

PROGRAM LISTINGS 2014-2015

The following pages list alphabetically by discipline area, the curriculum programs to be offered by Catawba Valley Community College during the 2014-2015 academic year. Programs in addition to those shown are being planned and may be implemented prior to or during the year. Catawba Valley Community College reserves the right to delete or change programs and courses as may be required; however, this general catalog represents the most accurate information available concerning the CVCC curriculum at the time of its publication.

HOW TO USE THE LISTINGS

Each curriculum offered for credit is listed along with course numbers, titles, and semester hours of credit required for graduation. The credit hours shown in each curriculum are classified as follows: class hours per week; lab hours per week; clinical/work experience hours per week (where applicable); and credit hours. Some courses entail both lab hours and clinical/work experience, and in these courses the number of hours for each is listed. A complete course syllabus for each credit course is on file in the offices of the respective department heads and is available for review by interested persons.

PROGRAM SEQUENCES

Program Sequences are suggestions only. The College retains the right to alter Program Sequences as it deems necessary.

COLLEGE TRANSFER

The College Transfer program is designed to parallel the freshman and sophomore years of study of a four-year college or university. In the first two years of college, students pursue a program of general education in the area of humanities, communications, social and behavioral sciences, mathematics, and sciences.

Catawba Valley Community College provides advising to help students plan their program for transfer to the college of their choice. Students should structure their programs of study in conference with academic advisors, and admissions personnel at the college or university to which they wish to transfer. The structure of each student's program should be based on high school records, occupational goals, and choice of college to which the student plans to transfer.

COLLEGE TRANSFER

Associate in Arts Degree Curricula:

- Associate in Arts: General

Associate in Science Degree Curricula:

- Associate in Science: General

Courses required to meet graduation requirements in these programs are offered during day and evening hours, as well as online.

Minimum time for completion:

Day -- four semesters full-time attendance;

Evening -- will vary according to semester load of student.

The Associate in Arts, or the Associate in Science Degree is awarded to graduates of college transfer programs.

Comprehensive Articulation Agreement (CAA)

The governing boards of the North Carolina Community College System and the University of North Carolina, in response to a legislative mandate, have approved a Comprehensive Articulation Agreement (CAA) which addressed in a system-wide manner the transfer of students from the community colleges to the universities. This CAA is for the A.A. and A.S. degrees. It specifies 45 semester hours of general education transfer courses and reflects the distribution of discipline areas commonly included in institution-wide, lower division, general education requirements for the baccalaureate degree. The CAA specifies study areas and semester hours credit (SHC) distributions for each.

The A.A. degree requires the following: English composition (6 SHC), humanities/fine arts (9 SHC), social/behavioral sciences (9 SHC), mathematics (3/4 SHC), and natural sciences (4 SHC).

The A.S. degree requires the following: English composition (6 SHC), humanities/fine arts (6 SHC), social/behavioral sciences (6 SHC), mathematics (8 SHC), and natural sciences (8 SHC). Community colleges and universities have identified community college courses appropriate for general education transfer. Those courses are listed in this section of the catalog.

The A.A. degree or A.S. degree, if completed successfully with grade C or better in each course, will transfer as a block across the community college system and to UNC institutions. No D grades will transfer.

Community college graduates receiving the A.A. or A.S. degree who have successfully completed the general education transfer courses will be considered to have fulfilled the institution-wide, lower division, general education requirements of the receiving UNC institution and will transfer with junior status. Completion of the A.A. or A.S. degree includes a Transfer Assured Admissions Policy (TAAP), which assures admission to one of the 16 University of North Carolina institutions with the following stipulations:

- Admission is not assured to a specific campus or specific program or major.
- Students must have graduated from a NC community college with an A.A. or A.S. degree.
- Students must meet all requirements of the CAA.
- Students must have an overall GPA of at least 2.0 on a 4.0 scale, as calculated by the college from which they graduated, and a grade of "C" or better in all CAA courses.
- Students must be academically eligible for readmission to the last institution attended.
- Students must meet judicial requirements of the institution to which they applied.
- Students must meet all application requirements at the receiving institution including the submission of all required documentation by stated deadlines.

In addition, students must meet the receiving university's foreign language and/or health and physical education requirements. These requirements, if applicable, may be completed prior to or after transfer to the senior institution.

The A.A. and A.S. degree programs of study are structured to include two components: **Universal General Education Transfer Components** that comprise a minimum of 30 semester hours of credit, and **additional general education, pre-major, and elective courses** that prepare students for successful transfer into selective majors at UNC institutions and bring the total number of hours in the degree programs to 60/61 semester hours.

To ensure maximum transferability of credits, students should select a transfer major and preferred transfer university before completing 30 semester hours of credit. Additional general education, pre-major, and elective courses should be selected based

on a student's intended major and transfer institution.

All courses approved for transfer in the CAA are designated as fulfilling general education or pre-major/elective requirements. While general education and pre-major courses may also be used as electives, elective courses may not be used to fulfill general education requirements.

Community college students who have not completed the A.A. or A.S. degree, will have their transcripts evaluated on a course-by-course basis by the receiving institution.

Mission Statement for the General Education Program

The mission of the General Education Program is to develop solid reasoning skills and a background in the various disciplines upon which to base a program of lifelong learning. The skills to connect the world of the individual to the rest of the world will be important in preparing the student to become an effective citizen.

Goals and Competencies of General Education Courses

Communication

The student will gain proficiency in reading, writing, speaking and comprehending Standard English. The student will be able to communicate effectively in all four areas.

Mathematics

The student will gain proficiency in basic computational skills, fundamental algebraic concepts, and interpretational skills of numerical and graphical data as these skills apply to real world situations.

Arts and Humanities

The student will gain an appreciation of the aesthetic aspect of human existence and how human expression in this area gives insight into the foundations of the basic questions of value in human life.

Social and Behavioral Sciences

The student will gain an understanding of the dynamics of the physiological and psychological self, group and societal interaction, and have an introduction to the influences of past events on the present. Further, the student will gain the necessary application and communication skills to utilize this knowledge in future academic and vocational pursuits.

Natural Science

The student will be introduced to the methods, concepts, and principles of science; will be exposed to representative applications of science and how these affect our society; and will experience the gathering, organization and interpretation of data.

Foreign Languages

The student will gain an understanding of foreign culture, cultural diversity, and language skills necessary for reading and speaking the language.

**ASSOCIATE IN ARTS DEGREE
(A10100)**

The Associate in Arts degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

Courses are approved for transfer through the Comprehensive Articulation Agreement (CAA). The CAA enables North Carolina community college graduates of two-year associate in arts programs who are admitted to constituent institutions of The University of North Carolina to transfer with junior status.

Community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.0 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

GENERAL EDUCATION COURSES: Total of 45 SHC

**UNIVERSAL GENERAL EDUCATION
TRANSFER COMPONENT [UGETC]**

Students will select the first 31-32 hours of the 45-hour General Education Requirement from the classes listed below. All of these courses are classified by the Comprehensive Articulation Agreement as Universal General Education Transfer Component courses [UGETC], and they will transfer to UNC institutions for equivalency credit.

English Composition (6 SHC)

ENG 111	Writing & Inquiry	3
ENG 112	Writing/Research in the Disciplines	3

Humanities/Fine Arts/Communications (9 SHC)

Select three (3) courses below from at least two (2) different disciplines:
Communications

COM 231	Public Speaking	3
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Humanities/Fine Arts

ART 111	Art Appreciation	3
ART 114	Art History Survey I	3
ART 115	Art History Survey II	3
ENG 231	American Literature I	3
ENG 232	American Literature II	3
MUS 110	Music Appreciation	3
MUS 112	Introduction to Jazz	3
PHI 215	Philosophical Issues	3
PHI 240	Introduction to Ethics	3

Social/Behavioral Sciences (9 SHC)

Select three (3) courses below from at least two (2) different disciplines:

ECO 251	Principles of Microeconomics	3
ECO 252	Principles of Macroeconomics	3
HIS 111	World Civilizations I	3
HIS 112	World Civilizations II	3
HIS 131	American History I	3
HIS 132	American History II	3
POL 120	American Government	3
PSY 150	General Psychology	3
SOC 210	Introduction to Sociology	3

Mathematics (3/4 SHC)

Select one (1) course from the following:

MAT 143	Quantitative Literacy	3
MAT 152	Statistical Methods	4
MAT 171	Pre-calculus Algebra	4

Natural/Physical Sciences (4 SHC)

Select one (1) course or (1) course and lab that equal four (4) SHC from the following course(s):

AST 151	General Astronomy I	3
And		
AST 151A	General Astronomy Lab I	1
BIO 111	General Biology I	4
CHM 151	General Chemistry I	4
GEL 111	Introductory Geology	4
PHY 110	Conceptual Physics	3
And		
PHY 110A	Conceptual Physics Lab	1

Additional General Education Hours (13/14 SHC)

An additional 13-14 SHC of courses should be selected from one of the following lists:

- from the UGETC courses the student did not select for the first 31-32 hours of General Education requirements above
- from the list of courses below classified as General Education within the Comprehensive Articulation Agreement.

**Comprehensive Articulation Agreement
General Education Course Listing:**

ANT-220	ENG-113	MUS-113
ANT-221	ENG-114	MUS-210
ARA-111	ENG-131	MUS-211
ARA-112	ENG-241	MUS-212
AST-152	ENG-242	MUS-213
AST-152A	ENG-251	PHI-210
BIO-112	ENG-252	PHY-151
BIO-120	FRE-111	PHY-152
BIO-130	FRE-112	PHY-251
BIO-140	FRE-211	PHY-252
BIO-140A	FRE-212	POL-110
CHI-111	GEL-113	PSY-237
CHI-112	GEL-120	PSY-239
CHM-131	GEL-230	PSY-241
CHM-131A	GEO-111	PSY-281
CHM-132	GEO-112	REL-110
CHM-152	GEO-130	REL-211
CIS-110	GER-111	REL-212
CIS-115	GER-112	REL-221
COM-110	HIS-121	SOC-213
COM-120	HIS-122	SOC-220
DAN-110	HUM-110	SOC-225
DRA-111	HUM-120	SOC-230
DRA-112	HUM-211	SPA-111
DRA-115	HUM-220	SPA-112
DRA-122	MAT-172	SPA-211
DRA-126	MAT-263	SPA-212
DRA-211	MAT-271	
DRA-212	MAT-272	
	MAT-273	

Students should select these courses based on their intended major and transfer university.

Total General Education Hours Required 45

OTHER REQUIRED HOURS

Total of 15 SHC

ACA 122 College Transfer Success

1

ASSOCIATE IN ARTS DEGREE (continued)

An additional 14 SHC of courses should be selected from the following lists:

- from the UGETC courses the student did not select for the first 31-32 hours of General Education requirements listed above
- from the list of courses above classified as General Education within the Comprehensive Articulation Agreement.
- from the list of pre-major/elective courses identified in the Comprehensive Articulation Agreement and listed below.

Comprehensive Articulation Agreement Pre-Major/Elective Course Listing:

ACC-120	CHM-130		MUS-133	PED-120	PED-256
ACC-121	CHM-130A	EGR-150	MUS-134	PED-121	PED-259
ARA-181	CHM-251	EGR-210	MUS-135	PED-122	PHS-130
ARA-182	CHM-252	EGR-220	MUS-136	PED-123	POL-130
ART-130	CHM-263	ENG-125	MUS-141	PED-124	PSY-211
ART-131	CHM-271	ENG-126	MUS-142	PED-125	PSY-231
ART-132	CHM-271A	ENG-235	MUS-151	PED-128	PSY-243
ART-140	CJC-111	ENG-273	MUS-152	PED-129	PSY-246
ART-171	CJC-121	ENG-275	MUS-161	PED-130	PSY-263
ART-231	CJC-141	FRE-181	MUS-162	PED-131	PSY-275
ART-232	COM-251	FRE-182	MUS-181	PED-137	SOC-215
ART-240	CSC-120	FRE-281	MUS-182	PED-138	SOC-234
ART-241	CSC-130	FRE-282	MUS-214	PED-139	SOC-242
ART-264	CSC-134	GER-181	MUS-215	PED-142	SOC-244
ART-271	CSC-139	GER-182	MUS-217	PED-143	SOC-250
ART-281	CSC-151	HEA-110	MUS-221	PED-144	SOC-254
ART-282	CSC-239	HEA-112	MUS-222	PED-145	SPA-141
ART-283	CTS-115	HEA-120	MUS-231	PED-146	SPA-161
ART-284	DFT-170	HIS-141	MUS-232	PED-147	SPA-181
BIO-143	DRA-120	HIS-145	MUS-233	PED-148	SPA-182
BIO-145	DRA-124	HIS-151	MUS-234	PED-150	SPA-221
BIO-146	DRA-128	HIS-162	MUS-235	PED-152	SPA-281
BIO-155	DRA-130	HIS-211	MUS-236	PED-153	SPA-282
BIO-163	DRA-131	HIS-221	MUS-241	PED-154	
BIO-168	DRA-132	HIS-226	MUS-242	PED-156	
BIO-169	DRA-135	HIS-227	MUS-251	PED-158	
BIO-175	DRA-136	HIS-228	MUS-252	PED-160	
BIO-224	DRA-140	HIS-232	MUS-261	PED-161	
BIO-230	DRA-141	HIS-236	MUS-262	PED-163	
BIO-250	DRA-142	HIS-261	MUS-281	PED-171	
BIO-275	DRA-145	JOU-110	MUS-282	PED-181	
BIO-280	DRA-170	MAT-285	MUS-283	PED-212	
BUS-110	DRA-171	MUS-111	PED-110	PED-217	
BUS-115	DRA-240	MUS-121	PED-113	PED-218	
BUS-137	DRA-260	MUS-122	PED-114	PED-220	
CHI-181	DRA-270	MUS-131	PED-117	PED-252	
CHI-182	DRA-271	MUS-132	PED-118	PED-254	

Students should select these courses based on their intended major and transfer university.

Total Semester Hours Credit (SHC) in Program: 60-61*

**One semester hour of credit may be included in a 61 SHC associate in arts program of study. The transfer of this hour is not guaranteed.*

Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098 Integrated Reading and Writing III.....	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143 & MAT 152).....	5
OR	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 (MAT 171).....	7

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

**ASSOCIATE IN SCIENCE DEGREE
(A10400)**

The Associate in Science degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

Courses are approved for transfer through the Comprehensive Articulation Agreement (CAA). The CAA enables North Carolina community college graduates of two-year associate in science programs who are admitted to constituent institutions of The University of North Carolina to transfer with junior status.

Community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.0 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

GENERAL EDUCATION COURSES: Total of 45 SHC

UNIVERSAL GENERAL EDUCATION
TRANSFER COMPONENT [UGETC]

Students will select the first 34 hours of the 45-hour General Education Requirement from the classes listed below. All of these courses are classified by the Comprehensive Articulation Agreement as Universal General Education Transfer Component courses [UGETC], and they will transfer to UNC institutions for equivalency credit.

English Composition (6 SHC)

ENG 111	Writing & Inquiry	3
ENG 112	Writing/Research in the Disciplines	3

Humanities/Fine Arts/Communication (6 SHC)

Select two (2) courses from the following list from two (2) different disciplines:

Communications

COM 231	Public Speaking	3
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Humanities/Fine Arts

ART 111	Art Appreciation	3
ART 114	Art History Survey I	3
ART 115	Art History Survey II	3
ENG 231	American Literature I	3
ENG 232	American Literature II	3
MUS 110	Music Appreciation	3
MUS 112	Introduction to Jazz	3
PHI 215	Philosophical Issues	3
PHI 240	Introduction to Ethics	3

Social/Behavioral Sciences (6 SHC)

Select two (2) courses from the following list from two (2) different disciplines:

ECO 251	Principles of Microeconomics	3
ECO 252	Principles of Macroeconomics	3
HIS 111	World Civilizations I	3
HIS 112	World Civilizations II	3
HIS 131	American History I	3
HIS 132	American History II	3
POL 120	American Government	3
PSY 150	General Psychology	3
SOC 210	Introduction to Sociology	3

Mathematics (8 SHC)

Select two (2) courses from the following list:

MAT 171	Precalculus Algebra	4
MAT 172	Pre-calculus Trigonometry	4
MAT 263	Brief Calculus	4
MAT 271	Calculus I	4

Natural/Physical Sciences (8 SHC)

Select two (2) courses with labs to total eight (8) SHC from the following list:

AST 151	General Astronomy I	3
And		
AST 151A	General Astronomy Lab I	1
BIO 111	General Biology I	4
And		
BIO 112	General Biology II	4
CHM 151	General Chemistry I	4
And		
CHM 152	General Chemistry II	4
GEL 111	Introductory Geology	4
PHY 110	Conceptual Physics	3
And		
PHY 110A	Conceptual Physics Lab	1
PHY 151	College Physics I	4
And		
PHY 152	College Physics II	4
PHY 251	General Physics I	4
And		
PHY 252	General Physics II	4

Additional General Education Hours (11 SHC)

An additional 11 SHC of courses should be selected from one of the following lists:

- from the UGETC courses the student did not select for the first 34 hours of General Education requirements above.
- from the list of courses below classified as General Education within the Comprehensive Articulation Agreement.

**Comprehensive Articulation Agreement
General Education Course Listing:**

ANT-220	DRA-111	GEO-111	PSY-237
ANT-221	DRA-112	GEO-112	PSY-239
ARA-111	DRA-115	GEO-130	PSY-241
ARA-112	DRA-122	GER-111	PSY-281
AST-152	DRA-126	GER-112	REL-110
AST-152A	DRA-211	HIS-121	REL-211
BIO-120	DRA-212	HIS-122	REL-212
BIO-130	ENG-113	HUM-110	REL-221
BIO-140	ENG-114	HUM-120	SOC-213
BIO-140A	ENG-131	HUM-211	SOC-220
CHI-111	ENG-241	HUM-220	SOC-225
CHI-112	ENG-242	MAT 143	SOC-230
CHM-131	ENG-251	MAT 152	SPA-111
CHM-131A	ENG-252	MAT-272	SPA-112
CHM-132	ENG 131	MAT-273	SPA-211
CIS-110	FRE-111	MUS-113	SPA-212
CIS-115	FRE-112	MUS-210	
COM-110	FRE-211	MUS-211	
COM-120	FRE-212	MUS-212	
DAN-110	GEL-113	MUS-213	
	GEL-120	PHI-210	
	GEL-230	POL-110	

Students should select these courses based on their intended major and transfer university.

Total General Education Hours Required 45

ASSOCIATE IN SCIENCE DEGREE (continued)
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OTHER REQUIRED HOURS

Total of 15 SHC

ACA 122 College Transfer Success

1

An additional 14 SHC of courses should be selected from the following lists:

- from the UGETC courses the student did not select for the first 34 hours of General Education requirements listed above
- from the list of courses above classified as General Education within the Comprehensive Articulation Agreement.
- from the list of pre-major/elective courses identified in the Comprehensive Articulation Agreement and listed below.

Comprehensive Articulation Agreement Pre-Major/Elective Course Listing:

ACC-120	CHM-130		MUS-133	PED-120	PED-256
ACC-121	CHM-130A	EGR-150	MUS-134	PED-121	PED-259
ARA-181	CHM-251	EGR-210	MUS-135	PED-122	PHS-130
ARA-182	CHM-252	EGR-220	MUS-136	PED-123	POL-130
ART-130	CHM-263	ENG-125	MUS-141	PED-124	PSY-211
ART-131	CHM-271	ENG-126	MUS-142	PED-125	PSY-231
ART-132	CHM-271A	ENG-235	MUS-151	PED-128	PSY-243
ART-140	CJC-111	ENG-273	MUS-152	PED-129	PSY-246
ART-171	CJC-121	ENG-275	MUS-161	PED-130	PSY-263
ART-231	CJC-141	FRE-181	MUS-162	PED-131	PSY-275
ART-232	COM-251	FRE-182	MUS-181	PED-137	SOC-215
ART-240	CSC-120	FRE-281	MUS-182	PED-138	SOC-234
ART-241	CSC-130	FRE-282	MUS-214	PED-139	SOC-242
ART-264	CSC-134	GER-181	MUS-215	PED-142	SOC-244
ART-271	CSC-139	GER-182	MUS-217	PED-143	SOC-250
ART-281	CSC-151	HEA-110	MUS-221	PED-144	SOC-254
ART-282	CSC-239	HEA-112	MUS-222	PED-145	SPA-141
ART-283	CTS-115	HEA-120	MUS-231	PED-146	SPA-161
ART-284	DFT-170	HIS-141	MUS-232	PED-147	SPA-181
BIO-143	DRA-120	HIS-145	MUS-233	PED-148	SPA-182
BIO-145	DRA-124	HIS-151	MUS-234	PED-150	SPA-221
BIO-146	DRA-128	HIS-162	MUS-235	PED-152	SPA-281
BIO-155	DRA-130	HIS-211	MUS-236	PED-153	SPA-282
BIO-163	DRA-131	HIS-221	MUS-241	PED-154	
BIO-168	DRA-132	HIS-226	MUS-242	PED-156	
BIO-169	DRA-135	HIS-227	MUS-251	PED-158	
BIO-175	DRA-136	HIS-228	MUS-252	PED-160	
BIO-224	DRA-140	HIS-232	MUS-261	PED-161	
BIO-230	DRA-141	HIS-236	MUS-262	PED-163	
BIO-250	DRA-142	HIS-261	MUS-281	PED-171	
BIO-275	DRA-145	JOU-110	MUS-282	PED-181	
BIO-280	DRA-170	MAT-285	MUS-283	PED-212	
BUS-110	DRA-171	MUS-111	PED-110	PED-217	
BUS-115	DRA-240	MUS-121	PED-113	PED-218	
BUS-137	DRA-260	MUS-122	PED-114	PED-220	
CHI-181	DRA-270	MUS-131	PED-117	PED-252	
CHI-182	DRA-271	MUS-132	PED-118	PED-254	

Students should select these courses based on their intended major and transfer university.

Total Semester Hours Credit (SHC) in Program: 60-61*

**One semester hour of credit may be included in a 61 SHC associate in arts program of study. The transfer of this hour is not guaranteed.*

Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098 Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065	7

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, and mathematics. Please refer to the Course Description section for prerequisite course information.

ASSOCIATE in GENERAL EDUCATION A.G.E. Program (A10300)

The Associate in General Education curriculum is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development. Course work includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided. Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their field of interest and become better qualified for a wide range of employment opportunities.

*All courses in the program are college-level courses. Many of the courses are equivalent to college transfer courses; however, the program is not principally designed for college transfer.

GENERAL EDUCATION CORE (15 SHC)

The general education core includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Within the core, colleges must include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers (SACS Criteria, 4.2.2).

English Composition (6 SHC)

Humanities/Fine Arts (3 SHC)

Select courses from the following discipline areas: music, art, drama, dance, foreign languages, interdisciplinary humanities, literature, philosophy and religion.

Social/Behavioral Sciences (3 SHC)

Select courses from the following discipline areas: anthropology, economics, geography, history, political science, psychology, and sociology.

Natural Sciences/Mathematics (3 SHC)

Mathematics

Select courses from the following discipline areas: college algebra, trigonometry, calculus, computer science, and statistics.

or *Natural Sciences*

Select courses from the following discipline areas: astronomy, biology, chemistry, earth sciences, physics, and/or general science.

OTHER REQUIRED HOURS (49-50 SHC)

Other required hours include additional general education and professional courses. A maximum of 7 SHC in health, physical education, college orientation, and/or study skills may be included as other required hours.

**TOTAL SEMESTER HOURS CREDIT (SHC)
IN PROGRAM: 64-65**

GENERAL OCCUPATIONAL TECHNOLOGY A.A.S. Program (A55280)

The General Occupational Technology (GOT) curriculum provides individuals with an opportunity to upgrade their skills and earn an associate degree, diploma, or certificate by taking courses that offer specific job knowledge and skills.

The curriculum content will be individualized for students according to their occupational interests and needs. A program of study for each student will be developed from any non-developmental level courses from approved curriculum programs of study offered by the College.

Graduates will become more effective workers, better qualified for advancements within their field of employment, and better qualified for a wide range of entry-level employment opportunities.

All courses included in the GOT must be taken from approved Associate of Applied Science (AAS), diploma or certificate programs.

GENERAL EDUCATION (15 SHC)

Associate Degree programs must contain a minimum of 15 semester hours of general education coursework. The general education hours must include a minimum of 6 semester hours in communications and at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Diploma programs must contain a minimum of 6 semester hours of general education, 3 semester hours of which must be in communications. General education is optional in certificate programs.

MAJOR COURSES (49 SHC)

Program Courses

The General Occupational Technology Associate in Applied Science (AAS), diploma, and certificate programs must include courses which offer specific job knowledge and skills. The student must select and complete a minimum of 49 SHC from a combination of major courses for curriculums approved to be offered by the college. Work experience, including cooperative education, practicums, and internships, may be included in a degree program up to a maximum of 8 semester hours of credit, in a diploma up to a maximum of 4 semester hours credit, and in a certificate program up to a maximum of 2 semester hours of credit.

OTHER REQUIRED HOURS (0-7 SHC)

Local employer requirements, as well as college designated graduation requirements, may be accommodated in "other required hours". Up to a maximum of 7 semester hours of credit in other required hours may be included in an AAS degree program, 4 semester hours of credit in a diploma program, and 1 semester hour of credit in other required hours may be included in a certificate program. Any course in the Combined Course Library that is educationally relevant to the student's career objective may be used in other required hours, as long as it is not a restricted or unique course.

TOTAL SHC (64-76 SHC)

The total number of semester hour credit must include a minimum of 64 hours and a maximum of 76 hours.

CAREER PROGRAMS

Career programs are offered in the Schools of Academics, Education & Fine Arts; Business, Industry & Technology; Health and Public Services. Specific program offerings and options are listed alphabetically. Descriptions for career courses are listed alphabetically by subject area in the course listings beginning on page 107.

SCHOOL OF ACADEMICS, EDUCATION & FINE ARTS

In addition to excellent two-year programs in such diverse areas as Early Childhood Education, Photography, and Advertising and Graphic Design, the School offers general education courses for students planning to transfer to a four-year institution. An agreement with the University of North Carolina system as well as many private colleges assures that our graduates' courses will be accepted for full credit. Studies in the humanities, sciences, arts, social sciences, English, and mathematics are a part of the general education core and are given high priority by our creative, innovative faculty members. The following programs are offered in the School of Academics, Education, and Fine Arts:

- Associate in Arts
- Associate in Science
- Associate in General Education
- Advertising and Graphic Design
- Early Childhood Education
- Infant/Toddler Care Certificate
- School Age Care Certificate
- Health & Fitness Science
- Photographic Technology

SCHOOL OF BUSINESS, INDUSTRY & TECHNOLOGY

Today's emerging digital economy demands problem solving skills using state-of-the-art technology and equipment. Programs within CVCC's School of Business, Industry & Technology use some of the most current technology to prepare you for a rapidly changing marketplace. From our Workforce Development Innovation Center which provides services to help businesses succeed in today's global economy, to our academic departments, we stand prepared to assist you in reaching your goals. The School of Business, Industry, and Technology is known for its talented faculty, staff, students and alumni. These stakeholders have worked to create an innovative climate that stresses teamwork, entrepreneurship, a global point of view, and an emphasis on new ideas and fresh perspectives. The following programs are offered in the School of Business, Industry, and Technology:

- Accounting
- Air Conditioning, Heating and Refrigeration Technology
- Automotive Systems Technology
- Business Administration
- Computer Engineering Technology
- Computer Information Technology
- Computer-Integrated Machining Technology
- Computer Programming
- Electrical Systems Technology
- Electronics Engineering Technology
- Entrepreneurship
- Funeral Service Education (Collaborative)
- General Occupational Technology
- Horticulture Technology
- Industrial Systems Technology
- Information Systems Security
- Mechanical Engineering Technology
- Mechatronics Engineering Technology
- Networking Technology
- Office Administration
- Turfgrass Management Technology
- Web Technologies
- Welding Technology

SCHOOL OF HEALTH & PUBLIC SERVICES

Individuals choosing health services should have an appreciation for human life, enjoy working with people of all ages, and be interested in the application of biological and scientific principles. Students will spend time in clinical facilities, hospitals, and other locations gaining skills through first-hand experience under the direction of competent professionals. Graduates of health and human resources associate degree programs may seek immediate employment. Students who are interested in pursuing a four year degree should contact their advisor or Student Services for specific information. Public Services provides comprehensive programs that offer associate degrees, certificates, and training in an array of disciplines and occupational interest to the Public Services community. In addition, technical pre-service and in-service advanced training is provided in a number of areas. Certificates are offered for Basic Law Enforcement Training (BLET) and in a range of criminal justice themes. Continuing/in-service public safety instruction is also provided in the areas of emergency medical training, fire and rescue. The following programs are offered in the School of Health and Public Services:

- Associate Degree Nursing
- Basic Law Enforcement Training
- Cosmetology
- Criminal Justice Technology
- Criminal Justice Technology: Latent Evidence Concentration
- Dental Hygiene
- Electroneurodiagnostic Technology
- Emergency Medical Science
- Fire Protection Technology
- Health Information Technology
- Healthcare Management Technology
- Medical Office Administration
- Polysomnography
- Radiography
- Respiratory Therapy
- Surgical Technology

WORK-BASED LEARNING

Work-Based Learning (WBL) is designed to give students enrolled in many programs within the College a chance to work on a job while completing their degree. This combination of classroom instruction with practical/related work experience provides numerous benefits to participating students.

WBL students work one or more semesters in part-time or full time jobs related to their major. Academic credit is given for the learning gained during the work period. Students are assigned to a WBL faculty coordinator and receive on-the-job supervision by the employers.

Admission to the Work-Based Learning program is based on scholastics and interest, not financial need. Employers select the students and determine salaries to be offered in the position; therefore, the college does not guarantee placement for all who are eligible.

Eligibility. Students who are enrolled in programs offering WBL for academic credit and who have completed a minimum of 12 credit hours at the college (unless otherwise specified by the program) are eligible to participate if they meet the following conditions:

1. Have a minimum 2.00 GPA.
2. Obtain approval from the WBL coordinator.
3. Have approval of WBL faculty coordinator.
4. Willing to follow program guidelines.
5. Certain curriculum programs may specify additional conditions.

Application Procedure. Interested students should schedule an interview with the Coordinator of Work-Based Learning. Students are selected on the basis of information obtained from their application, college transcripts, and an interview regarding career goals. After students have been accepted into the program, the WBL Program staff or faculty coordinator will be responsible for locating and/or approving an appropriate work assignment.

Academic Credit. WBL students may earn one or more semester hours of work-based learning credit toward completion of diploma or degree requirements in approved curriculums.

Registration. Registration for WBL courses is restricted. Students will meet with the Coordinator of Work-Based Learning to register for these courses.

Students interested in Work-Based Learning are invited to contact the WBL Office. Information is also available through faculty advisors.

NOTE: WBL options are listed under each participating curriculum course schedule.

PROGRAM SEQUENCES

Program Sequences are suggestions only. The College retains the right to alter Program Sequences as it deems necessary.

CAREER PROGRAM ELECTIVES

Humanities/fine arts and/or Social/behavioral science elective courses are specified in some programs. In order to assist students in planning their schedules, courses in these categories that are generally offered at CVCC are listed.

If a course is specified as a required course in the program sequence, it may not be chosen as an elective. All prerequisites and corequisites must be met for these courses.

In programs where only one (1) Humanities/Fine Arts elective is required, introductory foreign language courses are not accepted as the elective.

If you have additional questions about program electives please contact the Advising Center.

Humanities/Fine Arts Elective

ART	111	Art Appreciation	3-0-0-3
ART	114	Art History Survey I	3-0-0-3
ART	115	Art History Survey II	3-0-0-3
DRA	111	Theatre Appreciation	3-0-0-3
DRA	112	Literature of the Theatre	3-0-0-3
DRA	120	Voice for Performance	3-0-0-3
DRA	122	Oral Interpretation	3-0-0-3
DRA	126	Storytelling	3-0-0-3
DRA	130	Acting I	0-6-0-3
ENG	125	Creative Writing I	3-0-0-3
ENG	231	American Literature I	3-0-0-3
ENG	232	American Literature II	3-0-0-3
ENG	241	British Literature I	3-0-0-3
ENG	242	British Literature II	3-0-0-3
ENG	251	Western World Literature I	3-0-0-3
ENG	252	Western World Literature II	3-0-0-3
ENG	273	African-American Literature	3-0-0-3
ENG	275	Science Fiction	3-0-0-3
HUM	110	Technology and Society	3-0-0-3
HUM	120	Cultural Studies	3-0-0-3
HUM	211	Humanities I	3-0-0-3
HUM	220	Human Values and Meaning	3-0-0-3
MUS	110	Music Appreciation	3-0-0-3
MUS	111	Fundamentals of Music	3-0-0-3
MUS	112	Introduction to Jazz	3-0-0-3
MUS	213	Opera and Musical Theatre	3-0-0-3
PHI	210	History of Philosophy	3-0-0-3
PHI	240	Introduction to Ethics	3-0-0-3
REL	110	World Religions	3-0-0-3
REL	211	Intro to Old Testament	3-0-0-3
REL	212	Intro to New Testament	3-0-0-3
REL	221	Religion in America	3-0-0-3
SPA	141	Culture and Civilization	3-0-0-3

Social/Behavioral Science Elective

ANT	220	Cultural Anthropology	3-0-0-3
ANT	221	Comparative Cultures	3-0-0-3
ANT	230	Physical Anthropology	3-0-0-3
ECO	251	Prin of Microeconomics	3-0-0-3
ECO	252	Prin of Macroeconomics	3-0-0-3
GEO	111	World Regional Geography	3-0-0-3
GEO	112	Cultural Geography	3-0-0-3
GEO	113	Economic Geography	3-0-0-3
GEO	121	North Carolina Geography	3-0-0-3
GEO	130	General Physical Geography	3-0-0-3
HIS	111	World Civilizations I	3-0-0-3
HIS	112	World Civilizations II	3-0-0-3
HIS	121	Western Civilization I	3-0-0-3
HIS	122	Western Civilization II	3-0-0-3
HIS	131	American History I	3-0-0-3
HIS	132	American History II	3-0-0-3
HIS	151	Hispanic Civilization	3-0-0-3
HIS	162	Women and History	3-0-0-3
HIS	211	Ancient History	3-0-0-3
HIS	221	African-American History	3-0-0-3
HIS	226	The Civil War	3-0-0-3
HIS	227	Native American History	3-0-0-3
HIS	236	North Carolina History	3-0-0-3
HIS	261	East Asian History	3-0-0-3
POL	110	Intro Political Science	3-0-0-3
POL	120	American Government	3-0-0-3
POL	130	State & Local Government	3-0-0-3
PSY	110	Life Span Development	3-0-0-3
PSY	150	General Psychology	3-0-0-3
PSY	244	Child Development I	3-0-0-3
PSY	245	Child Development II	3-0-0-3
SOC	210	Introduction to Sociology	3-0-0-3
SOC	213	Sociology of the Family	3-0-0-3
SOC	220	Social Problems	3-0-0-3
SOC	225	Social Diversity	3-0-0-3
SOC	230	Race and Ethnic Relations	3-0-0-3
SOC	234	Sociology of Gender	3-0-0-3
SOC	242	Sociology of Deviance	3-0-0-3
SOC	244	Soc of Death & Dying	3-0-0-3
SOC	250	Sociology of Religion	3-0-0-3
SOC	254	Rural and Urban Sociology	3-0-0-3

ACCOUNTING
A.A.S. Program (A25100)

Accounting • A25100
Suggested Program Sequence Day

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day – four semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum. The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the “language of business,” accountants assemble and analyze, process, and communicate essential information about financial operations. In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics. Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disc.....	3
OR	ENG 113 Literature-Based Research.....	3
OR	ENG 114 Prof Research & Reporting	3

Humanities/Fine Arts:

Elective	3
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Natural Sciences/Mathematics:

MAT 110	Math Measurement & Literacy.....	3
OR	MAT 143 Quantitative Literacy.....	3

Social/Behavioral Sciences:

Elective	3
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MAJOR COURSES:

ACC 120	Prin of Financial Accounting.....	4
ACC 121	Prin of Managerial Accounting.....	4
ACC 129	Individual Income Taxes.....	3
ACC 140	Payroll Accounting	2
ACC 150	Accounting Software Appl	2
ACC 220	Intermediate Accounting I	4
ACC 225	Cost Accounting	3
ACC 240	Gov & Not-for-Profit Acct.....	3
BUS 110	Introduction to Business	3
BUS 115	Business Law I.....	3
BUS 116	Business Law II	3
CIS 110	Introduction to Computers.....	3
CTS 130	Spreadsheet.....	3
ECO 251	Prin of Microeconomics	3
WBL 110	World of Work	1

Accounting Electives 6

ACC 130	Business Income Taxes	3
ACC 221	Intermediate Acct II.....	4
ACC 269	Auditing & Assurance Services.....	3
BUS 125	Personal Finance	3
BUS 139	Entrepreneurship I	3
BUS 245	Entrepreneurship II	3
ETR 240	Funding for Entrepreneurs	3
WBL XXX	Work-Based Learning.....	1-6

Total Credit Hours Required65

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, (MAT 110).....	3	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143).....	5	

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Description section for prerequisite course information.

	Class	Lab	Clin/WkExp	Credit
Fall - 1st year				
ACC 120	Prin of Financial Accounting	3	2	0 4
BUS 110	Introduction to Business	3	0	0 3
ENG 111	Writing and Inquiry	3	0	0 3
MAT 110	Math Measurement & Literacy	2	2	0 3
OR MAT 143	Quantitative Literacy	2	2	0 3
	Social/Behaviorial Science Elective	3	0	0 3
	Total	14	4	0 16
Spring - 1st year				
ACC 121	Principles of Managerial Accounting	3	2	0 4
BUS 115	Business Law I	3	0	0 3
CIS 110	Introduction to Computers	2	2	0 3
ENG 112	Writing/Research in the Disc (Preferred)	3	0	0 3
OR ENG 113	Literature-Based Research	3	0	0 3
OR ENG 114	Prof Research & Development	3	0	0 3
	Accounting Elective	3	0	0 3
	Total	14	4	0 16
Fall - 2nd year				
ACC 129	Individual Income Taxes	2	2	0 3
ACC 220	Intermediate Accounting I	3	2	0 4
ACC 225	Cost Accounting	3	0	0 3
CTS 130	Spreadsheet	2	2	0 3
	Humanities/Fine Arts Elective	3	0	0 3
	Total	13	6	0 16
Spring - 2nd year				
ACC 140	Payroll Accounting	1	2	0 2
ACC 150	Accounting Software Appl	1	2	0 2
ACC 240	Gov & Not-for-Profit Acct	3	0	0 3
BUS 116	Business Law II	3	0	0 3
ECO 251	Prin of Microeconomics	3	0	0 3
WBL 110	World of Work	1	0	0 1
	Accounting Elective	3	2	0 3
	Total	15	6	0 17
	Grand Total	56	20	0 65

ACCOUNTING - Diploma Program (D25100)

GENERAL EDUCATION COURSES:		SHC
ENG 111	Writing and Inquiry.....	3
	Social/Behavioral Sciences Elective.....	3
MAJOR COURSES:		SHC
ACC 120	Prin of Financial Accounting.....	4
ACC 121	Prin of Managerial Accounting.....	4
ACC 129	Individual Income Taxes.....	3
ACC 140	Payroll Accounting.....	2
ACC 150	Accounting Software Appl.....	2
BUS 110	Introduction to Business.....	3
BUS 115	Business Law I.....	3
CIS 110	Introduction to Computers.....	3
CTS 130	Spreadsheet.....	3
ECO 251	Prin of Microeconomics.....	3
WBL 110	World of Work.....	1

Total Credit Hours Required37

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Description section for prerequisite course information.

Accounting - Diploma Program (D25100) Suggested Sequence

Fall - 1st year			
ACC 120	Prin of Financial Accounting	3	2 0 4
BUS 110	Introduction to Business	3	0 0 3
CIS 110	Introduction to Computers	2	2 0 3
ENG 111	Writing and Inquiry	3	0 0 3
	Total	11	4 0 13
Spring - 1st year			
ACC 121	Prin of Managerial Accounting	3	2 0 4
ACC 140	Payroll Accounting	1	2 0 2
ACC 150	Accounting Software Appl	1	2 0 2
BUS 115	Business Law I	3	0 0 3
	Total	8	6 0 11
Fall - 2nd year			
ACC 129	Individual Income Taxes	2	2 0 3
CTS 130	Spreadsheet	2	2 0 3
ECO 251	Prin of Microeconomics	3	0 0 3
	Total	7	4 0 9
Spring - 2nd year			
WBL 110	World of Work	1	0 0 1
	Social/Behavioral Science Elective	3	0 0 3
	Total	4	0 0 4
	Grand Total	30	14 0 37

ACCOUNTING

General - Certificate Program (C2510001)

MAJOR COURSES:		SHC
ACC 120	Prin of Financial Accounting.....	4
ACC 121	Prin of Managerial Accounting.....	4
ACC 129	Individual Income Taxes.....	3
ACC 140	Payroll Accounting.....	2

Total Credit Hours Required13

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Description section for prerequisite course information.

General - Certificate Program • (C2510001)

Suggested Prog. Seq. Day

Fall - 1st Year			
ACC 120	Prin of Financial Accounting	3	2 0 4
ACC 121	Prin of Managerial Accounting	3	2 0 4
	Total	6	4 0 8
Spring - 1st Year			
ACC 129	Individual Income Taxes	2	2 0 3
ACC 140	Payroll Accounting	1	2 0 2
	Total	3	4 0 5
	Grand Total	9	8 0 13

ACCOUNTING

Computerized - Certificate Program (C2510003)

MAJOR COURSES:		SHC
ACC 120	Prin of Financial Accounting.....	4
ACC 150	Accounting Software Appl.....	2
CIS 110	Introduction to Computers.....	3
CTS 130	Spreadsheet.....	3

Total Credit Hours Required12

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Description section for prerequisite course information.

