

CHATTANOOGA STATE

College On The River

Center For Business, Industry
& Health Professions

Catalog 2004-2006

Transform Your Life!

Chattanooga State Technical Community College Catalog 2004-2006 Rev. Vol. 29

Revised Edition

The Tennessee Board of Regents has mandated that all associate degrees require no more than 60 credit hours unless approved as exceptions. The Board has also instituted a common General Education core for all colleges and universities in the TBR system. This does not include University of Tennessee colleges and universities. These changes have necessitated the publication of a revised edition of the catalog.

4 Easy Steps To Register For Classes

1 Apply for Admission

Use application form—
Last Insert in catalog
or
Apply online at
www.chattanoogaastate.edu
or at the
Admissions Office
Student Center 113 • (423) 697-4401.

2 Schedule New-Student Orientation

Telephone (423) 697-2654
or
Schedule online at
www.chattanoogaastate.edu

3 Register for Courses

Register at New-Student Orientation
or
at the **Records Office**
Student Center 113 • (423) 697-4401
or online at www.chattanoogaastate.edu.

4 Explore Financial Aid

On our web site: www.chattanoogaastate.edu
and pay online or in person or by mail.
Cash, check, VISA, MasterCard or Discover;
or
Use the deferred installment fee payment
plan.
Student Aid Office (Financial Aid Information) Student Center,
Second Floor, • (423) 697-4402
Business Office (Mailed Payments)
Student Center 113 • (423) 697-4732

Quick Click Guide To: www.chattanoogaastate.edu

What you'll find:

- **Online Application and Course Registration**
- **Campus Calendar—**
including student activities.
- **Campus Directories and Maps**
- **Complete Student Handbook**
- **Center for Distributed Education and Off-Campus Learning Sites**
- **Updated Course Schedules—**
including Center for Distributed Education, Off-campus Sites, After Labor Day Courses and Fall Mini-Sessions.
- **Complete College Catalog—**
including all career and transfer programs.
- **Student Services—**
including advising and career counseling.
- **Student Financial Aid Information—**
Student-aid and student-loan information is available from the
Student Aid Office
Student Center, Second Floor,
(423) 697-4402
or
via the web site at
www.chattanoogaastate.edu

Accreditations

Chattanooga State Technical Community College is accredited to award the associate degree by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number (404) 679-4501).

Program Accreditations and Approvals

Air Conditioning and Refrigeration

APPROVED BY HVAC EXCELLENCE
P.O. Box 491, Mount Pleasant, Illinois 60056-0491
(800) 394-5268 FAX (800) 546-3726

Automotive Technology

APPROVED BY THE NATIONAL AUTOMOTIVE TECHNICIANS
EDUCATION FOUNDATION (NATEF)
101 Blue Seal Drive, SE, Suite 101, Leesburg, Virginia 20175
(703) 669-6650 FAX (703) 669-6125 www.natef.org

Dental Hygiene

ACCREDITED BY THE COMMISSION ON DENTAL ACCREDITATION
OF THE AMERICAN DENTAL ASSOCIATION
*(A specialized accrediting body recognized by the Council on Postsecondary
Accreditation by the United States Department of Education)*
211 East Chicago Avenue, Chicago, Illinois 60641-2678
(312) 440-2500 FAX (312) 440-7494

Diagnostic Medical Sonography

ACCREDITED BY THE COMMISSION ON ACCREDITATION
OF ALLIED HEALTH EDUCATION PROGRAMS (CAAHEP)
515 North State Street, Suite 7530, Chicago, Illinois 60610-4377
(312) 464-4623 FAX (312) 464-5830
IN COOPERATION WITH THE JOINT REVIEW COMMITTEE ON EDUCATION
IN DIAGNOSTIC MEDICAL SONOGRAPHY
2025 Woodlane Drive, St. Paul, Minnesota 55125
(651) 731-7225 FAX (817) 354-8519

Emergency Services Technology:

Emergency Medical Care
Emergency Service Supervision and Administration
Fire Suppression

ACCREDITED BY INTERNATIONAL FIRE SERVICE
ACCREDITATION CONGRESS
1700 W. Tyler, Stillwater, Oklahoma 74078 • (405) 744-8303

Engineering Technology Programs:

Civil Engineering Technology
Electrical/Electronic Engineering Technology:
Automated Controls Concentration
Computer Systems Concentration
Mechanical Engineering Technology
ACCREDITED BY THE TECHNOLOGY ACCREDITATION COMMISSION
OF THE ACCREDITATION BOARD FOR ENGINEERING AND TECHNOLOGY
111 Market Place, Suite 1050, Baltimore, Maryland 21202
(410) 347-7700

Health Information Management

ACCREDITED BY THE COMMISSION ON ACCREDITATION
OF ALLIED HEALTH EDUCATION PROGRAMS (CAAHEP)
35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208
(312) 553-9355 FAX (312) 553-9616
IN COOPERATION WITH THE AMERICAN HEALTH INFORMATION MANAGEMENT
ASSOCIATION
919 N. Michigan Avenue, Suite 1400, Chicago, Illinois 60611-1683
(312) 787-2672 FAX (312) 787-9793

Judicial Reporting

APPROVED BY THE NATIONAL COURT REPORTERS ASSOCIATION
8224 Old Courthouse Road, Vienna, Virginia 22182-3808
(800) 272-6272 FAX (703) 556-6291

Medical Assistant

ACCREDITED BY THE COMMISSION ON ACCREDITATION
OF ALLIED HEALTH EDUCATION PROGRAMS (CAAHEP)
35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208
(312) 553-9355 FAX (312) 553-9616
ON RECOMMENDATION OF THE COMMITTEE OF ACCREDITATION
FOR MEDICAL ASSISTANT EDUCATION
AMERICAN ASSOCIATION OF MEDICAL ASSISTANTS
20 North Wacker Drive, Suite 1575, Chicago, Illinois 60606-2963
(800) 228-2262

Nuclear Medicine Technology

ACCREDITED BY THE JOINT REVIEW COMMITTEE ON EDUCATIONAL PROGRAMS
IN NUCLEAR MEDICINE TECHNOLOGY
1 Second Avenue East, Suite C, Polson, Montana 59860-2320
(406) 883-0003 FAX (406) 883-0022

Nursing

ACCREDITED BY THE NATIONAL LEAGUE FOR NURSING ACCREDITING COMMISSION
61 Broadway, New York, New York 10006 • (800) 669-1656

Paralegal Studies

APPROVED BY THE AMERICAN BAR ASSOCIATION
750 North Lake Shore Drive, Chicago, Illinois 60611

Pharmacy Technician

ACCREDITED BY THE AMERICAN SOCIETY OF HEALTH SYSTEM PHARMACISTS
7272 Wisconsin Avenue, Bethesda, Maryland 20814
(301) 657-3000 FAX (301) 652-8278

Physical Therapist Assistant

ACCREDITED BY THE COMMISSION ON ACCREDITATION IN PHYSICAL
THERAPY EDUCATION
1111 N. Fairfax Street, Alexandria, Virginia 22314
(800) 999-2782

Radiation Therapy Technology Radiologic Technology

ACCREDITED BY THE JOINT REVIEW COMMITTEE ON EDUCATION IN
RADIOLOGIC TECHNOLOGY
20 North Wacker Drive, Suite 900, Chicago, Illinois 60606-2901
(312) 704-5300 FAX (312) 704-5304

Respiratory Care

ACCREDITED BY THE COMMITTEE ON ACCREDITATION FOR
RESPIRATORY CARE (CoARC)
1701 W. Euless Boulevard, Suite 300, Euless, Texas 76040-6823
(817) 283-2835 (800) 874-5615

Surgical Technology

ACCREDITED BY THE COMMISSION ON ACCREDITATION
OF ALLIED HEALTH EDUCATION PROGRAMS (CAAHEP)
35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208
(312) 553-9355 FAX (312) 553-9616

Contents

2004-06

Page		Page	
1	<i>4 Easy Steps to Register For Classes</i>	33-38	Industrial Technology Programs
1	<i>Quick Click Guide To: www.chattanoogastate.edu</i>	39-42	General Education
2	Accreditation	43-64	General Information Admissions - <i>How To Apply</i> ; Academic Regulations; Student Aid; Financial Information
4	<i>How To Use This Catalog</i>	65-96	Course Descriptions
5	<i>A Guide To Academic Terminology</i>	95-104	Governance/Aerial View of Amnicola Highway Campus
5	Telephone Numbers	105-112	Index
6	Academic Calendar	Last Insert	Admission Application
7-26	Career Programs		
27-28	Regents Online Degree Programs		
29-32	Transfer Programs		

<http://www.chattanoogastate.edu> or call 1-800-207-8202



Photo: Andrew Frierson III

How To Use This Catalog—Your Official Guide To The College

Legend: Green = major subject areas. Blue = [hyperlinks](#) (click to access).

1. *See Your Academic Adviser...*

Your best guide to your college education and to using this Catalog.

2. Follow these helpful tips:

- You will find information ranging from entrance requirements to graduation requirements in the *General Information* section ([pages 43-64](#)).
- You can locate **career programs** on [pages 7-26](#). With each program description is a list of courses students must successfully complete to graduate.
- You can learn how to maximize your chances to earn a **four-year, baccalaureate degree** by reviewing **the transfer-degree information on pages 29-32**. *It is important to note that students who transfer with an associate's degree are two times more likely to earn a bachelor's degree than those who transfer without an associate's degree.*
- You can find **brief descriptions of courses** on [pages 68-96](#). [Pages 65-66](#) explain how the course descriptions are arranged; [page 66](#) is a **guide to reading the course descriptions** and [page 67](#) explains the *Types of Course Delivery*.
- You can locate information on **online courses** on [pages 27-28](#). *Please note: You can earn both an associate's degree and a bachelor's degree through our Board of Regents Online Degree Program (RODP).*
- You can find **brief biographies of faculty and staff** on [pages 97-103](#).

E-mail Educational Planning and Advising Office:
advising@chattanoogastate.edu

<http://www.chattanoogastate.edu> or call (423) 697-4483

A Guide To Academic Terminology

The following is a list of terms commonly used in admission and registration procedures.

- Academic load** The total hours of credit for all courses taken during a semester.
- Add and drop deadlines** The latest date in a semester when a course may be added or dropped from a student's class schedule.
- Admissions** The process of being admitted to the College allowing you to register for classes. Completion of the Admissions process does not constitute registration for classes.
- Admissions file** The documents collected for admission including the application form, official transcripts of previous work in high school or college and any standardized test scores or other information required by the Admissions Office.
- Audit** Registering for and attending class but not eligible to receive credit.
- Concentration** A group of courses within a major which emphasizes one aspect of the major.
- Corequisite** A course to be taken or a requirement to be fulfilled at the same time another required course is being taken.
- Curriculum** The set of courses offered in a particular degree or certificate program. More generally, the courses (in total) offered in a college or university. The plural is curricula.
- Drop** Officially discontinuing a portion of one's schedule for the remainder of the semester.
- Early Registration** The period of time before official registration day(s) for each semester when students may register for future term(s).
- Elective** A course that is accepted toward fulfillment of credit for a degree or certificate but is not specifically required for that degree or certificate. So termed because a student "elects" or chooses to take the course(s).
- Grade point average (GPA)** An average on the four point scale determined by dividing the total accumulated quality points by the corresponding total hours of credit attempted. Certain grades do not influence this computation, e.g., "W."
- Honors course** A version of a regular course reserved for students who select and qualify for advanced challenge.
- Major** The academic area offered by the College in which one specializes.
- Orientation** A meeting (or series of meetings) designed to acquaint a new student with the facilities, policies, sources of information and assistance, and academic and social atmosphere of the College.
- Prerequisite** A requirement to be completed or a level of skill or knowledge to be demonstrated prior to enrollment in a course or program.
- Probation** The status of students when their cumulative GPA drops below Chattanooga State's standards. Students may still enroll while on probation.
- Quality points** Academic performance records are compiled through use of a scale assigning four "quality points" per semester hour of credit for an "A" grade ranging to one "quality point" per semester hour of credit for a "D" grade.
- Reapplication** A form students must fill out if they do not attend Chattanooga State for one or more semesters (summer excluded).
- Registration** The process of officially enrolling in one or more courses. Students must be admitted to the College before they can register for classes.
- Semester** The division of the calendar year used in academic scheduling. A semester is roughly four months in duration.
- Semester credit hour** The unit of academic credit at Chattanooga State. Generally the number of hours a course meets each week determines the amount of credit it carries. (Laboratory and clinical courses are notable exceptions to this guideline.)
- Special Students** A Special Student is one who takes credit courses without working toward a degree.
- Suspension** The status of students (usually following probation) when their cumulative GPA drops below Chattanooga State's standards for two consecutive semesters. Students may not enroll while on suspension.
- Transcript** A cumulative record of a student's course work and grades.
- Transitional Studies** Foundation courses in English, math, reading, and study skills designed for students who are not prepared for college level courses. Placement in Transitional Studies courses is determined by ACT or SAT and/or COMPASS tests scores.
- Withdraw** Officially discontinuing all of one's schedule for the remainder of the semester.

Chattanooga State Telephone Numbers

Locations

Main Campus, 4501 Amnicola Hwy.....	(423) 697-4400
Commercial Truck Driving, 4510 Hixson Pike	(423) 875-8448
Downtown, 535 Chestnut St., Suite 112	(423) 697-3100
East Campus and Center for Applied Legal Studies, 7158 Lee Highway	(423) 697-4797
Grundy County High School	(423) 837-1327
North, Dayton	(423) 365-5010
Sequatchie Valley Technical Center	(423) 554-4027
West, Kimball	(423) 837-1327

Offices

Academic Affairs	(423) 697-4456
Admissions/Records.....	(423) 697-4401
Adult Education (GED)	(423) 697-2529
Business and Community Development Center (BCDC).....	(423) 697-3100
Career Planning.....	(423) 697-4421
Center for Distributed Education	(423) 697-4408
Child Development Center.....	(423) 697-4412
Counseling Services.....	(423) 697-4421
Disabilities Support Services	(423) 697-4452
Educational Planning & Advisement.....	(423) 697-4483

Library Services	(423) 697-4448
President's Office	(423) 697-4455
Records.....	(423) 697-4401
Student Aid.....	(423) 697-4402
Student Life.....	(423) 697-4475
Tennessee Small Business Development & Resource Center.....	(423) 756-8668
Transitional Studies.....	(423) 697-3221
Transitional Studies Helpline.....	(423) 697-4443

Academic Divisions and Departments

Arts and Sciences Division	(423) 697-2552
Humanities	(423) 697-4440
Mathematics or Sciences	(423) 697-4442
Social & Behavioral Sciences	(423) 697-3127
Engineering, Business & Information Technologies Division	(423) 697-4463
Business & Information Systems.....	(423) 697-4441
Engineering & Emergency Technologies	(423) 697-4434
Industrial Technology Division	(423) 697-4433
Practical Nursing/Surgical Technology/Medical Assistant	(423) 697-4447
Nursing and Allied Health Division.....	(423) 697-4450
Allied Health	(423) 697-4450
Nursing Program/Erlanger	(423) 493-8740

Academic Calendar

This calendar is subject to change at any time prior to or during an academic term due to emergencies or causes beyond the reasonable control of the institution, including severe weather, loss of utility services, or orders by federal or state agencies.

Fall 2004

Registration	August 24-25
Classes Begin	August 30
Last Day to Add	September 3
Labor Day – Holiday (No Classes)	September 6
Classes Begin – Flex Session	September 7
Last Day to Withdraw – First Session	September 29
Classes End – First Session	October 16
Fall Break (No Classes)	October 18-19
Classes Begin – Second Session	October 21
Graduation Application Due (Spring Commencement)	October 29
Last Day to Withdraw – Full/Flex Sessions	November 4
Last Day to Withdraw – Second Session	November 22
Thanksgiving Holidays (No Classes)	November 25-28
Last Day of Classes	December 10
Study Day	December 11
Finals	December 12-18
Industrial Technology Last Day of Classes/exams	December 17

Spring 2005

Registration	January 11
Industrial Technology Classes Begin	January 12
Martin Luther King, Jr. Holiday (No Classes)	January 17
Classes Begin – Credit	January 18
Last Day to Add	January 24
Classes Begin – Flex Session	January 25
Last Day to Withdraw – First Session	February 17
Last Day of Classes – First Session	March 5
Spring Break (No Classes)	March 7-13
Classes Begin – Second Session	March 15
Last Day to Withdraw – Full/Flex Sessions	March 24
Good Friday Holiday (No Classes)	March 25-27
Last Day to Withdraw – Second Session	April 13
Last Day of Classes – Credit	April 29
Study Day	April 30
Finals	May 1-5
Industrial Technology Last Day of Classes/exams	May 5
Commencement	May 7

Summer 2005

Registration	May 9
Classes Begin	May 12
Last Day to Add – First 6-week Session	May 13
Last Day to Add – 12-week Session and Industrial Technology	May 16
Memorial Day Holiday (No Classes)	May 30
Classes Begin – 10-week Session	May 31
Last Day to Add – 10-week Session	June 3
Last Day to Withdraw – First 6-week Session	June 9
Last Day of Classes/exams – First Session	June 24
Classes Begin – Second 6-week Session	June 27
Last Day to Add – Second 6-week Session	June 29
Independence Day Holiday – Summer Break (No Classes)	July 4-10
Last Day to Withdraw – 12-week Session	July 11
Last Day to Withdraw – 10-week Session	July 15
Last Day to Withdraw – Second 6-week Session	July 27
Industrial Technology Last day of Classes/exams	August 11
Last Day of Classes/exams – 12-week, 10-week, and Second 6-week Sessions	August 12

Fall 2005

Registration	August 23-24
Classes Begin	August 29
Labor Day – Holiday (No Classes)	September 5
Classes Begin – Flex Session	September 6
Fall Break (No Classes)	October 17-18
Thanksgiving Holidays (No Classes)	November 24-27
Last Day of Classes	December 9
Study Day	December 10
Finals	December 11-17
Industrial Technology Last Day of Classes/exams	December 14

Spring 2006

Registration	January 10
Industrial Technology Classes Begin	January 11
Martin Luther King, Jr. Holiday (No Classes)	January 16
Classes Begin – Credit	January 17
Classes Begin – Flex Session	January 24
Spring Break (No Classes)	March 6-12
Classes Begin – Second Session	March 15
Good Friday Holiday (No Classes)	April 14-16
Last Day of Classes – Credit	April 28
Study Day	April 29
Finals	April 30-May 4
Industrial Technology Last Day of Classes/exams	May 1
Commencement	May 6

Summer 2006

Registration	May 8
Classes Begin	May 11
Memorial Day Holiday (No Classes)	May 29
Classes Begin – 10-week Session	May 30
Last Day of Classes/exams – First Session	June 23
Classes Begin – Second 6-week Session	June 26
Independence Day Holiday –	July 4
Industrial Technology Last day of Classes/exams	August 1
Last Day of Classes/exams – 12-week, 10-week, and Second 6-week Sessions	August 10

Please refer to the applicable Schedule of Classes for the official and detailed term calendar.

Priority Registration for Fall 2004 begins April 5, 2004, Spring 2005 begins November 8, 2004, Summer 2005 begins April 4, 2005, Fall 2005 begins April 4, Spring 2006 begins November 14, and Summer 2006 begins April 3.

For more information on Industrial Technology start dates, please call (423) 697-4433.

<http://www.chattanoogaastate.edu> or call 1-800-207-8202

Career Programs

Chattanooga State Technical Community College

Volume Number 29 Revised Edition

Contents

2004-06

Page		Page	
8	Career Programs General Information	cont'd	Engineering & Emergency Technologies
8	Associate of Applied Science	16	Chemical Process Operations Certificate
8	Technical Certificate of Credit	16	Civil Engineering Technology
9-15	Business & Information Systems	16-17	Computer Systems Construction, see "Civil Engineering Technology"
9	Accounting Technology	17	Electrical/Electronic Engineering Technology
	Administrative Assistant	17	Emergency Medical Care
	Applied Technology	17	Emergency Service Supervision & Administration
9-10	Aviation Management	17	Emergency Services Technology
	Broadcast Captioning	18	Engineering Technology "Civil Engineering Technology" "Manufacturing Engineering Technology" "Mechanical Engineering Technology"
	Business, see "Management"	18	Fire Suppression
	CART Reporting Concentration	18	Industrial Maintenance Technology
	Computer Programming, see "Programming"	18	Manufacturing Engineering Technology
	Computer Science, see "End User Support Concentration," "Network Management Concentration," "Programming Concentration," "Information Systems Technology Certificate"	19	Mechanical Engineering Technology
11	E-Commerce	19	Networking Technology
11	End User Support	19-20	Sciences Department
11	General Management	19-20	Pharmacy Technician Certificate
11-12	Graphic Design	20-24	Nursing/Allied Health
12	Health Services Management	20	Admission/Retention Policies
	Information Systems Technology	20	Dental Hygiene
	"End User Support"	21	Diagnostic Medical Sonography Certificate
	"Network Management"	21	Health Information Management Medical Record Technology, see "Health Information Management"
	"Programming"	21	Nuclear Medicine Technology Certificate
	Information Systems Technology Certificate	22	Nursing
12-13	Judicial Reporting	22	LPN Transition Program
	Legal Assisting, see "Paralegal Studies"	22	Physical Therapist Assistant
13	Management	23	Radiation Therapy Technology Certificate
13	Network Management	23-24	Radiologic Technology
13	Office Administration	24	Respiratory Care Ultrasound, see "Diagnostic Medical Sonography" X-Ray Technology, see "Radiologic Technology"
13-14	Paralegal Studies	24-25	Social & Behavioral Sciences
14	Programming	24-25	Early Childhood Education
	Realtime Reporting, see "Broadcast Captioning"	25	Human Services Specialist
	"Broadcast Captioning"	26	Certificates of Advancement
	"CART Reporting"		
	"Judicial Reporting"		
14-15	Small Business Management		
	Web Design		
15	Word Processing Certificate		
15-19	Engineering & Emergency Technologies		
15	Automated Controls		
15-16	CAD Technology Certificate		

<http://www.chattanoogastate.edu> or call (423) 697-4483 or 1-800-207-8202

E-mail: advising@chattanoogastate.edu

General Information

Chattanooga State's career programs prepare students for specialized careers. These programs are designed for the student who does not intend to transfer to a traditional baccalaureate degree institution. Career students can pursue programs leading to the Associate of Applied Science (AAS) degree or a Technical Certificate of Credit.

Associate of Applied Science

Associate of Applied Science degrees are designed to prepare students for immediate employment in a specialized area. The AAS degree requires:

1. Total Credit Hours
60 semester credit hours of college level work
2. General Education
A minimum of 25% of the program must be in General Education and must include at least 3 hours of approved courses from each of the following:
English Composition
Humanities and/or Fine Arts
Social/Behavioral Science
Math or Natural Science

One additional course from any of the following categories:

- Communication
- Humanities
- Fine Arts
- Literature
- Math
- Natural Science
- Social/Behavioral Science

Please see the General Education section on pages 40-41 for a list of the Tennessee Board of Regents approved general education courses for all degrees at Chattanooga State.

Updated information may be available at the college's web site: <http://www.chattanoogaastate.edu>

Note: The SUMMARY OF REQUIRED HOURS for the student's major may require that a specific course be taken to satisfy a given General Education requirement. Otherwise, the student may select any course from the list. If the requirement calls for 3 credit hours and the student selects a 4- or 5-credit course, the extra credit hour(s) will count as unrestricted elective credit toward graduation. (If the requirement specified in the student's major is a 4-hour course, the 4th credit hour will not count toward satisfying the unrestricted elective requirement because it is required as opposed to being selected by the student.)

3. Major
A minimum of 36 hours in the technical specialty.
4. All courses in the major must be completed with a grade of "C" or better.

Technical Certificate of Credit

Programs leading to Technical Certificates of Credit are offered in response to the training needs of area business and industry. Since the credential denotes proficiency in a particular occupation, program standards are determined in consultation with an advisory board of practicing professionals. Students admitted to these programs may be enrolled as special students.

Note: Credit hours earned in Transitional Studies courses are institutional credit; they are not applicable to credit hours required for a degree or certificate.

<http://www.chattanoogaastate.edu>

or call 1-800-207-8202

E-mail: advising@chattanoogaastate.edu



Graduation 2003

Photo: Betty A. Proctor

Business & Information Systems

http://www.chattanoogastate.edu/Business_Information/bimain.asp

Accounting Technology

Associate of Applied Science Degree

The Accounting Technology program includes theoretical and practical accounting concepts, principles, standards, methods and procedures.

Career Opportunities

Accountant, bookkeeper, cost accountant, payroll bookkeeper, accounts receivable bookkeeper, accounts payable bookkeeper, tax accountant, internal auditor

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114,115	Principles of Accounting I, II	3	3
BU 173,175	Business Law I, II	3	3
ENGL 1010	Composition I	3	
FP 101	Fundamentals of Financial Planning	3	
MATH 1530	Introductory Statistics		3
MATH 1710	College Algebra	3	
MG 103	Introduction to Business		3
	Computer Elective		3
		<u>15</u>	<u>15</u>
Sophomore			
BU 185	Federal Taxes	3	
BU 204,205	Intermediate Accounting I, II	3	3
BU 210	Business Tax Reporting		3
BU 224	Cost & Budgeting	3	
BU 250,251	Accounting Information Systems I, II	3	3
BU 255	Professional Review in Accounting and Taxation		3
	Humanities Elective		3
	Social/Behavioral Science Elective	3	
		<u>15</u>	<u>15</u>
Total Hours: 60			

Applied Technology

Associate of Applied Science Degree

The Applied Technology major allows students who have successfully completed an approved clock hour training program at a Tennessee Technology Center (the College's Industrial Technology Division) to continue their education by granting 27 semester credit hours toward an AAS degree. These hours do not carry quality points, count in the calculation of grade point average, and cannot be used toward satisfying the graduation residency requirements.

Concentrations

The following Industrial Technology programs are approved concentrations in Applied Technology: Air Conditioning and Refrigeration, Auto Body Repair, Automotive Technology, Cosmetology, Diesel Equipment Mechanics, Industrial Electricity, Industrial Electronics, Industrial Maintenance Mechanics, Landscaping and Turf Management, Machine Tool Technology, Marine Engine Technology, Medical Office Assisting, Surgical Technology, Welding. Please see our website for the current listing of concentrations.

Admission Information

In order to be admitted to this major, the student must hold a certificate or diploma from Chattanooga State's Industrial Technology division or other Tennessee Technology Center or a certificate of completion from an apprenticeship program approved by the U.S. Department of Labor, AND the credential **must** have (1) been granted after January 1, 1983, (2) require at least 1,290 clock hours, and (3) coincide with one of the approved concentrations listed above. Documentation must be provided at the time of admission. Applicants must meet all admission requirements for degree seeking status and remove Transitional Studies deficiencies, if any.

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
	*Advanced Placement	27		
BU 114	Principles of Accounting I	3		
BU 173	Business Law I		3	
EC 211 or 212	Principles of Economics I or II		3	
ENGL 1010	Composition I	3		
MG 103	Introduction to Business	3		
MG 114	Principles of Management			3
MG 165	Business Mathematics	3		
	Computer Elective	3		
	General Education Elective		3	
	Humanities Elective		3	
	Mathematics/Natural Science Elective		3-4	
		<u>42</u>	<u>15-16</u>	<u>3</u>
Total Hours: 60-61				

**Advanced Placement credit will be awarded for documented completion of an approved clock hour training program as specified above.*

Business

See "Management"

Computer Programming

See "Programming Concentration"

Computer Science

See: "End User Support Concentration," "Network Management Concentration," "Programming Concentration," "Information Systems Technology Certificate"

E-Commerce

Technical Certificate of Credit

The E-Commerce Certificate is designed to provide a structured foundation for understanding business on the Internet. This program includes Web site design, business principles, and guidelines for the world of E-commerce. The variety of electives and online delivery of most courses allow for optimum flexibility for participants.

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
MG 115	E-Commerce Operations	3	
CS 150	Principles of Web Site Design	3	
MG 195	E-Commerce Legal Issues		1

E-Commerce continued

	**Directed Elective	3	
MG 116	E-Commerce Marketing		3
CS 151	Building Web Sites		3
MG 198	E-Commerce Success Factors		1
	**Directed Elective		3
		<u>10</u>	<u>10</u>

Total Hours: 20

***Directed Electives totaling six (6) hours must be selected from the following:*

BU 114	Principles of Accounting
MG 103	Introduction to Business
MG 114	Principles of Management
MG 154	Marketing
MG 165	Business Mathematics
FP 101	Fundamentals of Financial Planning

Graphic Design

Associate of Applied Science Degree

There are two concentrations within the Graphic Design major:

- Graphic Design Concentration
- Web Design Concentration

Please see those listings.

Graphic Design

Associate of Applied Science Degree

Web Design Concentration

The graphic design degree trains students for careers in advertising agencies, art services, department stores, printing industries, television, graphic arts industries, and in-plant or agency packaging services. The Web Design concentration focuses on web page design and courses specific to the internet. Students will need to spend approximately \$200–\$250 for basic professional equipment the first year.

Career Opportunities

Art director, production artist, graphic designer, illustrator, printer, printing, pre-press, service bureau

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
AA 106	Design	3	
AA 107	Illustration I		3
AA 108	Advertising Concepts	3	
AA 109	Production Art	3	
AA 116	Typography		3
AA 245	Computer Applications for Graphic Design		3
CS 150	Principles of Web Site Design	3	
CS 151	Building Web Site		3
CS 190	Introduction to Macintosh	3	
ENGL 1010	Composition I		3
		<u>15</u>	<u>15</u>
Sophomore			
AA 222	Portfolio		3
ART 1030	Art Appreciation	3	
CS 152	Multimedia Projects	3	
CS 198	Database Software Applications	3	
CS 250	Advanced Web Page and Site Design		3
CS 251	Scripting Languages		3
SP 110	Fundamentals of Public Speaking	3	
	CS or AA Elective		3
	Math Elective		3
	Social/Behavioral Science Elective	3	
		<u>15</u>	<u>15</u>
	Total Hours: 60		

http://www.chattanooga.state.edu/Business_Information/bimain.asp

E-mail: advising@chattanooga.state.edu

Graphic Design

Associate of Applied Science Degree

Graphic Design Concentration

The graphic design concentration trains students for careers in advertising agencies, art services, department stores, printing industries, television, graphic arts industries, and in-plant or agency packaging services. Students will need to spend approximately \$200–\$250 for basic professional equipment the first year.

Career Opportunities

Art director, production artist, graphic designer, illustrator, printer, printing, pre-press, service bureau

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
AA 106	Design	3	
AA 107	Illustration I		3
AA 108	Advertising Concepts	3	
AA 109	Production Art	3	
AA 116	Typography		3
AA 245	Computer Applications for Graphic Design		3
ART 1030	Art Appreciation		3
CS 190	Introduction to Macintosh	3	
ENGL 1010	Composition I		3
	Mathematics Elective	3	
		<u>15</u>	<u>15</u>
Sophomore			
AA 209,210	Graphic Design I, II	3	3
AA 215,217	Advertising Design I, II	3	3
AA 219	Illustration II	3	
AA 222	Portfolio		3
AA 246	Computer Illustration	3	
SP 110	Fundamentals of Public Speaking		3
	Social/Behavioral Science Elective		3
	Unrestricted Elective	3	
		<u>15</u>	<u>15</u>
	Total Hours: 60		

Information Systems Technology

Associate of Applied Science Degree

There are three concentrations within the Information Systems Technology major:

- End User Support
- Network Management
- Programming

Please see those listings.

Information Systems Technology

Associate of Applied Science Degree

End User Support Concentration

This program trains information systems technicians for the microcomputer field. Technical and non-technical subjects provide a better understanding of possible application areas and supervisory/administrative responsibilities.

Career Opportunities

Microcomputer specialist, end-user support

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CS 104	Fundamentals of Information Systems	3	
CS 114	Concepts of Programming	3	
CS 124	Visual Basic I	3	

End User Support continued

CS 176	Microcomputer Operating Systems		3
CS 197	Spreadsheet Software Applications	3	
CS 198	Database Software Applications		3
ENGL 1010	Composition I		3
MATH 1530	Introductory Statistics	3	
	Humanities Elective		3
	Social/Behavioral Science Elective		3
		<u>15</u>	<u>15</u>
Sophomore			
BU 114	Principles of Accounting I	3	
CS 160	Java Programming I	3	
CS 204	Microcomputer Architecture	3	
CS 205	Computer Networks	3	
CS 215	Local Area Network Management		3
CS 240	Computer User Support		3
CS 244	Systems Analysis and Design		3
CS 296	Principles of Database Management Systems	3	
	Oral Communication Elective		3
	Unrestricted Elective		3
		<u>15</u>	<u>15</u>

Total Hours: 60

Information Systems Technology

Associate of Applied Science Degree

Network Management Concentration

This program prepares graduates for computer network management certification.

Career Opportunities

Network manager

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114	Principles of Accounting I	3	
CS 104	Fundamentals of Information Systems	3	
CS 114	Concepts of Programming	3	
CS 124	Visual Basic I	3	
CS 176	Microcomputer Operating Systems		3
CS 185	C++ Programming Language		3
ENGL 1010	Composition I	3	
MATH 1530	Introductory Statistics		3
NW 204	Microcomputer Architecture		3
NW 205	*Introduction to Windows	2	
NW 206	Network Design and Management		3
		<u>17</u>	<u>15</u>
Sophomore			
CS 244	Systems Analysis and Design		3
CS 296	Principles of Database Management Systems	3	
NW 207	Advanced Network Management	4	
NW 208	Windows Server Enterprise Technologies		3
NW 209	TCP/IP Services		2
NW 210	Internet Information Server		2
	Humanities Elective	3	
	Oral Communication Elective		3
	Social/Behavioral Science Elective	3	
	Unrestricted Elective		2
		<u>15</u>	<u>13</u>

Total Hours: 60

*Prerequisite: CS 101 or consent of instructor.

Information Systems Technology

Associate of Applied Science Degree

Programming Concentration

This program prepares students to work as computer programmers in business. Technical and non-technical related subjects give students a better understanding of possible application areas and supervisory and administrative responsibilities.

Career Opportunities

Computer programmer, control clerk, job control specialist, operations librarian

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CS 104	Fundamentals of Information Systems	3	
CS 114	Concepts of Programming	3	
CS 124,225	Visual Basic I, II	3	3
CS 154	COBOL Programming Language I		3
CS 198	Database Software Applications		3
ENGL 1010	Composition I	3	
MATH 1530	Introductory Statistics		3
MG 160	*Project Management	3	
	Social/Behavioral Science Elective		3
		<u>15</u>	<u>15</u>
Sophomore			
BU 114	Principles of Accounting I	3	
CS 160,161	Java Programming I, II	3	3
CS 244	Systems Analysis and Design		3
CS 280	COBOL Programming Language II	3	
CS 296	Principles of Database Management Systems	3	
CS 299	Special Projects		3
	Humanities Elective		3
	Oral Communication Elective		3
	Unrestricted Elective		3
		<u>3</u>	<u>15</u>

Total Hours: 60

*Prerequisite: MG 103.

Information Systems Technology Certificate

Technical Certificate of Credit

This certificate is for persons interested in data processing. Thirteen semester hours of core courses are required of every student; the remaining coursework is chosen from information systems, accounting, management, or office administration. A minimum grade of "C" is required in each course.

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
BU 114	Principles of Accounting I	3	
CS 104	Fundamentals of Information Systems	3	
CS 124	*Visual BASIC I		3
MG 103	Introduction to Business	3	
	**Directed Electives	3	12-15
		<u>12</u>	<u>15-18</u>

Total Hours: 27-30

*Corequisite: CS 114.

**Must include a minimum of nine (9) hours of courses with a CS prefix. The remaining hours must be chosen from BU, MG, CS, or OF courses. For additional information, see a full-time instructor in the Information Systems Technology Department.

Legal Assisting

See "Paralegal Studies"

Management

Associate of Applied Science Degree

There are four concentrations within the Management major:

- Aviation Management
- General Management
- Health Services Management
- Small Business Management

Please see those listings.

Management

Associate of Applied Science Degree

Aviation Management Concentration

No new students will be accepted in this program as it is scheduled to be phased out. Students are responsible for all flight time charges incurred in all flight instruction classes.

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
AV 111	Flight Theory	3	
AV 112	Navigation	3	
AV 113	FAA Regulations	3	
AV 123	Meteorology		3
AV 141,142	Flight Instruction I, II	3	3
AV 231	Instrument Flight		3
ENGL 1010	Composition I	3	
MG 103	Introduction to Business		3
MG 165	Business Mathematics		3
		15	15
Sophomore			
AV 221	Aviation Management		3
BU 114	Principles of Accounting I	3	
BU 173	Business Law I	3	
MG 114	Principles of Management	3	
MG 264	Human Resources Management		3
	Directed Elective*		3
	General Education Elective	3	
	Humanities Elective		3
	Mathematics Elective	3	
	Social/Behavioral Science Elective		3
		15	15
	Total Hours: 60		

*Directed Electives: AV 143: Flight Instruction III (3), AV 144: Flight Instruction IV (3), AV 201: Aerospace Internship (3), or MG 254: Salesmanship (3). Advanced standing is available for flight related experience.

Advanced Standing For Flight Related Experience

The following credentials may justify advanced standing with credit for the listed classes:

Private Pilot, Airplane Single Engine—Land

AV 101 General Aeronautics—3 credit hours

AV 141 Flight Instruction I—3 credit hours

Commercial Pilot, Airplane Single or Multi-Engine Land

AV 111 Flight Theory—3 credit hours

AV 112 Navigation—3 credit hours

AV 113 FAA Regulations—3 credit hours

AV 142 Flight Instruction II—3 credit hours

Instrument Rating, Airplane

AV 123 Meteorology—3 credit hours

AV 143 Flight Instruction III—3 credit hours

AV 231 Instrument Flight—3 credit hours

Certificates must be current and valid, and the student must provide documentation to the Vice President for Academic Affairs through the appropriate faculty/department. Flight evaluation may be required before granting credit.

Management

Associate of Applied Science Degree

General Management Concentration

The General Management concentration prepares students to manage businesses and other organizations.

Career Opportunities

Office manager, assistant manager, department manager, personnel administration, supervisor

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114,115	Principles of Accounting I, II	3	3
BU 173	Business Law I		3
CS 197	Spreadsheet Software Applications	3	
EC 211 or 212	Principles of Economics I or II		3
ENGL 1010	Composition I	3	
MATH 1530	Introductory Statistics		3
MG 103	Introduction to Business	3	
MG 114	Principles of Management		3
MG 165	Business Mathematics	3	
		15	15
Sophomore			
FM 201	Financial Management	3	
MG 154	Marketing	3	
MG 160	Project Management	3	
MG 214	Purchasing	3	
MG 254	Salesmanship		3
MG 264	Human Resources Management	3	
	General Education Elective		3
	Humanities Elective		3
	MG, FP, or BU Electives		6
		15	15
	Total Hours: 60		

Management

Associate of Applied Science Degree

Health Services Management Concentration

The Health Services Management Concentration prepares students for supervisory and/or management positions in the health care industry. This program contains an Advanced Placement component which may be satisfied in one of the following ways:

- Completion of a clinically-based health program consisting of a minimum of 25 semester credit hours and current registration/certification/licensure in the State of Tennessee.
- OR-
- Completion of a health related certificate less than 25 semester credit hours **and** completion of 25 semester hours from the courses approved to be taken in lieu of Advanced Placement.
- OR-
- A minimum of two years of work experience in a health field **and** completion of 25 semester hours from the courses approved to be taken in lieu of Advanced Placement.

Career Opportunities

Emergency medical services management, dental office management, health care field management

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
	*Advanced Placement	25		
BIOL 2010,2020	Human Anatomy and Physiology I, II	4	4	
BU 114,115	Principles of Accounting I, II	3	3	
BU 173	Business Law I		3	
ENGL 1010	Composition I	3		
MG 103	Introduction to Business	3		
MG 114	Principles of Management		3	
MG 165	Business Mathematics	3		
MG 264	Human Resources Management			3
	Computer Elective		3	
	Humanities Elective			3
	Oral Communication Elective			3
	Social/Behavioral Science Elective			3
		41	16	12
	Total Hours: 69			

Health Services continued

*Courses in lieu of Advanced Placement:

HE 222	Medicolegal and Professional Concepts	2
HS 104,114	General Medical Terminology I	3
MG 101	Professional Ethics in the Workplace: Business and Commerce	1
MG 105	Introduction to Quality Management	3
MG 154	Marketing	3
MG 285	Organizational Behavior	3
MG 286	Health Services Management Practicum	3
	MG Elective	3
	**Directed Electives	4
		<u>25</u>

**Directed Electives totaling four (4) hours must be selected from the following:

PE 154	First Aid and Safety Education	3
PE 211	Personal and Community Health	3
PHED 1110	Concepts of Wellness	1

Management

Associate of Applied Science Degree

Small Business Management Concentration

This program is for students interested in starting, financing, and operating a small business. Emphasis is on finance, marketing, accounting, personnel management, and supervision.

Career Opportunities

Entrepreneur, manager in a small business

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114,115	Principles of Accounting I, II	3	3
BU 173	Business Law I		3
EC 211 or 212	Principles of Economics I or II		3
ENGL 1010	Composition I	3	
MG 103	Introduction to Business	3	
MG 114	Principles of Management		3
MG 154	Marketing		3
MG 165	Business Mathematics	3	
	Humanities Elective	3	
		<u>15</u>	<u>15</u>
Sophomore			
CS 197	Spreadsheet Software Applications	3	
FM 201	Financial Management	3	
MATH 1530	Introductory Statistics		3
MG 214	Purchasing	3	
MG 224	Entrepreneurship		3
MG 254	Salesmanship		3
MG 264	Human Resources Management		3
	General Education Elective	3	
	MG, BU or FP Electives	3	3
		<u>15</u>	<u>15</u>
Total Hours: 60			

Office Administration

Associate of Applied Science Degree

The Office Administration major provides an academic and technical foundation for individuals preparing for or upgrading skills in administrative support positions in business and industry.

Certified Professional Secretary

After completion of 12 semester hours of college level work at Chattanooga State, Certified Professional Secretaries (CPS) may receive up to 21 hours of college credit, applicable toward the AAS degree in Office Administration only. This credit may not duplicate or replace previously earned college credits. The student must present proof that all parts of the CPS exam have been passed and must be actively pursuing an Office Administration major. The

courses for which credit may be awarded are:

BU 114	Principles of Accounting I	3
CS 101	Computer Literacy	3
MG 103	Introduction to Business	3
MG 114	Principles of Management	3
OF 104	Business Communications I	3
OF 105	Business Communications II	3
OF 195	General Office Procedures	3

Career Opportunities

Administrative assistant, clerk/typist, data entry clerk, file clerk, office manager, receptionist, secretary, stenographer, transcriber, word processor

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CS 101	Computer Literacy	3	
ENGL 1010	Composition I		3
MG 165	Business Mathematics		3
OF 104	Business Communications I	3	
OF 113,114	Keyboarding/Document Processing I, II	3	3
OF 125	Word Processing I		3
OF 127	Desktop Publishing		3
OF 195	General Office Procedures	3	
	Humanities Elective	3	
	Social/Behavioral Science Elective	3	
		<u>18</u>	<u>15</u>
Sophomore			
BU 114	Principles of Accounting I	3	
CS 150	Principles of Web Site Design		3
CS 293	Microcomputer Software Applications	4	
ENGL 2710 or	Technical Reports or		
OF 105	Business Communications II	3	
OF 126	Word Processing II	3	
OF 206	Office Administration Internship		3
SP 110	Fundamentals of Public Speaking		3
	*Directed Electives	3	3
	Mathematics/Natural Science Elective		3-4
		<u>16</u>	<u>15-16</u>
Total Hours: 64-65			
<i>*Directed Electives must be selected based on the student's Emphasis:</i>			
Legal Emphasis			
LA 110	Fundamentals of Law		3
LA 130	Legal Research		3
Professional Emphasis			
MG 103	Introduction to Business		3
MG 114	Principles of Management		3

Paralegal Studies

Associate of Applied Science Degree

Approved by the American Bar Association

The goal of the Paralegal Studies program is to provide a general education with emphasis on substantive legal and ethical principles and prepare them for entry-level paralegal positions working under the supervision of an attorney in the private or public sector. This program is also the basis for the first two years of a baccalaureate program in Legal Assisting through Chattanooga State's 2+2 articulation agreement with the University of Tennessee at Chattanooga. (See the Advising Center for details.)

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BU 114	Principles of Accounting I	3	
CS 101	Computer Literacy	3	
ENGL 1010	Composition I	3	
LA 110	Fundamentals of Law	3	
LA 130	Legal Research	3	
LA 135	Legal Writing/Case Analysis		3
PO 110	American Government		3

Paralegal Studies continued

	Math Elective		3
	Humanities Elective		3
	Natural Science Elective		4
		15	16
Sophomore			
LA 210	Contracts		3
LA 220	Torts		3
LA 240	Trial Practice and Civil Procedure	3	
LA 290 or LA 299	Law Practice Management or Internship		3
MG 103	Introduction to Business	3	
	Legal Assisting Electives	6	6
	Social and Behavioral Sciences Elective*	3	
		15	15
	Total Hours: 61		

*PY 101, General Psychology, is strongly recommended, PE 230 is excluded.

Note: LA courses are listed under "Legal Assisting" in the course descriptions.

Realtime Reporting

Associate of Applied Science Degree

There are three concentrations within the Realtime Reporting major:
 Broadcast Captioning
 CART Reporting
 Judicial Reporting

Please see those listings.

Realtime Reporting

Associate of Applied Science Degree

Broadcast Captioning Concentration

The Broadcast Captioning concentration prepares students to provide television captioning services for deaf and hard-of-hearing people.

Career Opportunities

Live television captioning of news programs, talk shows, sporting events, shopping networks, political debates

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
CS 101	Computer Literacy		3	
ENGL 1010	Composition I	3		
HE 103	Medical Terminology	3		
HUM 1010	Introduction to Humanities I		3	
PO 110	Introduction to American Government		3	
REAL 100	Introduction to Realtime Reporting	1		
REAL 110,111	Realtime Reporting I, II	4	4	
REAL 131	Captioning/CART I			3
	Math Elective	3		
		14	13	3
Sophomore				
CO 204	TV Production	3		
CO 219	Internship in Television Communication		3	
GEOG 1025	World Geography		3	
HP 132	Psychology of Deaf People & Their Culture		3	
LA 110	Fundamentals of Law	3		
REAL 132,133,134	Captioning/CART II,III,IV	3	3	3
REAL 200	Computer-Aided Transcription	3		
REAL 202	Captioning/CART Procedures		3	
		15	12	3
	Total Hours: 60			

Realtime Reporting

Associate of Applied Science Degree

CART Reporting Concentration

The CART (Communication Access Realtime Translation) Reporting Concentration prepares students to provide communication access services for deaf and hard-of-hearing people.

Career Opportunities

CART in educational settings, conferences, conventions, business meetings, church services, theater productions

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
CS 101	Computer Literacy		3	
ENGL 1010	Composition I	3		
HE 103	Medical Terminology	3		
HUM 1010	Introduction to Humanities I		3	
PO 110	Introduction to American Government		3	
REAL 100	Introduction to Realtime Reporting	1		
REAL 110,111	Realtime Reporting I, II	4	4	
REAL 131	Captioning/CART I			3
	Math Elective	3		
		14	13	3
Sophomore				
GEOG 1025	World Geography		3	
HP 120	American Sign Language I	3		
HP 132	Psychology of Deaf People & Their Culture		3	
LA 110	Fundamentals of Law	3		
REAL 132,133,134	Captioning/CART II,III,IV	3	3	3
REAL 200	Computer-Aided Transcription	3		
REAL 202	Captioning/CART Procedures		3	
REAL 205	Medical/Technical Dictation		3	
		12	15	3
	Total Hours: 60			

Realtime Reporting

Associate of Applied Science Degree

Judicial Concentration

Approved by the National Court Reporters Association

The Judicial Reporting concentration prepares students to provide realtime reporting services in the legal environment.

Career Opportunities

Official court reporter or freelance reporter providing realtime reporting of court proceedings, depositions, medical malpractice cases, arbitrations, sworn statements, government hearings, board meetings

(423) 697-4441

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
CS 101	Computer Literacy	3		
ENGL 1010	Composition I	3		
HE 103	Medical Terminology	3		
HUM 1010	Introduction to the Humanities I		3	
LA 110	Fundamentals of Law	3		
REAL 100	Introduction to Realtime Reporting	1		
REAL 110,111	Realtime Reporting I, II	4	4	
REAL 121	Judicial Reporting I			3
PO 110	Introduction to American Government		3	
	Math Elective		3	
		17	13	3
Sophomore				
GEOG 1025	World Geography		3	
LA 130	Legal Research	3		
OF 104	Business Communications I	3		
REAL 122,123,124	Judicial Reporting II,III,IV	3	3	3
REAL 200	Computer-Aided Transcription	3		
REAL 201	Judicial Procedures		3	
REAL 205	Medical and Technical Dictation		3	
		12	12	3
	Total Hours: 60			

Word Processing Certificate

Technical Certificate of Credit

This two-semester certificate provides students with entry-level word processing skills. A minimum grade of “C” is required in each course.

(423) 697-4441

Course No.	Course Title	Semester Hours	
		FALL	SPR
CS 101	Computer Literacy		3
CS 150	Principles of Web Site Design	3	
OF 113,114	Keyboarding/Document Processing I, II	3	3
OF 125,126	Word Processing I, II	3	3
Total Hours: 18		9	9

Engineering & Emergency Technologies

Chattanooga State offers both two-year degrees in Engineering Technology and a Pre-Engineering transfer program. Students interested in these fields need to know the difference between Engineering and Engineering Technology.

- Engineering uses mathematics, science, experience, and judgment to benefit humanity.
- Engineering Technology supports engineering through knowledge, methods, and technical skills. It is between the craftsman and the engineer, closer to the engineer.

Engineering Technology courses (those with prefixes CI, DD, EE, ET, MD) are not generally accepted at four-year institutions offering degrees in Engineering, but are accepted at many four-year Engineering Technology programs. Pre-Engineering students should follow the articulation agreement for the senior institution to which they plan to transfer.

<http://www.chattanoogastate.edu/Engineering/enmain.asp>
(423) 697-4434

Automated Controls Concentration

Electrical/Electronic Engineering Technology

Associate of Applied Science Degree

Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology

The Electrical/Electronic Engineering Technology major gives students a broad education in AC and DC circuits, electronic circuits, logic circuits, advanced electronic circuits, digital computer systems, and integrated circuits through practical laboratory experiences and classroom instruction. The Automated Controls Concentration provides in-depth study in robotics, process control with feedback control loops, programmable logic controllers, transducers, and factory cell automation.

Career Opportunities

Engineering technician, electronics technician, industrial electronics technician, industrial electrician, instrumentation technician, manufacturing technician, plant technician, robotics technician, service technician, systems application technician

(423) 697-4434

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
DD 116	CAD for Electronics		3
EE 110	Electrical Circuits I	4	
EE 121	Electronics I		4
EE 140	Digital Circuits	4	
ENGL 1010	Composition I	3	
ET 115	Computers in Engineering Technology	3	
MATH 1710	College Algebra	3	
MATH 1720	Pre-Calculus		4
	*Physics Elective		4
		17	15
Sophomore			
EE 212	Electrical Circuits II	4	
EE 221	Electronics II		4
EE 260	Programmable Logic Controllers	4	
EE 261	Automation Control Systems		4
EE 271	Robotic Systems		3
ENGL 2710	Technical Reports	3	
MATH 1910	Calculus w/Analytic Geometry I	4	
	Humanities Elective		3
	Social/Behavioral Science Elective		3
		15	17
Total Hours: 64			

*PHYS 1030, PHYS 2010, or PHYS 2110.

CAD Technology

Technical Certificate of Credit

This program prepares students to work as CAD Drafters and Designers and provides skills enhancement for working architects, engineers, drafters, and designers. It includes advanced CAD drafting and design using AutoCAD and specialty software in electronics, graphics programming, or mechanical, architectural or civil design. A minimum grade of “C” is required in each course.

Admission Information

Additional admission procedures are required for this program. For specific information on admission requirements and application procedures, contact the Department of Engineering & Emergency Technologies.

(423) 697-4434

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
DD 114,124	*CAD Engineering Drawing I, II	3	3
MATH 1710	College Algebra	3	
MATH 1720	Pre-Calculus		4
		6	7
Sophomore			
DD 204	CAD Engineering Drawing III	3	
	**Directed Elective		3
		3	3
Total Hours: 19			

*Tech Prep articulation credit may be awarded for DD 114 and DD 124.

**Directed Elective must be selected from:

DD 116	¹ CAD for Electronics	3
DD 210	² AutoLISP Programming	3
DD 214	Mechanical Desktop	3
DD 216	Architectural Desktop	3
DD 218	³ Land Development Desktop	3
DD 222	Introduction to Pro/ENGINEER	3
DD 243	Solidworks I	3

¹Prerequisite: EE110, ET 115; or instructor's consent. Corequisite: EE 121.

²Additional prerequisite: ET 115.

³Prerequisite: CI 224, 274; or instructor's consent.

Chemical Process Operations

Technical Certificate of Credit

This certificate program trains graduates for employment as process operators in the chemical, manufacturing, refining, petrochemical, polymers, pharmaceuticals, plastics, food and beverage, water/sewage, utilities and pulp/paper industries. A minimum grade of "C" is required in each course.

Admission Information

Additional admission procedures are required for this program. For specific information on admission requirements and application procedures, contact the Department of Engineering & Emergency Technologies.

(423) 697-4434

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
CT 111	Introduction to Process Technology	3	
CT 112	Industrial Mathematics	3	
CT 113	Industrial Chemistry	4	
CT 121	Industrial Process Equipment		4
CT 122	Introduction to Quality Control		3
CT 123	Introduction to Process Operations		4
CT 124	Introduction to Process Controls and Instrumentation		3
OS 116	Industrial Maintenance Safety	3	
	Computer Elective	3	
Total Hours: 30		16	14

Civil Engineering Technology Concentration

Engineering Technology

Associate of Applied Science Degree

Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology

This program gives students the knowledge, methods, and skills to work as engineering technicians in support of such civil engineering activities as designing bridges, highways and industrial complexes, monitoring structure construction, maintaining material quality used in structure construction, surveying and mapping, construction estimating, and hydraulics.

Career Opportunities

Civil engineering technician, construction estimator, construction inspector, land surveyor, hydraulics technician, structural design technician, construction materials lab technician

(423) 697-4434

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CI 164	Construction Methods & Estimating	3	
CI 174	Surveying I	4	
DD 124	CAD Engineering Drawing II		3
ENGL 1010	Composition I	3	
ENGL 2710	Technical Reports		3
ET 115	Computers in Engineering Technology	3	
MATH 1710	College Algebra	3	
MATH 1720	Pre-Calculus		4
PHYS 1030	Concepts of Physics	4	
	Humanities Elective	3	
Total Hours: 30		16	17
Sophomore			
CI 224	Hydraulics	3	
CI 231	Construction Materials Testing	3	
CI 242	Structures I		3
CI 243	Structures II		3
CI 274	Surveying II	4	

MATH 1910	Calculus w/Analytic Geometry I	4	
MD 134,242	Statics & Strength of Materials I, II	3	3
	Social/Behavioral Science Elective		3
	*Technical Elective		3
Total Hours: 65		17	15

*DD, MD, or CI course.

Computer Systems Concentration

Electrical/Electronic Engineering Technology

Associate of Applied Science Degree

Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology

The Electrical/Electronic Engineering Technology major gives students a broad education in AC and DC circuits, electronic circuits, logic circuits, advanced electronic circuits, digital computer systems, and integrated circuits through practical laboratory experiences and classroom instruction. The Computer Systems Concentration provides in-depth study in microcomputer peripherals, bus standards, communication protocols, and the latest in microprocessor technology.

Career Opportunities

Associate engineering technician, computer technician, communications technician, electronics technician, industrial electronics technician, instrumentation technician, networking technician, plant technician, service technician, systems application technician

(423) 697-4434

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
DD 116	CAD for Electronics		3	
EE 110	Electrical Circuits I	4		
EE 121	Electronics I		4	
EE 140	Digital Circuits	4		
ENGL 1010	Composition I		3	
ET 115	Computers in Engineering Technology	3		
MATH 1710	College Algebra	3		
MATH 1720	Pre-Calculus		4	
	*Physics Elective		4	
Total Hours: 64		17	15	
Sophomore				
EE 212	Electrical Circuits II	4		
EE 221	Electronics II		4	
EE 250	Microcomputer Systems	4		
EE 251	Microcontrollers Applications		4	
EE 271	Robotic Systems		3	
ENGL 2710	Technical Reports	3		
MATH 1910	Calculus w/Analytic Geometry I	4		
	Humanities Elective		3	
	Social/Behavioral Science Elective	3		
Total Hours: 64		15	17	

*PHYS 1030, PHYS 2010, or PHYS 2110.

Construction

See "Civil Engineering Technology"

Electrical/Electronic Engineering Technology

Associate of Applied Science Degree

There are three concentrations within the Electrical/Electronic Engineering Technology major:

E/E Eng. Tech. continued

Automated Controls
 Computer Systems
 Networking Technology

Please see those listings.

Emergency Medical Care Concentration

Emergency Services Technology

Associate of Applied Science Degree

This concentration gives students a broad education in stress, legal issues, community relations, research, safety, fire protection, and paramedic training. Students who are currently licensed as paramedics will receive 25 hours of advanced placement credit. Students may work toward their paramedic training while completing the general education and emergency services technical core.

Career Opportunities

Private and municipal ambulance services, industrial fire and medical response teams, fire departments which employ combination fire fighters/paramedics, and hospital emergency rooms

(423) 697-4434

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
	*Advanced Placement	25		
ENGL 1010	Composition I	3		
FI 111	Fire Protection Systems	3		
FI 140	Legal Aspects of the Fire Service	3		
FI 142	Emergency Services Community Relations	3		
FI 146	Emergency Service Stress	1		
FI 235	Fundamentals of Emergency Service Safety		3	
FI 280	Emergency Services Practicum			3
PO 110 or PO 219	Introduction to American Government or State and Local Government		3	
PY 101 or PY 251	General Psychology or Psychology of Personal Adjustment		3	
SP 110	Fundamentals of Public Speaking		3	
	Humanities Elective		3	
	Mathematics Elective	3		
	Natural Science Elective		4	
	Unrestricted Elective			1
Total Hours: 64		41	19	4

*Completion of CSTCC's Paramedic Training Program or current state or national paramedic certification/licensure.

For information on Chattanooga State's Paramedic Training Program, contact the Division of Allied Health.

(423) 697-4450

Emergency Service Supervision and Administration Concentration

Emergency Services Technology

Associate of Applied Science Degree

This program is designed for experienced emergency services personnel who desire additional education for improved job performance and/or advancement. The program covers stress, legal issues, community service, safety, research, and emergency services, as well as supervision, leadership, planning, and innovation.

Career Opportunities

Company officer/chief officer positions with fire departments, emergency medical supervision, and fire brigade leaders

(423) 697-4434

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
ENGL 1010	Composition I	3	
FI 111	Introduction to Emergency Services	3	
FI 140	Legal Aspects of the Fire Service	3	
FI 142	Emergency Services Community Relations		3
PO 110 or PO 219	Introduction to American Government or State and Local Government		3
SP 110	Fundamentals of Public Speaking		3
	Humanities Electives		3
	Mathematics Elective	3	
	*Technical Electives	3	4
		15	16
Sophomore			
FI 146	Emergency Service Stress	1	
FI 221, 222	Fire Administration I, II	3	3
FI 235	Fundamentals of Emergency Service Safety	3	
FI 270	Emergency Service Strategic Planning & Innovation		3
FI 280	Emergency Services Practicum		3
PY 101 or PY 251	General Psychology or Psychology of Personal Adjustment	3	
	Natural Science Elective	4	
	*Technical Electives	3	6
	Unrestricted Elective	1	
		18	15

Total Hours: 64

*Technical Electives totaling sixteen (16) hours must be selected from courses with the following prefixes: EA, FI, HZ, IH, MG, OS. Alternatively, students who plan to transfer to a four year program may, with adviser approval, use their Technical Elective hours to take additional General Education courses needed to satisfy requirements for the baccalaureate degree. Students with current state or national licensure as Emergency Medical Technicians may be eligible for Advanced Standing credit toward the Technical Elective requirement. See program adviser for details.

Emergency Services Technology

Associate of Applied Science Degree

There are three concentrations within the Emergency Services Technology major:
 Emergency Medical Care
 Emergency Service Supervision and Administration
 Fire Suppression

Please see those listings.

Engineering Technology

Associate of Applied Science Degree

There are three concentrations within the Engineering Technology major:

- Civil Engineering Technology
- Manufacturing Engineering Technology
- Mechanical Engineering Technology

Please see those listings.

Fire Suppression Concentration

Emergency Services Technology

Associate of Applied Science Degree

This concentration allows career emergency service personnel to enhance their emergency services education, and gives the student who wishes to enter emergency services an introduction to the basics of fire suppression. Topics include legal issues, community service, safety, research, fire protection, tactics/strategy, fire equipment, and building construction.

Career Opportunities

Fire suppression, rescue, hazardous materials organizations, fire prevention, industrial fire protection, and private fire protection companies

(423) 697-4434

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
ENGL 1010	Composition I	3	
FI 111	Introduction to Emergency Services	3	
FI 114	Building Construction for Fire Science		3
FI 140	Legal Aspects of the Fire Service	3	
PO 110 or	Introduction to American Government or		
PO 219	State and Local Government		3
SP 110	Fundamentals of Public Speaking		3
	Humanities Elective		3
	Mathematics Elective	3	
	*Technical Electives	3	4
		<u>15</u>	<u>16</u>
Sophomore			
FI 116	Fire Fighting Tactics and Strategy I		3
FI 142	Emergency Services Community Relations	3	
FI 146	Emergency Service Stress	1	
FI 235	Fundamentals of Emergency Service Safety	3	
FI 280	Emergency Services Practicum		3
PY 101 or	General Psychology or		
PY 251	Psychology of Personal Adjustment		3
	Natural Science Elective	4	
	*Technical Electives	3	6
	Unrestricted Elective	1	
		<u>15</u>	<u>15</u>
Total Hours: 61			

*Technical Electives totaling sixteen (16) hours must be selected from courses with the following prefixes: EA, FI, HZ, IH, MG, OS. Alternatively, students who plan to transfer to a four year program may, with adviser approval, use their Technical Elective hours to take additional General Education courses needed to satisfy requirements for the baccalaureate degree. Students with current state or national licensure as Emergency Medical Technicians may be eligible for Advanced Standing credit toward the Technical Elective requirement. See program adviser for details.

Industrial Maintenance Technology

Associate of Applied Science Degree

The Industrial Maintenance Technology program helps manufacturing personnel develop technical and interpersonal skills by studying communications, mathematics, science, computers, electrical, mechanical, and environmental fundamentals.

(423) 697-4434

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CS 105	Introduction to Spreadsheets		1
CS 106	Introduction to Word Processing	1	
ENGL 1010	Composition I	3	
MATH 1530	Introductory Statistics	3	
MD 104	Blueprint Reading and Analysis	3	
MN 102,112	Electrical Fundamentals I, II	3	3
MN 103,113	Mechanical Fundamentals I, II	3	3
OS 116	Industrial Maintenance Safety		3
PHYS 1030	Concepts of Physics		4
		<u>16</u>	<u>14</u>
Sophomore			
MN 210	Building and Structural Maintenance	3	
MN 215	Maintenance Management & Organization		3
MN 218	Hydraulics, Pneumatics, and Fluid Systems	3	
SP 110	Fundamentals of Public Speaking		3
	Humanities Elective	3	
	Social/Behavioral Science Elective		3
	*Technical Electives	6	6
		<u>15</u>	<u>15</u>
Total Hours: 60			

*Selected from courses with the following prefixes: CI, EE, EZ, MD, MN, MZ, or QA.

Manufacturing Engineering Technology Concentration

Engineering Technology

Associate of Applied Science Degree

The Manufacturing Engineering Technology major provides graduates with a unique blend of theoretical and hands-on knowledge with computer integration in a manufacturing environment. This curriculum includes a background in mechanical/manufacturing engineering technologies and related theory, computer-aided design (CAD), computer numerical control (CNC), computer-aided manufacturing (CAM), statistical process control (SPC), quality management and control, engineering management. Computer usage for process control and effective communication skills is emphasized along with practical skills for programming and operating technically sophisticated equipment.

Career Opportunities

With an A.A.S. degree in Manufacturing Engineering Technology you will become an integral member of the team needed by modern industrial firms. Your knowledge of production systems, automated equipment, system integration, process controls, quality control and managerial skills will help you perform many different duties including applications for computer integration, process setup and control, quality control. You will be prepared to enter jobs such as equipment troubleshooter, equipment builder, equipment installation technician, manufacturing or quality control specialist, plant supervisor and other operational or management positions. Other areas may include product planning, product design, or system design. Your skills will enable you to enter your chosen field and quickly become a member of a dynamic industry.

(423) 697-4434

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
DD 124	CAD Engineering Drawing II		3
ENGL 1010	Composition I	3	
ENGL 2710	Technical Reports		3
ET 115	Computers in Engineering Technology	3	
MATH 1710	College Algebra	3	
MATH 1720	Pre-Calculus		4
MD 184	Manufacturing Processes	3	
MD 254	Elements of Material Science		3
PHYS 1030	Concepts of Physics	4	
	Humanities Elective		3
		<u>16</u>	<u>16</u>
Sophomore			
EE 284	Electrical Technology for Mechanical Engineering Technology		3
MATH 1530	Introductory Statistics		3
MD 134	Statics and Strength of Materials I	3	
MD 207,208	Numerical Control I, II	3	3
MD 226	Fluid Power		3
MD 294	Automated Manufacturing	3	
MD 295	Manufacturing Management		3
QA 240	Statistical Process Control	3	
	Social/Behavioral Science Elective		3
	*Technical Elective		3
		<u>18</u>	<u>15</u>
Total Hours: 65			

*DD 214, DD 222, or DD 243.

