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

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.

courses are listed in this section of the catalog.

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.

Englis	h Com	position		(6 SHC)	
ENG	111	Writing & Inquiry	3		
ENG	112	Writing/Research in the Disciplines	3		
		Fine Arts/Communications		(9 SHC)	
		3) courses below from at least two (2) differ	ent	disciplines:	
	unicati				
COM		Public Speaking	3		
		ine Arts			
ART	111	Art Appreciation	3		
ART		Art History Survey I	3		
ART		Art History Survey II	3		
ENG		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	/Behav	rioral Sciences		(9 SHC)	
Select	three (3	3) courses below from at least two (2) differ	ent	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 And	General Astronomy I	3
AST		General Astronomy Lab I	1
BIO CHM GEL	151	General Biology I General Chemistry I Introductory Geology	4 4 4
PHY	110 And	Conceptual Physics	3
PHY		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

ASSOCIATE IN ARTS DEGREE (continued)

ACA 122 College Transfer Success

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	(6 SHC)		
ENG 1	11 Writing & Inquiry	3	
ENG 1	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:

		. •
Commu	inic:	ations

COM	231	Public Speaking	3
<u>Huma</u>	nities/	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

LCO	201	Timespies of whereeconomies	5
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 And	General Astronomy I	3
AST		General Astronomy Lab I	1
BIO	111 And	General Biology I	4
BIO	112	General Biology II	4
СНМ		General Chemistry I	4
СНМ	And 152	General Chemistry II	4
GEL	111	Introductory Geology	4
PHY	110 And	Conceptual Physics	3
PHY	110A	Conceptual Physics Lab	1
PHY	151	College Physics I	4
PHY	And 152	College Physics II	4
PHY	251	General Physics I	4
PHY	And 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.

45

Total General Education Hours Required

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*

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*

^{*}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.

^{*}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 Cerfificate
- 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 SystemsTechnology
- 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 AdministrationPolysomnography
- 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 ART	114 115	Art History Survey I Art History Survey II	3-0-0-3 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 ENG	130 125	Acting I Creative Writing I	0-6-0-3 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 ENG	251 252	Western World Literature I	3-0-0-3
ENG	273	Western World Literature II African-American Literature	3-0-0-3 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 MUS	220 110	Human Values and Meaning Music Appreciation	3-0-0-3 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 REL	110 211	World Religions Intro to Old Testament	3-0-0-3 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 ECO	251 252	Prin of Microeconomics Prin of Macroeconomics	3-0-0-3 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 HIS	130 111	General Physical Geography World Civilizations I	3-0-0-3 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 HIS	132	American History II	3-0-0-3 3-0-0-3
HIS	151 162	Hispanic Civilization 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 HIS	236 261	North Carolina History East Asian History	3-0-0-3 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 PSY	110	Life Span Development	3-0-0-3 3-0-0-3
PSY	150 244	General Psychology 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 SOC	225 230	Social Diversity Race and Ethnic Relations	3-0-0-3 3-0-0-3
SOC	234	Sociology of Gender	3-0-0-3
	242		
SOC		Sociology of Deviance	3-0-0-3
SOC	244	Sociology of Deviance Soc of Death & Dying	3-0-0-3

Sociology of Religion

Rural and Urban Sociology

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ACCOUNTING A.A.S. Program (A25100)

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 EI	DUCATION COURSES:	SHC
English/Commur	nications:	
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	
Humanities/Fine Elective	Arts:	3
Natural Sciences	/Mathematics:	
MAT 110	Math Measurement & Literacy	3
OR	MAT 143 Quantitative Literacy	3
Social/Behaviora		
Elective		3
MAJOR COURS	SES:	
ACC 120	Prin of Financial Accounting	4
ACC 121	Prin of Managerial Accounting	4
ACC 129	Individual Income Taxes	
ACC 140	Payroll Accounting	
ACC 150	Accounting Software Appl	
ACC 220	Intermediate Accounting I	
ACC 225	Cost Accounting	
ACC 240 BUS 110	Introduction to Business	
BUS 115	Business Law I.	
BUS 116	Business Law II	
CIS 110	Introduction to Computers.	
CTS 130	Spreadsheet	
ECO 251	Prin of Microeconomics	3
WBL 110	World of Work	
Accounting	g Electives6	
ACC 130	Business Income Taxes	
ACC 221		
ACC 269		
BUS 125		
BUS 139		
BUS 245		
ETR 240 WBL XX		
WDL AA	A Work-Dasca Learning1-0	
Total Credit Ho	ours Required	65

DEVELOPMENTAL COURSE REQUIREMENTS*

Accounting • A25100 Suggested Program Sequence Da Fall - 1st year	ay Class	Lab	Clin/WkExp	Credit
ACC 120 Prin of Financial Accounting BUS 110 Introduction to Business ENG 111 Writing and Inquiry MAT 110 Math Measurement & Literacy OR MAT 143 Quantitative Literacy Social/Behavorial Science Elective Total	3 3 2 2 2 3 14	2 0 0 2 2 0 4	0 0 0 0 0 0	4 3 3 3 3 16
Spring - 1st year ACC 121 Principles of Managerial Accounting BUS 115 Business Law I CIS 110 Introduction to Computers ENG 112 Writing/Research in the Disc (Preferred) OR ENG 113 Literature-Based Research OR ENG 114 Prof Research & Development Accounting Elective Total	3 2 3 3 3 3 14	2 0 2 0 0 0 0 4	0 0 0 0 0 0 0	4 3 3 3 3 3 16
Fall - 2nd year ACC 129 Individual Income Taxes ACC 220 Intermediate Accounting I ACC 225 Cost Accounting CTS 130 Spreadsheet Humanities/Fine Arts Elective Total	2 3 3 2 3 13	2 2 0 2 0 6	0 0 0 0 0	3 4 3 3 16
Spring - 2nd year ACC 140 Payroll Accounting ACC 150 Accounting Software Appl ACC 240 Gov & Not-for-Profit Acct BUS 116 Business Law II ECO 251 Prin of Microeconomics WBL 110 World of Work Accounting Elective	1 1 3 3 3 1 3	2 2 0 0 0 0 2	0 0 0 0 0 0	2 2 3 3 1 3
Total Grand Total	15 56	6 20	0	17 65

DMA

^{*}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)

GENE	ERAL E	EDUCATION COURSES:	SHC
ENG	111	Writing and Inquiry	3
Social	/Behavi	ioral Sciences Elective	
MAJO	DR COL	URSES:	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 Required	37
DEVE	CLOPM	IENTAL COURSE REQUIREMENTS*	
CTS	080	Computing Fundamentals	3
		Integrated Reading Writing III	
*Deve	lopmen	ital coursework (including all prerequisites) will be required	of students

*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

BUS 110 CIS 110 ENG 111	Prin of Financial Accounting Introduction to Business Introduction to Computers Writing and Inquiry	ng Total	3 2 3 11	2 0 2 0 4	0 0 0 0 0	4 3 3 3 13
Spring - 1st						
	Prin of Managerial Account	ing	3	2	0	4
	Payroll Accounting		1	2	0	2
ACC 150	Accounting Software Appl		1	2	0	2 2 3
BUS 115	Business Law I		3	0	0	3
		Total	8	6	0	11
Fall - 2nd y	rear					
ACC 129	Individual Income Taxes		2	2 2 0	0	3
CTS 130	Spreadsheet		2	2	0	3 3 3
ECO 251	Prin of Microeconomics		2 2 3	0	0	3
		Total	7	4	0	9
Spring - 2n	d vear					
	World of Work		1	0	0	1
Social	Behavorial Science Elective	e	3	0	0	3
		Total	4	0	0	4
	Grand	l Total	30	14	0	37
	Grand	10141	50	17	U	51

ACCOUNTING

General - Certificate Program (C2510001)

MAJO	R CO	URSES:	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					
DEVE	LOPM	IENTAL COURSE REQUIREMENTS*			
CTS	080	Computing Fundamentals	3		
DRE	098	Integrated Reading Writing III	3		
		tal coursework (including all prerequisites) will be required or			

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

ACCOUNTING

Computerized - Certificate Program (C2510003)

MAJ(OR CO	URSES:	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 Required						
DEVELOPMENTAL COURSE REQUIREMENTS*						
DEVE	CLOPM	ENTAL COURSE REQUIREMENTS*				
DEVE CTS		IENTAL COURSE REQUIREMENTS* Computing Fundamentals	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)				
Computerized - Cert. Prog. • (C251 Suggested Program Sequence Da Fall - 1st Year	ay∞	_	lin/WkEx	Credit
Fall - 1st Year	Cla	Lab	Cli	Cre
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)

MAJO	R CO	URSES:	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 Required							
DEVE	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 • (C	25100	04)	Jin/WkExp	
	Suggested Program Sequence I	Day g	_	\§	Credit
Fall - 1st Yo	ear	Cla	Lat	CE	Ç
	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				
	Business Income Taxes		2		
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.