Computerized - Cert. Prog. • (C2510003)

Suggested Program Sequence Day

	Class	Lab	Clim/WkExp	Credit
Fall - 1st Year				
ACC 120	Prin of Financial Accounting	3	2	0 4
CIS 110	Introduction to Computers	2	2	0 3
	Total	5	4	0 7
Spring - 1st Year				
ACC 150	Accounting Software Appl	1	2	0 2
CTS 130	Spreadsheet	2	2	0 3
	Total	3	4	0 5
	Grand Total	8	8	0 12

ACCOUNTING

Taxation - Certificate Program (C2510004)

MAJOR COURSES:		SHC
ACC 120	Prin of Financial Accounting.....	4
ACC 129	Individual Income Taxes.....	3
ACC 130	Business Income Taxes.....	3
ACC 140	Payroll Accounting.....	2

Total Credit Hours Required12

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Description section for prerequisite course information.

Taxation - Certificate Program • (C2510004)

Suggested Program Sequence Day

	Class	Lab	Clim/WkExp	Credit
Fall - 1st Year				
ACC 120	Prin of Financial Accounting	3	2	0 4
ACC 129	Individual Income Taxes	2	2	0 3
	Total	5	4	0 7
Spring - 1st Year				
ACC 130	Business Income Taxes	2	2	0 3
ACC 140	Payroll Accounting	1	2	0 2
	Total	3	4	0 5
	Grand Total	8	8	0 12

ADVERTISING AND GRAPHIC DESIGN

A.A.S. Program (A30100)

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Advertising and Graphic Design curriculum is designed to provide students with knowledge and skills necessary for employment in the graphic design profession, which emphasizes design, advertising, illustration, and digital and multimedia preparation of printed and electronic promotional materials. Students will be trained in the development of concept and design for promotional materials such as newspaper and magazine advertisements, posters, folders, letterheads, corporate symbols, brochures, booklets, preparation of art for printing, lettering and typography, photography, and electronic media. Graduates should qualify for employment opportunities with graphic design studios, advertising agencies, printing companies, department stores, a wide variety of manufacturing industries, newspapers, and businesses with in-house graphics operations.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

ENG 111	Writing and Inquiry	3
ENG 113	Literature-Based Research	3
OR	ENG 114 Prof Research & Reporting	3

Humanities/Fine Arts:

Elective		3
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Natural Sciences/Mathematics:

MAT 143	Quantitative Literacy	3
OR	MAT 152 Statistical Methods	3
OR	MAT 171 Precalculus Algebra	4

Social/Behavioral Sciences:

Elective		3
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MAJOR COURSES:

BUS 110	Introduction to Business	3
GRA 151	Computer Graphics I	2
GRA 152	Computer Graphics II	2
GRA 153	Computer Graphics III	2
GRA 255	Image Manipulation I	2
GRD 110	Typography I	3
GRD 121	Drawing Fundamentals I	2
GRD 131	Illustration I	2
GRD 141	Graphic Design I	4
GRD 142	Graphic Design II	4
GRD 180	Interactive Design	3
GRD 241	Graphic Design III	4
GRD 249	Advanced Design Practice	4
GRD 265	Digital Print Production	3
GRD 280	Portfolio Design	4
MKT 120	Principles of Marketing	3
Program Elective OR Work-Based Learning		3

Students are required to take 3 SHC from the following:

ART 131	Drawing I	3
ART 231	Printmaking I	3
ART 264	Digital Photography I	3
CIS 110	Introduction to Computers	3
GRA 121	Graphic Arts I	4
GRA 256	Image Manipulation II	2
GRD 271	Multimedia Design I	2
MKT 220	Advertising and Sales Promotio	3
MKT 221	Consumer Behavior	3
PHO 110	Fund of Photography	5
PRN 155	Screen Printing I	2
SGD 111	Introduction to SGD	3
SGD 112	SGD Design	3
SGD 114	3D Modeling	3
WBL XXX	Work-Based Learning	1-3
WEB 110	Internet/Web Fundamentals	3
WEB 111	Intro to Web Graphics	3
WEB 120	Intro Internet Multimedia	3

OTHER REQUIRED COURSES:

ACA 111	College Student Success	1
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Work-Based Learning Option: Qualified students may elect to take up to 3 credit hours of Work-Based Learning in place of 3 hours Program electives.

Total Credit Hours Required 66/67

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals	3
DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143/MAT 152)		5
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, DMA 065, (MAT 171)		7

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Advertising and Graphic Design • A30100

Suggested Program Sequence Day

			Class	Lab	Clin/WkExp	Credit
Fall - 1st Year						
ACA 111	College Student Success		1	0	0	1
GRA 151	Computer Graphics I		1	3	0	2
GRD 141	Graphic Design I		2	4	0	4
GRD 110	Typography I		2	2	0	3
GRD 121	Drawing Fundamentals I		1	3	0	2
ENG 111	Writing and Inquiry		3	0	0	3
Total			10	12	0	15
Spring - 1st year						
GRA 152	Computer Graphics II		1	3	0	2
GRD 142	Graphic Design II		2	4	0	4
GRA 255	Image Manipulation I		1	3	0	2
GRD 131	Illustration I		1	3	0	2
ENG 113	Literature-Based Research		3	0	0	3
OR	ENG 114 Prof Research & Reporting		3	0	0	3
Total			8	13	0	13
Summer - 1st year						
BUS 110	Introduction to Business		3	0	0	3
MAT 143	Quantitative Literacy		2	2	0	3
OR	MAT 152 Statistical Methods		3	2	0	4
OR	MAT 171 Precalculus		3	2	0	4
Social/Behavioral Science Elective			3	0	0	3
Total			8	2	0	9/10
Fall - 2nd year						
GRA 153	Computer Graphics III		1	3	0	2
GRD 180	Interactive Design		1	4	0	3
GRD 241	Graphic Design III		2	4	0	4
GRD 265	Digital Print Production		1	4	0	3
MKT 120	Principles of Marketing		3	0	0	3
Total			8	15	0	15
Spring - 2nd year						
GRD 249	Advanced Design Practice		1	9	0	4
GRD 280	Portfolio Design		2	4	0	4
Humanities/Fine Arts Elective			3	0	0	3
Program/ Work-Based Learning Elective						3
Total			6	13	0	14
Grand Total			40	55	0	66/67

Program Electives 3 SHC: Must be selected from the following list:

ART 131, ART 231, ART 264, CIS 110, GRA 121, GRA 256, GRD 271, MKT 220, MKT 221, PHO 110, PRN 155, SGD 111, SGD 112, SGD 114, WEB 110, WEB 111, WEB 120, WBL XXX.

AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY

Diploma Program (D35100)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day – two semesters full-time attendance; Evening – four semesters of part-time attendance. The Diploma is awarded graduates of this curriculum. The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems. Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems.

GENERAL EDUCATION COURSES:.....SHC

English/Communications:
 ENG 102 Applied Communications II.....3
 OR ENG 111 Writing and Inquiry.....3

Natural Sciences/Mathematics:
 MAT 110 Math Measurement & Literacy.....3
 OR MAT 143 Quantitative Literacy.....3

MAJOR COURSES:

AHR 110	Intro to Refrigeration.....	5
AHR 111	HVACR Electricity.....	3
AHR 112	Heating Technology.....	4
AHR 113	Comfort Cooling.....	4
AHR 114	Heat Pump Technology.....	4
AHR 130	HVAC Controls.....	3
AHR 151	HVAC Duct Systems I.....	2
AHR 160	Refrigerant Certification.....	1
AHR 180	HVACR Customer Relations.....	1
AHR 210	Residential Building Code.....	2
AHR 211	Residential System Design.....	3
WBL 110	World of Work.....	1

Total Credit Hours Required.....39

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 097	Integrated Reading Writing II.....	3
DMA DMA 010, DMA 020, DMA 030 (MAT 110).....		3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143).....		3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Air Conditioning, Heating and Refrigeration • D35100

Suggested Program Sequence Day

Fall - 1st year			
AHR 110	Intro to Refrigeration (1st 8 weeks)	2 6 0 5	
AHR 111	HVACR Electricity (1st 8 weeks)	2 2 0 3	
AHR 112	Heating Technology (2nd 8 weeks)	2 4 0 4	
AHR 151	HVAC Duct Systems I	1 3 0 2	
AHR 180	HVACR Customer Relations (2nd 8 weeks)	1 0 0 1	
AHR 211	Residential Systems Design (2nd 8 weeks)	2 2 0 3	
Total		10 17 0 18	
Spring - 1st year			
AHR 113	Comfort Cooling (2nd 8 weeks)	2 4 0 4	
AHR 210	Residential Building Code (1st 8 weeks)	1 2 0 2	
AHR 114	Heat Pump Technology (1st 8 weeks)	2 4 0 4	
AHR 130	HVAC Controls (2nd 8 weeks)	2 2 0 3	
AHR 160	Refrigerant Certification (2nd 8 weeks)	1 0 0 1	
WBL 110	World of Work	1 0 0 1	
MAT 110	Math Measurement & Literacy	2 2 0 3	
OR MAT 143	Quantitative Literacy	2 2 0 3	
Total		10 14 0 18	
Summer - 1year			
ENG 102	Applied Communications II	3 0 0 3	
OR ENG 111	Writing and Inquiry	3 0 0 3	
Total		3 0 0 3	
Grand Total		23 31 0 39	

Air Conditioning, Heating and Refrigeration • D35100

Suggested Program Sequence Night

	Class	Lab	Clin/WkExp	Credit
Fall - 1st year				
AHR 110	Intro to Refrigeration	2 6 0 5		
AHR 111	HVACR Electricity	2 2 0 3		
MAT 110	Math Measurement & Literacy	2 2 0 3		
OR MAT 143	Quantitative Literacy	2 2 0 3		
Total		6 10 0 11		
Spring - 1st year				
AHR 160	Refrigerant Certification	1 0 0 1		
AHR 113	Comfort Cooling	2 4 0 4		
AHR 130	HVAC Controls	2 2 0 3		
Total		5 6 0 8		
Fall - 2nd year				
AHR 112	Heating Technology	2 4 0 4		
AHR 151	HVAC Duct Systems I	1 3 0 2		
AHR 211	Residential Systems Design	2 2 0 3		
Total		5 9 0 9		
Spring - 2nd year				
AHR 114	Heat Pump Technology	2 4 0 4		
AHR 180	HVACR Customer Relations	1 0 0 1		
AHR 210	Residential Building Code	1 2 0 2		
WBL 110	World of Work	1 0 0 1		
Total		5 6 0 8		
Summer - 2nd year				
ENG 102	Applied Communications II	3 0 0 3		
OR ENG 111	Writing and Inquiry	3 0 0 3		
Total		3 0 0 3		
Grand Total		23 31 0 39		

Air Conditioning, Heating and Refrigeration Certificate • C35100

MAJOR COURSES:

AHR 110	Intro to Refrigeration.....	5
AHR 111	HVACR Electricity.....	3
AHR 112	Heating Technology.....	4
AHR 160	Refrigerant Certification.....	1

Total Credit Hours Required.....13

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 097	Integrated Reading Writing II.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Air Conditioning, Heating and Refrigeration Certificate • C35100

Suggested Program Sequence Day

Fall - 1st year			
AHR 110	Intro to Refrigeration	2 6 0 5	
AHR 111	HVACR Electricity	2 2 0 3	
AHR 112	Heating Technology	2 4 0 4	
AHR 160	Refrigerant Certification 1	0 0 1	
Total		7 12 0 13	
Grand Total		7 12 0 13	

Air Conditioning, Heating and Refrigeration Certificate • C35100

Suggested Program Sequence Night

Fall - 1st year			
AHR 110	Intro to Refrigeration	2 6 0 5	
AHR 111	HVACR Electricity	2 2 0 3	
Total		4 8 0 8	
Spring - 1st year			
AHR 160	Refrigerant Certification 1	0 0 1	
Total		1 0 0 1	
Summer - 2nd year			
AHR 112	Heating Technology	2 4 0 4	
Total		2 4 0 4	
Grand Total		7 12 0 13	

**ASSOCIATE DEGREE NURSING
A.A.S. Program (A45110)**

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science Degree is awarded to graduates of this curriculum.

The Associate Degree Nursing curriculum provides knowledge, skills, and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment, and to meet individual needs which impact health, quality of life, and achievement of potential. Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement, and informatics. Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global health care system and may include positions within acute, chronic, extended, industrial, and community health care facilities.

GENERAL EDUCATION COURSES:SHC

English/Communications:	
ENG 111	Writing and Inquiry.....3
ENG 112	Writing/Research in the Disc.....3
OR	ENG 113 Literature-Based Research.....3
OR	ENG 114 Prof Research & Reporting.....3
Humanities/Fine Arts:	
Elective	.....3
Natural Sciences/Mathematics:	
BIO 168	Anatomy and Physiology I.....4
BIO 169	Anatomy and Physiology II.....4
Social/Behavioral Sciences:	
PSY 150	General Psychology.....3

MAJOR COURSES:

BIO 275	Microbiology.....4
CIS 111	Basic PC Literacy.....2
NUR 111	Intro to Health Concepts.....8
NUR 112	Health-Illness Concepts.....5
NUR 113	Family Health Concepts.....5
NUR 114	Holistic Health Concepts.....5
NUR 211	Health Care Concepts.....5
NUR 212	Health System Concepts.....5
NUR 213	Complex Health Concepts.....10
PSY 241	Developmental Psych.....3

Total Credit Hours Required72

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....3
DRE 098	Integrated Reading Writing III.....3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050.....5	

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Associate Degree Nursing • A45110
Suggested Program Sequence Day**

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
NUR 111	Intro to Health Concepts	4	6	6	8
BIO 168	Anatomy and Physiology I	3	3	0	4
PSY 150	General Psychology	3	0	0	3
CIS 111	Basic PC Literacy	1	2	0	2
Total					11 11 6 17
Spring - 1st year					
NUR 112	Health-Illness Concepts	3	0	6	5
NUR 114	Holistic Health Concepts	3	0	6	5
BIO 169	Anatomy and Physiology II	3	3	0	4
PSY 241	Developmental Psychology	3	0	0	3
Total					12 3 12 17
Summer - 1st year					
NUR 212	Health System Concepts	3	0	6	5
ENG 111	Writing and Inquiry	3	0	0	3
Total					6 0 6 8
Fall - 2nd year					
NUR 113	Family Health Concepts	3	0	6	5
NUR 211	Health Care Concepts	3	0	6	5
BIO 275	Microbiology	3	3	0	4
	Humanities Elective	3	0	0	3
Total					12 3 12 17
Spring - 2nd year					
NUR 213	Complex Health Concepts	4	3	15	10
ENG 113	Literature-Based Research (Preferred)	3	0	0	3
OR	ENG 112 Writing/Research in the Disc (Preferred)	3	0	0	3
OR	ENG 114 Prof Research & Reporting	3	0	0	3
(Students considering transfer to a four-year university should take ENG 112 or ENG 113)					
Total					7 3 15 13
Grand Total					48 20 51 72
Associate Degree Nursing • A45110 Suggested Prog. Sequence Evening					
Spring - 1st year					
NUR 111 AB	Intro to Health Concepts-AB	2	3	3	4
BIO 168	Anatomy and Physiology I	3	3	0	4
CIS 111	Basic PC Literacy	1	2	0	2
Total					6 8 3 10
Summer - 1st year					
NUR 111 BB	Intro to Health Concepts-BB	2	3	3	4
BIO 169	Anatomy and Physiology II	3	3	0	4
PSY 150	General Psychology	3	0	0	3
Total					8 6 3 11
Fall - 1st year					
NUR 112	Health-Illness Concepts	3	0	6	5
NUR 114	Holistic Health Concepts	3	0	6	5
PSY 241	Developmental Psych	3	0	0	3
Total					9 0 12 13
Spring - 2nd year					
NUR 211	Health Care Concepts	3	0	6	5
NUR 212	Health System Concepts	3	0	6	5
ENG 111	Writing and Inquiry	3	0	0	3
Total					9 0 12 13
Summer - 2nd year					
NUR 113	Family Health Concepts	3	0	6	5
BIO 275	Microbiology	3	3	0	4
Total					6 3 6 9
Fall - 2nd year					
NUR 213 AB	Complex Health Concepts-AB	2	2	7	5
	Humanities Elective	3	0	0	3
Total					5 2 7 8
Spring - 3rd year					
NUR 213 BB	Complex Health Concepts-BB	2	1	8	5
ENG 113	Literature-Based Research (Preferred)	3	0	0	3
OR	ENG 112 Writing/Research in the Disc	3	0	0	3
OR	ENG 114 Prof Research & Reporting	3	0	0	3
(Students considering transfer to a four-year university should take ENG 113)					
Total					5 1 8 8
Grand Total					48 20 51 72

**ASSOCIATE DEGREE NURSING
Hickory RIBN Articulation Agreement
A.A.S. Program (A45110RB)**

Catawba Valley Community College
Associate Degree Nursing
And

Lenoir-Rhyne University

Bachelor of Science Degree with a Major in Nursing

This articulation agreement between Catawba Valley Community College (CVCC) and Lenoir-Rhyne University (LRU) allows graduates of Hickory RIBN to earn both an Associate Degree in Nursing from CVCC and a Bachelor of Science Degree with a Major in Nursing from LRU in 10 semesters through dual admission and continued enrollment. Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion of the A.A.S. portion is seven semesters full-time attendance. During this time students will be dually enrolled in CVCC and LRU. The Associate in Applied Science Degree is awarded to graduates of this curriculum, after which students will be eligible to take the NCLEX. The remaining three semesters will be taken at Lenoir-Rhyne University for a total of 10 program semesters.

Non-nursing courses completed at CVCC for the first three years will, as designated, satisfy course requirements towards the Bachelor of Science degree.

All courses designated by (LRU/BS) shown in the CVCC sequence will be completed at LRU for the first three years of Hickory RIBN. A total of 128 semester hours are required for students to complete their bachelors of science degree with a major in Nursing.

All courses designated by (BS) will be taken on CVCC's campus, and will be credited toward the Bachelor of Science degree.

Nursing students will enroll in NUR 300, Transition to Professional Practice (3 SHC), during the ninth semester. Successful completion of this course results in the awarding of a 39 semester hour block of credit.

GENERAL EDUCATION COURSES:SHC

English/Communications:	
ENG 111	Writing and Inquiry .....3
ENG 113	Literature-Based Research .....3
Humanities/Fine Arts:	
Elective	.....3
Natural Sciences/Mathematics:	
BIO 168	Anatomy and Physiology I.....4
BIO 169	Anatomy and Physiology II .....4
MAT 152	Statistical Methods I.....4
Social/Behavioral Sciences:	
PSY 150	General Psychology .....3

MAJOR COURSES:

BIO 275	Microbiology.....4
CIS 111	Basic PC Literacy.....2
NUR 111	Intro to Health Concepts .....8
NUR 112	Health-Illness Concepts .....5
NUR 113	Family Health Concepts.....5
NUR 114	Holistic Health Concepts .....5
NUR 211	Health Care Concepts.....5
NUR 212	Health System Concepts .....5
NUR 213	Complex Health Concepts .....10
PSY 241	Developmental Psych.....3

Total Credit Hours Required72

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....3
DRE 098	Integrated Reading Writing III .....3
DMA	DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 .....5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Associate Degree Nursing/RIBN • A45110RB
Suggested Program Sequence Day**

			Class	Lab	Clin/WkExp	Credit
Fall - 1st year						
BIO 168	Anatomy and Physiology I		3	3	0	4
CHM 131	Introduction to Chemistry (BS)		3	0	0	3
CHM 131A	Introduction to Chemistry Lab (BS)		0	3	0	1
ENG 111	Writing and Inquiry		3	0	0	3
PSY 150	General Psychology		3	0	0	3
FYE 191	First Year Experience I (LRU/BS)					3
Total			12	6	0	17
Spring - 1st year						
BIO 169	Anatomy and Physiology II		3	3	0	4
CIS 110	Introduction to Computers (BS)		2	0	0	3
OR						
CIS 111	Basic PC Literacy <u>AND</u> PED (1 Hour Activity) (BS)		3	2	0	2
			0	2	0	1
MAT 152	Statistical Methods I		3	2	0	4
PSY 241	Developmental Psych		3	0	0	3
FYE 192	First Year Experience II (LRU/BS)					3
Total			11/12	5/6	0	17
Fall - 2nd year						
NUR 111	Intro to Health Concepts		4	6	6	8
BIO 275	Microbiology		3	3	0	4
	Foreign Language (LRU/BS)					3
Total			7	9	6	15
Spring - 2nd year						
NUR 112	Health-Illness Concepts		3	0	6	5
NUR 114	Holistic Health Concepts		3	0	6	5
HEA 110	Personal Health/Wellness (BS)		3	0	0	3
	Foreign Language (LRU/BS)					3
Total			9	0	12	16
Summer - 2nd year						
NUR 212	Health System Concepts		3	0	6	5
ENG 113	Literature-Based Research		3	0	0	3
Total			6	0	6	8
Fall - 3rd year						
NUR 113	Family Health Concepts		3	0	6	5
NUR 211	Health Care Concepts		3	0	6	5
REL 100	Christian Faith (LRU/BS)					3
	Fine Arts Elective		3	0	0	3
Total			9	0	12	16
Spring 3rd year						
NUR 213	Complex Health Concepts		4	3	15	10
COM 110	Introduction to Communication (BS)		3	0	0	3
OR						
COM 231	Public Speaking (BS)		3	0	0	3
SOC XXX	Sociology (LRU/BS)					3
Total			7	3	15	16
Grand Total			61/62	23/24	51	105

• Semester Hour Totals include courses taken at Lenoir Rhyne

Note: The following courses will be taken at Lenoir-Rhyne University upon completion of the A.A.S., at CVCC.

Summer - 3rd year						
NUR 202	Assessment of Health Status (LRU)					3
NUR 435	Analytical Methods for Evidence-Based Practice (LRU)					3
Total						6
Fall 4th year						
NUR 300	Transition to Professional Practice (LRU)					3
NUR 455	Health Promotion with Populations & Families (LRU)					3
NAT 388	Environmental Science-Level II (LRU)					3
	Humanities Level I (LRU)					3
Total						12
Spring 4th year						
NUR 456	Concepts of Leadership in Nursing (LRU)					3
NUR 477	Applied Health Care (LRU)					4
HSB 388	Level II (LRU)					3
OR						
HUM 388	Level II (LRU)					3
	NUR Elective-Select Topics (LRU)					2

AUTOMOTIVE SYSTEMS TECHNOLOGY
A.A.S. Program (A60160)

Automotive Systems Technology • A60160
Suggested Program Sequence Day

Courses required to meet graduation requirements for the Associate in Applied Science Degree are offered during day hours. Courses required to meet graduation requirements for the Diploma are offered during afternoon and evening hours. Minimum time for completion: Day--five semesters full-time attendance; Evening--five semesters part-time attendance. The Associate in Applied Science degree or Diploma is awarded graduates of this curriculum. The Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field. Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains. Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time employment in dealerships and repair shops in the automotive service industry. The Automotive Systems Technology program is ASE Accredited by the National Automotive Technicians Education Foundation.

GENERAL EDUCATION COURSES:SHC

English/Communications:

ENG 111	Writing and Inquiry.....	3
ENG 114	Prof Research & Reporting.....	3
	OR ENG 112 Writing/Research in the Disc.....	3
	OR ENG 113 Literature-Based Research.....	3

Humanities/Fine Arts:

Elective	3
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Natural Sciences/Mathematics:

MAT 110	Math Measurement & Literacy.....	3
	OR MAT 143 Quantitative Literacy.....	3

Social/Behavioral Sciences:

Elective	3
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MAJOR COURSES:

AUT 116	Engine Repair.....	3
AUT 116A	Engine Repair Lab.....	1
AUT 141	Suspension & Steering Sys.....	3
AUT 141A	Suspension & Steering Lab.....	1
AUT 151	Brake Systems.....	3
AUT 151A	Brake Systems Lab.....	1
AUT 163	Adv Auto Electricity.....	3
AUT 163A	Adv Auto Electricity Lab.....	1
AUT 181	Engine Performance 1.....	3
AUT 181A	Engine Performance 1 Lab.....	1
AUT 183	Engine Performance 2.....	4
AUT 212	Auto Shop Management.....	3
AUT 221	Auto Transm/Transaxles.....	3
AUT 221A	Auto Transm/Transax Lab.....	1
AUT 231	Man Trans/Axles/Drtrains.....	3
AUT 231A	Man Trans/Ax/Drtrains Lab.....	1
AUT 281	Adv Engine Performance.....	3
TRN 110	Intro to Transport Tech.....	2
TRN 120	Basic Transp Electricity.....	5
TRN 140	Transp Climate Control.....	2
TRN 140A	Transp Climate Cont Lab.....	2
TRN 170	Pc Skills for Transp.....	2
WBL 110	World of Work.....	1

Work-Based Learning Option: Qualified students may elect to take up to 7 credit hours of Work-Based Learning in place of AUT 116A, AUT 141A, AUT 151A, AUT 163A, AUT 181A, AUT 221A, or AUT 231A.

Total Credit Hours Required67

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3
DMA DMA 010, DMA 020, DMA 030, (MAT 110).....		3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143).....		5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
AUT 116	Engine Repair (1st 8 weeks)	2	3	0	3
AUT 116A	Engine Repair Lab (1st 8 weeks)	0	3	0	1
AUT 181	Engine Performance 1 (2nd 8 weeks)	2	3	0	3
AUT 181A	Engine Performance 1 Lab (2nd 8 weeks)	0	3	0	1
TRN 110	Intro to Transport Tech	1	2	0	2
TRN 120	Basic Transp Electricity	4	3	0	5
TRN 170	Pc Skills for Transp	1	2	0	2
	Total	10	19	0	17
Spring - 1st year					
AUT 183	Engine Performance 2 (1st 8 weeks)	2	6	0	4
AUT 151	Brake Systems (2nd 8 weeks)	2	3	0	3
AUT 151A	Brake Systems Lab (2nd 8 weeks)	0	3	0	1
AUT 163	Adv Auto Electricity	2	3	0	3
AUT 163A	Adv Auto Electricity Lab	0	3	0	1
WBL 110	World of Work	1	0	0	1
	Total	7	18	0	13
Summer - 1st year					
ENG 111	Writing and Inquiry	3	0	0	3
	Social/Behavioral Science Elective	3	0	0	3
	Total	6	0	0	6
Fall - 2nd year					
AUT 141	Suspension & Steering Sys (2nd 8 Weeks)	2	3	0	3
AUT 141A	Suspension & Steering Lab (2nd 8 Weeks)	0	3	0	1
AUT 212	Auto Shop Management	3	0	0	3
AUT 281	Adv Engine Performance	2	2	0	3
TRN 140	Transp Climate Control (1st 8 weeks)	1	2	0	2
TRN 140A	Transp Climate Cont Lab (1st 8 weeks)	1	2	0	2
	Total	9	12	0	14
Spring - 2nd year					
AUT 221	Auto Transm/Transaxles (2nd 8 Weeks)	2	3	0	3
AUT 221A	Auto Transm/Transax Lab (2nd 8 Weeks)	0	3	0	1
AUT 231	Man Trans/Axles/Drtrains (1st 8 weeks)	2	3	0	3
AUT 231A	Man Trans/Ax/Drtrains Lab (1st 8 weeks)	0	3	0	1
MAT 110	Math Measurement & Literacy	2	2	0	3
OR	MAT 143 Quantitative Literacy	2	2	0	3
	Total	6	14	0	11
Summer - 2nd year					
ENG 114	Prof Research & Reporting (Preferred)	3	0	0	3
OR	ENG 112 Writing/Research in the Disc	3	0	0	3
OR	ENG 113 Literature-Based Research	3	0	0	3
	Humanities/Fine Art Elective	3	0	0	3
	Total	6	0	0	6
	Grand Total	44	63	0	67

Work-Based Learning Option: Qualified students may elect to take up to 7 credit hours of Work-Based Learning in place of AUT 116A, AUT 141A, AUT 151A, AUT 163A, AUT 181A, AUT 221A, or AUT 231A.

AUTOMOTIVE SYSTEMS TECHNOLOGY Diploma Program (D60160)

GENERAL EDUCATION COURSES:SHC

English/Communications:		
ENG 111	Writing and Inquiry	3
Natural Sciences/Mathematics:		
MAT 110	Math Measurement & Literacy	3
OR	MAT 143 Quantitative Literacy	3

MAJOR COURSES:

AUT 116	Engine Repair	3
AUT 116A	Engine Repair Lab	1
AUT 141	Suspension & Steering Sys.....	3
AUT 141A	Suspension & Steering Lab	1
AUT 151	Brake Systems	3
AUT 151A	Brake Systems Lab	1
AUT 163	Adv Auto Electricity	3
AUT 181	Engine Performance 1	3
AUT 181A	Engine Performance 1 Lab	1
AUT 183	Engine Performance 2	4
AUT 221	Auto Transm/Transaxles.....	3
AUT 221A	Auto Transm/Transax Lab	1
AUT 231	Man Trans/Axles/Drtrains	3
AUT 231A	Man Trans/Ax/Drtrains Lab	1
TRN 110	Intro to Transport Tech.....	2
TRN 120	Basic Transp Electricity	5
TRN 140	Transp Climate Control.....	2
TRN 140A	Transp Climate Cont Lab.....	2

Automotive Systems Technology

Work-Based Learning Option: Qualified students may elect to take up to 4 credit hours of Work-Based Learning in place of AUT 116A, AUT 141A, AUT 151A, AUT 181A, AUT 221A, or AUT 231A.

Total Credit Hours Required48

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DMA DMA 010, DMA 020, DMA 030, (MAT 110)	.....	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)	.....	5
DRE 098	Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Automotive Systems Technology - Diploma • D60160 Suggested Program Sequence Evening

Fall - 1st year			
AUT 116	Engine Repair (2nd 8 Wks)	2	3 0 3
AUT 116A	Engine Repair Lab (2nd 8 Wks)	0	3 0 1
TRN 110	Intro to Transport Tech	1	2 0 2
TRN 120	Basic Transp Electricity (1st 8 Wks)	4	3 0 5
	Total	7	11 0 11
Spring - 1st year			
AUT 151	Brake Systems (2nd 8 Wks)	2	3 0 3
AUT 151A	Brake Systems Lab (2nd 8 Wks)	0	3 0 1
AUT 163	Adv Auto Electricity (1st 8 Wks)	2	3 0 3
MAT 110	MatheMeasurement & Literacy	2	2 0 3
OR	MAT 143 Quantitative Literacy	2	2 0 3
	Total	6	11 0 10
Fall - 2nd year			
AUT 181	Engine Performance 1 (1st 8 Wks)	2	3 0 3
AUT 181A	Engine Performance 1 Lab (1st 8 Wks)	0	3 0 1
AUT 231	Man Trans/Axles/Drtrains (2nd 8 Wks)	2	3 0 3
AUT 231A	Man Trans/Axl/Drtrains Lab (2nd 8 Wks)	0	3 0 1
	Total	4	12 0 8
Spring - 2nd year			
AUT 221	Auto Transm/Transaxles (1st 8 Wks)	2	3 0 3
AUT 221A	Auto Transm/Transax Lab (1st 8 Wks)	0	3 0 1
AUT 183	Engine Performance 2 (2nd 8 Wks)	2	6 0 4
ENG 111	Writing and Inquiry	3	0 0 3
	Total	7	12 0 11
Fall - 3rd year			
AUT 141	Suspension & Steering (2nd 8 Wks)	2	3 0 3
AUT 141A	Suspension & Steering Lab (2nd 8 Wks)	0	3 0 1
TRN 140	Transp Climate Control (1st 8 weeks)	1	2 0 2
TRN 140A	Transp Climate Cont Lab (1st 8 weeks)	1	2 0 2
	Total	4	10 0 8
	Grand Total	28	56 0 48

AUTOMOTIVE SYSTEMS TECHNOLOGY Under Car Services Concentration Cert. Program (C60160)

Major CoursesSHC

AUT 141	Suspension & Steering Sys	3
AUT 141A	Suspension & Steering Lab	1
AUT 151	Brake Systems	3
AUT 151A	Brake Systems Lab	1
TRN 110	Intro to Transport Tech	2
TRN 120	Basic Transp Electricity	5

Total Credit Hours Required 15

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DMA DMA 010, DMA 020, DMA 030	.....	3
DRE 097	Integrated Reading Writing II.....	3

* Developmental course work (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computer. Please refer to the Course Descriptions section for prerequisite course information.

Automotive Systems Technology - Under Car Services Concentration Certificate Program (C60160) Suggested Sequence

	Class	Lab	Clin/WKExp	Credit
Fall - 1st Year				
TRN 110	Intro to Transport Tech	1	2	0 2
TRN 120	Basic Transp Electricity	4	3	0 5
AUT 141	Suspension & Steering Sys	2	3	0 3
AUT 141A	Suspension & Steering Lab	0	3	0 1
	Total	7	11	0 11
Spring - 1st Year				
AUT 151	Brake Systems	2	3	0 3
AUT 151A	Brake Systems Lab	0	3	0 1
	Total	2	6	0 4
	Grand Total	9	17	0 15

Work-Based Learning Option: Qualified students may elect to take up to 2 credit hours of cooperation education in place of AUT 141A, AUT 151A.

BASIC LAW ENFORCEMENT TRAINING Certificate Program (C55120)

This course is designed, developed, monitored, and constantly updated by the Criminal Justice Training and Standards Division of the North Carolina Department of Justice. Minimum time for completion is approximately six months. Classes meet during evening hours and on Saturdays. Basic Law Enforcement Training (BLET) is designed to give students essential skills required for entry-level employment as law enforcement officers with state, county, or municipal governments, or with private enterprise. This program utilizes State commission-mandated topics and methods of instruction. General subjects include, but are not limited to, criminal, juvenile, civil, traffic, and alcoholic beverage laws; investigative, patrol, custody, and court procedures; emergency responses; and ethics and community relations. Successful graduates receive a curriculum certificate and are qualified to take certification examinations mandated by the North Carolina Criminal Justice Education and Training Standards Commission and/or the North Carolina Sheriffs' Education and Training Standards Commission.

The application cycle for the Fall class begins in March and ends in June, with the application cycle for the Spring class beginning in August and ending in November. Contact the Law Enforcement Training Director at 828-327-7000, extension 4448 for further information on the application process and to receive an application packet.

MAJOR COURSES:SHC

CJC 100	Basic Law Enforcement Training	19
	Total Credit Hours Required.....	19

BUSINESS ADMINISTRATION
A.A.S. Program (A25120)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day -- four semesters full-time attendance; Evening -- will vary according to semester load of student (usually eight to nine semesters.) The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Business Administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy. Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making. Graduates are prepared for employment opportunities in governmental agencies, financial institutions, and large to small business or industry.

GENERAL EDUCATION COURSES:.....SHC

English/Communications:	
ENG 111 Writing and Inquiry	3
ENG 112 Writing/Research in the Disc	3
OR ENG 113 Literature-Based Research	3
OR ENG 114 Prof Research & Reporting	3
Humanities/Fine Arts:	
Elective	3
Natural Sciences/Mathematics:	
MAT 110 Math Measurement & Literacy	3
OR MAT 143 Quantitative Literacy	3
Social/Behavioral Sciences:	
Elective	3

MAJOR COURSES:

ACC 120 Prin of Financial Accounting	4
ACC 121 Prin in Managerial Accounting	4
BUS 110 Introduction to Business	3
BUS 115 Business Law I	3
BUS 116 Business Law II	3
BUS 137 Principles of Management	3
BUS 240 Business Ethics	3
BUS 285 Business Management Issues	3
CIS 110 Introduction to Computers	3
ECO 251 Prin of Microeconomics	3
ECO 252 Prin of Macroeconomics	3
MKT 120 Principles of Marketing	3
WBL 110 World of Work	1
Business/WBL Electives	12

Students are required to take 12 SHC from the following:

BUS 125 Personal Finance	3
BUS 139 Entrepreneurship I	3
BUS 153 Human Resource Management	3
BUS 230 Small Business Management	3
BUS 245 Entrepreneurship II	3
BUS 253 Leadership and Mgt Skills	3
CTS 130 Spreadsheet	3
ETR 215 Law for Entrepreneurs	3
ETR 220 Innovation and Creativity	3
ETR 230 Entrepreneur Marketing	3
ETR 240 Funding for Entrepreneurs	3
MKT 123 Fundamentals of Selling	3
MKT 220 Advertising and Sales Promotion	3
MKT 221 Consumer Behavior	3
MKT 223 Customer Service	3
WBL XXX Work-Based Learning	1-6

Work-Based Learning Option: Qualified students may elect to take up to 6 credit hours of Work-Based Learning in place of 6 hours Business electives.

Total Credit Hours Required66

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals	3
DRE 098 Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, (MAT 110)	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)	5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Business Administration • A25120
Suggested Program Sequence Day

			Class	Lab	Clim/WkExp	Credit
Fall - 1st year						
BUS 110	Introduction to Business		3	0	0	3
BUS 137	Principles of Management		3	0	0	3
CIS 110	Introduction to Computers		2	2	0	3
ENG 111	Writing and Inquiry		3	0	0	3
MAT 110	Math Measurement & Literacy		2	2	0	3
OR	MAT 143 Quantitative Literacy		2	2	0	3
Total			13	4	0	15
Spring - 1st year						
ACC 120	Prin of Financial Accounting		3	2	0	4
BUS 115	Business Law I		3	0	0	3
BUS 240	Business Ethics		3	0	0	3
MKT 120	Principles of Marketing		3	0	0	3
ENG 114	Prof Research & Reporting		3	0	0	3
OR	ENG 112 or ENG 113					
Total			15	2	0	16
Fall - 2nd year						
ACC 121	Prin in Managerial Accounting		3	2	0	4
BUS 116	Business Law II		3	0	0	3
ECO 251	Prin of Microeconomics		3	0	0	3
	Business Elective		3	0	0	3
	Business Elective		3	0	0	3
	Social/Behavioral Science Elective		3	0	0	3
Total			18	2	0	19
Spring - 2nd year						
BUS 285	Business Management Issues		2	2	0	3
ECO 252	Prin of Macroeconomics		3	0	0	3
WBL 110	World of Work		1	0	0	1
	Business Elective		3	0	0	3
	Business Elective		3	0	0	3
	Humanities/Fine Arts Elective		3	0	0	3
Total			15	2	0	16
Grand Total			61	10	0	66

Business Administration • A25120 Suggested Prog Seq Evening

Fall - 1st year						
BUS 110	Introduction to Business		3	0	0	3
CIS 110	Introduction to Computers		2	2	0	3
ENG 111	Writing and Inquiry		3	0	0	3
Total			8	2	0	9
Spring - 1st year						
BUS 137	Principles of Management		3	0	0	3
MAT 110	Math Measurement & Literacy		2	2	0	3
OR	MAT 143 Quantitative Literacy		2	2	0	3
Total			5	2	0	6
Fall - 2nd year						
ACC 120	Prin of Financial Accounting		3	2	0	4
BUS 115	Business Law I		3	0	0	3
Total			6	2	0	7
Spring - 2nd year						
BUS 240	Business Ethics		3	0	0	3
MKT 120	Principles of Marketing		3	0	0	3
ENG 114	Prof Research & Reporting		3	0	0	3
OR	ENG 112 or ENG 113					
Total			9	0	0	9
Fall - 3rd year						
ACC 121	Prin in Managerial Accounting		3	2	0	4
BUS 116	Business Law II		3	0	0	3
	Business Elective		3	0	0	3
Total			9	2	0	10
Spring - 3rd year						
ECO 251	Prin of Microeconomics		3	0	0	3
	Business Elective		3	0	0	3
	Social/Behavioral Science Elective		3	0	0	3
Total			9	0	0	9
Fall - 4th year						
	Business Elective		3	0	0	3
	Business Elective		3	0	0	3
	Humanities/Fine Arts Elective		3	0	0	3
Total			9	0	0	9
Spring - 4th year						
BUS 285	Business Management Issues		2	2	0	3
ECO 252	Prin of Macroeconomics		3	0	0	3
WBL 110	World of Work		1	0	0	1
Total			6	2	0	7
Grand Total			61	10	0	66

Business Administration Diploma Program • D25120

GENERAL EDUCATION COURSES:.....SHC

English/Communications:	
ENG 111 Writing and Inquiry	3
Social/Behavioral Sciences:	
Elective	3

MAJOR COURSES:

ACC 120 Prin of Financial Accounting	4
BUS 110 Introduction to Business.....	3
BUS 115 Business Law I	3
BUS 137 Principles of Management.....	3
BUS 240 Business Ethics.....	3
CIS 110 Introduction to Computers.....	3
ECO 251 Prin of Microeconomics	3
MKT 120 Principles of Marketing	3
WBL 110 World of Work	1

Business Electives.....6

Business Diploma Electives - Must be selected from the following list:

ACC 121, BUS 116, BUS 125, BUS 153, BUS 230, BUS 253, CTS 130, BUS 139, BUS 245, ECO 252, ETR 220, ETR 240, MKT 123, MKT 220, MKT 223, WBL XXX (1-4 SHC).