<http://www.chattanooga.state.edu/Engineering/enmain.asp>

or E-mail: advising@chattanooga.state.edu

Mechanical Engineering Technology Concentration

Engineering Technology

Associate of Applied Science Degree

Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology

This program gives students a broad education in mechanical design, manufacturing processes, creation and utilization of mechanical power, thermosciences, heating, ventilation and air conditioning (HVAC) design, metals and special materials, and computer-aided drafting and design.

Career Opportunities

Customer support technician, draftsman/designer, engineering assistant, HVAC technician, computer-aided draftsman/designer, industrial mechanics technician, metallurgical laboratory technician, mechanical engineering technician

(423) 697-4434

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CHEM 1010	Introduction to Chemistry I		4
DD 124	CAD Engineering Drawing II		3
ENGL 1010	Composition I	3	
ENGL 2710	Technical Reports		3
ET 115	Computers in Engineering Technology	3	
MATH 1710	College Algebra	3	
MATH 1720	Pre-Calculus		4
MD 184	Manufacturing Processes	3	
MD 254	Elements of Material Science		3
PHYS 1030	Concepts of Physics	<u>4</u>	
		16	17
Sophomore			
EE 284	Electrical Technology for Mechanical Engineering Technology	3	
MATH 1910	Calculus w/Analytic Geometry I	4	
MD 134,242	Statics and Strength of Materials I, II	3	3
MD 226	Fluid Power		3
MD 264	Thermodynamics I	3	
MD 274	Machine Design		3
	Humanities Elective		3
	Social/Behavioral Science Elective	3	
	*Technical Elective		<u>3</u>
		16	15

Total Hours: 64

*DD 204, DD 214, DD 222, or DD 243.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CNAP 1010	Cisco Network Academy Program I		4
EE 110	Electrical Circuits I	4	
EE 121	Electronics I		4
EE 140	Digital Circuits	4	
ENGL 1010	Composition I	3	
ET 115	Computers in Engineering Technology		3
MATH 1710	College Algebra	3	
	Natural Science Elective		<u>4</u>
		14	15
Sophomore			
CNAP 1020,1030	Cisco Network Academy Program II, III	4	4
EE 116	Microcomputer Upgrade and Troubleshooting	2	
EE 203	Telecommunications		4
EE 250	Microcomputer Systems	4	
EE 251	Microcontrollers Applications		4
ENGL 2710	Technical Reports		3
	Humanities Elective	3	
	Social/Behavioral Science Elective	<u>3</u>	
		16	15

Total Hours: 60

<http://www.chattanoogaastate.edu/Engineering/enmain.asp>

E-mail: advising@chattanoogaastate.edu

Sciences

Pharmacy Technician Certificate

Technical Certificate of Credit

Accredited by the American Society of Health System Pharmacists

This program prepares students for certification by the Pharmacy Technician Certification Board (PTCB). Pharmacy technicians assist licensed pharmacists to provide health care and medications to patients. Pharmacy Technicians must perform precise work where details can be a matter of life or death. They must have a broad knowledge of pharmacy practice and the techniques required to fill prescriptions, constitute IV solutions, and prepare medications. Good communication and interpersonal skills are essential to interact with patients and other health care professionals on a daily basis.

The Pharmacy Technician courses are designed in accordance with American Society of Health-System Pharmacists (ASHP) guidelines. They are not designed for college transfer credit. A minimum grade of "C" is required in each course.

A class will be accepted each fall semester.

Career Opportunities

Community pharmacies, drug manufacturing companies, drug wholesale companies, home health care, hospital pharmacies, nuclear medicine pharmacies, nursing homes

Admission Information

Additional admission procedures are required for this program. The deadline for priority consideration is **May 31**. Applications received after the deadline will be accepted if space permits.

For specific information on admission requirements and application procedures, contact the program director.

Networking Technology Concentration

Electrical/Electronic Engineering Technology

Associate of Applied Science Degree

This program trains students to work in data/telecommunications by providing a broad knowledge of computer operating systems protocol as well as techniques for establishing physical connections between various computer platforms. Graduates will be able to work with stand-alone local area networks, distributed workgroups linked directly to a host computer, and interconnecting computers with different platforms.

Career Opportunities

Management information system technician, management information system coordinator, computer network installer, network repair (maintenance) technician, computer technician

(423) 697-4434

(423) 697-2690 or (423) 697-2568

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
PC 101	Introduction to Pharmacy Practice	3		
PC 104	*Chemistry for Pharmacy Technicians	4		
PC 105	Pharmacy Law and Ethics	3		
PC 110	Pharmaceutical Calculations		4	
PC 115	**Introduction to Human Biology	4		
PC 201	Pharmacology and Therapeutics		4	
PC 205	Pharmacy Practice		5	
PC 220	Pharmacy Practice Clinical Rotations			5
		14	13	5

Total Hours: 32

*Prerequisites: DSPM 0800, DSPR 0800, DSPW 0800.

**May substitute BIOL 1050, 1051; or BIOL 2020.

<http://www.chattanoogaastate.edu/Math/default.htm>E-mail: advising@chattanoogaastate.edu

Nursing/Allied Health

Admission/Retention Policies

A student must be admitted to the specific Nursing/Allied Health program beyond general admission to Chattanooga State Technical Community College. Selection into health programs is based on a comparative evaluation of all applicants' test scores, transcripts and other application information. Composition of a class will reflect diversity based on age, gender and race. Students must have successfully completed (or be scheduled to complete during the summer) **all Transitional Studies courses and other required prerequisite courses.**

Students are encouraged to take additional science and general education courses, however, students are cautioned that science courses taken prior to program acceptance must have been completed no sooner than five years before the student is admitted to the program. **HOWEVER**, completion of the application process and any/all science and general education courses **does not guarantee acceptance** into a health program.

The goal of all Chattanooga State's health programs is to prepare practitioners who can function in the health care arena to ensure the safety of patients. Program standards are in place to assure that students have the potential to perform as entry level practitioners. These program standards are available in the Nursing/Allied Health Division office. Acceptance into a health program is contingent upon the student's demonstrated ability to meet these standards. Prior convictions (excluding traffic violations) may affect licensure eligibility.

For specific information on admission requirements and application procedures, contact the Division of Nursing/Allied Health

(423) 697-4450

http://www.chattanoogaastate.edu/Allied_Health/ahmain.asp

Dental Hygiene

Associate of Applied Science Degree

Accredited by the Commission on Dental Accreditation of the American Dental Association

The Dental Hygiene program provides a background in basic studies as well as directed dental hygiene experience, acquired in an on-campus dental facility as well as in community facilities. The student will develop judgment and skills needed for providing oral health care to the public under the supervision of a dentist and within the limits of the Code of Ethics of the American Dental Hygienists Association and the laws of the state in which he/she practices. A minimum grade of "C" (or "S") is required in all DH and science courses. Graduates are prepared to take the National Dental Hygiene board examination and the state or regional clinical examination.

Career Opportunities

Private practice—general, group, specialty; health departments or associated institutions; teaching—dental hygiene or dental assisting schools; pediatric, geriatric or special needs centers; health maintenance organizations, hospitals, nursing homes; dental claims departments of insurance companies; sales representative of preventive dental products

Admission Information

Additional admission procedures are required for this program. Contact the Allied Health Division office for application materials and other pertinent information. The application deadline is the first Monday in **April**. However, applications will be processed until the class is full.

(423) 697-4450

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
BIOL 1430	Nutrition			3
BIOL 2010,2020	Human Anatomy and Physiology I, II	4	4	
CHEM 1010	Introduction to Chemistry I	4		
DH 132,135	Dental Hygiene I, II	9	9	
DH 142,145	Dental Hygiene Applications I, II	4	4	
ENGL 1010	Composition I			3
PY 101	General Psychology			3
	*Oral Communication Elective			3
		21	20	9
Sophomore				
BIOL 2230	Microbiology	4		
DH 238,239	Dental Hygiene III, IV	5	3	
DH 248,249	Dental Hygiene Applications III, IV	4	4	
SO 110	Introduction to Sociology			3
	Humanities Elective	3		
	**Mathematics Elective			3
		16	13	
Total Hours: 79				

*SP 110 or SP 120 required.

**MATH 1530 recommended.

MATH 1410 not acceptable for Nursing/Allied Health programs.

Diagnostic Medical Sonography Certificate

Technical Certificate of Credit

Accredited by the Commission on Accreditation of Allied Health Education Programs in cooperation with the Joint Review Committee on Education in Diagnostic Medical Sonography

The Diagnostic Medical Sonography program is a 12-month advanced certificate program providing specialty education for registered radiographers and preparation for

certification by the American Registry of Diagnostic Medical Sonographers (ARDMS) in the specialty categories of Abdomen & Small Parts, Obstetrics & Gynecology, and Physics. Classes are conducted two or three days every other week, with clinical experience obtained at approved clinic affiliates within the region. A minimum grade of “C” is required in each course. Full-time status is required for those who have no previous work experience in sonography. Applicants who have worked as diagnostic medical sonographers for a minimum of one (1) year may potentially qualify for the program in a non-traditional working status.

A class will be accepted each year for fall admission.

Admission Information

Additional admission procedures are required for this program. Contact the Allied Health Division office for application materials and other pertinent information. The application deadline for priority consideration is **March 15**.

(423) 697-4450

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
US 200	Introduction to Diagnostic Medical Sonography	2		
US 201,211,221	Ultrasound Physics I, II, III	2	2	2
US 202,212,222	Obstetrics and Gynecology I, II, III	4	2	3
US 203,213,223	Abdominal and Small Parts I, II, III	4	2	3
US 205,215,225	Clinic I, II, III	7	2	2
US 210	Ultrasound Administration		1	
US 220	Ultrasound Seminar			2
Total Hours: 40		19	9	12

Health Information Management

Associate of Applied Science Degree

Accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the American Health Information Management Association

The Health Information Management program prepares students to become Health Information Technicians (HIT); it does not serve as the first two years of a baccalaureate HIM program. The curriculum consists of a combination of classroom, laboratory, and clinical practice. A minimum grade of “C” is required in all HE and the prerequisite BIOL courses in order to meet prerequisite and degree requirements. Graduates are eligible to take the accreditation exam administered by the American Health Information Management Association and receive recognition as a Registered Health Information Technician (RHIT) upon passing the examination.

The program is completed on an alternate-year cycle. First-year classes start in the Fall of each odd-numbered year. Most first year courses may be taken without formal program acceptance.

Admission Information

Additional admission procedures, including prerequisite college level courses, are required for this program. Contact the Allied Health Division office for application materials and other pertinent information.

(423) 697-4450

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
CS 197	Spreadsheet Software Applications			3
CS 198	Database Software Applications			3
ENGL 1010	Composition I			3
HE 102	Laboratory Procedures	1		
HE 103	Medical Terminology	3		
HE 110	Introduction to Health Information Management	1		
HE 111	History and Physical Examination	1		
HE 112,221	Pharmacology I, II	2	1	
HE 115	Health Informatics and Records Management	2		
HE 122	Introduction to Clinical Coding and Reimbursement	2		
HE 202	Imaging and Diagnostic Procedures		1	
HE 213	Human Diseases and Surgical Procedures		3	
HE 222	Medicolegal and Professional Concepts	2		
HE 226	Health Information Management Internship I		2	
HE 245,255	Clinical Coding and Classification I, II		3	3
HE 248	Reimbursement Methodologies		1	
HE 249	Practice Management, Billing, and Compliance		3	
MATH 1530	Introductory Statistics	3		
NW 205	Introduction to Windows		2	
	Social/Behavioral Science Elective			3
	Unrestricted Elective			1
		17	16	16
Sophomore				
HE 177	Introduction to Speech Recognition Technology	2		
HE 178	Speech Recognition Technology Applications	1		
HE 225	Health Data Content, Standards, and Computer-based Patient Record	3		
HE 242	Medicolegal, Ethical and Confidentiality Concepts	2		
HE 244	Health Statistics	3		
HE 247	Healthcare Quality, Utilization & Risk Management		3	
HE 251	Electronic Patient Information, Security & Internet		1	
HE 252	Health Information Systems and Knowledge-based Applications		1	
HE 256	Health Information Management Internship II		2	
HE 265	Clinical Coding Seminar	1		
HE 297	Health Informatics Management		3	
	Humanities Elective		3	
	Oral Communication Elective		3	
	*Directed Elective		3	
		15	16	
Total Hours: 80				

*Directed Elective(s) totaling three (3) hours must be selected from the following:

BU 114	Principles of Accounting I	3
CS 114	Concepts of Programming	3
CS 124	1Visual Basic I	3
CS 296	2Principles of Database Management Systems	3
HE 104	Basic Clinical Coding	1
HE 116	Medical Transcription Practice I	6
HE 204	Intermediate Clinical Coding	1
HE 239	Patient Account & Insurance Processes	3
HS 299	Special Topics in Allied Health	1-3
NW 204	3Microcomputer Architecture	3
NW 206	4Network Design and Management	3

1Prerequisite: CS 114.

2Prerequisite: At least 1 programming language course.

3Prerequisite: CS 104.

4Prerequisites: NW 204, 205.

Medical Record Technology

See “Health Information Management”

Nuclear Medicine Technology Certificate

Technical Certificate of Credit

Accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology

The Nuclear Medicine Technology certification provides specialty education for registered radiographers and preparation for the ARRT and/or NMTCB certification exams in nuclear medicine technology. This 12 month program begins each fall semester. Classes are conducted

every other week on Monday and Tuesday with clinical experience obtained at affiliated clinical sites. A minimum grade of “C” is required in each course. Full-time status is required.

Applicants who have worked as nuclear medicine technologists for a minimum of two years may qualify for the Non-Traditional program. Contact the program for more information.

Admission Information

Additional admission procedures for all applicants are required for this program. All applicants must possess the following courses, and non-radiographers who have educational credits in the following areas may be eligible for special consideration: medical ethics, medical terminology, anatomy and physiology, principles of radiation physics and biology, computer literacy, college algebra, composition, chemistry, patient care and assessment, and clinical practicum.

Contact the Allied Health Division office for application materials and other pertinent information. The application deadline for priority consideration is **April 15**. Applications received after the deadline will be accepted if space permits.

(423) 697-4450

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
NM 200	Introduction to Nuclear Medicine	2		
NM 201	Instrumentation and Statistics	3		
NM 205,215,225	Clinical Procedures I, II, III	2	4	6
NM 207,217,227	Practicum in Nuclear Medicine I, II, III	9	2	6
NM 208	Radiopharmacology	2		
NM 212	Physics and Radiation Biology of Nuclear Medicine		4	
Total Hours: 40		18	10	12

Nursing

Associate of Applied Science Degree
Accredited by the National League for
Nursing Accrediting Commission
61 Broadway, New York, New York 10006
1-800-669-1656

Approved by the Tennessee Board of Nursing

The Nursing Program, located on the Erlanger Medical Center campus (1100 East 3rd St., Suite 2), prepares individuals to be providers and managers of nursing care and members of the nursing profession. Graduates use critical thinking and the nursing process to provide care to culturally diverse individuals across the life span.

The nursing curriculum includes a sequence of four clinical nursing courses. The day program may be full- or part-time. The night program is part-time only. A new class is accepted each fall for the day program and in the fall of even years for the night program. A minimum grade of “C” must be earned in all NS and science courses required in the program. Contact the Nursing Program office or nursing web site for detailed information on program policies (Nursing Program Handbook) or for information about admission, readmission, transfer from an accredited nursing program, and articulation with baccalaureate programs.

Prospective Employers

Hospitals, physician’s offices, home health care agencies, nursing homes

Admission Information

Additional admission procedures are required for this program and may include college level prerequisite courses, e.g. CHEM 1010 or equivalent. Contact the Nursing Program office or nursing web site for application materials and other pertinent information. Priority application deadline is March 15; applications are accepted through June 15 with selection on a space available basis.

(423) 493-8720

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
BIOL 1430	Nutrition	3		
BIOL 2010,2020	Human Anatomy and Physiology I, II	4	4	
ENGL 1010	Composition I			3
NS 119,128	Nursing I, II	9	9	
PY 101	General Psychology		3	
PY 217	Human Growth and Development	3		
	*Mathematics Elective			3
		19	16	6
Sophomore				
BIOL 2230	Microbiology	4		
NS 238,249	Nursing III, IV	9	9	
	Humanities Elective			3
		13	12	
Total Hours: 66				

**Recommended: MATH 1530 or MATH 1710.
MATH 1410 not acceptable for Nursing/Allied Health programs.*

Nursing

LPN Transition Program

The LPN Transition Program offers an accelerated curriculum track for LPNs to pursue the Associate of Applied Science Degree in Nursing and RN licensure. The associate degree nursing curriculum is adapted to recognize the knowledge and skills of the licensed practical nurse. All first year general education and support courses must have been completed prior to enrollment in NS 024 (Nursing Transition). Upon successful completion of NS 024, LPNs will be awarded credit for NS 119, 128 and progress into the second year of the nursing program.

Admission Requirements

Admission into the LPN Transition Program is a competitive process and specific prerequisites must be met. Priority application deadline is **January 15**; applications are accepted through **March 15** with selection on a space available basis. Contact the Nursing Program office or nursing web site for information on admission, selection, policies, etc.

(Practical Nursing see Industrial Technology)

(423) 493-8720

Physical Therapist Assistant

Associate of Applied Science Degree
Accredited by the Commission on Accreditation in
Physical Therapy Education

Physical Therapist Assistants (PTAs) work under the direction and supervision of a Physical Therapist (PT). PTAs

perform physical therapy treatment interventions delegated by the supervising Physical Therapist. The PTA Program is a combination of classroom, laboratory and clinical practice designed to prepare the student in the use of exercise, physical therapy modalities, clinical communication skills, and special treatment procedures. Program content is based on recommended guidelines as established by the American Physical Therapy Association and the Commission on Accreditation in Physical Therapy Education. The program prepares students to take the board examination for Physical Therapist Assistants administered by the state. A minimum grade of "C" is required in all PTA and science courses.

Places of Employment

Hospital, rehabilitation center, extended care facility, home health agency, private practice, school system

Admission Information

Additional admission procedures are required for this program. Contact the Allied Health Division office for application materials and other pertinent information. The application deadline is **the first Monday in March** of the year in which fall admission is sought. (Applications would be accepted after this deadline only if there were not enough qualified applicants to fill the 20 spaces in the class.)

(423) 697-4450

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
BIOL 2010,2020	Human Anatomy and Physiology I, II	4	4
ENGL 1010	Composition I		3
PHYS 1030	Concepts of Physics	4	
PT 104	Introduction to Physical Therapy	2	
PT 111	Clinical Practice I		2
PT 112	Pathological Conditions		3
PT 115,125	Physical Therapy Procedures I, II	5	4
PT 123	Functional Anatomy	4	
	Social/Behavioral Science Elective		3
		<u>19</u>	<u>19</u>
Sophomore			
PT 201	Physical Therapy Seminar		2
PT 205	Therapeutic Exercise	5	
PT 210,221	Clinical Practice II, III	4	10
	Computer Elective	3	
	Humanities Elective		3
	*Mathematics Elective	3	
	**Oral Communication Elective	3	
		<u>18</u>	<u>15</u>
Total Hours: 71			

*MATH 1410 not acceptable for Nursing/Allied Health programs.

**SP 110 or SP 120 required.

Radiation Therapy Technology Certificate

Technical Certificate of Credit

Accredited by the Joint Review Committee on Education in Radiologic Technology

The Radiation Therapy Technology certificate is a 12 month program of specialty education for registered radiographers and prepares them to take the ARRT certification exam in radiation therapy technology. Classes are conducted every other week on Thursday and Friday with clinical experience obtained at affiliated clinical sites throughout the Southeast. A minimum grade of "C" is required in each course. Full-time status is required for those who have no

previous work experience in radiation therapy.

Applicants who have worked as radiation therapy technologists for a minimum of two (2) years may qualify for the advanced standing program. Contact the division for further information.

A class will be accepted each fall semester.

Admission Information

Additional admission procedures are required for this program. Contact the Allied Health Division office for application materials and other pertinent information.

(423) 697-4450

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
HS 123	Introduction to Radiation Oncology	3		
HS 172	Anatomy and Imaging	2		
HS 214,224	Radiation Physics I, II	4	4	
HS 220,230,240	Clinic I, II, III	8	4	6
HS 223,233	Radiation Oncology I, II		3	3
HS 243	Radiation Biology and Hyperthermia			3
		<u>17</u>	<u>11</u>	<u>12</u>
Total Hours: 40				

Radiologic Technology

Associate of Applied Science Degree

Accredited by the Joint Review Committee on Education in Radiologic Technology

The Radiologic Technology Program begins fall semester and is a 24-month program. Full-time student status is required. A minimum grade of "C" is required in all RT courses, BIOL 2010, 2020, HS 145, 155, 184, MATH 1710, NU 104, and the computer elective. Clinical assignments totaling approximately 2,000 clock hours are required and may include semester breaks. Graduates may apply as candidates for certification by the American Registry of Radiologic Technologists.

Clinical Affiliates

Bradley Memorial Hospital, Chattanooga Imaging Inc., Chattanooga Outpatient Center, Diagnostic Imaging Inc., East Ridge Hospital, Erlanger Medical Center, Hutcheson Medical Center, Memorial Hospital, Memorial Atrium (outpatient), Memorial North Park Hospital, Parkridge Medical Center, Rhea Medical Center

Admission Information

Additional admission procedures and progression criteria are required for this program. Contact the Allied Health Division office for application materials and other pertinent information. The deadline for priority consideration is **April 15**. After this date, applications will be processed as they are received.

(423) 697-4450

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
BIOL 2010,2020	Human Anatomy and Physiology I, II	4	4	
HS 145,155	X-Ray Physics I, II	4	4	
MATH 1710	College Algebra	3		
RT 110	Introduction to Radiologic Technology	3		
RT 112,114	Clinic I, II		2	4
RT 115	Medical Terminology		3	
RT 124,125	Radiographic Exposure I, II	3	3	
RT 134,135	Radiographic Positioning—Film Critique I, II	3	3	
		<u>20</u>	<u>19</u>	<u>4</u>

Sophomore			
ENGL 1010	Composition I		3
HS 184	Radiation Biology		3
NU 104	Radiation Protection and Radiological Health Administration	4	
RT 143	Radiographic Positioning—Film Critique III	3	
RT 172	Radiologic Pathology		3
RT 202,212,224	Clinic III, IV, V	2	2 3
RT 223	Special Procedure Radiography—Nursing	3	
RT 232	Introduction to Pararadiologic Imaging Modalities and Radiation Therapy	3	
RT 234,235	Radiology Seminar I, II	4	4
	Computer Elective		3
	Humanities Elective		3
	*Oral Communication Elective		3
	Social/Behavioral Science Elective		3
	Unrestricted Elective		1
Total Hours: 93		19	21 10

*SP 110 or SP 120 required.

Advanced Standing Program

Certified RT's may receive up to 61 semester hours of college credit for previous certified instruction and/or experience. Students who qualify for "advanced standing" need only complete the core curriculum outlined below.

Requirements

1. Certified transcript from approved school of Radiologic Technology. (School must have JRCERT/CAHEA approval at the time the student graduated.)
2. Proof of registration by ARRT.

SUMMARY OF REQUIRED HOURS		
Course No.	Course Title	Semester Hours
ENGL 1010	Composition I	3
HS 184	Radiation Biology	3
MATH 1710	College Algebra	3
NU 104	Radiation Protection and Radiological Health Administration	4
RT 172	Radiologic Pathology	3
RT 232	Introduction to Pararadiologic Imaging Modalities and Radiation Therapy	3
	Computer Elective	3
	Humanities Elective	3
	*Oral Communication Elective	3
	Social/Behavioral Science Elective	3
	Unrestricted Elective	1
Total Hours: 32		

*SP 110 or SP 120 required.

Respiratory Care

Associate of Applied Science Degree

Accredited by the Committee on Accreditation for Respiratory Care

The Respiratory Care Program is six semesters and qualifies graduates to take the Entry Level Examination to become a Certified Respiratory Therapist (CRT) and the written and simulation portions of the Registry Examination to become a Registered Respiratory Therapist (RRT). Through a combination of classroom and laboratory instruction and clinical practice, students gain knowledge and skills in cardiopulmonary testing and therapy. A minimum grade of "C" is required in all RC and science courses. Graduates will meet the requirements to practice as a respiratory therapist as defined in the Tennessee Respiratory Care Practitioner's Act.

Admission Information

Additional admission procedures are required for this program. Contact the Allied Health Division office for

application materials and other pertinent information. The deadline for priority consideration is **May 15**.

(423) 697-4450

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours		
		FALL	SPR	SUM
Freshman				
BIOL 2010,2020	Human Anatomy and Physiology I, II	4	4	
BIOL 2230	Microbiology			4
ENGL 1010	Composition I	3		
RC 111,112,113	Principles of Respiratory Care Procedures I, II, III	3	3	4
RC 141,142,143	Technical Foundations of Respiratory Care I, II, III	3	3	3
	Chemistry Elective		4	
	Computer Elective	3		
	*Mathematics Elective		3	
		16	17	11
Sophomore				
RC 210,212,213	Fundamentals of Respiratory Care I, II, III	3	3	3
RC 221,222,223	Clinical Practicum I, II, III	6	6	7
RC 241,242	Clinical Pathophysiology I, II	3	3	
RC 243	Pediatric/Perinatal Respiratory Care		3	
	Humanities Elective	3		
	**Oral Communication Elective		3	
	Social/Behavioral Science Elective	3		
	Unrestricted Elective			1
		18	18	11
Total Hours: 91				

*MATH 1410 not acceptable for Nursing/Allied Health programs.

**SP 110 or SP 120 required.

Ultrasound

See "Diagnostic Medical Sonography"

X-Ray Technology

See "Radiologic Technology"

Social & Behavioral Sciences

Early Childhood Education

Associate of Applied Science Degree

This program trains students to work in early childhood education (ages birth through eight). It includes theoretical and practical elements and features supervised classroom practice teaching. It does not lead to a teaching certificate or qualify graduates to teach in the public schools.

Career Opportunities

Child care teacher, *child care director, family/group child care owner, school age care teacher, assistant director, teacher's assistant (Pre K-4), substitute teacher (public/private), entry level position in designated child and family welfare agencies

*This job also requires some successful job experience.

(423) 697-4774

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
ECED 1010	Introduction to Early Childhood Education	2	
ECED 2010	Safe, Healthy Learning Environments	3	
ECED 2015	Early Childhood Curriculum		3
ECED 2020	Infant, Toddler, Child Development		3

2004-06 Career Programs

ECED 2130	Clinical Practicum I	2	
ENGL 1010	Composition I	3	
SP 110	Fundamentals of Public Speaking	3	3
	Mathematics Elective	3	
	Natural Science Elective	4	
	Unrestricted Elective	3	3
		13	16

Sophomore

ECED 2040	Family Dynamics & Community Involvement	3	
ECED 2060	Development of Exceptional Children	3	
ECED 2070	Developmental Assessment	3	3
ECED 2080	Language and Literature in Early Childhood	3	
ECED 2085	Math and Science in Early Childhood	3	
ECED 2140	Clinical Practicum II	2	
ECED 2150	Clinical Practicum III	2	
ENGL 2630	Literature for Children	3	
	*ECED Elective	3	
	Humanities Elective	3	
	Social/Behavioral Science Elective	3	
		14	17
	Total Hours: 60		

**Directed Elective must be selected from:*

ECED 2030	Infant & Toddler Care	3
ECED 2050	Psychomotor Development	3
ECED 2090	Creative Expression	3
ECED 2100	The Mentoring Teacher	3
ECED 2120	Administration of Child Care Programs	3

Child Development Associate (CDA)

The CDA is a nationally recognized credential awarded by the Council for Professional Recognition to child care providers who have demonstrated their skill in working with young children. Holders of a current CDA credential may receive up to 9 hours of college credit, applicable toward the AAS degree in Early Childhood Education only. Such credit may not duplicate or replace previously earned college credits. The courses for which credit may be awarded are:

ECED 2010	Safe, Healthy Learning Environments	3
ECED 2015	Early Childhood Curriculum	3
ECED 2040	Family Dynamics & Community Involvement	3
ECED 2130	Clinical Practicum I	3

Human Services Specialist

Associate of Applied Science Degree

The Human Services Specialist Program prepares the individual to begin a career as a human services paraprofessional. The curriculum covers the knowledge and skills necessary to work with many social service agencies in the areas of drug abuse counseling, aging, child care and mental health.

Career Opportunities

Drug abuse counselor, child care specialist, youth worker, mental health technician, geriatric technician, psychiatric technician, adolescent counseling assistant, activity therapist, social services delivery worker, crisis companions

(423) 697-3127

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
ENGL 1010, 1020	Composition I, II	3	3
HR 101	Introduction to the Field of Social Welfare	4	
HR 130	Substance Abuse Theories	3	
HR 205	Human Relations & Explorations		4
HR 210	Methods of Human Service Practice		3
MATH 1530	Introductory Statistics or Mathematics Elective		3
PO 110	Introduction to American Government		3
PY 101	General Psychology	3	
SO 110	Introduction to Sociology	3	
		16	16
Sophomore			
BIOL 1110	General Biology I or Natural Science Elective	4	
EC 211	Principles of Economics I		3
HR 219	Family Systems	3	
HR 220	Human Services Practicum		6
HR 245	Introduction to Counseling		3
PY 213	Abnormal Psychology or Approved Psychology Elective		3
SO 216	Cultural Anthropology	3	
	ART, MUS, or THEA 1030 or Humanities Elective	3	
		13	15
	Total Hours: 60		



Graduation 2003

Photo: Betty A. Proctor

Certificates of Advancement

Chattanooga State offers a number of short training programs for which a Certificate of Advancement is awarded. Many employers recognize these certificates as appropriate documentation for employment or for professional development credit. Certificates of Advancement, however, must not be confused with other credentials awarded by the College: Associate Degrees (Associate of Arts, Associate of Science, and Associate of Applied Science), Technical Certificates of Credit, and clock hour programs offered through Chattanooga State's Industrial Technology Division—Technical Certificate of Completion Diplomas and Technical Certificates of Proficiency. Because Certificates of Advancement are not part of Chattanooga State's official Academic Programs, no notation of the certificate will appear on the student's transcript. However, the transcript will show all courses taken, including those used for the certificate. In many cases, courses required for a Certificate of Advancement can be applied toward an Associate Degree or Technical Certificate of Credit.

Certificates of Advancement are awarded by the division offering the program. The student should contact the division prior to beginning the program for specific program brochures.

Grade Point Average

The cumulative GPA in coursework required for the certificate must be 2.0 or higher.

Residency Requirement

At least one-third of the credit hours required for the certificate must be completed at Chattanooga State. (Credits earned through Chattanooga State's Distance Education Program are considered to be "in residence.")

Admission Procedures

Follow the admission procedures for Special Students. (See "Admission" section.)

Note: Some certificate programs may have additional requirements for admission and/or require testing or documentation of prerequisite competencies.

Business & Information Systems

- Administrative Assistant Level I
- Basic Financial Planning
- Computer Network Support
- Customer Service
- General Office Clerk/Receptionist
- Legal Office Clerk/Receptionist
- Medical Office Clerk/Receptionist
- Network Management
- Non-Profit Management
- Purchasing
- Quality Management
- Small Business
- Supervisory Development
- Supervisory Management
- Technology in the Classroom
- Web Developer

Call (423) 697-4441 for information.

Engineering, Environmental & Emergency Technologies

- Automated Controls
- Computer-Aided Manufacturing (CAM)
- Computer Systems Technology
- Construction and Inspection
- Construction Management
- Advanced Construction Management
- Dupont Customized Certificates
 - Automated Control
 - Chemical Technology
 - Electro-Mechanical
 - Engineering Technology
 - Polymer Operator
- Electricity/Electronics Technology
- HVAC Technology
- Hydraulics/Pneumatics Technology
- Quality Technology
- Structural Engineering Technology
- Surveying

Call (423) 697-4434 for information.

Nursing/Allied Health

- Advanced Patient Care and Management
- Clinical Coding and Reimbursement
- Computed Tomography
- Dental Assisting
- Emergency Medical Services
 - EMT/EMT-IV Program
 - Paramedic Training Program
- Magnetic Resonance Imaging
- Advanced Magnetic Resonance Imaging
- Mammography
- Medical Transcription
- Patient Account Representative
- Speech Recognition Technology

Call (423) 697-4450 for information and application.

Social & Behavioral Sciences

- Group Fitness Instruction

Call (423) 697-3127 for information.

<http://www.chattanoogaastate.edu> or

call 1-800-207-8202

E-mail: advising@chattanoogaastate.edu

Regents Online Degree Programs

Chattanooga State Technical Community College

Volume Number 29 Revised Edition

Contents

2004-06

Page

28 Regents Online Degree Programs (RODP)

<http://www.tn.regentsdegrees.org>

or call (423) 697-4492

Contents



Graduation 2003

Photo: Betty A. Proctor

Regents Online Degree Programs—Associate's and Bachelor's

Beginning Fall 2001, Chattanooga State Technical Community College joined with the other Tennessee Board of Regents institutions in offering the **Regents Online Degree Programs (RODP)**. Courses required in these programs can be completed entirely online and will be transferable among all the participating institutions.

The **Regents Online Degree Programs** bring college to students—at home, the library, the office or on the road ... anytime of the day or night. No long waiting lines or hours away from job and family. No commuting. Simply click into class and start learning. The student can pick up a few courses or go for an associate's or bachelor's degree on his/her own schedule.

Degrees are granted by any Tennessee Board of Regents university or community college of the student's choice and are the same as those earned by any other graduates of a Board of Regents school—and just as valuable in getting the career the student seeks.

College goes to the student, with Tennessee's **Regents Online Degree Programs**. So no matter where the student is, he/she can still invest in his/her future.

Regents Online Degree Programs offered by Chattanooga State

Degree: Associate of Applied Science
Major: Professional Studies
Concentration: Information Technology

Degree: Associate of Arts
Major: General Studies

Degree: Associate of Science
Major: General Studies

Technical Certificate of Completion Diploma:
(clock hour)
Computer System Specialist

Technical Certificate of Proficiency:
(clock hour)
Computer Operator
Information Processing Technician

Information about these programs can be found at:

www.TN.regentsdegrees.org/campus/cstcc

Additional Regents Degrees

Degree: Bachelor of Professional Studies
Major:
Concentration: Information Technology or Organizational Leadership

Degree: Bachelor of Interdisciplinary Studies
Major:
Concentration: General Studies/Liberal Studies/University Studies

Teacher Education Online

Each of the six Tennessee Board of Regents universities will be addressing online programs for teacher education. Details will be available soon.

Information about these programs can be found at:

www.TN.regentsdegrees.org

- *Quality courses taught by top faculty from established, accredited institutions.*
- *Inexpensive tuition, and financial aid available in many cases.*
- *Attend class anytime, wherever there's a computer and Internet connection.*
- *Computer technical support available 24 hours a day, 7 days a week.*
- *Only basic keyboarding skills required.*

www.tn.regentsdegrees.org

Transfer Programs

Chattanooga State Technical Community College

Volume Number 29 Revised Edition

Contents

2004-06

Page	
30	Transfer Programs General Information
30	Associate of Arts/Associate of Science
31	Removal of Entrance Deficiencies
31	American History Requirement
31-32	Tennessee Board of Regents/University of Tennessee Transfer Track
32	Criminal Justice Consortium with Cleveland State

<http://www.chattanoogastate.edu>

or call 1-800-207-8202

E-mail: advising@chattanoogastate.edu



Graduation 2003

James L. Catanzaro, President

Photo: Betty A. Proctor

Transfer Programs General Information

Associate of Arts/Associate of Science

Associate of Arts and Associate of Science degrees are designed for students who plan to transfer to a senior institution to complete a baccalaureate degree.

These degrees require:

1. Total credit hours
A minimum of 60 semester credit hours of college level work
2. General Education
A minimum of 41 hours of General Education distributed as follows:

	Credit Hours
English Composition	6
Oral Communication	3
Literature	3
Humanities, Fine Arts, or Literature	6
Math	3
Natural Science	8
Social/Behavioral Science	6
History Sequence	6

Please see the General Education section on pages 40-41 for a list of the Tennessee Board of Regents approved general education courses for all degrees at Chattanooga State.

Updated information may be available at the college's web site: <http://www.chattanoogastate.edu>

3. Foreign Language
The Associate of Arts degree requires proficiency in a foreign language equivalent to one year of college-level work. Students who have completed 2 or more years of the same foreign language in high school may be able to skip one or both of the elementary level courses. No credit is granted for the course(s) the student is able to skip. Courses used to remove a Foreign Language Deficiency may not be used to satisfy this requirement. The following courses are approved to satisfy the foreign language requirement:

FREN	1010, 1020	Elementary French I, II
FREN	2010, 2020	Intermediate French I, II
GERM	1010, 1020	Elementary German I, II
GERM	2010, 2020	Intermediate German I, II
SPAN	1010, 1020	Elementary Spanish I, II
SPAN	2010, 2020	Intermediate Spanish I, II
4. Area of Emphasis
Additional course work to be selected based on the major or other degree requirements of the receiving institution. For advising purposes, students may select one of the following Areas of Emphasis:

Accounting
American Sign Language
Art
Art Education
Biology
Broadcasting
Business Administration
Chemistry
Early Childhood Education
Economics
Elementary Education (Pre K-4)
English
Environmental Science
Forestry, Fisheries, or Wildlife
French
General Transfer
Geography
German
Graphic Design
Health & Physical Education
History
Humanities
Information Systems
Journalism
Management
Marketing
Mathematics
Music
Nutrition
Philosophy
Physics
Political Science
Pre-Cytotechnology
Pre-Dentistry
Pre-Engineering
Pre-Law
Pre-Medical Technology
Pre-Medicine
Pre-Occupational Therapy
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Veterinary Medicine
Psychology
Religious Studies
Secondary Education
Social Work
Sociology
Spanish
Surveying
Theatre Arts
Wellness/Fitness
Wellness/Fitness Leadership

NOTE: Students should consult articulation agreements, the catalogs of the school to which they intend to transfer, and their advisers for information on requirements specific to the senior institution of their choice.

Removal of Entrance Deficiencies

Students who do not meet the entrance requirements for regular admission listed under “Admission” in the “General Information” section must remove the deficiencies before receiving an associate degree. Credit hours earned in college-level courses taken to remove entrance deficiencies may count as electives toward the 60 hours required for graduation, but may not be used to satisfy general education or major requirements. [Example: If a student takes THEA 1030 to remove a Visual/Performing Arts Deficiency, he/she would need to take ART 1030, ART 2030, or MUS 1030 to satisfy the Fine Arts requirement.] Entrance deficiencies must be removed prior to completion of 30 semester hours of college-level work. A grade of “C” or higher is required.

Requirement	Course	Exam
English	*	*
Algebra I and II	*	*
Geometry	MATH 0990	No
Natural/Physical Science I	BIOL 1110, CHEM 1010, CHEM 1110, ESC 1110, PHYS 1030, PHYS 2010, or PSCI 1030	CLEP
Natural/Physical Science II	BIOL 1120, CHEM 1120, ESC 1120, or PHYS 2020	CLEP
Social Studies**	HIST 1010, HIST 1020, HIST 1110, HIST 1120, or GO 103	CLEP
U.S. History	HIST 2010 or HIST 2020	CLEP
Foreign Language I	FREN 1010, GERM 1010, or SPAN 1010	CLEP
Foreign Language II	FREN 1020, GERM 1020, or SPAN 1020	CLEP
Visual/Performing Arts †	ART 1110, MUS 1130, THEA 1030, or THEA 1110	No

*Entrance deficiencies in these areas may be removed by scoring 26 or above on the ACT composite; scoring at college level on placement tests other than ACT; or completing Transitional Studies requirements.

**The following courses are acceptable for removal of a Social Studies deficiency only if the student graduated from high school prior to Spring 1993: EC 211, PY 101, SO 110, SO 216.

†Not required for students who graduated from high school prior to Spring 1993.

American History Requirement

Students who plan to transfer to one of Tennessee’s state-supported institutions should be aware of the following:

- Effective July 1, 1978 and afterwards, all students receiving bachelor’s degrees from any of Tennessee’s state-supported colleges or universities must have completed one unit of American History on the high school level or 6 semester hours (9 quarter hours) of college-level American history as required by TCA Statute 49-3253.
- The law allows one course in Tennessee History to be substituted for one of the required American history courses.
- Students who hold a GED Certificate are not considered to have

satisfied this requirement automatically. Unless American History was completed in high school prior to receiving the GED, the student has a deficiency which must be removed in order to receive a baccalaureate degree from a Tennessee state-supported college or university.

- Although college-level American History may be used to remove a high school History deficiency, the reverse is not true. High school American History cannot substitute for college-level history required as part of an associate or baccalaureate degree program. A student who has taken American History in high school may be required to take American History in college as well.

Students who have not completed a full year of American History in high school are strongly encouraged to remove this deficiency before transferring to a senior institution. For students not subject to the 1989 Admission Requirements, completion of 6 hours from HIST 2010, HIST 2020, HIST 2030 (in any combination) will remove this deficiency and also count as the approved History sequence required for the AA or AS degree or, if the student prefers to take a non-U.S. history for the History sequence, as elective credit toward graduation. For students subject to the 1989 Admission Requirements, all 3 courses (9 hours) must be completed in order to satisfy the AA/AS requirement for a History sequence because one of the U.S. History courses must be used to remove the high school unit deficiency and can only count as an elective toward graduation.

Tennessee Board of Regents/ University of Tennessee Transfer Track

Students who wish to fulfill core curriculum requirements for institutions in both the Tennessee Board of Regents (TBR) System and the University of Tennessee (UT) System may do so by completing the TBR-UT University Track Module. The Module consists of a sixty (60) semester hour block of courses in eight categories of subjects. The University Track Module incorporates the minimum degree requirements of all TBR and UT institutions and requires the completion of courses within the following subject categories:

- Category 1: Two English Composition Courses (normally 6 credit hours)
- Category 2: Two Mathematics Courses (normally 6 credit hours)
- Category 3: Two Science Courses (normally 6-8 credit hours)
- Category 4: Five History and Humanities Courses (normally 15 credit hours)*
- Category 5: Two Social/Behavioral Science Courses (normally 6 credit hours)

*Six credit hours of history are required. The type of history required varies among public universities in Tennessee. Check university catalogs to determine the proper history courses to take.

- Category 6: Two Multicultural or Interdisciplinary Courses or Two Foreign Language Courses (normally 6 credit hours)
- Category 7: Two Physical Education Courses (normally 2 credit hours)
- Category 8: Pre-major/Major Elective Courses (normally 12-15 credit hours)

The choice of courses depends upon the intended major at the university to which transfer is planned. Students planning to transfer to a Tennessee public university are expected to work with their academic advisors to ensure that all courses taken within the categories are appropriate to their intended majors. Courses to be transferred under the stipulations of the University Track Module must have been completed with the grade of C or better.

Criminal Justice Consortium with Cleveland State

Associate of Science Degree

Degree offered by Cleveland State Community College
Courses offered on Chattanooga State Campus

This program is for students who want to work in criminal justice who plan to transfer to a four-year institution.

The requirements listed below are based on Cleveland State's 2002-03 catalog. For information about possible changes for 2004-05, contact the Criminal Justice adviser.

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Hours	
		FALL	SPR
Freshman			
CJP 1010	*Overview of Criminal Justice System	3	
CJP 1050	*Administration in Criminal Justice		3
CJP 1070	*Criminal Law	3	
CJP 1110	*Procedures and Evidence in Criminal Justice		3
CS 101	Computer Literacy	3	
ENGL 1010,1020	Composition I, II	3	3
SO 110	Introduction to Sociology	3	
	Mathematics Elective		3
	Natural Science Sequence	4	4
	Physical Education Activity		1
		<u>19</u>	<u>17</u>
Sophomore			
CJP 1210	*Correctional Issues and Alternatives		3
CJP 2110	*Legal Issues in Criminal Justice Investigations	3	
CJP 2210	*Issues in Juvenile Justice	3	
CJP 2310	*Community and Public Relations		3
CJP 2410	*Externship in Criminal or Juvenile Justice		6
SO 120	Social Problems		3
SP 110	Fundamentals of Public Speaking	3	
	**History Sequence	3	3
	Humanities Elective	3	
	†Literature Elective	3	
	Physical Education Activity	1	
		<u>19</u>	<u>18</u>
	Total Hours: 73		

*Cleveland State courses taught at Chattanooga State.

**Take the history sequence required by the senior institution.

†Must be selected from ENGL 2110, 2120, 2210, 2220, 2410 or 2420. Take the course required by the senior institution.

Please see the General Education section on pages 40-41 for a list of the Tennessee Board of Regents approved general education courses for all degrees at Chattanooga State.

**Updated information
may be available
at the college's
web site.**

<http://www.chattanoogastate.edu>

or call 1-800-207-8202

E-mail:

advising@chattanoogastate.edu

**For information telephone
(423) 472-7141**

Industrial Technology Programs

Chattanooga State Technical Community College

Volume Number 29 Revised Edition

Contents

2004-06

Page		Page	
34	Academic Retention Standards	36	Industrial Electronics
34	Industrial Technology/AAS Degree Articulation	36	Industrial Maintenance Mechanics
34	Air Conditioning and Refrigeration	36	Landscaping and Turf Management
34	Auto Body Repair	36	Machine Tool Technology
34	Automotive Technology	36	Marine Engine Technology
35	Business Systems Technology	36	Mechanic, see "Automotive Technology" "Diesel Equipment Mechanics" "Marine Engine Technology"
35	Commercial Truck Driving	36-37	Medical Assistant
35	Computer Operations Technology		Ornamental Horticulture, see "Landscaping and Turf Management"
	Computer Repair, see "Computer Operations Technology"	37	Practical Nursing
35	Cosmetology	37	Surgical Technology
35	Diesel Equipment Mechanics		Truck Driving, see "Commercial Truck Driving"
	Electrician, see "Industrial Electricity"	37	Welding
	Greenhouse, see "Landscaping and Turf Management"	38	Lottery Scholarship Information— The Wilder-Naifeh Technical Skills Grant
	Horticulture, see "Landscaping and Turf Management"		
	HVAC, see "Air Conditioning and Refrigeration"		
36	Industrial Electricity		

<http://www.chattanoogastate.edu>

or call (423) 697-4433 or 1-800-207-8202



Graduation 2003

Senator Ward Crutchfield

Photo: Betty A. Proctor

Industrial Technology Programs

Industrial Technology programs are designed to be completed in one year (usually 1290 clock hours except as noted). However, some students may need more than the usual number of clock hours to achieve the level of competency required.

Academic Retention Standards

A minimum grade of “C” is required each semester except for those programs having higher retention/progression standards due to accreditation or licensing requirements. Students failing to achieve the minimum semester grade for the program will be suspended for one enrollment period.

The semester grade will reflect each student’s progress in the following categories:

- Skill Proficiency (written tests, lab work)
- Related Information (daily journals, math)
- Worker Characteristics (attendance*, participation, working with others)

*Regular and punctual class attendance is required.

Excessive absences and tardies will have an adverse effect on student progress. For each 1% of the assigned clock hours that a student is absent from class, 3.2 points will be deducted from the attendance grade. A student who has been absent for 11% or more of a semester will receive a failing grade for attendance. One point will be deducted from the final attendance grade for each tardy. A student is considered tardy if not in the classroom at the designated time for class to start. The attendance grade will be averaged in with the other course-related grades for the student’s final semester grade.

In individual cases of extenuating circumstances, the dean may make exceptions to suspension. Requests for exceptions must be made in writing and be accompanied by full documentation.

Readmission by the Dean from Suspension

Criteria considered in evaluating readmission requests are 1) the candidate’s willingness to address those deficiencies that contributed to the suspension and 2) the likelihood that the student may succeed in pursuing his or her training objective. See “Academic Suspension” in this catalog.

Industrial Technology/AAS Degree Articulation

Industrial Technology students who have completed a Technical Certificate of Completion Diploma in an approved program may receive 27 semester hours of advanced standing credit toward an Associate of Applied Science degree with a major in Applied Technology. For more information, see “Applied Technology” major.

Air Conditioning and Refrigeration

Technical Certificate of Completion Diploma

Accredited by HVAC Excellence, an organization that establishes national standards for HVAC/R Programs

This program covers the theory, application, operation, and maintenance of basic and advanced air conditioning/refrigeration systems.

Career Opportunities

Air conditioning/refrigeration technician, air conditioning/refrigeration installation/maintenance/service, sales—retail and wholesale

(423) 697-3173

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
AC 000	Air Conditioning/Refrigeration Technology	450	450	390

Total Clock Hours: 1290

Note: Students register for AC 000 each term until all competencies are mastered.

Auto Body Repair

Technical Certificate of Completion Diploma

This course prepares students to work in automotive body repair and refinishing. The program focuses on automobile construction and repair and emphasizes hands-on activities. The course provides instruction on diagnosing damages and estimating repair costs, while covering the subjects included in the National Institute for Automotive Service Excellence (NIASE) certification tests “Body Repair” and “Painting and Refinishing.”

Career Opportunities

Auto body metal straightener, insurance adjuster, painter, repair cost estimator

(423) 697-4780

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
AB 000	Auto Body Repair Technology	450	450	390

Total Clock Hours: 1290

Note: Students register for AB 000 each term until all competencies are mastered.

Automotive Technology

Technical Certificate of Completion Diploma

Accredited by the National Automotive Technicians Education Foundation (NATEF)

This ASE certified training program covers automotive electronics, engine performance, steering and suspension, manual transmissions and drive trains, automatic transmissions and transaxles, heating, ventilation and air conditioning, brakes, and engine repair and rebuilding. Specialized electronics are taught throughout as well as the proper use of tools and equipment.

Career Opportunities

Technician, shop foreman, service adviser, service manager

(423) 697-4779 or 697-2439

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
AM 000	Automotive Technology	450	450	390

Total Clock Hours: 1290

Note: Students register for AM 000 each term until all competencies are mastered.

Business Systems Technology

Technical Certificate of Completion Diploma

This program will teach students a wide variety of office functions including clerical and keyboarding skills, and the use of applications software and technology.

Career Opportunities

Data entry, payroll clerk, receptionist/customer service representative, accounting clerk, information processor, bookkeeper, and administrative assistant

(423) 697-4451

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
BST 000	Business Systems Technology	450	450	390

Total Clock Hours: 1290

Note: Students register for BST 000 each term until all competencies are mastered.

Commercial Truck Driving

Technical Certificate of Proficiency

This 11 week program trains students to drive commercial trucks, focusing on driving skills, safe operating practices, and proper record keeping.

Additional Admission Requirements

Applicants must be at least 21 years of age.

Career Opportunities

Truck driver, dispatcher, operations manager, safety supervisor, terminal

(423) 875-8448

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Total Clock Hours	
		CD 000	Commercial Truck Driving
CD 000	Commercial Truck Driving	330	

Computer Operations Technology

Technical Certificate of Completion Diploma

This program is designed to provide students with first hand knowledge of the software, hardware, and operations of personal computers used in business and industry today; students will explore how the personal computer works, how data is processed, and how to apply the functions to solutions on the job. The program consists of studies in the major operating systems, diagnostics, and configuration of computers and their related peripheral devices.

Career Opportunities

Information processing technician, personal computer hardware technician, microcomputer specialist, networking specialist

(423) 697-4729

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
COT 000	Computer Operations Technology	450	450	390

Total Clock Hours: 1290

Note: Students register for COT 000 each term until all competencies are mastered.

Computer Repair

See "Computer Operations Technology"

Cosmetology

Technical Certificate of Completion Diploma

This four-semester program prepares students to take the State Board of Cosmetology's practical and written examinations.

Additional Admission Requirements

Applicants must have completed at least two years of high school (8 credits) or score 38 or higher on the GED.

Career Opportunities

Color technician, esthetician, hair stylist, manicurist, make-up artist, shop manager

(423) 697-4477

Kimball (423) 837-9105

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours			
		FALL	SPR	SUM	FALL
CY 000	Cosmetology	450	450	390	*

Total Clock Hours: 1500*

*1500 clock hours required for State Board licensure

Diesel Equipment Mechanics

Technical Certificate of Completion Diploma

This program trains students in diesel engine mechanics.

Career Opportunities

Diesel mechanic, heavy diesel equipment repair, mechanic helper, truck mechanic

(423) 697-4778

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
DM 000	Diesel Mechanics	450	450	390

Total Clock Hours: 1290

Note: Students register for DM 000 each term until all competencies are mastered.

Electrician

See "Industrial Electricity"

Greenhouse

See "Landscaping and Turf Management"

Horticulture

See "Landscaping and Turf Management"

<http://www.chattanoogaastate.edu>

or call or 1-800-207-8202

E-mail: advising@chattanoogaastate.edu

HVAC

See “Air Conditioning and Refrigeration”

Industrial Electricity

Technical Certificate of Completion Diploma

This program prepares students to install, maintain, and repair electrical systems and equipment.

Career Opportunities

Apprentice electrician, cable TV installer, electrician’s helper, electric motor repairer, electrical technician, journeyman electrician, satellite antenna installer

(423) 697-3106

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
IE 000	Industrial Electricity	450	450	390

Total Clock Hours: 1290

Note: Students register for IE 000 each term until all competencies are mastered.

Industrial Electronics

Technical Certificate of Completion Diploma

This program prepares students to repair and maintain “state of technology” electronic equipment.

Career Opportunities

Computer maintenance, industrial controls system specialist, radio and television repair, industrial instrumentation specialist, telecommunications technician

(423) 697-3238 or 697-3174

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
ER 000	Industrial Electronics	450	450	390

Total Clock Hours: 1290

Note: Students register for ER 000 each term until all competencies are mastered.

Industrial Maintenance Mechanics

Technical Certificate of Completion Diploma

This program prepares maintenance personnel for industry. Students learn skills in electricity, welding, machine shop, hydraulics, pneumatics, air conditioning, general building maintenance, and robotics.

Career Opportunities

Electrical equipment maintenance technician, repair welder, robotics maintenance technician, maintenance foreman assistant, maintenance machinist, maintenance technician

(423) 697-3175

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
ID 000	Industrial Maintenance Technology	450	450	390

Total Clock Hours: 1290

Note: Students register for ID 000 each term until all competencies are mastered.

Landscaping and Turf Management

Technical Certificate of Completion Diploma

This program trains students for work with greenhouses, golf courses, public grounds, and residential landscaping.

(423) 697-2580

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
LM 000	Landscaping and Turf Management	450	450	390

Total Clock Hours: 1290

Note: Students register for LM 000 each term until all competencies are mastered.

Machine Tool Technology

Technical Certificate of Completion Diploma

This program gives students experience in machine tools, such as engine lathes, vertical and horizontal milling machines, pedestal and surface grinders, shapers, CNC Machining Centers, and Turning Centers.

Career Opportunities

CNC operator, CNC programmer, machine tool operator, maintenance machinist, manufacturing machinist, tool and die maker apprentice

(423) 697-3176

Sequatchie Valley Technical Center – (423) 554-4027

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
MT 000	Machine Tool Technology	450	450	390

Total Clock Hours: 1290

Note: Students register for MT 000 each term until all competencies are mastered.

Marine Engine Technology

Technical Certificate of Completion Diploma

This program prepares students for employment in the field of marine engine repair.

Career Opportunities

Marine mechanic, parts salesman, service manager, shop foreman

(423) 697-3178

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
SE 000	Marine Engine Technology	450	450	390

Total Clock Hours: 1290

Note: Students register for SE 000 each term until all competencies are mastered.

Mechanic

See “Automotive Technology”
See “Diesel Equipment Mechanics”
See “Marine Engine Technology”

Medical Assistant

Technical Diploma of Completion

Accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Curriculum Review Board of the American Association of Medical Assistants’ Endowment (AAMAE).

This program develops the administrative knowledge and clinical skills needed to work in a physician’s office. Graduates are eligible to write the National Certification Examination for Medical Assistants. Individuals convicted of a felony are not eligible to take the certification examination.

Career Opportunities

Hospital clinics, private physician offices, private medical clinics

Additional Admission Procedures

Additional admission procedures are required for this program. Please contact the program office.

(423) 697-4438

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
MO 000	Medical Office Assistant	450	450	390
Total Clock Hours: 1290				

Ornamental Horticulture

See "Landscaping and Turf Management"

Practical Nursing

Technical Diploma of Completion

This three-semester program provides theoretical knowledge and clinical experiences needed for practical nursing. The graduate is eligible to write the National Council Licensure Examination for Practical Nursing (NCLEX-PN). Individuals who have been convicted of a crime other than a minor traffic violation could be ineligible for licensure in the State of Tennessee, even though they have successfully completed a nursing program.

A class of 40 students is admitted in the fall and spring semesters.

Additional Admission Procedures

Additional admission procedures are required for this program. Applications are available all year on a first-requested basis. Please contact the program office.

(423) 697-4447

Expenses

Additional expenses include nursing textbooks, liability insurance, student uniform, achievement tests, school pin, state board examination and other supplies.

Progression

A minimum grade of "B" is required for retention and progression in the program. Students failing to meet this standard will not earn clock hours toward graduation and will be suspended from the program.

Career Opportunities

Doctor's office, home health care agencies, hospital, long-term care facility, nursing homes

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
LP 000	Practical Nursing	487	487	383
Total Clock Hours: 1357				

Surgical Technology

Technical Diploma of Completion

Accredited by the Commission on Accreditation of Allied Health Education Programs

The Surgical Technologist maintains a sterile environment and makes instruments and equipment available to the surgeon during surgery. Graduates of this three-semester training program are eligible to write the National Certification Examination for Surgical Technologists.

Additional Admission Procedures

Additional admission procedures are required for this program. Applications are available all year long. Please contact the program office.

(423) 697-4447

Expenses

Additional expenses include textbooks, certification exam and other supplies.

Progression

A minimum grade of "B" is required for retention and progression in the program. Students failing to meet this standard will not earn clock hours toward graduation and will be suspended from the program.

Career Opportunities

Doctor's office, hospital

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
OR 000	Surgical Technology	487	487	383
Total Clock Hours: 1357				

Truck Driving

See "Commercial Truck Driving"

Welding

Technical Certificate of Completion Diploma

This program teaches combination welding, basic oxyacetylene cutting and welding, shielded metal arc welding, metal inert gas welding, tungsten inert gas welding, and blueprint reading for welding.

Career Opportunities

Combination welder, maintenance welder, mig welder, pipe welder, structural steel welder, tig welder

(423) 697-3179

Sequatchie Valley Technical Center – (423) 554-4027

SUMMARY OF REQUIRED HOURS

Course No.	Course Title	Semester Clock Hours		
		FALL	SPR	SUM
WD 000	Welding Technology	450	450	390
Total Clock Hours: 1290				

Note: Students register for WD 000 each term until all competencies are mastered.

Telephone 1-800-207-8202 or e-mail: advising@chattanoogaastate.edu
or go online to <http://www.chattanoogaastate.edu>

Lottery information from

The Tennessee Technology Center

At Chattanooga State

The Wilder-Naifeh Technical Skills Grant:

It's **\$1,250** to earn valuable job skills at Chattanooga State's Tennessee Technology Center

Adults of any age and recent high school grads can qualify!

The simple requirements are:

- Have a TN high school diploma (any year) or GED
- No minimum GPA or GED score required
- Study any of the 17 one-year technical career programs offered by Chattanooga State
- Enroll full or part time (Some evening programs available.)
- Apply by May 1, 2004, for priority consideration

These excellent programs will have you career-ready in as little as one year!

Air Conditioning/Refrigeration*	Industrial Maintenance Mechanics
Auto Body Repair	Landscape & Turf Management
Automotive Technology	Licensed Practical Nursing
Business Systems Technology **	Machine Tool Technology **
Computer Operations Technology	Medical Assistant
Cosmetology *	Marine Engine Technology
Diesel Equipment Mechanics	Surgical Technology
Industrial Electricity	Welding **
Industrial Electronics	

All of these Wilder-Naifeh Grant programs are available at Chattanooga State's Amnicola Campus.

* Also at the Kimball Campus. ** Also at the Sequatchie Valley Campus.

Telephone today to learn about the simple application process.
Your contact is Andy Forrester at 423-697-4781.



General Education

Chattanooga State Technical Community College

Volume Number 29 Revised Edition

Contents

2004-06

Page

40	General Education General Information
40	Tennessee Board of Regents Philosophy of General Education
40-41	Approved General Education Courses
41	Math Placement
41	Foreign Language
42	Transfer Locations

Updated information may be available at the college's web site.

<http://www.chattanoogastate.edu>

Contents



Graduation 2003

Photo: Betty A. Proctor



Graduation 2003

Photo: Betty A. Proctor

General Education General Information

Tennessee Board of Regents Philosophy of General Education

The purpose of the Tennessee Board of Regents general education core is to ensure that college graduates have the broad knowledge and skills to become lifelong learners in a global community that will continue to change. Because course requirements in general education emphasize breadth, they are not reduced to the skills, techniques, or procedures associated with a specific occupation or profession. As a fundamental element of the baccalaureate degree, essential for full completion of all majors and minors, the general education core is fulfilled through lower division (freshman and sophomore) courses, but universities may add general education courses at the upper division as well.

General education provides critical thinking skills enabling students to discover authoritative answers to questions, and to solve challenging problems. Specifically, educated people practice and are literate in many forms of communication. They recognize their place in the history, culture, and diverse heritage of Tennessee, the United States, and the world. They appreciate the web of commonality of all humans in a multicultural world and are prepared for the responsibilities of engaged citizenship. They recognize the ethical demands of modern life. They demonstrate the skills and knowledge of the social and behavioral sciences to analyze contemporary society. They are familiar with the history and aesthetics of the fine arts. They understand and practice the scientific and mathematical view of the world.

Finally, Tennessee's general education core provides for its citizens the means to make a better living. It also, perhaps above all, enables its citizens to have a better life.

General Education

Effective Fall Semester 2004, each institution in the State University and Community College System of Tennessee (The Tennessee Board of Regents System) will share a common lower-division general education core curriculum of forty-one (41) semester hours for baccalaureate degrees and the Associate of Arts and the Associate of Science degrees. Lower-division means freshman and sophomore courses. The courses comprising the general education curriculum are contained within the following subject categories:

Baccalaureate Degrees and Associate of Arts and Associate of Science Degrees*

Communication	9 hours**
Humanities and/or Fine Arts	9 hours <i>(At least one course must be in literature.)</i>
Social/Behavioral Sciences	6 hours
History	6 hours***
Natural Sciences	8 hours
Mathematics	<u>3 hours</u>
Total	41 hours

*Foreign language courses are an additional requirement for the Associate of Arts (A.A.) and Bachelor of Arts (B.A.) degrees. Six

hours of foreign language are required for the A.A. degree and twelve hours are required for the B.A.

**Six hours of English Composition and three hours in English oral presentational communication are required.

***Students who plan to transfer to Tennessee Board of Regents (TBR) universities should take six hours of United States History (three hours of Tennessee History may substitute). Students who plan to transfer to University of Tennessee System universities or to out-of-state or private universities should check requirements and take the appropriate courses.

Although the courses designated by Tennessee Board of Regents (TBR) institutions to fulfill the requirements of the general education subject categories vary, transfer of the courses is assured through the following means:

- Upon completion of an A.A. or A.S. degree, the requirements of the lower-division general education core will be complete and accepted by a TBR university in the transfer process.
- If an A.A. or A.S. is not obtained, transfer of general education courses will be based upon fulfillment of complete subject categories. (Example: If all eight hours in the category of Natural Sciences are complete, then this "block" of the general education core is complete.) When a subject category is incomplete, course-by-course evaluation will be conducted. The provision of block fulfillment pertains also to students who transfer among TBR universities.
- Institutional/departmental requirements of the grade "C" will be honored. Even if credit is granted for a course, any specific requirements for the grade of "C" by the receiving institution will be enforced.
- In certain majors, specific courses must be taken also in general education. It is important that students and advisors be aware of any major requirements that must be fulfilled under lower-division general education.

A complete listing of the courses fulfilling general education requirements for all system institutions is available on the TBR website (www.tbr.state.tn.us) under Transfer and Articulation Information.

Approved General Education Courses for All Degrees

The following courses fulfill general education requirements at Chattanooga State.

Communication

ENGL 1010	Composition I
ENGL 1020	Composition II
SP 110	Fundamentals of Public Speaking

Humanities and/or Fine Arts

ART 1010*	Survey: Art History I
ART 1020*	Survey: Art History II
ART 1030*	Art Appreciation
ENGL 2110	American Masterpieces I
ENGL 2120	American Masterpieces II
ENGL 2140	African American Literature
ENGL 2210	English Masterpieces I
ENGL 2220	English Masterpieces II
ENGL 2410	Literature of the Western World I
ENGL 2420	Literature of the Western World II
HUM 1010	Introduction to the Humanities I
HUM 1020	Introduction to the Humanities II
HUM 2130	Mythology
MUS 1030*	Music Appreciation
PHIL 1030	Introduction to Philosophy
PHIL 2230	Ethics
RELS 2030	Religions of the World
THEA 1030*	Introduction to Theatre

*May be used for the Fine Arts requirement.