			НС
U		nmunications:	_
ENG	111	Writing and Inquiry	
ENG	113		
	OR	ENG 114 Prof Research & Reporting	3
Humar Electiv		Fine Arts:	3
Natura	l Scier	nces/Mathematics:	
MAT	143		3
	OR	MAT 152 Statistical Methods	
	OR	MAT 171 Precalculus Algebra	
Social		vioral Sciences:	
Electiv		violal Sciences.	2
	-	OURSES:	3
BUS	110		3
GRA	151	Computer Graphics I	
GRA	152	Computer Graphics II	
GRA	153	Computer Graphics III	
GRA	255	Image Manipulation I	2
GRD	110	Typography I	2
GRD	121	Drawing Fundamentals I	2
GRD	131	Illustration I	
GRD	141	Graphic Design I	
GRD	142	Graphic Design II	
GRD	180	Interactive Design	
GRD	241	Graphic Design III	4
GRD	249	Advanced Design Practice	4
GRD	265	Digital Print Production	
GRD	280	Portfolio Design	
MKT	120	Principles of Marketing	3
Progra	m Elec	ctive OR Work-Based Learning	3
110814		ents are required to take 3 SHC from the following:	
	ART	131 Drawing I	
	ART	231 Printmaking I	
	ART	264 Digital Photography I	
	CIS	110 Introduction to Computers	
	GRA	121 Graphic Arts I	
	GRA	256 Image Manipulation II	
	GRD	271 Multimedia Design I2	
	MKT	220 Advertising and Sales Promotio	
	MKT		
	PHO	Fund of Photography5	
	PRN	155 Screen Printing I	
	SGD	111 Introduction to SGD	
	SGD	112 SGD Design	
	SGD	114 3D Modeling	
	WBL		
	WEB		
	WEB		
	WEB	120 Intro Internet Multimedia	
OTHE	ER RE	EQUIRED COURSES:	
ACA	111	College Student Success	1
11011	111	Conege station success	1

ACA	111	College Student	Success	 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 electives.

Total (Credit I	Hours Required 66/	67
DEVE	LOPME	ENTAL 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	DMA0	10, DMA020, DMA030, DMA040, DMA050, DMA060, DMA065, (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.

liti 😽	Advertising and Graphic Design • A30100 Suggested Program Sequence Day								
Fall - 1st Year ACA 111 College Student Success GRA 151 Computer Graphics I 1 3 0 2 GRD 141 Graphic Design I 2 4 0 4 GRD 110 Typography I 2 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	3								
Summer - 1st year 3 0 0 3 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 9/1	10								
Fall - 2nd year GRA 153 Computer Graphics III	5								
Spring - 2nd year GRD 249 Advanced Design Practice GRD 280 Portfolio Design Humanities/Fine Arts Elective Program/ Work-Based Learning Elective 1 9 0 4 2 4 0 4 3 0 0 3 3 0 0 3									
Total 6 13 0 14 Grand Total 40 55 0 66									

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.

CENEDAL EDUCATION COURSES.

GENERAL EDUCATION COURSES:SHC
English/Communications:
ENG 102 Applied Communications II
OR ENG 111 Writing and Inquiry
Natural Sciences/Mathematics:
MAT 110 Math Measurement & Literacy
OR MAT 143 Quantitative Literacy
MAJOR COURSES:
AHR 110 Intro to Refrigeration
AHR 111 HVACR Electricity
AHR 112 Heating Technology
AHR 113 Comfort Cooling
AHR 114 Heat Pump Technology4
AHR 130 HVAC Controls
AHR 151 HVAC Duct Systems I
AHR 160 Refrigerant Certification
AHR 180 HVACR Customer Relations
AHR 210 Residential Building Code
AHR 211 Residential System Design
WBL 110 World of Work
Total Credit Hours Required39
DEVELOPMENTAL COURSE REQUIREMENTS*
CTS 080 Computing Fundamentals
DRE 097 Integrated Reading Writing II
DMA DMA 010, DMA 020, DMA 030 (MAT 110)
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 - 1	st yea	r				
AHR	110	Intro to Refrigeration (1st 8 weeks)	2	6	0	5
AHR	111	HVACR Electricity (1st 8 weeks)	2 2 2	2	0	5 3
AHR	112	Heating Technology (2nd 8 weeks)		4	0	4 2 1
AHR	151	HVAC Duct Systems I	1	3	0	2
AHR	180	HVACR Customer Relations (2nd 8 weeks)	1	0	0	
AHR	211	Residential Systems Design (2nd 8 weeks)	2	2	0	3
		Total	10	17	0	18
Spring	- 1st y	/ear				
ÁHR	113	Comfort Cooling (2nd 8 weeks)	2	4	0	4
AHR	210	Residential Building Code (1st 8 weeks)	1	2	0	2 4 3 1
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
C		Total	10	14	0	18
Summ	er - Ty					
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
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Suggested Program Sequence Night							
Fall - 1	1 ct ves	ır		Class	Lab	Clin/WkExp	Credit
AHR	110	Intro to Refrigeration			6	0	5
AHR				2	2	0	3
MAT	110	Math Measurement & Lite	eracy	2	2	ŏ	3
111111	OR	MAT 143 Quantitative L	iteracy	2 2 2 2	6 2 2 2	ŏ	5 3 3
			Total	6	10	0	11
Spring	- 1st	vear	10141	Ü	10	Ü	
AHR				1	0	0	1
AHR		Comfort Cooling		2		Ŏ	
AHR	_	HVAC Controls		2 2	4 2	Ŏ	4
			Total	5	6	0	8
Fall - 2	2nd ye	ar					
AHR	112	Heating Technology		2	4	0	4
AHR	151	HVAC Duct Systems I		- 1	3 2	0	2
AHR	211	Residential Systems Desi	ign	2	2	0	3
			Total	5	9	0	9
Spring							
AHR				2	4	0	4
AHR	180				0	0	1
AHR		Residential Building Cod	le	1	2	0	2
WBL	110	World of Work		1	0	0	1
_			Total	5	6	0	8
		nd year			_	_	_
ENG	102		s II	3	0	0	3
	OR	EÑG 111 Writing and Inc			0	0	
			Total	3	0	0	3
		Grand	Total	23	31	0	39

Air Conditioning, Heating and Refrigeration Certificate • C35100

Intro to Defrigaration

MAJOR	COURSES:
ΛLID	110

DEVELORMENTAL COURSE DEQUIDEMENTS*					
Total Credit Hours Required13					
AHR	160	Refrigerant Certification			
AHR	112	Heating Technology4			
AHR	111	HVACR Electricity			
АПК		illuo to Kerrigeration			

DEVE	LOI	WIENTAL COURSE REQUIREMENTS
CTS	080	Computing Fundamentals
DRE	097	Integrated Reading Writing II

^{*}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

raii - i	ıst yea	ır				
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	6	0	3
· · · · · · · · · · · · · · · · · · ·	Total		8		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/Comr	munications:
	Writing and Inquiry3
OR	Writing/Research in the Disc 3 ENG 113 Literature-Based Research 3 ENG 114 Prof Research & Reporting 3
Humanities/F	ine Arts:
Elective	3
Natural Scien	ces/Mathematics:
BIO 168	Anatomy and Physiology I4
BIO 169	Anatomy and Physiology II4
Social/Behavi	ioral Sciences:
	General Psychology
MAJOR CO	
	Microbiology4
	Basic PC Literacy
	Intro to Health Concepts
	Health-Illness Concepts
	Family Health Concepts
	Holistic Health Concepts
	Health Care Concepts
	Complex Health Concepts
PSY 241	Developmental Psych
Total Credit	Hours Required72
DEVELOPM	IENTAL COURSE REQUIREMENTS*
CTS 080	Computing Fundamentals
DRE 098	Integrated Reading Writing III
DMA DMA	A 010, DMA 020, DMA 030, DMA 040, DMA 0505
*Developmen	tal coursework (including all prerequisites) will be required of students