Total Credit Hours Required.....38

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals.....	3
DRE 098 Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Business Administration • D25120 Suggested Program Sequence

Fall - 1st year				
BUS 110 Introduction to Business	3	0	0	3
BUS 137 Principles of Management	3	0	0	3
CIS 110 Introduction to Computers	2	2	0	3
ENG 111 Writing and Inquiry	3	0	0	3
Total	11	2	0	12
Spring - 1st year				
ACC 120 Prin of Financial Accounting	3	2	0	4
BUS 115 Business Law I	3	0	0	3
BUS 240 Business Ethics	3	0	0	3
MKT 120 Principles of Marketing	3	0	0	3
Total	12	2	0	13
Fall - 2nd year				
ECO 251 Prin of Microeconomics	3	0	0	3
Business Elective	3	0	0	3
Business Elective	3	0	0	3
Total	9	0	0	9
Spring - 2nd year				
WBL 110 World of Work	1	0	0	1
Social/Behavioral Science Elective	3	0	0	3
Total	4	0	0	4
Grand Total	36	4	0	38

BUSINESS ADMINISTRATION General Cert. Prog. (C2512001)

MAJOR COURSES:.....SHC

BUS 110 Introduction to Business.....	3
BUS 115 Business Law I	3
BUS 137 Principles of Management	3
MKT 120 Principles of Marketing.....	3

Total Credit Hours Required.....12

Business Administration - General Certificate (C2512001)

Fall - 1st year				
BUS 110 Intro to Business	3	0	0	3
MKT 120 Prin of Marketing	3	0	0	3
Total	6	0	0	6
Spring - 1st year				
BUS 115 Business Law I	3	0	0	3
BUS 137 Prin of Management	3	0	0	3
Total	6	0	0	6
Grand Total	12	0	0	12

BUSINESS ADMINISTRATION Advanced Cert. #1 (C2512002)

MAJOR COURSES:.....SHC

ACC 120 Prin of Financial Accounting	4
BUS 110 Introduction to Business.....	3
BUS 115 Business Law I	3
BUS 137 Principles of Management	3

Total Credit Hours Required.....13

Business Administration - Advanced Certificate #1 (C2512002)

Fall - 1st year				
BUS 110 Introduction to Business	3	0	0	3
BUS 137 Principles of Management	3	0	0	3
Total	6	0	0	6
Spring - 1st year				
ACC 120 Prin of Financial Accounting	3	2	0	4
BUS 115 Business Law I	3	0	0	3
Total	6	2	0	7
Grand Total	12	2	0	13

BUSINESS ADMINISTRATION

Advanced Certificate #2 (C2512003)

MAJOR COURSES:.....SHC

ACC 120 Prin of Financial Accounting	4
ACC 121 Prin of Managerial Accounting.....	4
CIS 110 Introduction to Computers.....	3
ECO 251 Prin of Microeconomics.....	3
ECO 252 Prin of Macroeconomics.....	3

Total Credit Hours Required.....17

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals.....	3
DRE 098 Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Business Administration - Advanced Certificate #2 (C251003)

	Class	Lab	Clin/WkExp	Credit
Fall - 1st year				
ACC 120 Prin of Financial Accounting	3	2	0	4
CIS 110 Introduction to Computers	2	2	0	3
ECO 251 Prin of Microeconomics	3	0	0	3
Total	8	4	0	10
Spring - 1st year				
ACC 121 Prin of Managerial Accounting	3	2	0	4
ECO 252 Prin of Macroeconomics	3	0	0	3
Total	6	0	0	7
Grand Total	14	6	0	17

BUSINESS ADMINISTRATION

Customer Service Certificate Program (C2512004)

MAJOR COURSES:.....SHC

BUS 110 Introduction to Business.....	3
MKT 120 Principles of Marketing.....	3
MKT 221 Consumer Behavior.....	3
MKT 223 Customer Service.....	3

Total Credit Hours Required.....12

Business Administration - Customer Service Cert (C2512004)

Fall - 1st year				
BUS 110 Intro to Business	3	0	0	3
MKT 223 Customer Services	3	0	0	3
Total	6	0	0	6
Spring - 1st year				
MKT 120 Principles of Marketing	3	0	0	3
MKT 221 Consumer Behavior	3	0	0	3
Total	6	0	0	6
Grand Total	12	0	0	12

BUSINESS ADMINISTRATION

Marketing Certificate Program (C2512005)

MAJOR COURSES:.....SHC

BUS 110 Introduction to Business.....	3
MKT 120 Principles of Marketing.....	3
MKT 123 Fundamentals of Selling.....	3
MKT 220 Advertising and Sales Promotion.....	3

Total Credit Hours Required.....12

Business Administration - Marketing Certificate (C2512005)

Fall - 1st year				
BUS 110 Introduction to Business	3	0	0	3
MKT 123 Fundamentals of Selling	3	0	0	3
Total	6	0	0	6
Spring - 1st year				
MKT 120 Principles of Marketing	3	0	0	3
MKT 220 Advertising and Sales Promotion	3	0	0	3
Total	6	0	0	6
Grand Total	12	0	0	12

**COMPUTER ENGINEERING TECHNOLOGY
A.A.S. Program (A40160)**

**Computer Engineering Technology • A40160
Suggested Program Sequence Day**

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Computer Engineering Technology curriculum prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computer controlled equipment. Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation. Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks..

GENERAL EDUCATION COURSES:.....SHC

English/Communications:.....	
ENG 111 Writing and Inquiry.....	3
ENG 114 Prof Research & Reporting.....	3
OR ENG 112 Writing/Research in the Disc.....	3
OR ENG 113 Literature-Based Research.....	3
Humanities/Fine Arts:	
Elective	3
Natural Sciences/Mathematics:	
MAT 121 Algebra/Trigonometry I.....	3
Social/Behavioral Sciences:	
Elective	3

MAJOR COURSES:

CET 111 Computer Upgrade/Repair I.....	3
CIS 110 Introduction to Computers.....	3
CSC 134 C++ Programming.....	3
DFT 117 Technical Drafting.....	2
EGR 110 Intro to Engineering Tech.....	2
ELC 138 DC Circuit Analysis.....	4
ELC 139 AC Circuit Analysis.....	4
ELC 229 Applications Project.....	2
ELN 131 Analog Electronics I.....	4
ELN 132 Analog Electronics II.....	4
ELN 133 Digital Electronics.....	4
ELN 233 Microprocessor Systems.....	4
MAT 122 Algebra/Trigonometry II.....	3
NET 125 Networking Basics.....	3
PHY 131 Physics-Mechanics.....	4
CET Electives	6

Students are required to take a minimum of 6 SHC from the following:

CET 211 Computer Upgrade/Repair II.....	3
CSC 139 Visual BASIC Programming.....	3
CSC 151 JAVA Programming.....	3
CTS 130 Spreadsheet.....	3
NOS 110 Operating System Concepts.....	3
NOS 120 Linux/UNIX Single User.....	3
PHY 133 Physics-Sound & Light.....	4
WEB 110 Internet/Web Fundamentals.....	3

Work-Based Learning Option: Qualified students may elect to take 2 credit hours of Work-Based Learning in place of ELC 229.

Physics Note: Students planning to transfer to a 4-year college should consider taking PHY 131 & PHY 133. Please see your advisor.

Total Credit Hours Required.....70

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals.....	3
DRE 098 Integrated Reading Writing III.....	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060.....	6

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

	Class	Lab	Clin/WkExp	Credit
Fall - 1st year				
CIS 110 Introduction to Computers	2	2	0	3
CSC 134 C++ Programming	2	3	0	3
DFT 117 Technical Drafting	1	2	0	2
EGR 110 Intro to Engineering Tech	1	2	0	2
ELC 138 DC Circuit Analysis	3	3	0	4
MAT 121 Algebra/Trigonometry I	2	2	0	3
Total	11	14	0	17
Spring - 1st year				
ELC 139 AC Circuit Analysis	3	3	0	4
ELN 131 Analog Electronics I	3	3	0	4
ENG 111 Writing and Inquiry	3	0	0	3
MAT 122 Algebra/Trigonometry II	2	2	0	3
NET 125 Networking Basics	1	4	0	3
Total	12	12	0	17
Summer - 1st year				
ENG 114 Prof Research and Reporting (Preferred)	3	0	0	3
OR ENG 112 Writing/Research in the Disc	3	0	0	3
OR ENG 113 Literature-Based Research	3	0	0	3
Humanities/Fine Arts Elective	3	0	0	3
Total	6	0	0	6
Fall - 2nd year				
CET 111 Computer Upgrade/Repair I	2	3	0	3
OR				
CTS 120 Hardware/Software Support	2	3	0	3
ELN 132 Analog Electronics II	3	3	0	4
ELN 133 Digital Electronics	3	3	0	4
PHY 131 Physics-Mechanics	3	2	0	4
Total	11	11	0	15
Spring - 2nd year				
ELC 229 Applications Project	1	3	0	2
ELN 233 Microprocessor Systems	3	3	0	4
CET Elective	2	3	0	3
CET Elective	2	3	0	3
Social/Behavioral Science Elective	3	0	0	3
Total	11	12	0	15
Grand Total	49	49	0	70

Computer Engineering Technology • A40160

Suggested Program Evening Sequence

	Class	Lab	Clin/WkExp	Credit	
Fall - 1st year					
EGR 110	Intro to Engineering Tech	1	2	0	2
ELC 138	DC Circuit Analysis	3	3	0	4
MAT 121	Algebra/Trigonometry I	2	2	0	3
Total		6	7	0	9
Spring - 1st year					
ELC 139	AC Circuit Analysis	3	3	0	4
MAT 122	Algebra/Trigonometry II	2	2	0	3
Total		5	5	0	7
Summer - 1st year					
ENG 111	Writing and Inquiry	3	0	0	3
Social/Behavioral Science Elective		3	0	0	3
Total		6	0	0	6
Fall - 2nd year					
DFT 117	Technical Drafting	1	2	0	2
ELN 131	Analog Electronics I	3	3	0	4
Total		4	5	0	6
Spring - 2nd year					
ELN 132	Analog Electronics II	3	3	0	4
ELN 133	Digital Electronics	3	3	0	4
Total		6	6	0	8
Summer - 2nd year					
CIS 110	Introduction to Computers	2	2	0	3
ENG 114	Prof Research & Reporting (Preferred)	3	0	0	3
OR	ENG 112 Writing/Research in the Disc	3	0	0	3
OR	ENG 113 Literature-Based Research	3	0	0	3
Humanities/Fine Arts Elective		3	0	0	3
Total		8	2	0	9
Fall - 3rd year					
CET 111	Computer Upgrade/Repair I	2	3	0	3
OR					
CSC 120	Hardware/Software Support	2	3	0	3
CSC 134	C++ Programming	2	3	0	3
Total		4	6	0	6
Spring - 3rd year					
ELN 233	Microprocessor Systems	3	3	0	4
NET 125	Networking Basics	1	4	0	3
Total		4	7	0	7
Fall - 4th year					
PHY 131	Physics-Mechanics	3	2	0	4
CET Elective		2	3	0	3/4
Total		5	5	0	7/8
Spring - 4th year					
ELC 229	Applications Project	1	3	0	2
CET Elective		2	3	0	3
Total		3	6	0	5
Grand Total		51	49	0	70/71

COMPUTER INFORMATION TECHNOLOGY

A.A.S. Program (A25260)

Courses required to meet graduation requirements in this curriculum are offered during the day and online. The core courses are offered mostly online. Minimum time for completion: Day -- five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum. The Computer Information Technology curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible curriculum that can be customized to meet community information systems needs. Course work will develop a student's ability to communicate complex technical issues related to computer hardware, software, and networks in a manner that computer users can understand. Classes cover computer operations and terminology, operating systems, database, networking, security, and technical support. Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to manage information. Graduates should be prepared to sit for industry-recognized certification exams.

GENERAL EDUCATION COURSES:SHC

English/Communications:	
ENG 111	Writing and Inquiry .....3
ENG 114	Prof Research & Reporting.....3
OR	ENG 113 Literature-Based Research.....3
Humanities/Fine Arts:	
Elective .....3	
Natural Sciences/Mathematics:	
MAT 143	Quantitative Literacy .....3
Social/Behavioral Sciences:	
Elective .....3	

MAJOR COURSES:

CIS 110	Introduction to Computers.....3
CIS 115	Intro to Prog & Logic.....3
CTS 115	Info Sys Business Concept.....3
CTS 120	Hardware/Software Support.....3
CTS 130	Spreadsheet.....3
CTS 285	Systems Analysis & Design.....3
CTS 289	System Support Project.....3
DBA 110	Database Concepts.....3
DBA 115	Database Applications.....3
DBA 120	Database Programming I.....3
NET 125	Networking Basics.....3
NOS 110	Operating System Concepts.....3
NOS 130	Windows Single User.....3
NOS 230	Windows Administration I.....3
SEC 110	Security Concepts.....3
WBL XXX	Work-Based Learning.....2
Programming Elective.....3	

Students must select one course from the following:

CSC 134	C++ Programming.....3
CSC 139	Visual BASIC Programming.....3
Program Elective.....3	
CET 211	Computer Upgrade/Repair II.....3
CIS 277	Network Design & Imp.....3
CSC 234	Advanced C++ Programming.....3
CSC 239	Advanced Visual BASIC Prog.....3
DBA 220	Oracle DB Programming II.....3
NET 126	Routing Basics.....3
NET 175	Wireless Technology.....3
NOS 120	Linux/UNIX Single User.....3
NOS 231	Windows Administration II.....3
NOS 244	Operating Sytem - AS/400.....3
SEC 150	Secure Communications.....3
SEC 160	Secure Administration I.....3
WBL XXX	Work-Based Learning.....1-3

Work-Based Learning Option: Qualified students may elect to take 3 additional credit hours of Work-Based Learning in place of 3 hours program electives.

Total Credit Hours Required68

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....3
DRE 098	Integrated Reading Writing III.....3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050	.....5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Computer Information Technology Program Elective Pick List: CIS 277, CSC 234, CSC 239, DBA 220, NET 126, NOS 120, NOS 231, NOS 244, SEC 150, SEC 160, NET 175.

Computer Information Technology • A25260
Suggested Program Sequence Day

	Class	Lab	Clin/WkExp	Credit
Fall - 1st year				
CIS 110	Introduction to Computers	2	2	0 3
CIS 115	Intro to Prog. & Logic	2	3	0 3
DBA 110	Database Concepts	2	3	0 3
NOS 110	Operating System Concepts	2	3	0 3
	Total	8	11	0 12
Spring - 1st year				
CSC 139/134	Visual BASIC OR C++ Programming	2	3	0 3
DBA 115	Database Applications	2	2	0 3
CTS 120	Hardware/Software Support	2	3	0 3
NOS 130	Windows Single User	2	2	0 3
WBL XXX	Work-Based Learning	0	0	20 2
	Total	8	10	20 14
Summer - 1st year				
ENG 111	Writing and Inquiry	3	0	0 3
MAT 143	Quantitative Literacy	2	2	0 3
	Social/Behavioral Science Elective	3	0	0 3
	Total	8	2	0 9
Fall - 2nd year				
CTS 130	Spreadsheet	2	2	0 3
CTS 285	Systems Analysis & Design	3	0	0 3
DBA 120	Database Programming I	2	2	0 3
NET 125	Networking Basics	1	4	0 3
NOS 230	Windows Administration I	2	2	0 3
SEC 110	Security Concepts	2	2	0 3
	Total	12	12	0 18
Spring - 2nd year				
CTS 115	Info Sys Business Concepts	3	0	0 3
CTS 289	System Support Project	1	4	0 3
ENG 114	Prof Research & Reporting	3	0	0 3
	OR ENG 113 Literature-Based Research	3	0	0 3
	Humanities/Fine Arts Elective	3	0	0 3
	Program Elective	3	0	0 3
	Total	13	4	0 15
	Grand Total	53	41	20 68

Computer Information Technology • A25260
Suggested Program Sequence Evening

	Class	Lab	Clin/WkExp	Credit
Fall - 1st year				
CIS 110	Introduction to Computers	2	2	0 3
SEC 110	Security Concepts	2	2	0 3
	Total	4	4	0 6
Spring - 1st year				
CTS 115	Info Sys Business Concepts	3	0	0 3
CSC 139/134	Visual BASIC OR C++ Programming	2	3	0 3
NOS 110	Operating Systems Concepts	2	3	0 3
	Total	7	6	0 9
Summer - 1st year				
ENG 111	Writing and Inquiry	3	0	0 3
MAT 143	Quantitative Literacy	2	2	0 3
	Total	6	2	0 6
Fall - 2nd year				
CIS 115	Intro to Prog & Logic	2	3	0 3
CTS 130	Spreadsheet	2	2	0 3
DBA 110	Database Concepts	2	3	0 3
NET 125	Networking Basics	1	4	0 3
	Total	7	12	0 12
Spring - 2nd year				
DBA 115	Database Applications	2	2	0 3
NOS 130	Windows Single User	2	2	0 3
	Total	4	4	0 6
Summer - 2nd year				
ENG 114	Prof Research & Reporting	3	0	0 3
	OR ENG 113 Literature-Based Research	3	0	0 3
WBL XXX	Work-Based Learning	0	0	20 2
	Social/Behavioral Science Elective	3	0	0 3
	Total	6	0	20 8
Fall - 3rd year				
CTS 285	Systems Analysis & Design	3	0	0 3
DBA 120	Database Programming I	2	2	0 3
NOS 230	Windows Administration I	2	2	0 3
	Total	7	4	0 9
Spring - 3rd year				
CTS 289	System Support Project	1	4	0 3
CTS 120	Hardware/Software Support	2	3	0 3
	Total	3	7	0 6
Summer - 3rd year				
	Program Elective	3	0	0 3
	Humanities/Fine Arts Elective	3	0	0 3
	Total	6	0	0 6
	Grand Total	53	41	20 68

COMPUTER INFORMATION TECHNOLOGY
Certificate Program (C25260)

MAJOR COURSES:.....SHC

CIS 110	Introduction to Computers	.....3
CTS 115	Info Sys Business Concepts	.....3
CTS 130	Spreadsheet	.....3
DBA 110	Database Concepts	.....3
DBA 115	Database Applications	.....3

Total Credit Hours Required15

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals	.....3
DRE 098	Integrated Reading Writing III	.....3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Computer Information Technology (C25260)
Certificate Suggested Sequence

Fall - 1st year				
CIS 110	Introduction to Computers	2	2	0 3
CTS 130	Spreadsheet	2	2	0 3
DBA 110	Database Concepts	2	3	0 3
	Total	6	7	0 9
Spring 1st year				
DBA 115	Database Applications	2	2	0 3
CTS 115	Info Sys Business Concept	2	3	0 3
	Total	4	5	0 6
	Grand Total	10	12	0 15

COMPUTER INFORMATION TECHNOLOGY
Database Certificate (C2526001)
Suggested Sequence

MAJOR COURSES:.....SHC

DBA 110	Database Concepts	.....3
DBA 115	Database Applications	.....3
DBA 120	Database Programming I	.....3
DBA 220	Oracle DB Programming II	.....3

Total Credit Hours Required12

Computer Information Technology-Database Certificate (C2526001)
Suggested Sequence

Fall - 1st year				
DBA 110	Database Concepts	2	3	0 3
	Total	2	3	0 3
Spring - 1st year				
DBA 115	Database Applications	2	2	0 3
	Total	2	2	0 3
Fall - 2nd year				
DBA 120	Database Programming I	2	2	0 3
	Total	2	2	0 3
Spring - 2nd year				
DBA 220	Oracle DB Programming II	2	3	0 3
	Total	2	3	0 3
	Grand Total	8	10	0 12

**COMPUTER-INTEGRATED
MACHINING TECHNOLOGY
A.A.S. Program (A50210)**

**Computer-Integrated Machining Technology - A50210
Suggested Program Sequence Day**

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. The Associate in Applied Science Degree is awarded graduates of this curriculum. The Computer-Integrated Machining curriculum prepares students with the analytical, creative and innovative skills necessary to take a production idea from an initial concept through design, development and production, resulting in a finished product. Coursework may include manual machining, computer applications, engineering design, computer-aided drafting (CAD), computer-aided machining (CAM), blueprint interpretation, advanced computerized numeric control (CNC) equipment, basic and advanced machining operations, precision measurement and high-speed multi-axis machining. Graduates should qualify for employment as machining technicians in high-tech manufacturing, rapid-prototyping and rapid-manufacturing industries, specialty machine shops, fabrication industries, and high-tech or emerging industries such as aerospace, aviation, medical, and renewable energy, and to sit for machining certification examinations.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting	3
OR	ENG 112 Writing/Research in the Disc	3
OR	ENG 113 Literature-Based Research	3

Humanities/Fine Arts:

Elective	3
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Natural Sciences/Mathematics:

MAT 121	Algebra/Trigonometry I	3
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Social /Behavioral Sciences:

Elective	3
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MAJOR COURSES:

CIS 111	Basic PC Literacy	2
OR	CIS 110 Introduction to Computers	3
ISC 112	Industrial Safety	2
MAC 122	CNC Turning	2
MAC 124	CNC Milling	2
MAC 131	Blueprint Reading/Mach I	2
MAC 132	Blueprint Reading/Mach II	2
MAC 141	Machining Applications I	4
MAC 142	Machining Applications II	4
MAC 143	Machining Appl III	4
MAC 151	Machining Calculations	2
MAC 222	Advanced CNC Turning	2
MAC 224	Advanced CNC Milling	2
MAC 231	CAM: CNC Turning	3
MAC 232	CAM: CNC Milling	3
MAC 233	Appl in CNC Machining	6
MAC 234	Adv Multi-Axis Machin	3
MAC 241	Jigs & Fixtures I	4
MAC 242	Jigs & Fixtures II	4
MEC 110	Intro to CAD/CAM	2
MEC 142	Physical Metallurgy	2
WBL 110	World of Work	1

Work-Based Learning Option: Qualified students may elect to take 4-6 credit hours of Work-Based Learning in place of MAC 233 or MAC 242.

Total Credit Hours Required 73/74

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals	3
DRE 098	Integrated Reading Writing III	3
DMA	DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060	6

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

			Class	Lab	Clin/WkExp	Credit
Fall - 1st year						
ISC 112	Industrial Safety		2	0	0	2
MAC 131	Blueprint Reading/Mach I		1	2	0	2
MAC 141	Machining Applications I (1st 8 Wks)		2	6	0	4
MAC 142	Machining Application II (2nd 8 Wks)		2	6	0	4
MAC 151	Machining Calculations I		1	2	0	2
CIS 111	Basic PC Literacy		1	2	0	2
OR	CIS 110 Introduction to Computers		2	2	0	3
	Total		9/10	18	0	16/17
Spring - 1st year						
MAC 122	CNC Turning (1st 4 Wks)		1	3	0	2
MAC 222	Advanced CNC Turning (2nd 4 Wks)		1	3	0	2
MAC 132	Blueprint Reading Mach. II		1	2	0	2
MAC 124	CNC Milling (3rd 4 Wks)		1	3	0	2
MAC 224	Advanced CNC Milling (4th 4 Wks)		1	3	0	2
MAT 121	Algebra/Trigonometry I		2	2	0	3
WBL 110	World of Work		1	0	0	1
	Total		8	16	0	14
Summer - 1st year						
ENG 111	Writing and Inquiry		3	0	0	3
MEC 110	Intro to CAD/CAM		1	2	0	2
MAC 143	Machining Applications III		2	6	0	4
	Total		6	8	0	9
Fall - 2nd year						
MAC 231	CAM:CNC Turning		1	4	0	3
MAC 232	CAM:CNC Milling		1	4	0	3
MAC 241	Jigs & Fixtures I		2	6	0	4
	Humanities/Fine Arts Elective		3	0	0	3
	Total		7	14	0	13
Spring - 2nd year						
MAC 234	Adv Multi-Axis Machining		2	3	0	3
MAC 242	Jigs & Fixtures II		1	9	0	4
MEC 142	Physical Metallurgy		1	2	0	2
	Social/Behavioral Science Elective		3	0	0	3
	Total		7	14	0	12
Summer - 2nd year						
ENG 114	Literature-Based Research (Preferred)		3	0	0	3
OR	ENG 112 Writing/Research in the Disc		3	0	0	3
OR	ENG 113 Literature-Based Research		3	0	0	3
MAC 233	Appl in CNC Machining		2	12	0	6
	Total		5	12	0	9
	Grand Total		42/43	82	0	73/74

Computer-Integrated Machining Technology Diploma (D50210)

GENERAL EDUCATION COURSES: SHC

English/Communications:		
ENG 111	Writing and Inquiry	3
Natural Sciences/Mathematics:		
MAT 121	Algebra/Trigonometry I.....	3

MAJOR COURSES:

CIS 111	Basic PC Literacy	2
OR	CIS 110 Introduction to Computers.....	3
MAC 122	CNC Turning	2
MAC 124	CNC Milling.....	2
MAC 131	Blueprint Reading/Mach I.....	2
MAC 132	Blueprint Reading/Mach II.....	2
MAC 141	Machining Applications I.....	4
MAC 142	Machining Applications II.....	4
MAC 151	Machining Calculations	2
MAC 222	Advanced CNC Turning.....	2
MAC 224	Advanced CVC Milling.....	2
MEC 110	Intro to CAD/CAM.....	2
WBL 110	World of Work	1
*CIM/WBL Program Elective.....		6
MAC 231	CAM: CNC Turning.....	3
MAC 232	CAM: CNC Milling.....	3
MAC 241	Jigs & Fixtures I.....	4
MEC 142	Physical Metallurgy.....	2
WBL XXX	Work-Based Learning.....	1-4

Work-Based Learning Option: Qualified students may elect to take up to 4 credit hours of cooperative education in place of Programming electives.

Total Credit Hours Required..... 39/40

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 097	Integrated Reading Writing II.....	3
DMA	DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060.....	6

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Computer-Integrated Machining Technology - Diploma • D50210
Suggested Program Sequence Day**

	Class	Lab	Clin/WkExp	Credit
Fall - 1st year				
CIS 111	Basic PC Literacy	1	2	0 2
OR	CIS 110 Introduction to Computers	2	2	0 3
MAC 131	Blueprint Reading/Mach I	1	2	0 2
MAC 141	Machining Applications I	2	6	0 4
MAC 142	Machining Applications II	2	6	0 4
MAC 151	Machining Calculations	1	2	0 2
	Program Elective			3
	Total	10/11	18	0 17/18
Spring - 1st year				
MAC 122	CNC Turning (1st 4 Wks)	1	3	0 2
MAC 222	Advanced CNC Turning (2nd 4 Wks)	1	3	0 2
MAC 132	Blueprint Reading/Mach II	1	2	0 2
MAC 124	CNC Milling (3rd 4 Wks)	1	3	0 2
MAC 224	Advanced CNC Milling (4th 4 Wks)	1	3	0 2
MAT 121	Algebra/Trigonometry I	2	2	0 3
WBL 110	World of Work	1	0	0 1
	Program Elective			3
	Total	11	16	0 17
Summer - 1st year				
ENG 111	Writing and Inquiry	3	0	0 3
MEC 110	Intro to CAD/CAM	1	2	0 2
	Total	4	2	0 5
	Grand Total	25/26	36	0 39/40

Computer-Integrated Machining Technology - Diploma • D50210

Suggested Program Sequence Evening

Fall - 1st year				
MAC 131	Blueprint Reading/Mach I	1	2	0 2
MAC 141	Machining Applications I	2	6	0 4
MAC 151	Machining Calculations	1	2	0 2
CIS 111	Basic PC Literacy	1	2	0 2
OR	CIS 110 Introduction to Computers	2	2	0 3
	Total	5/6	12	0 10/11
Spring - 1st year				
MAC 132	Blueprint Reading/Mach II	1	2	0 2
MAC 142	Machining Applications II	2	6	0 4
MEC 110	Intro to CAD/CAM	1	2	0 2
	Total	4	10	0 8
Fall - 2nd year				
MAC 122	CNC Turning	1	3	0 2
MAC 124	CNC Milling	1	3	0 2
MAT 121	Algebra/Trigonometry I	2	2	0 3
WBL 110	World of Work	1	0	0 1
	Program Elective			3
	Total	8	8	0 11
Spring - 2nd year				
MAC 222	Advanced CNC Turning	1	3	0 2
MAC 224	Advanced CNC Milling	1	3	0 2
	Program Elective			3
	Total	5	6	0 7
Summer - 2nd year				
ENG 111	Writing and Inquiry	3	0	0 3
	Total	3	0	0 3
	Grand Total	25/26	36	0 38/39

Computer-Integrated Machining Technology Cert. Prog. (C50210)

MAJOR COURSES:

MAC 122	CNC Turning	2
MAC 124	CNC Milling.....	2
MAC 131	Blueprint Reading/Mach I.....	2
MAC 141	Machining Applications I.....	4
MAC 151	Machining Calculations	2
MEC 110	Intro to CAD/CAM.....	2

Total Credit Hours Required.....14

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 097	Integrated Reading Writing II.....	3
MAT	DMA 010, DMA 020, 030	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Computer-Integrated Machining Technology Certificate - Suggest Program Sequence Day (C50210)

Fall - 1st year				
MAC 122	CNC Turning	1	3	0 2
MAC 124	CNC Milling	1	3	0 2
MAC 131	Blueprint Reading/Mach I	1	2	0 2
MAC 141	Machining Applications I	2	6	0 4
MAC 151	Machining Calculations	1	2	0 2
MEC 110	Intro to CAD/CAM	1	2	0 2
	Grand Total	7	18	0 14

Computer-Integrated Machining Technology Certificate - Suggest Program Sequence Evening (C50210)

Fall - 1st year				
MAC 131	Blueprint Reading/Mach I	1	2	0 2
MAC 141	Machining Applications I	2	6	0 4
MAC 151	Machining Calculations	1	2	0 2
	Total	4	10	0 8
Spring - 1st year				
MEC 110	Intro to CAD/CAM	1	2	0 2
MAC 122	CNC Turning	1	3	0 2
MAC 124	CNC Milling	1	3	0 2
	Total	3	8	0 6
	Grand Total	7	18	0 14

COMPUTER PROGRAMMING

A.A.S. Program (A25130)

Courses required to meet graduation requirements in this curriculum are offered during the day and online. The core courses are offered mostly online. Minimum time for completion: Day -- five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum. The Computer Programming curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations. Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve. Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, computer operators, systems technicians, or database specialists.

GENERAL EDUCATION COURSES:.....SHC

English/Communications:

ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting.....	3
	OR ENG 113 Literature-Based Research.....	3

Humanities/Fine Arts:

Elective	3
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Natural Sciences/Mathematics:

MAT 143	Quantitative Literacy	3
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Social/Behavioral Sciences:

Elective	3
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MAJOR COURSES:

CIS 110	Introduction to Computers.....	3
CIS 115	Intro to Prog & Logic	3
CSC 138	RPG Programming	3
CSC 139	Visual BASIC Programming	3
CSC 141	Visual C++ Programming.....	3
	OR CSC 134 C++ Programming.....	3
CSC 238	Advanced RPG Programming	3
CSC 239	Advanced Visual BASIC Prog.....	3
CSC 289	Programming Capstone Project	3
CTS 115	Info Sys Business Concepts.....	3
CTS 130	Spreadsheet.....	3
CTS 285	Systems Analysis & Design.....	3
DBA 110	Database Concepts.....	3
NET 125	Networking Basics.....	3
NOS 110	Operating System Concepts.....	3
NOS 244	Operating System - AS/400.....	3
SEC 110	Security Concepts.....	3
	Programming Elective	3

Students must select 3 SHC from the following courses:

CSC 151	JAVA Programming.....	3
DBA 115	Database Applications.....	3
DBA 120	Database Programming I.....	3
SGD 111	Introduction to SGD.....	3
SGD 112	SGD Design.....	3
SGD 114	3D Modeling.....	3

Programming/Work-Based Learning Elective.....1-3

Students are required to take one (1) course from the following:

CSC 151	JAVA Programming.....	3
DBA 115	Database Applications.....	3
DBA 120	Database Programming I.....	3
SGD 111	Introduction to SGD.....	3
SGD 112	SGD Design.....	3
SGD 114	3D Modeling.....	3
WBL XXX	Work-Based Learning.....	1-3

Work-Based Learning Option: Qualified students may elect to take 1-3 credit hours of Work-Based Learning in place of Programming elective.

OTHER REQUIRED COURSES:

ACA 111	College Student Success.....	1
Total Credit Hours Required		68/70

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050		5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Computer Programming • A25130

Suggested Program Sequence Day

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
ACA 111	College Student Success	1	0	0	1
CIS 110	Introduction to Computers	2	2	0	3
CIS 115	Intro to Prog & Logic	2	3	0	3
DBA 110	Database Concepts	2	3	0	3
NET 125	Networking Basics	1	4	0	3
Total		8	12	0	13
Spring - 1st year					
CSC 141	Visual C++ Programming	2	3	0	3
	OR CSC 134 C++ Programming				
CTS 115	Info Sys Business Concepts	3	0	0	3
NOS 110	Operating Systems Concepts	2	3	0	3
NOS 244	Operating Systems - AS/400	2	2	0	3
	Program Elective	3	0	0	3
Total		12	8	0	15
Summer - 1st year					
ENG 111	Writing and Inquiry	3	0	0	3
MAT 143	Quantitative Literacy	2	2	0	3
	Humanities/Fine Arts Elective	3	0	0	3
Total		8	2	0	9
Fall - 2nd year					
CTS 130	Spreadsheet	2	2	0	3
CTS 285	Systems Analysis & Design	3	0	0	3
CSC 138	RPG Programming	2	3	0	3
CSC 139	Visual BASIC Programming	2	3	0	3
SEC 110	Security Concepts	2	2	0	3
Total		11	10	0	15
Spring - 2nd year					
ENG 114	Prof Research & Reporting	3	0	0	3
	OR ENG 113 Literature-Based Research	3	0	0	3
CSC 289	Programming Capstone Project	1	4	0	3
CSC 238	Advanced RPG Programming	2	3	0	3
CSC 239	Advanced Visual BASIC Programming	2	3	0	3
	Social/Behavioral Science Elective	3	0	0	3
	Programming/WBL Elective	0	0	0	1/3
Total		11	10	0	16/18
Grand Total		50	42	0	68/70

COMPUTER PROGRAMMING - Cert. Prog. (C25130)

MAJOR COURSES:.....SHC

CIS 115	Intro to Prog & Logic	3
CSC 139	Visual BASIC Programming	3
CSC 141	Visual C++ Programming.....	3
CSC 239	Advanced Visual BASIC Prog	3

Total Credit Hours Required

DEVELOPMENTAL COURSE REQUIREMENTS*

MAT DMA 010, DMA 020, DMA 030, DMA 040, DMA 050	5
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*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Computer Programming - Cert. Suggested Sequence (C25130)

Fall - 1st year					
CIS 115	Intro to Prog & Logic	2	3	0	3
Total		2	3	0	3
Spring - 1st year					
CSC 139	Visual BASIC Programming	2	3	0	3
CSC 141	Visual C++ Programming	2	3	0	3
Total		4	6	0	6
Spring - 2nd year					
CSC 239	Advanced Visual BASIC Prog	2	3	0	3
Total		2	3	0	3
Grand Total		8	12	0	12

COSMETOLOGY
Diploma Program (D55140)

Courses required to meet graduation requirements in this curriculum are offered during evening hours. All courses, state hours, and state performances must be completed before graduation. Minimum time for completion: four semesters full-time attendance; nine semesters part-time attendance. The Diploma is awarded graduates of this curriculum.

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills. Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge, and other selected topics. Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons, spas, nail salons, and related businesses. General Education Courses, including developmental courses, English, and Psychology will be taught on the CVCC campus. Instruction and course materials are available in Spanish.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 102	Applied Communications II .....3
Social/Behavioral Sciences:	
PSY 150	General Psychology.....3

MAJOR COURSES:

COS 111	Cosmetology Concepts I.....4
OR	
COS 111AB	Cosmetology Concepts I-AB.....2
COS 111BB	Cosmetology Concepts I-BB.....2
COS 112	Salon I.....8
OR	
COS 112AB	Salon I-AB.....4
COS 112BB	Salon I-BB.....4
COS 113	Cosmetology Concepts II.....4
OR	
COS 113AB	Cosmetology Concepts II-AB.....2
COS 113BB	Cosmetology Concepts II-BB.....2
COS 114	Salon II.....8
OR	
COS 114AB	Salon II-AB.....4
COS 114BB	Salon II-BB.....4
COS 115	Cosmetology Concepts III.....4
OR	
COS 115AB	Cosmetology Concepts III-AB.....2
COS 115BB	Cosmetology Concepts III-BB.....2
COS 116	Salon III.....4
OR	
COS 116AB	Salon III-AB.....2
COS 116BB	Salon III-BB.....2
COS 117	Cosmetology Concepts IV.....2
OR	
COS 117AB	Cosmetology Concepts IV-AB.....1
COS 117BB	Cosmetology Concepts IV-BB.....1
COS 118	Salon IV.....7
OR	
COS 118AB	Salon IV-AB.....4
COS 118BB	Salon IV-BB.....3
WBL 110	World of Work.....1

Total Credit Hours Required48

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098	Integrated Reading Writing III3
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*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Cosmetology - Diploma • D55140
Suggested Program Sequence Day

		Class	Lab	Clim/WkExp	Credit
Fall - 1st year					
COS 111	Cosmetology Concepts I	4	0	0	4
COS 112	Salon I	0	24	0	8
WBL 110	World Of Work	1	0	0	1
Total		5	24	0	13
Spring - 1st year					
COS 113	Cosmetology Concepts II	4	0	0	4
COS 114	Salon II	0	24	0	8
ENG 102	Applied Communication II	3	0	0	3
Total		7	24	0	15
Summer - 1st year					
COS 115	Cosmetology Concepts III	4	0	0	4
COS 116	Salon III	0	12	0	4
Total		4	12	0	8
Fall - 2nd year					
COS 117	Cosmetology Concepts IV	2	0	0	2
COS 118	Salon IV	0	21	0	7
PSY 150	General Psychology	3	0	0	3
Total		5	21	0	12
Grand Total		21	81	0	48

Cosmetology - Diploma/Part-Time • D55140
Suggested Program Sequence Evening

Fall - 1st year					
COS 111AB	Cosmetology Concepts I-AB	2	0	0	2
COS 112AB	Salon I-AB	0	12	0	4
WBL 110	World Of Work	1	0	0	1
Total		3	12	0	7
Spring - 1st year					
COS 111BB	Cosmetology Concepts I-BB	2	0	0	2
COS 112BB	Salon I-BB	0	12	0	4
ENG 102	Applied Communications II	3	0	0	3
Total		5	12	0	9
Summer - 1st year					
PSY 150	General Psychology	3	0	0	3
Total		3	0	0	3
Fall - 2nd year					
COS 113AB	Cosmetology Concepts II-AB	2	0	0	2
COS 114AB	Salon II-AB	0	12	0	4
Total		2	12	0	6
Spring - 2nd year					
COS 113BB	Cosmetology Concepts II-BB	2	0	0	2
COS 114BB	Salon II-BB	0	12	0	4
Total		2	12	0	6
Fall - 3rd year					
COS 115AB	Cosmetology Concepts III-BB	2	0	0	2
COS 116AB	Salon III-AB	0	6	0	2
Total		2	6	0	4
Spring - 3rd year					
COS 115BB	Cosmetology Concepts III-BB	2	0	0	2
COS 116BB	Salon III-BB	0	6	0	2
Total		2	6	0	4
Fall - 4th year					
COS 117AB	Cosmetology Concepts IV-AB	1	0	0	1
COS 118AB	Salon IV-AB	0	12	0	4
Total		1	12	0	5
Spring - 4th year					
COS 117BB	Cosmetology Concepts IV-BB	1	0	0	1
COS 118BB	Salon IV-BB	0	9	0	3
Total		1	9	0	4
Grand Total		21	81	0	48

CRIMINAL JUSTICE TECHNOLOGY
A.A.S. Program (A55180)

Criminal Justice Technology • A55180
Suggested Program Sequence Day

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day—five semesters full-time attendance; Evening—ten semesters part-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum. The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored. Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology. Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry 3
ENG 113	Literature-Based Research..... 3
OR	ENG 114 Prof Research & Reporting 3
Humanities/Fine Arts:	
Elective	..... 3
Natural Sciences/Mathematics:	
MAT 110	Math Measurement & Literacy..... 3
OR	MAT 143 Quantitative Literacy..... 3
Social/Behavioral Sciences:	
PSY 150	General Psychology 3

MAJOR COURSES:

CIS 110	Introduction to Computers (Effective Spr 2015)..... 3
CJC 111	Intro to Criminal Justice 3
CJC 112	Criminology..... 3
CJC 113	Juvenile Justice 3
CJC 121	Law Enforcement Operations..... 3
CJC 131	Criminal Law 3
CJC 132	Court Procedure & Evidence..... 3
CJC 141	Corrections..... 3
CJC 151	Intro to Loss Prevention 3
CJC 160	Terrorism: Underlying Issues 3
CJC 212	Ethics & Comm Relations 3
CJC 215	Organization & Administration 3
CJC 221	Investigative Principles..... 4
CJC 225	Crisis Intervention 3
CJC 231	Constitutional Law 3
SOC 210	Introduction to Sociology 3
Program Elective 3	
CJC 114	Investigative Photography 2
CJC 222	Criminalistics 3
HIS 111	World Civilizations I..... 3
HIS 112	World Civilizations II 3
HIS 121	Western Civilization I 3
HIS 122	Western Civilization II..... 3
POL 120	American Government..... 3
POL 130	State & Local Government 3
PSY 231	Forensic Psychology..... 3
PSY 241	Developmental Psych 3
PSY 281	Abnormal Psychology..... 3
SOC 220	Social Problems 3
WBL XXX	Work-Based Learning 1-3

Work-Based Learning Option: Qualified students may elect to take 1-3 credit hours of Work-Based Learning.

Credits applied for prior completion of B.L.E.T.