Social & Behavioral Sciences and/or History

EC 211	Principles of Macroeconomics
EC 212	Principles of Microeconomics
GEOG 1025	World Geography
HIST 1010*	Western Civilization I
HIST 1020*	Western Civilization II
HIST 1110*	History of World Civilizations I
HIST 1120*	History of World Civilizations II
HIST 2010*	United States History I
HIST 2020*	United States History II
HIST 2030**	Tennessee History (for 2010 or 2020)
PE 230	The Science of Fitness and Wellness
PO 110	Introduction to American Government
PY 101	General Psychology
SO 110	Introduction to Sociology
SO 216	Cultural Anthropology

*Transfer students must complete a history sequence. **HIST 2030 (Tennessee History) may be substituted for either HIST 2010 or 2020. This is the only substitution that is allowed in any of the History Sequences.

Natural Sciences

ASTR 1030	Astronomy
BIOL 1110	General Biology I
BIOL 1120	General Biology II
BIOL 2010*	Human Anatomy and Physiology I
BIOL 2020*	Human Anatomy and Physiology II
CHEM 1010	Introduction to Chemistry I
CHEM 1020	Introduction to Chemistry II
CHEM 1110	General Chemistry I
CHEM 1120	General Chemistry II
ESC 1110	Environmental Science I

ESC 1120	Environmental Science II
GEOL 1040	Physical Geology
GEOL 1050	Historical Geology
PHYS 1030	Physics Concepts
PHYS 2010	Non-Calculus-Based Physics I
PHYS 2020	Non-Calculus-Based Physics II
PHYS 2110	Calculus-Based Physics I
PHYS 2120	Calculus-Based Physics II
PSCI 1030	The Physical Environment

*BIOL 2010-2020 sequence must be completed to meet Natural Science requirement.

Mathematics

MATH 1010	Contemporary Mathematics
MATH 1530	Introductory Statistics
MATH 1710	College Algebra
MATH 1720	Pre-Calculus
MATH 1830	Calculus for Management, Life, and Social Sciences
MATH 1910	Calculus I with Analytic Geometry

Math Placement

Students pursuing majors for which the math requirement would normally be calculus or pre-calculus may begin their college math at a higher level than College Algebra if they meet the criteria listed below. All degrees at Chattanooga State require at least one college level math course. Meeting the criteria to place into a higher level course does not exempt the student from this requirement, nor is any credit granted for the course(s) the student is able to skip.

Criteria

- Three (3) high school math credits above the Algebra I level **and** a Math subscore of 25 on the ACT or corresponding SAT score.
- Two (2) high school math credits above the Algebra I level **and** a Math subscore of 21 on the ACT or corresponding SAT score.

Advanced Placement Course

Calculus with Analytic Geometry I, MATH 1910 (*MATH 1920 allowable for mathematics requirement if student places at that level*)
Pre-Calculus, MATH 1720 or
Calculus for Management, Life, and Social Sciences, MATH 1830

Foreign Language

The Associate of Arts degree requires proficiency in a foreign language equivalent to one year of college-level work. Students who have completed 2 or more years of the same foreign language in high school may be able to skip one or both of the elementary level courses. No credit is granted for the course(s) the student is able to skip.

FREN 1010, 1020	Elementary French I, II
FREN 2010, 2020	Intermediate French I, II
GERM 1010, 1020	Elementary German I, II
GERM 2010, 2020	Intermediate German I, II
SPAN 1010, 1020	Elementary Spanish I, II
SPAN 2010, 2020	Intermediate Spanish I, II

Updated information may be available at the college's web site: <http://www.chattanoogaastate.edu>.

General Education

Transfer program graduates easily enter many top four-year universities.

Every year, hundreds of Chattanooga State students **save thousands of dollars** on the total cost of a four-year degree by graduating first from Chattanooga State. Because Chattanooga State is accredited by the Southern Accreditation of Colleges and Schools, its graduates are eagerly accepted as Juniors by prestigious institutions nationwide. It's the **cost-effective** and **student-friendly** route to the top university of your choice. Here are some examples:

- University of Tennessee at Chattanooga
- University of Tennessee at Knoxville
- University of Memphis
- University of Georgia (pharmacy)
- Tennessee Technological University
- Southern Adventist University
- Samford University (pharmacy)
- Middle Tennessee State University
- Lee University
- Emory University
- East Tennessee State University
- Covenant College
- Bryan College
- Austin Peay State University
- Mercer University
- Georgia Tech



General Information

Contents

2004-06

Page		Page	
43	Notice To Students	62	Child Development Center
44	History	63	Disabilities Support Services
44	Statement of Mission	63	Educational Planning and Advisement
45-46	Academic Programs	63	Honors Program
47-52	Admissions	63	Library Services
52-59	Academic Regulations	63	Media Services
59-60	Student Aid	64	Placement and Cooperative Education
61	Financial Information	64	Student Life
62	Adult Education/GED	64	Tennessee Small Business Development and Resource Center
62	Athletics	64	Testing Center
62	Business and Community Development Center	64	Transitional Studies
62	Career Planning and Counseling Center	64	WAWL Radio
62	Center for Distributed Education		

Notice To Students

The College's course offerings and requirements are regularly scrutinized and revised. This catalog shows the offerings and requirements in effect at the time of publication. They may be changed or revoked. Adequate and reasonable notice will be given to students affected by any substantive changes.

This catalog is not intended to state contractual terms and does not constitute a contract between the student and the institution.

The institution reserves the right to make changes as required in course offerings, curricula, academic policies and other rules and regulations affecting students to be effective whenever determined by the institution. These changes will govern current and formerly enrolled students. Enrollment of all students is subject to these conditions.

Current information may be obtained from the following sources:

Admission Requirements	– Admissions Office
Course Offerings	– Department or Division Offering Course
Degree Requirements	– Academic Affairs
Fees and Tuition	– Bursar's Office

<http://www.chattanoogastate.edu> or call (423) 697-4401

or 1-800-207-8202

E-mail: advising@chattanoogastate.edu

History

Chattanooga State Technical Community College's history shows its commitment to the community and its ability to adapt.

When it opened in September 1965 on Fourth and Chestnut Streets, the College was known as Chattanooga State Technical Institute, a two-year, coeducational, college level institution. It was the state's first technical college, and Southeast Tennessee's first public institution of higher education. In 1967, the College moved to its present location; since then, it has grown into a multi-million dollar complex.

Chattanooga State Technical Institute's goal was to prepare students with marketable technical skills that would bridge the gap between the engineer and the craftsman. The technical programs offered AS and AE degrees and certificate programs, while remaining flexible to students and industry needs.

In 1973, Chattanooga State Technical Institute turned into Chattanooga State Technical Community College. Senate Bill 1010 assured the College would:

- provide comprehensive one and two-year occupational, college parallel, continuing education, and community service programs;
- provide quality technical and scientific occupational programs;
- serve as a regional technical school to train engineering technicians or technical workers in the fields of production, distribution, or service.

Chattanooga State's mission expanded to include vocational education on July 1, 1981, when the State Area Vocational-Technical School merged with the College. That merger was made permanent by the Tennessee legislature effective July 1, 1983.

Today, Chattanooga State Technical Community College continues to emphasize two-year technical programs and the expanded dimension of the comprehensive community college. Thus, the College is committed to meeting the needs of Chattanooga and Hamilton, Rhea, Sequatchie, Marion, Bledsoe, and Grundy counties.

Statement of Mission

Chattanooga State Technical Community College is nationally recognized for curricular innovation, use of technology in instruction, care for students and responsiveness to its community.

Chattanooga State is a comprehensive, regionally accredited community college in the State University and Community College System of Tennessee. Founded in 1965, Chattanooga State offers a wide array of programs and services including the following:

- Degree and certificate study for career preparation and advancement
- Transfer study leading to the associate degree
- Non-credit coursework (including CEU study)
- Transitional Studies (reading, writing and basic math)
- Adult education/GED preparation
- Technological and vocational training
- Career orientation
- Cultural diversity training and awareness
- Environmental education

Chattanooga State graduates have workplace knowledge and written and oral communication, computational, critical thinking, listening, teamwork and computer competence; and they have been taught the qualities of good character and citizenship.

Chattanooga State serves a six-county area of Southeast Tennessee and bordering counties of north Georgia and Alabama as an open-entry postsecondary institution offering over 50 majors of study toward these degrees and certificates:

- Associate of Arts
- Associate of Science
- Associate of Applied Science
- Technical Certificates
- Institutional Certificates

Chattanooga State is committed to area economic and community development, the use of advanced technologies in instruction, life-transforming support services based on a culture of care for all students and employees, and maintaining an

environment of learning where high academic standards and personal integrity are prized.

Chattanooga State affords equal opportunity to all eligible persons regardless of age, race, religion, sex, veteran status, national origin or disability.

Chattanooga State is also committed to these important objectives:

- Selecting and supporting faculty and staff members known for the following: superior teaching, applied research and professional service; the integration of technology into instruction and service; and the encouragement of all employees to practice their professions, grow personally and professionally and create community awareness of their capabilities.
- Assisting the community by providing educational programs and services that are of high quality, timely, created through scholarly program design and based on citizen and student surveys and studies.
- Instilling a desire for lifelong learning and a love of knowledge in all members of the College family.
- Offering caring support for all students through counseling, support groups, financial aid, career planning and advisement, library facilities, laboratories, tutoring, co-curricular activities and sports and recreation.
- Ensuring that all of these mission elements are accomplished through the careful utilization of resources—utilizing strategic planning, financial controls, employee professional development, public-private partnerships and alternative funding.

Chattanooga State delivers its programs and services at many sites in its Service Area as well as worldwide via distance learning technologies which include internet, video and electronic interactive instruction.

Every eligible instructional program of the College is nationally accredited. The institution as a whole is accredited by the Southern Association of Colleges and Schools.

Academic Programs

Associate Degree Programs

DEGREE	MAJOR (within degree)
Associate of Arts _____	General
Associate of Science _____	General
Associate of Applied Science _____	Accounting Technology Applied Technology _____



Graduation 2003

Photo: Betty A. Proctor



Graduation 2003

Photo: Betty A. Proctor

MAJOR (within degree)	CONCENTRATION (within major)
Applied Technology _____	Air Conditioning and Refrigeration Auto Body Repair Automotive Technology Cosmetology Diesel Equipment Mechanics Industrial Electricity Industrial Electronics Industrial Maintenance Mechanics Landscaping and Turf Management Machine Tool Technology Marine Engine Technology Medical Assistant Surgical Technology Welding
Engineering Technology _____	Civil Engineering Manufacturing Engineering Mechanical Engineering
Dental Hygiene	
Early Childhood Education	
Electrical/Electronic Engineering Technology _____	Automated Controls Computer Systems Networking Technology
Emergency Services Technology _____	Emergency Medical Care Emergency Service Supervision & Administration Fire Suppression
Graphic Design _____	Graphic Design Web Design
Health Information Management	
Human Services Specialist	
Industrial Maintenance Technology	
Information Systems Technology _____	End User Support Network Management Programming
Management _____	Aviation Management General Management Health Services Management Small Business Management
Nursing	
Office Administration	
Paralegal Studies	
Physical Therapist Assistant	
Radiologic Technology	
Realtime Reporting	Broadcast Captioning CART Reporting Judicial Reporting
Respiratory Care	

Academic Programs continued on next page

Academic Programs continued

Certificate Programs

CERTIFICATE

Technical Certificate of Credit _____	Administrative Assistant - Level II CAD Technology Chemical Process Operations Diagnostic Medical Sonography E-Commerce Information Systems Technology Nuclear Medicine Technology Pharmacy Technician Radiation Therapy Technology Word Processing
Technical Certificate of Completion Diploma (clock hour) _____	Air Conditioning and Refrigeration Auto Body Repair Automotive Technology Business Systems Technology Computer Operations Technology Cosmetology Diesel Equipment Mechanics Industrial Electricity Industrial Electronics Industrial Maintenance Mechanics Landscaping and Turf Management Machine Tool Technology Marine Engine Technology Medical Assistant Practical Nursing Surgical Technology Welding
Technical Certificate of Proficiency (clock hour) _____	Commercial Truck Driving

Regents Online Degree Programs

DEGREE

MAJOR (within degree)

CONCENTRATION (within major)

Associate of Arts _____	General Studies	
Associate of Science _____	General Studies	
Associate of Applied Science _____	Professional Studies _____	Information Technology

CERTIFICATES

Technical Certificate of Completion Diploma (clock hour) _____	Computer System Specialist
Technical Certificate of Proficiency (clock hour) _____	Computer Operator Information Processing Technician

Admissions

General Admissions Requirements

Chattanooga State has an open door admission policy. The College is open to all persons, regardless of race, color, religion, sex, age, national origin, veteran status, or physical, mental or educational disability.

Admissions requirements and procedures vary, depending on the student's goals and classification. Each category has its own requirements and procedures. However, the following apply to all applicants:

- Applicants should meet physical standards appropriate to their occupational choices.
- An admission application is not complete until the Admissions Office has received all required documents. An applicant may be denied admission until all are received.
- Males between 18 and 26 must certify registration with Selective Service before they can register for classes.
- All entering students born on or after January 1, 1957, are required to prove Immunization with two MMR (measles, mumps, rubella) vaccines unless contraindicated because of pregnancy, allergy to a vaccine component, or other documented medical reason. Contact Admissions for more information.

In addition to the admission requirements/procedures listed below, some programs have extra requirements, procedures, and deadlines. See the specific program in the "Career Programs" section of this catalog for more information.

Admissions Procedures - How To Apply Regular Admission

A regularly admitted student is one who is pursuing an associate degree or Industrial Technology program from Chattanooga State.

Associate Degree Programs

First Time Freshmen

- Submit an application to the Admissions Office and pay the non-refundable application fee.
- Submit an official high school transcript or General Education Development (GED) transcript.

An official transcript has the granting institution's seal and is either mailed directly to the Admissions Office or hand delivered in a sealed school envelope.

- High School graduates must hold a regular high school diploma. The high school transcript must show the student's graduation date and, for Tennessee high school graduates, must include a transcript entry that indicates the student passed the required proficiency test battery.
- Minimum scores for GED Certificate holders are based upon when the GED test was taken and are as follows:

JANUARY 1, 2002 OR LATER

Minimum score: 2,250
Minimum sub-score: 410
Minimum sub-score average: 450

JANUARY 1, 1997 THROUGH DECEMBER 31, 2001

Minimum score: 45
Minimum subscore: 40

PRIOR TO 1997

Minimum score: 45
Minimum subscore: 35

• Test Requirements

For applicants under 21: Submit ACT (American College Testing Program) or SAT (Scholastic Aptitude Test) scores. Scores are valid if taken within three years of the first semester of attendance and are used for advising and placement purposes. Additional assessment may be required.

Note: Students without the ACT (or SAT) may take the ACT residual test available in the Testing Center (valid for admission only at Chattanooga State); fee required.

For applicants 21 or older: Submit valid ACT or SAT scores or take assessment tests in reading, writing, and math.

Transfer Students

- Submit an application to the Admissions Office and pay the non-refundable application fee.
- Submit official transcript(s) from all colleges previously attended. An official transcript has the granting institution's seal and is either mailed directly to the Admissions Office or is hand delivered in a sealed school envelope. Transcripts will be evaluated and credit may be given for courses completed at regionally accredited institutions if all other admission requirements have been met. Transfer credits will not be used in computing the student's GPA at Chattanooga State. Students transferring from non-regionally accredited institutions follow the same procedures as first time freshmen. Credits from non-regionally accredited institutions may be evaluated on an individual basis or may be validated by examination. See "Alternative Sources of Credit" for information on procedures and fees.

• Testing and Placement

Transfer students who have not earned credits in college-level English composition or college-level, algebra-based math will be assessed in writing and math based on a valid ACT score or other appropriate assessment test. Chattanooga State accepts assessment and placement, as well as equivalent Transitional Studies courses, from all TBR schools. Assessment and placement from other non-TBR institutions, as well as Transitional Studies course credits, may be approved by Chattanooga State's Transitional Studies director.

Testing is not required for students who have any of the following from a regionally accredited college:

- successful completion of 60 hours of college level courses
- associate degree
- baccalaureate degree
- successful completion of a college level course at any TBR school before Fall 1985.

Transfer students are held to the same standards as other Chattanooga State students. Transfer students deficient in a Basic Academic Competency cannot continue in a related college-level course until they have satisfactorily met the exit criteria of the appropriate Transitional Studies course(s).

- Transfer students pursuing an AA or AS must also submit official high school transcripts or GED scores. This is waived for students who:
 - graduated from high school (or GED) before 1989, or
 - transferred 60+ hours of college level work, or
 - have a baccalaureate or associate degree
- Grade Point Average
Transfer students must be eligible to return to the institution they transferred from and meet the academic retention standards of

Chattanooga State. Students not meeting these criteria may be admitted to Chattanooga State after not attending any college for at least one term (not including summer). Such students are admitted on probation their first term and can be suspended at the end of the term if they do not meet Chattanooga State's academic retention standards. (See "Academic Retention Standards" in the "Academic Regulations" section.)

International Students

The Records Office handles international student admissions, including U.S. INS (Immigration and Naturalization Service) requirements.

International Students must:

- meet all requirements for admission as a degree-seeking student
- provide minimum TOEFL score of 500
- provide English translation of high school and/or post-secondary school transcripts
- take English and Reading components of placement exam if no transfer courses from institution using English as primary language
- furnish evidence of financial capability
- provide medical certification verifying freedom from tuberculosis
- have medical and hospitalization insurance

Mandatory Placement

- Students under 21 will be assessed for Transitional Studies placement according to ACT (or corresponding SAT) scores. Students over 21, GED students, and international students have the option of using ACT/SAT scores (taken within 3 years prior to the first day of the student's entering term) OR taking assessment tests in reading, writing, and math. Students with an ACT composite score of 26 or higher are placed at college level in all areas. An ACT score less than 19 in the subject areas of reading, writing, or math requires placement in Transitional Studies or further assessment.
- Students not required to take an assessment may request to be tested.
- Instructors may recommend testing for students who were not assessed, but later show deficiencies. If a student is then determined to be deficient in a Basic Academic Competency at the Transitional Studies level, he/she shall be withdrawn from the class(es) with a grade of "W." As a result, the student may not re-enroll until the exit criteria of the appropriate Transitional Studies course(s) has been satisfactorily met.
- A student's placement may be adjusted based on further holistic assessment.
- Re-testing for assessment may be available for an additional fee. See Director of Transitional Studies for options and approval to retest.

High School Unit Requirements

Beginning fall semester 1989, students entering a Chattanooga State program designed for transfer to a four-year institution should have the following high school credits:

- 4 units English
- 3 units Algebra I & II and Advanced Math or Integrated Mathematics I, II, III
- 2 units Natural/Physical Science (1 unit must have a lab)
- 1 unit Social Studies
- 1 unit United States History
- 2 units A single Foreign Language
- 1 unit Visual/Performing Art (effective Fall 1993)

Students without the entrance requirements listed above will be admitted, but cannot receive an Associate of Arts or

Associate of Science until all deficiencies are removed.

High school deficiencies in English or math may be removed by scoring 26 or higher on the ACT composite; scoring at college level on placement tests other than ACT; or completing Transitional Studies requirements. Other deficiencies may be removed with specified college courses, taken as electives. See "Removal of Entrance Deficiencies" in "Transfer Programs."

Notes:

- Applicants who graduated from high school or received a GED before 1989 are not subject to the 1989 Admission Requirements.
- Applicants who graduated from high school and have an ACT composite score of 26 or higher will have met all high school unit requirements except for foreign language and visual/performing arts.
- Applicants who received a General Education Development (GED) Certificate or an American Council on Education (ACE) External Diploma in 1989 or thereafter are considered to have met all high school unit requirements except those in foreign language and visual/performing arts. (However, such students are not exempt from the "American History Requirement" mandated by the Tennessee General Assembly as a condition of receiving a bachelor's degree from one of Tennessee's state-supported colleges or universities.)
- For applicants holding a baccalaureate degree or an associate degree designed for transfer, all high school deficiencies will be waived upon presentation of a transcript verifying completion of the degree.
- The qualifications and needs of applicants who volunteer information about a handicapping condition will be assessed on an individual basis. Assessment will include an evaluation of the applicant's potential for success in college and the determination of any exceptions which may be warranted.
- Applicants who are non-Tennessee residents are subject to the same admission requirements as Tennessee applicants.
- The High School Unit Requirements do not apply to students enrolled in career programs (Associate of Applied Science degrees or Technical Certificates of Credit).

Industrial Technology Programs

- Submit an application to the Admissions Office (\$10 non-refundable fee).
- Be 18; or (if under 18) have a high school diploma, GED, or be a designated Tech Prep program participant (see "Tech Prep" section under "Early Admission").
- Testing
 - Practical Nursing, Medical Office Assisting, and Surgical Technology applicants must take the Nursing Entrance Test (NET).
 - Other applicants must take the Industrial Technology Division's standard entrance exam or COMPASS. (This is waived for applicants with a baccalaureate or associate degree.) Students with math or reading deficiencies must successfully complete appropriate Transitional Studies courses before enrolling in the program.
- If applying for financial aid, submit:
 - Official high school transcript or GED transcript, or
 - Official transcript(s) from each college or university attended, or
 - A passing score on the Ability to Benefit Test (given by the Testing Center by appointment only).

Technical Certificate of Credit Programs

- Submit an application to the Admissions Office (\$10 non-refundable fee).
- Be admitted as a Special Student (see below).
- Testing requirements, if any, are determined by the program's content.

If a student enrolled in a Technical Certificate of Credit program later changes to degree-seeking status, all regular admission requirements, including assessment, must be met. Likewise, a regularly admitted student pursuing an associate degree may concurrently pursue a Technical Certificate of Credit, but this provision does not alter any requirements for regular admission.

Additional Admission Requirements

Some Technical Certificate of Credit programs have additional requirements, procedures, and deadlines which must be met. See the specific program in the "Career Programs" section of this catalog for information.

Special Students

A Special Student is one who takes credit courses without working toward a degree. Special Students must:

- Submit an application to the Admissions Office (\$10 non-refundable fee).
- Be 21, or (if under 21) have a regular high school diploma or GED.
- Testing

Some Technical Certificate of Credit programs require testing before admission. Testing may also be required in order to take certain courses (see below). Though Special Students are not required to complete normal assessment procedures, they are responsible for having the requisite knowledge and skills to succeed in their course(s).

Limitations:

- Special Students cannot enroll in a college level English or math course or in a course with an English or math prerequisite until they (1) satisfy the course's Mandatory Assessment Requirements, or (2) show successful completion of an appropriate college level English and/or algebra-based math course.
- Special Students are not eligible for financial aid unless enrolled in an approved Technical Certificate of Credit program.
- There is no limit on the number of credits Special Students may carry per term other than those stated in the Academic Load policy.
- Special Students are not restricted in how many credits they can earn. But, if the student changes to degree-seeking status, credit hours accumulated as a Special Student do not apply to the final twenty-four (24) semester hours required for the associate degree.

If Special Students change to degree-seeking status later, they must meet ALL regular admission requirements, regardless of the number of credit hours earned as a Special Student.

Transient Students

Students who are regularly enrolled in another college may attend Chattanooga State as transient students. If they later wish to change to degree-seeking status, all regular admission requirements must be met. Transient students must:

- Submit an application to the Admissions Office (\$10 non-refundable fee).

- For each semester attending, submit a letter of good standing from their regular college, dated after the end of the last term attended.
- Meet course prerequisites. (Transcript may be required for advisement.)
- If taking English or math, show successful completion of appropriate college level English and/or algebra-based math course(s), or satisfy the course's Mandatory Assessment Requirements.

Note: Transient students cannot enroll until the first day of regular registration for a semester, nor are they eligible to receive financial aid through Chattanooga State.

Early Admission

1. Early admission is available to high school students who have:
 - completed the 9th, 10th, and 11th grades with a 3.2+ GPA on a 4.0 scale or the equivalent.
 - ACT composite score of at least 22.
 - written statement from their high school principal specifying the college courses that will be substituted for the remaining high school courses needed for high school graduation.
 - written endorsements from their high school counselors and from their parents or guardians.

The student will leave the high school at the end of the junior year and matriculate into Chattanooga State. The Chattanooga State courses will substitute for courses needed for graduation from high school. The high school principal, or designee, will determine appropriateness of the courses before the student's matriculation. The student is awarded senior credit after successfully completing the college freshman year. Since 4 units of English is required for high school graduation, each student will enroll in freshman English, plus American History and Economics if not already completed in high school.

2. Dual Enrollment—The Dual Enrollment Program provides college courses for qualified high school honor students. Students receive college and high school credit simultaneously. These courses are offered during the school day on the high school campus, or students may attend one of Chattanooga State's sites with the parent's and principal's permission. All courses are taught by properly certified and appropriately endorsed local board of education employees or by credentialed Chattanooga State instructors. All courses are part of the school program, with content and instruction subject to the supervision of the school's principal and the local board of education.

Prospective dual enrollment students: sophomore (by exception), junior, or senior high school students with a minimum of 3.0 GPA and an ACT composite score of 19 or above. Additionally:

- For English—ACT English score of 19 required; open to seniors only
 - For Math—ACT math scores required: 21 for Pre-Calculus (MATH 1720); 25 for Calculus (MATH 1910)
3. Middle College High School—Courses are offered during the day at the Chattanooga State main campus

located on Amnicola Highway. Students will matriculate into Chattanooga State with parent and principal's permission. SACS qualified instructors teach all courses. Since 4 units of English are required for high school graduation, each student will enroll in an English course developed and taught by a Hamilton County teacher, housed on the Chattanooga State campus for this purpose.

Each participating student will enroll in other courses defined as necessary to complete the Carnegie units that are required for high school graduation. These courses are included with the standard curriculum offered at Chattanooga State and are taught by full-time Chattanooga State teachers. Middle College High School students participate in whatever regularly scheduled course that is appropriate for the completion of their high school requirements for courses other than English. Students receive both college and high school credit simultaneously for college courses.

Middle College High School students meet the following criteria:

- Have completed the 9th, 10th, or 11th grade.
- Have an ACT composite score of at least 19 or a demonstration of ability by exception.
- Provide a written statement of recommendation from principal (counselor) and parent.
- Have completed all necessary paperwork for college entrance.
- Have been selected for participation by the Middle College High School screening committee.
- Will be dual enrolled with the college.

Middle College High School graduates may also earn Chattanooga State's associate degree.

MCHS graduates can use their college courses plus an additional 12 credit hours (minimum) to meet associate degree requirements. After Middle College students have completed their high school requirements, they can:

- Submit an application for degree.
- Apply for re-admission as an associate degree major.
- Provide a letter of intent to graduate (MCHS) from the Middle College principal.
- Enroll in at least 12 credit hours more than required for high school completion.

4. **Technical Preparation Education (Tech Prep)**—Chattanooga State may grant credits to high school students through the national Technical Preparation Education (Tech Prep) program. Depending upon their type, Tech Prep credits may be used in placement in the College's Industrial Technology programs or as academic credit for selected technical courses. High school students interested in earning Tech Prep credits should contact either the high school guidance counselor or the Tech Prep Coordinator at Chattanooga State.
5. **Academically talented/gifted students enrolled in grades 9–12 in Tennessee** may, with the high school principal and appropriate personnel's approval, take college courses from a Tennessee college if the student presents an official high school transcript showing a 3.2 GPA on a 4.0 scale, if such placement is a part of the student's

Individual Education Program (IEP) as established by the multi-disciplinary team process.

Audit

A student may audit any college level or Industrial Technology course. Payment of the regular course fee is required. The student participates in class, but is not required to do assignments or take tests. Auditing may be denied, based on available space. Audit hours may not be converted to credit later or used to replace an earlier grade.

Students may enroll in any combination of audit and credit courses.

Students cannot audit Transitional Studies courses.

Senior Citizens and Persons With Disabilities

Tennessee residents who are totally and permanently disabled or who are senior citizens (age requirement defined below) may take courses at Chattanooga State for a reduced rate. A "Maintenance Fee Reduction Request" form, available from the Admissions Office, must be completed at the time of registration each semester in order to receive the discount or waiver. Normal admission (or readmission) requirements apply.

Audit—To receive a maintenance fee waiver for auditing, a person must:

- be 60+ or permanently disabled
- meet Tennessee residency requirements
- provide proof of age or disability before registering
- register for AUDIT after regular registration
- pay all other applicable fees

Credit—To receive discounted maintenance fees on credit courses, a person must:

- be 65+ or permanently disabled
- meet Tennessee residency requirements
- provide proof of age or disability before registering
- have satisfied all prerequisites or other criteria required for the course(s)
- pay all other applicable fees

Readmission

A student who did not attend the preceding term (summer excluded) must:

- Reapply for admission (no fee)
- Submit official transcripts from any college attended since leaving Chattanooga State (if applying for regular admission status)
- Complete any remaining admission requirements

Alternative Sources of Credit

College credit for prior learning may be given to students who demonstrate satisfactory achievement and proficiency by:

Credit by National Examination

Chattanooga State awards credit for successful completion of the following nationally recognized college-level examinations offered by the College Entrance Examination Board (CEEB):

Advanced Placement (AP)

AP tests are given to 11th and 12th grade students. Scores must be three or higher to receive credit.

College Level Examination Program (CLEP)

CLEP scores must be at the 50th percentile to get credit. Chattanooga State's Testing Center arranges the tests.

Students who have taken CLEP exams elsewhere should have official scores sent to the Records Office.

Credits earned by testing appear on the student's transcript with a grade of "CE," which carries no quality points and is not included in the student's GPA.

No limit is set on the number of hours that can be earned by AP or CLEP other than the restrictions imposed by the Graduation Residency Requirement.

Transfer program students should talk to their intended college or university about accepting AP and/or CLEP credit.

Credit By Departmental Examination

With the approval of an instructor, dean, and the Vice President for Academic Affairs, a student can earn credit for some college-level courses by passing a special departmental examination(s). See division offices for details.

Conditions and Restrictions:

- The student must be currently enrolled in credit work at Chattanooga State and have 2.5 cumulative GPA.
- The student must show the academic department he/she has the knowledge, skills, and/or competencies covered by the course. Permission to take a proficiency exam may be denied if the department decides the student's request is invalid. The department's decision is final.
- Proficiency examinations may validate credits taken at unaccredited institutions. Students must show by official transcript that the credits were previously earned.
- The regular course fee is charged for each test, in addition to maintenance fees paid for courses in which the student is actually registered (even if the student is full-time).
- Credits earned by testing appear on the student's transcript with a grade of "CE," which carries no quality points and is not used in computing the student's GPA.
- Proficiency tests may not be used to repeat coursework or to remove a grade of "I" or "F."
- A student may take the proficiency test for a specific course only once.
- Credits earned by testing do not satisfy the Graduation Residency Requirement.
- No limit is set on the total number of credits that can be earned by examination other than the restrictions imposed by the Graduation Residency Requirement.
- Proficiency examinations are not available for all courses.

Students planning to transfer should talk to their intended college or university about accepting proficiency test credit.

Credit for Life Experience

Individuals who have not earned an associate or baccalaureate degree may be eligible to petition to receive credit for work experience and/or certified professional programs. A student who has previously taken the petitioned course may not request Credit for Life Experience. Credit hours earned by Life Experience are not considered part of the College's Graduation Residency Requirement.

Credit for Life Experience may be granted by:

- Verification of College Credit Recommendation in the *Directory of the National Program on Noncollegiate Sponsored Instruction* (published by the University of the State of New York and the State Education Department of New York).
- OR-
- Up to nine (9) semester hours may be granted upon submission of

a portfolio documenting professional experience that directly relates to the content of specific courses offered by Chattanooga State AND approval of this portfolio by a Faculty Committee. The portfolio process must be initiated at least two semesters before graduating. A non-refundable assessment fee, equivalent to the per-credit-hour maintenance/tuition fee, must be paid prior to faculty assessment of the student's portfolio. Step-by-step procedures are listed in the *Student Handbook*. Assessment by portfolio is allowed only if credit by exam (including CLEP) is not available.

Military Service Credit

Credit may be granted for appropriate educational experience in the armed services in accordance with evaluation in the American Council on Education *Guide to the Evaluation of Education Experience in the Armed Services*. Veterans should submit documentation of previous training to the Veterans Affairs Office.

Students with honorable service and a valid DD 214 form may receive physical education activity credit. One credit is allowed for each six months of continuous active duty to a maximum of two credits.

American Council on Education (ACE)

Chattanooga State may give credit for appropriate educational experience listed in *The National Guide to Educational Credit for Training Programs* sponsored by the American Council on Education. The program is national in scope, and the Tennessee Higher Education Commission is a participating agency. Each request will be considered on its own merit and must have the approval from the appropriate division.

Orientation

Orientation is required for all first-time degree-seeking students.

Residency Classification

The following determines in-state and out-of-state status for fees and tuition purposes as defined by the State University and Community College System of Tennessee:

- Everyone domiciled* in Tennessee is classified in-state for fee, tuition, and admission purposes.
- Everyone not domiciled in Tennessee is classified out-of-state for said purposes.
- The domicile of an "unemancipated person"*** is that of his or her parent (i.e., father or mother, or non-parental guardian or legal custodian provided the guardianship or custodianship was not created primarily to create in-state status).
- Unemancipated students of divorced parents are in-state when one parent, regardless of custodial status, is domiciled in Tennessee.
- A graduate of any out-of-state high school must show Tennessee residency before receiving in-state tuition status.
- The spouse of a student classified as in-state shall also be classified as in-state.
- International students will pay out-of-state tuition.
- Students classified by Immigration as a Permanent Resident, Resident Alien, Refugee, or Immigrant may be charged in-state fees if domiciled in Tennessee.
- Part-time students who are not domiciled in Tennessee but who are employed full-time in Tennessee, are classified out-of-state but are not required to pay out-of-state tuition. The student must provide proper documentation each semester.

**Domicile—a person's true, fixed, and permanent home and place of habitation; it is the place where he or she intends to remain, and to which he or she expects to return when he or she leaves without intending to establish a new domicile elsewhere.*

***Emancipated person—a person who is eighteen years old, and whose parents have entirely surrendered the right to his/her care, custody, and earnings and are no longer under any legal obligation to support or maintain him/her.*

Contact the Admissions Office for more information.

Veterans

The Veterans Affairs Office is located in Student Aid Office.

To receive benefits, eligible students must:

- Apply to the Department of Veterans Affairs for educational benefits.
- Be enrolled in an associate degree program or in an Industrial Technology program.
- Submit a copy of DD 214 and DD 2384, if applicable.
- Register for classes.

Qualifying Courses

A student receiving veteran benefits can only be paid for courses listed in the catalog as required for his/her designated major.

Industrial Technology Programs

Students receiving veteran benefits who are enrolled in Industrial Technology programs are certified for clock-hour certificates. Credit may be given for previous education or training as determined by the instructor and approved by the Vice President for Academic Affairs at initial enrollment.

Full-time Status

The Department of Veterans Affairs accepts, as full-time, students who meet either of the following criteria:

- degree-seeking students taking 12 or more credit hours per semester.
- Industrial Technology students enrolled in clock hour programs meeting at least 22 hours per week.

Academic Fresh Start

Veterans are not eligible for Academic Fresh Start.

Veterans Brochure

Brochures with more information are available in Veterans Affairs.

**<http://www.chattanoogastate.edu> or call (423) 497-4401
or 1-800-207-8202**

E-mail: admissions@chattanoogastate.edu

Academic Regulations

Any exceptions to the following Academic Regulations must have the Vice President for Academic Affairs' recommendation and the President's approval.

General Expectations

The College can change the calendars, curricula, degree requirements, course offerings, and all academic regulations any time the faculty, the President, or the Tennessee Board of Regents believes such changes are in the best interests of the students and the College.

By registering, a student accepts all published academic regulations, including those here and in any other official announcement.

Academic Fresh Start

Academic Fresh Start is a forgiveness plan for students who did not do well their first time at college and are getting a second chance without penalty. Academic Fresh Start disregards all prior courses when calculating the student's current statistics. Although the courses are not removed from the student's transcript, they are not used in calculating the GPA and do not apply toward fulfilling any college requirement.

Eligibility Requirements for Academic Fresh Start—To

be eligible, the student must:

- Not have been enrolled in a postsecondary school for at least four (4) years.
- Be readmitted (or admitted) to Chattanooga State as a degree-seeking student. Only students pursuing an associate degree are eligible.
- Submit an Academic Fresh Start application and an Academic Plan form (available in the Records Office) to the Records Office prior to the completion of 15 hours of degree coursework.
- Complete at least fifteen (15) semester hours of college-level coursework with a minimum 2.5 GPA for all work attempted.

Terms of the Academic Fresh Start

- Academic Fresh Start is granted only once and is irrevocable.
- The student's permanent record remains a record of all work; however, for degree purposes, the student forfeits all college credit earned before the four-year separation.
- Previously satisfied Transitional Studies requirements are not forfeited. Students who did not complete their Transitional Studies requirements during their previous enrollment must meet current requirements and these courses do not count toward the 15 hours of coursework required to be eligible for Academic Fresh Start.
- The student's transcript will note the Academic Fresh Start and state that the grade point average and credit totals are based only

on the work beginning with the Academic Fresh Start.

- A student transferring to another institution should contact that institution to see what impact an Academic Fresh Start will have prior to implementing the program at Chattanooga State.

For more information, contact the Records Office.

Note: Veterans are not eligible for benefits as Academic Fresh Start participants.

Academic Honors

Commencement Honors

Chattanooga State recognizes exceptional degree-seeking students by granting honors at graduation as follows:

Summa cum laude	4.0 GPA
Magna cum laude	3.75–3.99 GPA
Cum laude	3.50–3.74 GPA

High Scores on Exit Exam

Honors recognition at commencement is based on the college-level GPA at the end of the fall term before graduation. If grades in courses completed during the final term(s) cause the student to qualify for a higher honors designation, it will be noted on the diploma.

Dean's List

Students completing 12 or more hours of college level work with a GPA of 3.5 or higher will make the Dean's List for that semester. (Dean's list recognition is based on calculations at the end of the semester and cannot be updated later to reflect grade changes, such as removal of Incompletes.)

Honors Program

The Chattanooga State Honors Program provides an enriched curriculum and related informal educational experiences for able and highly motivated students. Honors Program students who complete at least 12 hours of honors courses and maintain a 3.5 GPA or higher receive special recognition at graduation.

The Honors Program is open to the following:

- New students with a minimum ACT composite score of 25 or a high school GPA of 3.5 with sufficient high school course work in the honors subject area.
- Enrolled students with 15 completed semester hours of college-level work, a 3.5 GPA, and a faculty member's nomination.

For more information, contact the Honors Program coordinator.

Phi Theta Kappa

Phi Theta Kappa is the international two-year college honor society to recognize outstanding academic achievement and provide opportunities for developing leadership, service, fellowship and continued academic excellence.

All full-time and part-time students with 12 completed credit hours toward an associate degree with an overall minimum GPA of 3.5 are eligible for membership. Invitations are made in fall and spring semesters. Members must enjoy full rights of citizenship, pay a one-time induction fee, and maintain a 3.5 or higher GPA.

Psi Beta

Psi Beta, the National Honor Society for Psychology in Community and Junior Colleges, recognizes academic

excellence and provides members with opportunities to acquire leadership skills, learn more about professional and educational choices, and interact with professionals.

Eligibility criteria: (1) 3.5 overall GPA and (2) completion of two college-level psychology courses with a 3.5 or one psychology course with a 4.0 and enrollment in a second course.

Who's Who Among Students In American Junior Colleges

Full-time students with 30 completed hours and a GPA of 3.3 or higher may apply for Who's Who. Applicants are screened by a committee and reviewed by faculty members before the final selection is made.

Academic Load

Definition: The total semester hours of credit for all courses taken during the semester. Also referred to as "credit load," "course load," or "class load."

Full-time Students

Recommended credit load: 16–18 hours.

Minimum credit load: 12 hours.

Maximum credit load: 19 hours.

Overload: 20–22 hours. Enrollment in more than 19 credit hours must be approved in advance by the Vice President for Academic Affairs. A student requesting an overload should have a cumulative 3.0 GPA. The maximum number of hours permitted is 22.

Part-time Students

A student who carries an academic load of less than 12 hours is considered part-time.

Industrial Technology Students

A full-time load for an Industrial Technology student is 30 or more clock hours per week.

Industrial Technology students who wish to take credit courses while enrolled in an Industrial Technology program may do so subject to the following restrictions:

- All course prerequisites, including any mandatory testing, must be met and appropriate course fees paid.
- Credit load limitations: Six (6) credit hours per semester if the student is enrolled in an Industrial Technology program on a full-time basis; three (3) credit hours per semester if part-time.

Academic Retention Standards

Academic standing is based on the student's grade point average and is posted at the end of each term. The standing designation becomes part of the permanent record and does not change even if the GPA changes due to repeated courses.

Good Standing

The minimum college-level GPA required to receive a degree is 2.0. To be enrolled in good standing, a student must earn the minimum cumulative combined GPA below for the total number of semester credit hours attempted.

*Semester Quality Hours Attempted	Required Cumulative GPA
0.0 – 14.0	No Minimum
14.1 – 26.0	1.0
26.1 – 40.0	1.4
40.1 – 48.0	1.7
48.1 – 56.0	1.9
above 56	2.0

*Quality hours attempted are shown on the transcript under QHRS.

Note: The following grades are shown under Attempted Hours (AHRS) but not used in calculating GPA for probation/suspension purposes: W(withdrawal), S(satisfactory), N(no credit), and AU(audit).

Academic Probation

Any student who fails to attain the progression standards listed will be placed on academic probation for the next enrolled semester.

Academic Suspension

Any student on academic probation who fails to attain either the above cumulative standard or a 2.0 GPA for the current semester will be suspended for the next semester. The summer semester cannot be counted as the semester of suspension, nor can a suspended student enroll in summer school.

A student who re-enrolls at Chattanooga State after an academic suspension will be placed on post-suspension probation. If the student earns:

1. the cumulative standard, he/she will be in good standing.
2. a 2.0 GPA for that semester but is still below the cumulative standard, he/she will remain on probation.
3. less than a 2.0 GPA for that semester and is still below the cumulative standard, he/she will be placed on a twelve month suspension.

Appeal of Academic Suspension

A student may appeal his/her academic suspension. Suspension appeal forms, which include the procedures for an appeal, are available in the Career Planning and Counseling Center. Appeals hearings are usually held the first day of registration each semester; other appeals hearings may or may not be scheduled. Students should ask about suspension appeals as early as possible.

If an appeal is granted, the student will be eligible to enroll that semester in post-suspension probation status and must meet the conditions set by the appeals committee. If the conditions are not met, the student will be suspended for twelve months. Students may not appeal during this twelve-month suspension.

Industrial Technology

The Industrial Technology academic retention policy can be found in the “Industrial Technology Programs” section of this catalog.

Change of Registration (Drop/Add)

A “Registration and Drop/Add” form is used to add or drop a course, change from one course section to another, or change course registration from credit to audit or from audit to credit. (This form cannot be used to completely withdraw from school. See “Withdrawal From College.”) Forms must be submitted to the Admissions office for processing. Approval is required, as indicated on the back of the form. Students may not drop Transitional Studies courses except for extraordinary reasons and with special permission from the Director or his/her representative.

Deadlines

The academic calendar published by the Records Office each semester indicates the deadlines for making various registration changes. The following policies apply:

- Courses dropped during the first two weeks of classes will not appear on the student’s transcript.

- A grade of W shall be recorded for course(s) dropped prior to the Drop Deadline, which is not later than two-thirds into the semester.
- Exceptions to Drop Deadline are approved by the Vice President for Academic Affairs under extenuating circumstances only.
- A grade of W shall be recorded for Industrial Technology courses dropped at any point in the semester.
- If a student stops attending class and does not officially withdraw, he/she will receive a failing grade (F) for that course.

Change of Status

It is the student’s obligation to notify the Records Office of any change in name, address, or major. Failure to do so can cause serious delay in handling student records and in notification of emergencies at home. Change of Status forms are in the Records Office and on the Web.

Note: If mail is returned indicating insufficient address, a registration hold is placed on the student’s records until the address is corrected with the Records Office.

Class Attendance

When a student enrolls in a course, he/she obligates him/herself for all the work that may be assigned. Punctual and regular attendance is vital to this obligation. The student is responsible for all assigned work in the course, and absences, excused or unexcused, do not absolve him/her of this responsibility.

The instructor sets the attendance requirements for a class. At the beginning of the term, the instructor will distribute the class attendance policy, including an explanation of grade penalties that result from failure to comply with the policy. An unsatisfactory attendance record may negatively affect the final grade. It is each student’s responsibility to know the attendance policy in each of his/her classes. Non-attendance will not result in an automatic drop/withdrawal from course(s) and can result in grades which negatively affect the student’s academic record.

Students who are members of school sanctioned organizations will not incur grade penalties for classes not attended or class assignments/exams missed while representing Chattanooga State at scheduled events. At the beginning of each semester, the student must present a letter of organizational membership and a tentative activity schedule that has been developed and signed by the organization sponsor. It is also the student’s responsibility to notify the teacher in advance of any class he/she will miss. The student must complete missed assigned work/exams. Scheduled completion time will be at the discretion of the instructor.

Unsatisfactory attendance may result in a repayment of any financial aid received. Financial Aid students must attend all classes for which they register.

Note: If a student withdraws on or after the first day of class, but never attends the class, that class will not count when calculating financial aid eligibility and the student’s financial aid will be adjusted accordingly.

All veterans will be reported to Veterans Affairs when they have been excessively absent.

Class Cancellation

The College can cancel any class with fewer than the minimum number of students enrolled as set by the

institutional guidelines; however, all courses are given the opportunity to make.

Classification

A student is a freshman until he/she completes 33 semester hours in college level courses. Transfer credits are included in determining classification.

Co-op Credit

College credit may be earned through Chattanooga State's Cooperative Education program and applied toward graduation, with the following restrictions:

1. Co-op courses may be used as Unrestricted Elective credit in career programs (Associate of Applied Science degree).
2. A course substitution approved by the appropriate dean is required for co-op credit to be used to satisfy degree requirements other than Unrestricted Elective.
3. Co-op credit may not be used to satisfy General Education requirements.
4. Co-op credit may not be used as elective credit in transfer programs (Associate of Arts or Associate of Science degrees).

Course Substitutions

Only under unavoidable and exceptional circumstances will the College permit deviation from the prescribed curricula. When needed, the student must complete the appropriate form in consultation with his/her adviser, clearly stating in writing the desired substitution and reason for the request. Course substitutions must be approved by the student's adviser, the appropriate department head and dean, and the Vice President for Academic Affairs. A substitution is not allowed for courses for which a grade of D or F has been earned.

Diplomas

Unclaimed diplomas will be held in the Records Office for one (1) academic year after each graduation.

Dropping a Class

See "Change of Registration."

Grading Policy

Chattanooga State uses a grading system designed to show the level of mastery the student has achieved in a course. Minimum acceptable achievement is what is deemed necessary to enter the next level course or, at the program level, to enter a four-year college, or to be qualified to work in a specific career. The letter grades below are based on documented mastery of a set of specific instructional competencies. The competencies and objectives for each course are listed in the course syllabus.

Letter Grade	Quality Points per semester hour
--------------	-------------------------------------

A	4.0	Indicates consistently superior performance. Mastery level should be a minimum average of 90.
---	-----	---

B	3.0	Indicates consistently above-average performance. Mastery level should be a minimum average of 80.
C	2.0	Indicates satisfactory performance. Mastery level should be a minimum average of 70.
D	1.0	Indicates less than mastery level performance with a minimum average of 65. A course in which a D grade has been earned cannot be used as a prerequisite for another course in the same discipline. <small>Note: Some programs require a grade of C or higher in specified courses.</small>
F	0.0	Indicates failure to achieve minimum standards.
I	0.0	Incomplete. Given at the instructor's discretion to students who have not fulfilled all course requirements at the end of the grading period. Counts as an F, both in computing the GPA and for purposes of satisfying course prerequisites. The deadline for removing an Incomplete is determined by the instructor, but must be no later than two weeks before the end of the next semester. An exception to rule is anyone who has applied for graduation. If incomplete grades in courses satisfying degree or certificate requirements are not removed within two weeks of the end of the term, the student's degree or certificate will not be posted until the following term. <small>Note: If course requirements are not satisfied by the deadline, the "I" grade is changed to "IF" on the student's transcript.</small>
IF	0.0	Incomplete/Failure. Indicates student failed to complete the requirements of a course in which he/she had received an Incomplete.
W		Withdrawal. Indicates the student has withdrawn from the course. Does not count in the GPA.
AU		Audit. Indicates that the student elected to enroll in the course for no grade or credit. Audits do not replace previous grades.
CE		Credit by Examination. This designation is used for both institutional and national exams (AP and CLEP).
CL		Credit for Life Experience. The CL is not counted in the GPA.
S/N		Satisfactory/No Credit. Selected courses may be offered on a competency based grading system. If the student satisfactorily meets the minimum competencies, credit (S) will be awarded. Students not meeting minimum competencies will not receive credit (N).

Calculation of Grade Point Average (GPA)

Chattanooga State transcripts indicate two grade point averages—a "college only" average and a "combined" average. The college only GPA consists of hours taken in college level courses. The combined GPA includes hours taken in both college level and Transitional Studies courses. The college only GPA is used to calculate the GPA required for graduation and to determine honors. The combined GPA is used to determine suspension, probation, eligibility for financial aid, and athletic eligibility.

Note: Grades of W are shown on the transcript under the heading of Attempted Hours (AHRS) but are not used in calculating GPA. But, they may affect a student's financial aid eligibility.

Repeating a Course

For increasing mastery or GPA (and only for these purposes), students may repeat courses in which their final grades are C or lower.

Students may only repeat a course with a B or higher with the approval of the Vice President for Academic Affairs.

When a course is repeated, only the last grade received is calculated in the cumulative GPA. However, if a course is repeated more than twice, the third and all later grades are included in computing the cumulative GPA.

Appeal of a Grade

Grades assigned by faculty members are final unless there is evidence that the grade was influenced by consideration of race, color, religion, sex, marital status, handicap or national origin, arbitrary or capricious action or other reasons not related to the academic performance of the student. In all cases the complaining student shall assume the burden of proof with respect to the allegations.

Steps For Appeal of a Grade:

1. The student has thirty (30) calendar days from the day grades were due in the Records Office of the term in which the grade was earned to talk with the instructor and resolve the complaint. If the student cannot meet with the instructor, the student may contact the instructor's supervisor, who will schedule a meeting between the instructor and the student, unless the instructor is no longer working for the College or is unavailable.
2. If the complaint is not resolved in Step 1, the student may obtain a Student Grade Appeal Form from the Vice President for Student Affairs' office. The student must present the completed Student Grade Appeal Form to the division dean in which the course was offered within forty-five (45) calendar days from the end of the term during which the grade was received. The division dean will try to resolve the appeal with the instructor and the student within fifteen (15) calendar days of the formal presentation of the Student Grade Appeal Form.
3. If the complaint is not resolved at Step 2, the student has five (5) calendar days to appeal to the Vice President for Academic Affairs, by sending a copy of the Student Grade Appeal Form and explanation for the appeal, the evidence for the appeal, and any supporting data. The division dean must also forward a copy of all correspondence and records to the Vice President for Academic Affairs. The Vice President for Academic Affairs may use any resources available to resolve the grade conflict within a 21 calendar day period. If the Vice President for Academic Affairs finds the request without merit, he/she will notify the student, the instructor, and the division dean. If the Vice President for Academic Affairs determines the student's request has merit, he/she will refer the student to the Academic Appeals Committee.
4. The written request for a hearing before the Academic Appeals Committee shall state the facts of the appeal. The committee shall notify the student, the instructor, the Vice President for Academic Affairs, and the President of Chattanooga State of the time and location of the hearing. The Academic Appeals Committee shall function as a review board. Acting on behalf of the President, and after thorough review of the case, the Committee shall make the final decision. It shall have the power to allow the assigned grade to stand, be raised, or lowered. Its decision must be formally announced to all parties. The time schedule allowed for completion of the action by the Committee shall be 21 calendar days.

Pending resolution of the appeal, the grade stands.

Graduation Requirements

All requirements for degrees and/or certificates must be completed before the credential can be posted to the student's transcript or a diploma awarded. This includes removal of any incomplete grades in courses needed to satisfy degree or certificate requirements. Incompletes not removed within two weeks of the end of the term will delay posting the credential until the following term.

All candidates for graduation for a given academic year (Fall, Spring, or Summer) may participate in Chattanooga State's annual commencement exercises even though all requirements for graduation may not have been met. However, such participation in no way confirms completion of requirements or official graduation. Students not completing all requirements by the end of the summer term following commencement must reapply.

Application and Fee

A student must submit an application and pay the non-refundable application fee by the deadline in order to be considered a candidate for graduation. This deadline applies to all candidates for a given academic year, including summer completers.

Applicable Catalog

A student may obtain a degree or certificate based on the requirements in the catalog in force when he/she entered the College or under a later catalog in effect for any term he/she is enrolled. However, a student can only use one catalog.

Time Limitation. Counting from the first term covered by the catalog, requirements for associate degrees and Technical Certificates of Credit remain in effect for a period of five years and Industrial Technology programs for two years.

Double Degree

A student may earn, simultaneously or consecutively, multiple degrees only when the majors completed lead to different degrees, e.g., one leads to the AAS and the other to the AS. All requirements for both degrees must be met, and the student must complete at least 20 semester hours not included for the first degree. The cumulative grade point average (GPA) for all college-level work must be 2.0 or higher.

Double Major

A double major is the completion of two or more majors leading to the same degree. (At Chattanooga State, double majors are available only in AAS degree programs.) All requirements for each major must be met. The second major must include at least 20 hours not applied to the first major. The cumulative grade point average (GPA) for all college level work must be 2.0 or higher.

Note: Graduation with two or more concentrations in the same major is not considered a double major (see below).

Double Concentration

Students may complete more than one concentration in the same major; however, both concentrations must be completed at the same time.

Degree/Technical Certificate of Credit

Students may receive both a degree and a Technical Certificate of Credit by completing all requirements listed in the SUMMARY OF REQUIRED HOURS for each.

Double Certificate

All requirements for both Technical Certificates of Credit must have been met and at least one-third of the hours required for the second certificate must not have been required for the first certificate.

Grade Point Average

Associate Degree—The cumulative grade point average (GPA) for all college level work must be 2.0 or higher.

Technical Certificate of Credit—All courses required for the Technical Certificate of Credit must be completed with a grade of C or better.

Graduation Residency Requirements

Associate Degree—The final twenty (20) semester credit hours before graduation must be completed at Chattanooga State. (Only credits earned in college level courses apply toward satisfying this requirement.)

Note: Credit hours accumulated as a Special Student are not applicable to the final twenty-four (24) semester hours required for an associate degree.

Technical Certificate of Credit—All required hours for a Technical Certificate of Credit must be completed at Chattanooga State with the exception that a maximum of three (3) semester hours transferred from another institution of higher education or three (3) semester hours of Credit for Life Experience may be applied toward the certificate.

Industrial Technology Programs—Credit may be given for previous education or training as determined by the instructor and approved by the Vice President for Academic Affairs at the time of the student's initial enrollment.

Exit Testing

All degree candidates are required to test for general achievement. Major testing may also be required in selected fields. These tests are used to evaluate Chattanooga State's academic programs. Exit testing must be completed before the Records Office can post the degree or issue a diploma. Until the degree is posted, a student is not considered to have graduated.

Indebtedness

Students should pay off any debts to the College as soon as possible. No diploma, certificate, or academic transcript will be issued to a student who has not settled outstanding College debts with the Vice President for Business and Finance. A student may be prohibited from attending classes or taking final examinations after the due date of any unpaid obligation.

Privacy Rights of Students

A. Definitions

Educational Records. Those records, files, documents, and other materials which (1) contain information directly related to a student, and (2) are maintained by Chattanooga State or by a person acting for the College. Educational records do not include (1) personal notes, (2) records available only to law enforcement personnel, (3) employment records.

Student. Any person who is or has been enrolled at Chattanooga State. Wherever "student" is used in reference to personal rights, an eligible parent of a dependent student has similar rights. This "eligible" parent is one who has satisfied Section 152 of the Internal Revenue Code of 1954, and who presents proof of such to the Records Office. Normally, this will be a written affirmation by the student and the parent declaring that the student is a dependent for Federal Income Tax purposes.

Directory Information. The student's name, address, telephone listing, photograph, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. At the time the student registers for courses, the student may notify the Records Office, in writing, that directory information for that student may not be released. This notification must be received within ten (10) days of registration.

Access. To have access to an educational record is to be allowed to see the original record. It also implies the right to obtain copies of that record.

B. Release of personally identifiable student educational records

Chattanooga State shall not permit access to, or the release of any information in the educational records of any student that is personally identifiable, other than directory information, without the written consent of the student, to any party other than the following:

1. Chattanooga State officials and staff who have legitimate educational interests, including the support of honor societies and academic excellence.
2. Officials of schools in which the student seeks admission.
3. Appropriate persons in connection with a student's application for, or receipt of, financial aid.
4. Federal or State officials as defined in paragraph 99.31 of the regulations concerning this law.
5. State and local officials authorized by state statutes.
6. Organizations or persons conducting studies for, or on behalf of Chattanooga State for the purpose of assisting in accomplishing the College's stated goals,

when such information will be used by such organizations or persons and subsequently destroyed when no longer needed for the intended purpose.

7. Accrediting organizations, to carry out their functions.
8. Parents of a student as defined in section 152 of the Internal Revenue Code of 1954 (written consent may be allowed from either of these separated or divorced parents subject to any agreement between the parents or court order). In the case of a student whose legal guardian is an institution, a party representing that institution may have access to the records.
9. In compliance with judicial order or subpoena, providing that the student is notified in advance of the compliance.
10. Appropriate persons in connection with an emergency if such knowledge is necessary to protect the health and safety of a student or other persons.

Note: With the exception of Chattanooga State officials and staff who have been determined by the College to have legitimate educational interests, all individuals and agencies who have requested or obtained access to a student's record will be noted in a record which is kept with each student's educational record. A request must be in writing stating the purpose of the request. This record will also indicate specifically the legitimate interest that the person or agency had in obtaining the information.

C. Procedure for Accessing Educational Records

The student requests the custodian to allow him/her to pursue the educational record. The student may ask for an explanation and/or a copy of the given educational record. After consultation with the custodian, errors may be corrected at that time by that custodian. Thereafter, if the student believes the record to be accurate in content, he/she should acknowledge with his signature and the date; if the student believes the record content to be inaccurate, he/she then may submit a request for an informal hearing before the Appeals Committee. The request, and the challenge, must be presented in writing to the Records Office which will request a meeting of the Appeals Committee. The Appeals Committee Chairperson will acknowledge receipt of the challenge and notify the student of time and place for the first meeting convenient to the student. The Appeals Committee will convene with the student within forty-five (45) days from the date of the request allowing the student to present relevant evidence, and allowing the student to be represented by an individual of his/her choice at his/her own expense, including an attorney if so desired. The student will be afforded all of his/her rights under Due Process as delineated in the *Student Handbook*. The decision rendered by the Appeals Committee shall be based solely upon the evidence presented at the hearing. The decision must include a summary of the evidence and the reasons for the decision.

Note: This procedure does not provide for a hearing to contest an academic grade.

D. Right of Access Does Not Include:

1. Financial records of parents or any information therein.
2. Confidential letters and statements of recommendation which were placed in the educational records prior to January 1, 1975.
3. Records to which access has been waived by the student. (This applies only if a student, upon request, is notified of the names of all persons making

confidential recommendations and, if such recommendations are used solely for the purpose they were intended.)

E. Educational Records may be destroyed except that a student shall be granted access prior to destruction if such is requested.

F. Complaints

Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by Chattanooga State to comply with the requirements of FERPA. The Office that administers FERPA is:
 Family Policy Compliance Office
 U.S. Department of Education
 600 Independence Avenue, SW
 Washington, DC 20202-4605

Probation/Suspension

See "Academic Retention Standards" in this section.

Retention of Records

The Records Office is required to maintain certain student records permanently. However, Registration and Drop/Add forms and Transcript requests will be maintained for only one year.

Transcripts

An official Chattanooga State transcript will be sent to another institution or organization upon a student's written request. Unofficial transcripts are available in the Records Office with proper identification. There is no fee for this service.

Note: Transcripts are not released if the student has an outstanding obligation to the college.

Transcript Evaluations

The College accepts transfer credits from other colleges. Official transcripts from each institution a student attended are evaluated upon receipt in Admissions. A grade of "D" or higher is required for transfer. However, a course in which a "D" grade has been earned cannot be used as a prerequisite for other courses in the same discipline, or for major courses in the AAS degree programs. Transfer credits are not used in computing a student's GPA at Chattanooga State, but are counted in Earned Hours.

Credits from non-regionally accredited institutions may be evaluated on an individual basis (contact the Records Office for a "Petition of Transfer Credit" form) or may be validated by examination (See "Alternative Sources of Credit" for information on credit by exam).

Note: A maximum of three (3) semester hours of transfer credit may be applied toward a Technical Certificate of Credit.

Undecided Majors

Students may remain "undecided" only until the end of their freshman year. Upon completing 33 semester hours of college level courses, students must declare a major by completing a Change of Status Form in the Records Office. Students may change their major anytime by the same procedure.

Students are encouraged to declare a major early, so

their records can be evaluated and they can be assigned to an appropriate advisor. This is especially important for A.A. or A.S. majors who may need to remove entrance deficiencies.

Note: Contact the Career Planning and Counseling Center (423) 697-4421 for help in choosing a major.

Withdrawal from College

A release from enrollment from all classes becomes official only after completion of the withdrawal process, which is initiated in the Career Planning and Counseling

Center. Failure to attend class or discontinued attendance is **not** official withdrawal. Not withdrawing officially will cause a student to fail and could jeopardize later re-enrollment.

The consequences of completely withdrawing from school depend on when the student withdraws. For more information, see “Change of Registration (Drop/Add).” For specific deadlines, see the Records Office’s academic calendar.

<http://www.chattanoogaastate.edu>

or call (423) 697-4402

or 1-800-207-8202

Student Aid

The Student Aid Office helps students pay for college. Eligibility for financial aid is based on financial need, merit, availability of funds and the ability to maintain satisfactory academic progress. To qualify a student must:

- Have a high school diploma, a GED, a certificate of completion of a home study program recognized by the state of Tennessee, or, for Industrial Technology students, pass the Ability to Benefit Test;
- Be a U.S. Citizen or permanent resident;
- Submit the Free Application for Federal Financial Aid (FAFSA) to determine financial need;
- Be accepted for admission or currently attending Chattanooga State;
- Be enrolled in an approved degree or certificate program;
- Submit all verification documents as requested by the Student Aid Office;
- Meet Chattanooga State’s satisfactory academic progress standards for financial aid recipients;
- Not be in default on a Federal Student Loan or owe a repayment on a Federal Pell Grant;
- If male and born after 1959, be registered with Selective Service;
- Have a valid Social Security Number.

Students may be eligible for financial aid through any or all of the following sources:

- Chattanooga State Academic Performance Scholarships cover in-state tuition and fees and provide an allowance for books and supplies. Entering freshman must have a cumulative 2.9 high school GPA. Some continuing students are also eligible.
- Chattanooga State Foundation Scholarships are available in various academic areas. For specific information, obtain an application for Chattanooga State Foundation Scholarships from the Student Aid Office.
- Minority Grants are for first-time African American and Native American freshmen with at least a 2.0 high school GPA. Currently enrolled, continuing, and transfer students may also be eligible.
- Federal Pell Grants are for students with financial need who are enrolled in an eligible program and who do not have a bachelor’s degree.
- Federal Supplemental Educational Opportunity Grants (FSEOG) are for students with exceptional financial need who are enrolled

in an eligible program and who do not have a bachelor’s degree.

- Tennessee Student Assistance Awards (TSAA) are for Tennessee students with demonstrated need who are enrolled or accepted as a student at an eligible Tennessee institution.
- Federal Work Study Programs are for at least half-time students who are eligible to work on campus.
- Federal Subsidized Stafford Loans are for at least half-time students who are maintaining satisfactory progress.
- Federal Unsubsidized Stafford Loans are for middle-income borrowers who do not qualify for federal interest subsidies under the Federal Stafford Loan program.
- Federal Plus Loans are for the parents of at least half-time students.
- Institutional Work Programs are for students who work on campus, but not through the Federal Work Study Program.
- Veterans Benefits are for students who have served on active duty and for the children and/or spouses of disabled or deceased veterans whose disability or death was service-connected.
- Military Assistance is for students serving in the Armed Forces.
- Vocational Rehabilitation is for eligible students with occupational handicaps.
- Employment Benefits are for students who get financial assistance or tuition reimbursement from their employers.

Financial Aid Refund, Withdrawal, and Repayment Policies

Refund

Class withdrawal refunds will be calculated using the TBR refund policy published in Chattanooga State’s Class Schedule. Any refund due for class(es) dropped before the 14th day will be returned to the student; after the 14th day, refunds will be returned to the Department of Education.

Withdrawal and Repayment

Students who withdraw from all classes prior to completing more than 60% of the term will have their eligibility for aid recalculated based on the percent of the term they completed. E.g., a student who withdraws completing only 30% of the term will have “earned” only 30% of any Title IV aid received. The remaining 70% is

considered “unearned” and must be returned.

When the total amount of unearned aid is greater than the amount returned by Chattanooga State from the student’s account, the student is responsible for repaying the difference. Loan amounts are returned by the student to the lender according to the terms of the promissory note.

The Student Aid Office will notify the student of the amount of repayment due. The student has 20 calendar days after notification to repay in full or make satisfactory repayment arrangements with the Student Aid Office. Students owing repayment are ineligible for additional Title IV aid unless arrangements can be made for deducting balances from future awards.

For more detailed information on these policies and procedures for withdrawal, contact the Student Aid Office.

Satisfactory Academic Progress Standards

Federal regulations require a policy measuring the qualitative standards, quantitative standards, and time frame of degree completion for all Title IV financial aid recipients. Satisfactory progress is reviewed and monitored when grades are posted each semester. Satisfactory academic progress standards are outlined below.