^{*}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 N Suggested Prograi	_	ıy		Clin/WkExp	. 					
Fall - 1st year NUR 111 Intro to Health Concepts		4 Class	Tap 6	6	∞ Credit					
BIO 168 Anatomy and Physiology PSY 150 General Psychology CIS 111 Basic PC Literacy	, I	3 3 1	3 0 2	0 0 0	4 3 2					
Spring let year	Total	11	11	6	17					
Spring - 1st year NUR 112 Health-Illness Concepts NUR 114 Holistic Health Concepts BIO 169 Anatomy and Physiology PSY 241 Developmental Psychology	/ II	3 3 3 3	0 0 3 0	6 6 0 0	5 5 4 3					
Summer - 1st year	Total	12	3	12	17					
NUR 212 Health System Concepts ENG 111 Writing and Inquiry		3	0	6 0	5 3					
Fall - 2nd year	Total	6	0	6	8					
NUR 113 Family Health Concepts NUR 211 Health Care Concepts BIO 275 Microbiology Humanities Elective		3 3 3 3	0 0 3 0	6 6 0 0	5 5 4 3					
Spring - 2nd year	Total	12	3	12	17					
NUR 213 Complex Health Concep ENG 113 Literature-Based Research (I OR ENG 112 Writing/Research in the OR ENG 114 Prof Research & Repo (Students considering transfer to a fo should take ENG 112 or ENG 113)	Preferred) Disc (Preferred) rting	4 3 3 3	3 0 0 0	15 0 0 0	10 3 3 3					
	Total	7	3	15	13					
	Grand Total	48	20	51	72					
Associate Degree Nursing • A45110 S	Suggested Prog.	Sequ	Associate Degree Nursing • A45110 Suggested Prog. Sequence Evening							
0 1 1	88 8	•		-	U					
Spring - 1st year NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy	ts-AB	2 3 1	3 3 2	3 0 0	4 4 2					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy	ts-AB	2 3	3	3	4 4					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo	ts-AB gy I Total ts-BB	2 3 1	3 3 2	3 0 0	4 4 2					
NUR 111 AB BIO 168 CIS 111 Summer - 1st year NUR 111 BB BIO 169 PSY 150 Intro to Health Concep Anatomy and Physiolo Basic PC Literacy Anatomy and Physiolo General Psychology	ts-AB gy I Total ts-BB	2 3 1 6 2 3	3 3 2 8 3 3	3 0 0 3 3	4 4 2 10 4 4					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy Summer - 1st year NUR 111 BB Intro to Health Concep BIO 169 Anatomy and Physiolo PSY 150 General Psychology Fall - 1st year NUR 112 Health-Illness Concepts NUR 114 Holistic Health Concepts	ts-AB gy I Total ts-BB gy II	2 3 1 6 2 3 3 8 3	3 3 2 8 3 3 0 6	3 0 0 3 3 0 0 3 6 6	4 4 2 10 4 4 3 11 5 5					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy Summer - 1st year NUR 111 BB Intro to Health Concep BIO 169 Anatomy and Physiolo PSY 150 General Psychology Fall - 1st year NUR 112 Health-Illness Concepts NUR 114 Holistic Health Concepts PSY 241 Developmental Psych	ts-AB gy I Total ts-BB gy II	2 3 1 6 2 3 3 8	3 3 2 8 3 3 0 6	3 0 0 3 3 0 0 3 6	4 4 2 10 4 4 3 11 5					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy Summer - 1st year NUR 111 BB Intro to Health Concep BIO 169 Anatomy and Physiolo PSY 150 General Psychology Fall - 1st year NUR 112 Health-Illness Concepts NUR 114 Holistic Health Concepts	ts-AB gy I Total ts-BB gy II Total	2 3 1 6 2 3 3 8 3 3 3	3 3 2 8 3 3 0 6 0 0	3 0 0 3 3 0 0 3 6 6 0	4 4 2 10 4 4 3 11 5 5 3					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy Summer - 1st year NUR 111 BB Intro to Health Concep BIO 169 Anatomy and Physiolo PSY 150 General Psychology Fall - 1st year NUR 112 Health-Illness Concepts NUR 114 Holistic Health Concepts PSY 241 Developmental Psych Spring - 2nd year NUR 211 Health Care Concepts NUR 212 Health System Concepts NUR 212 Health System Concepts ENG 111 Writing and Inquiry Total Summer - 2nd year	ts-AB gy I Total ts-BB gy II Total	2 3 1 6 2 3 3 8 3 3 3 9 3 3 3	3 3 2 8 3 3 0 6 0 0 0 0 0 0 9	3 0 0 3 3 0 0 3 6 6 0 12 6 6 0 0	4 4 2 10 4 4 3 11 5 5 3 13 5 5 3 1213					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy Summer - 1st year NUR 111 BB Intro to Health Concep BIO 169 Anatomy and Physiolo PSY 150 General Psychology Fall - 1st year NUR 112 Health-Illness Concepts NUR 114 Holistic Health Concepts PSY 241 Developmental Psych Spring - 2nd year NUR 211 Health Care Concepts NUR 212 Health System Concepts NUR 212 Health System Concepts ENG 111 Writing and Inquiry Total	ts-AB gy I Total ts-BB gy II Total	2 3 1 6 2 3 3 8 3 3 9 3 3	3 3 2 8 3 3 0 6 0 0 0 0 0	3 0 0 3 3 0 0 3 6 6 0 12 6 6 0	4 4 2 10 4 4 3 11 5 5 3 13 5 5 3					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy Summer - 1st year NUR 111 BB Intro to Health Concep BIO 169 Anatomy and Physiolo PSY 150 General Psychology Fall - 1st year NUR 112 Health-Illness Concepts NUR 114 Holistic Health Concepts PSY 241 Developmental Psych Spring - 2nd year NUR 211 Health Care Concepts NUR 212 Health System Concepts NUR 212 Health System Concepts ENG 111 Writing and Inquiry Total Summer - 2nd year NUR 113 Family Health Concepts	ts-AB gy I Total ts-BB gy II Total	2 3 1 6 2 3 3 8 3 3 9 3 3 3 3	3 3 2 8 3 3 0 6 0 0 0 0 0 0 0 9	3 0 0 3 3 0 0 3 6 6 6 0 12 6 6 0 0	4 4 2 10 4 4 3 11 5 5 3 1213 5					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy Summer - 1st year NUR 111 BB Intro to Health Concep BIO 169 Anatomy and Physiolo PSY 150 General Psychology Fall - 1st year NUR 112 Health-Illness Concepts NUR 114 Holistic Health Concepts PSY 241 Developmental Psych Spring - 2nd year NUR 211 Health Care Concepts NUR 212 Health System Concepts NUR 212 Health System Concepts ENG 111 Writing and Inquiry Total Summer - 2nd year NUR 113 Family Health Concepts	ts-AB gy I Total ts-BB gy II Total Total	2 3 1 6 2 3 3 8 3 3 3 3 3 3 3 6 2 3 3 6 6 2 3 3 6 6 6 2 3 6 6 6 6	3 3 2 8 3 3 0 6 0 0 0 0 0 0 9	3 0 0 3 3 0 0 3 6 6 0 12 6 6 0 0	4 4 4 2 10 4 4 3 11 5 5 3 13 5 5 3 1213 5 4 9					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy Summer - 1st year NUR 111 BB Intro to Health Concep BIO 169 Anatomy and Physiolo PSY 150 General Psychology Fall - 1st year NUR 112 Health-Illness Concepts NUR 114 Holistic Health Concepts PSY 241 Developmental Psych Spring - 2nd year NUR 211 Health Care Concepts NUR 212 Health System Concepts ENG 111 Writing and Inquiry Total Summer - 2nd year NUR 113 Family Health Concepts BIO 275 Microbiology Fall - 2nd year NUR 213 AB Complex Health Concepts Humanities Elective	ts-AB gy I Total ts-BB gy II Total Total	2 3 1 6 2 3 3 8 3 3 3 9 3 3 3 3 6	3 3 2 8 3 3 0 6 0 0 0 0 0 0 9	3 0 0 3 3 0 0 3 6 6 0 0 12 6 6 0 0 6 7	4 4 2 10 4 4 3 11 5 5 3 1213 5 4 9					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy Summer - 1st year NUR 111 BB Intro to Health Concep BIO 169 Anatomy and Physiolo PSY 150 General Psychology Fall - 1st year NUR 112 Health-Illness Concepts NUR 114 Holistic Health Concepts PSY 241 Developmental Psych Spring - 2nd year NUR 211 Health Care Concepts NUR 212 Health System Concepts ENG 111 Writing and Inquiry Total Summer - 2nd year NUR 113 Family Health Concepts BIO 275 Microbiology Fall - 2nd year NUR 213 AB Complex Health Concepts Humanities Elective Spring - 3rd year NUR 213 BB Complex Health Concepts ENG 113 Literature-Based Research OR ENG 112 Writing/Resear OR ENG 114 Prof Research	ts-AB gy I Total ts-BB gy II Total Total Total Total Total Ppts-AB Total Epts-BB (Preferred) ch in the Disc & Reporting	2 3 1 6 2 3 3 8 3 3 3 3 3 3 6 2 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3 3 2 8 3 0 0 0 0 0 0 0 0 0 9 0 3 3 3 2 0 1 0 0 0 0 0 0 0 0	3 0 0 3 3 6 6 0 0 12 6 6 0 0 7 7 8 0 0 0	4 4 4 2 10 4 4 3 11 5 5 3 1213 5 4 9 5 3 8 5 3 3 3 3 3					
NUR 111 AB Intro to Health Concep BIO 168 Anatomy and Physiolo CIS 111 Basic PC Literacy Summer - 1st year NUR 111 BB Intro to Health Concep BIO 169 Anatomy and Physiolo PSY 150 General Psychology Fall - 1st year NUR 112 Health-Illness Concepts NUR 114 Holistic Health Concepts PSY 241 Developmental Psych Spring - 2nd year NUR 211 Health Care Concepts NUR 212 Health System Concepts ENG 111 Writing and Inquiry Total Summer - 2nd year NUR 113 Family Health Concepts BIO 275 Microbiology Fall - 2nd year NUR 213 AB Complex Health Concepts Humanities Elective Spring - 3rd year NUR 213 BB Complex Health Concepts ENG 113 Literature-Based Research OR ENG 112 Writing/Research	ts-AB gy I Total ts-BB gy II Total Total Total Total Total Ppts-AB Total Epts-BB (Preferred) ch in the Disc & Reporting	2 3 1 6 2 3 3 8 3 3 3 3 3 3 6 2 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3 3 2 8 3 0 0 0 0 0 0 0 0 0 9 0 3 3 3 2 0 1 0 0 0 0 0 0 0 0	3 0 0 3 3 6 6 0 0 12 6 6 0 0 7 7 8 0 0 0	4 4 4 2 10 4 4 3 11 5 5 3 1213 5 4 9 5 3 8 5 3 3 3 3 3					