Total Credit Hours Required67

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals..... 3
DRE 098	Integrated Reading Writing III 3
DMA DMA 010, DMA 020, DMA 030 (MAT 110)..... 3	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)..... 5	

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

	Class	Lab	Clin/WkExp	Credit			
Fall - 1st year							
CJC 111	Intro to Criminal Justice	3	0	0	3		
CJC 131	Criminal Law	3	0	0	3		
CJC 132	Court Procedures & Evidence	3	0	0	3		
CJC 160	Terrorism: Underlying Issu	3	0	0	3		
ENG 111	Writing and Inquiry	3	0	0	3		
Total				15	0	0	15
Spring - 1st year							
CJC 112	Criminology	3	0	0	3		
CJC 121	Law Enforcement Operations	3	0	0	3		
CJC 221	Investigative Principles	3	2	0	4		
CIS 110	Introduction to Computers	2	2	0	3		
Total				11	4	0	13
Summer - 1st year							
ENG 113	Literature-Based Research	3	0	0	3		
OR	ENG 114 Prof Research & Reporting	3	0	0	3		
MAT 110	Math Measurement & Literacy	2	2	0	3		
OR	MAT 143 Quantitative Literacy	2	2	0	3		
PSY 150	General Psychology	3	0	0	3		
Total				8	2	0	9
Fall - 2nd year							
CJC 113	Juvenile Justice	3	0	0	3		
CJC 215	Organization & Administration	3	0	0	3		
CJC 231	Constitutional Law	3	0	0	3		
SOC 210	Introduction to Sociology	3	0	0	3		
	Humanities/Fina Arts Elective	3	0	0	3		
Total				15	0	0	15
Spring - 2nd year							
CJC 141	Corrections	3	0	0	3		
CJC 151	Intro to Loss Prevention	3	0	0	3		
CJC 212	Ethics & Comm Relations	3	0	0	3		
CJC 225	Crisis Intervention	3	0	0	3		
	Program Elective				3		
Total				15	0	0	15
Grand Total				64	6	0	67

Criminal Justice Technology • A55180
Suggested Prog Sequence Evening

	Class	Lab	Clin/WkExp	Credit	
Fall - 1st year					
CJC 111	Intro to Criminal Justice	3	0	0	3
CJC 131	Criminal Law	3	0	0	3
ENG 111	Writing and Inquiry	3	0	0	3
Total					
		9	0	0	9
Spring - 1st year					
CJC 121	Law Enforcement Operations	3	0	0	3
CIS 110	Introduction to Computers	2	2	0	3
Total					
		5	2	0	6
Summer - 1st year					
MAT 110	Math Measurement & Literacy	2	2	0	3
OR MAT 143	Quantitative Literacy	2	2	0	3
PSY 150	General Psychology	3	0	0	3
Total					
		5	2	0	6
Fall - 2nd year					
CJC 113	Juvenile Justice	3	0	0	3
SOC 210	Introduction to Sociology	3	0	0	3
Total					
		6	0	0	6
Spring - 2nd year					
CJC 141	Corrections	3	0	0	3
CJC 212	Ethics & Comm Relations	3	0	0	3
	Humanities/Fine Arts Elective	3	0	0	3
Total					
		9	0	0	9
Summer - 2nd year					
ENG 113	Literature-Based Research	3	0	0	3
OR ENG 114	Prof. Research & Reporting	3	0	0	3
Total					
		3	0	0	3
Fall - 3rd year					
CJC 132	Court Procedures & Evidence	3	0	0	3
CJC 160	Terrorism: Underlying Issu	3	0	0	3
	Program Elective	3	0	0	3
Total					
		9	0	0	9
Spring - 3rd year					
CJC 112	Criminology	3	0	0	3
CJC 221	Investigative Principles	3	2	0	4
Total					
		6	2	0	7
Fall - 4th year					
CJC 215	Organization & Administration	3	0	0	3
CJC 231	Constitutional Law	3	0	0	3
Total					
		6	0	0	6
Spring - 4th year					
CJC 151	Intro to Loss Prevention	3	0	0	3
CJC 225	Crisis Intervention	3	0	0	3
Total					
		6	0	0	6
Grand Total					
		64	6	0	67

CRIMINAL JUSTICE TECHNOLOGY
Law Enforcement Certificate Prog (C5518001)

MAJOR COURSES:	SHC
CJC 111 Intro to Criminal Justice	3
CJC 121 Law Enforcement Operations	3
CJC 132 Court Procedure & Evidence	3
CJC 212 Ethics & Comm Relations	3
CJC 225 Crisis Intervention	3
Total Credit Hours Required	15

Criminal Justice Technology
Law Enforcement Cert. (C5518001) Suggested Sequence

Fall - 1st year					
CJC 111	Intro to Criminal Justice	3	0	0	3
CJC 132	Court Procedure & Evidence	3	0	0	3
Total					
		6	0	0	6
Spring - 1st year					
CJC 121	Law Enforcement Operations	3	0	0	3
CJC 212	Ethics & Comm Relations	3	0	0	3
CJC 225	Crisis Intervention	3	0	0	3
Total					
		9	0	0	9
Grand Total					
		15	0	0	15

CRIMINAL JUSTICE TECHNOLOGY

Correctional -- Probation & Parole Certificate Prog (C5518002)

MAJOR COURSES:	SHC
CJC 111 Intro to Criminal Justice	3
CJC 141 Corrections	3
CJC 212 Ethics & Comm Relations	3
CJC 215 Organization & Administration	3
CJC 225 Crisis Intervention	3
Total Credit Hours Required	15

Correctional -- Probation & Parole
Cert. Suggested Sequence (C5518002)

Fall - 1st year					
CJC 111	Intro to Criminal Justice	3	0	0	3
CJC 215	Organization & Administration	3	0	0	3
Total					
		6	0	0	6
Spring - 2nd year					
CJC 141	Corrections	3	0	0	3
CJC 212	Ethics & Comm Relations	3	0	0	3
CJC 225	Crisis Intervention	3	0	0	3
Total					
		9	0	0	9
Grand Total					
		15	0	0	15

CRIMINAL JUSTICE TECHNOLOGY

Judicial -- Court Administrator Certificate Prog (C5518004)

MAJOR COURSES:	SHC
CJC 111 Intro to Criminal Justice	3
CJC 131 Criminal Law	3
CJC 132 Court Procedure & Evidence	3
CJC 215 Organization & Administration	3
CJC 225 Crisis Intervention	3
Total Credit Hours Required	15

Judicial -- Court Administrator - Cert. Suggested Sequence (C5518004)

Fall - 1st year					
CJC 111	Intro to Criminal Justice	3	0	0	3
CJC 131	Criminal Law	3	0	0	3
CJC 132	Court Procedure & Evidence	3	0	0	3
CJC 215	Organization & Administration	3	0	0	3
Total					
		12	0	0	12
Spring - 1st year					
CJC 225	Crisis Intervention	3	0	0	3
Total					
		3	0	0	3
Grand Total					
		15	0	0	15

CRIMINAL JUSTICE TECHNOLOGY

Retail -- Industrial Security Certificate Prog (C5518003)

MAJOR COURSES:	SHC
CJC 111 Intro to Criminal Justice	3
CJC 131 Criminal Law	3
CJC 151 Intro to Loss Prevention	3
CJC 215 Organization & Administration	3
CJC 221 Investigative Principles	4
Total Credit Hours Required	16

Retail -- Industrial Security - Cert. Suggested Sequence (C551803)

Fall - 1st year					
CJC 111	Intro to Criminal Justice	3	0	0	3
CJC 131	Criminal Law	3	0	0	3
CJC 215	Organization & Administration	3	0	0	3
Total					
		9	0	0	9
Spring - 1st year					
CJC 221	Investigative Principles	3	2	0	4
CJC 151	Intro to Loss Prevention	3	0	0	3
Total					
		6	2	0	7
Grand Total					
		15	2	0	16

CRIMINAL JUSTICE TECHNOLOGY

Latent Evidence Concentration

A.A.S. Program (A5518A)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day--five semesters full-time attendance; Evening--ten semesters part-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

Latent Evidence is a concentration under the curriculum of Criminal Justice Technology. This curriculum is designed to provide knowledge of latent evidence systems and operations. Study will focus on local, state, and federal law enforcement, evidence processing and procedures. Students will learn both theory and hands-on analysis of latent evidence. They will learn fingerprint classification, identification, and chemical development. Students will record, cast, and recognize footwear and tire-tracks; and process crime scenes. Issues and concepts of communications and the use of computers and computer assisted design programs in crime scene technology will be discussed. Graduates should qualify for employment in a variety of criminal justice organizations especially in local, state, and federal law enforcement, and correctional agencies.

GENERAL EDUCATION COURSES: SHC

English/Communications:		
ENG 111	Writing and Inquiry	3
ENG 113	Literature-Based Research.....	3
OR	ENG 114 Prof Research & Reporting	3
Humanities/Fine Arts:		
Elective	.....	3
Natural Sciences/Mathematics:		
MAT 110	Math Measurement & Literacy.....	3
OR	MAT 143 Quantitative Literacy.....	3
Social/Behavioral Sciences:		
PSY 150	General Psychology	3

MAJOR COURSES:

CIS 110	Introduction to Computers.....	3
CJC 111	Intro to Criminal Justice.....	3
CJC 112	Criminology.....	3
CJC 113	Juvenile Justice.....	3
CJC 121	Law Enforcement Operations.....	3
CJC 131	Criminal Law.....	3
CJC 132	Court Procedure & Evidence.....	3
CJC 144	Crime Scene Processing.....	3
CJC 146	Trace Evidence.....	3
CJC 212	Ethics & Comm Relations.....	3
CJC 221	Investigative Principles.....	4
CJC 222	Criminalistics.....	3
CJC 231	Constitutional Law.....	3
CJC 245	Friction Ridge Analysis.....	3
CJC 246	Adv. Friction Ridge Analy.....	3
CJC 250	Forensic Biology I.....	3
OR	CJC 251 Forensic Chemistry I.....	4
PSY 231	Forensic Psychology.....	3
Criminal Justice Elective.....		1-4
CJC 114	Investigative Photography.....	2
WBL XXX	Work-Based Learning	1-4

Total Credit Hours Required..... 68-72

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3
DMA DMA 010, DMA 020, DMA 030 (MAT 110)	.....	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)	.....	5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Criminal Justice Technology Latent Evidence Concentration • A5518A Suggested Program Sequence Day

		Class	Lab	Clim/WkExp	Credit
Fall - 1st year					
CJC 111	Intro to Criminal Justice	3	0	0	3
CJC 131	Criminal Law	3	0	0	3
CJC 132	Court Procedures & Evidence	3	0	0	3
ENG 111	Writing and Inquiry	3	0	0	3
Total		12	0	0	12
Spring - 1st year					
CJC 112	Criminology	3	0	0	3
CJC 121	Law Enforcement Operations	3	0	0	3
CJC 221	Investigative Principles	3	2	0	4
CIS 110	Introduction to Computers	2	2	0	3
Total		11 2/4	0	0	13
Summer - 1st year					
ENG 113	Literature-Based Research	3	0	0	3
OR	ENG 114 Prof. Research & Reporting	3	0	0	3
MAT 110	Math Measurement & Literacy	2	2	0	3
OR	MAT 143 Quantitative Literacy	2	2	0	3
PSY 150	General Psychology	3	0	0	3
	Humanities/Fine Arts Elective	3	0	0	3
Total		12	2	0	12
Fall - 2nd year					
CJC 113	Juvenile Justice	3	0	0	3
CJC 146	Trace Evidence	2	3	0	3
CJC 231	Constitutional Law	3	0	0	3
CJC 245	Friction Ridge Analysis	2	3	0	3
	Criminal Justice Elective				1/4
Total		10	6	0	13/16
Spring - 2nd year					
CJC 222	Criminalistics	3	0	0	3
CJC 144	Crime Scene Processing	2	3	0	3
CJC 212	Ethics & Comm. Relations	3	0	0	3
CJC 246	Adv. Friction Ridge Analy	2	3	0	3
CJC 250	Forensic Biology I	2	2	0	3
OR	CJC 251 Forensic Chemistry I	3	2	0	4
PSY 231	Forensic Psychology	3	0	0	3
Total		15/16	10	0	18/19
Grand Total		60/61	20/22	0	68/72

**Criminal Justice Technology
Latent Evidence Concentration • A5518A
Suggested Program Sequence Evening**

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
CJC 111	Intro to Criminal Justice	3	0	0	3
CJC 131	Criminal Law	3	0	0	3
ENG 111	Writing and Inquiry	3	0	0	3
	Total	9	0	0	9
Spring - 1st year					
CJC 121	Law Enforcement Operations	3	0	0	3
CIS 110	Introduction to Computers	2	2	0	3
	Total	5	2	0	6
Summer - 1st year					
MAT 110	Math Measurement & Literacy	2	2	0	3
	OR MAT 143 Quantitative Literacy	2	2	0	3
PSY 150	General Psychology	3	0	0	3
	Total	5	2	0	6
Fall - 2nd year					
CJC 113	Juvenile Justice	3	0	0	3
CJC 146	Trace Evidence	2	3	0	3
	Criminal Justice Elective				1/4
	Total	5	3	0	7/10
Spring - 2nd year					
CJC 144	Crime Scene Processing	2	3	0	3
CJC 212	Ethics & Comm Relations	3	0	0	3
PSY 231	Forensic Psychology	3	0	0	3
	Total	8	3	0	9
Summer - 2nd year					
ENG 113	Literature-Based Research	3	0	0	3
	OR ENG 114 Prof Research & Reporting	3	0	0	3
	Humanities/Fine Arts Elective	3	0	0	3
	Total	6	0	0	6
Fall - 3rd year					
CJC 132	Court Procedures & Evidence	3	0	0	3
	Total	3	0	0	3
Spring - 3rd year					
CJC 221	Investigative Principles	3	2	0	4
CJC 112	Criminology	3	0	0	3
	Total	6	2	0	7
Fall - 4th year					
CJC 231	Constitutional Law	3	0	0	3
CJC 245	Friction Ridge Analysis	2	3	0	3
	Total	5	3	0	6
Spring - 4th year					
CJC 222	Criminalistics	3	0	0	3
CJC 246	Adv. Friction Ridge Analy	2	3	0	3
CJC 250	Forensic Biology I	2	2	0	3
	OR CJC 251 Forensic Chemistry I	3	2	0	4
	Total	7/8	5	0	9/10
Grand Total		59/61	20/22	0	68/72

**CRIMINAL JUSTICE TECHNOLOGY
Latent Evidence Concentration Crime Scene Investigation
Certificate Program (C5518A01)**

MAJOR COURSES:		SHC
CJC 111	Intro to Criminal Justice	3
CJC 114	Investigative Photography	2
CJC 144	Crime Scene Processing	3
CJC 146	Trace Evidence	3
CJC 221	Investigative Principles.....	4
Total Credit Hours Required		15

**CRIMINAL JUSTICE TECHNOLOGY
Latent Evidence Concentration Crime Scene Investigation
Cert. Prog. Suggested Sequence (C5518A01)**

Fall - 1st year					
CJC 111	Intro to Criminal Justice	3	0	0	3
CJC 146	Trace Evidence	2	3	0	3
CJC 114	Investigative Photography	1	2	0	2
	Total	6	5	0	8
Spring - 1st year					
CJC 221	Investigative Principles	3	2	0	4
CJC 144	Crime Scene Processing	2	3	0	3
	Total	5	5	0	7
Grand Total		11	10	0	15

DENTAL HYGIENE
A.A.S. Program (A45260)

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Some general education courses are offered at night. Minimum time for completion: seven semesters. The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Dental Hygiene curriculum provides individuals with the knowledge and skills to assess, plan, implement, and evaluate dental hygiene care for individuals and the community. Students will learn to prepare the operator, collect patient histories, note abnormalities, plan care, teach oral hygiene, debride and polish teeth, expose radiographs, apply preventive agents, complete necessary chart entries, and perform other procedures related to dental hygiene care. Graduates of this program may be eligible to take national and state/regional examinations for licensure which are required to practice dental hygiene. Employment opportunities include dental offices, clinics, schools, public health agencies, industry, and educational institutions.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

COM 110	Introduction to Communication.....	3
ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting.....	3
OR	ENG 112 Writing/Research in the Disc.....	3
OR	ENG 113 Literature-Based Research.....	3

Humanities/Fine Arts:

Elective	3
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Natural Sciences/Mathematics:

CHM 130	Gen, Org, & Biochemistry.....	3
CHM 130A	Gen, Org, & Biochem Lab.....	1

Social/Behavioral Sciences:

PSY 150	General Psychology.....	3
SOC 210	Introduction to Sociology.....	3

MAJOR COURSES:

BIO 163	Basic Anat & Physiology.....	5
BIO 175	General Microbiology.....	3
DEN 110	Orofacial Anatomy	3
DEN 111	Infection/Hazard Control.....	2
DEN 112	Dental Radiography.....	3
DEN 120	Dental Hyg Preclinic Lec.....	2
DEN 121	Dental Hygiene Precl Lab.....	2
DEN 123	Nutrition/Dental Health.....	2
DEN 124	Periodontology.....	2
DEN 130	Dental Hygiene Theory I.....	2
DEN 131	Dental Hygiene Clinic I.....	3
DEN 140	Dental Hygiene Theory II.....	1
DEN 141	Dental Hygiene Clinic II.....	2
DEN 220	Dental Hygiene Theory III.....	2
DEN 221	Dental Hygiene Clinic III.....	4
DEN 222	General & Oral Pathology.....	2
DEN 223	Dental Pharmacology	2
DEN 224	Materials and Procedures.....	2
DEN 230	Dental Hygiene Theory IV.....	1
DEN 231	Dental Hygiene Clinic IV.....	4
DEN 232	Community Dental Health.....	3
DEN 233	Professional Development.....	2

Total Credit Hours Required76

DEVELOPMENTAL COURSE REQUIREMENTS*

ENG 090	Composition Strategies.....	3
DRE 098	Integrated Reading Writing III	3
DMA	DMA 010, DMA 020, DMA 030, DMA 040, DMA 050.....	5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Background Check - A criminal background check is required for students to participate in external rotations and for North Carolina Dental Hygiene Licensure.

Dental Hygiene • A45260
Suggested Program Sequence Day

		Class	Lab	Clin/WkExp	Credit
Spring - 1st year					
BIO 163	Basic Anatomy and Physiology	4	2	0	5
CHM 130	Gen, Org & Biochemistry	3	0	0	3
CHM 130A	Gen, Org & Biochem Lab	0	2	0	1
ENG 111	Writing and Inquiry	3	0	0	3
PSY 150	General Psychology	3	0	0	3
Total					13 4 0 15
Fall - 1st year					
BIO 175	General Microbiology	2	2	0	3
COM 110	Introduction to Communication	3	0	0	3
ENG 114	Prof Research & Reporting (Preferred)	3	0	0	3
OR	ENG 112 Writing/Research in the Disc	3	0	0	3
OR	ENG 113 Literature-Based Research	3	0	0	3
SOC 210	Introduction to Sociology	3	0	0	3
Total					11 2 0 12
Note: General Education Course Requirements- Applicants must have completed the following courses required for the program, prior to the Dental Hygiene Program application deadline (March 15). Students must complete BIO 163, BIO 175, CHM 130 & CHM 130A, COM 110, ENG 111, ENG 114, PSY 150, & SOC 210. Grades lower than "C" will not be accepted. Students must also be accepted into the Dental Hygiene program prior to taking DEN courses.					
Fall - 2nd year					
DEN 110	Orofacial Anatomy	2	2	0	3
DEN 111	Infection/Hazard Control	2	0	0	2
DEN 120	Dental Hygiene Preclinic Lecture	2	0	0	2
DEN 121	Dental Hygiene Precl Lab	0	6	0	2
	Humanities/Fine Arts Elective	3	0	0	3
Total					9 8 0 12
Spring - 2nd year					
DEN 112	Dental Radiography	2	3	0	3
DEN 222	General & Oral Pathology	2	0	0	2
DEN 130	Dental Hygiene Theory I	2	0	0	2
DEN 131	Dental Hygiene Clinic I	0	0	9	3
DEN 123	Nutrition/Dental Health	2	0	0	2
Total					8 3 9 12
Summer - 2nd year					
DEN 124	Periodontology	2	0	0	2
DEN 140	Dental Hygiene Theory II	1	0	0	1
DEN 141	Dental Hygiene Clinic II	0	0	6	2
Total					3 0 6 5
Fall - 3rd year					
DEN 220	Dental Hygiene Theory III	2	0	0	2
DEN 221	Dental Hygiene Clinic III	0	0	12	4
DEN 223	Dental Pharmacology	2	0	0	2
DEN 232	Community Dental Health	2	3	0	3
Total					6 3 12 11
Spring - 3rd year					
DEN 224	Materials and Procedures	1	3	0	2
DEN 230	Dental Hygiene Theory IV	1	0	0	1
DEN 231	Dental Hygiene Clinic IV	0	0	12	4
DEN 233	Professional Development	2	0	0	2
Total					4 3 12 9
Grand Total					54 20 42 76

EARLY CHILDHOOD EDUCATION

A.A.S. Program (A55220)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day – six semesters full-time attendance; Evening – ten semesters part-time attendance. An Associate in Applied Science Degree is awarded graduates of the Early Childhood Education Degree curriculum. A Diploma is awarded students completing the diploma curriculum. A Certificate is awarded students completing the certificate curriculum. **Special Admissions Requirements for Early Childhood Education Programs.** In addition to the general procedures to apply for admission to a curriculum program of study, applicants for the Early Childhood Education program must complete other procedures. CVCC's Early Childhood Education program requires completion of educational experiences in childcare facilities and/or public school settings. These settings require students to undergo criminal background checks. If a student is excluded from an educational setting as a result of a background check, the student may be asked to withdraw from the program. Some settings may also require additional vaccinations and/or health examinations. Admission into CVCC's Early Childhood Education program may be contingent upon receipt of a CVCC medical form documenting that the applicant possesses satisfactory physical and mental health. Facilities for providing health care services are not available on campus. The Early Childhood Education curriculum prepares individuals to work with children from infancy through middle childhood in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers. Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with parents and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children. Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs. Program Graduation Requirements: The Early Childhood Education Department is currently seeking National Accreditation through the National Association for the Education of Young Children. The standards for students are rigorous and require students to perform at a minimum competency level. Due to the minimum competency level expected for graduates, the Education Department requires a grade of "C" or higher on all required Education Courses for graduation with a certificate, diploma, or degree.

GENERAL EDUCATION COURSES:

SHC

English/Communications:	
COM 110	Introduction to Communication..... 3
ENG 111	Writing and Inquiry 3
ENG 113	Literature-Based Research..... 3
OR	ENG 114 Prof Research & Reporting 3

Humanities/Fine Arts:	
Elective	..... 3
Natural Sciences/Mathematics:	
Elective	..... 3/4
Social/Behavioral Science:	
Elective	..... 3

MAJOR COURSES:

EDU 119	Intro to Early Child Educ..... 4
EDU 131	Child, Family, & Commun 3
EDU 144	Child Development I 3
EDU 145	Child Development II 3
OR	
PSY 244	Child Development I..... 3
PSY 245	Child Development II 3
EDU 146	Child Guidance 3
EDU 151	Creative Activities 3
EDU 153	Health, Safety, & Nutrit..... 3
EDU 221	Children With Exceptional 3
EDU 234	Infants, Toddlers, & Twos 3
EDU 251	Exploration Activities 3
EDU 259	Curriculum Planning 3
EDU 271	Educational Technology 3
EDU 280	Language & Literacy Exp..... 3
EDU 284	Early Child Capstone Prac..... 4
PSY 150	General Psychology 3
SOC 210	Introduction to Sociology 3
CIS/EDU Elective	..... 2/4

Students are required to take one (1) course from the following:

EDU 216	Foundations of Education..... 4
EDU 235	School-Age Dev & Program 3
EDU 261	Early Childhood Admin I 3
EDU 262	Early Childhood Admin II 3
EDU 275	Effective Teach Train..... 2

(Early Childhood Education cont.)

OTHER REQUIRED COURSES:

ACA 111	College Student Success..... 1
Total Credit Hours Required 71/74	

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals..... 3
DRE 098	Integrated Reading Writing III 3
DMA DMA 010, DMA 020, DMA 030, (MAT 110)..... 3	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143 or MAT 152)..... 5	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, (MAT 121)..... 6	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 DMA 065, (MAT 171)..... 7	

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Early Childhood Education • A55220 Suggested Program Sequence Day

	Class	Lab	Clin/WrkExp	Credit	
Fall - 1st year					
ACA 111	College Student Success	1	0	0	1
EDU 119	Intro to Early Child Educ	4	0	0	4
*EDU 144	Child Development I	3	0	0	3
EDU 151	Creative Activities	3	0	0	3
EDU 271	Educational Technology	2	2	0	3
ENG 111	Writing and Inquiry	3	0	0	3
	Total	16	2	0	17
Spring - 1st year					
*EDU 145	Child Development II	3	0	0	3
EDU 146	Child Guidance	3	0	0	3
EDU 153	Health, Safety, & Nutrit	3	0	0	3
SOC 210	Intro to Sociology	3	0	0	3
EDU Elective		2/4	0	0	3/4
	Total	14/16	0	0	15/16
Summer - 1st year					
	Humanities/Fine Arts Elective	3	0	0	3
	Natural Science/Mathematics Elective				3/4
	Social/Behavioral Science Elective	3	0	0	3
	Total	8/9	2/3	0	9/10
Fall - 2nd year					
ENG 113	Literature-Based Research	3	0	0	3
OR	ENG 114 Prof Research & Reporting	3	0	0	3
EDU 131	Child, Family, & Commun	3	0	0	3
EDU 221	Children With Exceptional	3	0	0	3
EDU 259	Curriculum Planning	3	0	0	3
PSY 150	General Psychology	3	0	0	3
	Total	15	0	0	15
Spring - 2nd year					
COM 110	Introduction to Communication	3	0	0	3
EDU 234	Infants, Toddlers, & Twos	3	0	0	3
EDU 251	Exploration Activities	3	0	0	3
EDU 280	Language & Literacy Exp	3	0	0	3
EDU 284	Early Child Capstone Prac	1	9	0	4
	Total	13	9	0	16
	Grand Total	66/69	13/14	0	71/74

EDU Electives: EDU 216, EDU 261, EDU 262, EDU 235, EDU 275.

Natural Science and Math Electives: AST 151, AST 151A, BIO 111, BIO 143, BIO 163, BIO 168, CHM 130, CHM 130A Lab, CHM 131, CHM 131A Lab, GEL 111, GEL 120, MAT 110, MAT 121, MAT 143, MAT 152, MAT 171, PHS 130, PHY 110 and PHY 110A Lab, PHY 121.

* Students may take PSY 244 and PSY 245 for EDU 144 and EDU 145

**EARLY CHILDHOOD EDUCATION
Diploma Program (D55220)**

GENERAL EDUCATION COURSES:SHC

English/Communications:
 ENG 111 Writing and Inquiry3
 ENG 113 Literature-Based Research3
 OR ENG 114 Prof Research & Reporting3

MAJOR COURSES:

EDU 119 Intro to Early Child Educ4
 EDU 131 Child, Family, & Commun3
 EDU 144 Child Development I3
 EDU 145 Child Development II3
 OR
 PSY 244 Child Development I3
 PSY 245 Child Development II3
 EDU 146 Child Guidance3
 EDU 151 Creative Activities3
 EDU 153 Health, Safety, & Nutrit3
 EDU 221 Children with Exceptional3
 EDU 259 Curriculum Planning3
 EDU 271 Educational Technology3
 EDU 280 Language & Literacy Exp3
 EDU 284 Early Child Capstone Prac4

OTHER REQUIRED COURSES:

ACA 111 College Student Success1

Total Credit Hours Required45

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098 Integrated Reading Writing III3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Early Childhood Education Diploma Suggested Sequence (D55220)

	Class	Lab	Clin/WkExp	Credit
Fall - 1st year				
ACA 111 College Student Success	1	0	0	1
EDU 119 Intro to Early Child Educ	4	0	0	4
*EDU 144 Child Development I	3	0	0	3
EDU 151 Creative Activities	3	0	0	3
EDU 271 Educational Technology	2	2	0	3
Total	13	2	0	14
Spring - 1st year				
*EDU 145 Child Development II	3	0	0	3
EDU 146 Child Guidance	3	0	0	3
ENG 111 Writing and Inquiry	3	0	0	3
EDU 153 Health, Safety, & Nutriti	3	0	0	3
EDU 280 Language & Literacy Exp	3	0	0	3
Total	15	0	0	15
Fall - 2nd year				
EDU 131 Child, Family, & Commun	3	0	0	3
EDU 221 Children With Exceptional	3	0	0	3
EDU 259 Curriculum Planning	3	0	0	3
EDU 284 Early Child Capstone Prac	1	9	0	4
ENG 113 Literature-Based Research	3	0	0	3
OR ENG 114 Prof Research & Reporting	3	0	0	3
Total	13	9	0	16
Grand Total	41	11	0	45

**EARLY CHILDHOOD EDUCATION
School-Age Certificate Program (C5522004)**

MAJOR COURSES:SHC

EDU 131 Child, Family, & Commun3
 EDU 144 Child Development I3
 EDU 145 Child Development II3
 OR
 PSY 244 Child Development I3
 PSY 245 Child Development II3
 EDU 146 Child Guidance3
 EDU 235 School-Age Dev & Program3
 EDU 275 Effective Teach Train2

OTHER REQUIRED COURSES:

ACA 111 College Student Success1

Total Credit Hours Required18

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098 Integrated Reading Writing III3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

School-Age Cert. Suggested Sequence (C5522004)

Fall - 1st year				
ACA 111 College Student Success	1	0	0	1
EDU 131 Child, Family, & Commun	3	0	0	3
*EDU 144 Child Development I	3	0	0	3
EDU 235 School-Age Dev & Program	3	0	0	3
Total	10	0	0	10
Spring - 1st year				
*EDU 145 Child Development II	3	0	0	3
EDU 146 Child Guidance	3	0	0	3
EDU 275 Effective Teach Train	2	0	0	2
Total	8	0	0	8
Grand Total	18	0	0	18

INFANT/TODDLER CARE - Certificate Prog. (C55290)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. The Certificate is awarded graduates of this curriculum. The curriculum prepares individuals to work with children from infancy to three years of age in diverse learning environments. Students will combine learned theories, competency-based knowledge, and practice in actual settings with young children under the supervision of qualified teachers. Course work includes infant/toddler growth and development; physical/nutritional needs of infants and toddlers; safety issues in the care of infants and toddlers; care and guidance; communication skills with parents and children; design and implementation of appropriate curriculum; and other related topics. Graduates should be prepared to plan and implement developmentally appropriate infant/toddler programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Early Head Start Programs, and other infant/toddler programs.

MAJOR COURSES:SHC

EDU 119 Intro to Early Child Educ4
 EDU 131 Child, Family & Commun3
 EDU 153 Health, Safety & Nutrit3
 EDU 234 Infants, Toddlers, & Twos3
 EDU Child Development Elective3
 (Select a course from the following)
 EDU 144 Child Development I3
 PSY 244 Child Development I3

OTHER REQUIRED COURSES:

ACA 111 College Student Success1

Total Credit Hours Required:17

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098 Integrated Reading Writing III3

Infant/Toddler Care Cert. Prog. (C55290) Suggested Sequence

Fall - 1st year				
ACA 111 College Student Success	1	0	0	1
EDU 119 Intro to Early Childhood Education	4	0	0	4
EDU 131 Child, Family and Community	3	0	0	3
Child Development Elective	3	0	0	3
Total	11	0	0	11
Spring - 1st year				
EDU 153 Health, Safety and Nutrition	3	0	0	3
EDU 234 Infants, Toddlers, & Twos	3	0	0	3
Total	6	0	0	6
Grand Total	17	0	0	17

**ELECTRICAL SYSTEMS TECHNOLOGY
Diploma Program (D35130)**

**Electrical Systems Technology Diploma • D35130
Suggested Prog Seq Evening**

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day -- two semesters full-time attendance; Evening -- four semesters full-time attendance. The Diploma is awarded graduates of this curriculum. The Electrical Systems Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial, and industrial facilities. Coursework, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, programmable logic controllers, industrial motor controls, applications for the National Electric Code, and other subjects as local needs require. Graduates should qualify for a variety of jobs in the electrical field as an on-the-job apprentice assisting in the layout, installation, and maintenance of electrical systems.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 102	Applied Communications II .....3
OR	ENG 111 Writing and Inquiry.....3
Natural Sciences/Mathematics:	
MAT 110	Math Measurement & Literacy.....3
OR	MAT 143 Quantitative Literacy.....3

MAJOR COURSES:

BPR 111	Print Reading.....2
ELC 112	DC/AC Electricity.....5
ELC 113	Residential Wiring.....4
ELC 115	Industrial Wiring.....4
ELC 117	Motors and Controls.....4
ELC 118	National Electrical Code.....2
ELC 119	NEC Calculations.....2
ELC 128	Intro to PLC.....3
ELN 229	Industrial Electronics.....4

Total Credit Hours Required36

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....3
DRE 098	Integrated Reading Writing III.....3
DMA DMA 010, DMA 020, DMA 030, (MAT 110)	.....3
DMA DMA 010, DMA 020, DMA 030, DMA, 040, DMA 050, (MAT 143).....	5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Electrical Systems Technology Diploma • D35130
Suggested Program Sequence Day**

Fall - 1st year			
BPR 111	Print Reading	1	2 0 2
ELC 112	DC/AC Electricity	3	6 0 5
ELC 113	Residential Wiring	2	6 0 4
ELC 118	National Electrical Code	1	2 0 2
ELC 119	NEC Calculations	1	2 0 2
MAT 110	Math Measurement & Literacy	2	2 0 3
OR	MAT 143 Quantitative Literacy	2	2 0 3
Total		10	20 0 18
Spring - 1st year			
ELC 115	Industrial Wiring	2	6 0 4
ELC 117	Motors and Controls	2	6 0 4
ELC 128	Intro to PLC	2	3 0 3
ELN 229	Industrial Electronics	2	4 0 4
ENG 102	Applied Communications II	3	0 0 3
OR	ENG 111 Writing and Inquiry	3	0 0 3
Total		11	19 0 18
Grand Total		21	39 0 36

Fall - 1st year				Class	Lab	Clin/WkExp	Credit
ELC 113	Residential Wiring	2	6	0	4		
ELC 118	National Electrical Code	1	2	0	2		
MAT 110	Math Measurement & Literacy	2	2	0	3		
OR	MAT 143 Quantitative Literacy	2	2	0	3		
Total				5	10	0	9
Spring - 1st year							
BPR 111	Print Reading	1	2	0	2		
ELC 112	DC/AC Electricity	3	6	0	5		
ELC 119	NEC Calculations	1	2	0	2		
ENG 102	Applied Communications II	3	0	0	3		
OR	ENG 111 Writing and Inquiry	3	0	0	3		
Total				8	10	0	12
Fall - 2nd year							
ELC 117	Motors and Controls	2	6	0	4		
ELN 229	Industrial Electronics	2	4	0	4		
Total				4	10	0	8
Spring - 2nd year							
ELC 115	Industrial Wiring	2	6	0	4		
ELC 128	Intro to PLC	2	3	0	3		
Total				4	9	0	7
Grand Total				21	39	0	36

**Electrical Systems Technology
Electrical Installation Concentration - Cert. Prog. (C35130)**

MAJOR COURSES: SHC

BPR 111	Print Reading.....2
ELC 113	Residential Wiring.....4
ELC 115	Industrial Wiring.....4
ELC 118	National Electrical Code.....2
Total Credit Hours Required .....12	

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098	Integrated Reading Writing III.....3
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**Electrical Systems Technology
Electrical/Installation Concentration (C35130)
Certificate Program Suggested Sequence**

Fall - 1st year							
BPR 111	Print Reading	1	2	0	2		
ELC 113	Residential Wiring	2	6	0	4		
ELC 118	National Electrical Code	1	2	0	2		
Total				4	10	0	8
Spring - 1st year							
ELC 115	Industrial Wiring	2	6	0	4		
Total				2	6	0	4
Grand Total				6	16	0	12

ELECTRONEURODIAGNOSTIC TECHNOLOGY
A.A.S. Program (A45320)

Electroneurodiagnostic Technology • A45320
Suggested Program Sequence Day

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Some general education courses are offered at night. Minimum time for completion: four semesters. The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Electroneurodiagnostic Technology curriculum is designed to provide students with the knowledge and skills to obtain recordings of patients' nervous system functions through the use of electroencephalographic equipment and other electrophysiological devices. Course work includes communication skills with patients and healthcare personnel, taking appropriate patient histories, electrode application, documentation of patients' clinical status, electrical waveform recognition, management of medical emergencies, and preparation of descriptive reports for the physician. Graduates will qualify to take the ABRET (American Board of Registration of EEG and EP Technologists) Exam and, working under the supervision of a qualified physician, may be employed by hospitals or private offices of neurologists and neurosurgeons.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry .....3
English Elective	.....3
Students are required to take one (1) course from the following:	
ENG 112	Writing/Research in the Disc.....3
ENG 113	Literature-Based Research.....3
ENG 114	Prof Research & Reporting .....3
Humanities/Fine Arts:	
Elective	.....3
Natural Sciences/Mathematics:	
MAT 143	Quantitative Literacy .....3
Social/Behavioral Sciences:	
PSY 150	General Psychology .....3

MAJOR COURSES:

BIO 168	Anatomy and Physiology I.....4
BIO 169	Anatomy and Physiology II.....4
CIS 110	Introduction to Computers.....3
EDT 110	Neuroscience/Pathol Cond.....4
EDT 111	Laboratory Management.....1
EDT 111A	EDT Laboratory Basics .....1
EDT 112	Instrument/Record Methods.....3
EDT 113	Clinical Correlates.....2
EDT 114	Special Procedures.....3
EDT 115	EDT Laboratory Practice.....2
EDT 116	EDT Clinical Experience.....12
EDT 118	EDT Laboratory Pract. II.....3
ELC 111	Intro to Electricity.....3
MED 118	Medical Law and Ethics.....2
MED 121	Medical Terminology I.....3
MED 122	Medical Terminology II.....3

Total Credit Hours Required.....68

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....3
DRE 098	Integrated Reading Writing III.....3
DMA	DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 .....5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

	Class	Lab	Clin/WkExp	Credit	
Fall - 1st year					
EDT 110	Neuroscience/Pathol Cond	4	0	0	4
EDT 111	Laboratory Management	1	0	0	1
EDT 111A	EDT Laboratory Basics	1	0	0	1
ELC 111	Intro to Electricity	2	2	0	3
ENG 111	Writing and Inquiry	3	0	0	3
MED 121	Medical Terminology I	3	0	0	3
PSY 150	General Psychology	3	0	0	3
	Total	17	2	0	18
Spring - 1st year					
BIO 169	Anatomy and Physiology II	3	3	0	4
CIS 110	Introduction to Computers	2	2	0	3
EDT 112	Instrumental/Record Methods	3	0	0	3
EDT 113	Clinical Correlates	2	0	0	2
EDT 115	EDT Laboratory Practice	0	6	0	2
ENG 112	Writing/Research in the Disc	3	0	0	3
	OR ENG 113 Literature-Based Research				
	OR ENG 114 Prof Research & Reporting				
	Total	13	11	0	17
Fall - 2nd year					
EDT 114	Special Procedures	3	0	0	3
EDT 118	EDT Laboratory Prac. II	0	9	0	3
MAT 143	Quantitative Literacy	2	2	0	3
MED 118	Medical Law and Ethics	2	0	0	2
MED 122	Medical Terminology II	3	0	0	3
	Humanities/Fine Arts Elective	3	0	0	3
	Total	13	11	0	17
Spring - 2nd year					
EDT 116	EDT Clinical Experience	0	0	36	12
	Total	0	0	36	12
	Grand Total	43	24	36	64

Note: Students must complete BIO 168, Anatomy & Physiology I, 4 credits hours, prior to admission into the program.

Electroneurodiagnostic Technology Degree Completion Program

This special program was developed to offer technologists who are ABRET registered in EEG and are currently working in the neurodiagnostic field a pathway to obtain an Associate in Applied Science Degree. The length of the course will vary depending on the student's prior education and advanced placement success. Applicants will be eligible for admission after having met the following admissions standards:

- a. The applicant must apply for and meet CVCC's institutional requirements for admission as a student.
- b. The applicant must be currently employed as a neurodiagnostic technologist.
- c. The applicant must hold the credentials of R.EEG.T. through ABRET. Credentials must be current and in good standing.
- d. The applicant must provide two letters of reference: one from an immediate supervisor and one from the Medical Director of the neurodiagnostic facility with which the applicant is employed. These letters should attest to the individual's competence as a neurodiagnostic technologist.
- e. Once admitted to the program, students will receive Advanced Placement in the following courses based on their ABRET credentials and letters of reference:

	Credit Hours
EDT 111A EDT Laboratory Basics	1
EDT 115 EDT Laboratory Practice	2
EDT 118 EDT Laboratory Practice II	3
EDT 116 EDT Clinical Experience	12

Students will also be offered Advanced Placement Exams in the following courses. If the written exam is passed with a grade of 80 or higher, advanced placement will be given:

EDT 110 Neuroscience/Pathol Cond	4
EDT 111 Laboratory/Management	1
EDT 112 Instrument/Record Methods	3
EDT 113 Clinical Correlates	2
EDT 114 Special Procedures	3

Students are required to complete the following courses, and maintain a 2.0 GPA, in order to successfully complete the program requirements.

BIO 168 Anatomy and Physiology I	4
BIO 169 Anatomy and Physiology II	4
CIS 110 Introduction to Computers	3
ELC 111 Intro to Electricity	3
ENG 111 Writing and Inquiry	3
ENG 112 Writing/Research in Disc	3
OR ENG 113 Literated-Based Research	3
OR ENG 114 Prof Research & Reporting	3
MAT 143 Quantitative Literacy	3
MED 118 Medical Law and Ethics	2
MED 121 Medical Terminology I	3
MED 122 Medical Terminology II	3
PSY 150 General Psychology	3
34 SHC	

The student may transfer or advance place up to sixty-five percent of the required course hours. The duration and timing of this program will vary between individuals depending on their prior college credits and success with advanced placement testing.

Grading, transcript evaluation, transfer policies, curriculum and graduation requirements will follow current CVCC policy. Program completion will vary according to progression of required classes for each student accepted.

ELECTRONICS ENGINEERING TECHNOLOGY A.A.S. Program (A40200)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day – five semesters full-time attendance; Evening – ten semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum. The Electronics Engineering Technology curriculum prepares the students to apply basic engineering principles and technical skills to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems. Includes instruction in mathematics, basic electricity, solid-state fundamentals, digital concepts, and microprocessors or programmable logic controllers. Graduates should qualify for employment as electronics engineering technician, field service technician, instrumentation technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician..

GENERAL EDUCATION COURSES:

	SHC
English/Communications:	
ENG 111 Writing and Inquiry	3
ENG 114 Prof Research & Reporting.....	3
OR ENG 112 Writing/Research in the Disc.....	3
OR ENG 113 Literature-Based Research.....	3
Humanities/Fine Arts:	
Elective	3
Natural Sciences/Mathematics:	
MAT 121 Algebra/Trigonometry I.....	3
Social/Behavioral Sciences:	
Elective	3

MAJOR COURSES:

CSC 134 C++ Programming	3
DFT 117 Technical Drafting	2
DFT 151 CAD I	3
EGR 110 Intro to Engineering Tech	2
ELC 138 DC Circuit Analysis.....	4
ELC 139 AC Circuit Analysis.....	4
ELC 229 Applications Project	2
ELN 131 Analog Electronics I.....	4
ELN 132 Analog Electronics II.....	4
ELN 133 Digital Electronics	4
ELN 234 Communication Systems.....	4
ELN 260 Prog Logic Controllers.....	4
MAT 122 Algebra/Trigonometry II	3
PHY 131 Physics-Mechanics	4
EET Electives	7

Students are required to take a minimum of 7 SHC from the following:

ELC 135 Electrical Machines	3
ELC 136 Electrical Machines II.....	4
ELN 235 Data Communication Sys.....	4
PHY 133 Physics-Sound & Light.....	4

Work-Based Learning Option: Qualified students may elect to take 2 credit hours of Work-Based Learning in place of ELC 229.