Degree Seeking Students

Qualitative Standards

Financial aid recipients must maintain the following cumulative grade point average:

Cumulative Quality Hours	Required Quality GPA
0.0 – 14.0	No Minimum
14.1 – 26.0	1.4
26.1 – 33.9	1.7
34.0 and above	2.0

If the student’s Quality GPA is below the minimum, then the student will be ineligible for financial aid until his/her GPA is raised to this level.

Quantitative Standards

Students must successfully complete at least 67% of all credit hours attempted, based on passing grades. A student who is unsuccessful in completing 67% of the semester credit hours attempted will be reviewed for cumulative percentage. If a student’s cumulative percentage of completed courses is below 67%, the student will be ineligible for financial aid until the 67% completion rate is obtained.

Time Frame

Students may ATTEMPT 1.5 times the number of credit hours needed to complete their degree, excluding Transitional Studies, and still be eligible for financial aid. Attempted hours include I’s, F’s, W’s, and audits. This is a combined total of all credit hours attempted.

Time frame for transfer students will be evaluated according to the hours transferred into the institution, as well as credit hours attempted at Chattanooga State.

Time frame for students seeking a second associate degree is determined by the 1.5 times the number of credit hours rule. Applications for a second degree will be considered on a case by case basis. Applicable hours from the first degree will be counted as attempted hours in the second degree program.

Students reaching the maximum time frame in a semester will receive financial aid for hours enrolled in that semester only. They will need to complete the appeals process to receive financial aid in any future semesters.

Industrial Technology Students

In order to get financial aid, Industrial Technology Division students must (1) have a high school diploma, a GED, or pass the Ability to Benefit Test, AND (2) be enrolled for at least 30 clock hours per week if full time. Students enrolled for less than 30 hours per week are not considered full time, and their awards will be prorated based on part-time enrollment. **Part-time industrial technology students are ineligible for student loans.**

Qualitative Standards

A grade of C or better is required.

Quantitative Standards

Chattanooga State Industrial Technology programs count as one academic year in length (except Cosmetology).

Industrial Technology students must complete 91% of the enrolled hours to remain eligible for later financial aid payments. Unexcused absences exceeding 9% must be made up before the student can receive future financial aid.

Time Frame

The maximum time frame for an Industrial Technology student to receive financial aid is 1.5 times the number of clock hours needed to complete a certificate.

Appeals

Financial aid termination can be appealed in writing to the Financial Aid Appeals Committee, which meets before classes begin and throughout the semester as needed. Students are encouraged to submit, in writing, any significant circumstances that would effect their ability to make satisfactory academic progress. Consideration will be given for extenuating circumstances, such as a student’s illness or hospitalization, or death in family.

Prorating of Funds

Registration in non-standard term classes (Examples: Flex, RODP, Urban League and classes that do not run the full semester) will result in prorating (reducing) financial aid, including loans. **Financial aid is awarded based on the number of weeks of class instruction.**

Financial Information

Fee Policy

All fees are due when the student registers or pre-registers. Registration is not complete until fees are paid or when the initial minimum payment under the deferred payment plan has been paid. The fees are subject to change at any time by the Tennessee Board of Regents.

Fee Schedule

The fee schedule is available on the College's web site, and at campus locations.

Out-of-state residents who work full-time in Tennessee may attend classes part-time at in-state fee rates, upon completion of an out-of-state employment form. This form must be completed for each term of enrollment before registering for classes.

Maintenance fees for Summer are not capped at 12 credit hours. Students will be charged the per hour fee for every hour enrolled.

Note: The regular maintenance fee and tuition, not to exceed the maximum, will be charged for repeating a course for which a grade of "E" has been received in a previous term.

Regents Online Degree Program (RODP)—The fees for RODP students will be the current part-time per hour charge of the home institution for the maintenance fee and for the out-of-state fee, as applicable, plus an online course fee. (Since the RODP Online Course Fee is considered a "special course fee," TBR, UT and other state employees who are entitled to a fee waiver are still required to pay this fee.) RODP students are not required to pay the General Access Fee. This fee is included in the RODP Online Course Fee. Regents degree courses are all charged per hour and viewed separately from on-campus courses so as not to mix with the full-time cap applicable to on-campus courses and other online courses that are not part of the Regents Degree Program, and distance education courses. For more information, visit: <http://www.TN.regentsdegrees.org>.

Senior Citizens and Persons with Disabilities—Senior citizens and persons with disabilities may qualify for discounted maintenance fees.

Fees Charged in Addition to Maintenance and Tuition:

Application Fee—Paid one-time. Non-refundable.

CDE Fee—Per Distributed Education class.

Credit by Examination Fee—The regular course fee is charged for each special examination before the test.

Credit for Life Experience Fee—A non-refundable assessment fee, equivalent to the per-credit-hour maintenance/tuition fee, must be paid prior to faculty assessment of the student's portfolio.

General Access Fee

Graduation Fee

Handicapped Parking Violation

ID Card Replacement Fee

Late Registration Fee

Parking Violations

Private Music Fee

Special Course Fees—If the College must pay for special facilities, those costs will be assessed as a laboratory fee.

Technology Access Fee:

- For credit courses per credit hour.
- For Industrial Technology courses.

Refund Policies

Students who officially withdraw from school entirely, full-time students who drop to part-time, or part-time students who drop one or more classes may get a refund.

100% of fees are refunded for (1) drops or withdrawals before the first day of the term, (2) cancelled classes, and (3) the death of a student during the term.

College Credit Courses

75% of fees are refunded for drops or withdrawals during the first 14 calendar days of a term or within an equivalent period for a short term course.

25% of fees are refunded for 25% of a term following the 75% period. No refunds will be made beyond the 25% period.

Industrial Technology Courses

75% of fees are refunded for drops or withdrawals during the first 10% of the class hours.

50% of fees are refunded for drops or withdrawals during the first 20% of the class hours. No refunds will be made after 20% of the class hours have been completed.

The Vice President for Academic Affairs may make an exception to these policies. Requests for exceptions should be submitted in writing, along with supporting documentation, directly to the Vice President for Academic Affairs or his/her designee.

STOPPING PAYMENT ON A CHECK DOES NOT CONSTITUTE PROPER WITHDRAWAL.

Dishonored Checks

Checks tendered in payment of fees are normally deposited immediately by the College and should be drawn only against accounts with sufficient balances. Every effort will be made to collect on checks dishonored for any reason. A fee will be charged for dishonored checks.

A STUDENT IS NOT REGISTERED UNTIL ALL FEES ARE PAID.

<http://www.chattanoogastate.edu>

or call (423) 697-4402

or 1-800-207-8202

Adult Education/GED

Chattanooga State conducts day and evening Adult Education/GED classes on the main campus and throughout the community for anyone 17 or older. All classes have individualized instruction.

The program includes:

- Registration and orientation session.

- Computerized instructional lab.
- Reading program.
- English as a Second Language (ESL) classes.
- GED practice tests.

(423) 697-2529

Athletics

Chattanooga State provides National Junior College Athletic Association (NJCAA) Division I competition in women's fast-pitch softball, women's and men's basketball, and baseball. Chattanooga State's teams are often nationally ranked, and student athlete scholarships are plentiful. Team

members are recruited locally and regionally. Students interested in tryouts are welcome.

**Telephone the Athletic Department at
(423) 697-3370**

Business and Community Development Center

The Business and Community Development Center offers a wide range of services, including personal interest continuing education classes, short-courses, teleconferences, certification classes, and customized skills training delivered on-site to business and industry. It also provides job profiling and analysis, skill assessment, and WorkKeys skill development training for area employers. WorkKeys helps

employers match employee skills to those required for satisfactory performance in specific jobs. Once skills gaps are identified, Chattanooga State can deliver training programs to help bridge them.

(423) 697-3100

Career Planning and Counseling Center

Confidential personal, career, and academic counseling is available to help students define and achieve their goals and succeed in college. Services include individual and group counseling, crisis intervention, tutoring, issue-related workshops, support groups, "How to Learn" workshops, Transitional Studies advising, drug awareness activities and information about self-help groups. Career counseling resources include group and individual career

counseling, career inventories and interpretations, a career library, workshops for people returning to college or enrolling for the first time; and support groups for various types of students.

(423) 697-4421

Center for Distributed Education

Chattanooga State offers "anytime, anywhere" education through its Center for Distributed Education. Both credit and non-credit courses are delivered remotely via a variety of methods—Regents Online Degree Program (RODP) and other online courses, video, CD-ROM, and traditional correspondence. All credit courses have the same content and transferability as on-campus courses.

For additional information, visit the Center for Distributed Education web site at <http://www.chattanoogaastate.edu/cde> or e-mail CDE@chattanoogaastate.edu.

(423) 697-4408, 2592 or 1-800-207-8202

Child Development Center

The Child Development Center serves Chattanooga State employees and students on a space-available basis. The Center also serves as a demonstration/observation area for

Early Childhood Education, Psychology, Nursing, and Allied Health programs. Monthly fees are charged for participation.

(423) 697-4412

Disabilities Support Services

Disabilities Support Services arranges for accommodations for students with documented disabilities so that they have equal access to programs and activities offered by the College. Accommodations may include readers, scribes, interpreters, notetakers, assistive listening systems, and adaptive computer equipment. A support group

for students with disabilities is available during the fall and spring semesters. Disabilities Support Services also assists students in linking to appropriate campus and community services, such as counseling, tutoring, registration assistance, financial aid, and Vocational Rehabilitation.

(423) 697-4452

Educational Planning and Advisement

The Educational Planning and Advisement (EPA) office assists students in the realization of their educational goals. Professional advisers are available to advise students in

developing and following an appropriate educational plan.

(423) 697-4483

Honors Program

The Chattanooga State Honors Program provides an enriched curriculum and related informal educational experiences for able and highly motivated students. Honors Program students who complete at least 12 hours of honors courses and maintain a 3.5 GPA or higher receive special

recognition at graduation.

Test and GPA requirements are located in the General Information/Academic Regulations/Academic Honors section of this course catalog.

(423) 697-4456

Library Services

The Augusta R. Kolwyck Library is on the Instructional Materials Center's first floor, with a branch at Chattanooga State East. Chattanooga State West students use Jasper Public Library, while Chattanooga State North students use Bryan College Library or Dayton Public Library. Sequatchie Valley students may use Sequatchie County Public Library or Pikeville Public Library. Students located elsewhere may contact the Dean of Library Services who will make arrangements for those students to have access to library services.

Holdings include 72,102 books, 548 current magazine subscriptions, 3,606 videotapes, and 871 audiotapes. Students can search more than a dozen online databases containing journal articles, news stories, literary and

biography information, as well as complete books. The library's catalog and these other resources can be searched through the Internet site at

<http://library.chattanoogastate.edu>.

The library staff provides individualized and classroom instruction on research for students, faculty, and staff. Reference librarians are available during all hours the library is open.

The library is open to everyone. Students use their Chattanooga State picture I.D. cards to check out books. Residents of Tennessee, North Georgia, or Northeast Alabama with a current driver's license may apply for a Chattanooga State library card.

(423) 697-4448

Media Services

Media Services is located in the IMC building on the first floor. The staff offers a variety of services in the audio/visual field. They offer a library of 5,000 tapes with over 150 monitors across the campus which are wired to a master control room in the media services center. Via a

closed circuit phone in each classroom, videos can be viewed by selecting the number of the video, which is obtained from the instructor, and can be viewed in the classroom.

(423) 697-4405

Placement and Cooperative Education

The Placement and Cooperative Education Center links students and alumni with employers through job placement services and the Cooperative Education program. Cooperative Education allows students to obtain work experience while attending college by combining on-campus study with a

planned, supervised and paying work experience related to the student's field of study. Information on resumé writing, interviewing skills, job search techniques and placement assistance is available for current students and alumni.

(423) 697-2570

Student Life

The Student Life office helps students take advantage of the many opportunities and experiences that college has to offer. This office distributes the *Student Handbook*, which contains descriptions of campus clubs and organizations, explanations and references to all components of student life,

and a calendar of major campus events. The *Student Handbook* also contains the Student Code of Conduct. Charges of code violations are heard and adjudicated in the office of Judicial Affairs.

(423) 697-4475

Tennessee Small Business Development and Resource Center

Chattanooga State, with area partners, operates the Tennessee Small Business Development and Resource Center at 100 Cherokee Blvd. The Center promotes entrepreneurial education, supports small business start-ups, and provides access to capital. It enhances small businesses through

counseling, planning assistance, the First Tennessee Small Business Computing Center, a comprehensive resource library, the TVA Small Business Video Center, seminars, and courses.

(423) 756-8668

Testing Center

The Testing Center offers regularly scheduled tests, tests by special appointment, and unscheduled tests.

(423) 697-4461

Regularly Scheduled Tests

- ACT Residual Test
- ACT ASSET
- Career Abilities Placement Survey (CAPS)
- Computerized Placement Testing (COMPASS)

Tests by Special Appointment

- Dental Assisting National Board (DANB)
- General Educational Development (GED)
- Nursing Entrance Test (NET)
- Health Occupations Basic Entrance Test (HOBET)
- Ability to Benefit (ATB)
- English Mastery Assessment Test (EMAT)

Unscheduled Exams

- Make-up Exams
- Exams for Distance Education Courses
- COPS Career Inventory
- Myers Briggs
- 16 PF Personality Profile
- Strong Interest Inventory

Transitional Studies

The Transitional Studies Program offers foundation courses in English, mathematics, reading and Psychology of Learning for students who need additional preparation for college level courses.

Transitional Studies Policies and Procedures:

- Valid ACT/SAT scores, COMPASS or other assessment is needed to determine Transitional Studies course placement. Students who have taken the COMPASS/ASSET exam at another institution must have their transcript and test scores sent to the College.
- Transitional Studies requirements must be completed during the student's initial terms of enrollment. A grade of "C" or higher is required for progression to the next course. Auditing is not allowed.

- Students may not withdraw from a Transitional Studies course except for extraordinary reasons and with special permission from the Transitional Studies Director.
- Instructional labs provide tutoring and supplementary materials.
- Credit hours earned for Transitional Studies courses do not satisfy the requirements for an associate degree.
- DSPS 0800, Learning Strategies, is mandatory for students who place into any two subject areas at either the basic (0700) or developmental (0800, 0850) level. Transitional Studies students not *required* to take DSPS 0800 may *elect* to take it.
- All Transitional Studies requirements must be completed before graduation.

(423) 697-3321

WAWL Radio 91.5 FM

The purpose of the WAWL is twofold. It serves as a vehicle for academic instruction as a learning lab for students enrolled in the broadcasting degree program where they are able to receive valuable hands-on experience in the art of radio

broadcasting. The station is staffed entirely by students and also provides a unique marketing service for the college.

www.chattanoogaastate.edu/media_services/mewawl.html
Office (423) 697-4470, Request Line—(423) 697-4406

Course Descriptions

Contents

2004-06

Page	
65-66	Course Listing By Subject Abbreviation
66	How To Read Course Description/Example
67	Types of Course Delivery
68-96	Course Descriptions

Course Listing By Subject Abbreviation

The following is a list in alphabetical order of Chattanooga State courses by subject abbreviation code. For example, **ENGL=English, FI=Fire Science and WD=Welding.**

In the following section, courses taught by Chattanooga State are listed in alphabetical order by subject name, not alphabetically by their abbreviation code. For example, the course titled “**AA 109 Production Art**” is listed under the subject area of “**Advertising Arts,**” not under **AA.**

If you know the course number, but not the name of the subject area in which it is taught, **use the chart below to locate the subject name.**

Courses numbered **000** or **0000** are **Industrial Technology** (vocational) courses and carry clock-hour credit.

Course numbers beginning with **0** (e.g. 0700) are **Transitional Studies** or other remedial-type courses.

Course numbers beginning with **1** (e.g. 101, 1010) are **freshman** level.

Course numbers beginning with **2** (e.g. 201, 2010) are **sophomore** level.

AA	Advertising Arts	CYT	Cosmetology Instructor Training	EZ	Electrical/Electronic Engineering Technology (DuPont)	LM	Landscaping and Turf Management
AB	Auto Body Repair	DA	Dental Assisting	FI	Fire Science	LP	Practical Nursing (LPN)
AC	Air Conditioning and Refrigeration	DD	Computer-Aided Design Technology	FM	Financial Management	MATH	Mathematics
AM	Automotive Technology	DH	Dental Hygiene	FP	Financial Planning	MCRI	Middle College Renaissance Institute
ART	Art	DM	Diesel Equipment Mechanics	FREN	French	MD	Mechanical Engineering Technology
ASTR	Astronomy	DSPM	See “Mathematics”	GEOL	Geology	MG	Management
AV	Aviation	DSPR	Reading	GERM	German	MN	Maintenance Technology
BIOL	Biology	DSPS	See “Psychology”	GEOG	Geography	MO	Medical Office Assisting
BST	Business Systems Technology	DSPW	See “English”	HE	Health Information Management Medical Transcription	MRI	Magnetic Resonance Imaging
BU	Accounting	EA	Emergency Medical Services	HIST	History	MT	Machine Tool Technology
CD	Commercial Truck Driving	EC	Economics	HP	American Sign Language	MUS	Music
CHEM	Chemistry	ECED	Early Childhood Education	HR	Human Services	MY	Mammography
CI	Civil Engineering Technology	ED	Education	HS	Health Science	MZ	Mechanical Engineering Technology (DuPont)
CNAP	Cisco Network Academy Program	EE	Electrical/Electronic Engineering Technology	HUM	Humanities	ND	Dietary Manager
CO	Mass Communications	EG	Engineering Transfer (Pre-Engineering)	HZ	Hazardous Materials	NM	Nuclear Medicine Technology
COT	Computer Operations Technology	ENGL	English	ID	Industrial Maintenance Mechanics	NS	Nursing (RN)
CP	Cooperative Education	ER	Industrial Electronics	IE	Industrial Electricity	NU	Health Physics
CS	Information Systems	ESC	Environmental Science	IS	Insurance		
CT	Chemical Technology	ET	Engineering Technology	IY	Interdisciplinary Studies		
CY	Cosmetology			JS	Job Skills Development		
				LA	Legal Assisting		

Course Listing By Subject Abbreviation continued

NW	Network Management	PT	Physical Therapist Assistant	SO	Sociology
OF	Office Administration	PY	Psychology	SP	Speech
OR	Surgical Technology	PZ	Powerhouse Operations	SPAN	Spanish
OS	Occupational Safety	QA	Quality Technology	TFAP	Technology Foundations in Basic Anatomy & Physiology
PC	Pharmacy Technician	RC	Respiratory Care	TFMA	Technology Foundations in Mathematics
PE	Physical Education (General Courses)	REAL	Realtime Reporting	THEA	Theatre
PHED	Physical Education (Activity Courses)	RELS	Religious Studies	TM	Computed Tomography
PHIL	Philosophy	RI	Renaissance Institute	US	Diagnostic Medical Sonography
PHYS	Physics	RS	Real Estate	WD	Welding
PO	Political Science	RT	Radiologic Technology		
PSCI	Physical Science	SE	Marine Engine Technology		

How To Read Course Descriptions

Example:

Geography

GO 101 Physical Geography (3)
The Earth's physical environment; processes that determine Earth's climate, water, soil, landforms, vegetation, and distribution patterns of each. [S]

GO 103 World Geography (3)
Study of selected world regions; focus on each region's characteristics, problems and global interrelationships. [E]

Geology

GEOL 104 Geological Geology (3)
Introduction to geology; Earth's age and processes, and resultant structures. Class 3 hours. [F]

GEOL 1050 Historical Geology (4)
Earth's origin and geologic history; concept of geologic time and the fossil record; class 3 hours, lab 2 hours. Prereq: GEOL 1040. [S]

Geology Course number

Prefix or subject abbreviation, GEOL = Geology

Course title

Number of semester credit hours

Brief description of course content

Prerequisite and/or corequisite. A prerequisite is a course which should be completed prior to enrolling in the selected course. A corequisite is a course which should be completed prior to or at the same time as the selected course.

Term(s) offered: E=Every, F=Fall, S=Spring, Su=Summer.

If the course has a lab component, a breakdown of the amount of time per week spent in class and lab will be shown here. Some clinical courses may show the total amount of time spent in clinic for the entire semester.

HZ 101 Introduction to Environmental Technology (3)
Overview of environmental, safety, health, and industrial hygiene problems common to industrial, manufacturing, and construction business sectors; environmental issues and legislative regulations; pollution types, sources, and business prevention strategies; environmental enforcement organizations and trends in business, education programs, and federal/state enforcement; hazardous chemical management; worker protection and safety programs. Prereq: DSPR 0800. [on demand]

HZ 115 Environmental Management for Maintenance Activities (3)
Identification of maintenance activities likely to have environmental consequences; hazards of PCB's, asbestos, lead, hazardous waste, and controlling of air emissions; discussion of activities possibly subject to regulation, necessary restrictions, and approved/appropriate work practices; class 2 hours, lab 3 hours. [on demand]

HZ 120 Hazardous Materials Regulations (3)
Overview of federal, state, and local regulations of environmental protection and chemical-use including Resource Conservation and Recovery Act (RCRA), Compensation and Liabilities Act (CERCLA), Comprehensive Environmental Response, Toxic Substance Control Act (TSCA), Clean Water Act (CWA), Clean Air Act (CAA), and Emergency Planning and Community Right-to-Know Act (EPCRA). Prereq: HZ 101. [on demand]

HZ 200 Hazardous Materials Technician Certification (2)
Critical competencies required by hazardous materials, environmental and safety technicians; 4 certificates of

<http://www.chattanoogastate.edu> or call 1-800-207-8202

E-mail: advising@chattanoogastate.edu

Types of Course Delivery

Many of our courses are offered via hybrid classes, independent study, video, online or through the Regents Online Degree Program (RODP) program. *These courses require students to be very self-motivated and well organized.* Once registered for these courses, it is the student's responsibility to take the necessary steps to begin the course. Listed below, you will find some important information for these types of courses.

Hybrid Classes:

(Noted in the schedule as H section)

Hybrid classes are a combination of traditional delivery and online delivery. That is, a hybrid course has a fixed meeting time and place for 50% (or more) of the hours required for the course each week. However, the remainder of the course materials and activities are delivered through the online format. For example, a traditional 3 credit hour class might meet on Tuesdays and Thursdays from 9:30 a.m. to 10:50 a.m. in H-107. The hybrid class would meet ONLY on Tuesday from 9:30 a.m. to 10:50 a.m. in H-107. The "Thursday" portion would be covered online through materials, assignments, and activities directed by the instructor and performed by the student anytime during the ensuing week.

Independent Study:

(Noted in the schedule as 95 section)

In this type of course the student completes the coursework on their own with the instructor's assistance. Instructor approval is required to register. Once registered, the student MUST contact the course instructor for the syllabus and to make arrangements for completion of course assignments. There are no assigned class meeting times. If required, students take proctored tests either in the Chattanooga State Testing Center or an agreed upon off-site location. Textbooks usually accompany the course and can be purchased in the bookstore.

Online:

(Noted in the schedule as 97 section)

In this type of course, material is presented via the Internet. Once registered the student must contact the instructor via e-mail. This can be done by accessing the Center for Distributed Education website on the Chattanooga State website, or directly via the instructor's e-mail address. Typically, there are no assigned class meeting times, but this can vary by course. The class meetings, if required, would be

conducted online. All course work is submitted via the Internet. Testing for the course is either online or proctored in the Testing Center or an agreed upon off-site location. Textbooks usually accompany the course and can be purchased in the bookstore. There is an additional per course fee. Students MUST be computer literate, have a minimum 56K Internet access and an e-mail address. For courses involving streaming media, a cable, DSL or broadband connection is highly recommended.

Video:

(Noted in the schedule as 99 section)

In this type of course, the material is presented and/or enhanced by video programming. The student, once registered, must go to the Center for Distributed Education (CDE) to pick up course materials including the syllabus and video tapes. There are no assigned class meeting times. The student should contact the instructor within the first week of classes by phone, e-mail or in-person. All course work must be submitted to the Center for Distributed Education and picked up from CDE once graded by the instructor. Testing for the course is proctored in the Testing Center or agreed upon off-site location. Textbooks usually accompany the course and can be purchased in the bookstore. There is an additional per course fee. Students can view videos with their own VCR or by using VCRs available in CDE.

RODP:

(Noted in the schedule as R50 section)

Similar to classes offered "online" as noted above, these classes are offered via the Internet. These classes are part of the Regents's Online Degree Program and follow a different schedule than other Chattanooga State classes. It is imperative that students are aware of the differences in course starting and ending dates. Students, once registered, should go to the RODP website, <http://www.tn.regentsdegrees.org>, for

instructions on how to get started with the course. Students will pay per hour tuition plus the RODP per hour fee. Students must pay for every "credit hour" regardless if they exceed the twelve credit hours of "full-time" status. Students are charged for credit hours over twelve due to the additional cost for online delivery, virtual bookstore, virtual library, online student services, and 24/7 technical help. For more information on fees, contact: Lisa Hancock, Bursar, (423) 697-4731 or see web site, <http://www.tn.regentsdegrees.org/fees.htm>. Textbooks must be purchased online at <http://direct.mbsbooks.com/tbr.htm>. For on campus help with admission and registration questions, contact Diane Norris, (423) 697-3107. No enrollment overrides are allowed.

Honors Program Courses:

(Noted on schedule as 55 section)

These courses provide an enriched curriculum and related informal educational experiences for able and highly motivated students. The Honors Program is open to the following: New students with a minimum ACT composite score of 25 or a high school GPA of 3.5 with sufficient high school course work in the honors subject area and enrolled students with 15 completed semester hours of college-level work, a 3.5 GPA, and a faculty member's nomination. For more information, contact Jeff McEwen, Honors Program Coordinator, (423) 697-4739 – IMC 233

Please also note the following course designs:

Mixed Courses - Online with Video

(Noted on schedule as 96 section)

Video (Distance Ed) with lab

(Noted on schedule as 98 section)

Course Descriptions

Descriptions of courses offered by the College are listed alphabetically according to subject area, then in numerical order under each subject.

Accounting

BU 114,115 Principles of Accounting I,II (3,3)

Principles, practices and techniques of accounting. 114–Emphasis on basic functions for proprietorship and partnership. 115–Emphasis on partnership, corporation and managerial accounting; analysis of financial statements. Must be taken in sequence. [E]

BU 173,175 Business Law I,II (3,3)

Principles of law governing business transactions. 173–Contracts, sales and agency. 175–Business organizations, property laws, commercial paper, secured transactions, and business legal environment. Must be taken in sequence. [173–E, 175–S]

BU 185 Federal Taxes (3)

Study of individual income tax; includes issues in form preparation such as tax credits, tax rates, capital gains and losses, and personal deductions. [F]

BU 201 Accounting Internship (3)

Work experience in career specialties related to accounting technology; 9 hours/week at approved local business without compensation. [S]

BU 204,205 Intermediate Accounting I,II (3,3)

Theory and structure of financial statements; emphasizes generally accepted accounting principles. Must be taken in sequence. Prereq: BU 115. [204–F, 205–S]

BU 210 Business Tax Reporting (3)

Surveys local, state, and federal tax regulations for proprietorships, partnerships, corporations and nonprofit organizations; includes payroll, business, excise, and sales taxes. Prereq: BU 115, 185; or instructor's consent. [S]

BU 224 Cost & Budgeting (3)

Study of cost accounting principles and procedures using accounting as managerial tool; emphasis on cost determination methods. Prereq: BU 115. [F]

BU 250,251 Accounting Information Systems I,II (3,3)

Core concepts in using commercial application software in accounting information systems; integrates software application projects with course topics; experience with computer applications required. 251 includes internal controls as they relate to EDP and systems for managerial decision making. Must be taken in sequence. Prereq: BU 115. [250–F, 251–S]
BU 255 Professional Review in Accounting and Taxation (3)
Condensed professional review of financial/managerial accounting and income taxation topics. Prereq: BU 115, 185, 204, 224. Coreq: BU 205. [S]

BU 299 Special Topics in Accounting (1-3)

Study of selected accounting and related topics of current and special interest. Prereq: BU 115 and/or faculty consent. [on demand]

Advertising Arts, See “Graphic Design” and “Art”

Air Conditioning/Refrigeration

AC 000 Air Conditioning/Refrigeration Technology

Theory, application, operation and maintenance of air conditioning and refrigeration systems; 30 clock hours/week. [E]

American Sign Language

HP 120,121,220,221 American Sign Language I,II,III,IV (3,3,3,3)

Study of the manual alphabet and language of “signs.” 120–Basic level skill development; sentence structure, question forms, verb usage, classifiers, negatives, locational relationships, plurals, and time measurements stressing ASL and Deaf Community. 121–Intense study of manual communication; vocabulary, language concepts, sign language idioms, and expressive/receptive skills; intro to ASL conversational regulators. 220–Focus on communication of day-to-day experiences and activities, spatial agreement, storytelling, and general conversational regulators. 221–Emphasis on language concepts and syntax, vocabulary review, conversational patterns, numbers, fingerspelling, songs, poetry, and storytelling techniques. Must be taken in sequence. [120, 220–F; 121, 221–S]

HP 125 ASL Sign Choir (1)

Activity course in performance of choral music into American Sign Language; selections from varied musical styles; required performance at scheduled concerts; open to all ASL students; repeatable; maximum of 3 hours applicable toward a degree. [F,S]

HP 132 Psychology of Deaf People and Their Culture (3)

Study of the bilingual education for Deaf children, socio-linguistics and Deaf culture, family structure, socialization in groups and in the Deaf Community, and economic status of Deaf persons, civil rights of the Deaf, telecommunication devices, cochlear implants and deafness as a disability. [S]

HP 135 Special Topics in American Sign Language (1-3)

Special topics in American Sign Language; focuses on use of ASL in the workplace; repeatable for credit on different topics. [on demand]

HP 222 Fingerspelling (2)

Comprehensive study of fingerspelling, using drills to enable reading of full-speed fingerspelling and fluent expression in fingerspelling. Coreq: HP 221 or instructor's consent. [S]

HP 236 English Sign Systems (3)

Sign systems used in educational programs, different systems' rationale and criterion for teaching English to Deaf students; detailed study of SEE2 system with instruction of “signs” unique to the system. [on demand]

HP 246 Oral Interpreting Techniques (3)

Intense study of expressive oral interpreting techniques; voicing, support mechanisms, facial expression, natural gestures, speech sound visibility, speechreading, ethical issues; problem solving and role-play activity techniques used. Prereq: HP 130. [on demand]

Art

ART 1001 Artist in Residence (1-3)

Visiting artists interact with students in lectures and workshops; 2 workshops for 1 credit; 3 workshops for 2 credits; 4 workshops for 3 credits; repeatable; maximum of 3 hours applicable toward a degree. [F,S]

ART 1010,1020 Survey: Art History I,II (3,3)

Visual arts within western civilization. 1010–Near East, Aegean, Greece, Rome, early Christian, Byzantium, early medieval, Romanesque, Gothic eras. 1020–Renaissance, baroque, rococo, neoclassic, romantic, moderns and postmoderns. [1010–F, 1020–S]

ART 1030 Art Appreciation (3)

Study of significant works of art throughout history to heighten perception and enjoyment of the visual arts; consideration of formal elements in representative works of various styles, forms, and periods. [E]

ART 1060 Making Art Safely (1)

Survey of health and safety concerns in the field of visual arts; overview of chemicals used in diverse media; tips on studio design, safe use of materials and tools, and on how to stay informed; for artists and hobbyists. [on demand]

ART 1110,1120 Life Drawing I,II (4,4)

Beginning to advanced studies from figure and still-life objects. 1110–Line and value studies emphasizing observation and accurate spatial and proportionate rendering; intro to composition. 1120–Focus on sustained studies, composition, value modeling, and detail rendering; practice with live models and still life; in-depth study of drawing media; intro to personal imagery and contemporary concepts. Must be taken in sequence. [F,S]

ART 1210 Three Dimensional Design (4)

Design elements as they operate in 3-D; projects deal with real space and 3-D materials, may involve both relief and free-standing forms. [on demand]

ART 1250 Stone Carving (3)

Study of the direct method of carving alabaster and soapstone; use of hand, electric and pneumatic tools. [on demand]

ART 1400 Beginning Photography (1)

Beginning photography course; intro to the darkroom, photography as art, and significant historical and contemporary photographs; emphasizes camera work and aesthetics of an image; must provide own 35mm camera. [F,S]

ART 2030 Art Structure (4)

Broad spectrum course using various techniques to develop art appreciation across a range of cultures and periods; emphasis on the contemporary; intro to a variety of materials, methods, and concepts employed by artists. [F]

2004-06 Course Descriptions

ART 2100 Metal Casting (3)

Metal casting, using the lost wax method; various mold making techniques utilized. Prereq: ART 1210. [on demand]

ART 2160 Art Education (4)

Emphasizes understanding of child art as basic to good teaching and parenting; range of materials and procedures appropriate to preschoolers and 1st–6th graders; teaching art appreciation at elementary level. [on demand]

ART 2200 Clay Portraiture and Torso (3)

Life study of the human head and torso in clay; proportions and anatomy stressed. Prereq: ART 2610. [on demand]

ART 2310,2320 Painting and Composition I,II (4,4)

Painting techniques in oil and/or acrylics. **2310**–Focus on developing color relationships and spatial and composition skills; studies may include abstract, still life, landscape, and/or figurative subject matters. **2320**–Stresses technical skills in sustained personal image composition; some assigned problems but focus on student's choice of non-objective, abstract, surreal, pop, or realistic direction. Must be taken in sequence. Prereq for 2310: ART 1110. (ART 1120 recommended.) [F,S]

ART 2410,2420 Photography and Darkroom I,II (4,4)

Fine art approach to photography; darkroom work and oral critiques; must provide own 35mm camera. **2410**–Black and white photography and printing; image, personal symbolism, avant garde composition, content, and photographs as art statements. **2420**–Photography as expressive communication and art; creative approach to lighting methods, camera and paper use, film type, developing, enlarging, and mounting; focus on personal imagery and content. Must be taken in sequence. [F,S]

ART 2430 Color Photography (4)

Intro to techniques and theory of color photographic process; processing slides, negative film, and color printing; design, composition and perceptual aspects of color; focus on creative expression. Prereq: ART 2410. [on demand]

ART 2610,2620 Ceramics I,II (4,4)

Studio in ceramics; focus on design and creative handbuilding, glazing and wheel-throwing. **2610**–Beginning techniques. **2620**–Intermediate techniques. Must be taken in sequence. [F,S]

ART 2790 Intermediate Studio (3)

Continued practice in technical expertise while expanding compositional and expressive components in chosen studio area; repeatable. Prereq: advanced standing in emphasized media and instructor's consent. [F,S]

ART 2990 Special Topics in Art History or Theory (1-3)

Art history/theory; topics change each term and include African-American art, photographic media history, experimental art surveys, art criticism or aesthetics, museum site learning via art travel in U.S. or abroad; repeatable for credit on different topics. [on demand]

ART 2991 Special Topics in Studio Art (1-4)

Media processes/studio techniques; topics change each term and include assemblage, stone-carving, watercolor, conceptual art, or workshops in clay, photography, drawing, wood-working, painting,

matting, framing, or slide making; repeatable. [on demand]

Astronomy

ASTR 1030 Astronomy (4)

Intro to astronomy; history and methods of astronomy, formation of the solar system, and physical characteristics of the sun, planets, moons, and minor members of the solar system (asteroids, meteoroids, and comets); class 3 hours, lab 3 hours. [S]

Auto Body Repair

AB 000 Auto Body Repair Technology

Current auto body repair procedures; collision repair and refinishing of each part; auto welding, sheet metal repair, body and frame straightening; painting car body and interior/exterior parts; preparing written damage estimates; running successful body shop; hands-on activities emphasized; 30 clock hours/week. [E]

Automotive Technology

AM 000 Automotive Technology

ASE certified training in Automotive Electronics; Engine Performance; Steering and Suspension; Manual Transmission & Drive Train; Automatic Transmission & Transaxles; Heating, Ventilation & Air Conditioning; Brakes; Engine Repair & Rebuilding; 30 clock hours/week. [E]

Aviation

AV 101 General Aeronautics (3)

Aviation and aerospace history; Federal Aviation Regulations, Airman's Information Manual, flight theory basics, physiology of flight, meteorology, navigation; open to all desiring general/practical aviation knowledge, especially on private pilot level. [on demand]

AV 111 Flight Theory (3)

Aeronautics, aerodynamics and flight basics, airplane components and functions, flight control systems, forces acting on aircraft in flight, aircraft construction materials, powerplants, stability, performance, and instruments. [F]

AV 112 Navigation (3)

Pilotage principles, dead reckoning, and radioelectronic methods of navigation applied to cross-country flight planning. [F]

AV 113 FAA Regulations (3)

Federal and international laws governing aviation operation and their source, enforcement and purpose; laws or regulations concerning airmen, aircraft, air agencies, air operation, air traffic control, and flying safety stressed; Airman's Information Manual and its application included. [F]

AV 123 Meteorology (3)

Weather and its influence on aerospace operations; basic understanding of the atmosphere, meteorological elements measurement and effects of these on air operations in the lower atmosphere. [S]

AV 141,142,143,144 Flight Instruction I,II,III,IV (3,3,3,3)

Flight instruction; class 1 hour, lab 4 hours. **141**–Focus on familiarity with the airplane and its systems; application of material covered in other AV courses. **142**

& **143**–More advanced flight and technical instruction in precision flight techniques. **144**–Emphasis on instrument flight operations and weather flying. Must be taken in sequence or have instructor's consent. [F,S]

AV 201 Aerospace Internship (3)

Field work in acceptable fixed base operator, airline, airport director, or aerospace industry; job training in various aerospace industry segments; focus on educational experiences, not salaried employment; credit for actual work with employer; lab 9 hours. [F,S]

AV 221 Aviation Management (3)

Principles of aviation management; topics include aviation needs, economics, finance, public relations, maintenance, insurance, and general operating procedures. [S]

AV 231 Instrument Flight (3)

Instruments, FAA regulations, ATC procedures, radio navigation, meteorology, physiology, and aircraft operation and performance applied to flying and flight planning. Prereq: AV 112 or instructor's consent. [S]

Biology

BIOL 1050 Introduction to Human Biology (3)

Human anatomy and physiology related to body systems; relationship between structural and functional roles of system components; special focus on disease and homeostasis; basic histology and terminology; not intended for transfer. [F,S]

BIOL 1051 Introduction to Human Biology Laboratory (1)

Lab for BIOL 1050; elementary biological chemistry, clinical tests, biological models, creative projects and written examinations integral part of course; not intended for transfer; lab 3 hours. Coreq: BIOL 1050. [F,S]

BIOL 1110,1120 General Biology I,II (4,4)

Class 3 hours, lab 3 hours. **1110**–Chemical concepts related to biology: cell structure and function, photosynthesis, respiration, cellular control, cell division, Mendelian and molecular genetics, ecological concepts. **1120**–Evolutionary principles, survey of the Kingdoms: Archebacteria, Eubacteria, Protista, Fungi, Plantae, Animalia; study of plant and animal biological systems. Must be taken in sequence. [E]

BIOL 1430 Nutrition (3)

Nutrients and their relation to human growth, development and maintenance; role of foods and their nutrients on sociological, physiological, and psychological well-being; food records analysis and nutritional knowledge application. [E]

BIOL 2010,2020 Human Anatomy and Physiology I,II (4,4)

Structure, function, interrelationships and homeostasis of body organ systems; biochemical, cytological and histological studies integrate dissection, experimentation, 3-D visualization, and computer applications; focus on critical thinking and clinical application; class 3 hours, lab 3 hours. **2010**–Integumentary, skeletal, muscular, and nervous systems. **2020**–Endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems; includes immunity, metabolism, fluid-electrolyte dynamics, and genetics. Must be taken in sequence. [E]

2004-06 Course Descriptions

BIOL 2050 Plant Morphology (4)

Analysis of the structure, reproductive processes, and evolutionary relationships of the main nonvascular and vascular plant groups; class 3 hours, lab 3 hours. Prereq: BIOL 1110 or equivalent. [F]

BIOL 2230 Microbiology (4)

Microbial morphology and physiology; focus on energy relationships, genetics, microbial control, immune responses and human pathogens using portal of entry approach; class 3 hours, lab 3 hours. Prereq: BIOL 1110 or 2010. [E]

BIOL 2990 Special Topics in Biology (1-4)

Detailed study of a specific topic in biological sciences; repeatable for credit on different topics. Prereq: Department head and instructor's consent. [on demand]

Broadcasting, See "Mass Communications"

Business Accounting, See "Accounting"

Business Law, See "Accounting"

Business Management, See "Management"

Business Systems Technology**BST 000 Business Systems Technology**

Communication, data records management, business math and English, office computer applications and procedures, personal/professional development; 30 clock hours/week. [E]

Cardiopulmonary Resuscitation (CPR), See "Physical Education—General Courses"

Chemical Technology**CT 101 Foundational Studies for Chemical Process Operator (4)**

Intro to terms and basic concepts used in food and chemical process industries; helpful to prospective and existing employees in the industry and provides base for follow-up studies in chemical and food processing; class 3 hours, lab 3.5 hours. [on demand]

CT 102 Fundamentals of Process Operations (4)

Intro to chemical process operation basics; overview of basic process equipment characteristics involved in chemical manufacturing—heat exchangers, steam traps, pumps, valves, piping, and sensors; class 3 hours, lab 3.5 hours. [on demand]

CT 107 Plant Statistics (1)

Intro to statistical thinking and its industrial

applications; includes statistical process control, Excel use, and plant-specific control charts and graphs. Prereq: CT 112. [on demand]

CT 111 Introduction to Process Technology (3)

Overview of process technology ranging from safety to process utilities; includes a plant visit. Prereq: DSPM 0800, DSPR 0800, DSPW 0800. [F]

CT 112 Industrial Mathematics (3)

Basic mathematical operations, systems of measure, problem solving, geometry, right angle trigonometry, and their industrial applications. Prereq: DSPM 0800, DSPR 0800, DSPW 0800. [F]

CT 113 Industrial Chemistry (4)

Intro of inorganic and organic chemical theories and their industrial applications; includes case studies, safety, and communication skills; class 3 hours, lab 2 hours. Prereq: DSPM 0800, DSPR 0800, DSPW 0800. [F]

CT 115 Process Chemistry (3)

Intro to organic chemistry and industrial applications of organic and inorganic theories; focus on plant-specific process chemistry; includes case studies, safety, and communication skills. Prereq: CT 111, 113. [on demand]

CT 121 Industrial Process Equipment (4)

Intro to operation and utilization of industrial process equipment; includes preventative maintenance, safety, troubleshooting; and communication skills; class 3 hours, lab 3 hours. Prereq: CT 111. [S]

CT 122 Introduction to Quality Control (3)

Intro to quality concepts and applications used in process industries; includes a study of the statistical methods of quality control, quality tools, control charts, team skills and communication skills. Prereq: CT 111, 112. [S]

CT 123 Introduction to Process Operations (4)

Intro to theory, equipment, and application of common industrial processes such as distillation and evaporation; includes case studies, safety, troubleshooting, and communication skills; class 3 hours, lab 3 hours. Prereq: CT 111, 113. [S]

CT 124 Introduction to Process Control and Instrumentation (3)

Intro to the principles of process control and the functions of instruments used to monitor and control chemical processes; includes the use of process control diagrams, case studies, troubleshooting and communication skills. Prereq: CT 111. [S]

CT 150,220 Unit Operations I,II (4,4)

Processes and equipment used to convert raw materials into chemical products; class 3 hours, lab 3 hours. **150**—Characteristics and operations of materials handling and storage systems; checks and maintenance requirements; mixing operations, tanks, pumps, conveyors, and piping. **220**—Focus on types of reactors, energy input/output, and reactor control methods. Must be taken in sequence. [on demand]

CT 210 Basic Laboratory Techniques (4)

Intro to basic laboratory techniques; filtration and extraction; use of laboratory equipment and glassware; focus on industrial applications, safety, and plant-specific techniques; class 3 hours, lab 2 hours. Prereq: CT 115. [on demand]

CT 211 Instrumental Analysis (4)

Spectroscopy applications and basic theory; standard lab experiments and chemical analysis methods using UV-Visible, fluorescence, atomic absorbance and emission, total organic carbon, and Fourier transform infrared spectrometers; class 2 hours, lab 6 hours. [on demand]

Chemistry**CHEM 1010,1020 Introduction to Chemistry I,II (4,4)**

Principles of chemistry; not for chemistry majors; class 3 hours, lab 3 hours. **1010**—Atomic and molecular structure, bonding, equation writing and stoichiometry, compound classification, gas, liquid and solid states, solutions, acids/bases. **1020**—Basics of organic and analytical chemistry; organic compound families, their preparation and reactions; qualitative and quantitative analytical methods. Must be taken in sequence. Coreq for 1010: DSPM 0850. [1010—E, 1020—on demand]

CHEM 1060 Survey of Organic and Analytical Chemistry (3)

Second semester of principles of chemistry without lab; credit not given for both CHEM 1020 and CHEM 1060; CHEM 1020 substitutes for CHEM 1060, but not vice versa. Prereq: CHEM 1010 or equivalent. [on demand]

CHEM 1110,1120 General Chemistry I,II (4,4)

Properties of matter related to atomic and molecular structure; element and compound reactions and equations, stoichiometry, kinetics, and measurement techniques and calculation; 1120 lab includes qualitative analysis; for students in the field of science, medicine, or engineering; class 3 hours, lab 3 hours. Must be taken in sequence. Prereq for 1110: CHEM 1010 or equivalent. Coreq for 1110: MATH 1710 or 1740. [E]

CHEM 2010,2020 Organic Chemistry I,II (4,4)

Aliphatic and aromatic hydrocarbons, stereochemistry, monofunctional and some polyfunctional compounds; basic separation, purification, synthesis and identification techniques emphasized in lab; for science and preprofessional majors; class 3 hours, lab 3 hours. Must be taken in sequence. Prereq: CHEM 1120. [2010—F, 2020—S]

CHEM 2990 Special Topics in Chemistry (1-5)

Detailed study of a specific chemistry topic; repeatable for credit on different topics. Prereq: Department head and instructor's consent. [on demand]

Cisco Network Academy Program**CNAP 1010,1020,1030 CISCO Network Academy Program I,II,III (4,4,4)**

Preparation for CISCO Network Academy Program Exam; class 3 hours, lab 3 hours. **1010**—How computers communicate; basic theories of electricity and electro-magnetism; data collision, collision detection; OSI model; TCP/IP; design and documentation. **1020**—Wide area networks; CISCO routers; Command Line Interface; OSI TCP/IP; routing protocols; IP addressing and sub-netting; network trouble shooting. **1030**—New theories and

applications, Access Control Lists, point to point protocol, frame relay, ISDN and Novell IPX; case study and presentation of complex network design scenario. Must be taken in sequence. [1010-S, 1020-F, 1030-S]

Civil Engineering Technology

CI 101 Construction Licensing (2)

Basic concepts and practices in construction; emphasis on project contracts, elementary blueprint reading, scheduling, field operations, construction law, purchasing and cost control; Satisfactory/No Credit grading. [on demand]

CI 102 Construction Calculations (3)

Applied mathematics for the construction industry; covers basic math, applied algebra, applied trigonometry, and intro to construction estimating. [on demand]

CI 103 Construction Project Administration (3)

Establishing and controlling the flow of documentation on a construction project; focus on communication between owners, developers, architects, construction managers, facilities managers, general contractors, subcontractors, and vendors. [on demand]

CI 110 Construction Safety (3)

Knowledge for efficiency in the workplace; safety professionals and typical workplace accidents and injuries; preventive measures and developing, initiating, and evaluating safety training programs; credit not given for both CI 110 and OS 125. [F,S]

CI 111 Construction Blueprint Reading (2)

Basics of proposal writing in construction industry based on sound estimates and takeoffs from budget-grade project prints; numbering sequence of the Construction Specifications Institute Master Format System. Prereq: CI 101 or instructor's consent. [on demand]

CI 116 Construction Planning and Scheduling (3)

Provides a working knowledge for planning and scheduling of construction projects; C.P.M., Precedence Method, PERT, Bar Charts, arrow diagrams, and computer applications. [on demand]

CI 164 Construction Methods & Estimating (3)

Construction estimating techniques/applications related to technical aspects required for quantity takeoffs in construction estimate preparation; the Construction Specifications Institute Master Format System's numbering sequence; computer applications may be covered. Coreq: DSPM 0850. [S]

CI 174,274 Surveying I,II (4,4)

Fundamental concepts and practices of surveying; class 2 hours, lab 4 hours. 174—Theory of measurements and field notes; methods of obtaining horizontal and vertical distances, angles and directions; use of levels, transits, theodolites, and total stations; construction surveying, curves and volumes. 274—E.D.M. use and theory, traversing practice, adjusting methods, plotting a plat, computing the area and making topographic maps; State Plane coordinates, Public Land surveys; Photogrammetry and satellite surveying. Coreq for 174: MATH 1720. Prereq for 274: CI 174, MATH 1720; or instructor's consent. [174-S, 274-F]

CI 202 Construction Financial and Cost Analysis (2)

In-depth study of financial and cost accounting means and methods related to small and medium sized construction companies, general contractors, and subcontractors. Prereq: CI 101 or instructor's consent. [on demand]

CI 224 Hydraulics (3)

Intro to fluid statics and dynamics principles; incompressible ideal fluid and real fluid flow in pipes, multiple pipe-line systems, open channels; fluid measurements; lab work parallels class work; class 2 hours, lab 2 hours. Coreq: MD 134. [F]

CI 231 Construction Materials Testing (3)

Intro to lab practices in measuring construction material properties like soil, concrete, steel, wood, timber, asphalt; tests based on ASTM standards; class 2 hours, lab 2 hours. Coreq: MD 134. [F]

CI 233 Contracts and Specifications (3)

Study of engineering contracts and specifications; business and legal issues, engineering ethics, competitive bidding, contracting procedures, general and technical specifications, and inspection procedures for contract enforcement. Prereq: Instructor's consent. [F,S]

CI 242,243 Structures I,II (3,3)

Analysis, design, and detailing of elementary structures; emphasis on structural components rather than entire structures. Prereq: MATH 1720. Coreq: MD 242. 242—Steel structures. 243—Concrete structures. [S]

CI 298 Special Topics in Civil Engineering Technology (1-4)

Specialized topics and/or problems in civil engineering technology; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

CI 299 Special Topics in Civil Engineering Technology with Lab (1-4)

Specialized topics and/or problems in civil engineering technology; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

Commercial Truck Driving

CD 000 Commercial Truck Driving

Basic commercial truck operation principles and skills; safe operation, vehicle documentation, and proper load; all federal, state and local law compliance; minimum age of 21 required for program admission; 11-week course; 30 clock hours/week. [E]

Communications, See "Mass Communications"

Computed Tomography

The following 3-course set provides formal specialized training in CT whole-body imaging prior to independent performance. All 3 courses must be taken together. Prereq: Graduate of CAHEA/JRCERT accredited Radiologic Technology Program and certified or eligible for certification by American Registry of Radiologic Technologists.

TM 210 Computed Tomography Patient Care and Management (3)

Patient care and management, whole body cross-sectional anatomy, pathology, imaging procedures with protocols, special procedures in CT. [F]

TM 220 Computed Tomography Physics (3)

History of CT, computer basics, scanning methods, digital imaging, quality control, radiation protection. [F]

TM 230 Computed Tomography Clinic (4)

Supervised performance of computed tomography of head, neck, spine, chest, abdomen, pelvis and musculoskeletal system at program approved CT facility in student's geographic area. [F]

Computer-Aided Design Technology

DD 100 Introduction to CAD (1)

Intro to a PC-based Computer-Aided Design (CAD) system; Satisfactory/No Credit grading. [on demand]

DD 101 Microcomputer Drafting (3)

Intense overview of AutoCAD's microcomputer-based drafting software; geometric construction and editing concepts; focus on AutoCAD language and syntax; class 2 hours, lab 2 hours. Prereq: Drafting experience or instructor's consent. [F,S]

DD 114,124,204 CAD Engineering Drawing I,II,III (3,3,3)

CAD engineering drawing using AutoCAD software; class 2 hours, lab 3 hours. 114—Introductory level; includes scales, sketching of multi-view and pictorial drawings, AutoCAD geometry construction and editing techniques, dimensioning, and plotting. 124—Intermediate level; includes electrical, piping, fasteners, welding, power transmission, property plats, elevations, and structural steel designing; design project required. 204—Advanced level; includes developments, intersections, limits, tolerances, GD&T, detail and assembly drawings, cams, scripts and slides, menu customization, intro to 3-D wireframe, surfaces, and solids modeling drawings. Must be taken in sequence. Prereq for 124: Consent of Instructor. Coreq for 124: MATH 1710. Coreq for 204: MATH 1720. [114-F; 124-S,Su; 204-F]

DD 116 CAD for Electronics (3)

Intro to mechanical and electrical/electronic drafting practices and procedures; focus on pictorial and electronic drawings using CAD; class 2 hours, lab 2 hours. Prereq: EE 110, ET 115; or instructor's consent. Coreq: EE 121. [S]

DD 118 Introduction to Intergraph Microstation (3)

Intense intro to Intergraph Microstation drafting and design software; concepts of geometric construction and editing; focus on the Microstation language and syntax; class 2 hours, lab 2 hours. Prereq: Drafting experience or instructor's consent. [S]

DD 210 AutoLISP Programming (3)

Extension of AutoCAD flexibility and functionality through programming interface language AutoLISP; AutoLISP functions and applications; parametric programming; class 2 hours, lab 2 hours. Prereq: DD 204, ET 115; or instructor's consent. [S]

DD 214 Mechanical Desktop (3)

Intro to Mechanical Desktop software; includes surface modeling, parametric design, assembly

modeling, and part modeling; class 2 hours, lab 3 hours. Prereq: DD 124 or instructor's consent. [S]

DD 216 Architectural Desktop (3)

Intro to Architectural Desktop software; class 2 hours, lab 3 hours. Prereq: DD 114, MATH 1710. [on demand]

DD 218 Land Development Desktop (3)

Intro to Land Development software; includes working with projects, creating boundaries and labels, developing surfaces, and roadway, subdivision, and sewer design; class 2 hours, lab 3 hours. Prereq: CI 224, 274; or instructor's consent. [on demand]

DD 222 Introduction to Pro/ENGINEER (3)

Fundamentals of the Pro/ENGINEER software; concepts of solid modeling, including the fundamentals of part, assembly, and drawing creation; class 2 hours, lab 2 hours. Prereq: DD 114 or instructor's consent. [on demand]

DD 243,253 SolidWorks I,II (3,3)

Use of parametric, solid modeling design software; class 2 hours, lab 2 hours. **243**-Prototyping, assemblies, and production drawings. **253**-Advanced features; sheetmetal parts, advance sweeps and lofts, importing and exporting files, and assembly modeling. Must be taken in sequence. [on demand]

DD 298 Special Topics in CAD (1-4)

Selected specialized topics and/or problems in Computer-Aided Design (CAD); repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

DD 299 Special Topics in CAD with Lab (1-4)

Selected specialized topics and/or problems in Computer-Aided Design (CAD); repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

Computer Operations Technology

COT 000 Computer Operations Technology

Computer components and functions; data; software applications; hardware assembly and repair; system diagnostics; networking; programming; 30 clock hours/week. [E]

Computer Programming, See "Information Systems"

Computer Repair, See "Industrial Electronics"

Computer Science, See "Information Systems"

Construction, See "Civil Engineering Technology"

Cooperative Education

CP 101,102,103,104,105,106 Cooperative Education Work Experience I,II,III,IV,V,VI (1-3 each)

Combines off-campus work with on-campus study, allows students to gain marketable job skills and develop self-confidence and interpersonal skills; credit based on hours worked; approved for unrestricted elective credit in career programs (AAS).

Cosmetology

CY 000 Cosmetology

Personal and shop safety, sanitation/sterilization; salon equipment/implements, scalp and hair care, hair styling, permanent/thermal waves, relaxers, color, straightening, manicures, facials; electricity and electrical safety practices; intro to anatomy/physiology and organic/inorganic chemistry; salesmanship; 30 clock hours/week. Note: 1500 clock hours required for State Board licensure. [E]

Cosmetology Instructor Training

CYT 000 Cosmetology Instructor Training

This course is a presentation of concepts of instruction in cosmetology. Topics include history of teaching, educator characteristics, curriculum development-evaluation, and teaching assessment in techniques. This course is a combination of lecture and lab (300 contact hours). [on demand]

Court Reporting, See "Realtime Reporting"

Creative Writing, See "English"

Dental Assisting

Admission to the program is a prerequisite for all DA courses. All Fall Semester courses are prerequisite to all Spring semester courses, and all courses taught in the same term are corequisites.

DA 120,121 Basic Sciences I,II (2,1)

Basic sciences for dental assisting. **120**-Anatomy and physiology, microbiology, oral anatomy, histology, and embryology. **121**-Oral pathology, nutrition, pain control and pharmacology. [120-F, 121-S]

DA 124 Dental Materials (3)

Laboratory skills, including material manipulation, fabrication of models and other devices and lab equipment operation; lab/material safety complying with OSHA guidelines; class 2 hours, lab 3 hours. [F]

DA 125 Dental Radiology (3)

Dental radiology theory and practice; emphasis on the technical aspects of x-ray production, exposure techniques, film processing, preliminary interpretation, and radiation biology and safety; class 2 hours, lab 3 hours. [F]

DA 128 Dental Office Management (3)

Preparation to serve as dental receptionist/dental office manager. [S]

DA 130,131 Clinical Skills I,II (5,9)

Skills development in performing tasks specified by Tennessee State Dental Practice Act; must provide own transportation to off-campus clinical sites; class 2 hours, clinic hours: 9 in 130, 21 in 131. **130**-Work in on-campus clinic and 2 or more off-campus sites; must submit valid CPR card before externship rotation. **131**-Work in off-campus clinical sites; in-depth study of dental specialties, ethics and jurisprudence; preparation for State and National Board Exams. [130-F, 131-S]

DA 134 Communications for Dental Assistants (2)

Written and oral communication skills; applied psychology relative to the dental profession. [S]

Dental Hygiene

Admission to the Dental Hygiene Program is a prerequisite for all DH courses unless otherwise noted. Please consult the SUMMARY OF REQUIRED HOURS. All DH courses shown in the same term are corequisites and all DH courses shown in the preceding term(s) are DH prerequisites.

DH 132,135,238,239 Dental Hygiene I,II,III,IV (9,9,5,3)

Course series integrates didactic knowledge with affective behavior and psychomotor skills. **132**-Tooth morphology; head, neck and oral anatomy; oral embryology, histology and pathology; radiology; periodontology; pain management; dental materials; oral health education; patient management, including special needs; clinical dental hygiene; medical and dental emergencies; legal and ethical issues; infection and hazard control management, including bloodborne infectious diseases; focus on clinical safety, critical thinking and decision making. **135**-Focus on recognition of conditions requiring treatment modification (e.g., developmental abnormalities, drug therapies, medical conditions) evident during medical and dental history review, radiographic interpretation, and clinical examination; role of research in the profession. **238**-Focus on treatment modifications necessitated by clinical findings. **239**-Focus on lifelong learning strategies, e.g., literature review; outreach projects with community agencies. Prereq for 239: Program director's consent. [132, 238-F; 135, 239-S]

DH 142,145,248,249 Dental Hygiene Applications I,II,III,IV (4,4,4,4)

Application of dental hygiene theory; supervised provision of services on partner, lab manikin or client; lab hours: 11 in 142, 12 in 145, 14 in 248 & 249; Satisfactory/No Credit grading. **142**-Determination of services through accurate decision making stressed. **145**-Integration of preventive, educational and therapeutic concepts when treating clients. **248 & 249**-Preventive, educational and therapeutic concepts for treating increasingly severe gingivitis and periodontal conditions. [142, 248-F; 145, 249-S]

DH 255 Dental Hygiene Clinical Enhancement (2)

Refines clinical skills for practicing dental hygienists or students; individual attention given to participants; focus on scaling and curettage techniques; lab 7 hours; Satisfactory/No Credit grading. Prereq: Instructor's consent. [on demand]

Diagnostic Medical Sonography

Admission to the Diagnostic Medical Sonography Program is a prerequisite for all US courses unless otherwise noted. Please consult the SUMMARY OF REQUIRED HOURS. All courses shown in the same term are corequisites and all courses shown in the preceding term(s) are prerequisites.