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 <u>on CVCC's campus</u>, 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.

	L EDUCATION COURSES:SHC
	nmunications:
	Writing and Inquiry
ENG 113	Literature-Based Research
Humanities/	Fine Arts:
Elective	3
Natural Scie	ences/Mathematics:
BIO 168	Anatomy and Physiology I4
BIO 169	Anatomy and Physiology II4
MAT 152	Statistical Methods I4
Social/Beha	vioral Sciences:
PSY 150	General Psychology
MAJOR CO	OURSES:
BIO 275	Microbiology4
CIS 111	Basic PC Literacy
NUR 111	Intro to Health Concepts8
NUR 112	Health-Illness Concepts5
NUR 113	Family Health Concepts5
NUR 114	Holistic Health Concepts5
NUR 211	Health Care Concepts5
NUR 212	Health System Concepts5
NUR 213	Complex Health Concepts
PSY 241	Developmental Psych
Total Cred	it Hours Required72
DEVELOP	MENTAL COURSE REQUIREMENTS*
CTS 080	Computing Fundamentals
DRE 098	1 0
DMA DM	A 010, DMA 020, DMA 030, DMA 040, DMA 0505
*Davalanma	antal aguraguarle (including all prorequisites) will be required of students

^{*}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 Progran	1 Sequence			WK	-		
Fall - 1st yea	r		Class	Lab	Clin/WkExp	Credit		
BIO 168	Anatomy and Physiology	I	3 0 3 3	3	0	4		
CHM 131 CHM 131A	Introduction to Chemistry		3	0	$0 \\ 0$	4 3 1		
ENG 111	Introduction to Chemistry Writing and Inquiry	Lau (BS)	3	0	ő	3		
PSY 150	General Psychology	D. 1. (D. C)	3	0	0	3 3 3		
FYE 191	First Year Experience I (L	RU/BS)				3		
G : 1.		Total	12	6	0	17		
Spring - 1st yo BIO 169	ear Anatomy and Physiology	II	3	3	0	4		
CIS 110	Introduction to Computers		2	0	ŏ	3		
OR CIS 111	Pagia DC Litaragy, AND		2	2	0	2		
CIS III	Basic PC Literacy <u>AND</u> PED (1 Hour Activity) (B	S)	3	2	0	1		
MAT 152	Statistical Methods I	/	3	2	0	4		
PSY 241 FYE 192	Developmental Psych First Year Experience II (1	RIJ/RS)	3	0	0	3		
11E 192	That real Experience if (i	,	11/12	5/6	0	-		
Fall - 2nd yea	r	Total	11/12	3/0	0	17		
NUR 111	Intro to Health Concepts		4	6	6	8		
BIO 275	Microbiology		3	3	0	4		
Foreign	n Language (LRU/BS)	m . 1	_	_		_		
		Total	7	9	6	15		
Spring - 2nd y						_		
NUR 112 NUR 114	Health-Illness Concepts Holistic Health Concepts		3 3 3	$0 \\ 0$	6	5		
HEA 110	Personal Health/Wellness	(BS)	3	Ö	0	5 5 3		
	n Language (LRU/BS)	(-)				3		
		Total	9	0	12	16		
G 2	1							
Summer - 2nd NUR 212	Health System Concepts		3	0	6	5		
ENG 113	Literature-Based Research	1	3	0	0	3		
		Total	6	0	6	8		
Fall 2nd seas	_							
Fall - 3rd year NUR 113	Family Health Concepts		3	0	6	5		
NUR 211	Health Care Concepts		3	0	6	5 5 3		
REL 100	Christian Faith (LRU/BS) rts Elective		3	0	0	3		
Tille A.	its Elective					-		
		Total	9	0	12	16		
Spring 3rd ye NUR 213	ar Compley Health Consent		1	2	15	10		
OM 110	Complex Health Concepts Introduction to Communic	ation (RS)	4	3	15	10 3		
OR		(100)						
COM 231 SOC XXX	Public Speaking (BS) Sociology (LRU/BS)		3	0	0	3		
SOC AAA	Sociology (LIKU/DS)	Total	7	3	15	16		
	Gran	d Total	61/62	_				
• Sem	ester Hour Totals include co	ourses taker	at Lend	oir R	hyne	e		
Note: The f	ollowing courses will be t	aken at Lei	noir-Rh	yne l	Univ	versi		

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

Sumn NUR NUR		year Assessment of Health Status (LRU) Analytical Methods for Evidence-Based Practice (LRU)	3
		Total	6
Fall 4	th vear	Total	O
NUR		Transition to Professional Practice (LRU)	3 3 3
NUR		Health Promotion with Populations & Families (LRU)	3
NAT		Environmental Science-Level II (LRU)	3
	Human	ities Level I (LRU)	3
		Total	12
Spring	g 4th yea	ar	
NUR	456	Concepts of Leadership in Nursing (LRU)	3
NUR	477	Applied Health Care (LRU)	4
HSB	388	Level II (LRU)	3
	OR		
HUM		Level II (LRU)	3
	NUR E	lective-Select Topics (LRU)	2

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

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 fulltime 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.

GEN	ERAL	EDUCATION COURSES:SHC
Englis	h/Com	munications:
ENG	111	Writing and Inquiry
ENG	114	Prof Research & Reporting
	OR	ENG 112 Writing/Research in the Disc
	OR	ENG 113 Literature-Based Research
Humai	nities/E	ine Arts:
Electiv		3
		ces/Mathematics:
MAT	110	Math Measurement & Literacy
	OR	MAT 143 Quantitative Literacy
		ioral Sciences:
Electiv	/e	3
MAJO	OR CO	URSES:
AUT	116	Engine Repair
AUT	116A	8 · r
AUT	141	Suspension & Steering Sys
AUT	141A	~ msp 6 6
AUT	151	Brake Systems
AUT	151A	=
AUT	163	Adv Auto Electricity
AUT	163A	
AUT	181	Engine Performance 1
AUT	181A	
AUT AUT	183 212	Engine Performance 2
AUT	212	Auto Shop Management
AUT	221A	
AUT	221A 231	Man Trans/Axles/Drtrains. 3
AUT	231A	
AUT	281	Adv Engine Performance 3
TRN	110	Intro to Transport Tech
TRN	120	Basic Transp Electricity 5
TRN	140	Transp Climate Control
TRN	140A	
TRN	170	Pc Skills for Transp
WBL	110	World of Work
hours	of Wor	Learning Option: Qualified students may elect to take up to 7 credit k-Based Learning in place of AUT 116A, AUT 141A, AUT 151A, AUT 181A, AUT 221A, or AUT 231A.
Total	Credit	t Hours Required67
DEVE	LOPA	MENTAL COURSE REQUIREMENTS*
CTS	080	Computing Fundamentals
DRE	098	Integrated Reading Writing III
DMA	DMA	A 010, DMA 020, DMA 030, (MAT 110)
DMA		A 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.