Physics Note: Students planning to transfer to a 4-year college should consider taking PHY 131 & PHY 133. Please see your advisor.

Total Credit Hours Required69

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098 Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060	6

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Electronics Engineering Technology • A40200

Suggested Program Sequence Day

			Class	Lab	Clin/WkExp	Credit
Fall - 1st year						
CSC 134	C++ Programming		2	3	0	3
DFT 117	Technical Drafting		1	2	0	2
EGR 110	Intro to Engineering Tech		1	2	0	2
ELC 138	DC Circuit Analysis		3	3	0	4
MAT 121	Algebra/Trigonometry I		2	2	0	3
Total			9	12	0	14
Spring - 1st year						
DFT 151	CAD I		2	3	0	3
ELC 139	AC Circuit Analysis		3	3	0	4
ELN 131	Analog Electronics I		3	3	0	4
ENG 111	Writing and Inquiry		3	0	0	3
MAT 122	Algebra/Trigonometry II		2	2	0	3
Total			13	11	0	17
Summer - 1st year						
ENG 114	Prof Research & Reporting (Preferred)		3	0	0	3
	OR ENG 112 Writing/Research in the Disc		3	0	0	3
	OR ENG 113 Literature-Based Research		3	0	0	3
	Humanities/Fine Arts Elective		3	0	0	3
Total			6	0	0	6
Fall - 2nd year						
ELN 132	Analog Electronics II		3	3	0	4
ELN 133	Digital Electronics		3	3	0	4
PHY 131	Physics-Mechanics		3	2	0	4
	Electronics Engineering Technology Elective		2	2	0	3
Total			11	10	0	15
Spring - 2nd year						
ELC 229	Applications Project		1	3	0	2
ELN 234	Communication Systems		3	3	0	4
ELN 260	Prog Logic Controllers		3	3	0	4
	Social/Behavioral Science Elective		3	0	0	3
	Electronics Engineering Technology Elective		3	3	0	4
Total			13	12	0	17
Grand Total			52	45	0	69

Work-Based Learning Option: Qualified Students may elect to take up to 2 credit hours of Work-Based Learning in place of ELC 229.

Physics Note: Students planning to transfer to a 4-year college should consider taking PHY 131 & PHY 133. Please see your advisor.

Electronic Engineering Technology Electives: The student is required to take a minimum of 7 credits from this list.

ELC 135	Electrical Machines	2	2	0	3
ELC 136	Electrical Machines II	3	3	0	4
ELN 235	Data Communications Sys	3	3	0	4
PHY 133	Physics - Sound & Light	3	2	0	4

Electronics Engineering Technology • A40200

Suggested Program Sequence Evening

			Class	Lab	Clin/WkExp	Credit
Fall - 1st year						
EGR 110	Intro to Engineering Tech		1	2	0	2
ELC 138	DC Circuit Analysis		3	3	0	4
MAT 121	Algebra/Trigonometry I		2	2	0	3
Total			6	7	0	9
Spring - 1st year						
ELC 139	AC Circuit Analysis		3	3	0	4
MAT 122	Algebra/Trigonometry II		2	2	0	3
Total			5	5	0	7
Summer - 1st year						
ENG 111	Writing and Inquiry		3	0	0	3
	Social/Behavioral Science Elective		3	0	0	3
Total			6	0	0	6
Fall - 2nd year						
DFT 117	Technical Drafting		1	2	0	2
ELN 131	Analog Electronics I		3	3	0	4
Total			4	5	0	6
Spring - 2nd year						
ELN 132	Analog Electronics II		3	3	0	4
ELN 133	Digital Electronics		3	3	0	4
Total			6	6	0	8
Summer - 2nd year						
ENG 114	Prof Research & Reporting (Preferred)		3	0	0	3
	OR ENG 112 Writing/Research in the Disc		3	0	0	3
	OR ENG 113 Literature-Based Research		3	0	0	3
	Humanities/Fine Arts Elective		3	0	0	3
Total			6	0	0	6
Fall - 3rd year						
CSC 134	C++ Programming		2	3	0	3
	Electronics Engineering Technology Elective		2	2	0	3
Total			4	5	0	6
Spring - 3rd year						
DFT 151	CAD I		2	3	0	3
ELN 260	Prog Logic Controllers		3	3	0	4
Total			5	6	0	7
Fall - 4th year						
ELN 234	Communication Systems		3	3	0	4
PHY 131	Physics-Mechanics		3	2	0	4
Total			6	5	0	8
Spring - 4th year						
ELC 229	Applications Project		1	3	0	2
	Electronics Engineering Technology Elective		3	3	0	4
Total			4	6	0	6
Grand Total			52	45	0	69

Worked-Based Learning Option: Qualified students may elect to take up to 2 credit hours of Work-Based Learning in place of ELC 229.

Physics Notes: Students planning to transfer to a 4-year college should contact their advisor.

Electronic Engineering Technology Electives: The student is required to take a minimum of 7 credits from this list

ELC 135	Electrical Machines	2	2	0	3
ELC 136	Electrical Machines II	3	3	0	4
ELN 235	Data Communications Sys	3	3	0	4
PHY 133	Physics-Sound & Light	3	2	0	4

EMERGENCY MEDICAL SCIENCE
A.A.S. Program (A45340)

The Emergency Medical Science Curriculum is Accredited by the Commission on Accreditation of Allied Health Education Programs, (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce. Students will gain complex knowledge, competency, and experience while employing evidence based practice under medical oversight, and serve as a link from the scene into the healthcare system. Graduates of this program may be eligible to take state and/or national certification examinations. Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting.....	3
OR	ENG 112 Writing/Research in the Disc.....	3
OR	ENG 113 Literature-Based Research.....	3

Humanities/Fine Arts:

Elective	3
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Natural Sciences/Mathematics:

BIO 168	Anatomy and Physiology I.....	4
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Social/Behavioral Sciences:

PSY 150	General Psychology	3
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MAJOR COURSES:

BIO 169	Anatomy and Physiology II.....	4
CIS 110	Introduction to Computers.....	3
EMS 110	EMT.....	8
EMS 122	EMS Clinical Practicum I.....	1
EMS 130	Pharmacology.....	4
EMS 131	Advanced Airway Management	2
EMS 140	Rescue Scene Management.....	2
EMS 160	Cardiology I.....	2
EMS 220	Cardiology II	3
EMS 221	EMS Clinical Practicum II	2
EMS 231	EMS Clinical Pract III.....	3
EMS 235	EMS Management.....	2
EMS 240	Patients W/Special Challenges.....	2
EMS 241	EMS Clinical Practicum IV.....	4
EMS 250	Medical Emergencies	4
EMS 260	Trauma Emergencies	2
EMS 270	Life Span Emergencies.....	3
EMS 285	EMS Capstone.....	2
MED 121	Medical Terminology I.....	3
MED 122	Medical Terminology II.....	3

Total Credit Hours Required75

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals	3
DRE 098	Integrated Reading Writing III.....	3
DMA	DMA 010, DMA 020, DMA 030, DMA 040	4

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Emergency Medical Science
Suggested Program Sequence Day

			Class	Lab	Clin/WkExp	Credit
Fall - 1st year						
EMS 110	EMT		6	6	0	8
BIO 169	Anatomy and Physiology II		3	3	0	4
MED 121	Medical Terminology I		3	0	0	3
MED 122	Medical Terminology II		3	0	0	3
	Total		15	9	0	18
Spring - 1st year						
EMS 122	EMS Clinical Practicum I		0	0	3	1
EMS 130	Pharmacology		3	3	0	4
EMS 131	Advanced Airway Management		1	2	0	2
EMS 140	Rescue Scene Management		1	3	0	2
EMS 160	Cardiology I		1	3	0	2
CIS 110	Introduction to Computers		2	2	0	3
	Total		8	13	3	14
Summer - 1st year						
EMS 220	Cardiology II		2	3	0	3
EMS 221	EMS Clinical Practicum II		0	0	6	2
EMS 240	Patients W/Special Challenges		1	2	0	2
PSY 150	General Psychology		3	0	0	3
	Total		6	5	6	10
Fall - 2nd year						
EMS 231	EMS Clinical Pract III		0	0	9	3
EMS 250	Medical Emergencies		3	3	0	4
EMS 260	Trauma Emergencies		1	3	0	2
EMS 270	Life Span Emergencies		2	3	0	3
ENG 111	Writing and Inquiry		3	0	0	3
	Total		9	9	9	15
Spring - 2nd year						
EMS 235	EMS Management		2	0	0	2
EMS 241	EMS Clinical Practicum IV		0	0	12	4
EMS 285	EMS Capstone		1	3	0	2
ENG 114	Prof Research & Reporting (Preferred)		3	0	0	3
OR	ENG 112 Writing/Research in the Disc		3	0	0	3
OR	ENG 113 Literature-Based Research		3	0	0	3
	Humanities/Fine Arts Elective		3	0	0	3
	Total		9	3	12	14
	Grand Total		47	39	33	75

Note: Students must complete BIO 168, Anatomy & Physiology I, 4 credit hours, prior to admission into the program.

**EMERGENCY MEDICAL SCIENCE CURRICULUM
Certificate Paramedic Advancement Program (A4534009)**

This special track was developed to facilitate a North Carolina or Nationally Registered certified paramedic in returning to school to obtain an Associate in Applied Science Degree. The length of this course varies depending on the individual's experience and prior education. In order to enable the most rapid completion of the CPA Program the following prerequisites and/or admission requirements will be used:

1. Meet CVCC's institutional requirements for admissions as an EMS student.
2. Letter from EMS director confirming 1000 hours or more of direct patient care.
3. Provider and/or instructor cards for ITLS or PHTLS, ACLS or ACLS-EP, PALS or PEPP.
4. Valid North Carolina or National Registry Paramedic Certification.
5. Letter of reference from service's Medical Director attesting to the individual's competence in basic and advanced life support skills.
6. Once the criterion above has been met, the student will then be offered Advanced Placement exams in the following courses so as to facilitate their movement through the program. To successfully advance place a student must score a "B" or higher.

- A. EMS 110 EMT
- B. EMS 130 Pharmacology
- C. EMS 131 Advanced Airway Management
- D. EMS 160 Cardiology I
- E. EMS 220 Cardiology II
- F. EMS 240 Patients W/Special Challenges
- G. EMS 250 Medical Emergencies
- H. EMS 260 Trauma Emergencies
- I. EMS 270 Life Span Emergencies
- J. EMS 285 Capstone
- K. EMS 122, EMS, 221, EMS 231 and EMS 241 (Clinical Practicum)
Advanced Placement requirement will be satisfied with documentation of 1000 hours or more of direct patient care.

Students are required to complete the following courses, and maintain a 2.0 GPA, in order to successfully complete the program requirements.

ENG	111	Expository Writing	3
ENG	112	Argument-Based Research	3
	OR	ENG 113 Literature-Based Research	3
	OR	ENG 114 Prof Research & Reporting	3
BIO	168	Anatomy and Physiology I	4
BIO	169	Anatomy and Physiology II	4
CIS	110	Introduction to Computers	3
EMS	235	EMS Management	2
EMS	280	EMS Bridging Course	3
MED	121	Medical Terminology I	3
MED	122	Medical Terminology II	3
PSY	150	General Psychology	3
			31 SHC

The student may transfer and/or advance place up to sixty-five percent of the required course hours. This track will be highly individualized depending on any prior college credits by the student and their success with advanced placement scores.

**ENTREPRENEURSHIP
A.A.S. Program (A25490)**

The Entrepreneurship curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth as self-employed business owners. Course work includes developing a student's ability to make informed decisions as future business owners. Courses include entrepreneurial concepts learned in innovation and creativity, business funding, and marketing. Additional course work includes computers and economics. Through these skills, students will have a sound education base in entrepreneurship for lifelong learning. Graduates are prepared to be self-employed and open their own businesses.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry
ENG 114	Prof Research & Reporting
Humanities/Fine Arts:	
Elective	.....
Social/Behavioral Sciences:	
Elective	.....
Natural Sciences/Mathematics:	
MAT 110	Math Measurement & Literacy
OR	MAT 143 Quantitative Literacy

MAJOR COURSES:

ACC 120	Prin of Financial Accounting	4
BUS 110	Introduction to Business	3
BUS 139	Entrepreneurship I	3
BUS 240	Business Ethics	3
BUS 245	Entrepreneurship II	3
BUS 253	Leadership and Mgt Skills	3
CIS 110	Introduction to Computers	3
ECO 251	Prin of Microeconomics	3
ETR 215	Law for Entrepreneurs	3
ETR 220	Innovation and Creativity	3
ETR 230	Entrepreneur Marketing	3
ETR 240	Funding for Entrepreneurs	3
ETR 270	Entrepreneurship Issues	3
WBL 110	World of Work	1

Entrepreneurship Electives:.....9

Entrepreneurship/Work-Based Electives: Students are required to take a minimum of 9 SHC from the following courses. Qualified student may elect to take up to 6 credit hours of Work-Based learning.

ACC 121	Prin of Managerial Accounting	4
BUS 125	Personal Finance	3
BUS 153	Human Resource Management	3
CTS 130	Spreadsheet	3
ECO 252	Prin of Macroeconomics	3
MKT 123	Fundamentals of Selling	3
MKT 220	Advertising and Sales Promotion	3
MKT 221	Consumer Behavior	3
MKT 223	Customer Service	3
RLS 112	Broker Preclicensing	5
WBL XXX	Work-Based Learning	1-4

Total Credit Hours Required65

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals	3
DRE 098	Integrated Reading Writing III	3
DMA	DMA 010, DMA 020, DMA 030, (MAT 110)	
DMA	DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)	5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Entrepreneurship • A25490
Suggested Program Sequence Day

	Class	Lab	Clin/WkExp	Credit	
Fall - 1st year					
BUS 110	Introduction to Business	3	0	0	3
BUS 139	Entrepreneurship I	3	0	0	3
ENG 111	Writing and Inquiry	3	0	0	3
ETR 220	Innovation and Creativity	3	0	0	3
ETR 230	Entrepreneur Marketing	3	0	0	3
	Total	15	0	0	15
Spring - 1st year					
ACC 120	Prin of Financial Accounting	3	2	0	4
BUS 245	Entrepreneurship II	3	0	0	3
CIS 110	Introduction to Computers	2	2	0	3
ETR 215	Law for Entrepreneurs	3	0	0	3
MAT 110	Math Measurement & Literacy	2	2	0	3
OR	MAT 143 Quantitative Literacy	2	2	0	3
	Total	13	6	0	16
Fall - 2nd year					
BUS 240	Business Ethics	3	0	0	3
ECO 251	Prin of Microeconomics	3	0	0	3
ENG 114	Prof Research & Reporting	3	0	0	3
	Social/Behavioral Science Elective	3	0	0	3
	Entrepreneurship Elective	3	0	0	3
	Entrepreneurship Elective	3	0	0	3
	Total	18	0	0	18
Spring - 2nd year					
BUS 253	Leadership and Mgt Skills	3	0	0	3
ETR 240	Funding For Entrepreneurs	3	0	0	3
ETR 270	Entrepreneurship Issues	3	0	0	3
WBL 110	World of Work	1	0	0	1
	Humanities/Fine Arts Elective	3	0	0	3
	Entrepreneurship Elective	3	0	0	3
	Total	16	0	0	16
	Grand Total	62	6	0	65

Entrepreneurship - Cert. Prog. (C25490)

MAJOR COURSES:	SHC
BUS 139 Entrepreneurship I.....	3
BUS 245 Entrepreneurship II.....	3
ETR 220 Innovation and Creativity.....	3
ETR 230 Entrepreneur Marketing.....	3
Total Credit Hours Required:	12

Entrepreneurship Certificate Suggested Day Sequence (C25490)

Fall - 1st year					
BUS 139	Entrepreneurship I	3	0	0	3
ETR 220	Innovation and Creativity	3	0	0	3
ETR 230	Entrepreneur Marketing	3	0	0	3
	Total	9	0	0	9
Spring - 1st year					
BUS 245	Entrepreneurship II	3	0	0	3
	Total	3	0	0	3
	Grand Total	12	0	0	12

Entrepreneurship - Diploma Program (D25490)

GENERAL EDUCATION COURSES:

SHC

English/Communications:		
ENG 111	Writing and Inquiry.....	3
Social/Behavioral Sciences:		
	Elective.....	3

MAJOR COURSES:

ACC 120	Prin of Financial Acct.....	4
BUS 110	Introduction to Business.....	3
BUS 139	Entrepreneurship I.....	3
BUS 245	Entrepreneurship II.....	3
BUS 253	Leadership and Mgt Skills.....	3
ECO 251	Prin of Microeconomics.....	3
ETR 215	Law for Entrepreneurs.....	3
ETR 220	Innovation and Creativity.....	3
ETR 230	Entrepreneur Marketing.....	3
ETR 270	Entrepreneurship Issues.....	3
WBL 110	World of Work.....	1

Total Credit Hours Required:.....38

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Entrepreneurship Diploma Suggested Day Sequence (D25490)

Fall - 1st year					
BUS 110	Introduction to Business	3	0	0	3
BUS 139	Entrepreneurship I	3	0	0	3
ENG 111	Writing and Inquiry	3	0	0	3
ETR 230	Entrepreneur Marketing	3	0	0	3
	Total	12	0	0	12
Spring - 1st year					
ACC 120	Prin of Financial Accounting	3	2	0	4
BUS 245	Entrepreneurship II	3	0	0	3
ETR 215	Law for Entrepreneurs	3	0	0	3
ETR 270	Entrepreneurship Issues	3	0	0	3
	Total	12	2	0	13
Fall - 2nd year					
BUS 253	Leadership and Mgt Skills	3	0	0	3
ECO 251	Principles of Microeconomics	3	0	0	3
ETR 220	Innovation and Creativity	3	0	0	3
	Total	9	0	0	9
Spring - 2nd year					
WBL 110	World of Work	1	0	0	1
	Social/Behavioral Science Elective	3	0	0	3
	Total	4	0	0	4
	Grand Total	37	2	0	38

FIRE PROTECTION TECHNOLOGY

A.A.S. Program (A55240)

The Fire Protection Technology curriculum is designed to provide students with knowledge and skills in the technical, managerial, and leadership areas necessary for advancement within the fire protection community and related firefighting industries, and to provide currently employed firefighters with knowledge and skills often required for promotional consideration. Course work includes diverse fire protection subject areas, including fire prevention and safety, public education, building construction, fire ground strategies and tactics, and local government finance and laws, as they apply to emergency services management. Emphasis includes understanding fire characteristics and the structural consequences of fire; risk assessment and management; and relevant research, communications, and leadership methodologies. Employment opportunities exist with fire departments, governmental agencies, industrial firms, insurance rating organizations, and educational organizations.

GENERAL EDUCATION COURSES: SHC

English/Communications:
 ENG 111 Writing and Inquiry 3
 ENG 114 Prof Research & Reporting..... 3

Humanities/Fine Arts:
 Elective 3

Natural Sciences/Mathematics:
 MAT 143 Quantitative Literacy 3

Social/Behavioral Sciences:
 PSY 150 General Psychology..... 3
 OR SOC 210 Introduction to Sociology 3

MAJOR COURSES:

CIS 110 Introduction to Computers..... 3
 EPT 140 Emergency Management 3
 FIP 120 Intro to Fire Protection 3
 FIP 124 Fire Prevention & Public Ed..... 3
 FIP 132 Building Construction..... 3
 FIP 136 Inspections & Codes..... 3
 FIP 146 Fire Protection Systems 4
 FIP 152 Fire Protection Law 3
 FIP 220 Fire Fighting Strategies 3
 FIP 228 Local Govt Finance 3
 FIP 229 Fire Dynamics and Combust 3
 FIP 240 Fire Service Supervision..... 3
 FIP 248 Fire Svc Personnel Adm 3
 FIP 276 Managing Fire Services..... 3

FIP Electives: 6/8

Students are required to select 6/8 credit hours from the following:

FIP 128 Detection & Investigation 3
 FIP 140 Industrial Fire Protection 3
 FIP 164 OSHA Standards 3
 FIP 221 Adv Fire Fighting Strat 3
 FIP 224 Fire Instructor I & II 4
 FIP 226 Fire Officer I & II 4
 FIP 230 Chem of Hazardous Mat I..... 5

OTHER REQUIRED HOURS:

ACA 111 College Student Success 1

Total Credit Hours Required..... 65/67

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals..... 3
 DRE 098 Integrated Reading Writing III 3
 DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Fire Protection Technology • A55240
Suggested Program Sequence Day

	Class	Lab	Clin/W/Exp	Credit
Fall - 1st year				
ACA 111 College Student Success	1	0	0	1
CIS 110 Introduction to Computers	3	0	0	3
ENG 111 Writing and Inquiry	3	0	0	3
FIP 120 Intro to Fire Protection	3	0	0	3
FIP 124 Fire Prevention & Public Ed	3	0	0	3
FIP 132 Building Construction	3	0	0	3
Total	16	0	0	16
Spring - 1st year				
ENG 114 Prof Research & Reporting	3	0	0	3
EPT 140 Emergency Management	3	0	0	3
FIP 136 Inspection & Codes	3	0	0	3
FIP 152 Fire Protection Law	3	0	0	3
FIP Elective	3	0	0	3
Total	15	0	0	15
Summer - 1st year				
MAT 143 Quantitative Literacy	2	2	0	3
PSY 150 General Psychology	3	0	0	3
OR SOC 210 Introduction to Sociology	3	0	0	3
Humanities/Fine Arts Elective	3	0	0	3
Total	8	2	0	9
Fall - 2nd year				
FIP 146 Fire Protection Systems	3	2	0	4
FIP 220 Fire Fighting Strategies	3	0	0	3
FIP 229 Fire Dynamics and Combust	3	0	0	3
FIP 276 Managing Fire Services	3	0	0	3
Total	14	2	0	13
Spring - 2nd year				
FIP 228 Local Govt Finance	3	0	0	3
FIP 240 Fire Service Supervision	3	0	0	3
FIP 248 Fire Svc Personnel Adm	3	0	0	3
FIP Elective				3/5
Total	12	0	0	12/14
Grand Total	64	4	0	65/67

**Fire Protection Management Technology
Certificate Program (C5524004)**

MAJOR COURSES:			SHC
FIP 120	Intro to Fire Protection	3	
FIP 152	Fire Protection Law	3	
FIP 220	Fire Fighting Strategies	3	
FIP 228	Local Govt Finance	3	
FIP 248	Fire Svc Personnel Adm	3	
FIP 276	Managing Fire Services	3	

Total Credit Hours Required:..... 18

Fire Protection Management Certificate Sequence (C5524004)

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
FIP 120	Intro to Fire Protection	3	0	0	3
FIP 220	Fire Fighting Strategies	3	0	0	3
FIP 276	Managing Fire Services	3	0	0	3
	Total	9	0	0	9
Spring - 1st year					
FIP 152	Fire Protection Law	3	0	0	3
FIP 228	Local Gov Finance	3	0	0	3
FIP 248	Fire Svc Personnel Adm	3	0	0	3
	Total	9	0	0	9
	Grand Total	18	0	0	18

**Industrial Fire Protection
Certificate Program (C5524005)**

MAJOR COURSES:			SHC
FIP 120	Intro to Fire Protection	3	
FIP 124	Fire Prevention & Public Ed.....	3	
FIP 132	Building Construction.....	3	
FIP 140	Industrial Fire Protection	3	
FIP 164	OSHA Standards	3	
FIP 220	Fire Fighting Strategies	3	

Total Credit Hours Required:..... 18

Industrial Fire Protection Certificate Sequence (C5524005)

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
FIP 120	Introduction to Fire Protection	3	0	0	3
FIP 124	Fire Prevention & Public Ed	3	0	0	3
FIP 132	Building Construction	3	0	0	3
FIP 220	Fire Fighting Strategies	3	0	0	3
	Total	12	0	0	12
Spring - 1st year					
FIP 140	Industrial Fire Protection	3	0	0	3
FIP 164	OSHA Standards	3	0	0	3
	Total	6	0	0	6
	Grand Total	18	0	0	18

**HEALTH AND FITNESS SCIENCE
A.A.S. Program (A45630)**

Courses required to meet graduation requirements in this curriculum are offered during day hours. Minimum time for completion: five semesters full-time attendance. The Associate of Applied Science degree is awarded graduates of this curriculum.

The Health and Fitness Science program is designed to provide students with the knowledge and skills necessary for employment in the fitness and exercise industry. Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach specific exercise and fitness classes and provide instruction in the proper use of exercise equipment and facilities. Graduates should qualify for employment opportunities in commercial fitness clubs, YMCA's/YWCA's, wellness programs in business and industry, Parks & Recreation Departments and other organizations implementing exercise & fitness programs.

GENERAL EDUCATION COURSES:..... **SHC**

English/Communications:		
COM 110	Introduction to Communication	3
ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disc	3
OR	ENG 113 Literature-Based Research	3
OR	ENG 114 Prof Research & Reporting.....	3
Humanities/Fine Arts:		
Elective	.....	3
Natural Sciences/Mathematics:		
MAT 110	Math Measurement & Literacy	3
OR	MAT 143 Quantitative Literacy.....	3
OR	MAT 152 Statistical Methods I.....	4
Social/Behavioral Sciences:		
PSY 150	General Psychology.....	3

MAJOR COURSES:

BIO 155	Nutrition	3
BIO 168	Anatomy and Physiology I.....	4
BIO 169	Anatomy and Physiology II.....	4
HEA 112	First Aid & CPR	2
PED 110	Fit and Well for Life	2
PSF 110	Exercise Science.....	4
PSF 111	Fitness & Exer Testing I.....	4
PSF 114	Phys Fit Theory & Instr	4
PSF 116	Pvnt & Care Exer Injuries	3
PSF 118	Fitness Facility Mgmt.....	4
PSF 120	Group Exer Instruction.....	3
PSF 210	Personal Training.....	3
PSF 212	Exercise Programming	3
PSF 218	Lifestyle Chng & Wellness.....	4
PSY 275	Health Psychology.....	3
WBL 111	Work-Based Learning I	1

PED Electives 2

Students are required to select 2 credit hours from the following courses.

PED 113	Aerobics I	1
PED 117	Weight Training I.....	1
PED 118	Weight Training II	1
PED 120	Walking for Fitness.....	1
PED 122	Yoga I	1

Total Credit Hours Required 71/72

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030 (MAT 110)	.....	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143), (MAT 152)	.....	5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Health and Fitness Science • A45630
Suggested Program Sequence Day

			Class	Lab	Clin/WkExp	Credit
Fall - 1st year						
ENG	111	Writing and Inquiry	3	0	0	3
HEA	112	First Aid & CPR	1	2	0	2
PED	110	Fit And Well For Life	1	2	0	2
PSF	110	Exercise Science	4	0	0	4
PSY	150	General Psychology	3	0	0	3
		PED Elective	1	0	0	1
Total			13	4	0	15
Spring - 1st year						
ENG	112	Writing/Research in the Disc	3	0	0	3
	OR	ENG 113 Literature-Based Research	3	0	0	3
	OR	ENG 114 Prof Research & Reporting	3	0	0	3
BIO	168	Anatomy and Physiology I	3	3	3	04
BIO	155	Nutrition	3	0	0	3
PSF	111	Fitness & Exer Testing I	3	2	0	4
PSF	116	Pvnt & Care Exer Injuries	2	2	0	3
Total			14	7	0	17
Summer - 1st year						
MAT	110	Math Measurement & Literacy	2	2	0	3
	OR	MAT 143 Quantitative Literacy	2	2	0	3
	OR	MAT 152 Statistical Methods I	3	2	0	4
		Humanities/Fine Arts Elective	3	0	0	3
Total			5/6	2	0	6/7
Fall - 2nd year						
WBL	111	Work-Based Learning I	0	0	10	1
COM	110	Introduction to Communication	3	0	0	3
BIO	169	Anatomy and Physiology II	3	3	0	4
PSF	114	Phys Fit Theory & Instr	4	0	0	4
PSF	120	Group Exer Instruction	2	2	0	3
		PED Elective	1	0	0	1
Total			13	5	10	16
Spring - 2nd year						
PSF	118	Fitness Facility Mgmt	4	0	0	4
PSF	210	Personal Training	2	2	0	3
PSF	212	Exercise Programming	2	2	0	3
PSF	218	Lifestyle Chng & Wellness	3	2	0	4
PSY	275	Health Psychology	3	0	0	3
Total			14	6	0	17
Grand Total			59/60	24	10	71/72

HEALTH INFORMATION TECHNOLOGY
A.A.S. Program (A45360)

Courses required to meet graduation requirements in this curriculum are offered during day hours with selected courses offered during evening hours. Minimum time for completion: five semesters full-time attendance. The Associate of Applied Science degree is awarded graduates of this curriculum. The Health Information Technology curriculum is accredited by the Commission on Accreditation for Health Informatics and Information Management Education.

The Health Information Technology curriculum prepares individuals with the knowledge and skills to process, analyze, abstract, compile, maintain, manage, and report health information. Students will supervise departmental functions; classify, code and index diagnoses and procedures; coordinate information for cost control, quality management, statistics, marketing, and planning; monitor governmental and non-governmental standards; facilitate research; and design system controls to monitor patient information security. Graduates of this program may be eligible to write the national certification examination to become a Registered Health Information Technician. Employment opportunities include hospitals, rehabilitation facilities, nursing homes, health insurance organizations, outpatient clinics, physicians' offices, hospice, and mental health facilities.

GENERAL EDUCATION COURSES: SHC

English/Communications:

ENG 111	Writing and Inquiry	3
English Elective		3

Students are required to take one (1) course from the following:

ENG 112	Writing/Research in the Disc	3
ENG 113	Literature-Based Research	3
ENG 114	Prof Research & Reporting	3

Humanities/Fine Arts:

Elective		3
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Natural Sciences/Mathematics:

MAT 110	Math Measurement & Literacy	3
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Social/Behavioral Sciences:

PSY 150	General Psychology	3
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MAJOR COURSES:

BIO 168	Anatomy and Physiology I	4
BIO 169	Anatomy and Physiology II	4
BUS 137	Principles of Management	3
CIS 110	Introduction to Computers	3
OR	CIS 111 Basic PC Literacy	2
DBA 110	Database Concepts	3
HIT 110	Fundamentals of HIM	3
HIT 112	Health Law and Ethics	3
HIT 114	Health Data Sys/Standards	3
HIT 122	Prof Practice Exp I	1
HIT 124	Prof Practice Exp II	1
HIT 210	Healthcare Statistics	3
HIT 211	ICD Coding	4
HIT 214	CPT/Other Coding Systems	2
HIT 215	Reimbursement Methodology	2
HIT 216	Quality Management	2
HIT 220	Health Informatics & EHRs	2
HIT 222	Prof Practice Exp III	2
HIT 226	Principles of Disease	3
HIT 280	Professional Issues	2
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3

Total Credit Hours Required **70-71**

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals	3
DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030		3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Health Information Technology • (A45360)
Suggested Program Sequence Day

			Class	Lab	Clin/WkExp	Credit
Fall - 1st year						
BIO 168	Anatomy and Physiology I		3	3	0	4
CIS 110	Introduction to Computers		2	2	0	3
	OR CIS 111 Basic PC Literacy		1	2	0	2
ENG 111	Writing and Inquiry		3	0	0	3
MED 121	Medical Terminology I		3	0	0	3
HIT 110	Fundamentals of HIM		3	0	0	3
PSY 150	General Psychology		3	0	0	3
	Total		16/17	5	0	18/19
Spring - 1st year						
BIO 169	Anatomy and Physiology II		3	3	0	4
DBA 110	Database Concepts		2	3	0	3
HIT 112	Health Law and Ethics		3	0	0	3
HIT 114	Health Data Sys/Standards		2	3	0	3
MED 122	Medical Terminology II		3	0	0	3
	Total		13	9	0	16
Summer - 1st year						
ENG 112	Writing/Research in the Disc (Preferred)		3	0	0	3
	OR ENG 113 Literature-Based Research					
	OR ENG 114 Prof Research & Reporting					
HIT 122	Prof Practice Exp I		0	0	3	1
MAT 110	Math Measurement & Literacy		2	2	0	3
	Humanities Elective		3	0	0	3
	Total		8	2	3	10
Fall - 2nd year						
HIT 210	Healthcare Statistics		2	2	0	3
HIT 211	ICD Coding		2	6	0	4
HIT 216	Quality Management		1	3	0	2
HIT 220	Health Informatics & EHRs		1	2	0	2
HIT 226	Principles of Disease		3	0	0	3
	Total		9	13	0	14
Spring - 2nd year						
BUS 137	Principles of Management		3	0	0	3
HIT 124	Prof Practice Exp II		0	0	3	1
HIT 222	Prof Practice Exp III		0	0	6	2
HIT 214	CPT/Other Coding Systems		1	3	0	2
HIT 215	Reimbursement Methodology		1	2	0	2
HIT 280	Professional Issues		2	0	0	2
	Total		7	5	9	12
	Grand Total		53/54	34	12	70/71

HEALTH INFORMATION TECHNOLOGY
Certificate Program (C45360)

Courses required to meet graduation requirements in this curriculum are offered during day hours with selected courses offered during evening hours. Minimum time for completion: two semesters part-time attendance. A certificate is awarded graduates of this curriculum.

MAJOR COURSES:

		SHC
CIS 110	Introduction to Computers.....	3
	OR CIS 111 Basic PC Literacy.....	2
HIT 110	Fundamentals of HIM.....	3
HIT 112	Health Law and Ethics.....	3
HIT 114	Health Data Sys/Standards.....	3
MED 121	Medical Terminology I.....	3
MED 122	Medical Terminology II.....	3

Total Credit Hours Required 17-18

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Health Information Technology Cert. Prog. (C45360)
Suggested Sequence

Fall - 2nd year						
CIS 110	Introduction to Computers		2	2	0	3
	OR CIS 111 Basic PC Literacy		1	2	0	2
HIT 110	Fundamentals of HIM		3	0	0	3
MED 121	Medical Terminology I		3	0	0	3
	Total		7/8	2	0	8/9
Spring - 2nd year						
HIT 112	Health Law and Ethics		3	0	0	3
HIT 114	Health Data Sys/Standards		2	3	0	3
MED 122	Medical Terminology II		3	0	0	3
	Total		8	3	0	9
	Grand Total		15/16	5	0	17/18

HEALTHCARE MANAGEMENT TECHNOLOGY A.A.S. Program (A25200)

Core courses, those specific to Healthcare Management Technology, are offered during day hours, as well as distance learning opportunities. Most other courses required to meet graduation requirements are offered by the above methods and evening hours. Minimum time for completion: Day -- five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Healthcare Management Technology curriculum is designed to prepare students for employment in healthcare business and financial operations. Students will gain a comprehensive understanding of the application of management principles to the healthcare environment. The curriculum places emphasis on planning, organizing, directing, and controlling tasks related to healthcare organizational objectives including the legal and ethical environment. Emphasis is placed on the development of effective communication, managerial, and supervisory skills. Graduates may find employment in healthcare settings including hospitals, medical offices, clinics, long-term care facilities, and insurance companies. Graduates are eligible to sit for several certification examinations offered by healthcare management professional organizations.

GENERAL EDUCATION COURSES: SHC

English/Communications:		
ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting	3
OR	ENG 112 Writing/Research in the Disc	3
OR	ENG 113 Literature-Based Research	3
Humanities/Fine Arts:		
Elective		3
Natural Sciences/Mathematics:		
MAT 143	Quantitative Literacy	3
Social/Behavioral Sciences:		
Elective		3

MAJOR COURSES:

ACC 120	Prin of Financial Accounting	4
ACC 121	Prin of Managerial Accounting	4
CIS 110	Introduction to Computers	3
CTS 130	Spreadsheet	3
HMT 110	Intro to Healthcare Mgt	3
HMT 210	Medical Insurance	3
HMT 211	Long-Term Care Admin	3
HMT 212	Mgt of Healthcare Org	3
HMT 220	Healthcare Financial Mgmt	4
HMT 225	Practice Mgmt Simulation	3
MED 114	Prof Interac in Heal Care	1
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3
OST 149	Medical Legal Issues	3
OST 247	Procedure Coding	2
OST 248	Diagnostic Coding	2
OST 281	Emer Issues in Med Ofc	3
WBL XXX	Work-Based Learning	2

OTHER REQUIRED COURSES:

ACA 111	College Student Success	1
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Total Credit Hours Required68

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals	3
DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050		5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information

HealthCare Management Technology • (A25200) Suggested Program Sequence Day

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
ACA 111	College Student Success	1	0	0	1
ACC 120	Prin of Financial Accounting	3	2	0	4
HMT 110	Intro to Healthcare Mgt	3	0	0	3
MED 114	Prof Interac in Heal Care	1	0	0	1
MED 121	Medical Terminology I (1st Eight Wks)	3	0	0	3
MED 122	Medical Terminology II (2nd Eight Wks)	3	0	0	3
Total		14	2	0	15
Spring - 1st year					
ACC121	Prin of Managerial Accounting	3	2	0	4
CIS 110	Introduction to Computers	2	2	0	3
HMT 210	Medical Insurance	3	0	0	3
OST 149	Medical Legal Issues	3	0	0	3
OST 281	Emer Issues in Med Ofc	3	0	0	3
Total		14	4	0	16
Summer - 1st year					
ENG 111	Writing and Inquiry	3	0	0	3
	Humanities/Fine Arts Elective	3	0	0	3
	Social/Behavioral Science Elective	3	0	0	3
Total		9	0	0	9
Fall - 2nd year					
CTS 130	Spreadsheet	2	2	0	3
ENG 112	Writing/Research in the Disc (Preferred)	3	0	0	3
OR	ENG 113 Literature-Based Research	3	0	0	3
OR	ENG 114 Pro Research & Reporting	3	0	0	3
(Students are highly encouraged to take ENG 114)					
HMT 211	Long-Term Care Admin	3	0	0	3
MAT 143	Quantitative Literacy	2	2	0	3
OST 247	Procedure Coding	1	2	0	2
Total		11	6	0	15
Spring - 2nd year					
HMT 212	Mgt. of Healthcare Org	3	0	0	3
HMT 220	Healthcare Financial Mgmt	4	0	0	4
HMT 225	Practice Mgmt Simulation	2	2	0	3
OST 248	Diagnostic Coding	1	2	0	2
WBL XXX	Worked-Based Learning	0	0	20	2
Total		10	4	20	12
Grand Total		58	16	20	68

HEALTHCARE MANAGEMENT TECHNOLOGY Healthcare Management Certificate Program (C25200)

MAJOR COURSES: SHC

HMT 110	Intro to Healthcare Mgt	3
HMT 210	Medical Insurance	3
HMT 211	Long-Term Care Admin	3
HMT 212	Mgt of Healthcare Org	3
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3

Total Credit Hours Required18

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 097	Integrated Reading Writing II	3
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*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions.

HealthCare Management Technology Cert. Prog. (C25200) Suggested Sequence

Fall - 1st year					
HMT 110	Intro to Healthcare Mgt	3	0	0	3
MED 121	Medical Terminology I (1st 8 weeks)	3	0	0	3
MED 122	Medical Terminology II (2nd 8 weeks)	3	0	0	3
Total		9	0	0	9
Spring - 1st year					
HMT 210	Medical Insurance	3	0	0	3
HMT 211	Long-Term Care Admin	3	0	0	3
HMT 212	Mgt of Healthcare Org	3	0	0	3
Total		9	0	0	9
Grand Total		18	0	0	18

HEALTHCARE MANAGEMENT TECHNOLOGY

Healthcare Receptionist Certificate Program (C2520005)

MAJOR COURSES:		SHC
HMT 110	Intro to Healthcare Mgt	3
HMT 210	Medical Insurance.....	3
MED 114	Prof Interac in Heal Care	1
MED 121	Medical Terminology I.....	3
MED 122	Medical Terminology II.....	3
OST 149	Medical Legal Issues.....	3

Total Credit Hours Required16

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 097	Integrated Reading Writing II.....	3
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*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information

Healthcare Management Technology Healthcare Receptionist (C2520005) Certificate Program Suggested Sequence

		Class	Lab	Cln/WkExp	Credit
Fall - 1st year					
HMT 110	Intro to Healthcare Mgt	3	0	0	3
MED 121	Medical Terminology I (1st 8 weeks)	3	0	0	3
MED 122	Medical Terminology II (2nd 8 weeks)	3	0	0	3
Total		9	0	0	9
Spring - 1st year					
MED 114	Prof Interac in Heal Care	1	0	0	1
HMT 210	Medical Insurance	3	0	0	3
OST 149	Medical Legal Issues	3	0	0	3
Total		7	0	0	7
Grand Total		16	0	0	16

HEALTHCARE MANAGEMENT TECHNOLOGY

Insurance Certificate Program (C2520004)

MAJOR COURSES:		SHC
HMT 110	Intro to Healthcare Mgt	3
HMT 210	Medical Insurance.....	3
MED 114	Prof Interac in Heal Care	1
MED 121	Medical Terminology I.....	3
MED 122	Medical Terminology II.....	3
OST 247	Procedure Coding.....	2
OST 248	Diagnostic Coding.....	2

Total Credit Hours Required17

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 097	Integrated Reading Writing II.....	3
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*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

HealthCare Management Technology Insurance (C2520004) Certificate Program Suggested Sequence

		Class	Lab	Cln/WkExp	Credit
Fall - 1st year					
HMT 110	Intro to Healthcare Mgt	3	0	0	3
MED 121	Medical Terminology I (1st 8 Wks)	3	0	0	3
MED 122	Medical Terminology II (2nd 8 Wks)	3	0	0	3
Total		9	0	0	9
Spring - 1st year					
MED 114	Prof Interac In Heal Care	1	0	0	1
HMT 210	Medical Insurance	3	0	0	3
OST 247	Procedure Coding	1	2	0	2
OST 248	Diagnostic Coding	1	2	0	2
Total		6	4	0	8
Grand Total		15	4	0	17

HORTICULTURE TECHNOLOGY

A.A.S. Program (A15240)

Most courses required to meet graduation requirements in this curriculum are offered during day hours only. Selected courses are offered each semester via the Internet. Minimum time for completion: Day -- five semesters full-time attendance for the full curriculum; Evening -- three semesters for the certificate program option. The Associate in Applied Science Degree is awarded graduates of this curriculum. A certificate is awarded graduates of the certificate program option. Special University Articulation Agreement with North Carolina State University: NCSU may accept up to 15 semester credit hours in Horticulture from CVCC toward the Bachelor of Science in Horticulture Degree. A course grade of C or higher for each course is required. For details, call Scott Crosby at extension 4755. CVCC has a 2 + 2 Articulation Agreement with N.C. Agricultural and Technological State University in Horticulture. These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study. Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses. Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, governmental agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination. A program that focuses on the general production and management of cultivated plants, shrubs, flowers, foliage, trees, groundcovers, and related plant materials; the management of technical and business operations connected with horticultural services; and the basic scientific principles needed to understand plants and their management and care.