US 200 Introduction to Diagnostic Medical Sonography (2)

Basic ultrasound instrumentation and clinical terms; cross-sectional/sagittal anatomy review; rules, regulations, clinical affiliates, diagnostic ultrasound history and student-instructor responsibilities in clinical settings; liability insurance fee required. [F]

US 201,211,221 Ultrasound Physics I,II,III (2,2,2)

Physics of diagnostic medical sonography; correlation with instrumentation procedures; class 2 hours, lab 1 hour. **201**–Sound wave characteristics, matter-ultrasound interaction; basic algebraic review. **211**–Real-time ultrasound transducer characteristics, the ultrasound beam, and the imaging process; application of theoretical concepts in lab. **221**–Focus on instrumentation and clinical environment; artifactual image analysis and corrective factors, quality control measurements and observations, and ultrasound’s biologic effects; advanced scanning techniques, including Doppler and color flow principles. [201–F, 211–S, 221–Su]

US 202,212,222 Obstetrics and Gynecology I,II,III (4,2,3)

A 3-course sequence in female pelvic & obstetrical ultrasound. **202**–Physiological processes affecting imaging; pathological processes and sonographic appearance. **212**–Fetal anatomy; gestational age estimation; fetal anomaly detection and intrauterine growth retardation; transabdominal and transvaginal techniques for assessing early intrauterine and ectopic pregnancies. **222**–Advanced fetal and pelvic sonography techniques; multiple gestations, antenatal syndromes, placental, umbilical cord and membrane evaluation; fetal and maternal disorders; intro to infertility studies; uncommon pathological processes in nongravid pelvis. [202–F, 212–S, 222–Su]

US 203,213,223 Abdominal and Small Parts I,II,III (4,2,3)

203–Abdominal organs, their relation and normal sonographic presentation; physiologic process; metabolic functions; importance of lab data. **213**–Pathologic patterns of abdominal organs; relation to sonographic appearance, physiologic changes, and lab findings; anatomic variations; Doppler and color-flow technique in vascular anatomy evaluation. **223**–Neonatal encephalography and demonstration of anatomy and pathology of superficial structures (small parts). [203–F, 213–S, 223–Su]

US 205,215,225 Clinic I,II,III (7,2,2)

Increasing development of sonographic knowledge and skills in the clinical setting; performance of sonographic exams under clinical supervision; weekly case studies and imaging critiques; clinic hours: 540 in 205, 520 in 215, 420 in 225. **205**–Intro to the sonographic imaging process and the clinical setting; exam protocol; operation of ultrasound instrumentation. **215**–Normal anatomy; pathology and abnormal physiological processes. **225**–Focus on completion of all clinical objectives. [205–F, 215–S, 225–Su]

US 210 Ultrasound Administration (1)

Research, quality control, and accreditation practices and procedures of a general sonography department; research paper, oral presentation, and group accreditation project. [S]

US 220 Ultrasound Seminar (2)

Integrated coverage of ultrasound topics related to image production/evaluation, ultrasound procedures, and patient care and management; focus on needed skills, attitudes and knowledge for judgment and discretion in ultrasound imaging. [Su]

US 231 Vascular Physics (3)

Review and extension of general ultrasound physics; principles of vascular physiology and hemodynamics; other physics principles related to vascular physics. Prereq: Successful completion of a CAAHEP-accredited general sonography program or a physics examination administered by ARDMS. [F,S]

Diesel Equipment Mechanics

DM 000 Diesel Mechanics

Diesel engine mechanics; diesel assembly and disassembly, safety regulations, and shop equipment operation; cylinder block, camshaft, crankcase and oil pan; cylinder head/valves; timing and valve mechanism, air intake, starting and fuel systems; trouble shooting and tune-ups; 30 clock hours/week. [E]

Dietary Manager

ND 110 Practical Diet Therapy (3)

Normal nutrition and therapy principles related to health and disease; role of food and its nutrients regarding diet modifications; practical diet planning, identifying dietary needs patients, development of nutritional care plans and clinical services quality assurance. Prereq: BIOL 1430. Coreq: ND 111. [S]

ND 111 Practical Diet Therapy Practicum (1)

Series of area non-commercial food service agency visits and/or study of diet therapy in student’s work facility; diet therapy principles applied in work settings; extension of topics in ND 110; clinic 4 hours. Prereq: BIOL 1430. Coreq: ND 110. [S]

ND 120 Food Service Sanitation (2)

Food service and equipment sanitation/safety principles; Hazard Analysis Critical Control Point (HACCP) food safety systems, foodborne illness emerging pathogens, Hazard Communication Standard (HCS) required by Occupational Safety and Health Administration (OSHA); Natural Restaurant Association’s SERVESAFE Certification Examination given at course end. Prereq: BIOL 1430. Coreq: ND 121. [F,S]

ND 121 Food Service Sanitation Practicum (1)

Series of area non-commercial food service agency visits and/or study of food service sanitation and safety principles in student’s work facility; principles of food service sanitation applied, extension of topics studied in ND 120; lab 3 hours. Prereq: BIOL 1430. Coreq: ND 120. [F,S]

ND 125 HACCP Training & Certification (1)

Recipes, flowcharts and written Hazard Analysis Critical Control Point (HACCP) system; develop and implement an HACCP food safety system for food service operation. Coreq: ND 120, 121; or proof of current SERVESAFE certification. [F]

ND 130 Food Service Management (2)

Food procurement, production and service principles; methods for organization/department planning, menu planning with computer applications, food production/productivity, work simplification, inventory control, equipment procurement, and continuous quality improvement methods. Prereq: BIOL 1430. Coreq: ND 131. [Su]

ND 131 Food Service Management Practicum (1)

Series of area non-commercial food service agency visits and/or study of diet therapy in student’s work facility; principles of food service management applied, extension of topics studied in ND 130; clinic 4 hours. Prereq: BIOL 1430. Coreq: ND 130. [Su]

ND 140 Food Service Administration (3)

Principles of food service administration/personnel management; focus on human relations, institutional development and operations management; problem solving, systems analysis, dietary policies and procedures, interpersonal skills, departmental budgeting, marketing and computer applications. Prereq: BIOL 1430. Coreq: ND 141. [F]

ND 141 Food Service Administration Practicum (1)

Series of area non-commercial food service agency visits and/or study of diet therapy in student’s work facility; principles of food service administration applied; extension of topics studied in ND 140; clinic 4 hours. Prereq: BIOL 1430. Coreq: ND 140. [F]

Drama, See “Theatre”

Early Childhood Education

ECED 1010 Introduction to Early Childhood Education (2)

Orientation to the profession; family relationships, diversity, child development, age-appropriate practices, observation and assessment, learning environments, health and safety, and guidance. [F]

ECED 2010 Safe, Healthy Learning Environments (3)

Basic principles of children’s health, nutrition, hygiene, growth, disease and accident prevention in a family or child care program and the community. [F]

ECED 2015 Early Childhood Curriculum (3)

Pragmatic intro to Early Childhood Education; preparation for student teaching; focus on physical, emotional, cognitive, creative and social aspects of young children; includes field component. [S]

ECED 2020 Infant, Toddler, Child Development (3)

Physical, cognitive, social and emotional development of young children; application to child care, guidance and development; includes field component. [F,S]

ECED 2030 Infant & Toddler Care (3)

Procedures for stimulating intellectual and physical development of infants and toddlers as well as basic caregiving skills; includes field component. [on demand]

ECED 2040 Family Dynamics & Community Involvement (3)

Role of family and community in the physical, cognitive, social, and emotional growth of the child in a diverse society; includes field component. Prereq: ECED 1020 or departmental consent. [F]

ECED 2050 Psychomotor Development (3)

Theories and application of psychomotor development; focus on motor skills; includes field component. Prereq: ECED 2020. [on demand]

ECED 2060 Development of Exceptional Children (3)

Physical, intellectual, and sensory impairments; community resources for diagnosis and treatment services; includes field component. Prereq: ECED 1020, 2070; or departmental consent. [F]

ECED 2070 Developmental Assessment (3)

Developing competency in screening children for developmental problems; community support programs and referral procedures; includes field component. Prereq: ECED 1020, 2020; or departmental consent. [S]

ECED 2080 Language and Literacy Development in Early Childhood (3)

Research-based principles and practices for providing children, birth to age nine, a strong foundation in language and literacy; field experiences required. Prereq: ECED 2015, 2020; or departmental consent. [F]

ECED 2085 Math and Science in Early Childhood (3)

Standards, principles, and practices in teaching mathematics and science to children, birth to age nine; focus on developing and integrated math and science curriculum; field experiences required. Prereq: ECED 2015, 2020; or departmental consent. [F]

ECED 2090 Creative Development (3)

Theories, teaching techniques, and basic program components of early childhood art instruction; use of art media and creative play activities. [on demand]

ECED 2100 The Mentoring Teacher (3)

Philosophy, principles, and methods of mentoring; focus on role of mentors as facilitators of adult learning. [on demand]

ECED 2120 Administration of Child Care Centers (3)

Organization and administration practices; staff-management relations, state and local licensing standards, national accreditation, CDA standards, tax laws, legal liabilities; laboratory observation and interaction. Prereq: ECED 1010, 1020, 2020, 2030. [on demand]

ECED 2130,2140,2150 Clinical Practicum I,II,III (2,2,2)

Practicum caring for children, birth to age nine; 60 hours per semester. **2130**–Physical and human qualities needed to create safe, healthy environments for learning. **2140**–Reflective practices to examine quality, and set goals; experience in accredited site. **2150**–Demonstration of competencies that produce positive developmental outcomes. Must be taken in sequence. Coreq for 2130: ECED 2010 or departmental consent. Prereq for 2140: ECED 1010, 2015, 2040; or departmental consent. Prereq for 2150: departmental consent. [2130-F, 2140-F, 2150-S]

ECED 2510 Educating the Culturally Different (3)

A course providing insight into the special problems and needs of children whose ethnic, religious, or cultural heritage is different from the majority culture group. The effects of poverty and prejudices on classroom performance are examined, as well as classroom practices to help overcome these handicaps. [F]

Ecolonomics, See “Environmental Science”**Economics****EC 113 Consumer Economics (3)**

Provides knowledge to make rational decisions when purchasing clothing, food, housing, consumer durables and insurance, using credit, saving and investing, and preparing for retirement and property distribution. [on demand]

EC 211,212 Principles of Economics I,II (3,3)

211–Macro economics; study of national income and its determination, fiscal and monetary policy, money and banking, economic growth, and international economics. **212**–Micro economics; study of the market system; covers the price system, labor and the distribution of income, government and business, and forms of business organization. [F,S]

EC 235 Special Topics in Economics (1-3)

Specific topics of current economic interest; repeatable for credit on different topics. Prereq: Instructor’s consent. [on demand]

Education**ED 201 Foundations of Education (3)**

Intro to the history, philosophies, and present practices of elementary and secondary education in America; includes field component. [F,S]

ED 202 Teaching Reading and Critical Thinking (3)

An overview of strategies for teaching reading and critical thinking skills in kindergarten through third grade. Emphasis on assessment instruments, connections between reading and writing development and allowing for cultural diversity. [on demand]

ED 235 Special Topics in Education (1-3)

Specific topics of traditional and current interest, including social developments and issues; repeatable for credit on different topics. [on demand]

Electrical/Electronic Engineering Technology**EE 110,212 Electrical Circuits I,II (4,4)**

Study of DC and AC circuits, including series, parallel and series-parallel; class 3 hours, lab 3 hours. **110**–Current, voltage, resistance, and power for DC circuits; capacitance, magnetism, inductance and DC transients; sinusoidal alternating waveforms. **212**–Sinusoidal current, voltage, phasors and impedance; resistance and impedance networks and circuit theorems; resonance, transformers and 3-phase circuits; advanced practices with lab

instruments. Must be taken in sequence. Coreq for 110: MATH 1710. Prereq for 212: MATH 1720. [110-F,S; 212-F]

EE 121,221 Electronics I,II (4,4)

Characteristics, parameters and basic physics of semiconductors; class 3 hours, lab 3 hours. **121**–Includes diodes, bipolar and field effect transistors, optoelectronic devices, and small signal and power amplifiers; covers biasing methods and application of diodes in elementary rectifier/filter circuits. **221**–Focus on linear integrated circuit technology; covers decibels and frequency effects, voltage regulators, and amplifiers. Must be taken in sequence. Prereq for 121: EE 110. [121-S,Su; 221-S]

EE 140 Digital Circuits (4)

Intro to digital circuitry basics; systems, codes, Boolean algebra, logic circuit design, types and analysis, logic storage devices, counters, registers, arithmetic and MSI (medium-scale integration) logic circuits; lab experiments enforce logic circuits design and analysis; class 3 hours, lab 3 hours. Coreq: DSPM 0850. [F,S]

EE 141 Microcomputer Circuits (4)

Intense study of computer systems, permanent storage devices, registers, input-output control and programming typical computer system; lab analysis of computer circuitry; microprocessors internal architecture to microcomputers interfacing to real world systems; emphasis on design, analysis and testing of basic microcomputers consisting of MPU, RAM, EPROM, clock, control circuits, standard input/output interface devices, and micro-processor device applications; class 3 hours, lab 3 hours. Prereq: EE 140. [S,Su]

EE 200,201 Networking Technology I,II (4,4)

Local area networks; class 3 hours, lab 3 hours. **200**–Wiring, cables, telephone networks, modems, cable modems, protocol and 1-server LANs. **201**–Larger LANs, connections and operations; network architectures and standards, TCP/IP, Ethernet, 10 Base T, Novell, Macintosh servers, ISDN and multimedia technology. Must be taken in sequence or have instructor’s consent. [200-F, 201-S]

EE 203 Telecommunications (4)

Introduction to telecommunications with emphasis on wiring, cables, telephone networks, modems, protocols and local area networks; class 3 hours, lab 3 hours. [S]

EE 250 Microcomputer Systems (4)

Thorough study of DOS, DOS EDIT, DOSHELL, DOSKEY, RAMDRIVES and Batch files; advanced Turbo Basic methods including data/objects graphical display, basic object motion, and interrupts use; parallel data input/output; serial communication (RS-232) to terminals and other computers. Prereq: EE 110, 141, ET 115. [F]

EE 251 Microcontrollers Applications (4)

Microcontroller interfacing and applications; single chip microcontrollers and single board computers in stand-alone applications; assembly level programming, program downloading, debugging; interfaces to various I/O devices and appropriate control software development; timing waveforms generated by microcontroller using programmable interrupts to control servos, stepper motors, and DC motors; on-chip analog-to-digital converter and multiplexer to acquire, store, and process analog signals; class 3 hours, lab 3 hours. Prereq: EE 110, 141, and ET 115 or EE 250. [S]

EE 260 Programmable Logic Controllers (4)

PLC system and components description; program functions including sequential on-off operations, timers, counters and data comparisons; PLC instructions use to perform numerical, logic and move functions on single element and multi-element files, forcing input/output instructions; program control, sequencer, and block transfer instructions application; class 3 hours, lab 3 hours. Prereq: EE 110, 140. [F]

EE 261 Automation Control Systems (4)

Discrete and continuous automation control systems; principle motors used as actuators in these systems; motor control devices and circuits studied; proportional, integral, and derivative control of 3-control loop model factory analyzed with theoretical discussion and lab investigation; mechanical/thermal transducers analyzed; PLC used for automatic control of factory cell; class 3 hours, lab 3 hours. Prereq: EE 121, 212, 260. Coreq: EE 221 or instructor's consent. [S]

EE 271 Robotic Systems (3)

Basic robotics and computer-aided manufacturing systems concepts and applications; robot classification, drive methods, arm geometry, path control, controller, end of arm tooling and sensors; lab includes programming of robots, interfacing sensors to the robots, trouble-shooting basic hardware/software problems, and designing supporting devices; robot safety stressed; class 2 hours, lab 3 hours. Prereq: EE 121, 140, MATH 1710. [S]

EE 284 Electrical Technology for Mechanical Engineering Technology (3)

Basic electrical/electronics theory/practice for mechanical engineering technology; intro to electric and electronic devices; AC/DC circuits reviewed; emphasis on electrical power; transformers, generators, motors studied for single and 3-phase operations; electrical machinery controls studied; lectures enforced by lab experiments, videos, and tours of local companies; class 2 hours, lab 3 hours. Prereq: ET 115, MATH 1720. [F]

EE 298 Special Topics in Electronics (1-4)

Special topics and/or problems in electronics; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

EE 299 Special Topics in Electronics with Lab (1-5)

Special topics and/or problems in electronics; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

Electrical/Electronic Engineering Technology (DuPont)**EE 110 DC Circuits (4) (DuPont)**

Direct current electronics basics; analysis of current flow and conductors physics; study of voltage, resistance, Ohm's Law, Kirchhoff's Laws, theory and use of meters, power, magnetism, inductance and capacitance; series, parallel, and series-parallel DC circuits analyzed using Ohm's and Kirchhoff's Laws; complex DC circuits analyzed using loop equations and Thevenin's and Norton's theorems; class 3 hours, lab 2 hours.

EE 111 AC Circuits (3) (DuPont)

Alternating current electronic basics; sine waves and alternating current values analysis; waveform measurement with AC meters and oscilloscopes,

inductance theory and circuits, transformer theory and applications, capacitance theory and circuits, series and parallel resonance theory and circuits, bandwidth, and -C filters; class 2 hours, lab 2 hours.

EE 115 Active Devices (3) (DuPont)

Semiconductor devices theory and application; description of semiconductor materials, doping methods, and conduction; conventional/special purpose diodes, bipolar junction transistor characteristics and circuits, unipolar junction field effect transistors, and FET and MOSFET circuits, thyristors, integrated circuits, and optoelectronic devices; class 2 hours, lab 2 hours.

EE 120 Electrical Theory (3) (DuPont)

Basic concepts and skills needed for technically competent Control Equipment Craftsman in electrical plant maintenance areas; National Electrical Code, AC/DC basics and motors, 3-phase systems, transformers, over-current protection, fuses, circuit breakers, electrical test equipment, grounding, and wiring techniques; class 2 hours, lab 2 hours.

EE 122 Applied Electricity (3) (DuPont)

Electrical components common to industrial power distribution and motor control systems; electrical symbols, drawings, diagrams, and ladder logic diagrams instruction, focus on 2- and 3-wire motor control circuits and motor control devices; class 2 hours, lab 2 hours.

EE 124 Motor Control (3) (DuPont)

Motor control centers circuit construction, operation, and troubleshooting applied by GE-7700 Motor Control Venter and a Rowan controller system trainer use; GE-7700 and Rowan controller analysis and troubleshooting by system level drawings, schematic diagrams, and electrical test equipment use; GE-7700 represents a manual motor control center and Rowan trainer simulates a plant installed nylon yarn wind-up system that simultaneously employs several motors; class 2 hours, lab 2 hours.

EE 131 Digital Electronics (3) (DuPont)

Theory and application of digital electronics techniques and devices; uses and physical/electronic characteristics of a wide range of integrated circuits; working knowledge of number systems, Boolean algebra, binary codes, logic circuits, memory devices, data conversion, and digital troubleshooting also gained; class 2 hours, lab 2 hours.

EE 134 Basic Programmable Controls (3) (DuPont)

Entry level programmable logic controllers (PLC) theory, operation and maintenance; generic PLC basics; PLC system component identification, ladder logic diagrams, and programming basics; lab training situations on Allen Bradley SLC-100/150, PLC-5 and T-50 programming terminals operation; class 2 hours, lab 3 hours.

EE 201 Instrumentation Theory (3) (DuPont)

Intro to process control systems equipment and basic physics used in their operation; includes equipment instrumentation demonstrations and instruction on skills used in performing basic instrumentation practices and procedures for calibration certification; class 2 hours, lab 3 hours.

EE 210 Plant Safety (3) (DuPont)

Prepares Control Equipment Craftsmen to recognize electrical safety hazards, plan and execute electrical jobs from a safety perspective, and follow general safety practices and protective measures as stated in EZ DuPont Engineering Standards, the Chattanooga

Plant Works Engineering Safety Handbook, and the Chattanooga Plant Lock-Tag-Clear-Try-Release Procedures; class 2 hours, lab 2 hours.

EZ 220 Advanced Instrumentation (3) (DuPont)

Manual and automatic process controls; control loop installation, calibration, and tuning with emphasis on single loop controllers; calibration, installation and removal, disassembly, reassembly, and maintenance of valves; class 2 hours, lab 3 hours.

EZ 230 Automated Control Systems (3) (DuPont)

Practical application of process installation, calibration, operation and troubleshooting using batch process simulator; use of process instrument drawings, schematic diagrams and input/output (I/O) drawings in installing, analyzing and troubleshooting a process on a system level; class 2 hours, lab 3 hours.

Electrician, See "Industrial Electricity"**Electronics, Industrial, See "Industrial Electronics"****Emergency Medical Services**

A prerequisite to all EA courses (except 205) is admission into the program in which the course is required. Please consult the brochure for the specific program. All courses shown in the same term are prerequisites and all courses shown in the preceding term(s) are prerequisites.

EA 106,116 Emergency Medical Technician I,II (8,8)

Two semester sequence provides minimum training required to staff a licensed ambulance and prepares students for licensing exams; taught in accordance with the 1994 National Dept. of Transportation EMT-B curriculum and Tennessee regulatory requirements. [106-F, 116-S]

EA 226,227,228 Paramedic Theories I,II,III (14,14,7)

Based on 1998 Department of Transportation EMT-Paramedic curriculum. 226-Covers preparatory subjects, airway management & ventilation, and patient assessment. 227-Medical emergencies and traumatic injuries. 228-Special patient populations, assessment-based management; ambulance operations. [226-F, 227-S, 228-Su]

EA 240,241,242 Paramedic Clinical Practice I,II,III (2,3,4)

Clinic hours: 112 in 240, 216 in 241, 264 in 242; Satisfactory/No Credit grading. 240-Ambulance observation, EMS communication, aeromedical services, rescue, labor and delivery, burn unit, operating room, forensic center. 241-Emergency and Pediatric Emergency departments. 242-Precepted prehospital paramedic field internship. [240-F, 241-S, 242-Su]

Engineering Technology**ET 107 Introduction to Engineering Technology (1)**

Introductory course for beginning engineering technology students; topics include careers for the

2004-06 Course Descriptions

technician, developing good study habits, hand calculator use in engineering technology, engineering design process, and problem analysis. [F,S]

ET 112 Introduction to Space (3)

History of space flight, how to achieve and maintain orbits, satellites, living and working in space, and the effects of space exploration on our daily lives. [on demand]

ET 115 Computers in Engineering Technology (3)

Intro to computers for engineering technology students; Visual BASIC programming, word processing, and spreadsheets; use of computer as a tool for subsequent courses in engineering technology. Coreq: MATH 1710. [F,S]

ET 116 Microcomputer Upgrade and Troubleshooting (2)

Intro to repair, assembly and updating of PC computers; focus on hardware, but some software troubleshooting covered. [on demand]

ET 117 A+ Certification Preparation (2)

Preparation for Computer Technology Industry Association A+ Certification exams; core (computer basics) and DOS/Windows exams covered; requires computer literacy and familiarity with computer hardware; Satisfactory/No Credit grading. Prereq: ET 116 or instructor's consent. [on demand]

ET 130 Preparation for the HAM Radio License (1)

Prepares students for the Technician Class Amateur Radio (HAM) Licensing Examination; combination of lecture and computer-aided study software utilized; Satisfactory/No Credit grading. [on demand]

ET 180 Our World of Technology (3)

Intro to the technologies of everyday living; how technology impacts communications, medicine, manufacturing, engineering and design, space, energy, and the environment; includes Internet use. [on demand]

ET 298 Special Topics in Engineering Technology (1-4)

Specialized topics and/or problems in engineering technology; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

ET 299 Special Topics in Engineering Technology with Lab (1-4)

Specialized topics and/or problems in engineering technology; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

Engineering Transfer**EG 124 Introduction to Engineering Computations (3)**

Study of the structure, design, and implementation of computer programming for engineering applications; flow diagram representation of efficient algorithms and proper syntax of the C++ computer language; credit not allowed for both EG 124 and CS 185. Prereq: MATH 1720. [F, day/every year; Su, night/odd years]

EG 270,271 Electrical Circuits and Laboratory (3,1)

270-Direct current and sinusoidal steady-state analysis; resistance, capacitance, inductance, first

and second order step response; Kirchhoff's laws, circuit theorems, and operational amplifiers. 271-Lab for EG 270; use of circuit simulation software and basic electrical instrumentation; lab 3 hours. Coreq for 270: EG 271, MATH 1920. Coreq for 271: EG 270, MATH 1920. [S, day/every year; F, night/odd years]

EG 274 Engineering Mechanics (3)

Forces and their effect on rigid bodies at rest; free body diagrams, equilibrium in 2 and 3 dimensions, moments of inertia, and truss analysis. Coreq: MATH 1920. [S, day/every year; F, night/odd years]

EG 284 Mechanics of Solids (3)

Stress-strain relationships under plane and 3-D deformations; Hooke's Law, extension, bending, shear, torsion, and beam deflections; Castigliano's theorem, column design and buckling, combined stresses, stress concentrations, and failure theories. Prereq: EG 274. Coreq: MATH 2110. [F, day/every year; S, night/even years]

EG 285 Mechanics of Materials Laboratory (2)

Experiments demonstrating material mechanics theory and engineering materials characteristics; labs include measurement and accuracy, hardness, impact strength, elasticity modulus, torsion, beam bending, and column buckling; individualized design project involving analysis, design and test of a structure required; class 1 hour, lab 3 hours. Coreq: EG 284. [F, day/every year; S, night/even years]

EG 294 Dynamics (3)

Rectilinear, curvilinear, and rotary motion; work and energy, impulse and momentum principles; emphasis on machine motions; 3-D problems. Prereq: EG 274. [S, day/every year; F, night/even years]

EG 298 Special Topics in Engineering (1-4)

Specialized topics and/or problems in engineering; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

EG 299 Special Topics in Engineering with Lab (1-4)

Specialized topics and/or problems in engineering; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

English**DSPW 0690 Individualized Instruction in Writing Skills (2)**

Individualized course for students with significant weakness in general or specific writing skills, needing individual instruction and guided practice; may be taken before or after DSPW 0700 and/or DSPW 0800; repeatable for credit; lab 4 hours. Prereq: Assessment test recommendation or Department Head's consent.** [E]

DSPW 0700 Basic/Developmental Writing (3)

Basic writing skills and grammar review; stresses applying basic mechanical skills to writing paragraphs and sentences; primary emphasis on writing coherent, well-developed, unified paragraphs; advancement to DSPW 0800 upon completion. Prereq: ACT or COMPASS Placement.** [E]

DSPW 0800 Developmental Writing (3)

Continued study and application to achieve writing

skills needed for college; student will write unified, coherent paragraphs and essays in acceptable, standard form; will also produce a research essay. Prereq: DSPW 0700; or ACT or COMPASS placement.** [E]

ENGL 0610 English as a Second Language (3)

Designed for the non-native speaker of English; includes practice in writing, listening, reading and speaking; not intended for transfer; not accepted toward any degree program at Chattanooga State. [on demand]

ENGL 0620 English as a Second Language II (3)

Designed for the non-native speaker of English who possesses a mid-to-intermediate level of competency in spoken and written English. The course includes practice in writing, listening, reading and speaking. Not applicable to credit hours required for a degree or certificate. Prereq: ENGL 0610 or equivalent. [on demand]

ENGL 1000 Tutoring Writing (1)

In-depth view of writing and tutoring process, and current writing center theory; focus on professionalism, interpersonal skills, and collaborative learning; repeatable for credit. Prereq: ENGL 1010 and departmental consent. [on demand]

ENGL 1010,1020 Composition I,II (3,3)

Research projects required. 1010-Focus on exposition and argument; process and development using various rhetorical patterns. 1020-Focus on reading and responding to short fiction, poetry, drama and/or non-fiction prose. Must be taken in sequence. Prereq for 1010: Placement per TBR specifications or DSPW 0800. [E]

ENGL 1030 Literary Studies Abroad (3)

Study of the literary and cultural legacy of selected foreign countries through reading, discussion, research, online interaction, writing, and personal travel to the foreign destination. Prereq: ENGL 1010. [S]

ENGL 2050 Teaching English and Reading with the Internet (3)

Intro to Internet resources for teaching English and reading (pre-K through 12); students visit web sites and develop materials relevant to their own teaching needs; for students interested in English, reading, library science, or creative writing. Prereq: ENGL 1020. [on demand]

ENGL 2110,2120 American Masterpieces I,II (3,3)

Framework and major movements, writers, and works of American literature; research project required. 2110-To 1865; focus on tracing the development of a national literature and literature's role in recording American cultural heritage. 2120-From 1865; focus on various attempts to portray the American response to the complexity of life in the 20th century. Prereq: ENGL 1020. [2110-F, 2120-S]

ENGL 2140 African-American Literature (3)

Literature by African-American writers from the Colonial Period to the Modern Era; readings include written versions of traditional oral forms. Prereq: ENGL 1020. [F]

***Transitional Studies course (not generally transferable; not applicable to credit hours required for a degree or certificate)*

ENGL 2210,2220 English Masterpieces I,II (3,3)

Literary, cultural, and historical aspects of British literature; focus on works that illustrate important literary trends; research project required. 2210–To 1798. 2220–From 1798. Prereq: ENGL 1020. [2210–F, 2220–S]

ENGL 2240 Shakespeare: An Introduction (3)

Study of representative plays by William Shakespeare selected from among the comedies, tragedies, and histories; research project required. Prereq: ENGL 1020. [F,S]

ENGL 2410,2420 Literature of the Western World I,II (3,3)

Survey of western literature; research project required. 2410–Literary, cultural, and historical contributions of classical, medieval, and Renaissance periods to the value systems and world view of contemporary society; focus on development of aesthetic awareness and appreciation of literary art. 2420–Selected readings from the 17th–20th centuries; focus on cultural and aesthetic values presented by the writers, their relationship to earlier literature, and their influence on contemporary literature. Prereq: ENGL 1020. [2410–F,S; 2420–S]

ENGL 2540 Literature by Women (3)

Historical overview of women's literary accomplishments in English; from the Middle Ages to the contemporary period; genres surveyed include the novel, autobiography, short story, feminist expository prose, drama, and poetry. Prereq: ENGL 1020. [on demand]

ENGL 2550 Contemporary Women's Literature (3)

Study of literature by contemporary women; emphasis on multicultural diversity; includes intro to feminist criticism and analysis of ways women perceive themselves as expressed in the 20th century. Prereq: ENGL 1020. [on demand]

ENGL 2630 Literature for Children (3)

Survey of children's literature with special attention to preschool and elementary; genres include folk tales, myth, fantasy, fiction, poetry, biography, and non-fiction. Prereq: ENGL 1010. [F,S]

ENGL 2640 Children's Literature: Contemporary Issues (3)

Explores changes in children's literature of the last 25 years; current literature that addresses real-life issues confronting today's child and considered both helpful and controversial; includes novels, picture books, poetry, and non-fiction for children from preschool age to junior high; how to deal with sensitive issues and censorship. Prereq: ENGL 1010. [on demand]

ENGL 2650 Literature for the Adolescent (3)

Literature for the young adult with emphasis on stages of development and their relationship to the reading experience. Prereq: ENGL 1010. [on demand]

ENGL 2710 Technical Reports (3)

Logical organization, formatting, and stylistic conventions applied to communication in business/industry; focus on collaborative planning and presentation of research-based data and reader/listener-oriented communication; word processing assignments. Prereq: ENGL 1010. [E]

ENGL 2790 Researching Family History (3)

Study focusing on locating, analyzing, and using

genealogical resources found in courthouses, archives, and libraries and on the Internet; research project required. Prereq: ENGL 1010. [on demand]

ENGL 2830 Creative Writing: Introduction (3)

Instruction and practice in writing poetry and/or short fiction; students read and discuss their own works as well as representative works by contemporary writers. Prereq: ENGL 1010. [on demand]

ENGL 2840 Creative Writing: Poetry (3)

Instruction and practice in writing poetry. Prereq: ENGL 1010. [on demand]

ENGL 2850 Creative Writing: Fiction (3)

Instruction and practice in writing fiction. Prereq: ENGL 1010. [on demand]

ENGL 2990 Special Studies in English (3)

Topics of contemporary interest in language and literature; repeatable for credit on different topics. Prereq: ENGL 1010. [F,S]

Environmental Science**ESC 1110,1120 Environmental Science I,II (4,4)**

Study of environmental problems at global, national, and local levels; class 3 hours, lab 3 hours.

1110–Ecological principles, geophysical processes, and human population dynamics; scientific approach applied to understanding environmental concepts using hands-on laboratory and field experiences.

1120–Soil, water, and mineral resources, food resources and pesticides, hazardous wastes and air pollution, energy, land, and species resources; laboratory emphasis on local field experiences. [E]

ESC 2430 Introduction to Soil Resources (4)

Soil genesis and formation, composition and classification, physical and chemical properties and how they relate to soil capabilities and limitations, and soil planning and management; field lab excursions and exercises reinforce lecture topics; class 3 hours, lab 3 hours. [on demand]

ESC 2610 Organic Gardening I (2)

Scientific basis of soils and plants and their relationships as they relate to gardening without additives. [F]

ESC 2650 Gardening with Native Plants (3)

Intro to using native vegetation in the landscape; appropriate for the home gardener or commercial designer; advantages of native plants, general plant ecology, plant identification, soils, landscape design, species selection, and plant propagation techniques. [F]

ESC 2990 Special Topics in Environmental Science (1-4)

Detailed study of specific topic in environmental science; repeatable for credit on different topics. Prereq: Instructor and department head's consent. [on demand]

Environmental Technology, See "Hazardous Materials"**Financial Management****FM 201 Financial Management (3)**

Designed to improve decision skills related to financial resources of the firm; financial analysis techniques, time value of money, valuation, and risk; nature and scope of financial markets and investment opportunities. Prereq: BU 115, MG 103, 165. [F,S]

Financial Planning**FP 101 Fundamentals of Financial Planning (3)**

Intro to financial planning principles; focus on communication with the client; basic areas of financial planning surveyed, i.e., tax planning, risk and insurance, investments, retirement benefit, and estate planning; may be used to prepare for the HS 320 exam from the American College or the CFP I exam from the International Board of Certified Financial Planners. [on demand]

FP 219 Computerized Financial Planning (3)

Applications course teaching simple household budgeting and money management software and more extensive programs which track investments; students use spreadsheet software to develop their own applications; experience with computer applications required. Prereq: BU 185. [on demand]

Fire Science**FI 111 Introduction to Emergency Services (3)**

Emergency/non-emergency operations typically provided by municipal, volunteer and industrial emergency service organizations; historical perspectives, relevant statistics, current and future challenges, services and operations, and external agencies that regulate or impact the emergency response field. [E]

FI 113 Fire Protection Systems (3)

Design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers. [E]

FI 114 Building Construction for Fire Science (3)

Intro to fire problems relating to building construction; analysis of building construction, materials, and construction design methods; focus on needs and requirements of institutional, mercantile, and industrial structures before, during, and after construction periods. [E]

FI 116,124 Fire Fighting Tactics and Strategy I,II (3,3)

Fire control techniques and attack strategies. 116–Focus on residential fires; fire apparatus and equipment, forcible entry, ladder use, hose and hose stream application, extinguishing agents, ventilation, overhaul and salvage. 124–Focus on commercial, industrial, and nonresidential fires; personnel and equipment distribution and use; hazard control. Must be taken in sequence. Prereq for 116: Instructor's consent. [E]

FI 140 Legal Aspects of the Fire Service (3)

Federal, state, and local laws that regulate emergency services; national standards influencing emergency services; standard of care, tort liability,

2004-06 Course Descriptions

and review of relevant court cases. Prereq: FI 111 or instructor's consent. [E]

FI 146 Emergency Service Stress (1)

Stress and its impact on emergency service personnel; unique emergency service field stresses, excessive stress identification, survival skills, and management; critical incident stress debriefing (CISD). [E]

FI 148 Firefighter I (3)

Credit for course given for state or national certification to NFPA 1001 Firefighter I.

FI 215 Fire Behavior and Combustion (3)

Theories and fundamentals of how and why fires start, spread, and how they are controlled. [E]

FI 217 Fire Hydraulics (3)

Basic math and hydraulic formulas for fluid flow, friction loss and forces; internal and external fire protection water distribution and supply; fluid flow in hoses; nozzle discharge and fire streams; and application of principles to fire department operations. [E]

FI 221,222 Fire Administration I,II (3,3)

Organization and management of fire department. 221–Focus on fire service leadership from perspective of the company officer; relationship with government agencies. 222–Budget administration, organization of divisions; relationship with outside agencies. Prereq for 222: FI 221 or 251. [E]

FI 230 Certified Fire Fighter II (3)

Credit given for completion of standards set for state or national advanced Certified Fire Fighter II. [E]

FI 235 Fundamentals of Emergency Service Safety (3)

Application of safety during emergency and non-emergency operations; basic understanding of causes of injuries and death and how to apply that understanding to emergency and non-emergency operations; emergency operations, emergency medical, equipment and vehicle, facility, hazardous materials, wildland, and general safety, protective clothing and safety equipment. [E]

FI 240 Emergency Service Instructor (3)

Credit given for national or state certification to NFPA 1041 Instructor Level I.

FI 251 Fire Officer I (3)

Credit given for national or state certification to NFPA 1021 Fire Officer Professional Qualifications. Prereq: FI 230 or instructor's consent.

FI 260 Fire Prevention and Inspection (3)

History and philosophy of fire prevention; organization and operation of fire prevention bureau; fire codes; identification and protection systems; fire investigation; fire-safety education. [E]

FI 262 Fire Causes and Investigation (3)

Analysis of fire causes; relationship of fire characteristics and causes; recognition of equipment failure responsible for fires, incendiary fires; collection, preservation, and documentation of evidence substantiating fire causes. [E]

FI 270 Emergency Service Strategic Planning & Innovation (3)

Basic concepts strategic planning and innovation for emergency services; community emergency service planning issues, budgeting/cost containment, and

evaluation review; alternative delivery systems, innovation management and emergency service future. Prereq: Instructor's consent. [E]

FI 275 Emergency Response to Hazardous Materials (4)

Basic principles and techniques regarding emergency response to hazardous materials incidents; recognition information, analysis and mitigation of hazardous materials incidents by emergency response personnel; regulatory considerations, detection and personal protective equipment, decontamination, and facility and transportation containers; class 3 hours, lab 3 hours. [on demand]

FI 280 Emergency Services Practicum (3)

Research project on contemporary issues or problems within emergency services field; written report required; findings may be applied in work environment. Prereq: instructor's consent. [E]

FI 299 Special Topics in Emergency Services (1-3)

Topics of traditional and current interest in emergency service field; repeatable for credit on different topics. Prereq: Instructor's consent. [E]

Foreign Language, see "French," "German," "Japanese, see 'Humanities,' " "Spanish"

French**FREN 1010,1020 Elementary French I,II (4,4)**

Elementary grammar, vocabulary, reading, idiomatic conversation, and French culture. Must be taken in sequence. [1010–F, 1020–S]

FREN 2010,2020 Intermediate French I,II (3,3)

Intermediate French conversation and reading. Must be taken in sequence. Prereq: FREN 1020 or 2 years of high school French. [2010–F, 2020–S]

SPECIAL INTEREST COURSES

The following courses are offered as a community service and are not intended to be used to satisfy the foreign language requirement or remove high school deficiencies for any degree program at Chattanooga State or any other college or university.

FREN 1000 Conversational French (2)

Contemporary French language and culture; focus on spoken language, basic vocabulary and idiomatic expressions needed in real-life situations. [S]

FREN 1990 French Field Work (3)

Basics of teaching French; includes observation/participation; class 2 hours, lab 2 hours. Prereq: FREN 1010. [F]

FREN 2990 Special Topics in French (1-3)

Specific topics in French language and culture; repeatable for credit on different topics. Prereq: FREN 1010 and instructor's consent. [on demand]

Geography**GEOG 1010 Physical Geography (3)**

The Earth's physical environment; processes that determine Earth's climate, water, soil, landforms, vegetation, and distribution patterns of each. [S]

GEOG 1025 World Geography (3)

Study of selected world regions; focus on each region's characteristics, problems and global interrelationships. [E]

Geology**GEOL 1040 Physical Geology (4)**

Intro to geology; Earth's age and origin; Earth materials, processes, and resultant structures; class 3 hours, lab 2 hours. [F]

GEOL 1050 Historical Geology (4)

Earth's origin and geologic history; concept of geologic time and the fossil record; class 3 hours, lab 2 hours. Prereq: GEOL 1040. [S]

German**GERM 1010,1020 Elementary German I,II (4,4)**

Elementary grammar, vocabulary, reading, translation, conversation, and cultural studies. Must be taken in sequence. [1010–F, 1020–S]

GERM 2010,2020 Intermediate German I,II (3,3)

Intermediate German grammar, reading, oral drills and conversation. Must be taken in sequence. Prereq: GERM 1020 or 2 years of high school German. [on demand]

SPECIAL INTEREST COURSES

The following courses are offered as a community service and are not intended to be used to satisfy the foreign language requirement or remove high school deficiencies for any degree program at Chattanooga State or any other college or university.

GERM 1000 Conversational German (2)

Contemporary German language and culture; focus on spoken language; basic vocabulary and idiomatic expressions needed in real-life situations. [S]

GERM 2990 Special Topics in German (1-3)

Specific topics in German language and culture; repeatable for credit on different topics. [on demand]

Graphic Design**AA 106 Design (3)**

Intro to visual elements and principles of 2-dimensional design; space, balance, line, shape, texture, value, color, contrast, emphasis and rhythm, geometric and organic form. [F]

AA 107,219 Illustration I,II (3,3)

107–Advanced drawing rendering 3-D forms within the advertising context; study of linear perspective, isometric and human figure indication drawing systems for advertising; line art, black and white, and color media. 219–Study of illustration concepts as self-expression; mastery of a variety of techniques; all illustration forms covered; professional orientation with industry-related problems and deadlines. Prereq: Instructor's consent. [107–S, 219–F]

AA 108 Advertising Concepts (3)

Intro to creative problem solving; study of verbal and graphic communication; methods of idea/concept and content generation; focus on strong

visuals, basic copy writing and presentation skills.
Prereq: Instructor's consent. [F]

AA 109 Production Art (3)

Intro to the basic skills of production artists through simulated on-the-job work projects; study of the tools of the trade, craftsmanship, history; covers both traditional and digital production methods. [F]

AA 116 Typography (3)

Intro to terminology, technology and design aspects of typography and visual communication; topics include typographical anatomy, type characteristics, basic digital textual layout. Prereq: AA 106, 109; or instructor's consent. [S]

AA 190 Photography for Designers (3)

Intro to basic equipment, techniques, processes and terminology/nomenclature of still photography as applied to advertising; emphasis on imagery for advertising design and layout. Prereq: AA 106, 108; or instructor's consent. [F]

AA 209,210 Graphic Design I,II (3,3)

Intermediate to advanced creative problem solving. **209**—Application of design principles and techniques to poster, logo/trademark and ad design. **210**—Basic identity design, collateral design, typography as a major design element; audience, deadline, and production addressed. Prereq for 209: AA 106, 108, 116. Coreq for 209: AA 245 or instructor's consent. Prereq for 210: AA 209, 245. Coreq for 210: AA 246 or instructor's consent. [209–F, 210–S]

AA 215,217 Advertising Design I,II (3,3)

215—Study of basic tools, terms and kinds of advertising art; design process from conception to prepress production; incorporation of design tools for clients' specific needs. **217**—Advanced problems in ad design; creation of ad campaigns incorporating the mass media; individual projects for portfolios to include computer and layout techniques. Prereq: Instructor's consent. [215–F, 217–S]

AA 218 Airbrush Illustration (3)

Intro to the airbrush as important medium in illustration and photo retouching; covers preparation, frisket and shield use, maintenance and handling techniques. [S]

AA 221 Design Internship (3)

On-the-job training in ad design, graphic design, illustration or related commercial art with area business or industrial firm; lab 9 hours. Prereq: Faculty adviser's approval. [E]

AA 222 Portfolio (3)

Visual presentation techniques; editing, formatting, organizing, presenting the professional design portfolio; oral exit exam with select panel of design professionals; preparation for entry into job market. [S]

AA 245 Computer Applications for Graphic Design (3)

Intro to computer (digital) image generation basics, digital page layout and electronic mechanicals. Prereq: AA 106, 108, 109, 116, CS 190; or instructor's consent. [F]

AA 246 Computer Illustration (3)

In-depth intro to digital imagery creation; design and illustration projects created for personal portfolio. Prereq: AA 245 or instructor's consent. [S]

AA 249 Special Topics in Advertising Arts (1-3)

Intro to selected issues and/or problems in

advertising arts; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

Greenhouse, See "Landscaping and Turf Management"

Hazardous Materials

HZ 200 Hazardous Materials Technician Certification (2)

Critical competencies required by hazardous materials, environmental and safety technicians; 4 certificates of training upon completion: OSHA 8-hour annual update training for hazardous waste operations and emergency response; basic first aid and CPR; Department of Transportation hazardous materials employee general awareness and safety training certification; OSHA confined space operations certification; repeatable for credit and certification; Satisfactory/No Credit grading; class 1 hour, lab 2 hours. Prereq: Instructor's consent. [on demand]

Health and Physical Education, See "Physical Education"

Health Information

HEALTH INFORMATION MANAGEMENT

HE 101 Introduction to Medical Terminology (1)

General medical terms, common prefixes, suffixes and root words needed to build a working medical vocabulary. [F,S]

HE 102 Laboratory Procedures (1)

Common lab tests and procedures covered by body system and exams done by pathology; normal ranges and abnormal findings related to diagnoses and pathophysiology. Coreq: BIOL 1050 or BIOL 2010 or HE 103 or HS 104; or instructor's consent. [F]

HE 103 Medical Terminology (3)

Prefixes, suffixes, root words, combining forms, Latin and Greek forms, spelling, and pronunciation; focus on building working medical vocabulary based on all body systems; commonly used terms related to body disorders, medical and surgical procedures, abbreviations, charting symbols, and diagnostic terms; class 3 hours, lab 1 hour. [E]

HE 104 Basic Clinical Coding (1)

Common abbreviations and basic coding skills in the ICD and CPT coding classification systems; taught via interactive computer web-based program. [F,S]

HE 110 Introduction to Health Information Management (1)

Health information management (HIM) and documentation, electronic charting, role of the HIM professional, patient confidentiality, HIM ethics, and the healthcare environment. [F,S]

HE 111 History and Physical Examination (1)

Intro to all the history and physical exam elements: chief complaint, medical, family, and social history, review of systems vital signs, system specific exams and general appearance; pathophysiology history and physical elements and diagnostic work-up. [F]

HE 112,221 Pharmacology I,II (2,1)

Principles and classifications of commonly used drugs by body system. **112**—Drug actions, sources, administration, indications, adverse reactions; forms and reference material. **221**—Generic and trade names, including contrast media, radioisotopes, chemotherapy drugs, and blood products; indications, actions, therapeutic level, and side effects. Must be taken in sequence or have instructor's consent. [112–F, 221–S]

HE 115 Health Informatics and Records Management (2)

Intro to health informatics, records management, healthcare settings and basic standards; electronic charting, discipline- and industry-specific data elements, quantitative and qualitative analysis, formats, records control, document imaging, storage and retention, forms management, numbering, filing, and indexing; class 1 hour, lab 3 hours. Prereq: Acceptance into HIM Program or instructor's consent. [F]

HE 122 Introduction to Clinical Coding and Reimbursement (2)

Intro to coding principles and conventions for ICD and CPT classification systems; overview of Medicare, insurance, reimbursement, accounts receivable, and collections; class 2 hours, lab 1 hour. Prereq: BIOL 1050 or HE 103. Coreq: HE 110. [F]

HE 177 Introduction to Speech Recognition Technology (2)

Covers basic speech recognition competencies, including dictation using voice commands to edit and navigate application software, customizing vocabularies, creating templates and downloading digital voice files from a handheld recorder. Prereq: Computer competence. [F,S]

HE 178 Speech Recognition Technology Applications (1)

Intro to speech enabling applications; purchase of software and minimum computer system specifications required if taken by distance education. Prereq: Computer competence. Coreq: HE 177 or instructor's consent. [F,S]

HE 202 Imaging and Diagnostic Procedures (1)

Radiological and imaging procedures, other diagnostic and therapeutic procedures, indications, views and positions, and other specific tests by body system; abnormal results related to pathophysiology and diagnoses. Recommended prereq: HE 103 or equivalent. [S]

HE 204 Intermediate Clinical Coding (1)

Intermediate level ICD clinical coding; focus on circulatory disorders, respiratory diseases, neoplasms, injuries, poisonings and adverse effects, late effects, complications of medical and surgical care, obstetrical complications, and ICD procedural coding; utilizes web-based learning. Prereq: HE 245 or AHIMA certification or instructor's consent. [F,S]

HE 213 Human Diseases and Surgical Procedures (3)

Disease processes, causes, symptoms, and treatments; focus on specialty areas; instruments,

2004-06 Course Descriptions

operative procedures, and surgical techniques. Prereq: BIOL 1050, HE 103; or instructor's consent. [S]

HE 222 Medicolegal and Professional Concepts (2)

Professional standards of conduct and patient information confidentiality; focus on problems from misuse of patient information; legislative process, court system, legal vocabulary, medicolegal liability, release of information, informed consent, patient rights, risk and ergonomic management, job procurement, interviewing techniques, resumé preparation, and stress management. [F,S]

HE 225 Health Data Content, Standards, and Computer-based Patient Record (3)

JCAHO, NCQA, Medicare and state licensure requirements; credentialing; data sets such as UHDDS, UACDS, MDS, HEDIS and NPBD; registries, primary versus secondary records, data dictionaries, forms and screen design; CPR (computer-based patient record) using ASTM guidelines and HL7; class 2 hours, lab 3 hours. Prereq: HE 115 or instructor's consent. [F]

HE 226,256 Health Information Management Internship I,II (2,2)

Supervised learning experience in a Health Information Management department (non-hospital facilities and JCAHO-accredited hospitals). 226—Focus on HIM procedures, computer applications, including registration and master patient index, computer troubleshooting, data collection, analysis and presentation, productivity assessment and data integrity, patient confidentiality, professional conduct and ethical behavior. 256—Focus on coding skills, quality management, and other management issues. Must be taken in sequence. Prereq for 256: HE 245, 249; or instructor's consent. [S]

HE 239 Patient Account and Insurance Processes (3)

Customer service, patient registration and preregistration guidelines and legal requirements, in-house followup, dismissal, cash control, third-party payers, managed care, billing forms, compliance, and legal aspects of collecting. Coreq: HE 122, 249. [F,S]

HE 242 Medicolegal, Ethical, and Confidentiality Concepts (2)

Record retention, authentication, patient advocacy, subpoenaed information, release of information, security, confidentiality, advanced directives, organ donation, current legislation, and practical applications; class 1 hour, lab 2 hours. Prereq: HE 222 or instructor's consent. [F]

HE 244 Health Statistics (3)

Covers common health statistics; includes converting data into information; class 2 hours, lab 3 hours. Prereq: CS 197, MATH 1530. [F]

HE 245,255 Clinical Coding and Classification I,II (3,3)

Classification and coding systems for most health care settings; focus on accurate coding as major anti-fraud measure by substantiation of diagnoses and service through documentation and as a legitimate reimbursement optimizer; groupers and encoders used; class 2 hours, lab 3 hours. 245—ICD conventions, quality control, principal diagnosis identification, coding reference, DRGs, severity, sequencing and methodology. 255—CPT; relationship of coding to managed care, compliance, and

chargemasters; APCs, and coding references. Prereq for 245: BIOL 1050, HE 122; or instructor's consent. Prereq for 255: HE 122, 213; or instructor's consent. [245–S, 255–Su]

HE 247 Healthcare Quality, Utilization, and Risk Management (3)

Principles of quality management, performance improvement, utilization review and risk management in healthcare; accreditation, credentialing, and regulatory issues; admission and level of care criteria; data quality; class 2 hours, lab 3 hours. Prereq: HE 225 or instructor's consent. [S]

HE 248 Reimbursement Methodologies (1)

Prospective payment system (PPS), DRG assignment, groupers, and case mix computation; APCs, RBRVS, MDS driven PPS, other pertinent PPS systems, capitation, severity, third party payers and peer review organizations; class 1 hour, lab 1 hour. Prereq: HE 122 or instructor's consent. Coreq: HE 245 or instructor's consent. [S]

HE 249 Practice Management, Billing, and Compliance (3)

Practice management, personnel issues, scheduling and referrals, billing/insurance, patient accounting overview, anti-fraud measures, compliance and documentation, chargemaster, EOBs, check and balance procedures, comprehensive claims tracking/reporting, financial statements, management reporting, managed care contracts, credentialing, OSHA, CLIA, Medicare, safety and other regulatory requirements; class 2 hours, lab 3 hours. Prereq: Computer competence. [F,S]

HE 251 Electronic Patient Information, Security, and Internet (1)

Issues surrounding storage, transmission, and security of electronic patient information (EPI); class 1 hour, lab 1 hour. Prereq: HE 242 or instructor's consent. [S]

HE 252 Health Information Systems and Knowledge-based Applications (1)

Covers voice recognition, transcription, and dictation systems, auto-identification technologies, biometrics, arden-syntax, MEDLINE, CINAHL, Index Medicus, and HIM Internet resources; class 1 hour, lab 1 hour. Coreq: HE 247 or instructor's consent. [S]

HE 265 Clinical Coding Seminar (1)

Clinical review, application, and enhancement of ICD and CPT coding and classification systems; lab 3 hours. Prereq: HE 245, 255. [F]

HE 297 Health Informatics Management (3)

Covers principles of management on micro-, mid-, and organization-wide level, strategic planning, operations, systems, process improvement, human resources and relations, supervision, and finances within health informatics environment. Prereq: HE 115, 225; or instructor's consent. Coreq: HE 247 or instructor's consent. [S]

MEDICAL TRANSCRIPTION

HE 105,107 Keyboarding in Transcription I,II (3,3)

Touch control of the keyboard, proper typing techniques, speed and accuracy; formatting business documents and production of mailable copy; transcription; 107 includes office-style simulations; placement by exam; credit toward graduation not allowed for both HE 105 and OF 113 or for both HE 107 and OF 114. [105–F, 107–S]

HE 116,229 Medical Transcription Practice I,II (6,6)

Provides knowledge and skills to accurately transcribe medical dictation from physicians and allied health professionals. 116—Transcription of routine medical reports; proper content, use of transcription equipment and reference materials; professional and ethical conduct. 229—Transcription skills for cardiology, orthopedics, pathology, radiology, gastroenterology, and all major report categories (history, consultations, physicals, discharge summaries, emergency room records, and operative reports). Must be taken in sequence or have instructor's consent. Prereq for 116: Acceptance into Medical Transcription Certificate of Advancement program or instructor's consent. [116–F, 229–S]

HE 234 Medical Transcription Internship (4)

Opportunity for extensive experience through "live" transcription within healthcare facility's transcription unit or "realdictation" from a medical transcription company; student gains familiarity with policies, procedures, and management techniques within professional setting while under supervision of skilled medical transcriptionist; transcription performed at work site for 180 hours. Prereq: HE 229. [Su]

Health Physics

NU 101 Health Physics and Industrial Hygiene Seminar (1)

Intro to disciplines of health physics and industrial hygiene; lectures and video presentations provide overview of basic features of both fields. [F]

NU 104 Radiation Protection and Radiological Health Administration (4)

Radiation dosimetry, biological effects of ionizing radiation, radiation protection standards for general public, occupationally exposed, and special groups; theory and application of basic radiation detection instrumentation used in radiation protection; class 3 hours, lab 3 hours. Coreq: NU 204. [F,S]

NU 154 Atomic and Nuclear Physics (4)

Atomic and electrical nature of matter and the elementary theory of the nucleus, fundamental particles, natural and artificial radioactivity and nuclear reactions; class 3 hours, lab 3 hours. Coreq: MATH 1910. [S]

NU 204 Introduction to Health Physics and Industrial Hygiene (4)

Radiation-induced ionization, methods of measurement, radiation safety and occupational health; topics include atomic and nuclear structure, types of ionizing radiation, radioactive decay, introductory gamma ray physics, shielding, distance/intensity relationships, instrumentation and dosimetry, health effects, waste disposal, fission and fusion; class 3 hours, lab 3 hours. Coreq: CHEM 1110. [F,S]

NU 264 Health Physics (4)

Concentrated study of practical radiation protection principles; problems in radiation physics/biology, radioactive decay, interactions, counting statistics, radiation units, regulations, personnel monitoring, instrumentation, dosimetry, waste disposal, air and water sampling, shielding, x-ray safety, and radiography and laboratory facility design; class 3 hours, lab 3 hours. Coreq: NU 104, 204. [S]

Health Science

A prerequisite to all HS courses numbered above 114 is admission into the program in which the course is required. Please consult the SUMMARY OF REQUIRED HOURS or the specific program brochure. All HS courses shown in the same term are corequisites and all HS courses shown in the preceding term are HS prerequisites.

HS 111 Health Care Overview (1)

Overview of current health care milieu; broad topics include health care environment, careers, and dynamics. [on demand]

HS 123 Introduction to Radiation Oncology (3)

Overview of radiation therapy; medical terminology, ethics and the law, patient care, cancer management, radiation therapy rationale, usage, and physics, and basic machine usage. [F]

HS 145,155 X-Ray Physics I,II (4,4)

Basic x-ray physics; physical phenomena associated with x-ray production, its quantity, quality, method of measurement, dose and exposure units; theory of photographic image formation by x-rays; principles of radiobiology; class 3 hours, lab 3 hours. **145**—Math, basic electrostatics and mechanics; x-ray production and interaction with matter, factors that control quantity and quality of x-ray emission, and methods of controlling scatter radiation. **155**—Latent and manifest image formation, factors affecting image quality, general tomography, image intensified fluoroscopy, stereography, mammography, digital imaging (DF/DR, US, MR, CT); x-ray facility design, radiation effects and protection, and health physics. [145–F, 155–S]

HS 172 Anatomy and Imaging (2)

In-depth study of transverse, longitudinal, sagittal and coronal cross sections of the total body; use of computerized tomography, magnetic resonance, ultrasonography and nuclear medicine images in the localization and follow-up of tumors after radiation treatment. [F]

HS 184 Radiation Biology (3)

Unified coverage of ionizing radiation effects in biological systems; radiation effects on developing embryonic systems in plants and animals; acute radiation effects in whole animals and prokaryotic cells; class 3 hours, lab 2 hours. [S]

HS 200 Clinical Education Methodology (3)

Aids instructors or future instructors in allied health and nursing programs to develop knowledge, skills and attitudes needed for effective teaching, supervision, and evaluation of students in clinical settings; focus on presenting real-world experience by providing students the opportunity to design, develop, implement and evaluate instruments and strategies transferable to clinical settings. [on demand]

HS 214,224 Radiation Physics I,II (4,4)

Basic classical and modern physics concepts needed for physics involved in radiation therapy; includes math concepts needed for physics principles. [214–F, 224–S]

HS 220,230,240 Clinic I,II,II (8,4,6)

Radiation therapy clinical methodology; develops skills and knowledge in radiation protection and quality assurance, simulation and treatment planning, treatment procedures using multiple megavoltage machines, and patient care and management; clinic hours: 520 in 220 & 230, 450 in 240. [220–F, 230–S, 240–Su]

HS 223,233 Radiation Oncology I,II (3,3)

Concepts of disease, types of growths, causative factors and biologic behavior of neoplastic disease; intro to specific malignant disease entities by site of occurrence; disease processes, staging, and treatment planning philosophy; inter-relating of treatment planning with clinical radiation therapy. [223–S, 233–Su]

HS 243 Radiation Biology and Hyperthermia (3)

Intro to medical aspects of radiobiology, including cellular, systemic, and total body responses; somatic and genetic effects of radiation; use of radiobiology in the clinical practice of Radiation Therapy; concept of hyperthermia. [Su]

HS 299 Special Topics in Allied Health (1-3)

Selected topics of interest in allied health; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

History

HIST 1010,1020 Western Civilization I,II (3,3)

Survey of political, economic, social, cultural, religious, and intellectual history of mankind that has influenced Western Civilization. **1010**—To 1715. **1020**—From 1715. [1010–F, 1020–S]

HIST 1110,1120 History of World Civilizations I,II (3,3)

Survey of political, economic, social, cultural, religious, and intellectual history of world civilizations. **1110**—To 1500. **1120**—From 1500. [E]

HIST 2010,2020 United States History I,II (3,3)

Survey of United States history; focus on political, diplomatic, economic, social, cultural and intellectual phases of American life in its regional, national, and international aspects. **2010**—Through 1865. **2020**—After 1865. [E]

HIST 2030 Tennessee History (3)

Survey of the state's history from its beginnings to the present; consideration of its social development, population, economy, political life, and geography. [on demand]

HIST 2040 The Scopes Trial (3)

Historical, scientific, theological, educational, and artistic ramifications of the Scopes Trial. [on demand]

HIST 2130 Afro-American History (3)

Study of black people in America from their African origins to the present; highlights and unique nature of the Black Experience in America; the structure, problems, and potential of the Black Community; intro to thoughts and contributions of Black leaders. [on demand]

HIST 2530 The Holocaust and Jewish Civilization (3)

Chronicles the origins, progression, and culmination of the Holocaust and grapples with questions and issues surrounding this human catastrophe; endeavors to understand the rich European Jewish heritage and civilization virtually destroyed and to analyze the continuing impact of modern racial nationalism in the world today. [on demand]

HIST 2990 Special Topics in History (1-3)

Specific topics of traditional and current historical

interest; includes relevant political and social developments and issues; repeatable for credit on different topics. [on demand]

Horticulture, See "Landscaping and Turf Management"

Human Services

HR 101 Introduction to the Field of Social Welfare (4)

Intro and orientation to social welfare; focus on professional values/ethics and the diversity of groups served; historical development and present structure; minimum of 45 observation hours and supervised volunteer service in appropriate settings required. [F,S]

HR 113 Introduction to Individuals with Developmental Disabilities (3)

Intro to the atmosphere in which developmentally disabled individuals live and their relationship to family, the community, caregivers, ethics and normal development. [F,S]

HR 123 Requisite Skills for Direct Caregivers (3)

Intro to knowledge, skills and abilities needed for valid and reliable quality care of the developmentally disabled; aids in development of knowledge, skills and abilities necessary for minimum standard of care. Prereq: HR 113. [F,S]

HR 125 Community Social Services (3)

Survey of community social services to consider as resources in making effective referrals for human services in the Chattanooga Metropolitan area. [on demand]

HR 130 Substance Abuse Theories (3)

Social, political, physiological, and behavioral implications of alcohol/drug abuse; theories of drug-alcohol addiction stages, dynamics and nature of psychoactive substances, and theories/methods of substance abuse prevention; focus on family dynamic models, co-dependency, and disease concept. [F,S]

HR 135 Special Topics in Human Services (1-3)

Specific topics of interest in human services and social welfare; repeatable for credit on different topics. [on demand]

HR 205 Human Relations and Explorations (4)

Intro to social and psychological concepts and techniques of therapeutic communication, including individual and group process dynamics. Practice in interviewing skills, active listening, reflective techniques, and establishing therapeutic relationships in both individual and group settings through the use of humanistic psychology. Coreq: HR 101. [F,S]

HR 210 Methods of Human Service Practice (3)

Multi-disciplinary approach to development of understanding of the roles, treatment modalities, and practice settings in which human services specialists may be involved. Prereq: HR 101. [F]

HR 219 Family Systems (3)

Examination of interpersonal interaction patterns in functional and dysfunctional families and their

2004-06 Course Descriptions

problems in contemporary American society; focus on examining emotional and physical abuse, drug addiction, alternative life styles, and changing sex roles. [F]

HR 220 Human Services Practicum (6)

Minimum of 200 hours supervised field instruction in social agencies dealing directly with human problems; student applies and demonstrates appropriate mastery of necessary knowledge/skills required for beginning practice; in-class activities include on-campus seminars. Prereq: HR 101, 210. [F,S]

HR 235 Methods of Substance Abuse Treatment (3)

Theory and practice of alcohol and/or drug addiction treatment approaches; focus on understanding of wellness and the whole person, stages of recovery, discharge assessment, and community resources. [F]

HR 240 Group Dynamics (3)

Intro to interpersonal concepts and problems of communication in interpersonal transactions; focus on understanding group processes, developing ability to facilitate communication between others in group settings and specific group process competencies. [on demand]

HR 245 Introduction to Counseling (3)

Comparative analysis of major theoretical approaches to counseling and psychotherapy practice; psychodynamic, behavioral, cognitive behavioral, gestalt, transactional analysis, rational-emotive therapy and systems theory. [S]

Humanities**HUM 1000 Seeking Spirituality for the Twenty-first Century (1)**

Intro to contemporary religious issues; organized religious movement in the American experience; speculation on religion's direction. [on demand]

HUM 1010,1020 Introduction to the Humanities I,II (3,3)

Historical approach to pivotal ideas, systems of thought, and creations of the Western world (e.g., music, drama, painting, sculpture, architecture, and literature) as reflections of the culture that produced them. **1010**—From antiquity to 1600 A.D. **1020**—From 1600 to present. Coreq: ENGL 1010. [1010–E; 1020–F,S]

HUM 1040 The Human Experience through Song (3)

Study of culture and the human experience through analysis of song lyrics; emphasis on messages in American lyrics including blues, country, folk, pop, rap, reggae, rock and spirituals. [F]

HUM 1230 Philosophy of Science and Technology (3)

History of major scientific and technological achievements in the modern age and their relevance to the world view of Western civilization. [on demand]

HUM 1530 Elementary Japanese Language and Culture (3)

Beginning course in Japanese language and culture; focus on acquiring skills to communicate in basic Japanese and on a comprehensive understanding of

traditional and modern Japanese culture and society. [on demand]

HUM 1550 Introduction to Service-Learning (3)

Nature of philanthropy; role of the individual in societal transformation through service. [on demand]

HUM 2130 Mythology (3)

Cross-cultural survey of the creation, hero, and fertility myths of diverse cultures including Middle Eastern, European, African, Oriental, and North and South American; study of Classical Greek Mythology. [F,S]

HUM 2140 Folklore and Native Culture (3)

Basic theory and working vocabulary of folklore related to the student's geographical origin and personal experience; focus on family, community, and regional cultures. Prereq: ENGL 1010. [on demand]

HUM 2330 Contemporary Women Artists and Writers (3)

Multicultural selections; critical reviews of the way women perceive themselves as expressed in 20th century imagery. Prereq: ENGL 1010. [on demand]

HUM 2550 Leadership Development (3)

Leadership philosophy, practices and skills; decision making, empowerment, trust, goal-setting and conflict resolution; readings in the humanities and critical analysis of media that explore leadership styles. (Same as PY 250; credit not allowed for both courses.) Prereq: ENGL 1010. [F,S]

HUM 2990 Special Topics in Humanities (3)

Specific topics of traditional and current relevance in Humanities disciplines; repeatable for credit on different topics. Prereq: ENGL 1010. [on demand]

HVAC, See "Air Conditioning/Refrigeration"**Industrial Electricity****IE 000 Industrial Electricity**

Basic electricity, National Electric Code, AC/DC motors, generators, alternators, programmable logic controllers, hydraulics, symbols, pneumatics, line diagrams, manual contactors and manual motor starters; installation and repair of TVRO satellite systems; hands-on experience in residential wiring and conduit bending; 30 clock hours/week. [E]

Industrial Electronics**ER 000 Industrial Electronics**

Theory and practical application in electronic equipment repair and maintenance, including communications and video equipment, computers, programmable logic controllers, and other solid state, digital, and computer-oriented electronics; provides preparation for the National Electronics Certification Test (leading to Certified Electronics Technician designation) and Federal Communications Commission Test; 30 clock hours/week. [E]

Industrial Maintenance Mechanics**ID 000 Industrial Maintenance Technology**

Theory and practical applications in industrial maintenance; blueprint reading, welding, machine shop, electricity, hydraulics, pneumatics, HVAC, general building maintenance; 30 clock hours/week. [E]

Information Systems**CS 101 Computer Literacy (3)**

Information about the nature of a computer applied to the roles that computers play in society; intro to the use and operation of microcomputers and commercial applications software packages; basic components of a computer, computer applications, data processing careers, electronic spreadsheets, databases, intro to word processing, and issues in computing. [E]

CS 103 Internet and Presentation Software (2)

Intro to basic presentation graphics software, e-mail management, the Internet and using it effectively. [E]

CS 104 Fundamentals of Information Systems (3)

Overview of the information systems discipline; base number systems, computer, data, and file organization, career opportunities, and current technology concepts. [E]

CS 105 Intro to Spreadsheets (1)

Intro to basic electronic spreadsheet software and file management skills. [E]

CS 106 Intro to Word Processing (1)

Intro to basic word processing software and file management skills. [E]

CS 107 Intro to Database Software (1)

Intro to basic database software concepts and file management skills. [E]

CS 108 Internet Applications for Educators (3)

History of the Internet and classroom application; focus on accessing Internet resources. [Su]

CS 109 Maintaining Classroom Technology (3)

Covers basic skills needed to set up and maintain technology in the classroom. [Su]

CS 114 Concepts of Programming (3)

Basic concepts of traditional computer program design, design tools, and an intro to object technology. [E]

CS 124,225 Visual BASIC I,II (3,3)

Intro to the concepts of computer program design through the Visual BASIC language. **124**—Use of controls, forms, code modules, functions and procedures to create Windows applications. **225**—Advanced features: file processing, data access, and communicating with other Windows applications, including object linking and embedding. Must be taken in sequence. Coreq for 124: CS 114. [124–F,S; 225–S]

CS 150 Principles of Web Site Design (3)

Design concepts and principles for designing web sites; intro to tools for creating, enhancing, and publishing a web site. Prereq: CS 101 or instructor's consent. [on demand]

CS 151 Building Web Sites (3)

Use of current web authoring tools to create web sites; focus on web page construction and use of themes, templates, and forms. Prereq: CS 150 or instructor's consent. [on demand]

CS 152 Multimedia Projects (3)

Use of latest web design tools for web publishing. Prereq: CS 150 or instructor's consent. [on demand]

CS 154,280 COBOL Programming Language I,II (3,3)

Use of COBOL to solve typical business problems. **154**—Programming assignments include payroll, sales analysis, accounts payable, accounts receivable, and inventory control; class 3 hours, lab 2 hours. **280**—Advanced features. Must be taken in sequence. Prereq for 154: CS 114 or instructor's consent. [F,S]

CS 160,161 Java Programming I,II (3,3)

160—Intro to the Java programming language; includes object-oriented techniques and development of simple application and applets. **161**—Covers advanced features. Must be taken in sequence or have instructor's consent. Prereq for 160: CS 124 or instructor's consent. [on demand]

CS 176 Microcomputer Operating Systems (3)

Microcomputers, operating systems, system commands, and machine codes; data representation and elementary machine instructions studied in detail; survey of communication codes and terminology. Prereq: CS 104 or instructor's consent. [S]

CS 178 Fundamentals of Unix (3)

Overview UNIX system administration; booting and shutting down, root account, controlling processes, file system organization, drivers and the kernel, networking, security, daemons, and other UNIX concepts. Prereq: CS 176 or instructor's consent. [on demand]

CS 185 C++ Programming Language (3)

Intro to computer program design concepts and development using the C++ programming language; orientation towards syntax, usage, modularity of program design, and development of program libraries; credit not allowed for both CS 185 and EG 124. Prereq: CS 114; or experience with a block structure language or instructor's consent. [S]

CS 190 Introduction to Macintosh (3)

Intro to Macintosh computers, system maintenance, software installation, use of peripherals, efficiency enhancement; survey of mainstream advertising and graphic arts software. Prereq: Instructor's consent. [F]

CS 197 Spreadsheet Software Applications (3)

Designed for students who have been introduced to microcomputer use and operation, have basic knowledge of Windows environment, and wish to learn to use electronic spreadsheet software package. [F,S]

CS 198 Database Software Applications (3)

Designed for students who have been introduced to microcomputer use and operation, have basic knowledge of Windows environment, and wish to learn to use commercial database software package. [F,S]

CS 204 Microcomputer Architecture (3)

Provides background for using the microcomputer

as a business tool; microcomputer basics with focus on hardware components and configurations, security, and networking. Prereq: CS 104 or instructor's consent. (Same as NW 204; credit not allowed for both courses.) [F]

CS 205 Computer Networks (3)

Basic data communications and networks; data communication concepts, standards, local area networks OSI model, and network hardware and software. Prereq: CS 176 or instructor's consent. Coreq: CS 204. [F]

CS 215 Local Area Network Management (3)

Management of computer local area networks; server and workstation installation, network performance management, managing client services, print services, and security. Prereq: CS 205 and experience with microcomputers or instructor's consent. [S]

CS 231 Numerical Methods (3)

Foundation for basic numerical methods; higher order equations, systems of equations, interpolation and curve fitting, numerical integration, and differential equations; problem solution using the computer and elementary discussion of error control. Prereq: CS 185. Coreq: MATH 1920. [on demand]

CS 240 Computer User Support (3)

Overview of computer user support; includes troubleshooting, problem-solving, personal communications, needs assessment, product documentation, user training, and help-desk operation. Coreq: CS 244 or instructor's consent. [on demand]

CS 244 Systems Analysis and Design (3)

Integration of manual and data processing techniques applied to business and science; complex application areas studied with view toward development and analysis of systems and procedural improvements; focus on case study approach. Prereq: Advanced standing or instructor's consent. [S]

CS 248 Survey of Computer Topics (1-4)

Specialized topics and/or problems in information data processing studied at an introductory level; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

CS 249 Topics in Computer Applications (3)

Specialized topics and/or problems in computer data processing studied in detail; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

CS 250 Advanced Web Page and Site Design (3)

Development of web sites driven by underlying databases; Active Server Page (ASP) technology; client-side and server-side scripting. Prereq: CS 124, 151, 296; or instructor's consent. [S]

CS 251 Scripting Languages (3)

Intro to JavaScript and VBScript programming languages; covers both client-side and server-side programming. Prereq: CS 250 or instructor's consent. [on demand]

CS 293 Microcomputer Software Applications (4)

Designed for those who will use a suite of commercial software applications in the office setting; must have working knowledge of word processing software applications and excellent keyboarding/document formatting skills. Prereq: CS 101 or equivalent, OF 114; or instructor's consent. [F,S]

CS 296 Principles of Database Management Systems (3)

Basic concepts of database management systems (DBMS); terminology, types of systems, large and small system implementation, report generators, and user interface. Prereq: At least 1 programming language course. [F]

CS 299 Special Projects (3)

Integrates concepts and skills learned in previous programming courses; focus on solutions to typical problems encountered in business; case studies in systems and programming; repeatable for credit with different programming languages. Prereq: CS 154, 280. [S]

Insurance**IS 107 Principles of Life and Health Insurance (3)**

Intro to the principles, practices, and techniques of life and health insurance. [on demand]

Interdisciplinary Studies**IY 100 Student Government Leadership (2)**

Promotes development of appropriate leadership skills; focus on identifying, nurturing and mentoring students as they grow to become effective leaders; parliamentary process and the basic principles of arbitration, compromise, conflict resolution, effective communication, motivation and team building. [F,S]

Japanese, see "Humanities"**Job Skills Development****JS 101 Career and Life Planning (3)**

Assists students to develop awareness of personal choice in making career and life decisions; focus on developing realistic short and long term career goals through personality, abilities and skills assessments; job market trends explored in relation to need for continual training and retraining. [F,S]

Landscaping and Turf Management**LM 000 Landscaping and Turf Management**

Landscape management; plant and soil science; pest and insect identification and management; selection and safe application of pesticides and fertilizer; landscape design and residential turf management; cost calculation and bid preparation; greenhouse and nursery production and management; interiorscaping; computer assisted landscape drafting and design; 30 clock hours/week. [E]

Leadership, see "Humanities," "Interdisciplinary Studies," "Management," "Psychology"**Legal Assisting**

Courses taught for paralegals.