Automotive Systems Technology • A60160 Suggested Program Sequence Day

Suggested Program Sequence Day							
AUT 116A Engine F AUT 181 Engine F AUT 181A Engine F TRN 110 Intro to T TRN 120 Basic Tra	Repair (1st 8 weeks) Repair Lab (1st 8 weeks) Performance 1 (2nd 8 weeks) Performance 1 Lab (2nd 8 weeks) Fransport Tech Performance 1 Lab (2nd 8 weeks)	SS Class 0 2 0 1 4 1	9g 3 3 3 3 2 3 2 3 2	0 0 0 0 0 0 Clin/WkExp	3 1 2 5 2 5 2		
	Total	10	19	0	17		
AUT 151 Brake Sy AUT 151A Brake Sy		2 2 0 2 0 1	6 3 3 3 0	0 0 0 0 0	4 3 1 3 1		
	Total	7	18	0	13		
	and Inquiry 1 Science Elective Total	3 3 6	0 0 0	0 0 0	3 3 6		
AUT 141A Suspension AUT 212 Auto Sho AUT 281 Adv Eng TRN 140 Transp C	on & Steering Sys (2nd 8 Weeks) on & Steering Lab (2nd 8 Weeks) op Management time Performance Climate Control (1st 8 weeks) limate Cont Lab (1st 8 weeks) Total	2 0 3 2 1 1	3 0 2 2 2 2	0 0 0 0 0 0	3 1 3 3 2 2		
AUT 221A Auto Tra AUT 231 Man Tran AUT 231A Man Tran MAT 110 Math Me	ansm/Transaxles (2nd 8 Weeks) nsm/Transax Lab (2nd 8 Weeks) ns/Axles/Drtrains (1st 8 weeks) ns/Ax/Drtrains Lab (1st 8 weeks) rasurement & Literacy 3 Quantitative Literacy Total	2 0 2 0 2 2 2	3 3 3 2 2	0 0 0 0 0 0	3 1 3 1 3 3 1		
OR ENG 112 OR ENG 113	earch & Reporting (Preferred) 2 Writing/Research in the Disc 3 Literature-Based Research ne Art Elective Total Grand Total	3 3 3 6 44	0 0 0 0 0	0 0 0 0 0	3 3 3 3 6 67		
	J. 10 mi			9	0 /		

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)

		EDUCATION COURSES:SHC
_		nunications:
ENG		Writing and Inquiry
		ces/Mathematics:
MAT		Math Measurement & Literacy
	OR	MAT 143 Quantitative Literacy
MAJO	OR CO	URSES:
AUT	116	Engine Repair3
AUT	116A	Engine Repair Lab
AUT	141	Suspension & Steering Sys
AUT	141A	Suspension & Steering Lab
AUT	151	Brake Systems
AUT	151A	=- j =
AUT	163	Adv Auto Electricity
AUT	181	Engine Performance 1
AUT	181A	
AUT	183	Engine Performance 2
AUT	221	Auto Transm/Transaxles 3
AUT	221A	Auto Transm/Transax Lab
AUT	231	Man Trans/Axles/Drtrains
AUT	231A	Man Trans/Ax/Drtrains Lab
TRN	110	Intro to Transport Tech
TRN	120	Basic Transp Electricity
TRN	140	Transp Climate Control
TRN	140A	Transp Climate Cont Lab
		iystems Technology Learning Option: Qualified students may elect to take up to 4 credit
		-Based Learning in place of AUT 116A, AUT 141A, AUT 151A, AUT
		21A, or AUT 231A.
Total	Credit	Hours Required48
DEVE	LOPM	IENTAL COURSE REQUIREMENTS*
CTS	080	Computing Fundamentals
		010, DMA 020, DMA 030, (MAT 110)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	0			
AUT 116 Engine Repair (2nd 8 Wks) AUT 116A Engine Repair Lab (2nd 8 Wks) TRN 110 Intro to Transport Tech	2 0 1	3 3 2 3	0 0 0	3 1 2 5
TRN 120 Basic Transp Electricity (1st 8 Wks)	4	-	0	
Total	7	11	0	11
Spring - 1st year				
AUT 151 Brake Systems (2nd 8 Wks)	2 0 2 2 2	3 3 2 2	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	1 3 3 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	•		•	Ü
AUT 221 Auto Transm/Transaxles (1st 8 Wks)	2	3	0	3
AUT 221A Auto Transm/Transax Lab (1st 8 Wks)	$\overline{0}$	3	ŏ	1
AUT 183 Engine Performance 2 (2nd 8 Wks)	2	6	ŏ	4
ENG 111 Writing and Inquiry	2 3	Õ	Ö	3
Total	7	12	0	11
Fall - 3rd year	,	12	U	11
AUT 141 Suspension & Steering (2nd 8 Wks)	2	2	0	3
AUT 141A Suspension & Steering (2nd 8 Wks)	0	3 2 2	0	1
TRN 140 Transp Climate Control (1st 8 weeks)	1	2	0	2
	1	2	0	1 2 2
TRN 140A Transp Climate Cont Lab (1st 8 weeks)	1	2	U	2
Total	4	10	0	8
Grand Total	28	56	0	48

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

Majo	r Cour	·ses	SHC
AUŤ		Suspension & Steering Sys	
AUT	141A	Suspension & Steering Lab	
AUT	151	Brake Systems	
AUT	151A	Brake Systems Lab.	
TRN	110	Intro to Transport Tech	2
TRN	120	Basic Transp Electricity	
		lit Hours Required	15
		ENTAL COURSE REQUIREMENTS*	
CTS	080	Computing Fundamentals	3
DMA	DMA (010, DMA 020, DMA 030	3
		Integrated Reading Writing II	
		ental course work (including all prerequisites) will	

* 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

Fall	1st Ye	or	Class	'ap	Zlin/Wk	Credit	
	150 10		<u> </u>	П	0		
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	
Sprin	g - 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 commissionmandated 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
ENG 112 Writing/Research in the Disc
OR ENG 113 Literature-Based Research 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
OR MAT 143 Quantitative Literacy3
Social/Behavioral Sciences:
Elective3
Elective
MAJOR COURSES:
ACC 120 Prin of Financial Accounting
ACC 121 Prin in Managerial Accounting
BUS 110 Introduction to Business
BUS 115 Business Law I
BUS 116 Business Law II
BUS 137 Principles of Management
BUS 240 Business Ethics
BUS 285 Business Management Issues
CIS 110 Introduction to Computers
ECO 251 Prin of Microeconomics
ECO 252 Prin of Macroeconomics 3
MKT 120 Principles of Marketing 3
WBL 110 World of Work
WBE 110 Work of Work
Business/WBL Electives
Dusiness/ WDE Discurses
Students are required to take 12 SHC from the following:
BUS 125 Personal Finance
BUS 139 Entrepreneurship I
BUS 153 Human Resource Management
BUS 230 Small Business Management
BUS 245 Entrepreneurship II
BUS 253 Leadership and Mgt Skills
CTS 130 Spreadsheet3
ETR 215 Law for Entrepreneurs
ETR 220 Innovation and Creativity3
ETR 230 Entrepreneur Marketing
ETR 240 Funding for Entrepreneurs
MKT 123 Fundamentals of Selling
MKT 220 Advertising and Sales Promotion
MKT 221 Consumer Behavior3
MKT 223 Customer Service
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
10th 010th 110th 110th 110th 110th
DEVELOPMENTAL COURSE REQUIREMENTS*
CTS 080 Computing Fundamentals
DRE 098 Integrated Reading Writing III
DMA DMA 010, DMA 020, DMA 030, (MAT 110)
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)5
Dial Dial viv, Dial viv, Dial viv, Dial viv, Dial viv, (Mai 143)
*Developmental coursework (including all prerequisites) will be required of students
*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