GENERAL EDUCATION COURSES: **SHC**

English/Communications:		
ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting	3
OR	ENG 112 Writing/Research in the Disc.....	3
OR	ENG 113 Literature-Based Research	3
Humanities/Fine Arts:		
Elective		3
Natural Sciences/Mathematics:		
MAT 110	Math Measurement & Literacy	3
OR	MAT 143 Quantitative Literacy.....	3
Social/Behavioral Sciences:		
Elective		3

MAJOR COURSES :

HOR 110	Intro to Landscaping.....	2
HOR 112	Landscape Design I	3
HOR 114	Landscape Construction	3
HOR 116	Landscape Management I.....	3
HOR 118	Equipment Op & Maint	2
HOR 134	Greenhouse Operations	3
HOR 160	Plant Materials I	3
HOR 161	Plant Materials II	3
HOR 162	Applied Plant Science.....	3
HOR 164	Hort Pest Management	3
HOR 166	Soils & Fertilizers.....	3
HOR 168	Plant Propagation	3
HOR 170	Hort Computer Apps	2
HOR 213	Landscape Design II.....	3
HOR 215	Landscape Irrigation.....	3
HOR 265	Adv Plant Materials.....	2
HOR 273	Hor Mgmt & Marketing	3
TRF 110	Intro Turfgrass Cult & ID.....	4

Horticulture/Turf or Work-Based Learning Elective

Please choose from the following:		
HOR 255	Interiorscapes	2
SPA 120	Spanish for the Workplace	3
TRF 120	Turfgrass Irrigat & Design	4
TRF 125	Turfgrass Computer App	2
TRF 130	Native Flora ID	2
TRF 140	Turfgrass Mgmt Safety	3
TRF 150	Landscape Drafting	2
TRF 151	Intro Landscape Design	3
TRF 152	Landscape Maintenance	3
TRF 210	Turfgrass Eqmt Mgmt	3
TRF 220	Turfgrass Calculations	2
TRF 230	Turfgrass Mgmt Apps	2
TRF 250	Golf/Sport Field Const	4
TRF 260	Adv Turfgrass Mgmt	4
WBL XXX	Work-Based Learning	1-4

Total Credit Hours Required70

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DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, (MAT 110)	.....	3	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)	.....	5	

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Horticulture Technology • A15240		Class	Lab	Clin/WkExp	Credit
Suggested Program Sequence Day					
Fall - 1st year					
TRF 110	Intro Turfgrass Cult & ID	3	2	0	4
HOR 118	Equipment Op & Maint	1	3	0	2
HOR 162	Applied Plant Science	2	2	0	3
HOR 166	Soils & Fertilizers	2	2	0	3
ENG 111	Writing and Inquiry	3	0	0	3
Total		11	9	0	15
Spring - 1st year					
MAT 110	Math Measurement & Literacy	2	2	0	3
OR	MAT 143 Quantitative Literacy	2	2	0	3
HOR 168	Plant Propagation	2	2	0	3
HOR 160	Plant Materials I	2	2	0	3
HOR 116	Landscape Management I	2	2	0	3
HOR 110	Intro To Landscaping	1	2	0	2
ENG 114	Prof Research and Reporting (Preferred)	3	0	0	3
OR	ENG 112 Writing/Research in the Disc	3	0	0	3
OR	ENG 113 Literature-Based Research	3	0	0	3
Total		12	10	0	17
Summer - 1st year					
HOR 112	Landscape Design I	2	3	0	3
HOR 114	Landscape Construction	2	2	0	3
HOR 161	Plant Materials II	2	2	0	3
Total		6	7	0	9
Fall - 2nd year					
HOR 170	Hort Computer Apps	1	3	0	2
HOR 213	Landscape Design II	2	2	0	3
HOR 215	Landscape Irrigation	2	2	0	3
HOR 134	Greenhouse Operations	2	2	0	3
HOR 273	Hort. Mgmt. & Marketing	3	0	0	3
	Hort/Turf/Work-Based Learning Elective				2
Total		10	9	0	16
Spring - 2nd year					
HOR 164	Hort Pest Management	2	2	0	3
HOR 265	Advanced Plant Materials	1	2	0	2
	Humanities/Fine Arts Elective	3	0	0	3
	Hort/Turf/Work-Based Learning Elective	0			2
	Social/Behavioral Science Elective	3	0	0	3
Total		9	4	0	13
Grand Total		48	39	0	70

HORTICULTURE TECHNOLOGY Cert. Prog. (C15240)

MAJOR COURSES:	SHC
HOR 110	Intro to Landscaping.....2
HOR 118	Equipment Op & Maint.....2
HOR 134	Greenhouse Operations.....3
HOR 164	Hort Pest Management.....3
HOR 168	Plant Propagation.....3
HOR 215	Landscape Irrigation.....3
HOR 255	Interiorscapes.....2
Total Credit Hours Required	18

Horticulture Technology Cert. Prog. (C15240) Sug. Seq.

Fall - 1st year					
HOR 110	Intro to Landscaping	1	2	0	2
HOR 118	Equipment Op & Maint	1	3	0	2
HOR 134	Greenhouse Operations	2	2	0	3
HOR 215	Landscape Irrigation	2	2	0	3
Total		6	9	0	10
Spring - 1st year					
HOR 164	Hort Pest Management	2	2	0	3
HOR 168	Plant Propagation	2	2	0	3
HOR 255	Interiorscapes	1	2	0	2
Total		5	6	0	8
Grand Total		11	15	0	18

HORTICULTURE TECHNOLOGY

**Landscape Design
Diploma Program (D1524001)**

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry.....3
Natural Sciences/Mathematics:	
MAT 110	Math Measurement & Literacy.....3
OR	MAT 143 Quantitative Literacy.....3

MAJOR COURSES :

HOR 110	Intro to Landscaping.....2
HOR 112	Landscape Design I.....3
HOR 114	Landscape Construction.....3
HOR 160	Plant Materials I.....3
HOR 161	Plant Materials II.....3
HOR 162	Applied Plant Science.....3
HOR 164	Hort Pest Management.....3
HOR 166	Soils & Fertilizers.....3
HOR 170	Hort Computer Apps.....2
HOR 213	Landscape Design II.....3
HOR 215	Landscape Irrigation.....3
HOR 265	Advanced Plant Materials.....2

Total Credit Hours Required39

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098	Integrated Reading Writing III	.....	3
DMA DMA 010, DMA 020, DMA 030, (MAT 110)	.....	3	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)	.....	5	

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Horticulture Technology - Landscape Design (D1524001)
Suggested Sequence**

	Class	Lab	Clin/WkExp	Credit	
Fall - 1st year					
ENG 111	Writing and Inquiry	3	0	0	3
HOR 162	Applied Plant Science	2	2	0	3
HOR 166	Soils & Fertilizers	2	2	0	3
HOR 170	Hort Computer Apps	1	3	0	2
HOR 112	Landscape Design I	2	3	0	3
HOR 215	Landscape Irrigation	2	2	0	3
Total		12	12	0	17
Spring - 1st year					
MAT 110	Math Measurement & Literacy	2	2	0	3
OR	MAT 143 Quantitative Literacy	2	2	0	3
HOR 110	Intro to Landscaping	1	2	0	2
HOR 160	Plant Materials I	2	2	0	3
HOR 164	Hort Pest Management	2	2	0	3
HOR 265	Advanced Plant Materials	1	2	0	2
Total		8	10	0	13
Summer - 1st year					
HOR 213	Landscape Design II	2	2	0	3
HOR 114	Landscape Construction	2	2	0	3
HOR 161	Plant Materials II	2	2	0	3
Total		6	6	0	9
Grand Total		26	28	0	39

HORTICULTURE TECHNOLOGY

Landscape Management Diploma Program (D1524002)

INDUSTRIAL SYSTEMS TECHNOLOGY

A.A.S. Program (A50240)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day—four semesters full-time attendance; Evening—eight semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Industrial Systems Technology curriculum is designed to prepare or upgrade individuals to safely service, maintain, repair, or install equipment. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial systems. Students will learn multi-craft technical skills in blueprint reading, mechanical systems maintenance, electricity, hydraulics/pneumatics, welding, machining or fabrication, and includes various diagnostic and repair procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered. Upon completion of this curriculum, graduates should be able to individually, or with a team, safely install, inspect, diagnose, repair, and maintain industrial process and support equipment. Students will also be encouraged to develop their skills as life-long learners.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry 3
ENG 114	Prof Research & Reporting 3
OR	ENG 112 Writing/Research in the Disc 3
OR	ENG 113 Literature-Based Research 3

Humanities/Fine Arts:	
Elective	..... 3

Natural Sciences/Mathematics:	
MAT 110	Math Measurement & Literacy 3
OR	MAT 143 Quantitative Literacy 3

Social/Behavioral Sciences:	
Elective	..... 3

MAJOR COURSES:

BPR 111	Print Reading 2
CIS 110	Introduction to Computers 3
OR	CIS 111 Basic PC Literacy 2
ELC 112	DC/AC Electricity 5
ELC 113	Residential Wiring 4
ELC 115	Industrial Wiring 4
ELC 117	Motors and Controls 4
ELC 118	National Electrical Code 2
ELC 119	NEC Calculations 2
HYD 110	Hydraulics/Pneumatics I 3
ISC 112	Industrial Safety 2
MAC 141	Machining Applications I 4
MAC 142	Machining Applications II 4
MNT 110	Intro to Maint Procedures 2
WLD 112	Basic Welding Processes 2
IST Program Electives	..... 9

Students are required to take a minimum of 9 SHC from the following:

AHR 110	Intro to Refrigeration 5
AHR 112	Heating Technology 4
AHR 113	Comfort Cooling 4
ELC 128	Intro to PLC 3
ELN 229	Industrial Electronics 4
MAC 122	CNC Turning 2
MAC 124	CNC Milling 2
MAC 222	Advanced CNC Turning 2
MAC 224	Advanced CNC Milling 2
WBL XXX	Work-Based Learning 1-3
WLD 110	Cutting Processes 2
WLD 115	SMAW (Stick) Plate 5
OR	
WLD 115AC	SMAW (Stick) Plate-AC 2
WLD 115BC	SMAW (Stick) Plate-BC 2
WLD 115CC	SMAW (Stick) Plate-CC 1

Work-Based Learning Option: Qualified students may elect to take up to 3 credit hours of Work-Based Learning in place of 3 hours Program Elective.

Total Credit Hours Required 66-67

DEVELOPMENTAL COURSE REQUIREMENTS*	
CTS 080	Computing Fundamentals 3
DRE 098	Integrated Reading Writing III 3
DMA DMA 010, DMA 020, DMA 030, (MAT 110)	..... 3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)	..... 5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry 3
Natural Sciences/Mathematics:	
MAT 110	Math Measurement & Literacy 3
OR	MAT 143 Quantitative Literacy 3

MAJOR COURSES:

HOR 110	Intro to Landscaping 2
HOR 114	Landscape Construction 3
HOR 116	Landscape Management I 3
HOR 118	Equipment Op & Maint 2
HOR 160	Plant Materials I 3
HOR 161	Plant Materials II 3
HOR 162	Applied Plant Science 3
HOR 164	Hort Pest Management 3
HOR 166	Soils & Fertilizers 3
HOR 215	Landscape Irrigation 3
HOR 265	Advanced Plant Materials 2
Horticulture/Turf or Work-Based Learning Elective	..... 2
Please choose from the following:	
HOR 255	Intiorscapes 2
SPA 120	Spanish for the Workplace 3
TRF 110	Intro Turfgrass Cult & ID 4
TRF 120	Turfgrass Irrigat & Design 4
TRF 125	Turfgrass Computer App 2
TRF 130	Native Flora ID 2
TRF 140	Turfgrass Mgmt Safety 3
TRF 150	Landscape Drafting 2
TRF 151	Intro Landscape Design 3
TRF 152	Landscape Maintenance 3
TRF 210	Turfgrass Eqmt Mgmt 3
TRF 220	Turfgrass Calculations 2
TRF 230	Turfgrass Mgmt Apps 2
TRF 250	Golf/Sport Field Const 4
TRF 260	Adv Turfgrass Mgmt 4
WBL XXX	Work-Based Learning 1-2

Total Credit Hours Required 38

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098	Integrated Reading Writing III 3
DMA DMA 010, DMA 020, DMA 030, (MAT 110)	..... 3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)	..... 5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Horticulture Technology - Landscape Management (D1524002) Suggested Sequence

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
ENG 111	Writing and Inquiry	3	0	0	3
HOR 118	Equipment Op & Maint	1	3	0	2
HOR 162	Applied Plant Science	2	2	0	3
HOR 166	Soils & Fertilizers	2	2	0	3
HOR 215	Landscape Irrigation	2	2	0	3
MAT 110	Math Measurement & Literacy	2	2	0	3
OR	MAT 143 Quantitative Literacy	2	2	0	3
Total		12	11	0	17
Spring - 1st year					
HOR 110	Intro to Landscaping	1	2	0	2
HOR 116	Landscape Management I	2	2	0	3
HOR 160	Plant Materials I	2	2	0	3
HOR 164	Hort Pest Management	2	2	0	3
HOR 265	Advanced Plant Materials	1	2	0	2
Work-Based Learning or Hort/Turf Elective					2
Total		8	10	0	15
Summer - 1st year					
HOR 114	Landscape Construction	2	2	0	3
HOR 161	Plant Materials II	2	2	0	3
Total		4	4	0	6
Grand Total		24	25	0	38

Industrial Systems Technology • A50240
Suggested Program Sequence Day

Industrial Systems Technology • A50240
Suggested Program Sequence Evening

			Class	Lab	Clin/Wk&Exp	Credit
Fall - 1st year						
BPR	111	Print Reading	1	2	0	2
ELC	112	DC/AC Electricity	3	6	0	5
ELC	113	Residential Wiring	2	6	0	4
ELC	118	National Electrical Code	1	2	0	2
ELC	119	NEC Calculations	1	2	0	2
Total			8	18	0	15
Spring - 1st year						
ELC	115	Industrial Wiring	2	6	0	4
ELC	117	Motors and Controls	2	6	0	4
ENG	111	Writing and Inquiry	3	0	0	3
MAT	110	Math Measurement & Literacy	2	2	0	3
OR		MAT 143 Quantitative Literacy	2	2	0	3
		IST Program Elective	3	0	0	3
Total			12	14	0	17
Summer - 1 year						
		Social/Behavioral Science Elective	3	0	0	3
		Humanities/Fine Arts Elective	3	0	0	3
Total			6	0	0	6
Fall - 2nd year						
ISC	112	Industrial Safety	2	0	0	2
MAC	141	Machining Applications I	2	6	0	4
MAC	142	Machining Applications II	2	6	0	4
MNT	110	Intro to Maint Procedures	1	3	0	2
		IST Program Elective	3	0	0	3
Total			10	15	0	15
Spring - 2nd year						
CIS	111	Basic PC Literacy	1	2	0	2
OR		CIS 110 Introduction to Computers	2	2	0	3
ENG	114	Prof Research & Reporting (Preferred)	3	0	0	3
OR		ENG 112 Writing/Research in the Disc	3	0	0	3
OR		ENG 113 Literature-Based Research	3	0	0	3
HYD	110	Hydraulics/Pneumatics I	2	3	0	3
WLD	112	Basic Welding Processes	1	3	0	2
		IST Program Elective	3	0	0	3
Total			10/11	8	0	13/14
Grand Total			46/47	55	0	66/67

Work-Based Learning Option: Qualified students may elect to take up to 3 credit hours of work-based learning in place of 3 hours of Program Elective.

			Class	Lab	Clin/Wk&Exp	Credit
Fall - 1st year						
ELC	113	Residential Wiring	2	6	0	4
ELC	118	National Electrical Code	1	2	0	2
MAT	110	Math Measurement & Literacy	2	2	0	3
OR		MAT 143 Quantitative Literacy	2	2	0	3
Total			5	10	0	9
Spring - 1st year						
ELC	112	DC/AC Electricity	3	6	0	5
ELC	119	NEC Calculations	1	2	0	2
BPR	111	Print Reading	1	2	0	2
Total			5	10	0	9
Fall - 2nd year						
ELC	117	Motors and Controls	2	6	0	4
		IST Program Elective	3	0	0	3
Total			5	6	0	7
Spring - 2nd year						
ELC	115	Industrial Wiring	2	6	0	4
		IST Program Elective	3	0	0	3
Total			5	6	0	7
Fall - 3rd year						
ENG	111	Writing and Inquiry	3	0	0	3
MNT	110	Intro to Maint Procedures	1	3	0	2
		Social/Behavioral Science Elective	3	0	0	3
Total			7	3	0	8
Spring - 3rd year						
CIS	111	Basic PC Literacy	1	2	0	2
OR		CIS 110 Introduction to Computers	2	2	0	3
ENG	114	Prof Research & Reporting (Preferred)	3	0	0	3
OR		ENG 112 Writing/Research in the Disc	3	0	0	3
OR		ENG 113 Literature-Based Research	3	0	0	3
HYD	110	Hydraulics/Pneumatics I	2	3	0	3
Total			6/7	5	0	8/9
Fall - 4th year						
ISC	112	Industrial Safety	2	0	0	2
MAC	141	Machining Applications I	2	6	0	4
WLD	112	Basic Welding Processes	1	3	0	2
Total			5	9	0	8
Spring - 4th year						
MAC	142	Machining Applications II	2	6	0	4
		IST Program Elective	3	0	0	3
		Humanities/Fine Arts Elective	3	0	0	3
Total			8	6	0	10
Grand Total			46/47	55	0	66/67

Program electives: The student is required to take a minimum of 9 credits from this list.

Work-Based Learning Option: Qualified students may elect to take up to 3 credit hours of Work-Based learning in place of 3 hours of program elective.

AHR	110	Intro to Refrigeration	2	6	0	5
AHR	112	Heating Technology	2	4	0	4
AHR	113	Comfort Cooling	2	4	0	4
ELC	128	Intro to PLC	2	3	0	3
ELN	229	Industrial Electronics	2	4	0	4
MAC	122	CNC Turning	1	3	0	2
MAC	124	CNC Milling	1	3	0	2
MAC	222	Advanced CNC Turning	1	3	0	2
MAC	224	Advanced CNC Milling	1	3	0	2
WBL	XXX	Work-Based Learning	0	0	10/30	1/3
WLD	110	Cutting Processes	1	3	0	2
WLD	115	SMAW (Stick) Plate	2	9	0	5
OR						
WLD	115AC	SMAW (Stick) Plate-AC	1	3	0	2
WLD	115BC	SMAW (Stick) Plate-BC	1	3	0	2
WLD	115CC	SMAW (Stick) Plate-CC	0	3	0	1

INFORMATION SYSTEMS SECURITY A.A.S. Program (A25270)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. The Associate in Applied Science is awarded graduates of this curriculum.

Information Systems Security covers a broad expanse of technology concepts. This curriculum provides individuals with the skills required to implement effective and comprehensive information security controls. Course work includes networking technologies, operating systems administration, information policy, intrusion detection, security administration, and industry best practices to protect data communications. Graduates should be prepared for employment as security administrators. Additionally, they will acquire the skills that allow them to pursue security certifications.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry .....3
ENG 114	Prof Research & Reporting .....3
OR	ENG 113 Literature-Based Research .....3

Humanities/Fine Arts:	
Elective	.....3

Natural Sciences/Mathematics:	
MAT 143	Quantitative Literacy .....3
OR	MAT 171 Precalculus Algebra .....4

Social/Behavioral Sciences:	
Elective	.....3

MAJOR COURSES:

CIS 110	Introduction to Computers.....3
CIS 115	Intro to Prog & Logic .....3
CTS 115	Info Sys Business Concepts .....3
DBA 110	Database Concepts.....3
NET 125	Networking Basics .....3
NET 126	Routing Basics.....3
NET 175	Wireless Technology .....3
NET 225	Routing & Switching I .....3
NET 226	Routing & Switching II .....3
NOS 110	Operating Systems Concepts.....3
NOS 120	Linux/UNIX Single User.....3
NOS 130	Windows Single User .....3
SEC 110	Security Concepts .....3
SEC 150	Secure Communications.....3
SEC 160	Secure Administration I.....3
SEC 210	Intrusion Detection.....3
SEC 220	Defense-In-Depth .....3
SEC 240	Wireless Security.....3
SEC 289	Security Capstone Project.....3

Work-Based Learning Option: Qualified students may elect to take 3 credit hours of Work-Based Learning in place of SEC 240.

Total Credit Hours Required:..... 72/73

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....3
DRE 098	Integrated Reading Writing III .....3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)...	5
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 (MAT 171).....	7

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Information Systems Security • A25270 Suggested Program Sequence Day

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
CIS 110	Introduction to Computers	2	2	0	3
CIS 115	Intro to Prog & Logic	2	3	0	3
SEC 110	Security Concepts	2	2	0	3
NET 125	Networking Basics	1	4	0	3
DBA 110	Database Concepts	2	3	0	3
Total		9	14	0	15
Spring - 1st year					
NET 126	Routing Basics	1	4	0	3
CTS 115	Info Sys Business Concepts	3	0	0	3
NOS 110	Operating Systems Concepts	2	3	0	3
ENG 111	Writing and Inquiry	3	0	0	3
	Humanities/Fine Arts Elective	3	0	0	3
Total		12	7	0	15
Summer - 1st year					
ENG 114	Prof Research & Reporting	3	0	0	3
OR	ENG 113 Literature-Based Research	3	0	0	3
MAT 143	Quantitative Literacy	2	2	0	3
OR	MAT 171 Precalculus Algebra	3	2	0	4
	Social/Behavioral Science Elective	3	0	0	3
Total		8/9	2	0	9/10
Fall - 2nd year					
SEC 160	Secure Administration I	2	2	0	3
NET 175	Wireless Technology	2	2	0	3
NET 225	Routing & Switching I (1st eight week)	1	4	0	3
NET 226	Routing & Switching II (2nd eight week)	1	4	0	3
SEC 220	Defense-in-Depth	2	2	0	3
Total		8	14	0	15
Spring - 2nd year					
NOS 120	Linux/UNIX Single User	2	2	0	3
NOS 130	Windows Single User	2	2	0	3
SEC 150	Secure Communications	2	2	0	3
SEC 210	Intrusion Detection	2	2	0	3
SEC 240	Wireless Security	2	2	0	3
OR	WBL Work-Based Learning	0	0	30	3
SEC 289	Security Capstone Project	1	4	0	3
Total		11	14	30	18
Grand Total		48/49	51	30	72/73

INFORMATION SYSTEMS SECURITY

Network Security Certificate • Cert. Prog. (C2527001)

MAJOR COURSES:		SHC
NET 125	Networking Basics.....3	
NET 126	Routing Basics.....3	
SEC 110	Security Concepts.....3	
SEC 160	Secure Administration I.....3	
SEC 210	Intrusion Detection.....3	
SEC 220	Defense-In-Depth .....3	
Total Credit Hours Required:.....		18

Information Systems Security - Network Security Cert. (C2527001) Suggested Sequence

Fall - 1st year					
SEC 110	Security Concepts	2	2	0	3
NET 125	Networking Basics	1	4	0	3
Total		3	6	0	6
Spring - 1st year					
NET 126	Routing Basics	1	4	0	3
Total		1	4	0	3
Fall - 2nd year					
SEC 160	Secure Administration I	2	2	0	3
SEC 220	Defense-In-Depth	2	2	0	3
Total		4	4	0	6
Spring - 2nd year					
SEC 210	Intrusion Detection	2	2	0	3
Total		2	2	0	3
Grand Total		10	16	0	18

**INFORMATION SYSTEMS SECURITY
Operating System Security Certificate
Certificate Program (C2527003)**

MAJOR COURSES:			SHC
NET 125	Networking Basics		3
NOS 110	Operating Systems Concepts.....		3
NOS 120	Linux/UNIX Single User.....		3
NOS 130	Windows Single User		3
SEC 110	Security Concepts.....		3
SEC 150	Secure Communications.....		3

Total Credit Hours Required18

**Information Systems Security
Operating Security Certificate (C2527003) Suggested Sequence**

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
SEC 110	Security Concepts	3	0	0	3
NET 125	Networking Basics	1	4	0	3
NOS 110	Operating Systems Concepts	2	3	0	3
	Total	6	7	0	9
Spring - 1st year					
SEC 150	Secure Communication	2	2	0	3
NOS 120	Linux/UNIX Single User	2	2	0	3
NOS 130	Windows Single User	2	2	0	3
	Total	6	6	0	9
	Grand Total	12	13	0	18

**INFORMATION SYSTEMS SECURITY
Wireless Security Certificate
Certificate Program (C2527004)**

MAJOR COURSES:			SHC
NET 125	Networking Basics		3
NET 175	Wireless Technology		3
NOS 110	Operating Systems Concepts.....		3
SEC 110	Security Concepts.....		3
SEC 150	Secure Communications.....		3
SEC 240	Wireless Security.....		3

Total Credit Hours Required18

**Information Systems Security
Wireless Security Certificate (C2527004) Suggested Sequence**

Fall - 1st year					
SEC 110	Security Concepts	2	2	0	3
NET 125	Networking Basics	1	4	0	3
	Total	3	6	0	6
Spring - 1st year					
NOS 110	Operating Systems Concepts	2	3	0	3
SEC 150	Secure Communications	2	2	0	3
	Total	4	5	0	6
Fall - 2nd year					
NET 175	Wireless Technology	2	2	0	3
	Total	2	2	0	3
Spring - 2nd year					
SEC 240	Wireless Security	2	2	0	3
	Total	2	2	0	3
	Grand Total	11	15	0	18

**MECHANICAL ENGINEERING TECHNOLOGY
A.A.S. Program (A40320)**

**Mechanical Engineering Technology • A40320
Suggested Program Sequence Day**

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Mechanical Engineering Technology curriculum prepares the graduates to use basic engineering principles and technical skills to design, develop, test, and troubleshoot projects involving mechanical systems. Includes instruction in principles of mechanics, applications to specific engineering systems, design testing procedures, prototype and operational testing and inspection procedures, manufacturing system-testing procedures, test equipment operation and maintenance, computer applications, critical thinking, planning and problem solving, and oral and written communications. Graduates of the curriculum will find employment opportunities in the manufacturing or service sectors of engineering technology. Engineering technicians may obtain professional certification by application to organizations such as ASQC, SME, and NICET.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting.....	3
OR	ENG 112 Writing/Research in the Disc.....	3
OR	ENG 113 Literature-Based Research.....	3

Humanities/Fine Arts:

Elective	3
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Natural Sciences/Mathematics:

MAT 121	Algebra/Trigonometry I.....	3
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Social/Behavioral Sciences:

Elective	3
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MAJOR COURSES:

CSC 134	C++ Programming.....	3
EGR 251	Statics.....	3
EGR 252	Strength of Materials.....	3
DFT 111	Technical Drafting I.....	2
DFT 111A	Technical Drafting I Lab.....	1
DFT 151	CAD I.....	3
DFT 153	CAD III.....	3
ELN 231	Industrial Controls.....	3
MAC 141	Machining Applications I.....	4
MAT 122	Algebra/Trigonometry II.....	3
MEC 161	Manufacturing Processes I.....	3
MEC 180	Engineering Materials.....	3
MEC 231	Comp-Aided Manufact I.....	3
MEC 265	Fluid Mechanics.....	3
MEC 270	Machine Design.....	4
PHY 131	Physics-Mechanics.....	4
PHY 132	Physics-Elec & Magnetism.....	4
WLD 112	Basic Welding Processes.....	2

Work-Based Learning Option: Qualified students may elect to take 4 credit hours of Work-Based Learning in place of MEC 270.

Total Credit Hours Required.....69

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3
DMA	DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060	6

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

			Class	Lab	Clm/WkExp	Credit
Fall - 1st year						
CSC 134	C++ Programming		2	3	0	3
DFT 151	CAD I		2	3	0	3
ENG 111	Writing and Inquiry		3	0	0	3
MAT 121	Algebra/Trigonometry I		2	2	0	3
MEC 180	Engineering Materials		2	3	0	3
	Total		11	11	0	15
Spring - 1st year						
DFT 111	Technical Drafting I		1	3	0	2
DFT 111A	Technical Drafting I Lab		0	3	0	1
ENG 114	Prof Research & Reporting (Preferred)		3	0	0	3
	OR ENG 112 Writing/Research in the Disc		3	0	0	3
	OR ENG 113 Literature-Based Research		3	0	0	3
MAT 122	Algebra/Trigonometry II		2	2	0	3
MEC 161	Manufacturing Processes I		3	0	0	3
WLD 112	Basic Welding Processes		1	3	0	2
	Total		10	11	0	14
Summer - 1st year						
	Humanities/Fine Arts Elective		3	0	0	3
	Social/Behavioral Science Elective		3	0	0	3
	Total		6	0	0	6
Fall - 2nd year						
DFT 153	CAD III		2	3	0	3
EGR 251	Statics		2	2	0	3
ELN 231	Industrial Controls		2	3	0	3
MAC 141	Machining Applications I		2	6	0	4
PHY 131	Physics-Mechanics		3	2	0	4
	Total		11	16	0	17
Spring - 2nd year						
EGR 252	Strength of Materials		2	2	0	3
MEC 231	Comp-Aided Manufact I		1	4	0	3
MEC 265	Fluid Mechanics		2	2	0	3
MEC 270	Machine Design		3	3	0	4
PHY 132	Physics-Elec & Magnetism		3	2	0	4
	Total		11	13	0	17
	Grand Total		49	51	0	69

Work-Based Learning Option: Qualified students may elect to take up to 4 credit hours of Work-Based Learning in place of MEC 270.

**MECHATRONICS ENGINEERING TECHNOLOGY
A.A.S. Program (A40350)
(Pending State Approval for Spring 2015)**

Courses required to meet graduation requirements in this curriculum are offered primarily during day hours. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Mechatronics Engineering Technology curriculum prepares graduates to use basic engineering principles and technical skills in developing and testing automated, servomechanical, and other electromechanical systems. Includes instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures. Graduates should be qualified for employment in industrial maintenance and manufacturing including assembly, testing, startup, troubleshooting, repair, process improvement, and control systems, and should qualify to sit for Packaging Machinery Manufacturers Institute (PMMI) mechatronics or similar industry examinations.

GENERAL EDUCATION COURSES: SHC

English/Communications:		
ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting	3
Humanities/Fine Arts:		
Elective		3
Natural Sciences/Mathematics:		
MAT 121	Algebra/Trigonometry I	3
Social/Behavioral Sciences:		
Elective		3

MAJOR COURSES:

ATR 112	Intro to Automation	3
BPR 111	Blueprint Reading	2
CIS 110	Intro to Computers	3
DFT 151	CAD I	3
ELC 112	DC/AC Electricity	5
ELC 117	Motors and Controls	4
ELC 128	Intro to PLC	3
ELC 213	Instrumentation	4
ELN 229	Industrial Electronics	4
HYD 110	Hydraulics/Pneumatics	3
ISC 112	Industrial Safety	2
MEC 130	Mechanisms	3
MNT 110	Intro to Maintenance	2
PHY 131	Physics-Mechanics	4

Program electives: 6

Students are required to take a minimum of 6 SHC from the following:

Work-Based Learning Option: Qualified students may elect to take up to 3 credit hours of Work-Based Learning

CSC 134	C++ Programming	3
CSC 139	Visual BASIC Prog.	3
ELC 111	Intro to Electricity	3
MAC 141	Machining Applications I	4
MAC 142	Machining Applications II	4
MEC 180	Engineering Materials	3
NET 125	Networking Basics	3
PHY 133	Physics-Sound & Light	4
WBL 110	World of Work	1
WBL XXX	Work-Based Learning	1-3
WLD 112	Basic Welding Processes	2

Total Credit Hours Required66

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals	3
DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060		6

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Mechatronics Engineering Technology • A40350
Suggested Program Sequence Day
(Pending State Approval for Spring 2015)**

			Class	Lab	Clin/WkExp	Credit
Fall - 1st year						
BPR 111	Blueprint Reading		1	2	0	2
CIS 110	Intro to Computers		2	2	0	3
ELC 112	DC/AC Electricity		3	6	0	5
ENG 111	Writing and Inquiry		3	0	0	3
MAT 121	Algebra/Trigonometry I		2	2	0	3
Total			11	12	0	16
Spring - 1st year						
DFT 151	CAD I		2	3	0	3
ELC 117	Motors and Controls		2	6	0	4
ELN 229	Industrial Electronics		2	4	0	4
ENG 114	Prof. Research and Reporting		3	0	0	3
MEC 130	Mechanisms		2	2	0	3
Total			11	15	0	17
Summer - 1st year						
	Humanities/Fine Arts Elective		3	0	0	3
	Social/Behavioral Science Elective		3	0	0	3
Total			6	0	0	6
Fall - 2nd year						
ATR 112	Intro to Automation		2	3	0	3
ISC 112	Industrial Safety		2	0	0	2
MNT 110	Intro to Maint Procedures		1	3	0	2
PHY 131	Physics-Mechanics		3	2	0	4
	Program Elective		2	3	0	3
Total			10	11	0	14
Spring - 2nd year						
ELC 213	Instrumentation		3	2	0	4
ELC 128	Intro to PLC		2	3	0	3
HYD 110	Hydraulics/Pneumatics		2	3	0	3
	Program Elective		2	3	0	3
Total			9	11	0	13
Grand Total			47	49	0	66

**Mechatronics Engineering Technology
Suggested Program Sequence Day
Certificate Program (C40350)
(Pending State Approval for Spring 2015)**

MAJOR COURSES: SHC

ATR 112	Intro to Automation	3
ELC 112	DC/AC Electricity	5
HYD 110	Hydraulics/Pneumatics	3
ISC 112	Industrial Safety	2
MNT 110	Intro to Maintenance	2

Total Credit Hours Required15

Mechatronics Engineering Technology Suggested Sequence

Fall - 1st year						
ATR 112	Intro to Automation		2	3	0	3
ELC 112	DC/AC Electricity		3	6	0	5
ISC 112	Industrial Safety		2	0	0	2
MNT 110	Intro to Maint Procedures		1	3	0	2
Total			8	12	0	12
Spring - 1st year						
HYD 110	Hydraulics/Pneumatics		2	3	0	3
Total			2	3	0	3
Grand Total			10	15	0	15

MEDICAL OFFICE ADMINISTRATION

A.A.S. Program (A25310)

This curriculum prepares individuals for employment in medical and other health-care related offices. Course work will include medical terminology; information systems; office management; medical coding, billing and insurance; legal and ethical issues; and formatting and word processing. Students will learn administrative and support functions and develop skills applicable in medical environments. Employment opportunities are available in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other health-care related organizations. Graduates will be eligible to sit for coding certification exams sponsored by the coding profession.