LA 110 Fundamentals of Law (3)

Intro to the legal field; includes survey of Torts,

family law, legal ethics, Contracts, Civil Procedure, and Criminal Law; focus on the attorney, paralegal, and legal tribunal's role in administration of justice. [F,S]

LA 130 Legal Research (3)

Primary and secondary sources of law found in the legal library; focus on legal research methods, case briefing, and citation of legal authorities. [F]

LA 135 Legal Writing/Case Analysis (3)

Systematized approach to how legal results and doctrines are reached through case analysis; writing techniques, case analysis, and briefing skills; focus on format, documentation development, application of judicial opinions, and uniform citations. Prereq: ENGL 1010, LA 110, 130. [S]

LA 210 Contracts (3)

Contracts from a paralegal's perspective; elements to formation, defenses, breach, remedies, ethical considerations, and drafting. Prereq: LA 110. [S]

LA 220 Torts (3)

Intentional torts, negligence, strict liability, worker's compensation, malpractice, and products liability; rules of civil procedure and evidence. [S]

LA 225 Constitutional Law (3)

Search and seizure; internet and cell phone privacy, exclusionary rule, right to trial, sentencing, free speech, and ethical considerations; components of research and presentation. Prereq: LA 110 or instructor's consent. [F,Su]

LA 230 Criminal Law/Procedure (3)

Criminal law and rules of procedure; Tennessee law; specific crimes, their elements, ethical considerations, and drafting. [S]

LA 235 Administrative Law (3)

Authority of government agencies to create, interpret and apply administrative laws; judicial review of administrative rulings, freedom of information issues, access to government information, and governmental liability/immunity. Prereq: LA 110, 130. [on demand]

LA 240 Trial Practice and Civil Procedure (3)

Techniques and documentation utilized in the civil trial; investigation, drafting, jurisdiction, discovery, procedure, multi-party litigation, interviewing/presentation component. Prereq: LA 110, 130, keyboarding at 25 wpm. [F]

LA 245 Legal Ethics for Paralegals (3)

Legal ethics and professional responsibility; rules and guidelines affecting paralegals, certification, licensing, unauthorized practice of law, confidentiality, conflicts, advertising, client fees and funds. Prereq: LA 110, 130. [on demand]

LA 250 Wills, Trusts and Estate Planning (3)

Legal requirements of wills and trusts; estate planning; administration of estates; advance directives; ethical considerations. [S]

LA 260 Domestic Relations (3)

Family law; divorce, legal separation, annulment, child custody, adoption, support; pleading and drafting documentation. [F]

LA 270 Insurance Law (3)

Policy analysis, coverage, insurable interest, automobile, property and life insurance, and regulation. Prereq: LA 110 or instructor's consent. [on demand]

LA 275 Bankruptcy (3)

Federal bankruptcy laws and guidelines; statutory provisions and judicial interpretations of Federal Bankruptcy Code, and use of forms. Prereq: LA 110. [S]

LA 280 Property Law (3)

Property law; landlord/tenant law in real estate; transference of ownership interest; closings and zoning. Prereq: LA 110, 130. [F]

LA 290 Law Practice Management (3)

Law office management techniques and practices; business aspects, record keeping, billing procedures. Includes interviewing/presentation component. [F]

LA 298 Special Topics in Legal Assisting Technology (1-3)

Topics of current and special interest; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

LA 299 Internship (3)

On-campus study combined with supervised work experience directly related to paralegal's role in legal community. Includes interviewing/presentation component. Prereq: CS 101, LA 135, 240, and instructor's consent. [S]

Literature, see "English"

LPN, See "Practical Nursing"

Machine Tool Technology

MT 000 Machine Tool Technology

Machine shop safety; basic hand tools and precision instruments; lathes, milling machines, and grinders; basic stamping die components principles and construction; focus on precision grinding; CNC technology; blueprint reading focusing on skills needed to interpret shop drawings; 30 clock hours/week. [E]

Magnetic Resonance Imaging

Prereq for all MRI courses: Graduate of CAHEA/JRCERT accredited Radiologic Technology Program and certified or eligible for certification by American Registry of Radiologic Technologists.

MRI 200 Magnetic Resonance Imaging (4)

Intro to basic essentials of magnetic resonance imaging methods, system operation, cross-sectional anatomy and clinical imaging interpretation; focus on requirements to operate magnetic resonance equipment. [F]

MRI 210 Advanced Magnetic Resonance Imaging for Technologists (3)

Advanced imaging techniques; focus on gradient echo, cardiac/cine, and 3-D imaging; paramagnetics, spectroscopy, motion suppression techniques, MR angiography, and scan protocols that improve image quality and permit evaluation of moving joints. [S]

MRI 230 Magnetic Resonance Imaging for Technologists Clinical (3)

Foundations, concepts and procedures of clinical MRI; advanced standing available for qualified candidates; 225 clinic hours. Prereq: Active certification as Registered Technologist by American Registry of Radiologic Technologists. [F,S]

Maintenance Technology

MN 102,112 Electrical Fundamentals I,II (3,3)

Electrical fundamentals for industrial/commercial electrical and electronic systems maintenance; class 2 hours, lab 3 hours. **102**–Basic AC/DC theory and concepts including circuits, batteries, transformers, and magnetism; generation, transmission, regulation and distribution of power systems with focus on in-plant customs, practices and application. **112**–Measuring and monitoring electrical/electronic systems variables; switching, modifying, and regulating electrical devices; electrical transmission (conductors); AC/DC circuits; intro to electronics. Must be taken in sequence. [on demand]

MN 103,113 Mechanical Fundamentals I,II (3,3)

Mechanical practices, applications, and concepts; class 2 hours, lab 3 hours. **103**–Drive components, mechanical forces, and machine motion; focus on operating, servicing and maintaining machines and equipment using a systems approach. **113**–Basics of integrated drive systems that propel and control motion; focus on management of processes and application of force/motion patterns in propulsion, positioning, and articulated movement of machines, materials and tooling systems. Must be taken in sequence. Coreq for 103: MD 104. [on demand]

MN 210 Building and Structural Maintenance (3)

Intro to necessary skills for servicing and maintenance of buildings and facilities used to house and support production machinery, processes, and storage; lock and key systems, carpentry, finishing for floors, walls, and ceilings, painting, roof maintenance, plumbing, and landscape maintenance activities; class 2 hours, lab 3 hours. Prereq: OS 116. [on demand]

MN 215 Maintenance Management and Organization (3)

Intro to the supervisor's role in a contemporary maintenance department/organization; human relations and organizational duties, control of maintenance resources, improvement of maintenance performance, and need to promote maintenance productivity through life long learning; lab and project activities include research on current maintenance management practices; class 2 hours, lab 3 hours. Prereq: MN 102, 103, OS 116. [on demand]

MN 218 Hydraulics, Pneumatics, and Fluid Systems (3)

Intro to fluid handling, management and quality control activity basics; focus on the parameters that sustain selection, installation, operation, service and maintenance of fluid handling and management systems; activity based labs aid in perfecting skill and proficiency with regard to industrial/commercial systems; class 2 hours, lab 3 hours. Prereq: MN 113. [on demand]

Mammography

A 3-course set in specialized imaging of the breast; complete set fulfills federal regulations for formal specialized training in mammography prior to independent mammography performance. All 3 courses must be taken together. Prereq: Graduate of CAHEA/JRCERT accredited Radiologic Technology Program and certified or eligible for certification by American Registry of Radiologic Technologists.

MY 210 Mammography Patient Management (3)

Patient care (psychological, sociological and physical), breast anatomy and physiology, pathology, compression and positions, and special procedures. [F]

MY 220 Mammography Instrumentation/Physics (3)

Characteristics of dedicated film screen mammography units, image receptors and required quality control tests; lab experiments used to apply theoretical principles and concepts. [F]

MY 230 Mammography Clinic (4)

Supervised performance of a minimum of 100 mammography exams and film-reporting sessions with radiologists interpreting mammograms; observation and assistance in quality assurance tests and localization procedures; clinic 140 hours in a program and FDA approved mammography facility in student's geographic area. [F]

Management**MG 101 Professional Ethics in the Workplace: Business and Commerce (1)**

Prepares students to cope with difficult choices in the business-commerce arena by the study of moral principles governing conduct of persons at work. [F,S]

MG 103 Introduction to Business (3)

Concise, clear overview of business, promoting understanding of the available tools for management to use in making decisions and awareness of our economic system; concepts and structure of American business methods, financing, internal organization, and management. [E]

MG 105 Introduction to Quality Management (3)

Acquaints students with concepts and tools associated with continuous improvement of products and services offered by the firm; explores basic tenets of quality from several of the outstanding writers in the Quality Management field. [F]

MG 110 Leadership Skills (1)

Comprehensive approach to the subject of leadership; successful leadership styles and ways to manage conflict, formulating a plan from initial concept through execution, positive productivity techniques, and presentation and speaking skills improvement. [S]

MG 114 Principles of Management (3)

Concise, comprehensive review of the management processes of planning, organizing, leading and controlling; students develop decision making and communication skills through case studies, research reports and simulations. [E]

MG 115 E-commerce Operations (3)

Overview of operating an online business; focus on how the Internet is used in businesses and the fundamentals of Internet technology; replaces MG 196 and 197; duplicate credit not allowed. [F]

MG 116 E-commerce Marketing (3)

Study of how the Internet is used as a marketing tool both by e-businesses and traditional businesses. Prereq: MG 115. [S]

MG 154 Marketing (3)

Study of the field of marketing; covers marketing channels, functions, methods and institutions; interpersonal skills developed through collaborative

projects; may include case studies and/or computer simulations. [E]

MG 160 Project Management (3)

Basic project management concepts; project organization, quotations and negotiations; planning, beginning operations, budgeting and funding; quality assurance and control, procurement, management style, team building and phasing-out methods; tracking a project with management computer software package; experience with computer applications required. Prereq: MG 103; or instructor's consent. [F]

MG 165 Business Mathematics (3)

Application of math to solve problems related to routine business operations and to personal finances; topics include insurance, taxes, consumer credit, retail applications, investments and introductory statistics. [E]

MG 170 Labor Relations (3)

Intro to labor relations; overview of labor relations beginning with the history and progressing through developments in the field, federal laws and recent trends; presents a labor relations definition and a working knowledge of basic negotiations concepts. [S]

MG 185 Basic Investing (3)

Presents alternative means of investing for the purpose of receiving benefits such as profits, interest payments or income tax reduction; elective for both business and non-business majors. [F]

MG 195 E-commerce Legal Issues (1)

Survey of legal issues shaping e-commerce including taxation, licensing, and contract principles. [F]

MG 198 E-commerce Success Factors (1)

Survey of the marketing, financial, and operational characteristics of successful e-commerce sites. [S]

MG 214 Purchasing (3)

The organization and operation of the purchasing function; focus on commodity analysis methods, selection of supply sources, stock control systems, and purchasing policies. Prereq: MG 103, 114. [F]

MG 224 Entrepreneurship (3)

Capstone course that applies skills learned throughout the previous courses in the Small Business Management Program; focus on starting, financing and operating a small business, while building a comprehensive business plan. Prereq: BU 114, MG 103. [S]

MG 244 Advertising (3)

Examines principles of modern advertising related to customer psychology; includes means and media of creative communication with customers; focus on group interaction via a selected advertising campaign. Prereq: MG 154. [F]

MG 254 Salesmanship (3)

Basic personal salesmanship principles linking customer needs to selling activities; focus on salesman's duties and methods, common problems, competitor and product knowledge, and handling objections; includes oral presentations in which each student serves as both buyer and seller. [S]

MG 264 Human Resources Management (3)

Intro to principles and practices of effective resources management; focus on procurement, development, compensation, integration, and management of personnel through case studies. Prereq: MG 103 or instructor's consent. [F,S]

MG 285 Organizational Behavior (3)

Study of strategic variables and relationships of structure and process involving groups of people and how they may be motivated to work together more productively. [S]

MG 286 Health Services Management Practicum (3)

Preparation for employment in Health Services Management; provides practical work experience; 2 required areas of emphasis are Accounting and Management/Supervision making and controlling processes to increase individual productivity within the workplace. [S]

MG 288,289 Applied Management I,II (1-9,1-9)

Results oriented management development course to refine skills in leadership, team building, decision making and controlling processes to increase individual productivity in the workplace. Must be taken in sequence. [288-F, 289-S]

MG 295 Students in Free Enterprise (1-3)

Explores real life business situations through participation in community project. [F,S]

MG 299 Special Topics in Management (1-19)

Selected management and related topics of current and special interest; repeatable for credit on different topics. Prereq: Department head's consent. [on demand]

Marine Engine Technology**SE 000 Marine Engine Technology**

Marine engine repair; shop safety, tools and equipment; routine maintenance, diagnosis and troubleshooting 2- and 4-cycle internal combustion engines; electrical, fuel, compression, lubrication, cooling, power transfer, carburetion and exhaust systems; students disassemble, inspect, and reassemble engines; 30 clock hours/week. [E]

Marketing, See "Management"**Mass Communications****CO 110 Introduction to Mass Communications (3)**

Survey of mass communications field; overview of mass media (TV, radio, newspapers, and magazines), their role and effect in society, and how they work together. [F,S]

CO 202 Broadcast Announcing (3)

Examination of broadcast communication principles and effective announcing techniques; lab and broadcast experiences cultivate on-air personality and announcing skills. [F,S]

CO 204 TV Production (3)

Practice and study in basic elements of television production; focus on studio facilities, equipment, and techniques. [F,S]

CO 205 Radio and Television News Writing and Editing (3)

Practice and study of preparing news for radio and

television broadcasting. Prereq: CO 110, ENGL 1010, keyboarding skills. [F,S]

CO 210 Communications Practicum (3)

Classroom and supervised lab work in broadcast communications; FCC rules and regulations, operating procedures, radio station format, and program development; class 1 hour, lab 6 hours. Prereq: CO 110, 202. [F,S]

CO 212 Television Practicum (3)

Study of television production, lights and lighting techniques, cameras and their operation, and microphone characteristics; postproduction editing, basic switching techniques, and electronic field production; class 1 hour, lab 6 hours. Prereq: CO 110, 204. [F,S]

CO 219 Internship in Television Communications (3)

Field experience in television with supervision by College faculty and cooperating broadcast stations; written reports relating to the field experience; lab 9 hours. Prereq: Instructor's consent. [F,S]

CO 230 Remote Television Production (3)

Intensive practical experience in multi-camera remote television broadcasting; focus on production, direction, camera and audio operation, electronic graphics use, satellite news gathering and uplinking; class 2 hours, lab 2 hours. [F,S]

CO 240 News and Sports Broadcasting (3)

Techniques and methods used by Radio-TV news and sports broadcasters; focus on reporting, writing, management of resources and on-camera presentation. Prereq: CO 202 or 204 or instructor's consent. [on demand]

CO 249 Special Topics in Mass Communications (3)

Specialized topics in the field of mass communications; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

CO 276 Journalism: News Writing and Editing (3)

Intro to journalism principles and the practice of news reporting, writing, and editing. Prereq: ENGL 1010. [on demand]

CO 277 Newspaper and Magazine Production (3)

Study and practice of the skills of journalism for writing, design, and layout of feature articles for newspapers and magazines. Prereq: CO 276. [S]

Mathematics

TFMA 0000 Technology Foundations in Mathematics

Course of study includes whole numbers, fractions, decimals, percents, ratio and proportion; 5 clock hours/week.

DSPM 0700 Basic Mathematics (3)

Integers, fractions, decimals, percents, ratio and proportions, basic statistics, measurement conversions, exponents, numerical and algebraic expressions; appropriate use of graphing calculator and applications. Prereq: ACT or COMPASS Placement.** [E]

DSPM 0800 Elementary Algebra (3)

Real number system, linear equations and inequalities, graphing equations and inequalities, systems of linear equations; appropriate use of

graphing calculator and applications. Prereq: DSPM 0700; or ACT or COMPASS Placement.** [E]

DSPM 0850 Intermediate Algebra (3)

Polynomials, factoring, quadratic functions, rational expressions, radicals, rational and radical equations, integer exponents, Pythagorean Theorem; appropriate use of graphing calculator and applications. Prereq: DSPM 0800; or ACT or COMPASS Placement.** [E]

MATH 0990 Geometry (3)

Minimum preparation for students who did not have high school geometry for trigonometry and calculus; lines, angles, planes, triangles, circles, polygons, and their properties; includes applications, direct and indirect proofs; not intended for transfer; not accepted toward any degree program at Chattanooga State. Prereq: DSPM 0850. [E]

MATH 1000 Tutoring Mathematics (1)

Online course offering in-depth view of the tutoring process; Chattanooga State textbook familiarization, and intro to and discussion of Math Center mission and procedures; focus on professionalism, study, tutoring techniques, listening, communication, and critical thinking skills; specific attention paid to math concepts giving students the most difficulty; tutor training program certified by College Reading and Learning Association (CRLA). Prereq: Department head's and instructor's consent. [F,S]

MATH 1010 Contemporary Mathematics (3)

Nature and techniques of mathematics; topics such as set theory, consumer mathematics, statistics, probability, methods of apportionment, and voting schemes. Prereq: 2 years of high school algebra and acceptable test scores; or DSPM 0850. [E]

MATH 1410,1420 Structure of Number Systems I,II (3,3)

1410—Origin of numerals and numeration systems, logic, sets, relations, functions, problem solving, whole numbers, integers, elementary number theory, and rational numbers. 1420—Euclidean geometry, metric system, probability and statistics. Must be taken in sequence. Prereq for 1410: 2 years of high school algebra and acceptable test scores; or DSPM 0850. [E]

MATH 1510,1520 Statistics I,II (3,3)

1510—Sampling, data organization, variability and central tendency; probability distributions, hypothesis testing, and confidence intervals; credit not allowed for both MATH 1510 and 1530. 1520—Hypothesis testing, confidence intervals, independence of two variables, simple analysis of variance, analysis of regression, and intro to non-parametric statistics. Must be taken in sequence. Prereq for 1510: 2 years of high school algebra and acceptable test scores; or DSPM 0850. [E]

MATH 1530 Introductory Statistics (3)

Sampling, data organization, variability and central tendency, probability, distributions and confidence intervals, hypothesis testing, inference and regression; credit not allowed for both MATH 1510 and 1530. Prereq: 2 years of high school algebra and acceptable test scores; or DSPM 0850. [E]

MATH 1710 College Algebra (3)

Equations and inequalities, functions and graphs, linear and quadratic functions, equation systems, polynomial and rational functions, and exponential and logarithmic functions. Prereq: 2 years of high school algebra and acceptable test scores; or DSPM 0850. [E]

MATH 1720 Pre-Calculus (4)

Trigonometric functions, identities, equations and graphs, inverse trigonometric functions, triangle applications, vectors, polar coordinates, complex numbers, conic sections, sequences and series, and the Binomial Theorem. Prereq: 2 high school math credits above the Algebra I level and acceptable test scores; or MATH 1710. [E]

MATH 1830 Calculus for Management, Life, and Social Sciences (3)

Intro to calculus; limits, differentiation of functions, optimization, marginal analysis, integration, the Fundamental Theorem of Calculus, applications of integration. Prereq: 2 high school math credits above the Algebra I level and acceptable test scores; or MATH 1710. [E]

MATH 1910,1920,2110 Calculus with Analytic Geometry I,II,III (4,4,4)

1910—Limits, derivatives and integrals of algebraic, trigonometric, exponential and logarithmic functions, their graphs and applications. 1920—Differentiation and integration involving inverse trigonometric functions, integration techniques, integral applications, infinite sequences and series. 2110—Vectors, parametric equations, polar coordinates, space coordinates, vector-valued functions, partial differentiation, multiple integrals, and vector analysis. Must be taken in sequence. Prereq for 1910: 3 high school math credits above the Algebra I level and acceptable test scores; or MATH 1720 or 1750. [1910, 1920—E; 2110—F,S]

MATH 2000 Mathematical Problem Solving (1)

Explores a variety of mathematical problem solving techniques; focus on applying mathematical concepts and communicating effectively. Prereq: MATH 1720 and instructor's consent. [on demand]

MATH 2010 Linear Algebra (3)

Intro to linear algebra; linear systems, matrix algebra and matrices, determinants, vectors and vector spaces, inner product spaces, linear transformations, and eigenvectors and eigenvalues. Prereq: MATH 1910. [F,S]

MATH 2120 Differential Equations (3)

Intro to basic concepts, theory, methods, and applications of ordinary differential equations including systems of equations and transform methods. Prereq: MATH 1920. Coreq: MATH 2010. [F,S]

MATH 2990 Special Topics in Mathematics (1-4)

Detailed study of specific topics in math; repeatable for credit on different topics. Prereq: Department head's and instructor's consent. [on demand]

Mechanical Engineering Technology

MD 104 Blueprint Reading and Analysis (1-4)

Intro to the basics of blueprint interpretation and mathematical analysis; topics include orthographic projection, dimensioning, sectioning, line conventions, visualization of the object and basic shop math. [on demand]

MD 134,242 Statics and Strength of Materials I,II (3,3)

134—Statics: vectors, moments, equilibrium of structures, centroids and moment of inertia; strength

**Transitional Studies course (not generally transferable; not applicable to credit hours required for a degree or certificate)

of materials: basic stresses and deformations; beam diagrams, flexure and shear. **242**—Further study of vector operations and forces in structures in 2 and 3 dimensions; stresses for welds, 2 material members, eccentric loads and those caused by temperature changes; interrelationship of beam diagrams; wood and steel beams designed; class 2 hours, lab 3 hours. Must be taken in sequence. Prereq for 134: ET 115, MATH 1720. Coreq for 242: MATH 1910. [F,S]

MD 184 Manufacturing Processes (3)

Primary and secondary manufacturing processes; covers formation of material into shapes through the testing of the finished product; basic C.I.M. concepts, usage of lathes, mills, drills, saws and other machine shop tools; lab exercises, videos, and tours of manufacturing facilities; class 2 hours, lab 3 hours. [F,S]

MD 207,208 Numerical Control I,II (3,3)

Principles of numerical control systems; class 2 hours, lab 3 hours. **207**—Focus on hands-on equipment usage, program debugging, and error diagnosis; NC tooling, 2- and 3-axis machining and G-codes. **208**—DNC links, CAM software, NC programming languages, 3-axis contouring, sculptured surfaces, interfacing CAD systems with NC systems. Must be taken in sequence. Prereq for 207: ET 115, MATH 1720, MD 184. Coreq for 207: MD 294. [207—F, 208—S]

MD 226 Fluid Power (3)

Principles of pneumatics and hydraulics; air compressors and power boosters, hydraulic fluids and power devices, accumulators, and controls; class 2 hours, lab 3 hours. Prereq: ET 115, MATH 1720. [S]

MD 254 Elements of Material Science (3)

Study of the physical structure of engineering materials and how their properties are dependent upon their internal structure; crystal structures, phase relationships, mechanical behavior of solids, and polymer and composite characteristics; class 2 hours, lab 3 hours. Prereq: MATH 1710. [S]

MD 264,265 Thermodynamics I,II (3,3)

Applied thermodynamics; study of heat and energy transfer and refrigeration; class 2 hours, lab 3 hours. **264**—Labs include study of heating and cooling equipment in operation. **265**—Internal combustion engines, gas and steam turbines, properties of steam. Must be taken in sequence. Prereq for 264: ET 115, MATH 1720. [264—F, 265—S]

MD 274 Machine Design (3)

Principles of dynamics; kinetics and kinematics of rectilinear motion and rotation of bodies, curvilinear motion, work, energy and power; gear design basics. Prereq: MD 134, PHYS 2010. Coreq: MATH 1910. [S]

MD 294 Automated Manufacturing (3)

Various manufacturing concepts applied to manufacturing automation; manufacturing organization, flexible manufacturing systems, plant layout and design, quality control, computer integrated manufacturing, jig and fixture design, geometric tolerancing and dimensioning, plastics, and tool design. Prereq: DD 124, MATH 1530, MD 184. [F]

MD 295 Manufacturing Management (3)

Production, organization, and operation management; relationships between manufacturing lead-time, cycle time and inventory level; quality management, production planning and control, plant layout, motion and time studies. Prereq: MD 294. [S]

MD 298 Special Topics in Mechanical Engineering Technology (1-4)

Specialized topics and/or problems in mechanical engineering technology; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

MD 299 Special Topics in Mechanical Engineering Technology with Lab (1-4)

Specialized topics and/or problems in mechanical engineering technology; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

Mechanical Engineering Technology (DuPont)

MZ 110 Mechanical Principles (4) (DuPont)

Intro to concepts of mechanical principles of motion, thermodynamics, fluid mechanics, and mathematical solution techniques; class 3 hours, lab 2 hours.

MZ 111 Mechanical Tool Applications (3) (DuPont)

Intro to the safe use and care of tools, precision measuring instruments, mechanical drawing, and everyday shop operations; class 2 hours, lab 2 hours.

MZ 112 Mechanical Piping Systems (3) (DuPont)

Intro to equipment and practices of pipe fitting procedures; pipe and pipe fitting properties identified by material, dimensions, schedule number, joining method, and function; basic piping system layout concepts taught using orthographic and isometric sketches; measurement, fabrication, assembly, and installation techniques; techniques and practices related to testing and breaking into a piping system explained with focus on safety; class 2 hours, lab 2 hours.

MZ 120 Mechanical Maintenance Principles (3) (DuPont)

Overview of the principles required to maintain and repair mechanical systems found in typical production facilities; bolt grade marking, hardware fasteners and identification, torque values, rigging techniques to move loads and equipment, lubricant characteristics and principles, bearings, seals, packing, pump applications and selection, and alignment techniques using dual dial indicators; class 2 hours, lab 2 hours.

MZ 122 Fluid Mechanics (3) (DuPont)

Intro to the principles of pneumatics and components found in a typical pneumatic circuit; force and energy transmission, compressors, pressure and directional control, diagrams, maintenance programs, and troubleshooting in a pneumatic circuit; covers safety, use of each component, and troubleshooting procedures; class 2 hours, lab 2 hours.

MZ 124 Principles of Thermodynamics (3) (DuPont)

Saturated, superheated, and wet steam; latent heat of steam, pressure/temperature relationship of saturated and superheated steam, condensing steam, and major components of steam generating equipment; how steam and condensate are formed, importance and need of steam traps; steam piping; installation, testing, troubleshooting, and repair of typical steam trap assemblies; class 2 hours, lab 2 hours.

MZ 130 Principles of Machine Operation and Maintenance (3) (DuPont)

Advanced maintenance principles for production equipment; chem, ansi, canned, nonmetallic, and sealless pumps; pump bearings and motors, mechanical seals, fans and blowers, power transmission related to chain drives, V belts, industrial flat belts, sheaves, shaft couplings, bearing mounting and dismounting, bearing failure analysis, gear types and usage, maintaining spur, helical, herringbone bevel work gears, and gear reducers; class 2 hours, lab 2 hours. Prereq: Instructor's consent.

MZ 131 Introduction to Welding Principles and Techniques (1-4) (DuPont)

Welding safety, processes, and techniques; personal protective equipment, equipment set-up; oxy-acetylene process used to demonstrate proper equipment set-up, lighting, adjusting, and extinguishing the flame, bevel cutting pipe in position, and equipment disassembly; SHAW process used to make fillet welds on carbon steel plate in position; class 1 hour, lab 3 hours. Prereq: Instructor's consent.

MZ 200,201 Machine Shop Principles I,II (3,3) (DuPont)

Machine tool principles and operation; class 2 hours, lab 2 hours. **200**—Physical properties of metals, their manipulation in mining and refinement; alloying and heat treatment processes; natural and manufactured abrasives and bonding processes that determine their molecular structures; various types of grinding machines studied and used. **201**—Operation and safe use of lathes, milling machines (including NC and CNC types), drill presses, etc.; focus on engine type bench lathe.

MZ 210 Planned Maintenance/PPM (3) (DuPont)

Intro to the basic information needed to establish or improve Predictive/Preventive Maintenance and equipment reliability programs; covers the latest predictive/preventive technology and how its implementation helps plants compete within the world market place; class 2 hours, lab 3 hours.

MZ 260 Mechanical Drawings and Standards (3) (DuPont)

Intro to P&ID's as well as the Dupont Industrial Engineering Standards; specific symbology, application and interconnection of prints and drawings studied until the student is fully competent to analyze given process control system from its prints; class 2 hours, lab 2 hours.

Mechanics, Automotive, see "Automotive Technology"

Mechanics, Diesel, See "Diesel Equipment Mechanics"

Mechanics, Marine, See "Marine Engine Technology"

Medical Assistant

MO 000 Medical Assistant

30 clock hours/week. Must be taken in sequence. **First Semester**
Administrative and clinical procedures; anatomy

2004-06 Course Descriptions

and physiology, medical terminology, basic medical typing, business communication, professional orientation and exam room procedures. [F]

Second Semester

Pharmacology and administration of medication, administrative practices (insurance, billing, filing, scheduling, and banking), lab procedures, medical transcription, first aid and CPR. [S]

Third Semester

Review of clinical and lab procedures; externship in physician's office. [Su]

Medical Records, See "Health Information Management"

Music

MUSIC—GENERAL COURSES

MUS 1000 Music Seminar (0)

Opportunities to perform and attend concerts and seminars on various musical topics; required each semester of attendance for every music major; repeatable. Coreq: Private instruction in music. [F,S]

MUS 1001 Artist in Residence (1-3)

Visiting artists interact with students in lectures and workshops; 2 workshops for 1 credit; 3 workshops for 2 credits; 4 workshops for 3 credits; repeatable; maximum of 3 hours applicable toward a degree. [F,S]

MUS 1030 Music Appreciation (3)

Development of music from Middle Ages to the present; designed to give better understanding and appreciation of traditional art music as well as music of our present culture. [E]

MUS 1040 History of Rock and Roll (3)

Study of the development of rock and roll by musical analysis, style comparison and coverage of the performers and their music's impact. [on demand]

MUS 1130 Fundamentals of Music (3)

Study of basic music elements: scales, intervals, triads, meter, note values, rhythm, notation, and simple keyboard harmony. [F,S]

MUS 1210,1220,2210,2220 Music Theory I,II,III,IV (3,3,3,3)

1210—Building scales, major and minor key signatures, triads, intervals, rhythmic notation, 4-part vocal writing, and primary and secondary triads. **1220**—Harmonization of melodies, non-chord tones, writing for the piano, secondary dominants, and secondary diminished 7th chords. **2210**—Modal changes, Neapolitan chords, pedal points, modulations; modal, non-functional, extended tertian and non-tertian harmony. **2220**—Harmony and form; binary and ternary principles, imitative, variation, sonata-allegro, rondo and atypical formal organization. Must be taken in sequence. Prereq for 1210: MUS 1130 or Instructor's consent. Coreq: MUS 1310 sequence; MUS 1400 or 1410. [1210, 2210-F; 1220, 2220-S]

MUS 1310,1320,2310,2320 Fundamental Sightreading and Ear Training I,II,III,IV (1,1,1,1)

Development of sightreading skills through drills in aural and visual recognition, intervals, melodies, harmonies, and rhythmic impulsations; lab 3 hours. **2310 & 2320**—Added focus on sight singing, ear training, and dictation. Must be taken in sequence.

Coreq: MUS 1210 sequence. [1310, 2310-F; 1320, 2320-S]

MUS 2530 Electronic Music (3)

Hands-on course with focus on MIDI and how it is used in conjunction with computers and sound devices; electronic keyboards, software programs, and basic recording techniques. [on demand]

MUS 2990 Special Topics in Music (1-3)

Study of specific topics relating to the historical and cultural significance of music; repeatable for credit on different topics. [on demand]

MUSIC—INSTRUCTION AND PERFORMANCE

Music majors must take at least one course from Applied Instruction and one from Performing Ensemble each semester. Designated courses are repeatable for credit, but no more than 12 hours of Applied Instruction and/or Performing Ensemble, in any combination, may be applied toward a degree.

APPLIED INSTRUCTION COURSES:**MUS 1400 Piano Instruction for Non-Majors (1)**

Individual piano instruction for non-majors; repeatable; maximum of 4 hours applicable toward a degree; extra fee required. [F,S]

MUS 1401, 1402, 1403, 1404 Piano Class I, II, III, IV (2,2,2,2)

Group instruction in basic keyboard techniques. **1401**—Basic note-reading, elementary harmony, simple exercises and pieces **1402**—Major scales and arpeggios, simple harmonization, sight-reading and transposition, simple pieces. **1403**—Minor scales and arpeggios, harmonization with augmented and diminished chords, four-part reading, pieces from standard keyboard literature. **1404**—Harmonization using traditional and pop chord notation, advanced sight-reading, improvisation, pieces from standard keyboard literature. Must be taken in sequence or have instructor's consent. [on demand]

MUS 1410 Piano Instruction (1-2)

Private instruction in piano; daily practice required; 1 half-hour lesson each week per credit hour; repeatable; maximum of 6 hours applicable toward a degree; extra fee required. [F,S]

MUS 1440 Jazz Piano (1)

Instruction to acquire/improve jazz/pop piano skills; jazz theory, piano voicings, improvisation and various stylistic approaches discussed and integrated through exercises and a repertoire; repeatable; maximum of 6 hours applicable toward a degree; extra fee required. [on demand]

MUS 1500 Voice Instruction for Non-Majors (1)

Individual voice instruction for non-music majors; repeatable; maximum of 2 hours applicable toward a degree; extra fee required. [F,S]

MUS 1501 Voice Class (2)

Group instruction in basic techniques of breath control, tone production, diction, phrasing and interpretation using simple song repertoire; daily practice required. [F,S]

MUS 1510 Voice Instruction (1-2)

Private instruction in voice; daily practice required; 1 half-hour lesson each week per credit hour; repeatable; maximum of 6 hours applicable toward a degree; extra fee required. [F,S]

MUS 1610 Guitar Instruction (1-2)

Private instruction in guitar; daily practice required; 1 half-hour lesson each week per credit hour; repeatable; maximum of 6 hours applicable toward a degree; extra fee required. [F,S]

MUS 1620 Guitar Class (2)

Group instruction in guitar; must provide own instrument; repeatable; maximum of 6 hours applicable toward a degree. [on demand]

MUS 1630 Brass Instruction (1-2)

Private instruction in brass instruments; daily practice required; 1 half-hour lesson each week per credit hour; focus on only 1 brass instrument; repeatable; maximum of 6 hours applicable toward a degree; extra fee required. [on demand]

MUS 1640 Woodwind Instruction (1-2)

Private instruction in woodwind instruments; daily practice required; 1 half-hour lesson each week per credit hour; focus on only 1 woodwind instrument; repeatable; maximum of 6 hours applicable toward a degree; extra fee required. [on demand]

MUS 1650 Percussion Instruction (1-2)

Private instruction in percussion instruments; daily practice required; 1 half-hour lesson each week per credit hour; focus on only 1 percussion instrument; repeatable; maximum of 6 hours applicable toward a degree; extra fee required. [on demand]

MUS 1660 String Instruction (1-2)

Private instruction in string instruments; daily practice required; 1 half-hour lesson each week per credit hour; focus on only 1 string instrument; repeatable; maximum of 6 hours applicable toward a degree. [on demand]

MUS 1670 Bass Guitar Instruction (1-2)

Private instruction in bass guitar; daily practice required; 1 half-hour lesson each week per credit hour; repeatable; maximum of 6 hours applicable toward a degree; extra fee required. [on demand]

MUS 2430 Conducting (2)

Intro to conducting techniques; repeatable; maximum of 6 hours applicable toward a degree. Prereq: MUS 1210, 1310. [on demand]

PERFORMING ENSEMBLE COURSES:**MUS 1720 Jazz Band (1-2)**

Performance of big band, jazz-rock and dixieland styles; members required to play at scheduled performances; repeatable; maximum of 6 hours applicable toward a degree; lab 3 hours. Prereq: Instructor's consent, knowledge/skill in an instrument. [F,S]

MUS 1740 Wind Ensemble (1-2)

Performance of standard repertoire and popular selections in large wind band; repeatable; maximum of 6 hours applicable toward a degree; student must furnish own instrument. Prereq: Ability to read music. [F,S]

MUS 1810 Concert Choir (1-2)

Performance of choral literature; open to all students; performance at scheduled concerts required; repeatable; maximum of 6 hours applicable toward a degree. [F,S]

MUS 1820 Gospel Choir (1-2)

Non-auditioned choral music group; performs music of an inspirational and spiritual nature; open to all students; repeatable; maximum of 6 hours applicable toward a degree. [on demand]

MUS 1840 Chorale (1-2)

Auditioned choral group; performs wide variety of choral music; admission by audition only; repeatable; maximum of 6 hours applicable toward a degree. Coreq: MUS 1810. [F,S]

MUS 1850 Jazz Vocal Ensemble (1-2)

Auditioned vocal ensemble; performs standard and contemporary jazz music; repeatable; maximum of 6 hours applicable toward a degree. [F,S]

MUS 2850 Opera Theater (2)

Rehearsal and performance techniques and performance of a complete opera and/or selected scenes. Prereq: Audition and permission of instructor/director. [on demand]

Network Management**NW 204 Microcomputer Architecture (3)**

Use of microcomputers as a business tool; microcomputer basics; focus on hardware components and configurations, networking, and security. Prereq: CS 104 or instructor's consent. (Same as CS 204; credit not allowed for both courses.) [E]

NW 205 Introduction to Windows (2)

Hands-on intro to Windows operating environment using real-world examples. Prereq: CS 101 or instructor's consent. [on demand]

NW 206 Network Design and Management (3)

Intro for students needing a foundation in current networking technology for local area networks, wide area networks, and the Internet. Prereq: NW 205; or instructor's consent. Coreq: NW 204 or CS 204. [on demand]

NW 207 Advanced Network Management (4)

Provides knowledge and skills needed to install and configure a Microsoft Windows Server and perform day-to-day administration tasks in a Microsoft Windows-based network; class 3 hours, lab 2 hours. Prereq: NW 206 or instructor's consent. [on demand]

NW 208 Windows Server Enterprise Technologies (3)

Provides knowledge and skills needed to work in a server-based enterprise environment and to design, implement, and support a network operating system in a multidomain enterprise environment; class 2 hours, lab 2 hours. Prereq: NW 207 or instructor's consent. Coreq: NW 209 or instructor's consent. [on demand]

NW 209 TCP/IP Services (2)

Provides knowledge and skills needed to set up, configure, use and support Transmission Control Protocol/Internet Protocol (TCP/IP) on Microsoft operating system; class 1 hour, lab 2 hours. Prereq: NW 207 or instructor's consent. [on demand]

NW 210 Internet Information Server (2)

Provides knowledge and skills needed to install, configure, and support the Microsoft Internet Information Server (IIS); class 1 hour, lab 2 hours. Prereq: NW 207 or instructor's consent. Coreq: NW 209 or instructor's consent. [on demand]

Nuclear Medicine Technology

Admission to the Nuclear Medicine Technology Program is a prerequisite for all NM courses. Please consult the SUMMARY OF REQUIRED HOURS. All courses shown in the same term are corequisites and all courses shown in the preceding term(s) are prerequisites.

NM 200 Introduction to Nuclear Medicine (2)

Intro to basic terminology in nuclear medicine technology; special emphasis on guidelines for radiation protection, regulatory requirements, ethics, patient care and participation in the Nuclear Medicine Technology Program and its clinical affiliates. [F]

NM 201 Instrumentation and Statistics (3)

Principles of instrumentation and nuclear statistics as used in the nuclear medicine laboratory with emphasis on use, maintenance, and quality control of personal monitoring devices, gas and scintillation detectors; intro to statistical analysis and computer applications associated with radiation detection and imaging. [F]

NM 205,215,225 Clinical Procedures I,II,III (2,4,6)

Biological, physiological and anatomical aspects of nuclear medicine clinical procedures. **205**–Skeletal, cardiovascular and respiratory organ systems; relationship between physiology, pathophysiology, radiochemistry, radiobiology, instrumentation and patient care techniques. **215**–Gastrointestinal, genitourinary and endocrine systems; radionuclide therapy. **225**–Central nervous system, tumor and inflammatory processes; intro to in-vivo non-imaging procedures, in-vitro procedures, and department management; preparation for national registries. [205–F, 215–S, 225–Su]

NM 207,217,227 Practicum in Nuclear Medicine I,II,III (9,2,6)

Clinical experience allowing students to assimilate methods, theory, and techniques into clinical practice; must demonstrate acceptable level of progression in clinical competency culminating in mastery of all required clinical competencies defined by the Joint Review Committee on Education Programs in Nuclear Medicine as *Essential*; Satisfactory/No Credit grading. [207–F, 217–S, 227–Su]

NM 208 Radiopharmacology (2)

Basic principles of radiopharmacy as practiced in the nuclear medicine laboratory; special emphasis on radionuclide and radiopharmaceutical preparations, radiation safety, quality control procedures and operation of equipment. [F]

NM 212 Physics and Radiation Biology of Nuclear Medicine (4)

Principles of physics and radiation biology as related to nuclear medicine. [S]

Nursing

Admission to the Nursing Program is a prerequisite for all NS courses unless otherwise noted. Please consult the SUMMARY OF REQUIRED HOURS; all BIOL and PY courses are pre/corequisite to the NS courses as shown.

NS 024 Nursing Transition (4)

Assists licensed practical nurses with transition from the role of LPN to associate degree RN; content derived from first year nursing courses provides a background on which the student's remaining educational program will be based; successful completion of the theory and clinical components of the course required for continued progression in the nursing program; not accepted toward any degree program at Chattanooga State; class 3 hours, lab 3 hours; liability insurance required. Prereq: Acceptance into the Transition Program, Chemistry (high school or CHEM 1010), BIOL 1430, 2010, 2020, PY 101, 217. [Su]

NS 101 Success in Nursing (1)

Knowledge and skills to cope with the demands of the nursing curriculum. Coreq: NS 119 or 238. [F]

NS 119,128,238,249 Nursing I,II,III,IV (9,9,9,9)

Progressive development of psychomotor, cognitive and affective competencies needed to assume 3 roles of the associate degree nurse in caring for culturally diverse individuals across the life span; students assess clients and plan, implement and evaluate interventions to promote, maintain and restore health; clinical experience in acute care, ambulatory care and community based settings; class 6 hours, 12 lab hours in 119 & 249; 6 class hours, 9 lab hours in 128 & 238; achievement test fee and liability insurance required. **119**–Intro to nursing process; wellness and adaptation. **128, 238, 249**–Alterations in function: protective, activity/mobility, comfort/rest, fluid and gas transport, psychosocial/cultural, growth and development, nutrition/metabolism, elimination, sensory/perceptual; focus on adult and pediatric client care in 128 & 238, clients with altered psychosocial function in 238, and intensive care, childbearing family, and management in 249. [119, 238–F; 128, 249–S]

NS 260 Nursing Practicum (6)

Intensive post-graduate clinical practice experience; class 15 hours, lab 225 hours. Prereq: NS 249, nursing program director's consent. [Su]

NS 299 Special Topics in Nursing (1-3)

Study of selected topics of interest in nursing; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

Nutrition, See "Biology" and "Dietary Manager"**Occupational Safety****OS 116 Industrial Maintenance Safety (3)**

Review of basic requirements and application of industrial safety and general housekeeping practices related to manufacturing and service environments; intro to potential maintenance activity hazards, employer/employee responsibility for job safety, and Occupational Safety and Health Act. [on demand]

Office Administration**OF 104,105 Business Communications I,II (3,3)**

104–Study of English skills; focus on proofreading and using reference sources efficiently. **105**–Prepare result-producing communications: letters, memos, e-mail, and short reports; focus on oral

2004-06 Course Descriptions

communication skills through reports and team activities. Prereq for 105: OF 104 or ENGL 1010, OF 113 or keyboarding at 25 nwpm. [104–F,S; 105–F]

OF 107 Keyboarding for Information Systems (1)

Basic keyboarding; develops touch mastery for input; speed and accuracy; for non–Office Administration majors only; not allowed as an elective for Office Administration majors. [E]

OF 113,114 Keyboarding/Document Processing I,II (3,3)

Keyboarding and formatting of business documents (letters, memos, reports, tables) with speed and accuracy; credit toward graduation not allowed for both OF 113 and HE 105 or for both OF 114 and HE 107. Must be taken in sequence. [E]

OF 115 Speedbuilding (1)

Students will concentrate on building keyboarding speeds; Satisfactory/No Credit Grading. Prereq: OF 114 or equivalent or instructor's consent. [F,S]

OF 125,126 Word Processing I,II (3,3)

Applications in word processing. 125–Basic editing techniques through document merge. 126–Advanced functions and formatting; focus on speed, decision making, and accuracy. Must be taken in sequence. Prereq for 125: Keyboarding at 25 nwpm. [F,S]

OF 127 Desktop Publishing (3)

Mechanics of desktop publishing, creation of a variety of publications. Prereq: CS 101 or equivalent. [F,S]

OF 195 General Office Procedures (3)

Covers office procedures, manual and automated records management using ARMA indexing rules, and use of electronic calculator in business applications. [F,S]

OF 206 Office Administration Internship (3)

A capstone experience to prepare for employment in the professional, industrial, and legal job markets; simulated office experience and on-the-job training in chosen emphasis; class 3 hours, lab 6 hours. Prereq: Sophomore standing or instructor's consent. [S]

Ornamental Horticulture, See “Landscaping and Turf Management”**Paralegal, See “Legal Assisting”****Paramedic Training, See “Emergency Medical Services”****Pharmacy Technician****PC 101 Introduction to Pharmacy Practice (3)**

Intro to pharmacy practice and the health care system; focus on pharmacy technicians' role and relationship with pharmacists; written and oral communication skills to deal with other health care professionals and patients; automation, computer use, and technology used in pharmacy practice;

managed care medicine and health care organizations; generic and brand names of top 200 drugs; class 2 hours, lab 3 hours. [F]

PC 104 Chemistry for Pharmacy Technicians (4)

Intro to the study of chemistry; atomic and molecular structure, bonding, stoichiometry and equation writing, compound classification and naming, gas laws, liquid and solid states, solutions, acids and bases, kinetics and equilibria, oxidation and reduction; emphasis on organic compounds and applications to pharmacy; credit may not be applied toward a chemistry major; class 3 hours, lab 3 hours. Prereq: DSPM 0800, DSPR 0800, DSPW 0800. [F]

PC 105 Pharmacy Law and Ethics (3)

Intro to pharmacy law history and application of laws governing duties delegated to pharmacy technicians; state and federal laws pertaining to pharmacy practice and drug distribution discussed. [F]

PC 110 Pharmaceutical Calculations (4)

Basic math computations with Roman numerals; addition, subtraction, multiplication, and division of whole numbers and fractions; pharmacy measurement systems (metric, apothecary, and avoirdupois); interpretation of numeric symbols and Latin abbreviations; medical terms, symbols, and abbreviations used in pharmacy practice. [S]

PC 115 Introduction to Human Biology (4)

Structure and function of the human body; focus on cells, tissues, and circulatory, respiratory, digestive, nervous, cardiovascular, endocrine, and reproductive systems; class 3 hours, lab 3 hours. [F]

PC 201 Pharmacology and Therapeutics (4)

Provides practical knowledge of general therapeutic classes of drugs and their interactions with the human body; focus on drug classifications, dosages and routes of administration and some major side effects of medications. Prereq: PC 101, 115. [S]

PC 205 Pharmacy Practice (5)

Review of prescriptions for accuracy; gathering patient information; entering information into data processing; preparing labels; counting, measuring, or admixing of drug products; pricing and third party billing, and maintaining records; ordering, stocking, returning drug products, medication distribution and control, and compounding with a heavy focus on sterile products and IV admixture; class 3 hours, lab 5 hours. Coreq: PC 110. [S]

PC 220 Pharmacy Practice Clinical Rotations (5)

Clinical experience in local institutional and community pharmacies to observe and practice basic pharmacy practice skills learned in class and through lab participation; students under supervision of a registered pharmacist; seminar 2 hours, clinical experience 24 hours. Prereq: PC 110, 201, 205. [Su]

Philosophy**PHIL 1030 Introduction to Philosophy (3)**

An introduction to life's fundamental questions. Addresses issues pertaining to rationality, value, knowledge, and reality. Prereq: ENGL 1010. [F,S]

PHIL 1130 Critical Thinking (3)

An introduction to practical reasoning and how to think critically. [on demand]

PHIL 2130 Formal Logic (3)

An introduction to formal deductive logic: syllogistic, modal, propositional, and predicate arguments. [F]

PHIL 2230 Ethics (3)

Study and comparison of major ethical theories from classical times to the present. Prereq: ENGL 1010. [S]

PHIL 2430 Philosophy of Religion (3)

Philosophical examination of religion; issues include the existence and nature of God, relationship between faith and reason, and challenges to religious belief. Prereq: ENGL 1010. [F]

PHIL 2530 The Meaning of Life (3)

Philosophical examination of religion; issues include the existence and nature of God, relationship between faith and reason, and challenges to religious belief. Prereq: ENGL 1010. [F]

PHIL 2990 Special Topics in Philosophy (3)

An analysis of the question, “What is the meaning of life?” and an exposition and evaluation of answers provided by various world views. Prereq: ENGL 1010. [on demand]

Physical Education**PHYSICAL EDUCATION—GENERAL COURSES****PE 133 Introduction to Exercise Science and Nutrition (3)**

Basic principles of exercise science and nutrition as they apply to teaching group fitness; provides preparation for national certification exams in group exercise instruction, including aerobics and weight training. [F]

PE 154 First Aid and Safety Education (3)

Basic accident prevention principles applied to the home, school, and community; administering immediate and temporary care in the event of injury or sudden illness, focus on cardio-pulmonary resuscitation; may lead to CPR certification. [E]

PE 201 Group Fitness Instruction (3)

Concepts and techniques for designing and practice in teaching all components of a safe and effective group exercise class. Prereq: PE 133. [F]

PE 202 Group Fitness Instructor Internship (3)

Internship as a fitness instructor assistant; minimum of 10 hours per week of supervised field work and 1 hour of weekly seminar. Prereq: PE 133, 154, 201; or instructor's consent. [S]

PE 209 Individual and Team Sports (3)

Teaching techniques of individual and team sports. [F]

PE 210 Introduction to Physical Education (3)

Role of physical activity in American education; historical, political, economic, and social forces affecting physical education and society. [S]

PE 211 Personal and Community Health (3)

Significant information useful in making intelligent decisions about personal health; focus on personal, family, social living, and community health. [F]

PE 220 Care and Prevention of Athletic Injuries (3)

Prevention, analysis, prompt diagnosis, treatment and rehabilitation of common athletic injuries; focus on practical aspects of athletic training within a theoretical framework; lab experiences significant part of course. [F]

PE 230 The Science of Fitness and Wellness (3)

Developing personal responsibility for optimal well being; encompassing health concerns and risk factors, lifestyle behaviors and preventive health measures; class 2 hours, lab 1 hour. This course may not be substituted for a physical education activity class. [F,S]

PE 235 Special Topics in Wellness and Health Promotion (1-3)

Specific topics of interest in wellness and health promotion fields; repeatable for credit on different topics.

PHYSICAL EDUCATION—ACTIVITY COURSES

Physical Education Activity courses meet 2 hours per week for each semester hour of credit.

To encourage students to develop and maintain an active, healthy lifestyle, designated Physical Education Activity Courses are repeatable for credit, but no more than 6 hours (in any combination) may be applied toward a degree. Each course has a maximum limit as well (see course description).

Adaptive Physical Education

Students with Adaptive Physical Education needs may enroll in any of a number of regular Physical Education activity classes. These classes routinely begin with evaluation of each student's physical profile and establish a personalized training or conditioning program based on the individual's needs. A wide range of adaptations may be implemented, limited by considerations of the student's personal safety and abilities and reasonable and appropriate use of the College's equipment and facilities.

PHED 1010 Aerobics (1)

Repeatable; maximum of 4 hours applicable toward a degree. [E]

PHED 1020 Step Aerobics (2)

Repeatable; maximum of 4 hours applicable toward a degree. [F,S]

PHED 1030 Aerobic Kickboxing (1)

Repeatable; maximum of 2 hours applicable toward a degree. [F,S]

PHED 1090 Introduction to Yoga (1)

Repeatable; maximum of 2 hours applicable toward a degree. [F,S]

PHED 1095 Power Yoga (1)

Practice in an intense form of yoga; repeatable; maximum of 2 hours applicable toward a degree. [F,S]

PHED 1110 Concepts of Wellness (1)

Concepts, understandings, and values of activity as applied to optimal living through wellness; lab in motor activity. [E]

PHED 1120 Strength and Conditioning (1)

Intro to weight training and conditioning; repeatable; maximum of 4 hours applicable toward a degree. [E]

PHED 1130 Fitness for Living (2)

Encompasses Strength training, body contouring and toning, aerobic conditioning, and flexibility. Each student's current status will be assessed and progress monitored. [F,S]

PHED 1140 Walking for Fitness (2)

Repeatable; maximum of 4 hours applicable toward a degree. [E]

PHED 1150 Body Sculpting (1)

Basic instruction and practice in the fundamentals of weight training using light hand weights; repeatable; maximum of 2 hours applicable toward a degree. [F,S]

PHED 1450 Beginning Self-Defense (1) [F,S]**PHED 1460 Self-Defense for Women (1) [F,S]****PHED 1470 Advanced Self-Defense for Women (1)**

Prereq: PHED 1460 or instructor's consent. [S]

PHED 1560 Skin and Scuba Diving (1)

Scuba equipment rental not included in course cost; swimming proficiency needed; repeatable; maximum of 2 hours applicable toward a degree. [F,S]

PHED 1570 Backpacking and Hiking (1)

Repeatable; maximum of 2 hours applicable toward a degree; equipment, campsite rental fees, food, and transportation not included in course cost. [F,S]

PHED 1750 Elementary Ballet Technique (1)

Repeatable; maximum of 2 hours applicable toward a degree. [F,S]

PHED 1820 Beginning Table Tennis (1) [F,S]**PHED 1830 Racquetball (1) [F,S]****PHED 1840 Volleyball (1) [F,S]****PHED 1850 Basketball (1) [F]****PHED 1860 Golf (1) [F]****PHED 1870 Beginning Tennis (1) [E]****PHED 1880 Intermediate Tennis (1)**

[on demand]

PHED 1890 Wallyball (1)

Repeatable; maximum of 2 hours applicable toward a degree. [F,S]

PHED 1990 Special Topics: Physical Education Activity (1-2)

Repeatable for credit on different topics; maximum of 6 hours applicable toward a degree. [on demand]

Physical Science**PSCI 1030 The Physical Environment (4)**

Explores physical science in its historical and sociological significance, the process of science, and the present content of scientific fact and theory; includes physics, chemistry, geology and astronomy; class 3 hours, lab 3 hours. [F,S]

PSCI 2990 Special Topics in Science (1-4)

Study of a specific topic in science; repeatable for credit on different topics. Prereq: Department head and instructor's consent. [on demand]

Physical Therapist Assistant

Admission to the Physical Therapist Assistant Program is a prerequisite for all PT courses. Please consult the SUMMARY OF REQUIRED HOURS; all PT courses shown in the same term are corequisites, all PT courses shown in the preceding term(s) are PT prerequisites, and all BIOL and PHYS courses are pre/corequisites to PT courses as shown.

PT 104 Introduction to Physical Therapy (2)

History, function, purpose of physical therapy; PTA's role in ethics, medical-legal issues, medical terminology, administration and communication skills with all clients/patients/and other care providers. [F]

PT 111,210,221 Clinical Practice I,II,III (2,4,10)

Clinical experience in local health care facilities; students observe and apply skills and interventions learned in class and lab under direct supervision of PT's or PTA's; clinic hours: 6 in 111, 12 in 210, 30 in 221; Satisfactory/No Credit grading; liability insurance required. [111-S, 210-F, 221-S]

PT 112 Pathological Conditions (3)

Survey of diseases and injuries treated by physical therapy; associated medical or surgical treatment of these conditions; physical therapy treatment for specific conditions. [S]

PT 115,125 Physical Therapy Procedures I,II (5,4)

Physical therapy principles; class 3 hours, lab hours: 6 in 115, 3 in 125; liability insurance required. **115**—Basic principles, interventions and modality techniques. **125**—Focus on spinal traction, electrical stimulation, biofeedback, pain control, protocol exercise routines, iontophoresis, CPM, manual muscle testing. [115-F, 125-S]

PT 123 Functional Anatomy (4)

Integrates muscle innervation, position, and function of the musculoskeletal system for specific joints and their muscular components; palpation skills, joint range of motion, goniometry, and manual muscle testing; biomechanical concepts related to simple movement analysis and kinesiology; class 3 hours, lab 3 hours. [F]

PT 201 Physical Therapy Seminar (2)

Critique sessions concerning physical therapy interventions and clinic participation; student presentations on PT interventions for specific pathologies, specific process for licensure. [S]

PT 205 Therapeutic Exercise (5)

Principles and uses of therapeutic exercises and exercise equipment options; special assessment procedures, exercise techniques, neurodevelopmental exercises, and techniques utilized in specific conditions; intro to orthotics, prosthetics, splinting and gait analysis; class 3 hours, lab 6 hours. [F]

Physics**PHYS 1000 Basic Technical Physics (3)**

Preparation for college physics for students with no previous physics and/or weak math background; algebraic equations, trigonometry and vectors; intro to physical mechanics; not intended for transfer; not accepted toward any degree program at Chattanooga State. Recommended coreq: MATH 1710 or 1740. [F]

PHYS 1030 Concepts of Physics (4)

One semester intro physics course for non-science and non-engineering majors; focus on the nature of physics and applying basic physics concepts in everyday life experience and work; math limited to basic algebra required to understand and apply physics concepts; mechanical motion, energy, temperature and heat, fluids, electricity, magnetism, wave motion and optics; class 3 hours, lab 3 hours. [F,S]

PHYS 2010,2020 Non-Calculus-Based Physics I,II (4,4)

Algebra-based physics for engineering technology and preprofessional majors; class 3 hours, lab 3 hours. **2010**–Mechanics, heat and thermodynamics. **2020**–Electricity and magnetism, ray and wave optics. Must be taken in sequence. Prereq for 2010: PHYS 1000 or equivalent. Coreq for 2010: MATH 1720 or 1750. [2010–E; 2020–S,Su]

PHYS 2110,2120 Calculus-Based Physics I,II (4,4)

Calculus-based physics; for engineering and science majors; class 3 hours, lab 3 hours. **2110**–Mechanics: statics, kinematics, work, energy, power, momentum, conservation laws, heat, rotation and harmonic motion, and thermodynamics. **2120**–Electrostatics, fields and potentials, electromotive force, AC/DC circuits, electromagnetism, capacitance and inductance, and electromagnetic waves. Must be taken in sequence. Prereq for 2110: MATH 1910, PHYS 2010; or departmental consent. Coreq for 2110: MATH 1920. [2110–F, 2120–S]

Political Science**PO 110 Introduction to American Government (3)**

Basics of democratic government; constitutional principles, functions, operations, and processes of governmental change; attention given to the role of political institutions and parties, public opinion, interest groups and the media. [F,S]

PO 219 State and Local Government (3)

Intro to state and local government; focus on the interrelationships between state and local, state and federal, and local and federal governments. [F]

Powerhouse Operations**PZ 110,111,210,211 Powerhouse Operations I,II,III,IV (4,4,4,4) (DuPont)**

Theory of steam generation; class 3 hours, lab 2 hours. **110**–Boilers, auxiliaries and superheaters; instruments and controls; fuels. **111**–Turbines, auxiliaries, coal handling, emission control systems, river water pumping stations, water treatment and cooling tower use, application and maintenance. **210**–Use of well water for steam generation, manufacturing processes; electrical generation and distribution, compressed air production, and

equipment maintenance. **211**–Compression refrigeration systems, heat transference, refrigerant types, compressors, low-temperature systems, air conditioning applications, delivery and handling; intro to wastewater treatment and sludge disposal. Prereq for 210: PZ 110, 111. Prereq for 211: PZ 110, 111. [on demand]

Practical Nursing**LP 000 Practical Nursing**

32.5 clock hours/week. Must be taken in sequence.