Elective3	Total	18	2	0	19
Natural Sciences/Mathematics:	Spring - 2nd year BUS 285 Business Management Issues	2	2	0	3
MAT 110 Math Measurement & Literacy	ECO 252 Prin of Macroeconomics	3	0	0	3
OR MAT 143 Quantitative Literacy3	WBL 110 World of Work	1	ŏ	0	1
Social/Behavioral Sciences:	Business Elective	3	0	0	3
Elective3	Business Elective	3	0	0	3
MAJOR COURSES:	Humanities/Fine Arts Elective	3	0	0	3
ACC 120 Prin of Financial Accounting4	Total	15	2	0	16
ACC 121 Prin in Managerial Accounting				-	
BUS 110 Introduction to Business	Grand Total	61	10	0	66
BUS 115 Business Law I					
BUS 137 Principles of Management 3	Business Administration • A25120 Suggested	Prog	Seq	Eve	ening
BUS 240 Business Ethics 3	Fall - 1st year				
BUS 285 Business Management Issues	BUS 110 Introduction to Business	3	0	0	3
CIS 110 Introduction to Computers	CIS 110 Introduction to Computers	2	2	0	3
ECO 251 Prin of Microeconomics 3 ECO 252 Prin of Macroeconomics 3	ENG 111 Writing and Inquiry	3	0	0	3
MKT 120 Principles of Marketing	Total	8	2	0	9
WBL 110 World of Work	Spring - 1st year				_
	BUS 137 Principles of Management	2 2	0	0	3
Business/WBL Electives	MAT 110 Math Measurement & Literacy OR MAT 143 Quantitative Literacy	2 2	0	3	3
Students are required to take 12 SHC from the following:	OK WAI 143 Qualititative Eliciacy	2		U	3
BUS 125 Personal Finance	Total	5	2	0	6
BUS 139 Entrepreneurship I3	Fall - 2nd year	2	2	0	4
BUS 153 Human Resource Management	ACC 120 Prin of Financial Accounting BUS 115 Business Law I	3	2	0	4
BUS 230 Small Business Management		6	2	0	3 7
BUS 253 Leadership and Mgt Skills 3	Total Spring - 2nd year	0	2	U	/
CTS 130 Spreadsheet3	BUS 240 Business Ethics	3	0	0	3
ETR 215 Law for Entrepreneurs3	MKT 120 Principles of Marketing	3	Õ	0	3
ETR 220 Innovation and Creativity	ENG 114 Prof Research & Reporting	3	0	0	3
ETR 230 Entrepreneur Marketing	OR ENG 112 or ENG 113				
MKT 123 Fundamentals of Selling	Total	9	0	0	9
MKT 220 Advertising and Sales Promotion3	Fall - 3rd year ACC 121 Prin in Managerial Accounting	3	2	0	4
MKT 221 Consumer Behavior	BUS 116 Business Law II	3	0	0	3
MKT 223 Customer Service	Business Elective	3	Õ	0	3
1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Total	9	2	0	10
	Spring - 3rd year				
Work-Based Learning Option: Qualified students may elect to take up to 6 credit	ECO 251 Prin of Microeconomics	3	0	0	3
hours of Work-Based Learning in place of 6 hours Business electives.	Business Elective Social/Behavioral Science Elective	3	0	0	3
Total Credit Hours Required66			-	-	
DEVELOPMENTAL COURSE REQUIREMENTS*	Total	9	0	0	9
CTS 080 Computing Fundamentals	Fall - 4th year Business Elective	3	0	0	3
DRE 098 Integrated Reading Writing III	Business Elective	3	0	0	3
DMA DMA 010, DMA 020, DMA 030, (MAT 110)	Humanities/Fine Arts Elective	3	ŏ	ŏ	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)5	Total	9	0	0	9
	Spring - 4th year				
*Developmental coursework (including all prerequisites) will be required of students	BUS 285 Business Management Issues	2	2	0	3
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	ECO 252 Prin of Macroeconomics WBL 110 World of Work	1	0	0	3 1
for prerequisite course information.		-	-		_
Tot protoquisto course information.	Total	6	2	0	7
	Grand Total	61	10	0	66
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CVCC 2014-2015 College Catalog	1				

Clin/WkExp

Lab

Business Administration • A25120 Suggested Program Sequence Day

Total

Total

Total

Fall - 1st year

Spring - 1st year

BUS

BUS

CIS

ENG

MAT

ACC

BUS

BUS

MKT

ENG

ACC

BUS

ECO

110 Introduction to Business

Writing and Inquiry

Principles of Management

Introduction to Computers

Math Measurement & Literacy

OR MAT 143 Quantitative Literacy

120 Prin of Financial Accounting

Principles of Marketing

121 Prin in Managerial Accounting

Social/Behavioral Science Elective

114 Prof Research & Reporting

Business Law I

Business Ethics

OR ENG 112 or ENG 113

Business Law II

Business Elective

Business Elective

251 Prin of Microeconomics

Business Administration Diploma Program • D25120 GENERAL EDUCATION COURSES:SHC	BUSINESS ADMINISTRATION
English/Communications: ENG 111 Writing and Inquiry	Advanced Certificate #2 (C2512003) MAJOR COURSES: SHC
Social/Behavioral Sciences:	MAJOR COURSES: SHC ACC 120 Prin of Financial Accounting
Elective 3 MAJOR COURSES:	ACC 121 Prin of Managerial Accounting
ACC 120 Prin of Financial Accounting4	CIS 110 Introduction to Computers 3 ECO 251 Prin of Microeconomics 3
ACC 120 Prin of Financial Accounting 4 BUS 110 Introduction to Business 3 BUS 115 Business Law I 3	ECO 252 Prin of Macroeconomics 3
BUS 137 Principles of Management 3	Total Credit Hours Required17
BUS 240 Business Ethics	DEVELOPMENTAL COURSE REQUIREMENTS*
ECO 251 Prin of Microeconomics 3	CTS 080 Computing Fundamentals
MKT 120 Principles of Marketing 3 WBL 110 World of Work 1	DRE 098 Integrated Reading Writing III
Business Electives	*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
Business Diploma Electives - Must be selected from the following list:	English, mathematics, and computers. Please refer to the Course Descriptions section
ACC 121, BŪS 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,	for prerequisite course information.
MKT 223, WBL XXX (1-4 SHC).	Business Administration - Advanced Certificate #2 (C251003)
Total Credit Hours Required38	Exp
-	Class Clin/WkExp
DEVELOPMENTAL COURSE REQUIREMENTS* CTS 080 Computing Fundamentals	Fall - 1st year Fall - 1st year
DRE 098 Integrated Reading Writing III	Fall - 1st year ACC 120 Prin of Financial Accounting 3 2 0 4
*Developmental coursework (including all prerequisites) will be required of students	CIS 110 Introduction to Computers 2 2 0 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	ECO 251 Prin of Microeconomics 3 0 0 3 Total 8 4 0 10
for prerequisite course information.	Spring - 1st year
Business Administration • D25120 Suggested Program Sequence	ACC 121 Prin of Managerial Accounting 3 2 0 4
Fall - 1st year	ECO 252 Prin of Macroeconomics 3 0 0 3 Total 6 0 0 7
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	
CIS 110 Introduction to Computers 2 2 0 3	Grand Total 14 6 0 17
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	BUSINESS ADMINISTRATION
BUS 240 Business Ethics 3 0 0 3 MKT 120 Principles of Marketing 3 0 0 3	Customer Service Certificate Program (C2512004)
Total 12 2 0 13	MAJOR COURSES: SHC BUS 110 Introduction to Business
Fall - 2nd year ECO 251 Prin of Microeconomics 3 0 0 3	MKT 120 Principles of Marketing
Business Elective 3 0 0 3	MKT 221 Consumer Behavior
Business Elective 3 0 0 3 Total 9 0 0 9	Total Credit Hours Required
Spring - 2nd year WBL 110 World of Work 1 0 0 1	
Social/Behavioral Science Elective 3 0 0 3	Business Administration - Customer Service Cert (C2512004)
Total 4 0 0 4	Fall - 1st year
Grand Total 36 4 0 38	BUS 110 Intro to Business 3 0 0 3
BUSINESS ADMINISTRATION General Cert. Prog. (C2512001)	Total 6 0 0 6
MAJOR COURSES: SHC	Spring - 1st year
BUS 110 Introduction to Business	MKT 120 Principles of Marketing 3 0 0 3 MKT 221 Consumer Behavior 3 0 0 3
BUS 137 Principles of Management	Total 6 0 0 6
MKT 120 Principles of Marketing	Grand Total 12 0 0 12
Business Administration - General Certificate (C2512001)	
Fall - 1st year	
BUS 110 Intro to Business 3 0 0 3	BUSINESS ADMINISTRATION
MKT 120 Prin of Marketing 3 0 0 3 Total 6 0 0 6	Marketing Certificate Program (C2512005)
Spring - 1st year BUS 115 Business Law I 3 0 0 3	MAJOR COURSES: SHC
BUS 137 Prin of Management 3 0 0 3	BUS 110 Introduction to Business
Total 6 0 0 6	MKT 123 Fundamentals of Selling
Grand Total 12 0 0 12	MKT 220 Advertising and Sales Promotion
BUSINESS ADMINISTRATION Advancded Cert. #1 (C2512002)	Total Cicuit Hours Required12
MAJOR COURSES: SHC	Project Administration Moulestine Contifeets (C2512005)
ACC 120 Prin of Financial Accounting 4 BUS BUS 110 Introduction to Business 3	Business Administration - Marketing Certificate (C2512005)
BUS 115 Business Law I	Fall - 1st year BUS 110 Introduction to Business 3 0 0 3
BUS 137 Principles of Management	MKT 123 Fundamentals of Selling 3 0 0 3
Total Credit Hours Required	Total 6 0 0 6
Business Administration - Advanced Certificate #1 (C2512002) Fall - 1st year	Spring - 1st year
BUS 110 Introduction to Business 3 0 0 3	MKT 120 Principles of Marketing 3 0 0 3 MKT 220 Advertising and Sales Promotion 3 0 0 3
BUS 137 Principles of Management 3 0 0 3	Total 6 0 0 6
Spring - 1st year	Grand Total 12 0 0 12
ACC 120 Prin of Financial Accounting 3 2 0 4 BUS 115 Business Law I 3 0 0 3	Grand rotat 12 0 0 12
Total 6 2 0 7	
Grand Total 12 2 0 13	
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COMPUTER ENGINEERING TECHNOLOGY A.A.S. Program (A40160)

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..