GENERAL EDUCATION COURSES:

English/Communications:

ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting	3
	OR ENG 112 Writing/Research in the Disc	3
	OR ENG 113 Literature-Based Research	3

Humanities/Fine Arts

Elective:3

Natural Science/Mathematics:

MAT 110 Math Measurement & Literacy3

Social/Behavioral Sciences

Elective:3

MAJOR COURSES:

CIS 110	Introduction to Computers	3
HMT 110	Introduction to Healthcare Mgt	3
HMT 211	Long-Term Care Admin	3
OST 132	Keyboard Skill Building	2
OST 136	Word Processing	3
OST 140	Internet Comm/Research	2
OST 148	Med Coding Billing & Insur	3
OST 149	Medical Legal Issues	3
OST 164	Text Editing Applications	3
OST 243	Med Office Simulation	3
OST 247	Procedure Coding	2
OST 248	Diagnostic Coding	2
OST 249	CPC Certification	4
OST 281	Emerg Issues in Med Ofc	3
OST 286	Professional Development	3
MED 114	Prof Interac in Heal Care	1
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3
WBL XXX	Word-Based Learning	2

Total Credit Hours Required66

DEVELOPMENTAL COURSE REQUIREMENTS:

CTS 080	Computing Fundamentals	3
DMA DMA 10, DMA 20, DMA 30		3
DRE 098	Integrated Reading Writing III	3
OST 080	Keyboarding Literacy	2

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Medical Office Administration • A40350

Suggested Program Sequence Day

			Class	Lab	Clin/WkExp	Credit
Fall - 1st year						
CIS 110	Introduction to Computers	2	2	0	0	3
HMT 110	Introduction to Healthcare Mgt	3	0	0	0	3
OST 132	Keyboard Skill Building	1	2	0	0	2
OST 136	Word Processing	2	2	0	0	3
OST 149	Medical Legal Issues	3	0	0	0	3
OST 164	Text Editing Applications	3	0	0	0	3
	Total	11	6	0	0	17
Spring - 1st Year						
MED 114	Prof Interac in Heal Care	1	0	0	0	1
MED 121	Medical Terminology I	3	0	0	0	3
MED 122	Medical Terminology II	3	0	0	0	3
OST 148	Med Coding Billing & Insurance	3	0	0	0	3
OST 281	Emerg Issues in Med Off	3	0	0	0	3
	Total	13	0	0	0	13
Summer - 1st Year						
	Social/Behavioral Science Elective	3	0	0	0	3
	Humanities/Fine Arts Elective	3	0	0	0	3
ENG 111	Writing and Inquiry	3	0	0	0	3
	Total	9	0	0	0	9
Fall - 2nd Year						
HMT 211	Long-Term Care Admin	3	0	0	0	3
OST 243	Med Office Simulation	2	2	0	0	3
OST 247	Prodedure Coding	1	2	0	0	2
OST 248	Diagnostic Coding	1	2	0	0	2
OST 286	Professional Development	3	0	0	0	3
	Total	10	6	0	0	13
Spring - 2nd Year						
ENG 114	Prof Research & Reporting	3	0	0	0	3
	OR ENG 112 Writing/Research in the Disc	3	0	0	0	3
	OR ENG 113 Literature-Based Research	3	0	0	0	3
MAT 110	Math Measurement & Literacy	2	2	0	0	3
OST 140	Internet Comm/Research	1	2	0	0	2
OST 249	CPC Certification	3	2	0	0	4
WBL XXX	Work-Based Learning	0	0	0	20	2
	Total	9	6	0	14	
	Grand Total	55	18	20	66	

MEDICAL OFFICE ADMINISTRATION Diploma Program (D25310)

This curriculum prepares individuals for employment in medical and other health-care related offices. Course work will include medical terminology; information systems; office management; medical coding, billing and insurance; legal and ethical issues; and formatting and word processing. Students will learn administrative and support functions and develop skills applicable in medical environments. Employment opportunities are available in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other health-care related organizations.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry..... 3
Social/Behavioral Sciences:	
Elective	..... 3

MAJOR COURSES:

CIS 110	Introduction to Computers..... 3
HMT 110	Intro to Healthcare Mgt..... 3
MED 114	Prof Interaction in HC..... 1
MED 121	Medical Terminology I..... 3
MED 122	Medical Terminology II..... 3
OST 132	Keyboard Skill Building..... 2
OST 136	Word Processing..... 3
OST 148	Med Coding Billing & Insu..... 3
OST 149	Medical Legal Issues..... 3
OST 164	Text Editing Applications..... 3
OST 243	Med Office Simulation..... 3
OST 247	Procedural Coding..... 2
OST 248	Diagnostic Coding..... 2
OST 281	Emer Issues in Med Ofc..... 3

Total Credit Hours Required:..... 43

DEVELOPMENTAL COURSE REQUIREMENTS

CTS 080	Computing Fundamentals..... 3
DRE 098	Integrated Reading Writing III..... 3
OST 080	Keyboarding Literacy..... 2

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Medical Office Administration • D25310 Suggested Program Sequence Day

Fall - 1st year

HMT 110	Intro to Healthcare Mgt	3	0	0	3
MED 121	Medical Terminology I (1st Eight Wks)	3	0	0	3
MED 122	Medical Terminology II (2nd Eight Wks)	3	0	0	3
OST 132	Keyboard Skill Building	1	2	0	2
OST 136	Word Processing	2	2	0	3
OST 164	Text Editing Applications	3	0	0	3
Total		15	4	0	17

Spring - 1st year

CIS 110	Introduction to Computers	2	2	0	3
MED 114	Prof Interaction in HC	1	0	0	1
OST 148	Med Coding Billing & Insu (1st 8 Wks)	3	0	0	3
OST 243	Med Office Simulation (2nd 8 Wks)	2	2	0	3
OST 247	Procedure Coding	1	2	0	2
OST 248	Diagnostic Coding	1	2	0	2
OST 281	Emer Issues in Med Ofc	3	0	0	3
Total		12	8	0	17

Summer - 1st year

OST 149	Medical Legal Issues	3	0	0	3
ENG 111	Writing and Inquiry	3	0	0	3
Social/Behavioral Science Elective		3	0	0	3
Total		9	0	0	9
Grand Total		35	12	0	43

NETWORKING TECHNOLOGY

A.A.S. Program (A25340)

Courses required to meet graduation requirements in this curriculum are offered during the day and online. Minimum time for completion: Day--five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Networking Technology curriculum prepares individuals for employment supporting network infrastructure environments. Students will learn how to use technologies to provide reliable transmission and delivery of data, voice, image, and video communications in business, industry, and education. Course work includes design, installation, configuration, and management of network infrastructure technologies and network operating systems. Emphasis is placed on the implementation and management of network software and the implementation and management of hardware such as switches and routers. Graduates may find employment in entry-level jobs as local area network managers, network operators, network analysts, and network technicians. Graduates may also be qualified to take certification examinations for various network industry certifications, depending on their local program.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry..... 3
ENG 114	Prof Research & Reporting..... 3
OR	ENG 113 Literature-Based Research..... 3

Humanities/Fine Arts:

Elective 3
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Natural Sciences/Mathematics:

MAT 143	Quantitative Literacy..... 3
OR	MAT 171 Precalculus Algebra..... 4

Social/Behavioral Sciences:

Elective 3
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MAJOR COURSES:

CIS 110	Introduction to Computers..... 3
CIS 115	Intro to Prog & Logic..... 3
CTS 115	Info Sys Business Concepts..... 3
CTS 120	Hardware/Software Support..... 3
CTS 286	Network Support..... 3
DBA 110	Database Concepts..... 3
NET 125	Networking Basics..... 3
NET 126	Routing Basics..... 3
NET 225	Routing & Switching I..... 3
NET 226	Routing & Switching II..... 3
NET 240	Network Design..... 3
NOS 110	Operating System Concepts..... 3
NOS 120	Linux/UNIX Single User..... 3
NOS 130	Windows Single User..... 3
NOS 230	Windows Administration I..... 3
NOS 231	Windows Administration II..... 3
SEC 110	Security Concepts..... 3
WBL XXX	Work-Based Learning..... 2

Networking Elective..... 3

Students must select one course from the following:

CIS 277	Network Design & Imp..... 3
NET 175	Wireless Technology..... 3
NET 270	Building Scalable Networks..... 3
NOS 244	Operating System - AS/400..... 3
SEC 150	Secure Communications..... 3
SEC 160	Security Administration..... 3

Total Credit Hours Required..... 71/72

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals..... 3
DRE 098	Integrated Reading Writing III..... 3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)..... 5	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 (MAT 171)..... 7	

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Networking Technology • A25340
Suggested Program Sequence Day

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
NOS 110	Operating System Concepts	2	3	0	3
NET 125	Networking Basics	1	4	0	3
SEC 110	Security Concepts	2	2	0	3
CIS 115	Intro to Prog & Logic	2	3	0	3
CIS 110	Introduction to Computers	2	2	0	3
Total		9	14	0	15
Spring - 1st year					
CTS 120	Hardware/Software Support	2	3	0	3
NET 126	Routing Basics	1	4	0	3
NET 240	Network Design	3	0	0	3
NOS 120	Linux/UNIX Single User	2	2	0	3
NOS 130	Windows Single User	2	2	0	3
	Humanities/Fine Arts Elective	3	0	0	3
Total		13	11	0	18
Summer - 1st year					
ENG 111	Writing and Inquiry	3	0	0	3
MAT 143	Quantitative Literacy	2	2	0	3
	OR MAT 171 Precalculus Algebra	3	2	0	4
	Social/Behavioral Science Elective	3	0	0	3
Total		8/9	2	0	9/10
Fall - 2nd year					
NET 225	Routing & Switching I (First eight weeks)	1	4	0	3
NET 226	Routing & Switching II (Sec eight wks)	1	4	0	3
DBA 110	Database Concepts	2	3	0	3
NOS 230	Windows Administration I	2	2	0	3
Total		6	13	0	12
Spring - 2nd year					
CTS 286	Network Support	2	2	0	3
	Networking Elective	3	0	0	3
ENG 114	Prof Research & Reporting	3	0	0	3
	OR ENG 113 Literature-Based Research	3	0	0	3
CTS 115	Info Sys Business Concepts	3	0	0	3
NOS 231	Windows Administration II	2	2	0	3
WBLXXX	Work-Based Learning	0	0	20	2
Total		13	4	20	17
Grand Total		49/50	44	20	71/72

NETWORKING TECHNOLOGY
CCNA - Cisco Certified Network Associate
Certificate Program (C2534001)

MAJOR COURSES:		SHC
NET 125	Networking Basics.....	3
NET 126	Routing Basics.....	3
NET 225	Routing & Switching I.....	3
NET 226	Routing & Switching II.....	3

Total Credit Hours Required12

Networking Technology - CCNA Cert. (C2534001) Suggested Seq. Day

Fall - 1st year			
NET 125	Networking Basics	1	4 0 3
Total		1	4 0 3
Spring - 1st year			
NET 126	Routing Basics	1	4 0 3
Total		1	4 0 3
Fall - 2nd year			
NET 225	Routing & Switching I (First eight weeks)	1	4 0 3
NET 226	Routing & Switching II (Second eight weeks)	1	4 0 3
Total		2	8 0 6
Grand Total		4	16 0 12

Networking Technology - CCNA Cert. (C2534001) Suggested Seq. Night

Fall - 1st year			
NET 125	Networking Basics	1	4 0 3
NET 126	Routing Basics	1	4 0 3
Total		2	8 0 6
Spring - 1st year			
NET 225	Routing & Switching I (First eight weeks)	1	4 0 3
NET 226	Routing & Switching II (Second eight weeks)	1	4 0 3
Total		2	8 0 6
Grand Total		4	16 0 12

NETWORKING TECHNOLOGY
Operating Systems Certificate Program (C2534004)

MAJOR COURSES:		SHC
NOS 110	Operating System Concepts.....	3
NOS 120	Linux/UNIX Single User.....	3
NOS 130	Windows Single User.....	3
NOS 230	Windows Administration I.....	3
NOS 244	Operating System - AS/400.....	3

Total Credit Hours Required15

Operating Systems Certificate (C2534004) - Suggested Sequence

Fall - 1st year			
NOS 110	Operating Systems Concepts	2	3 0 3
Total		2	3 0 3
Spring - 1st year			
NOS 130	Windows Single User	2	2 0 3
NOS 120	Linux/UNIX Single User	2	2 0 3
Total		4	4 0 6
Fall - 2nd year			
NOS 230	Windows Admin I	2	2 0 3
Total		2	2 0 3
Spring - 2nd year			
NOS 244	Operating System - AS/400	2	2 0 3
Total		2	2 0 3
Grand Total		10	13 0 15

**OFFICE ADMINISTRATION
A.A.S. Program (A25370)**

Courses required to meet graduation requirements in this curriculum are offered during the day and online. The Associate in Applied Science Degree is awarded graduates of this curriculum. A certificate is awarded graduates of the Office Administration certificate option.

The Office Administration curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic computerized workplace. Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on non-technical as well as technical skills. Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry .....3
ENG 113	Literature-Based Research.....3
OR	ENG 114 Prof Research & Reporting.....3
Natural Sciences/Mathematics:	
MAT 110	Math Measurement & Literacy .....3
OR	MAT 143 Quantitative Literacy.....3
-Humanities/Fine Arts:	
Elective	.....3
Social/Behavioral Sciences:	
Elective	.....3

MAJOR COURSES:

ACC 120	Prin of Financial Accounting.....4
BUS 115	Business Law I .....3
BUS 260	Business Communication .....3
CIS 110	Introduction to Computers.....3
CTS 130	Spreadsheet.....3
OST 132	Keyboard Skill Building.....2
OST 136	Word Processing.....3
OST 137	Office Software Applicat.....3
OST 153	Office Finance Solutions .....2
OST 164	Text Editing Applications.....3
OST 165	Adv Text Editing Apps.....3
OST 181	Intro to Office Systems.....3
OST 184	Records Management.....3
OST 284	Emerging Technologies.....2
OST 286	Professional Development.....3
OST 289	Administrative Office Mgt.....3
WEB 110	Internet/Web Fundamentals.....3
OR	
WBL XXX	Work-Based Learning.....3

Work-Based Learning Option: Qualified students may elect to take 3 credit hours of Work-Based Learning in place of WEB 110.

Total Credit Hours Required64

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....3
DRE 098	Integrated Reading Writing III .....3
DMA DMA 010, DMA 020, DMA 030 (MAT 110)	.....3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)	.....5
OST 080	Keyboarding Literacy.....2

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Office Administration • A25370
Suggested Program Sequence Day**

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
CIS 110	Introduction to Computers	2	2	0	3
ENG 111	Writing and Inquiry	3	0	0	3
OST 132	Keyboard Skill Building	1	2	0	2
OST 164	Text Editing Applications	3	0	0	3
OST 136	Word Processing	2	2	0	3
Total		11	6	0	14
Spring - 1st year					
OST 184	Records Management	2	2	0	3
CTS 130	Spreadsheet	2	2	0	3
ENG 113	Literature-Based Research	3	0	0	3
OR	ENG 114 Prof Research & Reporting	3	0	0	3
OST 284	Emerging Technologies	1	2	0	2
OST 137	Office Software Applicat	2	2	0	3
OST 181	Intro to Office Systems	2	2	0	3
Total		12	10	0	17
Fall - 2nd year					
ACC 120	Prin of Financial Accounting	3	2	0	4
BUS 260	Business Communication	3	0	0	3
MAT 110	Math Measurement & Literacy	2	2	0	3
OR	MAT 143 Quantitative Literacy	2	2	0	3
OST 165	Adv Text Editing Apps	2	2	0	3
OST 286	Professional Development	3	0	0	3
Total		13	6	0	16
Spring - 2nd year					
OST 289	Administrative Office Mgt	2	2	0	3
WEB 110	Internet/Web Fundamentals	2	2	0	3
OR	WBL XXX Work-Based Learning	0	0	30	3
OST 153	Office Finance Solutions	1	2	0	2
BUS 115	Business Law I	3	0	0	3
	Humanities/Fine Art Elective	3	0	0	3
	Social/Behavioral Science Elective	3	0	0	3
Total		14	6	0/30	17
Grand Total		50	28	0/30	64

**OFFICE ADMINISTRATION
Diploma Program (D25370)**

GENERAL EDUCATION COURSES:	SHC
English/Communications:	
ENG 111 Writing and Inquiry.....	3
ENG 113 Literature-Based Research.....	3
OR ENG 114 Prof Research & Reporting	3

MAJOR COURSES:	
BUS 115 Business Law I	3
CIS 110 Introduction to Computers.....	3
CTS 130 Spreadsheet	3
OST 132 Keyboard Skill Building.....	2
OST 136 Word Processing	3
OST 137 Office Software Applicat	3
OST 153 Office Finance Solutions.....	2
OST 164 Text Editing Applications.....	3
OST 181 Intro to Office Systems	3
OST 184 Records Management.....	3
WEB 110 Internet/Web Fundamentals	3

Total Credit Hours Required: 37

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals.....	3
DRE 098 Integrated Reading Writing III.....	3
OST 080 Keyboarding Literacy	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Office Administration - Diploma (D25370)
Suggested Sequence**

	Class	Lab	Clim/WkExp	Credit
Fall - 1st year				
CIS 110 Introduction to Computers	2	2	0	3
OST 132 Keyboarding Skill Building	1	2	0	2
OST 136 Word Processing	2	2	0	3
OST 164 Text Editing Applications	3	0	0	3
ENG 111 Writing and Inquiry	3	0	0	3
Total	11	6	0	14
Spring - 1st year				
OST 181 Intro to Office Systems	2	2	0	3
OST 184 Records Management	2	2	0	3
OST 137 Office Software Applicat.	2	2	0	3
OST 153 Office Finance Solutions	1	2	0	2
CTS 130 Spreadsheet	2	2	0	3
WEB 110 Internet/Web Fundamentals	2	2	0	3
Total	11	12	0	17
Summer - 1st year				
ENG 113 Literature-Based Research	3	0	0	3
OR ENG 114 Prof Research & Reporting	3	0	0	3
BUS 115 Business Law I	3	0	0	3
Total	6	0	0	6
Grand Total	28	18	0	37

**OFFICE ADMINISTRATION
Certificate Program (C25370)**

MAJOR COURSES:	SHC
CIS 110 Introduction to Computers.....	3
OST 132 Keyboard Skill Building.....	2
OST 136 Word Processing	3
OST 164 Text Editing Applications.....	3
OST 181 Intro to Office Systems	3
OST 184 Records Management.....	3

Total Credit Hours Required: 17

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals.....	3
DRE 098 Integrated Reading Writing III.....	3
OST 080 Keyboarding Literacy	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Office Administration - Certificate (C25370)
Suggested Sequence**

Fall - 1st year			
CIS 110 Introduction to Computers	2	2	0 3
OST 132 Keyboarding Skill Building	1	2	0 2
OST 136 Word Processing	2	2	0 3
OST 164 Text Editing Applications	3	0	0 3
Total	8	6	0 11
Spring - 1st year			
OST 181 Intro to Office Systems	2	2	0 3
OST 184 Records Management	2	2	0 3
Total	4	4	0 6
Grand Total	12	10	0 17

**OFFICE ADMINISTRATION
Microsoft Office Specialist Certificate (MOS)
Certificate Program (C2537001)**

MAJOR COURSES:	SHC
CIS 110 Introduction to Computers.....	3
CTS 130 Spreadsheet.....	3
OST 136 Word Processing.....	3
OST 137 Office Software Applicat.....	3

Total Credit Hours Required: 12

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals.....	3
DRE 098 Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Office Administration - Microsoft Office Specialist -
Certificate (C2537001) - Suggested Sequence**

Fall - 1st year			
CIS 110 Introduction to Computers	2	3	0 3
OST 136 Word Processing	2	2	0 3
Total	4	5	0 6
Spring - 1st year			
CTS 130 Spreadsheet	2	2	0 3
OST 137 Office Software Applicat	2	2	0 3
Total	4	4	0 6
Grand Total	8	9	0 12

PHOTOGRAPHIC TECHNOLOGY
A.A.S. Program (A30280)

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum. The Photographic Technology curriculum offers training in photographic techniques and their application in professional photographic disciplines. Where offered, students will receive comprehensive course work in four areas of concentration: Biomedical Photography, Photojournalism, Commercial Photography and Portrait Studio Management. Special emphasis is placed on developing skills in the following areas: fundamentals of camera systems, lighting, photographic process, digital imaging, design and business practices. Graduates should qualify for entry level jobs in the diverse photographic industry. Employment opportunities exist in the following areas: commercial photography, photojournalism, biomedical photography, portrait photography, equipment sales, photographic laboratories, and imaging technologies, depending upon courses offered and completed.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry .....3
ENG 113	Literature-Based Research.....3
OR	ENG 114 Prof Research & Reporting .....3
Humanities/Fine Arts:	
Elective	.....3
Natural Sciences/Mathematics:	
MAT 143	Quantitative Literacy .....3
OR	MAT 152 Statistical Methods I .....4
OR	MAT 171 Precalculus Algebra.....4
Social/Behavioral Sciences:	
Elective	.....3

MAJOR COURSES:

PHO 110	Fund of Photography.....5
PHO 113	History of Photography.....3
PHO 115	Basic Studio Lighting.....4
PHO 120	Intermediate Photography.....4
PHO 139	Intro to Digital Imaging.....2
PHO 150	Portfolio Development I.....4
PHO 216	Documentary Photography.....4
PHO 217	Photojournalism I.....4
PHO 219	Digital Applications.....2
PHO 220	Business of Photography.....3
PHO 224	Multimedia Production.....3
PHO 226	Portraiture.....4
PHO 235	Commercial Photography.....4
PHO 250	Portfolio Development II.....4
PHO Program Electives	..... 1/4

Students are required to take a minimum of 1 SHC from the following:

BUS 110	Introduction to Business.....3
BUS 125	Personal Finance.....3
BUS 137	Principles of Management.....3
BUS 139	Entrepreneurship I.....3
CIS 110	Introduction to Computers.....3
PHO 131	View Camera.....4
PHO 180	Creative Problem Solving.....3
PHO 275	Travel/Outdoor Photo.....3
WBL XXX	Work-Based Learning..... 1/3

OTHER REQUIRED COURSES:

ACA 111	College Student Success..... 1
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Total Credit Hours Required 67/71

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals..... 3
DRE 098	Integrated Reading Writing III 3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143/MAT 152).....5	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 (MAT 171)..... 7	

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Photographic Technology • A30280
Suggested Program Sequence Day

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
ACA 111	College Student Success	1	0	0	1
ENG 111	Writing and Inquiry	3	0	0	3
MAT 143	Quantitative Literacy	2	2	0	3
	OR MAT 152 Statistical Methods I	3	2	0	4
	OR MAT 171 Precalculus Algebra	3	2	0	4
PHO 110	Fund of Photography	3	6	0	5
PHO 139	Intro to Digital Imaging	1	3	0	2
Total		10/11	11	0	14/15
Spring - 1st year					
PHO 115	Basic Studio Lighting	2	6	0	4
PHO 120	Intermediate Photography	2	4	0	4
PHO 219	Digital Applications	1	3	0	2
PHO 220	Business of Photography	3	0	0	3
PHO 224	Multimedia Production	2	3	0	3
Total		10	16	0	16
Summer - 1st year					
ENG 113	Literature-Based Research	3	0	0	3
	OR ENG 114 Prof Research and Reporting	3	0	0	3
	Humanities/Fine Arts Elective	3	0	0	3
	Social/Behavioral Science Elective	3	0	0	3
Total		9	0	0	9
Fall - 2nd year					
PHO 150	Portfolio Development I	3	3	0	4
PHO 217	Photojournalism I	1	6	0	4
PHO 226	Portraiture	3	3	0	4
PHO 235	Commercial Photography	2	4	0	4
Total		9	16	0	16
Spring - 2nd year					
PHO 113	History of Photography	3	0	0	3
PHO 216	Documentary Photography	2	4	0	4
PHO 250	Portfolio Development II	2	4	0	4
	Program Elective				1/4
Total		7	8	0	12/15
Grand Total		45/46	51	0	67/71

Photographic Technology Certificate • (C30280)

MAJOR COURSES: SHC	
PHO 110	Fund of Photography.....5
PHO 115	Basic Studio Lighting.....4
PHO 139	Intro to Digital Imaging.....2
PHO 219	Digital Applications.....2
PHO 224	Multimedia Production.....3
Total Credit Hours Required .....16	

Photographic Technology Certificate • (C30280)
Suggested Program Sequence

Fall - 1st year					
PHO 110	Fund of Photography	3	6	0	5
PHO 139	Intro to Digital Imaging	1	3	0	2
Total		4	9	0	7
Spring - 1st year					
PHO 219	Digital Applications	1	3	0	2
Total		1	3	0	2
Fall - 2nd year					
PHO 115	Basic Studio Lighting	2	6	0	4
Total		2	6	0	4
Spring - 2nd year					
PHO 224	Multimedia Production	2	3	0	3
Total		2	3	0	3
Grand Total		9	21	0	16

**POLYSOMNOGRAPHY
A.A.S. Program (A45670)**

Courses required to meet graduation requirements in this curriculum are offered during day hours only with clinicals in the evenings. Minimum time for completion: four semesters full-time attendance. The Associate of Applied Science degree is awarded graduates of this curriculum. The Polysomnography curriculum prepares individuals, working in conjunction with a physician, to perform and interpret sleep studies and to provide comprehensive clinical evaluations that are required for the diagnosis of sleep related disorders. Students will acquire the knowledge and skills necessary to perform sleep studies, including recording and interpreting events observed during sleep. Treatment of sleep related disorders and patient education focused on healthy sleep habits will also be discussed. Graduates of accredited programs may be eligible to apply to take the examination offered by the Board of Registered Polysomnographic Technologists. Employment opportunities may be found in hospitals and freestanding sleep centers.

GENERAL EDUCATION COURSES: SHC

English/Communications:

ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting	3
OR	ENG 112 Writing/Research in the Disc.....	3
OR	ENG 113 Literature-Based Research	3

Humanities/Fine Arts:

Elective	3
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Natural Sciences/Mathematics:

MAT 143	Quantitative Literacy	3
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Social/Behavioral Sciences:

Elective	3
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MAJOR COURSES:

BIO 163	Basic Anat & Physiology	5
CIS 110	Introduction to Computers.....	3
ELC 111	Intro to Electricity.....	3
MED 118	Medical Law and Ethics	2
MED 121	Medical Terminology I.....	3
MED 122	Medical Terminology II.....	3
PSG 110	Intro to Polysomnography.....	4
PSG 111	Neuro/Cardiopulmonary A&P.....	4
PSG 112	PSG Fundamentals	3
PSG 210	Polysomnography I.....	7
PSG 211	Polysomnography II	7
PSG 212	Infant/Pediatric PSG.....	4
PSG 213	Case Study/Exam Review	1
PSG 214	PSG Clinical Apps I	1

OTHER REQUIRED COURSES:

ACA 111	College Student Success.....	1
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Total Credit Hours Required66

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050	5	

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

POLYSOMNOGRAPHY • Certificate Program (C45650)

Courses required to meet graduation requirements in this curriculum are offered during day hours, clinicals are offered in the evening hours. Minimum time for completion: three semesters part-time attendance. A certificate is awarded graduates of this curriculum.

MAJOR COURSES: SHC

*PSG 189	PSG Transition	3
PSG 210	Polysomnography I.....	7
PSG 211	Polysomnography II	7

*Credit for course may be earned by successfully completing the Polysomnography Entrance Test.

Total Credit Hours Required17

Polysomnography Certificate • C45650 Suggested Seq.

Summer - 1st year			
*PSG 189	PSG Transition	1	3 3 3
Total		1	3 3 3
Fall - 1st year			
PSG 210	Polysomnography I	3	2 9 7
Total		3	2 9 7
Spring - 1st year			
PSG 211	Polysomnography II	2	6 9 7
Total		2	6 9 7
Grand Total		6	11 21 17

**Polysomnography • A45670
Suggested Program Sequence Day**

			Class	Lab	Clin/WKExp	Credit
Fall - 1st year						
ACA 111	College Student Success	1	0	0	0	1
ELC 111	Intro to Electricity	3	0	0	0	3
ENG 111	Writing and Inquiry	3	0	0	0	3
MED 121	Medical Terminology I	3	0	0	0	3
PSG 110	Intro to Polysomnography	3	2	0	0	4
Total		13	2	0	0	14
Spring - 1st year						
CIS 110	Introduction to Computers	2	2	0	0	3
MAT 143	Quantitative Literacy	2	2	0	0	3
MED 122	Medical Terminology II	3	0	0	0	3
PSG 111	Neuro/Cardiopulmonary A&P	4	0	0	0	4
PSG 112	PSG Fundamentals	3	0	0	0	3
Total		14	4	0	0	16
Summer - 1st year						
MED 118	Medical Law and Ethics	2	0	0	0	2
ENG 114	Prof Research & Reporting	3	0	0	0	3
OR	ENG 112 Writing/Research in the Disc	3	0	0	0	3
OR	ENG 113 Literature-Based Research	3	0	0	0	3
	Humanities/Fine Arts Elective	3	0	0	0	3
Total		8	0	0	0	8
Fall - 2nd year						
PSG 210	Polysomnography I	3	2	9	7	
PSG 214	PSG Clinical Apps I	0	2	0	1	
	Social Behavioral/Science Elective	3	0	0	3	
Total		6	4	9	11	
Spring - 2nd year						
PSG 211	Polysomnography II	2	6	9	7	
PSG 212	Infant/Pediatric PSG	3	2	0	4	
PSG 213	Case Study/Exam Review	0	3	0	1	
Total		5	11	9	12	
Grand Total		46	23	18	66	

Note: Students must complete BIO 163, Basic Anat & Physiology 5 credit hours, prior to admission into the program.

Polysomnography Associate Degree Completion Program

This will be an ongoing program to offer an Associate in Applied Science to individuals who already hold the national registry credential offered by the Board of Registered Polysomnography Technologists (BRPT) and are currently in good standing with the Board at the time of acceptance. Good standing with the BRPT will be a requirement throughout the duration of the program. These individuals will have to meet the following criteria prior to acceptance:

- Meet all College requirements regarding basic admission and receipt of prior scholarly transcripts
- Provide official documentation of current Basic Life Support certification
- Provide a letter from current employer stating they are actively working in the field of Polysomnography for at least one year.

Student services and the Director of Polysomnography Technology will confirm admission requirements have been met prior to acceptance into the program. After being accepted to the program, these individuals will be required to:

- Maintain current working status in the field of Polysomnography and provide documentation to the Director of the program as requested
- Adhere to the rules of the Polysomnography Technology program, Catawba Valley Community College, and the BRPT standards of conduct
- Complete all required general education requirements of the Polysomnography Technology curriculum
- Register and complete PSG 112 Fundamentals and PSG 212 Infant/Pediatric PSG classes
- Students accepted will receive AP credit for the following PSG curriculum classes because competency objectives have been met by possession of current registry status with the Board of Registered Polysomnographic Technologists: PSG 110 Intro to Polysomnography; PSG 111 Neuro/CP A & P; PSG 210 Polysomnography I; PSG 211 Polysomnography II; PSG213 Exam Review/Case Studies; PSG 214 PSG Clinical Apps I.

All classes will be provided in a distant education online format for convenience of these individuals. Grading, transcript evaluation, transfer policies, curriculum and graduation requirements will follow current CVCC policy. Program completion will vary according to progression of required classes for each student accepted.

RADIOGRAPHY
A.A.S. Program (A45700)

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum.

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body. Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology. Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographers. Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry.....3
English Elective	.....3
Students are required to take one (1) course from the following:	
ENG 112	Writing/Research in the Disc.....3
ENG 113	Literature-Based Research.....3
ENG 114	Prof Research & Reporting.....3
Humanities/Fine Arts:	
Elective	.....3
Natural Sciences/Mathematics:	
BIO 168	Anatomy and Physiology I.....4
BIO 169	Anatomy and Physiology II.....4
MAT 143	Quantitative Literacy.....3
Social/Behavioral Sciences:	
PSY 150	General Psychology.....3

MAJOR COURSES:

RAD 110	Rad Intro & Patient Care.....3
RAD 111	RAD Procedures I.....4
RAD 112	RAD Procedures II.....4
RAD 121	Radiographic Imaging I.....3
RAD 122	Radiographic Imaging II.....2
RAD 131	Radiographic Physics I.....2
RAD 151	RAD Clinical Ed I.....2
RAD 161	RAD Clinical Ed II.....5
RAD 171	RAD Clinical Ed III.....4
RAD 211	RAD Procedures III.....3
RAD 231	Radiographic Physics II.....2
RAD 241	Radiobiology/Protection.....2
RAD 245	Image Analysis.....2
RAD 251	RAD Clinical Ed IV.....7
RAD 261	RAD Clinical Ed V.....7
RAD 271	Radiography Capstone.....1

Total Credit Hours Required.....76

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098	Integrated Reading Writing III.....3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050	.....5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Radiography Program • A45700
Suggested Program Sequence Day

	Class	Lab	Clin/WkExp	Credit			
Fall - 1st year							
BIO 168	Anatomy and Physiology I	3	3	0	4		
ENG 111	Writing and Inquiry	3	0	0	3		
PSY 150	General Psychology	3	0	0	3		
Total				9	3	0	10
Spring - 1st year							
BIO 169	Anatomy and Physiology II	3	3	0	4		
ENG 112	Writing/Research in the Disc (Preferred)	3	0	0	3		
OR	ENG 113 Literature-Based Research	3	0	0	3		
OR	ENG 114 Prof Research & Reporting	3	0	0	3		
MAT 143	Quantitative Literacy	2	2	0	3		
	Humanities/Fine Arts Elective	3	0	0	3		
Total				11	5	0	13
Fall - 2nd year							
RAD 110	Rad Intro & Patient Care	2	3	0	3		
RAD 111	RAD Procedures I	3	3	0	4		
RAD 151	RAD Clinical Ed. I	0	0	6	2		
Total				5	6	6	9
Spring - 2nd year							
RAD 112	RAD Procedures II	3	3	0	4		
RAD 121	Radiographic Imaging I	2	3	0	3		
RAD 161	RAD Clinical Ed II	0	0	15	5		
Total				5	6	15	12
Summer - 2nd year							
RAD 131	Radiographic Physics I	1	3	0	2		
RAD 122	Radiographic Imaging II	1	3	0	2		
RAD 171	RAD Clinical Ed III	0	0	12	4		
Total				2	6	12	8
Fall - 3rd year							
RAD 211	RAD Procedures III	2	3	0	3		
RAD 231	Radiographic Physics II	1	3	0	2		
RAD 241	Radiobiology/Protection	2	0	0	2		
RAD 251	RAD Clinical Ed IV	0	0	21	7		
Total				5	6	21	14
Spring - 3rd year							
RAD 245	Image Analysis	1	3	0	2		
RAD 261	RAD Clinical Ed V	0	0	21	7		
RAD 271	Radiography Capstone	0	3	0	1		
Total				1	6	21	10
Grand Total				38	38	75	76

Note: Students must complete BIO 168, BIO 169, ENG 111, ENG 112 or ENG 113 or ENG 114, MAT 143 or higher, PSY 150, and a Humanities/Fine Arts elective, prior to the program application deadline and prior to admission to the program. Students must also be accepted into the Radiography program prior to taking RAD courses.

RESPIRATORY THERAPY
A.A.S. Program (A45720)

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: five semesters full-time attendance. The Associate of Applied Science Degree is awarded graduates of this curriculum.

The Respiratory Therapy curriculum prepares individuals to function as respiratory therapists. In these roles, individuals perform diagnostic testing, treatments, and management of patients with heart and lung diseases. Students will master skills in patient assessment and treatment of cardiopulmonary diseases. These skills include life support, monitoring, drug administration, and treatment of patients of all ages in a variety of settings. Graduates of accredited programs may be eligible to take entry-level examinations from the National Board of Respiratory Care. Therapy graduates may also take the Advanced Practitioner examination. Graduates may be employed in hospitals, clinics, nursing homes, education, industry, and home care.

GENERAL EDUCATION COURSES: SHC

English/Communications:	
ENG 111	Writing and Inquiry.....3
ENG 112	Writing/Research in the Disc.....3
OR	ENG 113 Literature-Based Research.....3
OR	ENG 114 Prof Research & Reporting.....3
Humanities/Fine Arts:	
Elective	.....3
Natural Sciences/Mathematics:	
BIO 168	Anatomy and Physiology I.....4
BIO 169	Anatomy and Physiology II.....4
Social/Behavioral Sciences:	
Elective	.....3

MAJOR COURSES:

BIO 275	Microbiology.....4
RCP 110	Intro to Respiratory Care.....4
RCP 111	Therapeutics/Diagnostics.....5
RCP 113	RCP Pharmacology.....2
RCP 114	C-P Anatomy & Physiology.....3
RCP 115	C-P Pathophysiology.....2
RCP 122	Special Practice Lab.....1
RCP 123	Special Practice Lab.....1
RCP 145	RCP Clinical Practice II.....5
RCP 152	RCP Clinical Practice III.....2
RCP 210	Critical Care Concepts.....4
RCP 211	Adv Monitoring/Procedures.....4
RCP 214	Neonatal/Peds RC.....2
RCP 215	Career Prep-Adv Level.....1
RCP 236	RCP Clinical Practice IV.....6
RCP 246	RCP Clinical Practice V.....6

Total Credit Hours Required72

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098	Integrated Reading Writing III.....3
DMA DMA 010, DMA 020, DMA 030, DMA 040	.....4

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Respiratory Therapy • A45720
Suggested Program Sequence Day

		Class	Lab	Clnr/WkExp	Credit
Fall - 1st year					
RCP 110	Intro to Respiratory Care	3	3	0	4
RCP 113	RCP Pharmacology	2	0	0	2
RCP 122	Special Practice Lab	0	2	0	1
RCP 114	C-P Anatomy & Physiology	3	0	0	3
BIO 168	Anatomy and Physiology I	3	3	0	4
ENG 111	Writing and Inquiry	3	0	0	3
Total		14	8	0	17
Spring - 1st year					
RCP 111	Therapeutics/Diagnostics	4	3	0	5
RCP 145	RCP Clinical Practice II	0	0	15	5
RCP 115	C-P Pathophysiology	2	0	0	2
BIO 169	Anatomy and Physiology II	3	3	0	4
ENG 112	Writing/Research in the Disc	3	0	0	3
OR	ENG 113 Literature-Based Research	3	0	0	3
OR	ENG 114 Professional Writing	3	0	0	3
(Students are recommended to take ENG 114)					
Total		12	6	15	19
Summer - 1st year					
RCP 152	RCP Clinical Practice III	0	0	6	2
RCP 123	Special Practice Lab	0	3	0	1
Total		0	3	6	3
Fall - 2nd year					
BIO 275	Microbiology	3	3	0	4
RCP 210	Critical Care Concepts	3	3	0	4
RCP 236	RCP Clinical Practice IV	0	0	18	6
RCP 214	Neonatal/Peds RC	1	3	0	2
	Humanities/Fine Arts Elective	3	0	0	3
Total		10	9	18	19
Spring - 2nd year					
RCP 211	Adv Monitoring/Procedures	3	3	0	4
RCP 246	RCP Clinical Practice V	0	0	18	6
RCP 215	Career Prep-Adv Level	0	3	0	1
	Social/Behavioral Science Elective	3	0	0	3
Total		6	6	18	14
Grand Total		42	32	57	72

Note: Students must complete college level chemistry, 4 credit hours, prior to admission into the program. CHM 100 or greater.

SURGICAL TECHNOLOGY Diploma Program (D45740)

Courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: three semesters full-time attendance. The Diploma is awarded graduates of the surgical technology curriculum. The Surgical Technology curriculum prepares individuals to assist in the care of the surgical patient in the operating room and to function as a member of the surgical team. Students will apply theoretical knowledge to the care of patients undergoing surgery and develop skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations. Employment opportunities include labor/delivery/emergency departments, inpatient/outpatient surgery centers, dialysis units/facilities, physicians' offices, and central processing units. Students of Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited programs are required to take the national certification exam administered by the National Board on Certification in Surgical Technology and Surgical Assisting (NBSTSA) within a four-week period prior to or after graduation.

GENERAL EDUCATION COURSES: SHC

English/Communications:		
ENG 111	Writing and Inquiry	3
Social/Behavioral Sciences:		
PSY 150	General Psychology	3

MAJOR COURSES:

BIO 163	Basic Anat & Physiology	5
BIO 175	General Microbiology	3
SUR 110	Intro to Surg Tech	3
SUR 111	Periop Patient Care	7
SUR 122	Surgical Procedures I	6
SUR 123	SUR Clinical Practice I	7
SUR 134	Surgical Procedures II	5
SUR 135	SUR Clinical Practice II	4
SUR 137	Prof Success Prep	1

OTHER REQUIRED COURSES:

ACA 111	College Student Success	1
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Total Credit Hours Required48

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals	3
DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, DMA 040	.....	4

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Surgical Technology • (D45740) Suggested Program Sequence Day

	Class	Lab	Clim/WkExp	Credit
Fall - 1st year				
ENG 111 Writing and Inquiry	3	0	0	3
ACA 111 College Student Success	1	0	0	1
BIO 163 Basic Anat & Physiology	4	2	0	5
SUR 110 Intro to Surg Tech	3	0	0	3
SUR 111 Periop Patient Care	5	6	0	7
Total	16	8	0	19
Spring - 1st year				
BIO 175 General Microbiology	2	2	0	3
PSY 150 General Psychology	3	0	0	3
SUR 122 Surgical Procedures I	5	3	0	6
SUR 123 SUR Clinical Practice I	0	0	21	7
Total	10	5	21	19
Summer - 1st year				
SUR 135 SUR Clinical Practice II	0	0	12	4
SUR 134 Surgical Procedures II	5	0	0	5
SUR 137 Prof Success Prep	1	0	0	1
Total	6	0	12	10
Grand Total	32	13	33	48

TURFGRASS MANAGEMENT TECHNOLOGY A.A.S. Program (A15420)

Most courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum. CVCC has a 2+2 Articulation Agreement with N.C. Agricultural and Technological State University in Horticulture. CVCC has a 2+2 Online Articulation Agreement with Pennsylvania State University for the B.S. Degree in Turfgrass Management. These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study. Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses. Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, governmental agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination. A program that focuses on turfgrasses and related groundcover plants and prepares individuals to development ornamental or recreational grasses and related products; plant, transplant, and manage grassed areas; and to produce and store turf used for transplantation. Potential course work includes instruction in applicable plant sciences, genetics of grasses, turf science, use analysis, turf management, and related economics.

GENERAL EDUCATION COURSES: SHC

English/Communications:		
ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting	3
OR	ENG 112 Writing/Research in the Disc	3
OR	ENG 113 Literature-Based Research	3

Humanities/Fine Arts:

Elective	3
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Natural Sciences/Mathematics:

MAT 110	Math Measurement & Literacy	3
OR	MAT 143 Quantitive Literacy	3

Social/Behavioral Sciences:

Elective	3
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MAJOR COURSES:

HOR 162	Applied Plant Science	3
HOR 166	Soils & Fertilizers	3
TRF 110	Intro Turfgrass Cult & ID	4
TRF 120	Turfgrass Irrigat & Design	4
TRF 125	Turfgrass Computer App	2
TRF 130	Native Flora ID	2
TRF 140	Turfgrass Mgmt Safety	3
TRF 150	Landscape Drafting	2
TRF 151	Intro Landscape Design	3
TRF 152	Landscape Maintenance	3
TRF 210	Turfgrass Eqmt Mgmt	3
TRF 220	Turfgrass Calculations	2
TRF 230	Turfgrass Mgmt Apps	2
TRF 240	Turfgrass Pest Control	3
TRF 250	Golf/Sport Field Const	4
TRF 260	Adv Turfgrass Mgmt	4
WBL XXX	Work-Based Learning	5

OTHER REQUIRED COURSES:

SPA 120	Spanish for the Workplace	3
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Total Credit Hours Required70

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, (MAT 110)	.....	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)	.....	5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Turfgrass Management Technology • A15420

Suggested Program Sequence Day

	Class	Lab	Clin/Wk/Exp	Credit
Fall - 1st year				
ENG 111 Writing and Inquiry	3	0	0	3
MAT 110 Math Measurement & Literacy	2	2	0	3
OR MAT 143 Quantitative Literacy	2	2	0	3
TRF 110 Intro to Turfgrass Cult & ID	3	2	0	4
HOR 166 Soils & Fertilizers	2	2	0	3
TRF 150 Landscape Drafting	1	3	0	2
HOR 162 Applied Plant Science	2	2	0	3
Total	13	11	0	18
Spring - 1st year				
TRF 220 Turfgrass Calculations	2	0	0	2
TRF 210 Turfgrass Eqmt Mgmt	1	4	0	3
TRF 120 Turfgrass Irrigat & Design	2	4	0	4
ENG 114 Prof Research & Reporting (Preferred)	3	0	0	3
OR ENG 112 Writing/Research in the Disc	3	0	0	3
OR ENG 113 Literature-Based Research	3	0	0	3
TRF 151 Intro Landscape Design	2	2	0	3
Total	10	10	0	15
Summer - 1st year				
WBL XXX Work-Based Learning	0	0	20	2
Total	0	0	20	2
Fall - 2nd year				
TRF 240 Turfgrass Pest Control	2	2	0	3
TRF 140 Turfgrass Mgmt Safety	2	2	0	3
TRF 125 Turfgrass Computer App	1	3	0	2
TRF 130 Native Flora ID	1	3	0	2
TRF 152 Landscape Maintenance	2	2	0	3
WBL XXX Work-Based Learning	0	0	10	1
Humanities/Fine Arts Elective	3	0	0	3
Total	11	12	10	17
Spring - 2nd year				
TRF 260 Adv Turfgrass Mgmt	3	2	0	4
TRF 230 Turfgrass Mgmt Apps	1	2	0	2
TRF 250 Golf/Sport Field Const	2	4	0	4
WBL XXX Work-Based Learning	0	0	20	2
SPA 120 Spanish for the Workplace	3	0	0	3
Social/Behavioral Science Elective	3	0	0	3
Total	12	8	20	18
Grand Total	46	41	50	70

**TURFGRASS MANAGEMENT TECHNOLOGY
Diploma Program (D15420)**

GENERAL EDUCATION COURSES:			SHC
ENG 111	Writing and Inquiry	.....	3
MAT 110	Math Measurement & Literacy	.....	3
OR	MAT 143 Quantitative Literacy	.....	3

MAJOR COURSES:			
HOR 166	Soils & Fertilizers	.....	3
TRF 110	Intro Turfgrass Cult & ID	.....	4
TRF 120	Turfgrass Irrigat & Design	.....	4
TRF 130	Native Flora ID	.....	2
TRF 140	Turfgrass Mgmt Safety	.....	3
TRF 151	Intro Landscape Design	.....	3
TRF 210	Turfgrass Eqmt Mgmt	.....	3
TRF 220	Turfgrass Calculations	.....	2
TRF 240	Turfgrass Pest Control	.....	3
TRF 250	Golf/Sport Field Const	.....	4
WBL XXX	Work-Based Learning	.....	4

Total Credit Hours Required41

DEVELOPMENTAL COURSE REQUIREMENTS*			
DRE 098	Integrated Reading Writing III	.....	3
MAT DMA 010, DMA 020, DMA 030, (MAT 110)	.....	.....	3
MAT DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)	.....	.....	5

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Fall - 1st year			
ENG 111	Writing and Inquiry	3	0 0 3
MAT 110	Math Measurement & Literacy	2	2 0 3
OR	MAT 143 Quantitative Literacy	2	2 0 3
HOR 166	Soils & Fertilizers	2	2 0 3
TRF 110	Intro to Turfgrass Cult & ID	3	2 0 4
TRF 130	Native Flora ID	1	3 0 2
TRF 140	Turfgrass Mgmt Safety	2	2 0 3
TRF 240	Turfgrass Pest Control	2	2 0 3
Total		15	13 0 21

Spring - 1st year			
TRF 120	Turfgrass Irrigat & Design	2	4 0 4
TRF 151	Intro Landscape Design	2	2 0 3
TRF 210	Turfgrass Eqmt Mgmt	1	4 0 3
TRF 220	Turfgrass Calculations	2	0 0 2
TRF 250	Golf/Sport Field Const	2	4 0 4
WBL XXX	Work-Based Learning	0	0 20 2
Total		9	14 20 18

Summer - 1st year			
WBL XXX	Work-Based Learning	0	0 20 2
Total		0	0 20 2

Grand Total 24 27 40 41

**TURFGRASS MANAGEMENT TECHNOLOGY
Certificate Program (C15420)**

MAJOR COURSES:			SHC
TRF 110	Intro Turfgrass Cult & ID	.....	4
TRF 120	Turfgrass Irrigat & Design	.....	4
TRF 140	Turfgrass Mgmt Safety	.....	3
TRF 220	Turfgrass Calculations	.....	2
TRF 240	Turfgrass Pest Control	.....	3

Total Credit Hours Required16

Fall - 1st year			
TRF 110	Intro to Turfgrass Cult & ID	3	2 0 4
TRF 140	Turfgrass Mgmt Safety	2	2 0 3
TRF 240	Turfgrass Pest Control	2	2 0 3
Total		7	6 0 10

Spring - 1st year			
TRF 120	Turfgrass Irrigat & Design	2	4 0 4
TRF 220	Turfgrass Calculations	2	0 0 2
Total		4	4 0 6
Grand Total		11	10 0 16

**WEB TECHNOLOGIES
A.A.S. Program (A25290)**

Courses required to meet graduation requirements in this curriculum are offered during the day and online. Minimum time for completion: Day--five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum. The Web Technologies curriculum prepares graduates for careers in the information technology arena using computers and distributed computing to disseminate and collect information via the web. Course work in this program covers the terminology and use of computers, network devices, networks, servers, databases, applications, programming languages, as well as web applications, site development and design. Studies will provide opportunity for students to learn related industry standards. Graduates should qualify for career opportunities as designers, administrators, or developers in the areas of web applications, websites, web services, and related areas of distributed computing.