First Semester

Intro to the nursing profession; normal anatomy and physiology, nutrition, aging, basic math; nursing procedures to assist in maintaining normal function; clinical experiences in long term care facilities. [F,S]

Second Semester

Study of alterations in normal function; focus on nursing care of adults with medical and/or surgical problems; includes disease process, diet therapy, and pharmacology; clinical experiences in acute care setting. [S,Su]

Third Semester

Specialty areas of obstetric, gynecologic and pediatric nursing; intensive review for state licensing examination; concentrated clinical practice experience. [Su,F]

Psychology**DSPS 0800 Learning Strategies (3)**

Designed to develop effective study habits, attitudes and skills in the classroom setting; focus on application of study skills, critical thinking, and the processes of learning how to learn in college.** [E]

PY 101 General Psychology (3)

Intro survey course; study of mental processes and human behavior to better understand ourselves and anticipate and predict the behavior of others; history and methods of psychology, principles of human development (infancy through adulthood), motivation, emotion, stress, learning and remembering, and abnormal psychology. [E]

PY 103 Stress Management (1)

Relationship of stress to physical and mental well-being; focus on developing a lifestyle that promotes wellness through exercise, proper nutrition, and understanding the basic physiology of stress. [on demand]

PY 109 Healthy Marriages Aren't Accidents (1)

Basic "maintenance skills" for creating a marriage with long-range, positive potential; attention given to "pitfalls" that become obstacles to successful marriages; general communications skills, interactive listening, conflict resolution, and CONSTRAT (conscious strategizing). [on demand]

PY 201 Introduction to Behavioral Statistics (4)

Fundamental statistics for the behavioral sciences; descriptive and inferential statistics, research design, and interpretation of psychological data; computer analysis emphasized; class 3 hours, lab 2 hours. Prereq: 2 years of high school algebra and acceptable test scores; or DSPM 0850. [on demand]

PY 213 Abnormal Psychology (3)

Abnormal and psychopathological behavior patterns, mental deficiencies, neuroses, psychoses, personality disorders; prevention and processing; contains service-learning component. Prereq: ENGL 1010, PY 101. [F,S]

PY 215 Child Growth and Development (3)

Physical, emotional, social and intellectual child development from conception through adolescence; concepts of development and function derived from theoretical approaches, research and clinical observation emphasized; child rearing applications included. Prereq: PY 101. [F,S]

PY 217 Human Growth and Development (3)

Overview of human developmental changes from conception to death focusing on multidisciplinary perspectives (biological, cognitive, behavioral, social); analysis and application of these perspectives in various environmental contexts. Prereq: PY 101. [E]

PY 235 Special Topics in Psychology (1-3)

Specific topics of traditional and current social and psychological interest; repeatable for credit on different topics. [on demand]

PY 241 Psychology of Individual Differences (3)

Individual differences in the dimensions of interests, values, intelligence, personality, and needs; group diversity relating to gender, age, race, work, social class, and education; critical analysis of genetic and environmental factors influencing these differences. [F,S]

PY 250 Leadership Development (3)

Leadership philosophy, practices, and skills; decision making, empowerment, trust, goal-setting and conflict resolution; readings in the humanities and critical analysis of media that explore leadership styles. (Same as HUM 2550; credit not allowed for both courses.) Prereq: ENGL 1010. [F,S]

PY 251 Psychology of Personal Adjustment (3)

Major theories of adjustment and maladjustment, including psychoanalysis, neo-Freudian, behavioral theory and humanistic psychology; role of religion, work behavior and other cultural influences. [E]

Public Speaking, See "Speech"**Quality Technology****QA 142 Quality Engineering (4)**

Basic concepts and body of knowledge involved in Certified Quality Engineer Examination; basic concepts and principles of probability, discrete and continuous probability functions, sampling distributions, statistical inference, regression, and correlation analysis; statistical quality control, acceptance sampling using attributes and variables, experimental design, quality planning, quality management, product liability, metrology, inspection, testing, quality cost analysis, quality auditing, reliability, maintainability, product safety, quality information systems, motivation, and human factors. Recommended prereq: MATH 1510 or 1530. [on demand]

***Transitional Studies course (not generally transferable; not applicable to credit hours required for a degree or certificate)*

QA 146 Quality Auditing (1-2)

Basic concepts and body of knowledge required for Certified Quality Auditor (CQA) Examination; review of steps required for planning and conducting an audit: initiation, preparation, performing, reporting, and follow-up; sample questions from previous CQA examinations. [on demand]

QA 240 Statistical Process Control (3)

Concepts and body of knowledge required in basic statistical process control and improvement; study and applications of basic probability concepts and principles, discrete and continuous probability functions, sampling distributions, limited statistical inference, linear regression, and correlation analysis; also covers flow charts, check sheets, stem and leaf plots, histograms, cause and effect diagrams, and run and pareto chart; measurement process evaluation methods. Recommended prereq: MATH 1510 or 1530. [on demand]

QA 298 Special Topics in Quality (1-4)

Specialized topics and/or problems in quality; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

QA 299 Special Topics in Quality with Lab (1-4)

Specialized topics and/or problems in quality; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

Radiation Therapy Technology, See "Health Science"**Radiologic Technology**

A prerequisite to all RT courses is admission into the program in which the course is required. Please consult the SUMMARY OF REQUIRED HOURS for the specific program. All RT courses shown in the same term are corequisites and all RT courses shown in the preceding term(s) are RT prerequisites. BIOL, HS, and MATH courses required in the Radiologic Technology AAS degree program are pre/corequisite to RT courses as shown, and all Freshman year courses are prerequisite to second year RT courses.

RT 110 Introduction to Radiologic Technology (3)

Organization, function, supervision and financial arrangements of radiology departments; rules and regulations of the program and the clinical affiliates; brief history of medicine and radiology, do's and don'ts regarding radiation and electrical protection and general safety, and ethical and legal responsibilities entailed by becoming a member of a paramedical profession; liability insurance fee. [F]

RT 112,114,202,212,224 Clinic I,II,III,IV,V (2,4,2,2,3)

Simulation, practice and competent performance of radiologic exams in the following categories: 1) upper extremities, 2) lower extremities, 3) bony thorax, chest and abdomen, 4) contrast studies, 5) spines, 6) cranium; progressive development of knowledge and skills in correct positioning to demonstrate specific anatomy, radiographic film evaluation process, reasons for radiographic exams, and proper methods of patient care; assignments in advanced imaging procedures and radiation therapy;

lab/clinic hours: 20 in 112, 202 & 212, 40 in 114, 30 in 224. **112**—Intro to radiographic imaging and equipment care, basic positioning and exposure selection, and body mechanics of handling patients; must demonstrate competent performance of 3 radiologic exams from 3 different categories (except cranium). **114**—Must demonstrate competent performance of 3 radiologic exams from 3 different categories; preparation for final category competency evaluation. **202, 212 & 224**—Final category instruction and evaluation of 4 exams from 2 categories; assignments in nuclear medicine, radiation therapy, computed tomography, special procedures, and paradiologic areas; proper method of cleaning automatic film processor, preventive maintenance and quality control covered in 224. [112, 212–S; 114, 224–Su, 202–F]

RT 115 Medical Terminology (3)

Medical terminology applied to Radiologic Technology; elements and origins of medical terminology; intro to word building system and relation to specific terminology for the body; abbreviations and symbols addressed; focus on radiographic orders and diagnostic reports. [S]

RT 124,125 Radiographic Exposure I,II (3,3)

124—Nature and production of x-rays; x-ray film and intensifying screens, invisible and manifest image creation, film processing equipment and quality control, prime factors of radiography and x-ray interaction with matter; class 3 hours, 3 lab hours. **125**—Factors that govern and influence radiographic image production using radiographic film, proper operation and care of radiographic equipment, primary beam filtration, image intensification and stereoscopic radiography, tomography, radiation protection and health physics. [124–F, 125–S]

RT 134,135,143 Radiographic Positioning—Film Critique I,II,III (3,3,3)

Radiographic positioning and film critique; exam simulation and practice prior to working with patients. **134**—Intro to positioning and terminology; upper and lower extremities, bony thorax, chest, and abdomen, cervical, thoracic and lumbar-lumbosacral vertebrae; intro to common contrast procedures; class 3 hours, lab 5 hours. **135**—Anatomy, topography, morphology and routine projections of the cranium; terminology, anatomy and radiography of the sella turcica, orbits, temporal bones, facial bones, mandible, temporomandibular articulations and paranasal sinuses. **143**—Radiography of the soft-tissue structures of the neck, thorax, and abdomen; contrast media characteristics relative to their proper use in the body, side effects, and administration and opacification methods; normal radiographs of each body system reviewed with focus on preprocedure prep, patient care and management, contraindications and complications, and proper positioning and exposure. [134–F, 135–S, 143–F]

RT 172 Radiologic Pathology (3)

Survey of disease related to Radiologic Technology for advanced student radiographer; material based on systems and related organs of the body, stressing studies that make use of radiology; each system discussed according to categories of disease demonstrated by radiography or by another imaging modality; focus on specific pathologic conditions encountered in the major organ systems that require adjustments in exposure factors, patient care and management, and positioning. [S]

RT 223 Special Procedure Radiography—Nursing (3)

Special procedures discussed in reference to

anatomy, procedures, indications and contraindications, contrast media, equipment and patient positioning; basic medical techniques and patient care, medical and surgical asepsis, vital signs, medical emergencies, drug administration, anatomy and radiography of central nervous system and the visceral and peripheral circulatory system, general and computerized tomography, and foreign body localization. [F]

RT 232 Introduction to Paradiologic Imaging Modalities and Radiation Therapy (3)

Intro to subspecialties of diagnostic radiography and basic radiation therapy principles; focus on the following paradiologic imaging modalities: digital radiography, thermography, diagnostic ultrasound, diaphanography, positron emission tomography, magnetic resonance, and nuclear medicine; radiation therapy and subspecialties discussed in reference to comparison to conventional radiology physical principles, equipment and methodology, historical development, selected clinical applications, and biological effects. [F]

RT 234,235 Radiology Seminar I,II (4,4)

Advanced radiographic science; integrated coverage of radiation protection, equipment operation and maintenance, image production and evaluation, radiographic positioning and procedures, patient care and management, and quality assurance; focus on development of skills and knowledge needed to exercise independent judgment and discretion in technical performance of medical imaging procedures; focus on non-routine procedures in each exam category and evaluation of performance of radiologic systems to effect best diagnostic results with the least cost and radiation exposure to patients; 234 includes film processing quality assurance; 235 includes x-ray equipment and analysis and quality control and development of an exposure guide. [234–F, 235–S]

RT 250 Advanced Patient Care and Management (6)

Prepares registered or registry eligible technologist to perform advanced patient care associated with imaging procedures; cardiac monitoring, rapid patient assessment in emergencies, proper follow-up to include advanced cardiac life support (ACLS), pharmacology of all medications and contrast media utilized in imaging or emergency intervention, venipuncture, vital signs, urinary catheterization, charting and documentation. [F]

Reading**DSPR 0690 Individualized Instruction in Reading Skills (2)**

Individualized course for students with significant weakness in general or specific reading skills and in need of individualized instruction and guided practice; may be taken before or after DSPR 0700 and/or DSPR 0800; lab 4 hours; repeatable. Prereq: Assessment test recommendation or Department Head's consent.** [E]

DSPR 0700 Basic/Developmental Reading (3)

Lecture/lab course to improve ability to comprehend written materials, identify main and subordinate ideas, make inferences, separate fact from opinion, develop flexibility and efficiency in reading rate,

**Transitional Studies course (not generally transferable; not applicable to credit hours required for a degree or certificate)

2004-06 Course Descriptions

and improve vocabulary and reasoning skill. Prereq: ACT or COMPASS Placement.** [F,S]

DSPR 0800 Developmental Reading: Reading Analysis and Reasoning (3)

Designed to improve student's overall reading skills to college level; focus on reasoning skills, analysis of materials for bias and point of view, and increasing flexibility and efficiency in reading rate. Prereq: DSPR 0700; or ACT or COMPASS Placement.** [E]

DSPR 0870 Topics in Reading (1)

For students who cannot demonstrate mastery of objectives in a particular area of competency in language arts even though he/she has competency in other language arts areas; students may work on spelling, vocabulary, rate and flexibility, or reasoning skills; lab 2 hours. Prereq: Assessment test or instructor's recommendation.** [on demand]

Real Estate**RS 101 Basic Principles of Real Estate (4)**

Basics of real estate; prepares applicants for the State of Tennessee Real Estate License Exam (course not applicable for licensure in Georgia or other states); topics include ethics, contracts, trust deeds, closing statements, leases, mortgages, and real estate math. [on demand]

Realtime Reporting**REAL 100 Introduction to Realtime Reporting (1)**

Intro to the field of realtime reporting; includes judicial reporting in the legal setting, closed captioning in the broadcast setting, CART (Communication Access Realtime Translation) in the educational setting, and webcasting. [F]

REAL 110,111 Realtime Reporting I,II (4,4)

Principles and theory of reading and writing machine shorthand; class 4 hours, lab 4 hours. **110**—Focus on machine operation and phonetics. **111**—Focus on brief forms, phrases, and development of ability to take dictation; 100 wpm required for course completion. Must be taken in sequence. [110–F; 111–S]

REAL 121,122,123,124 Judicial Reporting I,II,III,IV (3,3,3,3)

Principles and theory of reading and writing machine shorthand. **121 & 122**—Focus on speedbuilding; speed required for course completion: 130 wpm in 121, 170 wpm in 122. **123**—Focus on dictation of various legal proceedings and accuracy; 200 wpm required for course completion. **124**—Focus on all court reporting areas; must pass one 5-minute test with 96% accuracy and two 5-minute tests with 95% accuracy at each of the following speeds: 225 wpm 2-voice testimony; 200 wpm jury charge; 180 wpm literacy. Must be taken in sequence. Prereq for 121: REAL 111. [121–Su; 122–F; 123–S; 124–Su]

REAL 131,132,133,134 Captioning/CART I,II,III,IV (3,3,3,3)

Development of captioning/CART skills, including speedbuilding. **131**—Focus on alphabets, letter-by-

letter spelling, and punctuation. **132**—Focus on numbers, time, speaker ID, brackets, and musical notes. **133**—Focus on dictionary development, environmental sound descriptors, phonetic translation, prefixes and suffixes. **134**—Focus on writing web site/internet addresses, stroke placement, and slang; 200 wpm required for writing 30-minute program with a TER of 98%; simulated CRR skills test at 180 wpm literary for 5 minutes at 96%. Must be taken in sequence. Prereq for 131: REAL 111. [131, 134–Su; 132–F; 133–S]

REAL 200 Computer-Aided Transcription (3)

Methods and procedures for transcript production; format, punctuation, dictation of machine shorthand notes, general use of reference materials, computer transcription of notes including real-time reporting. Prereq: REAL 121 or 131. [F]

REAL 201 Judicial Procedures (3)

Methods and procedures for transcript production of legal proceedings; freelance field procedures; taking and transcribing depositions, arbitrations, sworn statements, and official procedures. Prereq: REAL 200. [S]

REAL 202 Captioning/CART Procedures (3)

Online translation, basic care of hardware data input device, setup of computer hardware, application of CAT functions, broadcast production preparation, FCC regulations, and Internet research; hands-on practicum in simulated broadcast studio. Prereq: REAL 200. [S]

REAL 205 Medical and Technical Dictation (3)

Terminology encountered in medical malpractice, chemical, construction, patent, and other complex litigation; focus on the use of special reference materials. Prereq: REAL 121. [Su]

Religious Studies**RELS 2030 Religions of the World (3)**

Main tenets of the world's great religions, including Christianity, Judaism, Confucianism, Shintoism, Hinduism, Buddhism, and Islam; focus on their influence on thought and action. Prereq: ENGL 1010. [E]

RELS 2230 Religion in America (3)

Survey of religion's historical development in the American experience; major movements, divisions, theological issues, and personalities woven into the mosaic of religion in America from the Puritan heritage to modern secularism and cultural pluralism. Prereq: ENGL 1010. [on demand]

RELS 2610,2620 Biblical Studies I,II (3,3)

Philosophical, religious, socio-political, and literary aspects of the Bible and its impact on Western Culture. **2610**—Old Testament. **2620**—New Testament. Prereq: ENGL 1010. [F,S]

RELS 2990 Special Topics in Religious Studies (3)

Special topics of traditional and current relevance in Religious Studies; repeatable for credit on different topics. Prereq: ENGL 1010. [on demand]

Renaissance Institute**RI 100 Personal and College Success (3)**

Analysis of personal and academic strengths; career and life planning; building new skills and values; learning college and community culture and resources. [F,S]

RI 120 Chattanooga's African-American Experience—Contemporary Issues (2)

Study of the African-American experience in Chattanooga; focus on issues of identity, diversity, conflict, and community. [F]

RI 135 Special Topics—Renaissance Institute (1-3)

Study of contemporary, social, political, and/or cultural issues; repeatable for credit on different topics. [F,S]

Respiratory Care

Admission to the Respiratory Care Program is a prerequisite to all RC courses. Please consult the SUMMARY OF REQUIRED HOURS. All RC courses shown in the same term are corequisites and all RC courses shown in the preceding term(s) are RC prerequisites.

RC 111,112,113 Principles of Respiratory Care Procedures I,II,III (3,3,4)

111—Theory in the application of nursing principles and skills for respiratory personnel; basic nursing principles, vital signs, aseptic technique, the apothecary system and drug calculations; gas law, relative humidity and pulmonary values. **112**—Equipment and therapy modalities of humidity and aerosol therapy; intro to oxygen therapy. **113**—Oxygen therapy, hyperinflation therapy (SMI, IPPB), and airway management; indications and contraindications; series of preclinical check-offs required for course completion; class 3 hours, lab 3 hours. [111–F, 112–S, 113–Su]

RC 141,142,143 Technical Foundations of Respiratory Care I,II,III (3,3,3)

141—Overview of the development of respiratory care, role of the therapist, medical vocabulary. **142**—Functioning of heart and lungs; physiologic principles of pulmonary mechanics, O₂ and CO₂ transport, acid-base homeostasis, general principles of drug action focusing on the effects on renal and cardiopulmonary systems. **143**—Focus on neural and chemical control of cardiopulmonary function, drug administration, respiratory and systemic drugs, and recognition and management of adverse reactions. [141–F, 142–S, 143–Su]

RC 210,212,213 Fundamentals of Respiratory Care I,II,III (3,3,3)

210—In-depth study of mechanical ventilation through didactic and guided lab experiences; critical care medicine principles as applied to rationale, institution and discontinuance of mechanical ventilation; basic ventilator operation and modification; class 2 hours, lab 3 hours. **212**—Cardiopulmonary diagnostic testing and monitoring, major cardiovascular monitoring and supportive therapy concepts; EKG and pulmonary testing and interpretation, transcutaneous O₂ monitoring, oximetry, end tidal CO₂ monitoring; class 2 hours, lab 2 hours. **213**—Advanced topics including fluid and electrolyte balance, pulmonary

***Transitional Studies course (not generally transferable; not applicable to credit hours required for a degree or certificate)*

rehabilitation, hemodynamics, and new techniques in respiratory care; practice exams to prepare for NBRC entry level and advanced practitioner exams. [210-F, 212-S, 213-Su]

RC 221,222,223 Clinical Practicum I,II,III (6,6,7)

Respiratory care procedures in hospital settings; clinical rotations may be scheduled during evening or night hours; clinical fee and liability insurance required; 24 lab hours; Satisfactory/No Credit grading. **221**—Oxygen therapy, medical gas cylinder use, humidity and aerosol therapy, IPPB, incentive spirometry, bronchial hygiene, chest physiotherapy, isolation techniques, cleaning and sterilization, CPR, physical assessment and arterial puncture. **222**—Emphasis on patient evaluation and clinical judgment; pediatric therapy, blood gas instrumentation and quality control procedures, EKG testing and interpretation, endotracheal intubation, pulmonary function testing, chest radiographs interpretation and home care. **223**—Emphasis on critical care procedures; initiation, monitoring and discontinuation of mechanical ventilation; neonatal-pediatric intensive care; hemodynamic monitoring and lab test interpretation. [221-F, 222-S, 223-Su]

RC 241,242 Clinical Pathophysiology I,II (3,3)

241—General concepts of disease, human pathology, arterial blood gases, and acid-base concepts. **242**—Etiology, pathology, pathophysiology, symptoms, diagnosis, course, treatment, and prognosis of selected diseases that affect the cardiopulmonary system. [241-F, 242-S]

RC 243 Pediatric/Perinatal Respiratory Care (3)

Intro to common pediatric and neonatal cardiopulmonary disorders; intro to therapeutic modalities used in the treatment of infants and children, including critical care procedures. [S]

Secretarial Science, See “Office Administration”

Sociology

SO 110 Introduction to Sociology (3)

Intro to field of sociology; focus on basic concepts, principles, and processes used to study the structure and function of society. [E]

SO 120 Social Problems (3)

Study of social problems in the U.S.; provides sociological perspective for making sense of future developments in our society. Prereq: ENGL 1010. [F,S]

SO 214 Criminology (3)

Principles of criminology; what constitutes a crime, relevance of crime statistics, and major theories relating to the causes of crime; the problems, social costs of crime, and effects on society approached from sociological perspective. Prereq: ENGL 1010. [F]

SO 215 Marriage and Family (3)

Emphasizes values and family dynamics of contemporary American life; helps students make knowledgeable choices in their interpersonal lives by providing sound facts and using a problem-solving approach. Prereq: ENGL 1010. [F,S]

SO 216 Cultural Anthropology (3)

Comparative study of culture, social organization, economics, government, education, religion, language, and arts in various primitive and present societies. [E]

SO 217 Sociology of Aging (3)

Basic course in social gerontology; focus on the aging process and the problems of the aged. [on demand]

SO 235 Special Topics in Sociology (1-3)

Specific topics of traditional and current sociological interest; repeatable for credit on different topics. Prereq: ENGL 1010. [on demand]

Sonography, See “Diagnostic Medical Sonography”

Spanish

SPAN 1010,1020 Elementary Spanish I,II (4,4)

Elementary grammar, vocabulary, reading, idiomatic conversation, and Spanish culture. Must be taken in sequence. [F,S]

SPAN 2010,2020 Intermediate Spanish I,II (3,3)

Intermediate grammar, reading and conversation. Must be taken in sequence. **2010**—Focus on oral skills and Spanish culture. **2020**—Focus on reading and translation. Prereq: SPAN 1020 or 2 years of high school Spanish. [2010-F, 2020-S]

SPECIAL INTEREST COURSES

The following courses are offered as a community service and are not intended to be used to satisfy the foreign language requirement or remove high school deficiencies for any degree program at Chattanooga State or any other college or university.

SPAN 1000,2000 Conversational Spanish I,II (2,2)

Everyday Spanish language and culture; focus on spoken language. **1000**—Basic vocabulary and idiomatic expressions in real-life situations. **2000**—Sophisticated vocabulary and complex grammar structures: discussion and debate of politics, environment and current events. [1000-F,S; 2000-S]

SPAN 1002 Medical Spanish (2)

Basic vocabulary to communicate at the elementary level in everyday situations in the medical field. [F,S]

SPAN 1990 Spanish Field Work (3)

Basics of teaching Spanish: includes observation/participation; class 2 hours, lab 2 hours. Prereq: SPAN 1020. [on demand]

SPAN 2990 Special Topics in Spanish (1-3)

Specific topics pertaining to Spanish language and culture; repeatable for credit on different topics. Prereq: Instructor's consent. [on demand]

Speech

SP 110 Fundamentals of Public Speaking (3)

Introductory public speaking course stressing

organization and presentation of the extemporaneous speech in a variety of formats. Prereq: ENGL 1010 with grade of C or better. [E]

SP 120 Interpersonal Communication Skills in the Workplace (3)

Covers basic interpersonal communication skills, including listening, nonverbal awareness, interviewing, and conflict management; focus on application in the workplace. Prereq: ENGL 1010. [F,S]

SP 235 Special Topics in Speech (1-3)

Specific topics in speech communication and forensics; repeatable for credit on different topics. Prereq: ENGL 1010 with grade of C or better. [on demand]

Surgical Technology

OR 000 Surgical Technology

32.5 clock hours/week. Must be taken in sequence.

First Semester

Intro to basic operative procedures and techniques, principles of asepsis; human anatomy and physiology, microbiology, medical terminology; clinical experience in campus practice lab. [F]

Second Semester

Continued study of surgical operative procedures and techniques; clinical experience in surgical areas of affiliated hospitals. [S]

Third Semester

Intensive clinical practice experience in a variety of surgical settings; review for national certification examination. [Su]

Sustainability, See “Environmental Science”

Technology Foundations in Basic Anatomy & Physiology

TFAP 0000 Technology Foundations in Basic Anatomy & Physiology

Human anatomy and physiology related to body systems; relationship between structural and functional roles of system components; basic histology and terminology. The class is an 8-week, 160 clock hour course. [U]

Theatre

THEATRE—GENERAL COURSES

THEA 1001 Artist in Residence (1-3)

Visiting artists interact with students in lectures and workshops; 2 workshops for 1 credit; 3 workshops for 2 credits; 4 workshops for 3 credits; repeatable; maximum of 3 hours applicable toward a degree. [F,S]

THEA 1030 Introduction to the Theatre (3)

Representative survey of drama and stagecraft from its beginning to the present; analysis of significant plays from outstanding periods of theatre history; enhances understanding and appreciation of the theatre. [F]

2004-06 Course Descriptions

THEA 1990 Performance and Production (3)

Basic principles of performance and play production for non-majors; includes developing and presenting a public performance. [on demand]

THEA 2430 Musical Theatre (2)

Performance techniques used in modern musical theatre productions/auditions; voice production, acting, and movement for the stage presented in scene study projects from the standard musical theatre repertory. Prereq: THEA 1110, 1240. [on demand]

THEA 2990 Special Topics in Drama (3)

Study of topics relating to the historical and cultural significance of theatre; repeatable for credit on different topics. [on demand]

PROFESSIONAL ACTOR TRAINING

Admission to participate in the Professional Actor Training is a prerequisite for Professional Actor Training courses. All Fall Semester courses are prerequisite to all Spring Semester courses, and all courses taught in the same term are corequisites.

PROFESSIONAL ACTOR TRAINING COURSES**THEA 1110,1120,2110,2120 Acting I,II,III,IV (3,3,3,3)**

1110—Introduces foundational skills of acting to students interested in a career in theatre arts.

1120—Explores the use of senses, response, and imagination to develop and enhance actor's performance skills. **2110**—Develops and integrates voice, body, and face to enhance actor's performance skills in classical and contemporary dramas. **2120**—Applies collective knowledge and skills gained in the professional theatre program in context of a full-scale performance. Must be taken in sequence. [1110, 2110-F; 1120, 2120-S]

THEA 1230,1235,2230,2235 Movement I,II,III,IV (3,3,3,3)

1230—Principles and techniques of improvisational dance and movement; exploration of movement as an integral part of the actor's performance skills.

1235—Advances the skills of THEA 1230.

2230—Advances the skills of THEA 1235 so that students are more fully prepared for dramatic

performance situations. **2235**—Advances the skills of THEA 2230 so that students are more fully prepared for contemporary and musical theatre performance situations. Must be taken in sequence. [1230, 2230-F; 1235, 2235-S]

THEA 1310,1320,2310,2320 Production I,II,III,IV (3,3,3,3)

1310—Fundamental knowledge of vocabulary, principles and techniques employed in major theatrical production; basic principles and techniques of stagecraft, lighting, costuming and sound; hands on application in actual theatrical productions. **1320**—Review of the vocabulary, tools and techniques of theatre craft; introduction of process, principles, and techniques of scenic, lighting, and costume design; practical projects in each design area. **2310**—Introduction to publicity, tickets, programs, ushering, and house management in the theatre; includes overview of process and internship in production of a play or performance. **2320**—Introduction to the business of acting; includes photos and resumes, auditioning techniques, scenes and monologues for auditions, and how to market oneself as an actor. Must be taken in sequence. [1310, 2310-F; 1320, 2320-S]

THEA 1410,1420,2410,2420 Voice and Speech I,II,III,IV (3,3,3,3)

1410—Introduces concepts and practices to develop a voice suitable for theatrical performance.

1420—Provides opportunity to train the voice for a wide range of situations in theatrical performance.

2410—Extends student's ability to employ his/her voice to express emotion, develop character, and enhance performances. **2420**—Prepares student to apply voice and speech skills to a professional performance. Must be taken in sequence. [1410, 2410-F; 1420, 2420-S]

THEA 1520,1525,2520,2525 Improvisation I,II,III,IV (3,3,3,3)

1520—Introduces foundational skills of improvisational acting to students interested in a career in the theatre arts. **1525**—Advances skills of students to prepare them for performance situations. **2520**—Advances skills of students; engages them in performance situations. **2525**—Advances skills of students; engages them in professional performances. Must be taken in sequence. [1520, 2520-F; 1525, 2525-S]

Tomography, See "Computed Tomography"

Truck Driving, See "Commercial Truck Driving"

Ultrasound, See "Diagnostic Medical Sonography"

Welding**WD 000 Welding Technology**

Theory and practice in welding; oxyacetylene flame cutting, welding and brazing; MIG welding procedures; gas metal arc welding on aluminum; TIG welding on mild steel plate and aluminum; gas tungsten arc pipe welding; flux cored arc welding, covering self shielding and shielded flux cored electrode wire; welding instruction and practice in all positions on thin and thick gauge aluminum and 11-gauge plate; math and blueprint reading for welding; 30 clock hours/week. [E]

Wellness, See "Physical Education"

X-Ray Technology, See "Radiologic Technology"

<http://www.chattanoogaastate.edu>

or call 1-800-207-8202

E-mail: advising@chattanoogaastate.edu

Page	
98-103	Governance
98	Tennessee Higher Education Commission
98	Tennessee Board of Regents
98-100	Administrative/Professional Staff
100	Honors Faculty
100-103	Faculty
104	Aerial View of Amnicola Highway Campus

<http://www.chattanoogastate.edu> or call (423) 697-4401

or 1-800-207-8202

E-mail: advising@chattanoogastate.edu



Graduation 2003

Photo: Betty A. Proctor

Governance

Tennessee Higher Education Commission

The Honorable Phil Bredesen
Governor of the State of Tennessee

Dr. Richard Rhoda, Executive Director

Wm. Ransom Jones, Chairman, Murfreesboro

June Scobee-Rodgers, Vice-Chair, Signal Mtn.

A. C. Wharton, Jr., Vice-Chair, Memphis

Dale Kelly, Secretary, Huntingdon

Steve Adams, State Treasurer, Nashville

Riley Darnell, Secretary of State, Nashville

General Wendell Gilbert, Clarksville

Debby Patterson Koch, Nashville

John Morgan, State Comptroller, Nashville

Jim Powell, Sr., Limestone

Brad Windley, Tullahoma

Eleanor E. Yoakum, Knoxville

Betsey Kirk, Voting Ex-Officio, UTK

Omar Lopez, Non-voting Ex-Officio, MTSU

Douglas Wood, Non-voting Ex-Officio, Nashville

Tennessee Board of Regents

The Honorable Phil Bredesen,
Governor of the State of Tennessee (Ex-Officio)

Dr. Charles Manning, Chancellor

Dr. Richard Rhoda, Executive Director,
THEC (Ex-Officio)

The Honorable Lana Seivers, Commissioner of Education
(Ex-Officio)

The Honorable Ken Givens, Commissioner of Agriculture
(Ex-Officio)

Frank Barnett

Edgar R. Bowers

Demetra G. Boyd

Kathryn Byrd

Matthew Chapman

Noble Cody

Robert Jack Fishman

Tom Jackson

Jonas Kisber

W. Keith McCord

Leslie Parks Pope

J. Stanley Rogers

Maxine A. Smith

William H. Watkins, Jr.

Chattanooga State Foundation Board Members

Joseph Decosimo

John Germ

Vicky Gregg

John Marek

Paul McDaniel

Bob McDowell

Archie Meyers

Alfred Smith

Edna Varner

Rudy Walldorf

Administrative and Professional Staff

James L. Catanzaro, (1990) President; Professor, Philosophy, Western Civilization, Humanities. Ph.D., Claremont Graduate University, California.

Fannie D. Hewlett, (1979) Vice President, Academic Affairs; Professor, Psychology—Arts and Sciences. Ed.D., University of Tennessee, 1990.

Consuelo B. O'Neal, (1978) Vice President, Student Affairs. M.Ed., Memphis State University, 1977.

Elaine Swafford, (1988) Vice President, Economic and Community Development. Ed.D., University of Sarasota, 1999.

Tammy L. Swenson, (1987) Vice President, Business and Finance. M.B.A., University of Tennessee at Chattanooga, 1991.

Deborah A. Adams, (1981-86, 1988) Associate Vice President, Continuing Education and Community Development. B.S., University of Tennessee, 1976.

Annette Ballew Alsobrooks, (2000) Designer, Marketing. B.S., University of Tennessee at Chattanooga, 1995.

Bruce T. Alston, (1993) Producer, Media Services. B.F.A., New York Institute of Technology, 1990.

James L. Barrott, (1985) Dean, Engineering, Environmental, and Emergency Technologies; Dean, Industrial Technology; Associate Vice President, Technology. Ed.D., University of Tennessee at Chattanooga, 2000.

Martha K. Bates, (1991) Technician, Biology—Arts and Sciences. B.S., Mississippi College, 1967.

Timothy R. Belcher, (1990) Network Analyst—Computer Services. A.S., Chattanooga State Technical Community College, 1990.

Julie C. Bennett, (1984) Manager, Kimball Site—Extended Services. B.S., Covenant College, 1991.

Raymond M. Bertani, (1984) Coordinator, Institutional Advancement. B.A., University of Tennessee at Chattanooga, 1984.

Larry L. Bray, (1992) Counselor, Career Planning and Counseling. M.Ed., Wright State University, 1981.

Joyce R. Brennan, (1992) Director, Academic Systems—Computer Services. M.S., University of Florida, 1964.

Joyce A. Brinkmeyer, (2000) Manager, Workforce Assessment and Development—Business and Community Development Center. B.S., Illinois State University, 1971.

Patricia K. Brown, (1979) Director, Marketing, Design, and Publications—Marketing. B.S., Covenant College, 1998.

Nora C. Burke, (1993) Supervisor, PC Support—Computer Services. B.S., University of Tennessee at Chattanooga, 1987.

Richard E. Burke, (2002) Director, Continuing Education. B.S., University of Tennessee at Chattanooga, 1987.

Douglas E. Byrd, (1988) Counselor, Career Planning and Counseling. M.A., University of Alabama, 1988; M.S., Jacksonville State University, 1981.

Amy L. Campbell, (1998) Technician, Chemistry—Arts and Sciences. B.S., Centre College, 1977.

Anne B. Campbell, (1999) Editor, Institutional Advancement. M.A., University of Georgia School of Journalism, 1978.

Bruce A. Carlisle, (1997) Systems Analyst 1, Computer Services. B.S., University of Tennessee at Chattanooga, 1997.

Heidi G. Cawood, (1994) Designer, Marketing. B.S., Middle Tennessee State University, 1993.

Charles E. Chamberlin, (1998) Manager, Network Services—Computer Services. B.S., University of Chattanooga, 1967.

Christine A. Chardos, (1997) Adviser, Educational Planning and Advising. B.S., University of Tennessee at Chattanooga, 1993.

R. Foster Chason, (1976) Special Assistant to the President/Professor. D.A., Middle Tennessee State University, 1984.

Janice W. Cochran, (1988) Associate Vice President for Special Programs—Academic Affairs; Associate Professor, Chemistry—Arts and Sciences. M.S., University of Georgia, 1980.

George Conley, Jr., (2002) Career Counselor/Mentor, AHEAD Program. B.A., University of Tennessee at Chattanooga, 1984.

Lulu L. Copeland, (1996) Manager, Computer and Technical Training—Business and Community Development Center. B.S.E., University of Tennessee at Chattanooga, 1982.

Daniel P. Corn, (2003) Manager, College Reading and Writing Center—Academic Affairs. B.A., University of Tennessee at Chattanooga, 2000.

Gladys Crates, (1974) Dean, Arts and Sciences; Professor, Mathematics. Ed.D., University of Tennessee, 1994.

John W. Crawley, (2003) Manager, Business and Industry Training—Economic and Community Development. B.A., Trevecca Nazarene University, 1994.

Thomas F. Crum, (1991) Director, Human Resources. M.S., University of Illinois, 1970.

Mark A. Cunningham, (1983) Manager, Systems Support—Computer Services. A.S., Chattanooga State Technical Community College, 1982.

J. Dianne Dennison, (1988) Designer, Marketing. A.S., William Carter College, 1968.

Timothy S. Dills, (1999) Assistant Coordinator, Educational TV—Center for Distributed Education. B.A., Freed-Hardeman University, 1988.

Jules T. Doux, Jr. (2001), Counselor, Small Business Development Center. B.S., Middle Tennessee State University, 1988.

James C. Durm, (1997) Director, Administrative Systems—Computer Services. M.B.A., Troy State University, 1980.

Paul J. Ennis, (2000) Technician, Chemistry—Arts and Sciences. B.S., University of California, 1979.

Nora S. Ernst, (1991) Director, Institutional Research—Academic Affairs. Ph.D., University of North Texas, 1977.

J. Ted Evans, (2003) Coordinator, Student Development and Community Relations—Physical Education. Ed., University of Tennessee at Chattanooga, 1982.

Juanita B. Finnell, (1992) Adviser, Educational Planning and Advising. M.S., University of Tennessee at Chattanooga, 1992.

Gary L. Fisher, (1993) Director, Media Services. B.A., University of Tennessee at Chattanooga, 1989.

2004-06 Administrative and Professional Staff

For more information see the "Chattanooga State Digital Directory" online at <http://www.chattanoogastate.edu/facultypages/Index.asp>

- Daniel Fitzgerald**, (2003) Coordinator, Benefits and Information Research—Human Resources. M.S., University of Tennessee at Chattanooga, 1997.
- P. Andrew Forrester**, (1986) Assistant Dean—TN Technology Center. M.A., Tennessee Technological University, 2000.
- Barbara A. French**, (1985) Coordinator, Business and Community Development Center.
- Elizabeth L. Fronk**, (2000) Assistant Librarian 1, Library Services. M.L.S., University of Michigan, 1993.
- Patricia A. Gardner**, (1988) Manager, Personal Interest, Continuing Education—Business and Community Development Center. B.A., University of Tennessee at Chattanooga, 1970.
- Paul F. Gasparro**, (2002) Dean, Business and Information Systems. Ed.D., Nova Southeastern University, 1997.
- Donald W. Gibson**, (1992) Manager, Telephone Systems—Computer Services. M.B.A., University of Tennessee at Chattanooga, 1997.
- Jerome A. Gober**, (2002) Director, Affirmative Action/EEO—Human Resources. B.S. University of Tennessee at Chattanooga, 1988.
- Wanda Gocher-Johnson**, (2003) Specialist, Learning Disabilities—Disabilities Support. M.Ed., University of Tennessee at Chattanooga, 2001.
- Marsha L. Golesby-Barker**, (1999) Advisor, Educational Planning and Advising. M.S., University of Tennessee at Chattanooga, 1993.
- E. Clark Graham**, (1998) Coordinator, Student Services (Evening)—TN Technology Center. M.A., Tennessee Technological University, 1980.
- Kita L. Graham**, (1998) Specialist, Transitional Studies and Workforce Development Testing—Academic Affairs. B.S., Middle Tennessee State University, 1994.
- Judy D. Green**, (1999) Director, TECTA Program—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 2003.
- Lisa G. Hancock**, (1993) Bursar, Business Office.
- Ellen Hardy**, (1980) Coordinator, Payroll and Personnel Budget—Business Office. A.S., Chattanooga State Technical Community College, 1978.
- Craig T. Harston**, (2000) Counselor, Small Business Development Center. Ph.D., Tulane University, 1977.
- Robert C. Hawfield**, (1986) Technician, Industrial Technology—TN Technology Center. M.A., University of Tennessee, 1994.
- Donna K. Hawk**, (1993) Computer Programmer Analyst 1—Library Services. B.S., University of Tennessee at Chattanooga, 1986.
- Jerry L. Hendrix**, (1997) Manager, Dayton Site—Extended Services. B.S., University of Tennessee at Chattanooga, 1975.
- John Henry**, (2001) Coordinator, Artist-in-Residence Program—Arts and Sciences, D.A., University of Kentucky, 1965.
- Carolyn J. Hill**, (1980) Manager, Employment and Job Analysis—Human Resources. B.S., University of Tennessee, 1966.
- Robert E. Hobgood**, (1996) Manager, Auditorium—Media Services. B.A., University of Tennessee at Chattanooga, 1985.
- Linda R. Homa**, (1997) Adviser, Educational Planning and Advising. B.S., Covenant College, 1997.
- Margaret M. Horten**, (1998) Director, Child Development Center. B.S., Governors State, 2002.
- Tisa M. Houck**, (1983) Librarian 1—Library Services. M.S., University of Tennessee, 2000.
- Deborah S. Howe**, (1989) Programmer/Analyst 2, Computer Services. B.S., University of Tennessee at Chattanooga, 1999.
- Steve C. Huskins**, (1993) Director, Plant Operations and Facilities Planning. B.S., University of Tennessee, 1978.
- Vicki M. Jackson**, (1976) Coordinator, Testing Center—Basic Skills. B.S., Covenant College, 1992.
- Steve Jaecks**, (2001) Director, Athletics and Wellness. M.S., University of Tennessee at Chattanooga, 1982.
- Susan G. Joseph**, (1990) Associate Vice President—Business and Finance. B.S., University of Tennessee, 1982.
- Edward R. Kelly**, (1987) Assistant Director, Plant Operations. M.S., University of Tennessee, 1961.
- Lucas Kilburn**, (2002) Accountant 1, Business Office. B.A., Michigan State University, 1994.
- Saundra K. King**, (2001) Director, Transitional Studies. M.S., University of Tennessee, 1988.
- Sandra J. Klutz**, (1991) Dean, Student Life and Judicial Affairs—Student Affairs. M.S., University of Tennessee, 1978.
- Mary E. Knaff**, (1990) Director, Multicultural Services. M.S., University of Tennessee at Chattanooga, 1993.
- Rex H. Knowles, Jr.**, (2002) Director, Theater Arts. M.A. Union Theological Seminary, 2002.
- Sherry Landrum Knowles**, (2002) Director, Theater Arts. M.A., Antioch University, 1992.
- Brenda Langston**, (2002) Specialist, Orientation—TECTA Program. B.S., Covenant College, 2001.
- Georgiana C. Kotarski**, (2000) Director, Special Projects—Economic and Community Development. M.S., University of Tennessee at Chattanooga, 1994.
- Victoria P. Leather**, (1981) Dean, Library Services. M.S.L.S., University of Tennessee, 1978.
- Norma L. Lee**, (1981) Registrar, Records—Admissions/Registration and Records. B.S., Covenant College, 1994.
- Terrence E. Lee**, (1981) Programmer/Analyst 2, Computer Services. B.S., University of Tennessee at Chattanooga, 1980.
- Aleta F. Lenyard**, (2001) Manager, Math Center. B.S., Tulane University, 1970.
- W. Robbie Littlejohn**, (1993) Technician, Biology—Arts and Sciences. B.S., University of Tennessee at Chattanooga, 1988.
- Judy K. Lowe**, (2002) Director, Center for Distributed Education. Graduate Diploma in Higher Education, University of New South Wales, 1992.
- M. Catherine Lunn**, (1987) Research Analyst 1, Small Business Development Center. A.S., Chattanooga State Technical Community College, 1985.
- Kathryn L. Lutes**, (1998) Director, Disabilities Support Services. M.Ed., University of Tennessee at Chattanooga, 1992.
- Deborah J. Mailen**, (1994) Associate Vice President, Grants, Contracts and Student Accounts—Business Office. B.S., University of Tennessee, 1975.
- Brenda R. Maples**, (1987) Assistant Coordinator, Testing Center. Certificate, University of Tennessee at Chattanooga, 1979.
- Ronald L. Martin**, (2002) Purchasing Agent, Business Office. B.S., University of Tennessee, 1977.
- Tara C. Mathis**, (1998) Assistant Director, Financial Aid. M.B.A., University of Tennessee at Chattanooga, 1997.
- L. Ann Mawhinney**, (1987) Director, Internal Audit—President's Office. M.S., University of Wisconsin at Milwaukee, 1979.
- Elaine D. McCalla**, (1999) Computer Programmer Analyst 1, Computer Services. B.S., Florida A & M University, 1988.
- Sarah F. McDowell**, (1993) Coordinator, College Reading and Writing Center. M.A., University of Tennessee at Chattanooga, 1996.
- Lisa C. McWherter**, (2001) Associate Vice President, Leadership and Fund Development—Institutional Advancement. M.A., Middle Tennessee State University, 1997.
- C. Suzette Melville**, (1998) Accountant 1, Business Office. M.B.A., University of Tennessee at Chattanooga, 2001.
- Rosemary C. Milburn**, (1988) Library Associate, Library Services. B.A., Smith College, 1973.
- Linda P. Miller**, (1981) Associate Vice President, Marketing. M.A., University of Tennessee at Chattanooga, 1990.
- Barbara S. Morgan**, (1968) Administrative Assistant to the President. A.S., Chattanooga State Technical Institute, 1967.
- Diane C. Norris**, (1982) Interim Director, Admissions/Registration and Records.
- Michelle R. Olson**, (2002) Coordinator, AHEAD Program. B.S., Berry College, 1990.
- Charles M. Owen**, (2002) Systems Programmer 1, Computer Services. B.A., University of Tennessee, 1986.
- Marcia H. Owens**, (1999) Director, Enrollment, Retention and Telecounseling Center—Economic and Community Development. M.Ed., University of Tennessee at Chattanooga, 1995.
- Rebecca A. Owens**, (2003) Specialist, TECTA—Arts and Sciences. B.S., University of Alabama, 1998.
- Percy K. Parakh**, (1995) Specialist, Computer Services. B.S., Mysore University, 1975.
- Richard S. Payne**, (2002) Coordinator, Multi-Media—Center for Distributed Education. B.A., University of Georgia, 1978.
- Jennifer A. Peet**, (2000) Technician, Biology—Arts and Sciences. B.S., Troy State University, 1994.
- Eric H. Petersen**, (2002) Assistant Librarian 1, Library Services. Ph.D., Oxford University, 1991.
- Darryl J. Pirtle**, (1994) Programmer/Analyst 2, Computer Services. B.S., Freed-Hardeman University, 1983.
- Betty A. Proctor**, (1991) Designer, Marketing. A.A.S., Chattanooga State Technical Community College, 1992.
- Judith A. Qualey**, (2003) Interim Coordinator, Tech Prep—Academic Affairs. M.A., University of Tennessee at Chattanooga, 1980.
- Bradley R. Reynolds**, (1999) Technician, Chemistry—Arts and Sciences. B.S., Tennessee Wesleyan College, 1996.
- Michael E. Ricketts**, (1983) Director, Basic Skills; Ed.D., University of Tennessee, 1996.
- Bonnie H. Riggs**, (1988) Assistant Director, Institutional Research—Academic Affairs. M.B.A., University of Tennessee at Chattanooga, 1996.
- Daryl G. Riley**, (1980) Director, WAWL (Radio Station)—Media Services.

For more information see the "Chattanooga State Digital Directory" online at <http://www.chattanoogastate.edu/facultypages/Index.asp>

Carolann Roberts, (2000) Counselor, Career Planning and Counseling. M.S., University of Tennessee at Chattanooga, 1984.

Michael L. Rogers, (2000) Computer Programmer/Analyst 1, Computer Services. B.S., University of Tennessee at Chattanooga, 1980.

Blake E. Rougeau, (2003) Advisor, Educational Planning and Advising. B.A., University of SW Louisiana, 1987

Gary R. Rucker, (2003) Specialist, Web Development—Center for Distributed Education. B.S., DeVry Institute of Technology, 1985.

Gregory C. Schuck, (2001) Director, Food Services.

T. Elijah Scott, (2002) Librarian 1, Library Services. M.S., University of Tennessee, 1997.

Tiffany C. Scruggs, (2001) Advisor, Educational Planning and Advising. M.S., University of Tennessee at Chattanooga, 1997.

Robert P. Sefcik, (2002) Designer, Magazine., A.A.S., Chattanooga State Technical Community College, 2001.

Belinda S. Smith, (1998) Counselor, Career Planning and Counseling. M.S., Alabama A & M University, 1982.

Kathrandra D. Smith, (1994) Coordinator, Marketing. M.A., University of North Carolina at Chapel Hill, 1994.

Robin J. Smith, Counselor, Outreach—Community Outreach. B.S., Tennessee Technological University, 1992.

Joyce G. Stakely, (1984) Director, Institutional Development—Institutional Advancement. B.S., Covenant College, 2000.

Benney N. Standifer, (1998) Manager, Computer Lab—Computer Services. B.S., University of Tennessee at Chattanooga, 1991.

Robert R. Steinmetz, (2002) Coordinator, Student Activities—Intramurals. A.S., Chattanooga State Technical Community College, 1998.

Cynthia W. Swafford, (1987) Director, Nursing—Nursing/Allied Health. Ed.D., University of Tennessee, 1992.

Carol Swayze, (2001) Director, Dual Enrollment—Academic Affairs. M.A., Tusculum College, 1992.

Riad (Rod) A. Tawil, (2002) Director, Small Business Development Center—Economic and Community Development. Ph.D., Louisiana State University, 1972.

Pamela P. Temple, (1980) Librarian 3, Library Services. M.L.S., George Peabody College, 1968.

Vickie M. Thomason, (1999) Specialist, Web Services—Center for Distributed Education. B.S., Governor's State University, 2001.

Sheila A. Thompson, (1997) Director, Community Outreach—Community Outreach. B.S., University of Tennessee at Chattanooga, 1987.

Lynda Timmons, (1989) Systems Analyst 1, Computer Services. B.S., University of Tennessee at Chattanooga, 1993.

Sandra D. Townley, (1997) Assistant Vice President, Counseling and Academic Support. M.S., University of Tennessee at Chattanooga, 1982.

Joseph S. (Sam) Vetter, (2001) Coordinator, Recruiting—Community Outreach. B.S., Trevecca Nazarene University, 1999.

Rita Ward-Johnson, (2000) Coordinator, Math Center—Arts and Sciences. B.S., University of Tennessee at Chattanooga, 1996.

Nancy V. Watts, (1997) Director, Pharmacy Technician Program—Arts and Sciences. Pharm.D., Mercer University, 1990.

Melvin J. Williams, (1999) Coach, Men's and Women's Basketball/Outreach Counselor. B.S., Middle Tennessee State University, 1992.

Napoleon Williams, (1993) Assistant Director, Safety/Security—Plant Operations. B.S., University of Tennessee at Chattanooga, 1996.

Sandra B. Williford, (1993) Assistant Librarian 1, Library Services. M.L.I.S., Louisiana State University, 1988.

Sandra J. Wintor, (1997) Assistant Director, Financial Aid. B.S., University of Tennessee at Chattanooga, 1992.

Howard L. Yarbrough, (1973) Professor, Biology; Department Head, Biology and Environmental Science—Arts and Sciences. Ed.D., University of Tennessee, 1986.

Laura Young, (1994) Assistant Librarian 1, Library Services. M.S.L.S., University of North Carolina, 1971.

Honors Faculty

Donald F. Andrews, (1980) Professor, English—Arts and Sciences. Ph.D., University of Tennessee, 1977.

Maria Delourdes Carlone, (2000) Assistant Professor/Coordinator, Spanish—Arts and Sciences. Ph.D., University of Massachusetts, 1999.

James L. Catanzaro, (1990) President; Professor, Philosophy, Western Civilization, Humanities. Ph.D., Claremont Graduate University, California.

R. Foster Chason, (1976) Special Assistant to the President/Professor. D.A., Middle Tennessee State University, 1984.

Carolyn F. Dodson, (1990) Associate Professor, Biology—Arts and Sciences. M.S., Arizona State University, 1970.

T. Scott Douglass, (1991) Professor, English—Arts and Sciences. Ph.D., Florida State University, 1982.

Jennifer M. Duncan, (2001) Instructor, English—Arts and Sciences. M.A., University of South Carolina, 1999.

Denise I. Frank Heinly, (1979) Associate Professor, Art—Arts and Sciences. M.A., University of Tennessee at Chattanooga, 1991; M.Ed., University of Florida, 1977.

Debra S. Jones, (1998) Assistant Professor/Coordinator, Speech—Arts and Sciences. M.S., Texas Christian University, 1978.

Michael D. Krogman, (1999) Associate Professor, Philosophy—Arts and Sciences. Ph.D., University of Tennessee, 1998.

Kathy L. Long, (1988) Associate Professor, Social Sciences—Arts and Sciences. M.S., M.A., Florida State University, 1973, 1974.

J. Jeffrey McEwen, (1995) Honors Coordinator, Associate Professor, Social Sciences—Arts and Sciences. M.A., University of Tennessee, 1995.

Jeffery S. Mendenhall, (2003) Instructor, Speech—Arts and Sciences. M.A., Ball State University, 2001.

Walter Mickulick, (2001) Instructor, Psychology—Arts and Sciences. M.P.A., University of Tennessee at Chattanooga, 1995; M.A., Middle Tennessee State University, 1972.

Deborah J. Rudd, (1987) Associate Professor, English—Arts and Sciences. M.A., University of Tennessee at Chattanooga, 1990.

Donna L. Seagle, (1998) Assistant Professor, Psychology—Arts and Sciences. M.A., Middle Tennessee State University, 1994.

Calista Sprague, (2001) Assistant Professor, Music—Arts and Sciences. M.A., Middle Tennessee State University, 1999.

De'Lara Khalili Stephens, (1997) Assistant Professor, English—Arts and Sciences. M.A., University of Tennessee at Chattanooga, 1997.

William L. Stifler, Jr., (1992) Associate Professor, Writing—Arts and Sciences. M.A., University of Tennessee at Chattanooga, 1991.

Faculty

George W. Abbott, (1981) Intermediate Vocational Teacher, Air Conditioning, Refrigeration, and Heating—TN Technology Center. A.G.E., Chattanooga State Technical Community College, 1988.

Marcia E. Abernathy, (1997) Assistant Professor, Nursing—Nursing/Allied Health. M.S.N., University of Alabama, 1985.

Cinda J. Adams, (1992) Associate Professor, Economics—Arts and Sciences. M.S., University of Illinois at Urbana-Champaign, 1976.

Bertha L. Alford, (1983) Associate Professor, Office Administration—Business and Information Systems. M.Ed., University of Tennessee at Chattanooga, 1985.

S. Paulette Amsler, (2002) Instructor, Real Time Reporting—Business and Information Systems. A.S., Kelsey-Jenney College, 1994.

Truman G. Anderson, (1976) Professor, Management—Business and Information Systems. Ed.D., University of Tennessee, 1980.

Donald F. Andrews, (1980) Professor, English—Arts and Sciences. Ph.D., University of Tennessee, 1977.

S. Kay Andrews, (2003) Associate Professor, Sociology—Arts and Sciences. Ph.D., University of Pittsburgh, 1997.

Ruth I. Armstrong, (2000) Instructor, Psychology—Arts and Sciences. M.S., University of Tennessee at Chattanooga, 1991.

Curtis E. Aukerman, (2001) Instructor/Director, Emergency Medical Services Program—Allied Health. B.S., Lee University, 1996.

Vernon F. Ball, (1978) Professor, English—Arts and Sciences. Ph.D., Ball State University, 1976.

Sherri L. Barnes, (1993) Associate Professor, Mathematics—Arts and Sciences. M.S., University of Tennessee, 1992.

Randall G. Barre, (2002) Assistant Professor, Biology—Arts and Sciences. M.D., Medical College of Virginia, 1971.

Paula Benford, (1987) Instructor, Adult Education—Basic Skills. B.A., University of Tennessee at Chattanooga, 1975.

Cindy D. Birchell, (1993) Instructor, Physical Therapist Assistant—Nursing/Allied Health. A.S., Chattanooga State Technical Community College, 1981.

Michael E. Brennan, (1992) Professor, Chemistry—Arts and Sciences. Ph.D., University of Florida, 1967.

Marilyn B. Brown, (1979) Associate Professor/Department Head, Mathematics—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 1975.

Pamela M. Brune, (2001) Associate Professor, Office Administration—Business and Information Systems. M.S., University of Tennessee, 1989.

Joyce B. Campbell, (1988) Associate Professor, Nursing—Nursing/Allied Health. M.S.N., University of Tennessee, 1982.

Tina R. Cannon, (1993) Associate Professor, Mathematics—Arts and Sciences. M.Ed., Tusculum College, 1993.

2004-06 Faculty

For more information see the "Chattanooga State Digital Directory" online at <http://www.chattanoogaestate.edu/facultypages/Index.asp>

- Deborah T. Cantrell**, (1999) Associate Professor, Mathematics—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 1985.
- Rebecca A. Cantrell**, (1988) Associate Professor, Writing—Arts and Sciences. M.A., University of Tennessee at Chattanooga, 1990.
- Kenneth F. Cardillo**, (1999) Assistant Professor/Coordinator, Music—Arts and Sciences. D.Phil., Oxford Graduate School, 1992.
- Maria Delourdes Carlone**, (2000) Assistant Professor/Coordinator, Spanish—Arts and Sciences. Ph.D., University of Massachusetts, 1999.
- Ben W. Carr, Jr.** (1975) Associate Professor, Aviation—Business and Information Systems. M.Ed., Middle Tennessee State University, 1972.
- Karen W. Castleberry**, (1976) Assistant Professor, Dental Assisting—Nursing/Allied Health. B.S., Covenant College, 1996.
- Terri S. Chambers-Massey**, (2003) Instructor, Nursing—Nursing/Allied Health. M.S., Old Dominion University, 1986.
- Robert O. Chavous, Jr.**, (2001) Instructor, Maintenance Technology—Engineering, Environmental and Emergency Technologies. B.S.Ag., University of Tennessee, 1982.
- Shirley M. Clark**, (1992) Associate Professor/Program Coordinator, Human Services—Arts and Sciences. M.S.S.W., University of Tennessee, 1978.
- Richard K. Clements**, (1994) Professor, Biology—Arts and Sciences. Ph.D., University of Kentucky, 1995.
- Charles L. Cofer**, (1988) Assistant Professor, Electrical/Electronic Engineering Technology—Engineering, Environmental, and Emergency Technologies. B.S.E., University of Tennessee at Chattanooga, 1986.
- Cheryl D. Coffman**, (2000) Assistant Professor/Program Coordinator, Early Childhood Education—Arts and Sciences. M.E., Southwestern Baptist Theological Seminary, 1976.
- Gay D. Cohen**, (1991) Associate Professor, Nursing—Nursing/Allied Health. M.S.N., University of Tennessee, 1981.
- Peter A. Collins**, (1983) Associate Professor, Mathematics—Arts and Sciences. M.A., Eastern Michigan University, 1971.
- Brian D. Cotter**, (2003) Instructor, English—Arts and Sciences. M.A., University of Tennessee at Chattanooga, 1997.
- John E. Cousino**, (1991) Associate Professor, Respiratory Care—Nursing/Allied Health. M.A., University of South Florida, 1986.
- Albert R. Covington**, (1983) Senior Vocational Teacher, Industrial Electronics—TN Technology Center. B.S., University of New York, 1986.
- Nanci S. Cross**, (2003) Instructor/Program Director, Health Information Management—Nursing/Allied Health. B.A., Trevecca University, 1996.
- Jarvis G. Dean, Jr.**, (1979) Associate Professor, Accounting—Business and Information Systems. M.S., University of Tennessee, 1963.
- Kenneth J. DeLorey**, (2000) Instructor, Machine Tool Technology—TN Technology Center. SPC License, KLC Group, 1992; MFG E Plant Manager License, Management Institute, 1974; Mechanical Engineering and Mechanical Drafting License, Lowell University, 1969.
- Gregory F. Dennis**, (2003) Assistant Professor, Physical Education—Arts and Sciences. M.S., Baylor University, 1989.
- H. Diane Dixon**, (2002) Instructor, Legal Assisting—Business and Information Systems. J.D., University of Memphis, 1980.
- Carolyn F. Dodson**, (1990) Associate Professor, Biology—Arts and Sciences. M.S., Arizona State University, 1970.
- T. Scott Douglass**, (1991) Professor, English—Arts and Sciences. Ph.D., Florida State University, 1982.
- Jennifer M. Duncan**, (2001) Instructor, English—Arts and Sciences. M.A., University of South Carolina, 1999.
- Linda S. Edwards**, (1985) Associate Professor, Reading—Arts and Sciences. M.S., University of Tennessee at Chattanooga, 1982.
- Ann R. Ehmling**, (1988) Assistant Professor, Emergency Medical Services—Nursing/Allied Health. B.S., Covenant College, 1993.
- Angela Jordan Everett**, (1997) Assistant Professor, Mathematics—Arts and Sciences. M.S., Middle Tennessee State University, 1997.
- Joseph P. Everett**, (1976) Professor, Mathematics—Arts and Sciences. Ed.D., Florida State University, 1972.
- Lisa L. Evers**, (1998) Associate Professor, Nursing—Nursing/Allied Health. M.S., Southern Illinois University, 1994.
- Jerry L. Faulkner**, (1994) Professor/Acting Department Head, Environmental Science—Arts and Sciences. Ph.D., University of Tennessee, 1994.
- D. Clay Ferguson**, (1976) Associate Professor, Management—Business and Information Systems. M.Ed., University of Tennessee at Chattanooga, 1974.
- Arlene Flerchinger**, (2000) Instructor, Information Systems—Business and Information Systems. M.A., University of Denver, 1974.
- Toni W. Fountain**, (1992) Associate Professor, Mathematics—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 1991.
- Jean H. Gammon**, (1981) Associate Professor, Reading—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 1977.
- James E. Garner**, (1983) Associate Professor, Mathematics—Arts and Sciences. M.A., University of Mississippi, 1964.
- Gary Gilreath**, (2002) Instructor, Mathematics—Arts and Sciences. M.S., Rensselaer Polytechnic Institute, 1972.
- George G. Glass, Jr.**, (1977) Associate Professor, Mathematics, Environmental Science—Arts and Sciences. M.S., North Carolina State University, 1974.
- Hisel H. Gobble**, (1978) Associate Professor, Accounting—Business and Information Systems. M.B.A., East Tennessee State University, 1974.
- R. Clifford Goodlet**, (1998) Instructor, Office Administration—Business and Information Systems. B.S., Tennessee Wesleyan College, 1972.
- E. Frank Gordy, Jr.**, (2002) Instructor, Mathematics—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 1991.
- Efrem K. Graham**, (1997) Assistant Professor, Communications/Broadcasting—Business and Information Systems. M.S., Columbia University, 1994.
- Donald W. Green**, (1986) Intermediate Vocational Teacher, Air Conditioning, Refrigeration, and Heating—TN Technology Center. Certificate, Chattanooga State Technical Community College, 1984; A.B.S., McKenzie College, 1977.
- Flavius L. Green (Wilkie)**, (1999). Assistant Professor/Coordinator, Physical Education—Arts and Sciences. M.Ed., Middle Tennessee State University, 1970.
- Jason K. Green**, (2001) Instructor, French—Arts and Sciences. M.A., University of Missouri at Columbia, 1999.
- Yolanda J. Green**, (1988) Associate Professor, Nursing—Nursing/Allied Health. M.S.N., University of Alabama in Birmingham, 1983.
- David E. Guinn**, (1998) Vocational Instructor, Heating, Air Conditioning, and Refrigeration—TN Technology Center. Certificate, Chattanooga State Technical Community College, 1993.
- Hennie Gunter**, (1988) Associate Professor, Nursing—Nursing/Allied Health. M.S.N., University of Tennessee, 1981.
- M. David Haddock, Jr.**, (1979) Professor, Accounting—Business and Information Systems. Ed.D., Auburn University, 1976.
- Brian P. Hale**, (2003) Assistant Professor, English—Arts and Sciences. Ph.D., University of South Carolina, 1993.
- Sharon E. Hall**, (1988) Assistant Professor, Respiratory Therapy—Nursing/Allied Health. Mount Marty College, 1978.
- Sandra J. Hamlet**, (2003) Instructor, Early Childhood Education—Arts and Sciences. M.Ed., Freed Hardeman University, 1993.
- Lucy W. Hampton**, (1995) Vocational Teacher, Surgical Technology—TN Technology Center. B.S.N., University of Tennessee at Chattanooga, 1983.
- Jody Arnold Hancock**, (1993) Assistant Professor/Program Director, Diagnostic Medical Sonography—Nursing/Allied Health. B.S., Tennessee Wesleyan, 1994.
- Darrin J. Hasevoort**, (2000) Instructor, Music—Arts and Sciences. M.A., Bob Jones University, 1996.
- Kelley M. Hayton**, (2001) Instructor, English—Arts and Sciences. M.A., Eastern Michigan University, 2001.
- Betsy K. Headrick**, (1983) Associate Professor, Information Systems; Advertising Arts, Information Systems, Mass Communications, and Office Administration—Business and Information Systems. M.S., University of Tennessee at Chattanooga, 1992.
- Denise I. Frank Heinly**, (1979) Associate Professor, Art—Arts and Sciences. M.A., University of Tennessee at Chattanooga, 1991; M.Ed., University of Florida, 1977.
- William J. Helseth**, (1980-83, 1992) Associate Professor/Coordinator, Art—Arts and Sciences. M.S., Florida State University, 1976; M.F.A., Pennsylvania State University, 1973.
- Joel B. Henderson**, (1998) Assistant Professor, English—Arts and Sciences. M.S., Harding University, 1993.
- Alan D. Herweyer**, (1989) , Associate Professor, Mathematics/Department Head, Social and Behavioral Sciences—Arts and Sciences. M.A.T., Calvin College, 1985; M.S., Purdue University, 1973.
- Courtney H. Hicks**, (2004) Teacher, Licensed Practical Nursing—TN Technology Center. A.A.S, Chattanooga State Technical Community College, 1996.
- Marian A. Higginbotham**, (1999) Associate Professor, Mathematics—Arts and Sciences. M.Ed., Alabama State University, 1990.