		L EDUCATION COURSES:SHC
-		nmunications:
ENG	111	Writing and Inquiry
ENG	114	
		ENG 112 Writing/Research in the Disc
	OR	ENG 113 Literature-Based Research
Humar	nities/	Fine Arts:
Electiv	re	3
Natura	l Scie	nces/Mathematics:
MAT	121	Algebra/Trigonometry I
Social/	Beha	vioral Sciences:
Electiv	re	3
MAJC	R CO	OURSES:
CET	111	Computer Upgrade/Repair I
CIS	110	Introduction to Computers
CSC	134	C++ Programming. 3
DFT	117	Technical Drafting
EGR	110	Intro to Engineering Tech
ELC	138	DC Circuit Analysis4
ELC	139	AC Circuit Analysis4
ELC	229	Applications Project
ELN	131	Analog Electronics I4
ELN	132	Analog Electronics II
ELN	133	Digital Electronics
ELN	233	Microprocessor Systems4
MAT	122	Algebra/Trigonometry II
NET	125	Networking Basics
PHY	131	Physics-Mechanics4
CET E		**
St	udent	s are required to take a minimum of 6 SHC from the following:
	CET	211 Computer Upgrade/Repair II
	CSC	139 Visual BASIC Programming
	CSC	151 JAVA Programming
	CTS	130 Spreadsheet
	NOS	110 Operating System Concepts
	NOS	120 Linux/UNIX Single User
	PHY	133 Physics-Sound & Light
	WEB	110 Internet/Web Fundamentals

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
DEVE	LOPM	IENTAL 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.

	Suggested Program Sequence Day	7		Exp	
Fall - 1st y	ear	Class	Lab	Clin/WkExp	3 3 2 2 4
CIS 110	Introduction to Computers	2	2 3 2 2 3	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			
MAT 121	Algebra/Trigonometry I	2	2	0	3
	Total	11	14	0	17
Spring - 1s	t vear				
ELC 139		3	3	0	4
ELN 131	,	3 3 2	3	0	4
ENG 111	Writing and Inquiry	3	0 2 4	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				
	Prof Research and Reporting (Preferred)	3	0	0	3
OR ENG	G 112 Writing/Research in the Disc	3	0	0	3 3 3
OR ENG	G 113 Literature-Based Research	3	0	0	3
Huma	nities/Fine Arts Elective	3	0	0	3
	Total	6	0	0	6
Fall - 2nd y	/ear				
CET 111 OR	Computer Upgrade/Repair I	2	3	0	3
CTS 120	Hardware/Software Support	2	3	0	3
ELN 132	Analog Electronics II	3	3	0	4

3

2 0

3

3 0 3

0 0 3

3 3 0 4

2 3 0 3

2

3

11

Grand Total 49 49 0 70

11 11 0 15

Total

Total

0 4

0 2

12 0 15

Computer Engineering Technology • A40160

Suggested Dream

ELN 133

PHY 131

Spring - 2nd year

CET Elective

CET Elective

Digital Electronics

Physics-Mechanics

Social/Behavioral Science Elective

ELC 229 Applications Project

ELN 233 Microprocessor Systems

Computer Engineering Technology • A40160 **Suggested Program Evening Sequence** Clin/WkExp Lab Fall - 1st year 2 0 2 EGR 110 Intro to Engineering Tech ELC 138 DC Circuit Analysis 3 0 4 MAT 121 Algebra/Trigonometry I 2 0 3 Total 7 0 9 Spring - 1st year ELC 139 AC Circuit Analysis 3 0 4 MAT 122 Algebra/Trigonometry II 2 0 3 Total 5 0 7 Summer - 1st year ENG 111 Writing and Inquiry Social/Behavioral Science Elective 0 0 3 0 0 3 0 Total 0 6 Fall - 2nd year DFT 117 **Technical Drafting** 0 3 ELN 131 Analog Electronics I 0 4 5 0 6 Total Spring - 2nd year ELN 132 Analog Electronics II 3 0 3 4 ELN 133 Digital Electronics 3 0 4 0 Total 8 Summer - 2nd year CIS 110 Introduction to Computers 2 0 2 3 3 0 ENG 114 Prof Research & Reporting (Preferred) 0 3 OR ENG 112 Writing/Research in the Disc 3 0 0 3 ENG 113 Literature-Based Research 3 0 0 3 3 Humanities/Fine Arts Elective 0 0 3 8 2 0 9 Total Fall - 3rd year Computer Upgrade/Repair I 2 3 0 3 CET 111 OR CSC 120 Hardware/Software Support 3 0 CSC 134 C++ Programming 3 0 3 0 Total 6 6 Spring - 3rd year ELN 233 Microprocessor Systems 3 0 4 0 NET 125 Networking Basics 4 3 0 7 Total Fall - 4th year PHY 131 Physics-Mechanics 2 0 4 2 3 3/4 0 CET Elective Total 5 0 7/8 Spring - 4th year ELC 229 Applications Project 3 0 2 3 CET Elective 3 0 3 0 Total 5 6

Grand Total

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.

ENG	111	Writing	g and Inquiry
ENG	114	Prof Re	esearch & Reporting
	OR	ENG 1	13 Literature-Based Research
Humai	nities/	Fine Art	
Electiv	ve .		
			athematics:
MAT	143	Quanti	tative Literacy
		vioral So	
Electiv	ve		
	. D. G		0
		DURSE	•
CIS	110		ection to Computers
CIS	115	Intro to	Prog & Logic
CTS	115	Into Sy	rs Business Concept
CTS	120		are/Software Support
CTS	130		sheet
CTS	285		s Analysis & Design
CTS	289		Support Project
DBA	110	Databa	se Concepts
DBA	115	Databa	se Applications
DBA	120	Databa	se Programming I
NET	125	Netwo	rking Basics
NOS	110	Operat	ing System Concepts
NOS	130		ws Single User
NOS	230		ws Administration I
SEC	110		y Concepts
WBL	XXX	Work-I	Based Learning
Progra			ve
	Stude	nts mus	t select one course from the following:
	CSC	134	C++ Programming
	CSC	139	Visual BASIC Programming
Progra	m Ele	ctive	3
	CET		Computer Upgrade/Repair II3
	CIS	277	Network Design & Imp3
	CSC	234	Advanced C++ Programming3
	CSC		Advanced Visual BASIC Prog3
		220	Oracle DB Programming II
	NET		Routing Basics
	NET		Wireless Technology3
	NOS		Linux/UNIX Single User3
	NOS		Windows Administration II
	NOS		Operating Sytem - AS/400
	SEC		
	SEC	160	Secure Administration I
		XXX	

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				

^{*}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.