GENERAL EDUCATION COURSES: SHC

English/Communications:		
ENG 111	Writing and Inquiry	3
ENG 114	Prof Research & Reporting	3
OR	ENG 113 Literature-Based Research	3
Humanities/Fine Arts:		
Elective	.....	3
Natural Sciences/Mathematics:		
MAT 143	Quantitative Literacy	3
Social/Behavioral Sciences:		
Elective	.....	3

MAJOR COURSES:

CIS 110	Introduction to Computers.....	3
CIS 115	Intro to Prog & Logic	3
CTS 115	Info Sys Business Concept.....	3
DBA 110	Database Concepts.....	3
NET 125	Networking Basics	3
NOS 110	Operating Systems Concepts.....	3
SEC 110	Security Concepts.....	3
WEB 110	Internet/Web Fundamentals.....	3
WEB 115	Web Markup and Scripting.....	3
WEB 120	Intro Internet Multimedia	3
WEB 140	Web Development Tools.....	3
WEB 210	Web Design	3
WEB 230	Implementing Web Serv	3
WEB 250	Database Driven Websites.....	3
WEB 289	Internet Technologies Project.....	3
WBL XXX	Work-Based Learning.....	2

Program/WEB Industry Elective	3	
Students are required to take one (1) course from the following:		
BUS 230	Small Business Management	3
CSC 151	JAVA Programming.....	3
MKT 120	Principles of Marketing.....	3
MKT 223	Customer Service.....	3
SGD 111	Introduction to SGD.....	3
SGD 112	SGD Design	3
SGD 114	3D Modeling	3
WEB 180	Active Server Pages.....	3
WEB 186	XML Technology.....	3
WEB 260	E-Commerce Infrastructure	3

WEB Technologies Elective	3	
Students are required to take one (1) course from the following:		
WEB 111	Intro to Web Graphics	3
WEB 151	Mobile Application Dev 1.....	3
WEB 220	Advanced Multimedia.....	3
WEB 240	Internet Security.....	3

OTHER REQUIRED COURSES:

ACA 111	College Student Success.....	1
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Total Credit Hours Required.....69

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050.....	5	

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Web Technologies • A25290
Suggested Program Sequence Day**

			Class	Lab	Clin/WkExp	Credit
Fall - 1st year						
ACA 111	College Student Success		1	0	0	1
CIS 110	Introduction to Computers		2	2	0	3
CIS 115	Intro to Prog & Logic		2	3	0	3
DBA 110	Database Concepts		2	3	0	3
WEB 110	Internet/Web Fundamentals		2	2	0	3
MAT 143	Quantitative Literacy		2	2	0	3
Total			11	12	0	16
Spring - 1st year						
WEB 140	Web Development Tools		2	2	0	3
CTS 115	Info Sys Business Concepts		3	0	0	3
ENG 111	Writing and Inquiry		3	0	0	3
NET 125	Networking Basics		1	4	0	3
WEB 120	Intro Internet Multimedia		2	2	0	3
	WEB Technology Program Elective					3
Total			11	8	0	18
Summer - 1st year						
ENG 114	Prof Research & Reporting		3	0	0	3
OR	ENG 113 Literature-Based Research		3	0	0	3
	Humanities/Fine Arts Elective		3	0	0	3
Total			6	0	0	6
Fall - 2nd year						
SEC 110	Security Concepts		2	2	0	3
WEB 250	Database Driven Websites		2	2	0	3
WEB 115	Web Markup and Scripting		2	2	0	3
WEB 230	Implementing Web Serv		2	2	0	3
	WEB Technology Program Elective					3
Total			8	8	0	15
Spring - 2nd year						
WEB 210	Web Design		2	2	0	3
WEB 289	Internet Technologies Project		1	4	0	3
NOS 110	Operating Systems Concepts		2	3	0	3
WBL XXX	Work-Based Learning		0	0	20	2
	Social/Behavioral Science Elective		3	0	0	3
Total			8	9	20	14
Grand Total			44	37	20	69

WELDING TECHNOLOGY Diploma Program (D50420)

Courses required to meet graduation requirements in this curriculum are offered during day, afternoon, and evening hours. Minimum time for completion: five semesters full-time attendance. Students may begin any semester. The Diploma is awarded graduates of this curriculum. A Certificate is awarded graduates who complete the certificate program option. The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry. Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provides the student with industry-standard skills developed through classroom training and practical application. Successful graduates of the Welding Technology curriculum may be employed as entry-level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

WEB TECHNOLOGIES

Basic Web Developer • Certificate Program (C25290)

MAJOR COURSES:			SHC
CSC 151	JAVA Programming		3
WEB 110	Internet/Web Fundamentals		3
WEB 120	Intro Internet Multimedia		3
WEB 140	Web Development Tools.....		3

Total Credit Hours Required12

Basic Web Developer Certificate • C25290 Suggested Sequence

	Class	Lab	Clin/WkExp	Credit	
Fall - 1st year					
CSC 151	JAVA Programming	2	3	0	3
WEB 110	Internet/Web Fundamentals	2	2	0	3
Total		4	5	0	6
Spring - 1st year					
WEB 140	Web Development Tools	2	2	0	3
WEB 120	Intro Internet Multimedia	2	2	0	3
Total		4	4	0	6
Grand Total		8	9	0	12

WEB TECHNOLOGIES

Webmaster • Certificate Program (C2529001)

MAJOR COURSES:			SHC
CTS 115	Info Sys Business Concepts		3
SEC 110	Security Concepts		3
WEB 115	Web Markup and Scripting		3
WEB 210	Web Design		3

Total Credit Hours Required12

Web Technologies - Webmaster Certificate • C2529001 Suggested Sequence

	Class	Lab	Clin/WkExp	Credit	
Fall - 1st year					
SEC 110	Security Concepts	2	2	0	3
WEB 115	Web Markup and Scripting	2	2	0	3
Total		4	4	0	6
Spring - 1st year					
CTS 115	Info Sys Business Concepts	3	0	0	3
WEB 210	Web Design	2	2	0	3
Total		5	2	0	6
Grand Total		9	6	0	12

GENERAL EDUCATION COURSES: SHC

English/Communications:		
ENG 102	Applied Communications II	3
OR	ENG 111 Writing and Inquiry	3
Natural Sciences/Mathematics:		
MAT 110	Math Measurement & Literacy	3
OR	MAT 143 Quantitative Literacy.....	3

MAJOR COURSES:

WLD 110	Cutting Processes	2
WLD 115	SMAW (Stick) Plate	5
OR		
WLD 115AC	SMAW (Stick) Plate-AC	2
WLD 115BC	SMAW (Stick) Plate-BC	2
WLD 115CC	SMAW (Stick) Plate-CC	1
WLD 116	SMAW (Stick) Plate/Pipe.....	4
OR		
WLD 116AB	SMAW (Stick) Plate/Pipe-AB	2
WLD 116BB	SMAW (Stick) Plate/Pipe-BB	2
WLD 121	GMAW (MIG) FCAW/Plate.....	4
WLD 131	GTAW (TIG) Plate	4
WLD 141	Symbols & Specifications	3
WLD 143	Welding Metallurgy	2
WLD 215	SMAW (Stick) Pipe	4
OR		
WLD 215AB	SMAW (Stick) Pipe-AB	2
WLD 215BB	SMAW (Stick) Pipe-BB	2
WLD 261	Certification Practices.....	2
WLD 262	Inspection & Testing.....	3
WBL 110	World of Work	1

Total Credit Hours Required40

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 097	Integrated Reading Writing II.....	3
DMA DMA 010, DMA 020, DMA 030 (MAT 110)		3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143).....		3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Welding Technology - Diploma • D50420
Suggested Program Sequence Evening

		Class	Lab	Clin/WkExp	Credit
Fall - 1st year					
WLD 110	Cutting Processes	1	3	0	2
WLD 115AC	SMAW (Stick) Plate-AC	1	3	0	2
WLD 143	Welding Metallurgy	1	2	0	2
Total		3	8	0	6
Spring - 1st year					
WLD 115BC	SMAW (Stick) Plate-BC	1	3	0	2
WLD 115CC	SMAW (Stick) Plate-CC	0	3	0	1
WLD 141	Symbols & Specifications	2	2	0	3
MAT 110	Math Measurement & Literacy	2	2	0	3
OR	MAT 143 Quantitative Literacy	2	2	0	3
Total		5	10	0	9
Fall - 2nd year					
WLD 116AB	SMAW (Stick) Plate/Pipe-AB	1	4	0	2
WLD 116BB	SMAW (Stick) Plate/Pipe-BB	0	5	0	2
ENG 102	Applied Communications II	3	0	0	3
OR	ENG 111 Writing and Inquiry	3	0	0	3
Total		4	9	0	7
Spring - 2nd year					
WLD 121	GMAW (MIG) FCAW/Plate	2	6	0	4
WLD 215AB	SMAW (Stick) Pipe-AB	1	4	0	2
WLD 215BB	SMAW (Stick) Pipe-BB	0	5	0	2
WLD 262	Inspection & Testing	2	2	0	3
Total		5	17	0	11
Fall - 3rd year					
WLD 131	GTAW (TIG) Plate	2	6	0	4
WLD 261	Certification Practices	1	3	0	2
WBL 110	World of Work	1	0	0	1
Total		4	9	0	7
Grand Total		21	53	0	40

WELDING TECHNOLOGY Certificate Program (C50420)

MAJOR COURSES:		SHC
WLD 110	Cutting Processes	2
WLD 115	SMAW (Stick) Plate	5
OR		
WLD 115AC	SMAW (Stick) Plate-AC	2
WLD 115BC	SMAW (Stick) Plate-BC	2
WLD 115CC	SMAW (Stick) Plate-CC	1
WLD 121	GMAW (MIG) FCAW/Plate.....	4
WLD 131	GTAW (TIG) Plate	4
WLD 141	Symbols & Specifications	3
Total Credit Hours Required		18

Welding Technology - Certificate • C50420 - Suggested Sequence

Fall - 1st year					
WLD 110	Cutting Processes	1	3	0	2
WLD 115AC	SMAW (Stick) Plate-AC	1	3	0	2
Total		2	6	0	4
Spring - 1st year					
WLD 115BC	SMAW (Stick) Plate-BC	1	3	0	2
WLD 115CC	SMAW (Stick) Plate-CC	0	3	0	1
Total		1	6	0	3
Fall - 2nd year					
WLD 121	GMAW (MIG) FCAW/Plate	2	6	0	4
Total		2	6	0	4
Spring - 2nd year					
WLD 141	Symbols & Specifications	2	2	0	3
WLD 131	GTAW (TIG) Plate	2	6	0	4
Total		4	8	0	7
Grand Total		9	26	0	18

SPECIAL PROGRAMS

Associate in Applied Science Degree Curricula:

- Funeral Service Education

Diploma Curriculum:

- NC Funeral Director

Special programs are offered on demand in conjunction with other institutions when justified by employment needs and student interest. Details concerning current special programs are included on the following pages. Additional information may be obtained from the college website.

FUNERAL SERVICE EDUCATION

A.A.S. Program (A55260) Collaborative Program
Catawba Valley Community College/
Fayetteville Technical Community College

Funeral Service Education is an associate degree program offered at CVCC by Fayetteville Technical Community College. The Funeral Service Education courses are offered by FTCC via a live interactive video feed in one of the NC Information Highway classrooms at CVCC, with the general education courses being offered by CVCC. For details, please contact CVCC's Advising Center 828-327-7000, Ext. 4687. The Funeral Service Education curriculum provides students with the opportunity to become proficient in basic funeral service skills. In addition to the general education courses offered in the curriculum, technical courses such as human anatomy, embalming theory and practice, embalming chemistry, restorative arts, funeral law, and funeral home operations are taught. Students in the FTCC Funeral Service Education program are also required to take the National Board Exam for Funeral Service as a condition of Graduation. Graduates of the curriculum, upon passing the state or national exam and completing an internship in a funeral home, will be qualified for employment as embalmers and/or funeral directors. The Associate in Applied Science Degree in Funeral Service Education at Fayetteville Technical Community College is accredited by:

American Board of Funeral Service Education
 3432 Ashland Avenue, Suite U • St. Joseph, MO 64506
 Telephone: 816-223-3747

NC FUNERAL DIRECTOR

Diploma Program (D55260) • Collaborative Program
Catawba Valley Community College/
Fayetteville Technical Community College

Funeral Service Education – NC Funeral Director is a diploma program offered at CVCC by Fayetteville Technical Community College. The Funeral Service Education courses are offered by FTCC via a live interactive video feed in one of the NC Information Highway classrooms at CVCC, with the general education courses being offered by CVCC. For details, please contact CVCC's Advising Center 828-327-7000, Ext. 4687. The Funeral Service Education curriculum provides students with the opportunity to acquire the funeral service education necessary to become proficient in basic funeral directing skills. Students completing the diploma are eligible to sit for the NC Board of Funeral Service Funeral Director state exam. This academic program is designed to meet specific state or professional needs. It is not accredited by the American Board of Funeral Service Education owing to the fact that it does not include instruction in the following areas: Anatomy, Chemistry, Embalming, Microbiology and Restorative Arts. Students graduating from this program are not eligible to take the National Board Examination or any state examination for which graduation from an ABFSE accredited program is required.

CAREER AND COLLEGE PROMISE (High School Students)

The Career and College Promise program is established by the State Board of Education and the State Board of Community Colleges. Career and College Promise provides seamless dual enrollment educational opportunities for eligible North Carolina high school students in order to accelerate completion of college certificates, diplomas, and associate degrees that lead to college transfer or provide entry-level job skills. North Carolina community colleges may offer the following Career and College Promise pathways aligned with the K-12 curriculum and career and college ready standards adopted by the State Board of Education:

1. College Transfer Pathway leading to a minimum of 30 hours of college transfer credit
2. A Career and Technical Education Pathway leading to a certificate, diploma or degree.
3. A Cooperative Innovative High School Pathway approved under Part 9 of Article 16 of Chapter 115D of the General Statutes.

College Transfer Pathway

1. The Career and College Promise College Transfer Pathway requires the completion of at least thirty semester hours of transfer courses, including English and mathematics, and ACA 122 College Transfer Success.

2. To be eligible for enrollment, a high school student must meet the following criteria:

- a. Be a high school junior or senior;
- b. Have a weighted GPA of 3.0 on high school courses; and
- c. Demonstrate college readiness on an assessment or placement test. A student must demonstrate college readiness in English, reading and mathematics to be eligible for enrollment in a College Transfer Pathway.

3. A high school junior or senior who does not demonstrate college-readiness on an approved assessment or placement test may be provisionally enrolled in a College Transfer Pathway. To qualify for Provisional Status, a student must meet the following criteria:

- a. Have a cumulative weighted GPA of 3.5;
- b. Have completed two years of high school English with a grade of 'C' or higher;
- c. Have completed high school Algebra II (or a higher level math class) with a grade of 'C' or higher;
- d. Obtain the written approval of the high school principal or his/her designee; and,
- e. Obtain the written approval of the community college president or his/her designee.

A Provisional Status student may register only for college mathematics (MAT) and college English (ENG) courses within the chosen Pathway. To be eligible to register for other courses in the Pathway, the student must first successfully complete mathematics and English courses with a grade of 'C' or higher.

4. To maintain eligibility for continued enrollment, a student must

- a. Continue to make progress toward high school graduation, and
- b. Maintain a 2.0 GPA in college coursework after completing two courses.
- c. A student who falls below a 2.0 GPA after completing two college courses will be subject to the college's policy for satisfactory academic progress.

5. A student must enroll in one College Transfer Pathway program of study and may not substitute courses in one program for courses in another.

6. A student may change his or her program of study major with approval of the high school principal or his/her designee and the college's chief student development administrator.

7. With approval of the high school principal or his/her designee and the college's chief student development administrator, a student who completes a College Transfer Pathway while still enrolled in high school may continue to earn college transfer credits leading to the completion of the Associate in Arts or Associate in Science.

8. With approval of the high school principal or his/her designee and the college's chief student development administrator, a student may enroll in both a College Transfer Pathway program of study and up to two (2) Career Technical Education program of study (for a total of three (3)).

Career Technical Education Pathway

1. The Career and College Promise Career Technical Education Pathway for juniors and seniors leads to a certificate or diploma aligned with a high school Career Cluster.

2. To be eligible for enrollment, a high school student must meet the following criteria:

- a. Be a high school junior or senior;
- b. Have a weighted GPA of 3.0 on high school courses or have the recommendation of the high school principal or his/her designee; and
- c. Meet the prerequisites for the career pathway.

3. High school counselors should consider students' PLAN scores in making pathway recommendations.

4. College Career Technical Education courses may be used to provide partial or full fulfillment of a four-unit career cluster. Where possible, students should be granted articulated credit based on the local or state North Carolina High School to Community College articulation agreement.

5. To maintain eligibility for continued enrollment, a student must

- a. Continue to make progress toward high school graduation, and
- b. Maintain a 2.0 in college coursework after completing two courses.
- c. A student who falls below a 2.0 GPA after completing two college courses will be subject to the college's policy for satisfactory academic progress.

6. A student may enroll in two programs of study but may not substitute courses in one program for courses in another. The student may change his or her program of study major with approval of the high school principal or his/her designee and the college's chief student development administrator. A student may concurrently enroll in two CTE programs of study provided the exception has been approved by the college's Chief Academic Officer or his/her designee.

**CAREER & COLLEGE PROMISE
COLLEGE TRANSFER PATHWAY
Leading to the Associate in Arts (P1012C)**

The CCP College Transfer Pathway Leading to the Associate in Arts is designed for high school juniors and seniors who wish to begin study toward the Associate in Arts degree and a baccalaureate degree in a non-STEM major.

GENERAL EDUCATION (32/33 SHC)

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) component of the Comprehensive Articulation Agreement.

English Composition (6 SHC)

The following two English composition courses are required.

ENG 111	Writing & Inquiry	3
ENG 112	Writing/Research in the Disciplines	3

Select three courses from the following from at least two different disciplines (9 SHC)

Communication		
COM 231	Public Speaking	3
Humanities/Fine Arts		
ART 111	Art Appreciation	3
ART 114	Art History Survey I	3
ART 115	Art History Survey II	3
ENG 231	American Literature I	3
ENG 232	American Literature II	3
MUS 110	Music Appreciation	3
MUS 112	Introduction to Jazz	3
PHI 215	Philosophical Issues	3
PHI 240	Introduction to Ethics	3

Social/Behavioral Sciences (9 SHC)

Select three courses from the following from at least two different disciplines:

ECO 251	Principles of Microeconomics	3
ECO 252	Principles of Macroeconomics	3
HIS 111	World Civilizations I	3
HIS 112	World Civilizations II	3
HIS 131	American History I	3
HIS 132	American History II	3
POL 120	American Government	3
PSY 150	General Psychology	3
SOC 210	Introduction to Sociology	3

Math (3/4 SHC)

Select one course from the following:

MAT 143	Quantitative Literacy	3
MAT 152	Statistical Methods I	4
MAT 171	Precalculus Algebra	4

Natural Sciences (4 SHC)

Select 4 SHC from the following course(s):

AST 151	General Astronomy I	3
	and AST 151A General Astronomy Lab I	1
CHM 151	General Chemistry I	4
GEL 111	Introductory Geology	4
PHY 110	Conceptual Physics	3
	and PHY 110A Conceptual Physics Lab	1

Academic Transition (1 SHC)

The following course is required:

ACA 122	College Transfer Success	1
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Total Semester Hours Credit (SHC) in Pathway 32/33

High school students in the CCP College Transfer Pathway Leading to the Associate in Arts must complete the entire pathway before taking additional courses in the Associate in Arts degree.

**CAREER & COLLEGE PROMISE
COLLEGE TRANSFER PATHWAY
Leading to the Associate in Science (P1042C)**

The CCP College Transfer Pathway Leading to the Associate in Science is designed for high school juniors and seniors who wish to begin study toward the Associate in Science degree and a baccalaureate degree in a STEM or technical major.

GENERAL EDUCATION (35 SHC)

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC).

English Composition (6 SHC)

The following two English composition courses are required.

ENG 111	Writing & Inquiry	3
ENG 112	Writing/Research in the Disciplines	3

Select two courses from the following from at least two different disciplines (6 SHC)

Communications		
COM 231	Public Speaking	3
Humanities/Fine Arts		
ART 111	Art Appreciation	3
ART 114	Art History Survey I	3
ART 115	Art History Survey II	3
ENG 231	American Literature I	3
ENG 232	American Literature II	3
MUS 110	Music Appreciation	3
MUS 112	Introduction to Jazz	3
PHI 215	Philosophical Issues	3
PHI 240	Introduction to Ethics	3

Social/Behavioral Sciences (6 SHC)

Select two courses from the following from at least two different disciplines:

ECO 251	Principles of Microeconomics	3
ECO 252	Principles of Macroeconomics	3
HIS 111	World Civilizations I	3
HIS 112	World Civilizations II	3
HIS 131	American History I	3
HIS 132	American History II	3
POL 120	American Government	3
PSY 150	General Psychology	3
SOC 210	Introduction to Sociology	3

Math (8 SHC)

Select two courses from the following:

MAT 171	Precalculus Algebra	4
MAT 172	Pre-calculus Trigonometry	4
MAT 263	Brief Calculus	4
MAT 271	Calculus I	4

Natural Sciences (8 SHC)

Select 8 SHC from the following course(s):

AST 151	General Astronomy I	3
	and AST 151A General Astronomy Lab I	1
BIO 111	General Biology I	4
	and BIO 112 General Biology II	4
CHM 151	General Chemistry I	4
	and CHM 152 General Chemistry II	4
GEL 111	Introductory Geology	4
PHY 110	Conceptual Physics	3
	and PHY 110A Conceptual Physics Lab	1
PHY 151	College Physics I	4
	and PHY 152 College Physics II	4
PHY 251	General Physics I	4
	and PHY 252 General Physics II	4

Academic Transition (1SHC)

The following course is required:

ACA 122	College Transfer Success	1
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Total Semester Hours Credit (SHC) in Pathway 35

High school students in the CCP College Transfer Pathway Leading to the Associate in Science must complete the entire pathway before taking additional courses in the Associate in Science degree.

CAREER TECHNICAL EDUCATION PATHWAY

Advertising and Graphic Design • Pathway (C30100P)

CORE COURSES (12 SHC):		SHC
GRA 151	Computer Graphics I	2
GRA 152	Computer Graphics II	2
GRD 110	Typography I	3
GRD 121	Drawing Fundamentals I	2
GRD 141	Graphic Design I	4
GRD 142	Graphic Design II	4
Total Credit Hours Required		17

Air Conditioning, Heating, and Refrigeration Technology Pathway (D35100P)

GENERAL EDUCATION COURSES (6 SHC)		SHC
ENG 102	Applied Communications II	3
MAT 110	Mathematical Measurement and Literacy	3
CORE COURSES (20 SHC)		
AHR 110	Intro to Refrigeration	5
AHR 111	HVACR Electricity	3
AHR 112	Heating Technology	4
AHR 113	Comfort Cooling	4
AHR 114	Heat Pump Technology	4
OTHER MAJOR COURSES (10 SHC)		
AHR 130	HVAC Controls	3
AHR 160	Refrigerant Certification	1
AHR 180	HVACR Customer Relations	1
AHR 210	Residential Building Code	2
AHR 211	Residential System Design	3
Total Credit Hours Required		36

DEVELOPMENTAL COURSE REQUIREMENTS*		
CTS 080	Computing Fundamentals	3
DRE 097	Integrated Reading Writing II	3
MAT DMA 010, DMA 020, DMA 030		3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Air Conditioning, Heating, and Refrigeration Technology Pathway (C35100P)

CORE COURSES (17 SHC)		SHC
AHR 110	Intro to Refrigeration	5
AHR 112	Heating Technology	4
AHR 113	Comfort Cooling	4
AHR 114	Heat Pump Technology	4
Total Credit Hours Required		17

DEVELOPMENTAL COURSE REQUIREMENTS*		
CTS 080	Computing Fundamentals	3
DRE 097	Integrated Reading Writing II	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Automotive Systems Technology Pathway (D60160P)

GENERAL EDUCATION COURSES (6 SHC)		SHC
English/Communication:		
ENG 111	Writing and Inquiry	3
Natural Science/Mathematics:		
MAT 110	Mathematical Measurement and Literacy	3
CORE COURSES (18 SHC)		
AUT 141	Suspension & Steering Sys	3
AUT 151	Brake Systems	3
AUT 181	Engine Performance 1	3
TRN 110	Intro to Transport Tech	2
TRN 120	Basic TraspElectricity	5
TRN 140	Transp Climate Control	2
OTHER MAJOR COURSES (21 SHC)		
AUT 141A	Suspension & Steering Lab	1
AUT 151A	Brake Systems Lab	1
AUT 116	Engine Repair	3
AUT 116A	Engine Repair Lab	1
AUT 163	Adv Auto Electricity	3
AUT 181A	Engine Performance 1 Lab	1
AUT 183	Engine Performance 2	4
AUT 221	Auto Transm/Transaxles	3
AUT 221A	Auto Transm/Transax Lab	1
AUT 231	Man Trans/Axles/Drtrains	3
OTHER REQUIRED COURSES (3 SHC)		
AUT 231A	Man Trans/Ax/Drtrains Lab	1
TRN 140A	Transp Climate Cont Lab	2
Total Credit Hours Required		48

DEVELOPMENTAL COURSE REQUIREMENTS*		
CTS 080	Computing Fundamentals	3
DRE 098	Integrated Reading Writing III	3
MAT DMA 010, DMA 020, DMA 030		3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Automotive Systems Technology Pathway (C60160P)

CORE COURSES (13 SHC)		
AUT 141	Suspension & Steering Sys	3
AUT 151	Brake Systems	3
TRN 110	Intro to Transport Tech	2
TRN 120	Basic TraspElectricity	5
OTHER MAJOR COURSES (2 SHC)		
AUT 141A	Suspension & Steering Lab	1
AUT 151A	Brake Systems Lab	1
Total Credit Hours Required		15

DEVELOPMENTAL COURSE REQUIREMENTS*		
CTS 080	Computing Fundamentals	3
DRE 097	Integrated Reading Writing II	3
MAT DMA 010, DMA 020, DMA 030		3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Computer-Integrated Machining Technology
Pathway (D50210P)**

GENERAL EDUCATION COURSES (6 SHC)		SHC
ENG 111	Writing and Inquiry.....	3
MAT 121	Algebra/Trigonometry I.....	3
CORE COURSES (12 SHC)		
MAC 122	CNC Turning.....	2
MAC 124	CNC Milling.....	2
MAC 131	Blueprint Reading/Mach. I.....	2
MAC 141	Machining Applications I.....	4
MAC 142	Machining Applications II.....	4
MEC 110	Intro to CAD/CAM.....	2
OTHER MAJOR COURSES (18 SHC)		
MAC 132	Blueprint Reading/Mach. II.....	2
MAC 151	Machining Calculations.....	2
MAC 222	Advanced CNC Turning.....	2
MAC 224	Advanced CNC Milling.....	2
MAC 231	CAM: CNC Turning.....	3
MAC 232	CAM: CNC Milling.....	3
OTHER REQUIRED COURSES (2 SHC)		
CIS 111	Basic PC Literacy.....	2
Total Credit Hours Required.....		38

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3
MAT DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060.....		3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Computer-Integrated Machining Technology
Pathway (C50210P)**

CORE COURSES (12 SHC)		
MAC 131	Blueprint Reading/Mach. I.....	2
MAC 141	Machining Applications I.....	4
MAC 142	Machining Applications II.....	4
MEC 110	Intro to CAD/CAM.....	2
OTHER MAJOR COURSES (6 SHC)		
MAC 122	CNC Turning.....	2
MAC 124	CNC Milling.....	2
MAC 151	Machining Calculations.....	2
Total Credit Hours Required.....		18

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080	Computing Fundamentals.....	3
DRE 097	Integrated Reading Writing II.....	3
MAT DMA 010, DMA 020, DMA 030.....		3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Cosmetology • Pathway (D55140P)

GENERAL EDUCATION COURSES (6 SHC)		SHC
ENG 102	Applied Communications II.....	3
PSY 150	General Psychology.....	3
CORE COURSES (32 SHC)		
COS 111	Cosmetology Concepts I.....	4
OR		
COS 111AB	Cosmetology Concepts I-AB.....	2
COS 111BB	Cosmetology Concepts I-BB.....	2
COS 112	Salon I.....	8
OR		
COS 112AB	Salon I-AB.....	4
COS 112BB	Salon I-BB.....	4
COS 113	Cosmetology Concepts II.....	4
OR		
COS 113AB	Cosmetology Concepts II-AB.....	2
COS 113BB	Cosmetology Concepts II-BB.....	2
COS 114	Salon II.....	8
OR		
COS 114AB	Salon II-AB.....	4
COS 114BB	Salon II-BB.....	4
COS 115	Cosmetology Concepts III.....	4
OR		
COS 115AB	Cosmetology Concepts III-AB.....	2
COS 115BB	Cosmetology Concepts III-BB.....	2
COS 116	Salon III.....	4
OR		
COS 116AB	Salon III-AB.....	2
COS 116BB	Salon III-BB.....	2

OTHER MAJOR COURSES (9 SHC)

COS 117	Cosmetology Concepts IV.....	2
OR		
COS 117AB	Cosmetology Concepts IV-AB.....	1
COS 117BB	Cosmetology Concepts IV-BB.....	1
COS 118	Salon IV.....	7
Total Credit Hours Required.....		47

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098	Integrated Reading Writing III.....	3
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*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Criminal Justice Technology
Law Enforcement Pathway (C55180P)**

CORE COURSES (12 SHC)		SHC
CJC 111	Intro to Criminal Justice.....	3
CJC 113	Juvenile Justice.....	3
CJC 131	Criminal Law.....	3
CJC 212	Ethics & Comm Relations.....	3
OTHER REQUIRED COURSES (3 SHC)		
CJC 121	Law Enforcement Operations.....	3
Total Credit Hours Required.....		15

**Criminal Justice Technology-Latent Evidence Concentration
Crime Scene Pathway (C5518AP)**

CORE COURSES (16 SHC)		SHC
CJC 111	Intro to Criminal Justice.....	3
CJC 144	Crime Scene Processing.....	3
CJC 146	Trace Evidence.....	3
CJC 221	Investigative Principles.....	4
CJC 245	Friction Ridge Analysis.....	3
OTHER REQUIRED COURSES (2 SHC)		
CJC 114	Investigative Photography.....	2
Total Credit Hours Required.....		18

Electrical Systems Technology Pathway (C35220P1)

CORE COURSES (13 SHC)		SHC
ELC 112	DC/AC Electricity	5
ELC 113	Basic Wiring I	4
ELC 117	Motors and Controls	4
OTHER MAJOR COURSES (4 SHC)		
BPR 111	Blueprint Reading	2
ELC 118	National Electrical Code	2
Total Credit Hours Required		17

Electrical Systems Technology Pathway (C35220P2)

CORE COURSES (13 SHC)		SHC
ELC 112	DC/AC Electricity	5
ELC 113	Basic Wiring I	4
ELC 117	Motors and Controls	4
OTHER MAJOR COURSES (4 SHC)		
ELC 115	Industrial Wiring	4
Total Credit Hours Required		17

Health Information Technology Pathway (C45360P)

CORE COURSES (12 SHC)		SHC
HIT 110	Fundamentals of HIM	3
HIT 112	Health Law and Ethics	3
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3
OTHER REQUIRED COURSES (3 SHC)		
CIS 110	Introduction to Computers	3
Total Credit Hours Required		15

Healthcare Management Technology Receptionist Pathway (C25200P)

CORE COURSES (15 SHC)		SHC
HMT 110	Intro to Healthcare Mgt	3
HMT 210	Medical Insurance	3
MED 121	Medical Terminology I (1st 8 weeks)	3
MED 122	Medical Terminology II (2nd 8 weeks)	3
OST 149	Medical Legal Issues	3
OTHER REQUIRED COURSES (1 SHC)		
MED 114	Prof Interac in Heal Care	1
Total Credit Hours Required		16

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 097 Integrated Reading Writing II 3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Horticulture Technology Pathway (C15240P1)

CORE COURSES (12 SHC)		SHC
HOR 112	Landscape Design I	3
HOR 134	Greenhouse Operations	3
HOR 160	Plant Materials I	3
HOR 164	Hort Pest Management	3
OTHER MAJOR COURSES (3SHC)		
HOR 215	Landscape Irrigation	3
Total Credit Hours Required		15

Horticulture Technology Pathway (C15240P2)

CORE COURSES (12 SHC)		SHC
HOR 112	Landscape Design I	3
HOR 160	Plant Materials I	3
HOR 164	Hort Pest Management	3
HOR 166	Soils & Fertilizers	3
OTHER MAJOR COURSES (3SHC)		
HOR 170	Hort Computer Apps	2
Total Credit Hours Required		14

Horticulture Technology Pathway (C15240P3)

CORE COURSES (12 SHC)		SHC
HOR 112	Landscape Design I	3
HOR 160	Plant Materials I	3
HOR 164	Hort Pest Management	3
HOR 168	Plant Propagation	3
OTHER MAJOR COURSES (3SHC)		
HOR 110	Intro to Landscaping	2
Total Credit Hours Required		14

Information Systems Security

Networking Security Certificate Pathway (C25270P1)

CORE COURSES (18 SHC)		SHC
NET 125	Networking Basics	3
NET 126	Routing Basics	3
SEC 110	Security Concepts	3
SEC 160	Secure Admin I	3
SEC 210	Intrusion Detection	3
SEC 220	Defense-In-Depth	3
Total Credit Hours Required		18

Information Systems Security

Operating Systems Security Certificate Pathway (C25270P3)

CORE COURSES (18 SHC)		SHC
NET 125	Networking Basics	3
NOS 110	Operating Systems Concepts	3
NOS 120	Linux/UNIX Single User	3
NOS 130	Windows Single User	3
SEC 110	Security Concepts	3
SEC 150	Secure Communication	3
Total Credit Hours Required		18

Information Systems Security

Wireless Security Certificate Pathway (C25270P4)

CORE COURSES (18 SHC)		SHC
NET 125	Networking Basics	3
NET 126	Routing Basics	3
NET 175	Wireless Technology	3
SEC 110	Security Concepts	3
SEC 150	Secure Communication	3
OTHER MAJOR COURSES (3 SHC)		
SEC 240	Wireless Security	3
Total Credit Hours Required		18

Networking Technology

Cisco Certified Network Certificate Pathway (C25340P1)

CORE COURSES (12 SHC)		SHC
NET 125	Networking Basics	3
NET 126	Routing Basics	3
NET 225	Routing & Switching I	3
NET 226	Routing & Switching II	3
Total Credit Hours Required		12

Networking Technology

Operating Systems Certificate Pathway (C25340P4)

CORE COURSES (12 SHC)		SHC
NOS 110	Operating System Concepts	3
NOS 120	Linux/UNIX Single User	3
NOS 130	Windows Single User	3
NOS 230	Windows Admin I	3
OTHER MAJOR COURSES (3 SHC)		
NOS 244	Operating System - AS/400	3
Total Credit Hours Required		15

Office Administration Pathway (D25370P)

GENERAL EDUCATION COURSES (6 SHC)		SHC
English/Communication:		
ENG 111	Writing and Inquiry.....	3
ENG 113	Literature-Based Research.....	3
CORE COURSES (12 SHC)		
OST 136	Word Processing.....	3
OST 164	Text Editing Applications.....	3
OST 181	Introduction to Office Systems.....	3
OST 184	Records Management.....	3
OTHER MAJOR COURSES (19 SHC)		
BUS 115	Business Law.....	3
CIS 110	Introduction to Computers.....	3
CTS 130	Spreadsheet Software.....	3
OST 132	Keyboard Skill Building.....	2
OST 137	Office Software Applications.....	3
OST 153	Office Finance Solutions.....	2
WEB 110	Internet/Web Fundamentals.....	3
Total Credit Hours Required.....		37

DEVELOPMENTAL COURSE REQUIREMENTS*		
CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3
OST 080	Keyboarding Literacy.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Office Administration Cert. Pathway (C25370P)

CORE COURSES (12 SHC)		
OST 136	Word Processing.....	3
OST 164	Text Editing Applications.....	3
OST 181	Introduction to Office Systems.....	3
OST 184	Records Management.....	3
OTHER MAJOR COURSES (5 SHC)		
CIS 110	Introduction to Computers.....	3
OST 132	Keyboard Skill Building.....	2
Total Credit Hours Required.....		17

DEVELOPMENTAL COURSE REQUIREMENTS*		
CTS 080	Computing Fundamentals.....	3
DRE 098	Integrated Reading Writing III.....	3
OST 080	Keyboarding Literacy.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Photographic Technology Pathway (C30280P)

CORE COURSES (14 SHC)		SHC
PHO 110	Fund of Photography.....	5
PHO 115	Basic Studio Lighting.....	4
PHO 139	Intro to Digital Imaging.....	2
PHO 224	Multimedia Production.....	3
Total Credit Hours Required.....		14

DEVELOPMENTAL COURSE REQUIREMENTS*		
DRE 098	Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Photographic Technology Pathway (C30280P2)

CORE COURSES (14 SHC)		SHC
PHO 110	Fund of Photography.....	5
PHO 115	Basic Studio Lighting.....	4
PHO 139	Intro to Digital Imaging.....	2
PHO 224	Multimedia Production.....	3
OTHER MAJOR COURSES (4 SHC)		
PHO 120	Intermediate Photography.....	4
Total Credit Hours Required.....		18

DEVELOPMENTAL COURSE REQUIREMENTS*		
DRE 098	Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Photographic Technology Pathway (C30280P3)

CORE COURSES (14 SHC)		SHC
PHO 110	Fund of Photography.....	5
PHO 115	Basic Studio Lighting.....	4
PHO 139	Intro to Digital Imaging.....	2
PHO 224	Multimedia Production.....	3
OTHER MAJOR COURSES (2 SHC)		
PHO 219	Digital Applications.....	2
Total Credit Hours Required.....		16

DEVELOPMENTAL COURSE REQUIREMENTS*		
DRE 098	Integrated Reading Writing III.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Welding Technology Pathway (D50420P)

GENERAL EDUCATION COURSES (6 SHC)		SHC
ENG 102	Applied Communications II.....	3
MAT 110	Mathematical Measurement and Literacy.....	3

CORE COURSES (18 SHC)		
WLD 110	Cutting Processes.....	2
WLD 115	SMAW (Stick) Plate.....	5
OR	WLD 115AC SMAW (Stick) Plate-AC.....	2
	WLD 115BC SMAW (Stick) Plate-BC.....	2
	WLD 115CC SMAW (Stick) Plate-CC.....	1
WLD 121	GMAW (MIG) FCAW/Plate.....	4
WLD 131	GTAW (TIG) Plate.....	4
WLD 141	Symbols & Specifications.....	3

OTHER MAJOR COURSES (16 SHC)		
WLD 116	SMAW (Stick) Plate/Pipe.....	4
OR	WLD 116AB SMAW (Stick) Plate/Pipe-AB.....	2
	WLD 116BB SMAW (Stick) Plate/Pipe-BB.....	2
WLD 143	Welding Metallurgy.....	2
WLD 215	SMAW (Stick) Pipe.....	4
OR	WLD 215AB SMAW (Stick) Pipe-AB.....	2
	WLD 215BB SMAW (Stick) Pipe-BB.....	2
WLD 261	Certification Practices.....	2
WLD 262	Inspection & Testing.....	3
WBL 110	World of Work.....	1

Total Credit Hours Required.....		40
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DEVELOPMENTAL COURSE REQUIREMENTS*		
MAT DMA 010, DMA 020, DMA 030 (MAT 110).....		3
MAT DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143).....		5
DRE 097	Integrated Reading Writing II.....	3

*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

Welding Technology Cert. Pathway (C50420P)

CORE COURSES (18 SHC)		
WLD 110	Cutting Processes.....	2
WLD 115	SMAW (Stick) Plate.....	5
OR		
WLD 115AC	SMAW (Stick) Plate-AC.....	2
WLD 115BC	SMAW (Stick) Plate-BC.....	2
WLD 115CC	SMAW (Stick) Plate-CC.....	1
WLD 121	GMAW (MIG) FCAW/Plate.....	4
WLD 131	GTAW (TIG) Plate.....	4
WLD 141	Symbols & Specifications.....	3

Total Credit Hours Required.....		18
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