2004-06 Faculty

For more information see the “Chattanooga State Digital Directory” online at <http://www.chattanoogastate.edu/facultypages/Index.asp>

- C. Bruce Hilbert**, (2000) Instructor, Mathematics—Arts and Sciences. B.S., Samford University, 1998.
- Sara J. Hill (Jackie)**, (1990) Associate Professor, Early Childhood Education—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 1987.
- Stuart R. Hilton**, (1989) Associate Professor, CAD/CAM Engineering Technology—Engineering, Environmental, and Emergency Technologies. M.S., University of Tennessee at Chattanooga, 1994.
- Constance C. Hitchcock**, (1999) Assistant Professor, Management—Business and Information Systems. M.B.A., Vanderbilt University, 1987.
- Gregory D. Holcomb**, (1999) Associate Professor, Electrical/Electronic Engineering Technology—Engineering, Environmental, and Emergency Technologies. M.S., University of Tennessee, 1987.
- Max T. Holland**, (1989) Senior Vocational Teacher, Industrial Electricity—TN Technology Center. M.S., University of Southern Mississippi, 1965.
- Mary Lee Hopson**, (2002) Vocational Teacher, Licensed Practical Nursing—TN Technology Center. RN, Baroness Erlanger Hospital, 1980.
- Patricia A. Humble**, (2003) Instructor, Information Systems—Business and Information Systems. A.S., Chattanooga State Technical Community College, 1997.
- Don Hunt**, (1990) Vocational Instructor, Commercial Truck Driving—TN Technology Center. Certified Commercial Truck Driving Instructor, 1976.
- Alexis D. Jenkins**, (1988) Senior Vocational Teacher, Medical Office Assisting—TN Technology Center. B.S., University of Tennessee Medical Units, 1970.
- Diane P. Johnson**, (2000) Assistant Professor, Nursing—Nursing/Allied Health. M.S., College of St. Francis, 1996.
- James C. Johnson**, (1996) Vocational Instructor, Machine Tool Technology—TN Technology Center. Certificate, Chattanooga State Technical Community College, 1991.
- William A. Johnson**, (1990) Professor/Program Director, Dental Assisting & Hygiene—Nursing/Allied Health. D.M.D., University of Oregon Dental School, 1969.
- Donna M. Johnston**, (2002) Instructor, Health Information Technologies—Nursing/Allied Health. A.S., Chattanooga State Technical Community College, 1983.
- Debra S. Jones**, (1998) Assistant Professor/Coordinator, Speech—Arts and Sciences. M.S., Texas Christian University, 1978.
- Jimmy E. Jones**, (1996) Vocational Teacher, Marine Engine Technology—TN Technology Center. A.A.S., Chattanooga State Technical Community College, 1995.
- Wayne C. Jones**, (1981) Professor, Electrical/Electronic Engineering Technology—Engineering, Environmental, and Emergency Technologies. Ed.D., University of Tennessee, 1977.
- Patricia W. Kato**, (1980) Associate Professor, Writing—Arts and Sciences. M.A., East Tennessee State University, 1980.
- Pamela J. Keystone**, (2001) Assistant Professor, Information Systems—Business and Information Systems. M.B.A., University of Tennessee at Chattanooga, 1995.
- Denis O. Kiely**, (2000) Instructor, English—Arts and Sciences. M.A., Western Kentucky University, 1983.
- Shirley A. Kilgore**, (1985) Associate Professor, Nursing—Nursing/Allied Health. M.S.N., University of Tennessee, 1986.
- Virginia M. Kilgore**, (1995) Vocational Instructor, Cosmetology—TN Technology Center. Cosmetologist Instructor License, Tennessee State Board of Cosmetology, 1993.
- Paula R. Kinchen**, (2000) Instructor, English—Arts and Sciences. M.A., Ohio University, 1996.
- Michael D. Krogman**, (1999) Associate Professor, Philosophy—Arts and Sciences. Ph.D., University of Tennessee, 1998.
- Sara E. Kuhn**, (1980) Professor, English—Arts and Sciences. Ed.D., University of Georgia, 1979.
- Richard K. Lamerand**, (1980-87, 1992) Interim Assistant Dean/Department Head; Associate Professor, Pre-Engineering—Engineering, Environmental, and Emergency Technologies. M.S., University of Houston, 1977.
- Lori Lammert**, (2003) Instructor, Spanish—Arts and Sciences. M.A., Vanderbilt University, 2002.
- Billie S. Lane**, (1989) Associate Professor, Biology—Arts and Sciences. M.S., Louisiana State University, 1966.
- K. Labron Lawson**, (1989) Senior Intermediate Teacher, Auto Body Repair—TN Technology Center. B.S., Tennessee Wesleyan College, 1997; ASE Certified; ICAR Certified, Unibody.
- Douglas M. Ledford**, (1997) Vocational Teacher, Surgical Technology—TN Technology Center. Certified Surgical Technologist, 1984; B.S., Tennessee Temple University, 1981.
- Lisa Legg**, (1993) Assistant Professor/Program Director, Radiation Therapy—Nursing/Allied Health. B.S., Covenant College, 1994.
- Charles L. Lewis**, (1975) Associate Professor, Study Skills—Arts and Sciences. Ed.S., Mississippi State University, 1971.
- Marie P. Loisy**, (1999) Associate Professor, Nursing—Nursing/Allied Health. M.S., Michigan State University, 1997.
- Kathy L. Long**, (1988) Associate Professor, Social Sciences—Arts and Sciences. M.S., M.A., Florida State University, 1973, 1974.
- Sandra K. Lowery**, (1996) Associate Professor, Nursing—Nursing/Allied Health. M.S., Indiana University, 1978.
- Beatrice R. Lyons**, (1974) Associate Professor/Program Coordinator, American Sign Language—Arts and Sciences. M.S., University of Tennessee, 1965.
- Judy L. Mabe**, (2000) Assistant Professor, Dental Hygiene—Nursing/Allied Health. B.S., University of Tennessee at Martin, 1974.
- Warren C. Mackey**, (1976) Professor, History—Arts and Sciences. D.A., Middle Tennessee State University, 1980.
- Mahan, Charles**, (2003) Associate Professor, English—Arts and Sciences. M.A., University of Kentucky, 1973.
- Angie P. Maida**, (2002) Instructor, Dental Hygiene—Nursing/Allied Health. M.Ed., University of Louisville, 1998.
- Teresa T. Marcus**, (1998) Assistant Professor, Dietary Manager—Arts and Sciences. M.S., University of Tennessee, 1974.
- Terri S. Chambers-Massey**, (2003) Instructor, Nursing—Nursing and Allied Health. M.S., Old Dominion University, 1986.
- J. Jeffrey McEwen**, (1995) Associate Professor, Social Sciences—Arts and Sciences. M.A., University of Tennessee, 1995.
- Carolynn A. McMahan**, (1999) Assistant Professor, Management—Business and Information Systems. M.B.A., University of Tennessee at Chattanooga, 1995.
- Grace G. Medley**, (1988) Vocational Intermediate Teacher, Practical Nursing—TN Technology Center. M.S., University of Tennessee at Chattanooga, 1987.
- Jeffery S. Mendenhall**, (2003) Instructor, Speech—Arts and Sciences. M.A., Ball State University, 2001.
- Walter Mickulick**, (2001) Instructor, Psychology—Arts and Sciences. M.P.A., University of Tennessee at Chattanooga, 1995; M.A., Middle Tennessee State University, 1972.
- Carolyn S. Miller**, (1989) Associate Professor, Reading—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 1976.
- Cheryl L. Miller**, (1988) Professor, Nursing—Nursing/Allied Health. Ed.D., University of Tennessee, 2001.
- Donna H. Miller**, (2002) Assistant Professor, Biology—Arts and Sciences. M.S., University of Central Florida, 1992.
- Stuart B. Miller**, (1982) Senior Vocational Teacher, Landscaping and Turf Management—TN Technology Center. Vocational Education, UCF, 1981; M.A.T., Rollins College, 1976.
- Christine Moniyung**, (1999) Associate Professor, Nursing—Nursing/Allied Health. M.S., Andrews University, 1997.
- Gay M. Moore**, (2000) Assistant Professor, Human Services—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 1990.
- M. Jeffrey Morris**, (1996) Associate Professor, Advertising Arts—Business and Information Systems. B.S., Middle Tennessee State University, 1976.
- Roy H. Morris**, (1992) Vocational Instructor, Automotive Technology—TN Technology Center. Master ASE Certified in eight automotive fields, GM Master Technician.
- Ioannis (John) N. Mousourakis**, (2003) Instructor, Spanish—Arts and Sciences. J.D., Woodrow Wilson School of Law, 1980.
- Charles H. Nabors**, (2002) Instructor, Commercial Truck Driving—TN Technology Center. Certified Commercial Truck Driving Instructor, 1997.
- Samuel J. Nalley**, (1971) Professor, Physics—Arts and Sciences. Ph.D., University of Tennessee, 1971.
- Shirley F. Nelson**, (1990) Associate Professor, English—Arts and Sciences. M.A., Middle Tennessee State University, 1978.
- Dean Alan Nichols**, (2001) Assistant Professor, Music—Arts and Sciences. D.M.A., University of Kentucky, 2000.
- Edward C. Nichols**, (1993) Professor/Coordinator, Mathematics—Arts and Sciences. Ph.D., University of Tennessee, 1986.
- R. Duane Nickols**, (1979) Associate Professor, Civil Engineering Technology—Engineering, Environmental, and Emergency Technologies. B.S.C.E., University of Kentucky, 1971.
- Patricia Ochoa**, (1998) Assistant Professor, Physical Education—Arts and Sciences. Ph.D., University of Alabama, 1999.
- T. Gail Ownby-Hughes**, (2000) Assistant Professor, Emergency Services Technology—Engineering, Environmental, and Emergency Technologies. M.S., University of Tennessee, 1999.

2004-06 Faculty

For more information see the "Chattanooga State Digital Directory" online at <http://www.chattanoogastate.edu/facultypages/Index.asp>

- Merrill B. Parker**, (1976) Professor, Information Systems—Business and Information Systems. Ph.D., Peabody College of Vanderbilt University, 1979.
- Barbara Y. Partridge**, (2003) Instructor, Radiologic Technology—Nursing/Allied Health. B.S., Covenant College, 1997.
- Claire M. Peacock**, (1988) Associate Professor, Mathematics—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 1995.
- Janet E. Pickard**, (2002) Assistant Professor, Information Systems—Business and Information Systems. M.S., University of Tennessee at Chattanooga, 1988.
- Anita Polk-Conley**, (1989) Associate Professor, Mathematics—Arts and Sciences. M.S., University of Tennessee Space Institute, 1986.
- Larry Ponder**, (1979) Vocational Teacher, Welding Technology—TN Technology Center. Certified Combination Welder, 1976; Diploma, Chattanooga Area Vocational Technical School, 1976.
- Kathleen M. Puri**, (1992) Associate Professor, Nursing—Nursing/Allied Health. M.S.N., University of Connecticut, 1987.
- Azar D. Raiszadeh**, (1993) Associate Professor, Mathematics—Arts and Sciences. Ed.D., University of Tennessee, 1997.
- Larry J. Ramsey**, (1984) Senior Vocational Teacher, Industrial Electronics—TN Technology Center. M.S., University of Tennessee, 1989.
- Margaret S. Ramsey**, (1988) Associate Professor, Mathematics—Arts and Sciences. M.M., University of Tennessee, 1991.
- Paul A. Ray**, (1995) Associate Professor, Legal Assisting—Business and Information Systems. J.D., University of Arkansas School of Law, 1988.
- Ronald W. Reese**, (1983) Assistant Professor, Electrical/Electronic Engineering Technology—Engineering, Environmental, and Emergency Technologies. B.S.E.E., University of Tennessee, 1969.
- Mitchell A. Rhea**, (2002) Assistant Professor, Chemistry—Arts and Sciences. Ph.D., University of Tennessee, 1990.
- Joyce C. Rhoton**, (1977) Associate Professor, Biology—Arts and Sciences. M.S., East Tennessee State University, 1969.
- Jeffrey L. Rinkel**, (1995) Associate Professor, Speech—Arts and Sciences. M.A., University of Northern Iowa, 1982.
- Paul A. Robertson**, (1983, 1999) Associate Professor, Mathematics—Arts and Sciences. M.M., University of Tennessee, 1994.
- Kathleen S. Rose**, (1996) Assistant Professor, Nursing—Nursing/Allied Health. M.S., University of Tennessee at Chattanooga, 1996.
- Leesa A. Ross**, (1996) Assistant Professor, Nuclear Medicine Technology—Nursing/Allied Health. B.S., Covenant College, 1997.
- McIver Rountree, Jr.**, (1987) Assistant Professor/Program Director, Respiratory Care—Nursing/Allied Health. B.S., Medical College of Georgia, 1977.
- Deborah J. Rudd**, (1987) Associate Professor, English—Arts and Sciences. M.A., University of Tennessee at Chattanooga, 1990.
- Susan E. Ruta (Beth)**, (1987) Instructor, Chemical Technology—Engineering, Environmental, and Emergency Technologies. B.S., University of Tennessee at Chattanooga, 1986.
- George R. Ryan**, (1996) Assistant Professor, Mathematics—Arts and Sciences. M.S., California State University, 1986.
- Andrea Sanders**, (2003) Associate Professor, English—Arts and Sciences. Ph.D., University of Chicago, 1996.
- Margery K. Sanders**, (1997) Associate Professor, Radiologic Technology—Nursing/Allied Health. M.B.A., University of Tennessee at Chattanooga, 1985.
- Olga N. Santos**, (2003) Teacher, Business Systems Technology—TN Technology Center. M.S., University of Tennessee at Chattanooga, 1993.
- Rose N. Scalise**, (1997) Assistant Professor, Office Systems—Business and Information Systems. B.S., University of Pittsburgh, 1974.
- Ann D. H. Schide**, (2000) Assistant Professor, Nursing—Nursing/Allied Health. B.S., Vanderbilt University, 1974.
- Anna F. (Franci) Schoner**, (2001) Instructor, English—Arts and Sciences. M.A., Dallas Theological Seminary, 1996.
- Marsha M. Schoonover**, (1983) Associate Professor, Mathematics—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 1981.
- Randolph C. Schulte**, (1995) Assistant Professor/Department Head, English—Arts and Sciences. M.A.T., Colgate University, 1977.
- Donna L. Seagle**, (1998) Assistant Professor, Psychology—Arts and Sciences. M.A., Middle Tennessee State University, 1994.
- William W. Shifflett**, (1984) Associate Professor, Accounting—Business and Information Systems. M.B.A., University of Tennessee at Chattanooga, 1983.
- Joyce Smith**, (1987) Associate Professor, Mathematics—Arts and Sciences. M.Ed., University of Tennessee at Chattanooga, 1997.
- Kimberly W. Smith**, (1997) Assistant Professor, Physical Education—Arts and Sciences. M.S., University of Tennessee, 1988.
- Robert L. Smith**, (1990) Vocational Instructor, Diesel Technology—TN Technology Center. A.S.E. certified in eight automotive fields.
- Roy K. Sofield**, (1998) Associate Professor, Biology—Arts and Sciences. Ph.D., Rutgers University, 1983.
- Laqueta A. Soule**, (1991) Associate Professor, Court Reporting—Business and Information Systems. B.S., University of Alabama, 1998.
- Calista Sprague**, (2001) Assistant Professor, Music—Arts and Sciences. M.A., Middle Tennessee State University, 1999.
- David Stanislawski**, (1994) Professor, Chemistry—Arts and Sciences. Ph.D., University of Wisconsin at Madison, 1978.
- James L. Steele, Jr.**, (1998) Assistant Professor, Management; Department Head, Accounting, Applied Technology, Legal Assisting, and Management—Business and Information Systems. MBA, Vanderbilt University, 1982.
- De'Lara Khalili Stephens**, (1997) Assistant Professor, English—Arts and Sciences. M.A., University of Tennessee at Chattanooga, 1997.
- William L. Stifler, Jr.**, (1992) Associate Professor, Writing—Arts and Sciences. M.A., University of Tennessee at Chattanooga, 1991.
- Ken Storrs**, (1976) Associate Professor, History—Arts and Sciences. M.S., University of Tennessee, 1980.
- Erik G. Stubsten**, (1996) Assistant Professor, Mathematics—Arts and Sciences. B.S., University of Tennessee at Chattanooga, 1994.
- Lisa P. Swift**, (2001) Instructor, English—Arts and Sciences. M.A., East Tennessee State University, 1983.
- Glenda K. Thurman**, (1975) Associate Professor/Program Director, Radiologic Technology—Nursing/Allied Health. M.Ed., Vanderbilt University, 1988.
- Casey Turner**, (2003) Instructor, Auto Body—TN Technology Center. A.A.S., Chattanooga State Technical Community College, 1992.
- Theresa A. Underwood-Lemons**, (1995) Associate Professor, Physics/Department Head, Physical Sciences—Arts and Sciences. Ph.D., University of Tennessee, 1990.
- Cynthia R. Veach**, (1988) Associate Professor, Dental Hygiene—Nursing/Allied Health. M.Ed., University of Tennessee at Chattanooga, 1992.
- Kathy Veal**, (1995) Vocational Teacher, Practical Nursing—TN Technology Center. Diploma, Baroness Erlanger School of Nursing, 1977.
- Margaret B. Venable**, (1981) Assistant Professor, Biology—Arts and Sciences. M.S., Auburn University, 1976.
- Hugh W. Vines**, (1983) Intermediate Vocational Teacher, Industrial Electricity—TN Technology Center. A.G.E., Chattanooga State Technical Community College, 1991; Journeyman electrician, 1972.
- Vicki L. Vonschaaf**, (1989) Senior Vocational Teacher, Practical Nursing—TN Technology Center. B.S., University of Tennessee at Chattanooga, 1981.
- Duane J. Walker**, (1999) Vocational Instructor, Automotive Technology—TN Technology Center. Auto Mechanics Certificate, Athens Area Vocational School, 1967; ASE Certified Master Automotive Technician.
- Lewis A. Wallace**, (1988) Associate Professor, Advertising Arts—Business and Information Systems. M.F.A., University of Georgia, 1970.
- James V. Ware**, (2001) Instructor, Mechanical Engineering Technology—Engineering, Environmental and Emergency Technologies. B.S.E., University of Tennessee at Chattanooga, 1993.
- Laura P. Warren**, (1984) Associate Professor/Program Director, Physical Therapist Assistant Program—Nursing/Allied Health. M.S., University of Tennessee, Memphis, 1996.
- Charlotte G. Webb**, (2004) Teacher, Licensed Practical Nursing—TN Technology Center. A.A.S., Chattanooga State Technical Community College, 1998.
- Dorothy T. Weathersby**, (1981) Professor/Coordinator, English—Arts and Sciences. Ed.D., University of Tennessee, 1975.
- Jill H. Wentworth**, (2003) Instructor, Computer Operations—TN Technology Center. B.S., University of Tennessee Knoxville, 1981.
- Mary E. White (Libby)**, (1996) Assistant Professor, Mathematics—Arts and Sciences. M.S., University of Tennessee at Chattanooga, 1999.
- Mark W. Wood**, (1992) Associate Professor, Art—Arts and Sciences. M.F.A., Yale University, 1987.
- Jane M. Yantis**, (1984-86, 1988) Associate Professor, Biology—Arts and Sciences. M.S., Cornell University, 1984.
- Dusty M. York**, (2003) Instructor, Nuclear Medicine—Nursing/Allied Health. B.S., Medical College of Georgia, 2000.
- James R. Zimmer**, (1999) Assistant Professor, Mathematics—Arts and Sciences. M.S., Bob Jones University, 1977.



Chattanooga State Technical Community College Official Bulletin, Volume XXIX, January 2004 Revised Edition

Chattanooga State Technical Community College does not discriminate on the basis of race, sex, color, religion, national origin, age, disability or veteran status in provision of educational programs and services of employment opportunities and benefits. This policy extends to both employment by and admission to Chattanooga State Technical Community College.

Chattanooga State Technical Community College does not discriminate on the basis of race, sex, or disability in its education programs and activities pursuant to the requirements of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) of 1990.

Inquiries and charges of violation concerning Title VI, Title IX, Section 504, ADA or the Age Discrimination in Employment Act (ADEA) or any of the other above referenced policies should be directed to the College's Affirmative Action

Officer. Requests for accommodation of a disability should be directed to the ADA Coordinator at Chattanooga State Technical Community College.

Chattanooga State Technical Community College is one of 45 institutions in the Tennessee Board of Regents system, the seventh largest system of higher education in the nation. The Tennessee Board of Regents is the governing board for this system which is comprised of six universities, thirteen community colleges, and twenty-six area technology centers. The TBR system enrolls more than 80 percent of all Tennessee students attending public institutions of higher education. Crime statistics, rate, and institutional security policies and procedures are available upon request.

This catalog is intended for information purposes only. Requirements, rules, procedures, courses and informational statements set forth herein are subject to change. Notice of

changes will be conveyed to duly enrolled students and other appropriate persons at the time such changes are effected. The period during which the degree requirements set forth in this catalog shall remain in effect, subject to changes provided herein, shall not exceed five (5) years from the beginning of the Fall 2004 academic term.



Publication Number 11-67-65100-14-1/04/19,000 copies/mktg/jdd

A A, see “Advertising Arts”	AP Credit.....50
AB, see “Auto Body Repair”	Appeals
ABE, see “Adult Education”	Academic Suspension54
AC, see “Air Conditioning and Refrigeration”	Financial Aid60
Academic Calendar for 2004-05.....6	Grade56
Academic Fresh Start.....52	Industrial Technology Suspension34
Academic Honors.....53,63	Applicable Catalog, see “Graduation”
Academic Inventory, see “Academic Programs”	Application for AdmissionLast Insert
Academic Load.....53	Application for Graduation, see “Graduation”
Academic Performance Scholarship, see “Student Aid”	Applied Technology Major9,34
Academic Probation/Suspension.....54	ART, see “Art”
Academic Programs.....45-46	Art
Academic Regulations.....52-59	Course Descriptions68-69
Academic Retention Policy (Industrial Technology Division)34	Major, see “Transfer Programs”
Academic Retention Standards	See also “Graphic Design”
for Credit.....53-54	Art Education, see “Transfer Programs”
for Financial Aid60	Articulation Agreements
for Industrial Technology.....34	Industrial Technology.....34
Academic Suspension.....34,54	Transfer30
Academic Terminology.....5	Associate Degree (Minimum Requirements)8,30
Accounting	Career Programs.....8
Course Descriptions68	Transfer Programs.....30
Major, see “Accounting Technology” and “Transfer Programs”	Associate of Applied Science Degree.....8,28,45-46
Accounting Technology Major.....9	Associate of Arts Degree28,30,45-46
Accreditations.....2	Associate of Science Degree28,30,45-46
ACE Credit.....51	ASTR, see “Astronomy”
ACT47	Astronomy Course Descriptions69
Adaptive Computer Lab, see “Disabilities Support Services”	Athletics62
Adaptive Physical Education91	Attendance.....34,54
Add Deadline54	Audit50
Adding a Course.....54	Auto Body Repair
Administrative Assistant, see “Certificates of Advancement”	Concentration in Applied Technology9,34
Administrative/Professional Staff.....98-103	Course Description.....68
Admission Application.....Last Insert	Technical Certificate of Completion Diploma.....34
Admissions Information.....47-52	Automated Controls
Adult Education/GED62	Concentration in Electrical/Electronic Engineering Technology.....15
Advanced Magnetic Resonance Imaging, see “Certificates of Advancement”	See also “Certificates of Advancement”
Advanced Patient Care and Management, see “Certificates of Advancement”	Automotive Technology
Advanced Placement (AP) Credit.....50	Concentration in Applied Technology9,34
Advertising Arts, see “Graphic Design”	Course Description.....69
Advisement, see “Educational Planning and Advisement”	Technical Certificate of Completion Diploma.....34
African American Grant, see “Student Aid”	AV, see “Aviation”
Air Conditioning and Refrigeration	Aviation
Concentration in Applied Technology9, 34	Concentration in Management12
Course Description.....68	Course Descriptions69
Technical Certificate of Completion Diploma.....34	B achelor Degrees, see “Regents Online Degree Programs”
Allied Health, see “Nursing/Allied Health”	Basic Financial Planning, see “Certificates of Advancement”
Alternative Sources of Credit50-51	BIOL, see “Biology”
AM, see “Automotive Technology”	Biology
American Council on Education (ACE)51	Course Descriptions69
American History Requirement31	Major, see “Transfer Programs”
American Sign Language	Board of Regents.....98
Course Descriptions68	Broadcast Captioning
Major, see “Transfer Programs”	Concentration in Realtime Reporting14
	Course Descriptions.....94

- Broadcasting
 Course Descriptions, see “Mass Communications”
 Major, see “Transfer Programs”
- BST, see “Business Systems Technology”
- BU, see “Accounting”
- Business Accounting Courses, see “Accounting”
- Business Administration, see “Transfer Programs”
- Business and Community Development Center62
- Business and Information Systems Department
 Degree Programs9-15
 Technical Certificates
 of Credit9,11,15
 See also “Certificates of Advancement” and “Transfer Programs”
- Business Courses, see “Accounting,” “Advertising Arts,” “Aviation,”
 “Financial Management,” “Financial Planning,” “Information
 Systems,” “Insurance,” “Legal Assisting,” “Management,” “Mass
 Communications,” “Network Management,” “Office Administration,”
 “Real Estate,” “Realtime Reporting”
- Business Law Courses, see “Accounting”
- Business Management Courses, see “Management”
- Business Systems Technology
 Course Description70
 Technical Certificate of Completion Diploma34-35
- CAD**
 Certificates, see “CAD Technology Technical Certificate of Credit”
 Course Descriptions, see “Computer-Aided Design”
 Major, see “CAD/CAM Engineering Technology”
- CAD Technology Technical Certificate of Credit15
- Calculation of Grade Point Average (GPA)55
- Calendar6
- Cardiopulmonary Resuscitation Courses (CPR), see “Physical Education
 Course Descriptions”
- Career Planning62
- Career Programs7-28
- CART Reporting
 Concentration in Realtime Reporting14
 Course Descriptions94
- Catalog, Applicable for Graduation, see “Graduation”
- CD, see “Commercial Truck Driving”
- Center for Distributed Education62
- Certificates
 of Advancement26
 Technical
 of Completion Diploma28,34-37,46
 of Credit8,9,11,15,16,19,20-21,21-22,23
 of Proficiency28,35,46
- Change of Name or Address, see “Change of Status”
- Change of Registration (Drop/Add)54
- Change of Status54
- Chattanooga State Foundation Board Members98
- Chattanooga State Scholarships, see “Student Aid”
- Chattanooga State’s Web Site1
- CHEM, see “Chemistry”
- Chemical Process Operations Technical Certificate of Credit16
- Chemical Technology
 Course Descriptions70
 See also “Certificates of Advancement”
- Chemistry
 Course Descriptions70
 Major, see “Transfer Programs”
- Child Development Center62
- CI, see “Civil Engineering Technology”
- Cisco Network Academy Program Course Descriptions70
- Civil Engineering Technology
 Course Descriptions71
 Major16
- Class Attendance34,54
- Class Cancellation54-55
- Class Load, see “Academic Load”
- Classification of Students55
- CLEP Credit50-51
- Clinical Coding and Reimbursement, see “Certificates of Advancement”
- CNAP, see “Cisco Network Academy Program”
- CO, see “Mass Communications”
- College Level Examination Program (CLEP)50-51
- Commencement Honors53
- Commercial Truck Driving
 Course Description71
 Technical Certificate of Proficiency35
- Communication
 Course Descriptions, see “Mass Communications”
 Major, see “Transfer Programs”
- COMPASS48,64
- Computed Tomography
 Course Descriptions71
 See also “Certificates of Advancement”
- Computer-Aided Design
 Certificates, see “CAD Technology Technical Certificate of Credit”
 Course Descriptions71-72
- Computer-Aided Drafting/Design, see “Computer-Aided Design”
- Computer Courses, see “Information Systems” and “Network
 Management”
- Computer Network Support, see “Certificates of Advancement”
- Computer Operations Technology
 Course Description72
 Technical Certification of Completion Diploma35
- Computer Programming, see “Information Systems”
- Computer Repair, see “Industrial Electronics”
- Computer Science, see “Information Systems”
- Computer Systems
 Concentration in Electrical/Electronic Engineering Technology16
 See also “Certificates of Advancement”
- Construction, see “Civil Engineering Technology”
 See also “Certificates of Advancement”
- Continuing Education, see “Business and Community Development Center”
- Co-op, see “Cooperative Education”
- Cooperative Education
 Course Descriptions72
 Credit55
 See also, “Placement and Cooperative Education”
- Cosmetology
 Concentration in Applied Technology8,34
 Course Description72
 Technical Certificate of Completion Diploma35
- Cost, see “Financial Information”
- COT, see “Computer Operations Technology”
- Counseling Center62
- Course Abbreviations Index65-66
- Course Add Deadline54
- Course Delivery Types67
- Course Descriptions65-96
- Course Drop Deadline54

- Course Load, see “Academic Load”
- Course Repeat56
- Course Substitutions55
- CP, see “Cooperative Education”
- CPR, see “Physical Education Course Descriptions”
- Creative Writing Courses, see “English”
- Credit by Examination50-51
- Credit for Life Experience51
- Credit Load, see “Academic Load”
- Credit, Military Service.....51
- Criminal Justice Consortium with Cleveland State32
- CS, see “Information Systems”
- CT, see “Chemical Technology”
- Customer Service, see “Certificates of Advancement”
- CY, see “Cosmetology”
- D**A, see “Dental Assisting”
- DD, see “Computer-Aided Design”
- Deadlines (Drop/Add).....54
- Dean’s List53
- Degree Requirements (Minimum)
- Career Programs.....8
- Transfer Programs.....29-32
- Degree Seekers (Admissions).....47-52
- Degrees Offered45-46
- Dental Assisting
- Course Descriptions72
- See also “Certificates of Advancement”
- Dental Hygiene
- Course Descriptions72
- Major20
- Developmental Studies, see “Transitional Studies”
- DH, see “Dental Hygiene”
- Diagnostic Medical Sonography
- Course Descriptions73
- Technical Certificate of Credit.....20-21
- Diesel Equipment Mechanics
- Concentration in Applied Technology9,34
- Course Description.....73
- Technical Certificate of Completion Diploma35
- Dietary Manager
- Course Descriptions73
- See also “Certificates of Advancement”
- Diplomas55
- Disabilities Support Services63
- Dishonored Checks61
- Distance Education, see “Center for Distributed Education”
- DM, see “Diesel Equipment Mechanics”
- Double Certificate57
- Double Concentration57
- Double Degree.....56
- Double Major57
- Drafting, see “Computer-Aided Design”
- Drama, see “Theatre”
- Drop/Add.....54
- Drop Deadline54
- DSPM, see “Mathematics”
- DSPR, see “Reading”
- DSPS, see “Psychology”
- DSPW, see “English”
- Dual Enrollment.....49-50
- DuPont
- Course Descriptions, see “Electrical/Electronic Engineering Technology (DuPont)” and “Mechanical Engineering Technology (DuPont)”
- Customized certificates, see “Certificates of Advancement”
- E**A, see “Emergency Medical Services”
- Early Admission.....49-50
- Early Childhood Education
- Course Descriptions.....73-74
- Major.....24-25
- See also “Transfer Programs”
- EC, see “Economics”
- ECED, see “Early Childhood Education”
- Ecolonomics, see “Environmental Science”
- E-commerce Technical Certificate of Credit9-10
- Economics
- Course Descriptions74
- Major, see “Transfer Programs”
- ED, see “Education”
- Education
- Course Descriptions74
- Major, see “Transfer Programs”
- Educational Planning and Advisement63
- EE, see “Electrical/Electronic Engineering Technology”
- EG, see “Engineering Transfer (Pre-Engineering)”
- Electrical/Electronic Engineering Technology
- Course Descriptions74-75
- Major, see
- Automated Controls Concentration15
- Computer Systems Concentration.....16
- Networking Technology Concentration19
- See also “Certificates of Advancement”
- Electrical/Electronic Engineering Technology (DuPont) Course Descriptions.....75
- Electrician, see “Industrial Electricity”
- Electricity/Electronics Technology, see “Certificates of Advancement”
- Electro-Mechanical, see “Certificates of Advancement”
- Electronics, Industrial, see “Industrial Electronics”
- Elementary Education, see “Transfer Programs”
- EMT, see “Emergency Medical Services”
- Emergency Medical Care Concentration in Emergency Services Technology17
- Emergency Medical Services
- Course Descriptions75
- See also “Certificates of Advancement”
- Emergency Service Supervision and Administration Concentration in Emergency Services Technology17
- Emergency Services Technology Major, see
- Emergency Medical Care Concentration17
- Emergency Service Supervision and Administration Concentration....18
- Fire Suppression Concentration18
- End User Support Concentration in Information Systems Technology .10-11
- Engineering Technology
- Course Descriptions.....75-76
- See also “Civil Engineering Technology,” “Manufacturing Engineering Technology,” “Mechanical Engineering Technology”
- See also “Certificates of Advancement”
- Engineering, Environmental, and Emergency Technologies Department
- Degree Programs.....15-20
- See also “Certificates of Advancement” and “Transfer Programs”

- Engineering (Transfer)
 Course Descriptions76
 Major, see “Transfer Programs”
- ENGL, see “English”
- English as a Second Language, see “Adult Education”, see also “English”
- English
 Course Descriptions76-77
 Major, see “Transfer Programs”
- English Education, see “Transfer Programs”
- Entrance Deficiencies, Removal of.....31
- Environmental Science
 Course Descriptions77
 Major, see “Transfer Programs”
- ER, see “Industrial Electronics”
- ESC, see “Environmental Science”
- ESL Courses, see “Adult Education”, see also “English”
- ET, see “Engineering Technology”
- Exit Testing57
- Expenses and Fees61
- EZ, see “Electrical/Electronic Engineering Technology (DuPont)”
- F**aculty100-103
- Federal Financial Aid, see “Student Aid”
- Federal Pell Grant, see “Student Aid”
- Federal Plus Loans, see “Student Aid”
- Federal Stafford Loans, see “Student Aid”
- Federal Supplemental Educational Opportunity Grant (FSEOG), see “Student Aid”
- Federal Work Study, see “Student Aid”
- Fees61
 Discounts61
- FI, see “Fire Science”
- Financial Aid, see “Student Aid”
- Financial Information61
- Financial Management Course Descriptions77
- Financial Planning
 Course Descriptions77
 See also “Certificates of Advancement”
- Fine Arts Electives,
 See General Education Requirements39-42
- Fire Science
 Course Descriptions77-78
 Major, see “Emergency Services Technology”
- Fire Suppression Concentration in Emergency Services Technology17-18
- First Time Freshmen47
- FM, see “Financial Management”
- Foreign Language
 Course Descriptions, see “French,” “German,” “Japanese, see ‘Humanities,’ ” “Spanish”
 Electives (General Education).....41
 Major, see “Transfer Programs”
- Foreign Student, see “International Students”
- Forestry, see “Transfer Programs”
- Foundation Board Members, Chattanooga State98
- FP, see “Financial Planning”
- FREN, see “French”
- French
 Course Descriptions78
 Major, see “Transfer Programs”
- Freshman Admission47
- Full-Time Student Credit Load53
- G**ED.....31,47,48,49,59,62,64
 GED Test62,64
 General Education8,30,40-41
- General Information43-64
- General Management Concentration in Management12
- General Office Clerk/Receptionist, see “Certificates of Advancement”
- General Transfer Program.....30-32
- Geography
 Course Descriptions78
 Major, see “Transfer Programs”
- GEOG, see “Geology”
- Geology Course Descriptions78
- GERM, see “German”
- German
 Course Descriptions78
 Major, see “Transfer Programs”
- GO, see “Geography”
- Governance.....98
- GPA, see “Grade Point Average”
- Grade Appeal.....56
- Grade Point Average (GPA)
 Calculation of.....55-56
 for Certificate of Advancement26
 for Degree.....53,57
 for Technical Certificate of Credit57
- Grading Policy34,55-56
- Graduation
 Application and Fee56
 Honors53
 Requirements (General)56-57
 Residency Requirements57
 Testing57
 See also Specific Program Requirements
- Graphic Design Concentration.....10
- Graphic Design Major
 Course Descriptions.....78-79
 Concentration in Graphic Design.....10
 Concentration in Web Design.....10
- Grants, see “Student Aid”
- Greenhouse, see “Landscaping and Turf Management”
- Group Fitness Instruction, see “Certificates of Advancement”
- H**azardous Materials Course Descriptions79
- HE, see “Health Information Management”
- Health and Physical Education
 Course Descriptions, see “Physical Education”
 Major, see “Transfer Programs”
- Health Information Management
 Course Descriptions79-80
 Major21
- Health Physics Course Descriptions80
- Health Science Course Descriptions81
- Health Services Management Concentration in Management12-13
- Hearing Impaired, see “American Sign Language”
- High School Unit Requirements48
- HIST, see “History”

- History
of Chattanooga State44
Course Descriptions81
Major, see “Transfer Programs”
- Honors53,63
Honors Program53,63
Horticulture, see “Landscaping and Turf Management”
How to Apply47-52
How to Read Course Descriptions66
How to Use This Catalog4
- HP, see “American Sign Language”
HR, see “Human Services”
HS, see “Health Science”
HUM, see “Humanities”
Human Services
Course Descriptions81-82
Major25
- Humanities
Course Descriptions82
Electives (General Education)8,30-31,40-41
Major, see “Transfer Programs”
- Humanities Department
See “Transfer Programs”
HVAC, see “Air Conditioning and Refrigeration”
See also “Certificates of Advancement”
Hydraulics/Pneumatics Technology, see “Certificates of Advancement”
HZ, see “Hazardous Materials”
- I**D, see “Industrial Maintenance Mechanics”
IE, see “Industrial Electricity”
IH, see “Industrial Hygiene”
Indebtedness57
- Industrial Electricity
Concentration in Applied Technology9,34
Course Description82
Technical Certificate of Completion Diploma36
- Industrial Electronics
Concentration in Applied Technology9,34
Course Description82
Technical Certificate of Completion Diploma36
- Industrial Maintenance Mechanics
Concentration in Applied Technology9,34
Course Description82
Technical Certificate of Completion Diploma36
- Industrial Maintenance Technology Major18
- Industrial Technology Division
AAS Degree Articulation Agreement34
Academic Retention Policy34
Admission48
Attendance Policy34
Credit for Previous Training52
Programs34-37
- Industrial Technology Student Credit Load53
- Information Systems
Course Descriptions82-83
Major, see
End User Support Concentration10-11
Network Management Concentration11
Programming Concentration11
Technical Certificate of Credit11
See also “Transfer Programs” and “Certificates of Advancement”
- Information Technology Concentration in Professional Studies, see
“Regents Online Degree Programs”
Institutional Work Program, see “Student Aid”
Insurance Course Descriptions83
Interdisciplinary Studies Course Descriptions83
International Students48
Interpreter Training, see “American Sign Language”
Interpreters, see “Disabilities Support Services”
IS, see “Insurance”
IY, see “Interdisciplinary Studies”
- J**apanese, see “Humanities”
Job Skills Development Course Descriptions83
Joint Enrollment, see “Dual Enrollment”
Journalism Major, see “Transfer Programs”
Judicial Reporting
Concentration in Realtime Reporting14
Course Descriptions94
- JS, see “Job Skills Development”
- L**A, see “Legal Assisting” and “Paralegal Studies”
Landscaping and Turf Management
Concentration in Applied Technology9,34
Course Description83
Technical Certificate of Completion Diploma36
Late Registration Fee61
Leadership Courses, see “Humanities,” “Interdisciplinary Studies,”
“Management,” “Psychology”
- Legal Assisting
Course Descriptions83-84
Major, see “Paralegal Studies”
Legal Office Clerk/Receptionist, see “Certificates of Advancement”
Library Services63
- Literature
Course Descriptions, see “English”
Electives (General Education)39-42
- LM, see “Landscaping and Turf Management”
Load, Student Academic, see “Academic Load”
Loans, see “Student Aid”
LP, see “Practical Nursing”
LPN, see “Practical Nursing”
LPN Transition Program22
- M**achine Tool Technology
Concentration in Applied Technology9,34
Course Description84
Technical Certificate of Completion Diploma36
- Magnetic Resonance Imaging
Course Descriptions84
See also “Certificates of Advancement”
Maintenance Technology Course Descriptions84
- Mammography
Course Descriptions84-85
See also “Certificates of Advancement”
- Management
Course Descriptions85
Major, see
Aviation Management Concentration12
General Management Concentration12
Health Services Management Concentration12
Small Business Management Concentration13

- See also “Transfer Programs” and “Certificates of Advancement”
- Mandatory Placement Requirements**48
- Manufacturing Engineering Technology**
- Course Descriptions**86-87
- Concentration in Engineering Technology**.....18
- Marine Engine Technology**
- Concentration in Applied Technology**9,34
- Course Description**.....85
- Technical Certificate of Completion Diploma**.....36
- Marketing**
- Course Descriptions, see “Management”
- Major, see “Transfer Programs”
- Mass Communications**
- Course Descriptions**.....85-86
- Major, see “Transfer Programs”
- MATH**, see “Mathematics”
- Math Placement**.....41
- Mathematics**
- Course Descriptions**86
- Electives (General Education)**.....8,31,41
- Major, see “Transfer Programs”
- Placement**41
- Mathematics and Sciences Department**
- Technical Certificate of Credit**19
- See also “Certificates of Advancement” and “Transfer Programs”
- MD**, see “Mechanical Engineering Technology”
- Mechanical Engineering Technology**
- Course Descriptions**86-87
- Concentration in Engineering Technology**.....19
- Mechanical Engineering Technology (DuPont) Course Descriptions**87
- Mechanics Courses**, see “Automotive Technology,” “Diesel Equipment Mechanics,” “Marine Engine Technology”
- Media Services**63
- Medical Assistant**
- Concentration in Applied Technology**9,34
- Course Descriptions**87
- Technical Certificate of Completion Diploma**.....36-37
- Medical Office Clerk/Receptionist**, see “Certificates of Advancement”
- Medical Records**, see “Health Information Management”
- Medical Terminology Courses**, see “Health Science”
- Medical Transcription**
- Course Descriptions**80
- See also “Certificates of Advancement”
- MG**, see “Management”
- Microcomputer**, see “End User Support”
- Middle College High School**.....50
- Military Service Credit**.....51
- Minority Grant**, see “Student Aid”
- Mission Statement**.....44
- MN**, see “Maintenance Technology”
- MO**, see “Medical Office Assisting”
- MRI**, see “Magnetic Resonance Imaging”
- MT**, see “Machine Tool Technology”
- MUS**, see “Music”
- Music**
- Course Descriptions**88-89
- Major, see “Transfer Programs”
- MY**, see “Mammography”
- MZ**, see “Mechanical Engineering Technology (DuPont)”
- N**
- Name Change**, see “Change of Status”
- Native American Grant**, see “Student Aid”
- Natural Science**
- Course Descriptions, see “Astronomy,” “Biology,” “Chemistry,” “Environmental Science,” “Geology,” “Physical Science,” “Physics”
- Electives (General Education)**8,31,40-41
- ND**, see “Dietary Manager”
- Network Management**
- Concentration in Information Systems Technology**.....11
- Course Descriptions**89
- See also “Certificates of Advancement”
- Networking Technology Concentration in Electrical/Electronic Engineering Technology**19
- NM**, see “Nuclear Medicine Technology”
- Non-Profit Management**, see “Certificates of Advancement”
- Non-Residents (Admission)**.....48
- NS**, see “Nursing”
- NU**, see “Health Physics”
- Nuclear Medicine Technology**
- Course Descriptions**89
- Technical Certificate of Credit**.....21-22
- Nursing**
- Course Descriptions**89
- LPN Transition Program**22
- Major (AAS)**22
- Nursing/Allied Health Division**
- Admission/Retention Policies**20
- Degree Programs**.....20-24
- Technical Certificates of Credit**.....20-21,21-22,23
- See also “Certificates of Advancement”
- Nutrition**
- Course Descriptions, see “Biology” and “Dietary Manager”
- Major, see “Transfer Programs”
- NW**, see “Network Management”
- Occupational Safety Course Descriptions**89
- OF**, see “Office Administration”
- Office Administration**
- Course Descriptions**89-90
- Major**13
- See also “Word Processing” and “Certificates of Advancement”
- OR**, see “Surgical Technology”
- Oral Communication Electives (General Education)**.....8,31,41
- Orientation**51
- Ornamental Horticulture**, see “Landscaping and Turf Management”
- OS**, see “Occupational Safety”
- Paralegal Studies**
- Course Descriptions, see “Legal Assisting”
- Major**.....13-14
- Paramedic Training**
- Course Descriptions, see “Emergency Medical Services”
- See also “Certificates of Advancement”
- Part-time Students**53
- Patient Account Representative**, see “Certificates of Advancement”
- PC**, see “Pharmacy Technician”
- PE**, see “Physical Education”
- Pell Grant**, see “Student Aid”
- Persons Over Sixty**50
- Persons Over Sixty-five**.....50
- Persons With Disabilities**50
- PHED**, see “Physical Education”

- Pharmacy Technician
 Course Descriptions90
 Technical Certificate of Credit.....19-20
- PHIL, see “Philosophy”
- Philosophy
 Course Descriptions90
 Major, see “Transfer Programs”
- Phi Theta Kappa53
- PHYS, see “Physics”
- Physical Education
 Course Descriptions90-91
 Major, see “Transfer Programs”
- Physical Science Course Descriptions91
- Physical Therapist Assistant
 Course Descriptions91
 Major22-23
- Physics
 Course Descriptions92
 Major, see “Transfer Programs”
- Placement and Cooperative Education.....64
- Placement Tests47,48,49,50,51,64
- PO, see “Political Science”
- Political Science
 Course Descriptions92
 Major, see “Transfer Programs”
- Polymer Operator, see “Certificates of Advancement”
- Powerhouse Operations Course Descriptions92
- Practical Nursing
 Course Description.....92
 Technical Certificate of Completion Diploma.....37
- Pre-Cytotechnology, see “Transfer Programs”
- Pre-Dentistry, see “Transfer Programs”
- Pre-Engineering, see “Transfer Programs”
- Pre-Law, see “Transfer Programs”
- Pre-Medical Technology, see “Transfer Programs”
- Pre-Medicine, see “Transfer Programs”
- Pre-Occupational Therapy, see “Transfer Programs”
- Pre-Optometry, see “Transfer Programs”
- Pre-Pharmacy, see “Transfer Programs”
- Pre-Physical Therapy, see “Transfer Programs”
- Pre-Veterinary Medicine, see “Transfer Programs”
- Privacy Rights of Students.....57-58
- Probation/Suspension, see “Academic Retention Standards”
- Professional Staff98-100
- Professional Studies Major, see “Regents Online Degree Programs”
- Programming Concentration in Information Systems Technology11
- PSCI, see “Physical Science”
- Psi Beta53
- Psychology
 Course Descriptions92
 Major, see “Transfer Programs”
- PT, see “Physical Therapist Assistant”
- Public Speaking Courses, see “Speech”
- Purchasing, see “Certificates of Advancement”
- PY, see “Psychology”
- PZ, see “Powerhouse Operations”
- Q**A, see “Quality Technology”
- Quality Management, see “Certificates of Advancement”
- Quality Point Average5,53
- Quality Technology
 Course Descriptions92
 See also “Certificates of Advancement”
- R**adiation Therapy Technology
 Course Descriptions, see “Health Science”
 Technical Certificate of Credit23
- Radiologic Technology
 Course Descriptions93
 Major23-24
- RC, see “Respiratory Care”
- Reading Course Descriptions93
- Readmission50
- REAL, see “Realtime Reporting”
- Real Estate Course Descriptions94
- Realtime Reporting
 Course Descriptions94
 Major, see
 Broadcast Captioning Concentration14
 CART Reporting Concentration.....14
 Judicial Concentration.....14
- Records, Retention of.....58
- Refrigeration, see “Air Conditioning and Refrigeration”
- Refund Policies61
- Registration, Change of.....54
- Registration Steps.....1
- Regents Online Degree Programs27-28,46,61
- Regulations, Academic52-59
- Religious Studies
 Course Descriptions94
 Major, see “Transfer Programs”
- RELS, see “Religious Studies”
- Removal of Entrance Deficiencies31
- Renaissance Institute Course Descriptions94
- Repeating a Course56
- Residency
 Classification for Fee Payment51-52
 Requirements for Certificates of Advancement26
 Requirements for Graduation57
- Respiratory Care
 Course Descriptions94-95
 Major24
- Retention of Records.....58
- Retention Standards, Academic
 for Credit, see “Academic Retention Standards”
 for Financial Aid61
 for Industrial Technology34
- RI, see “Renaissance Institute”
- RS, see “Real Estate”
- RT, see “Radiologic Technology”
- S**atisfactory Academic Progress Standards
 for Credit, see “Academic Retention Standards”
 for Financial Aid61
 for Industrial Technology34
- Scholarships59
- Science Education, see “Transfer Programs”
- SE, see “Marine Engine Technology”
- Secondary Education, see “Transfer Programs”
- Secretarial Science, see “Office Administration”
- Senior Citizens50,61

- Services for Students with Disabilities63
- Sign Language (American), see “American Sign Language”
- Small Business
 Concentration in Management14
 See also “Certificates of Advancement”
- Small Business Development and Resource Center, see “Tennessee Small Business Development and Resource Center”
- SO, see “Sociology”
- Social and Behavioral Science Electives (General Education).....8,31,41
- Social and Behavioral Sciences Department
 Degree Programs.....24-25
 See also “Certificates of Advancement” and “Transfer Programs”
- Social Science Education, see “Transfer Programs”
- Social Work, see “Transfer Programs”
- Sociology
 Course Descriptions95
 Major, see “Transfer Programs”
- Sonography, see “Diagnostic Medical Sonography”
- SP, see “Speech”
- SPAN, see “Spanish”
- Spanish
 Course Descriptions95
 Major, see “Transfer Programs”
- Special Students49
- Speech Course Descriptions.....95
- Speech Recognition Technology, see “Certificates of Advancement”
- Staff, Administrative/Professional and Faculty98-103
- Stafford Loans, see “Student Aid”
- Structural Engineering Technology, see “Certificates of Advancement”
- Student Aid59-60
- Student Course Load, see “Academic Load”
- Student Life.....64
- Student Records, Retention of58
- Subject Abbreviations65-66
- Substitutions, see “Course Substitutions”
- Supervisory Development, see “Certificates of Advancement”
- Supervisory Management, see “Certificates of Advancement”
- Supplemental Educational Opportunity Grant, see “Student Aid”
- Surgical Technology
 Concentration in Applied Technology9,34
 Course Description95
 Technical Certificate of Completion Diploma37
- Surveying, see “Transfer Programs” and “Certificates of Advancement”
- Suspension, Academic.....34,54
- T**eacher Education Online.....28
- Tech Prep, see “Technical Preparation Education”
- Technical Certificates
 of Credit8,9,11,15,16,19,20,21-22,23,46,49
 of Completion Diploma28,34-37,46
 of Proficiency30,37,46
- Technical Preparation Education (Tech Prep).....50
- Technical Foundations in Basic Anatomy & Physiology Course
 Description.....95
- Technology in the Classroom, see “Certificates of Advancement”
- Telephone Numbers5
- Tennessee Board of Regents98
- Tennessee Board of Regents Philosophy of General Education.....40
- Tennessee Board of Regents/University of Tennessee Transfer Track...30-32
- Tennessee Higher Education Commission.....98
- Tennessee Small Business Development and Resource Center.....64
- Tennessee Student Assistance Award (TSAA), see “Student Aid”
- Tennessee Technology Center, see “Industrial Technology Division”
- Terminology, Academic5
- Testing as Degree Requirement57
- Testing Center64
- THEA, see “Theatre”
- Theatre
 Course Descriptions95-96
 Major, see “Transfer Programs”
- TM, see “Computed Tomography”
- TOEFL, see “International Students”
- Tomography, see “Computed Tomography”
- Transcript Evaluations.....58
- Transcripts47,48-49,58
- Transfer Programs30-32
- Transfer Students47-48
- Transient Students49
- Transitional Studies
 Courses, see “DSPM,” “DSPR,” “DSPS,” and “DSPW”
 Program64
- Truck Driving, Commercial, see “Commercial Truck Driving”
- Tuition Costs61
- U**ltrasound, see “Diagnostic Medical Sonography”
- Undecided Majors58-59
- University of Tennessee Transfer Track31-32
- US, see “Diagnostic Medical Sonography”
- V**eterans.....51,52,59
- Video Independent Study Courses, see “Center for Distributed Education”
- Vocational Programs, see “Industrial Technology”
- Vocational Rehabilitation, see “Student Aid”
- W**AWL Radio.....64
- Web Design Concentration.....10
- Web Developer, see “Certificates of Advancement”
- Web Site, Chattanooga States’1
- WD, see “Welding”
- Welding
 Concentration in Applied Technology9,34
 Course Description96
 Technical Certificate of Completion Diploma37
- Wellness
 Course Descriptions, see “Physical Education”
 Major, see “Transfer Programs”
- Who’s Who Among Students in American Junior Colleges53
- Withdrawal from College59-60
- Word Processing
 Course Descriptions, see “Office Administration”
 Technical Certificate of Credit15
- Work Study, see “Student Aid”
- WorkKeys, see “Business and Community Development Center”
- Written and Oral Communication Electives (General Education)8,30,40

Telephone 1-800-207-8202

E-mail: advising@chattanoogaastate.edu

Chattanooga State Technical Community College

4501 Amnicola Highway
Chattanooga, Tennessee 37406-1097

General Admission Information

Associate of Arts, Associate of Science, Associate of Applied Science Degrees:

- submit an application for admission with non-refundable \$10 fee
- provide official high school transcript or GED scores
- provide ACT or SAT test scores if under 21 of age.
Note - Compass or Asset exam may also be required
- provide official transcript(s) from each college attended

Industrial Technology Programs:

- submit an application for admission with non-refundable \$10 fee
- applicant must be 18 years of age or older; Industrial Technology test may be required
- official high school transcript, GED scores, or Ability to Benefit Test required for Industrial Technology applicants seeking financial aid
- phone Industrial Technology at 423-697-4433 for more information

Non-degree admission:

- submit an application for admission with non-refundable \$10 fee
- contact Admissions for information regarding:
 - Early Admission, Dual Enrollment, Middle College or Tech Prep
 - Special Student Status
 - Technical Certificates
 - Transient Student Requirements

**Applications for admission to Chattanooga State
are accepted throughout the year.**

**For more information, phone 423-697-4422 or
<http://www.chattanoogastate.edu>**

**Chattanooga
State**
COLLEGE ON THE RIVER

Major Areas of Study

	MAJOR CODE	CONCEN- TRATION
Associate of Applied Science (A.A.S.)		
Accounting Technology	ACCT	
Financial Planning	ACCT	FINC
Advertising Arts	AA	
Allied Health		
Dental Hygiene	ALHE	DHY
Health Information Management	ALHE	HIM
Nursing	ALHE	NU
Physical Therapist Assistant	ALHE	PT
Radiologic Technology	ALHE	RAD
Respiratory Care	ALHE	RC
Undecided	ALHE	UND
CAD/CAM Engineering Technology	CCT	
Civil Engineering	CET	
Early Childhood Education	ECED	
Electrical/Electronic Engineering		
Technology		
Automated Controls	EET	ACST
Computer Systems	EET	COMP
Networking Technology	EET	NET
Emergency Services Technology		
Emergency Medical Care	ESTE	EMC
Emergency Service Supervision and Administration	ESTE	ESSA
Fire Suppression	ESTE	FSUP
Human Services Specialist	HSS	
Industrial Maintenance Technology	IMT	
Information Systems Technology		
End User Support	INSY	EUS
Network Management	INSY	NETM
Programming	INSY	PROG
Management		
Aviation	MGT	AVIA
General	MGT	GMT
Health Services	MGT	HSM
Hospitality	MGT	HSPM
Industrial	MGT	INDS
Marketing	MGT	MRKT
Retail	MGT	RETL
Small Business	MGT	SMLB
Mechanical Engineering Technology	MET	MECH
Office Administration		
Court Reporting	OFTA	CRT
Legal Emphasis	OFTA	LEGL
Professional Emphasis	OFTA	PROF
Paralegal Studies	LAT	
Associate of Applied Technology (PRIOR COMPLETION OF TECHNOLOGY PROGRAM REQUIRED.)		
Air Conditioning & Refrigeration	AAT	
Auto Body Repair	AAT	

	MAJOR CODE	CONCEN- TRATION
Automotive Technology	AAT	
Cosmetology	AAT	
Diesel Equipment Mechanic	AAT	
Industrial Electricity	AAT	
Industrial Electronics	AAT	
Industrial Maintenance Mechanic	AAT	
Landscaping and Turf Management	AAT	
Machine Tool Technology	AAT	
Marine and Small Engine Repair	AAT	
Medical Office Assisting	AAT	
Surgical Technology	AAT	
Technical Drafting	AAT	
Welding	AAT	

Regents Online A.A.S.

Professional Studies		
Information Technology	ROPS	INFO

Associate of Science (A.S.) Transfer

A.S. Transfer (Non-Specified)	ATRN	AST
Accounting	ATRN	ACTT
American Sign Language Studies	ATRN	ASL
Art	ATRN	ARTS
Art Education	ATRN	ART
Biology	ATRN	BIOS
Broadcasting	ATRN	BRDS
Business Administration	ATRN	BUSA
Chemistry	ATRN	CHES
Early Childhood Education	ATRN	ECES
Economics	ATRN	ECOS
Elementary Education	ATRN	ELES
Environmental Science	ATRN	ENVS
Forestry, Fisheries and Wildlife	ATRN	AFFW
Geography	ATRN	GEO
Graphic Design	ATRN	GDAS
Health & Physical Education	ATRN	HPE
Information Systems	ATRN	CSIS
Management	ATRN	MGNT
Marketing	ATRN	MARK
Mathematics	ATRN	MATS
Music	ATRN	MUSS
Nutrition	ATRN	NUTR
Physics	ATRN	PHYS
Political Science	ATRN	PLAS
Pre-Cytotechnology	ATRN	PCYT
Pre-Dentistry	ATRN	PDEN
Pre-Engineering	ATRN	PENG
Pre-Law	ATRN	PLAW

	MAJOR CODE	CONCEN- TRATION
Pre-Medical Technology	ATRN	PMT
Pre-Medicine	ATRN	PMED
Pre-Occupational Therapy	ATRN	POCC
Pre-Optometry	ATRN	POPT
Pre-Pharmacy	ATRN	PPHS
Pre-Physical Therapy	ATRN	PPT
Pre-Veterinary	ATRN	PVET
Psychology	ATRN	PSYS
Secondary Education	ATRN	SEDU
Social Work	ATRN	SWAS
Sociology	ATRN	SOCS
Surveying	ATRN	SURV
Theatre Arts	ATRN	TART
Wellness/Fitness Leadership	ATRN	WFL
TBR-UT Transfer	ATRN	TENN

Regents Online A.S.

General Studies	ATRN	RODP
-----------------	------	------

Associate of Arts (A.A.) Transfer

A.A. Transfer (Non-Specified)	ATRN	AAT
Accounting	ATRN	ACTA
Art	ATRN	ART
Broadcasting	ATRN	BRDC
Business Administration	ATRN	BUSA
Chemistry	ATRN	CHEA
Economics	ATRN	ECON
English	ATRN	EAL
French	ATRN	FREN
German	ATRN	GRMN
Graphic Design	ATRN	GDAA
History	ATRN	HIST
Humanities	ATRN	HUM
Journalism	ATRN	JOUR
Management	ATRN	MGTA
Marketing	ATRN	MRKA
Mathematics	ATRN	MATA
Music	ATRN	MUS
Philosophy	ATRN	PHIL
Psychology	ATRN	PSY
Religious Studies	ATRN	REL
Sociology	ATRN	SOC
Spanish	ATRN	SPAN
Theatre Arts	ATRN	TART
TBR-UT Transfer	ATRN	TENN

Regents Online A.A.

General Studies	ATRN	RODP
-----------------	------	------

Industrial Technology Programs	MAJOR CODE	Technical Certificate Programs	MAJOR CODE
Air Conditioning & Refrigeration	VCAC	CAD Technology	CAD
Auto Body Repair	VCAB	Chemical Process Operations	CPO
Automotive Technology	VCAM	Diagnostic Medical Sonography	DMS
Business Systems Technology	VCBS	Information Systems Technology	ISTC
Commercial Truck Driving	VCCD	Nuclear Medicine Technology	NMTC
Computer Operations Technology	VCOT	Pharmacy Technician	PHT
Cosmetology	VCCY	Radiation Therapy Technology	RTTC
Diesel Equipment Mechanic	VCDM	Word Processing	WPRC
Industrial Electricity	VCIE		
Industrial Electronics	VCER		
Industrial Maintenance Mechanic	VCID		
Landscaping & Turf Management	VCLM	Special Student	S
Machine Tool Technology	VCMT	Transient Student	UNDZ
Marine and Small Engine Repair	VCSE	Undecided or Nondeclared	UND
Medical Office Assisting	VCMO		
Practical Nursing	VCLP		
Surgical Technology	VCOR		
Welding	VCWD		

Please check:

First admission () \$10 fee required.

Re-admission () No fee.



Date _____

Please print using blue or black ink.

APPLICANT INFORMATION

Social Security Number _____ Birthday: Month _____ Day _____ Year _____

Last Name _____ First _____ Middle _____

Jr., III, etc. _____ Previous Name(s) _____

Permanent Address:

Street _____ Apt. No. (Required) _____

City _____ State _____ Zip _____ E-mail _____

Home Phone () _____ Business Phone () _____ County _____

Emergency contact:

Last Name _____ First _____ Middle _____ Relationship _____

Street Address _____ City _____ State _____ Zip _____ Phone No. _____

PREVIOUS SCHOOL INFORMATION

() High School Graduate - School _____ Year Graduated _____

City _____ State _____

___ Regular Diploma ___ High School Certificate ___ Diploma of Specialized Education

() GED - Year Received _____

PREVIOUS COLLEGES ATTENDED

Complete Name Of College _____ City, State _____ Dates Attended _____ Degree Earned _____

_____ to _____

_____ to _____

_____ to _____

Last college attended: Placed on probation Yes () Date _____ No () Suspended Yes () Date _____ No ()

Academically dismissed Yes () Date _____ No ()

CLASSIFICATION

Area of Study (see opposite page)

Major code [][][][]

Concentration code [][][][]

Registration Type - Check One

- () 1 First Time College Student
() 3 Transfer Student
() 4 Transient Student
() 6 Re-admission

Term You Plan To Enter

- () Fall () Spring () Summer
Year 20 _____

Additional Classifications

- () 60-Year-Old Audit
() 65-Year-Old Credit
() Permanently Disabled
() Early Admission
() Dual Enrollment
Hamilton County School System
Other School Systems
() Middle College
() Tech Prep
() TBR/UT employee fee waiver

OFFICE USE ONLY

Req. Rule []
TN Req []
Admit Type []
Residency []

- Goal at Chattanooga State: () complete an associate degree () complete a certificate program
() complete courses to transfer to four-year school () complete Industrial Technology certificate
() take business/employment courses (no degree) () take personal interest courses (no degree)
() other _____

SELECTIVE SERVICE INFORMATION

The State of Tennessee requires eligible male applicants to be registered with the Selective Service prior to enrolling in state colleges and universities.

I am registered. ____

Not required to register with Selective Service because:

- () I am female () I am currently in Armed Services () I am not yet age 18 () I am age 26 or older
() I am not a United States citizen, permanent resident, resident alien or immigrant.

GENDER, ETHNIC ORIGIN, CITIZENSHIP

Gender Ethnic Origin Citizenship
() M () Asian or Pacific Islander () Hispanic U.S. () Yes () No
() F () Alaskan Native () White, Non-Hispanic If no, country of citizenship
() American Indian () Other Visa type or Registration Card
() Black, Non-Hispanic Non-U.S. citizens must present Visa or Registration Card

IMPORTANT INFORMATION

If accepted as a student at this institution, there are certain performance tests you will be required to take during your academic career. It is a requirement of admission that you agree to take any tests deemed necessary by the institution. In those instances where tests are administered by an external entity, you hereby agree for the results of such tests to be released to the institution. The purpose of this requirement is to comply with the State Legislature's expressed intent that institutions regularly evaluate and improve instruction at all levels. If you are under twenty-one years of age and are required by institutional policy to complete Compass and/or Asset exams, your scores on these tests and course placement may be reported to your high school for research purposes. Any test scores will be treated confidentially as required by law.

I understand that acceptance as a degree student requires submission of a copy of my high school transcript or GED scores, all college transcripts, and ACT and/or placement scores. If not received by Chattanooga State prior to my initial registration, acceptance is conditional pending receipt of these documents. Grades and transcripts of credits will be withheld and registration for subsequent semesters may be denied until this requirement is met.

I understand that withholding information requested on this application or giving false information may make me ineligible for admission to the College or subject to immediate dismissal without refund of fees. I certify that all statements given are correct and complete.

Signature _____ Social Security Number ____/____/____*

*Social Security number disclosure is voluntary; however, only the Social Security number may be used as an identifier for grants, loans, and other financial aid programs according to federal regulations. The student's Social Security number will not be disclosed to individuals or agencies outside Chattanooga State, except in accordance with the institutional policy on student records.

Chattanooga State Technical Community College supports affirmative action and does not discriminate against any applicant for admission or employment on the basis of age, gender, race, religion, national origin, or disability. Chattanooga State Technical Community College is one of 46 institutions in the Tennessee Board of Regents system, the seventh largest system of higher education in the nation. The Tennessee Board of Regents is the governing board for this system which is comprised of six universities, fourteen community colleges, and twenty-six area technology centers. The TBR system enrolls more than 80 percent of all Tennessee students attending public institutions of higher education. Crime statistics, rate, and institutional security policies and procedures are available upon request. Chattanooga State Technical Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools, the association that accredits all colleges and universities in the South. Chattanooga State is a Tennessee Board of Regents institution, and is an Equal Opportunity/Affirmative Action college.

Office Use Only
Fee Receipt #: _____ Amount _____ Date _____ Staff _____
[] Cash [] Check [] MC/Visa/Discover
____DT ____E ____N ____S-B ____W [] DUAL [] MCHS [] RECR
Application Entry: Staff _____ Date _____
Source: [] Web [] Mail [] Walk-in