51 49 0 70/71

Suggested Program Sequence Da	42 52 y	260	kExp
Fall - 1st year CIS 110 Introduction to Computers CIS 115 Intro to Prog. & Logic DBA 110 Database Concepts NOS 110 Operating System Concepts Total	2 Class 8	qe 7 2 3 3 3 11	Credit Cr
Spring - 1st year CSC 139/134 Visual BASIC OR C++ Programming DBA 115 Database Applications CTS 120 Hardware/Software Support NOS 130 Windows Single User WBL XXX Work-Based Learning Total	2 2 2 2 0 8	3 2 3 2 0 10	0 3 0 3 0 3 0 3 20 2 20 14
Summer - 1st year ENG 111 Writing and Inquiry MAT 143 Quantitative Literacy Social/Behavioral Science Elective Total	3 2 3 8	0 2 0 2	0 3 0 3 0 3 0 9
Fall - 2nd year CTS 130 Spreadsheet CTS 285 Systems Analysis & Design DBA 120 Database Programming I NET 125 Networking Basics NOS 230 Windows Administration I SEC 110 Security Concepts Total	2 3 2 1 2 2 12	2 0 2 4 2 2 12	0 3 0 3 0 3 0 3 0 3 0 3 0 3
Spring - 2nd year CTS 115 Info Sys Business Concepts CTS 289 System Support Project ENG 114 Prof Research & Reporting OR ENG 113 Literature-Based Research Humanities/Fine Arts Elective Program Elective Total	3 1 3 3 3 3 13	0 4 0 0 0 0 4	0 3 0 3 0 3 0 3 0 3 0 3 0 3
Grand Total Computer Information Technology •		41 260	20 68
Suggested Program Sequence Even	_	2	0 2
CIS 110 Introduction to Computers			
SEC 110 Security Concepts Total	2 2 4	2 2 4	$\begin{array}{ccc} 0 & 3 \\ 0 & 3 \\ 0 & 6 \end{array}$
Security Concepts Total Spring - 1st year CTS 115 Info Sys Business Concepts CSC 139/134 Visual BASIC OR C++Programming NOS 110 Operating Systems Concepts Total			0 3 0 6 0 3 0 3 0 3 0 9
Spring - 1st year CTS 115 Info Sys Business Concepts CSC 139/134 Visual BASIC OR C++Programming NOS 110 Operating Systems Concepts Total Summer - 1st year ENG 111 Writing and Inquiry MAT 143 Quantitative Literacy Total	4 3 2 2	4 0 3 3	0 6 0 3 0 3 0 3
Spring - 1st year CTS 115 Info Sys Business Concepts CSC 139/134 Visual BASIC OR C++Programming NOS 110 Operating Systems Concepts Total Summer - 1st year ENG 111 Writing and Inquiry MAT 143 Quantitative Literacy Total Fall - 2nd year CIS 115 Intro to Prog & Logic CTS 130 Spreadsheet DBA 110 Database Concepts NET 125 Networking Basics	4 3 2 2 7 3 2	4 0 3 3 6 0 2	0 6 0 3 0 3 0 3 0 9 0 3 0 3 0 6 0 3 0 3 0 3
Spring - 1st year CTS 115 Info Sys Business Concepts CSC 139/134 Visual BASIC OR C++Programming NOS 110 Operating Systems Concepts Total Summer - 1st year ENG 111 Writing and Inquiry MAT 143 Quantitative Literacy Total Fall - 2nd year CIS 115 Intro to Prog & Logic CTS 130 Spreadsheet DBA 110 Database Concepts	4 3 2 7 3 2 6 2 2 1	4 0 3 3 6 0 2 2 3 4	0 6 0 3 0 3 0 3 0 9 0 3 0 3 0 6 0 3 0 3 0 3
Spring - 1st year CTS 115 Info Sys Business Concepts CSC 139/134 Visual BASIC OR C++Programming NOS 110 Operating Systems Concepts Total Summer - 1st year ENG 111 Writing and Inquiry MAT 143 Quantitative Literacy Total Fall - 2nd year CIS 115 Intro to Prog & Logic CTS 130 Spreadsheet DBA 110 Database Concepts NET 125 Networking Basics Total Spring - 2nd year DBA 115 Database Applications NOS 130 Windows Single User Total Summer - 2nd year ENG 114 Prof Research & Reporting OR ENG 113 Literature-Based Research WBL XXX Work-Based Learning Social/Behavioral Science Elective	4 3 2 2 7 3 2 6 2 2 1 7	4 0 3 3 6 0 2 2 3 4 12 2 2	0 6 0 3 0 3 0 3 0 9 0 3 0 3 0 6 0 3 0 3 0 3 0 3 0 3
Spring - 1st year CTS 115 Info Sys Business Concepts CSC 139/134 Visual BASIC OR C++Programming NOS 110 Operating Systems Concepts Total Summer - 1st year ENG 111 Writing and Inquiry MAT 143 Quantitative Literacy Total Fall - 2nd year CIS 115 Intro to Prog & Logic CTS 130 Spreadsheet DBA 110 Database Concepts NET 125 Networking Basics Total Spring - 2nd year DBA 115 Database Applications NOS 130 Windows Single User Total Summer - 2nd year ENG 114 Prof Research & Reporting OR ENG 113 Literature-Based Research WBL XXX Work-Based Learning Social/Behavioral Science Elective Total Fall - 3rd year CTS 285 Systems Analysis & Design DBA 120 Database Programming I NOS 230 Windows Administration I Total	4 32277 3266 222177 224 3303	4 0 3 3 6 0 2 2 3 2 3 4 12 2 2 4 0 0 0 0	0 6 0 3 0 3 0 3 0 9 0 3 0 3 0 6 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 3
Spring - 1st year CTS 115	4 3 2 2 7 3 2 6 2 2 2 1 7 2 4 3 3 0 3 6 6 3 6 6 7 1 1 2 1 7 1 1 2 1 7 1 1 1 1 1 1 1 1 1	4 03336 02233412 2240000 00000 022443	0 6 0 3 0 3 0 3 0 9 0 3 0 3 0 6 0 3 0 3 0 12 0 3 0 6 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 3
Spring - 1st year CTS 115	4 3 2 2 7 3 2 6 2 2 1 1 7 2 2 4 3 3 6 6 3 6 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 0 3 3 6 0 2 2 3 4 12 2 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 6 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 3

COMPUTER INFORMATION TECHNOLOGY Certificate Program (C25260)

MAJO	OR C	OURSES:	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	Cred	lit Hours Required	15
DEVI	ELOP	MENTAL 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

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

COMPUTER INFORMATION TECHNOLOGY Database Certificate (C2526001) Suggested Sequence

MAJO	OR CC	OURSES:SHC
		Database Concepts
DBA	115	Database Applications
		Database Programming I
DBA	220	Oracle DB Programming II
Total (Credit	Hours Required12

Computer Information Technology-Database Certificate (C2526001) Suggested Sequence

Fall - 1st ye DBA 110	ear Database Concepts	Total	2	3	0	3
Spring - 1st	vear	Total	2	3	U	3
DBA 115	year Database Applications	Total	2	2	0	3
Fall - 2nd y	rear		_	_		•
DBA 120	Database Programming I		2	2	0	3
G	4	Total	2	2	0	3
DBA 220	d year Oracle DB Programming I	Ι	2	3	0	3
		Total	2	3	0	3
		Grand Total	8	10	0	12

COMPUTER-INTEGRATED MACHINING TECHNOLOGY

A.A.S. Program (A50210)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. The 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 hightech 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.

_			SHC
ENG	/Commui	Writing and Inquiry	
ENG	114	Prof Research & Reporting	
	OR OR	ENG 112 Writing/Research in the Disc	3
Human	ities/Fine		
Elective		AIG.	3
Natural	Sciences	/Mathematics:	
MAT	121	Algebra/Trigonometry I	3
Social /	Behavior	al Sciences:	
Elective	e		3
	R COUR	SES:	
CIS	111	Basic PC Literacy	2
	OR	CIS 110 Introduction to Computers	
ISC	112	Industrial Safety	
MAC MAC	122 124	CNC Turning	
MAC	131	CNC Milling	
MAC	131	Blueprint Reading/Mach II	2
MAC	141	Machining Applications I	4
MAC	142	Machining Applications II	4
MAC	143	Machining Appl III	
MAC	151	Machining Calculations	2
MAC	222	Advanced CNC Turning	
MAC	224	Advanced CNC Milling	
MAC	231	CAM: CNC Turning	
MAC MAC	232 233	CAM: CNC Milling	3
MAC	233	Appl in CNC Machining	0
MAC	241	Jigs & Fixtures I	4
MAC	242	Jigs & Fixtures II	
MEC	110	Intro to CAD/CAM	
MEC	142	Physical Metallurgy	
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 Required73/74					
DEVE	LOPME	ENTAL COURSE REQUIREMENTS*			
CTS	080	Computing Funamentals	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.

Computer-integrated Machining Technology		AS	UZ 1	U
Suggested Program Sequence D	ay		Exp	
			Clin/WkExp	. =
Fall - 1st year	Class	Lab	Zlin/	red
ISC 112 Industrial Safety	2	0	0	5 Credit
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
_	9/10		0	16/17
Total	9/10	10	U	10/1/
Spring 1st year				
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 Bluepring Reading Mach. II	1	2	0	2
MAC 132 Bluephing Reading Mach. II MAC 124 CNC Milling (3rd 4 Wks)	1	3	0	2
	1	3	0	2
MAC 224 Advanced CNC Milling (4th 4 Wks)	2	2	0	3
MAT 121 Algebra/Trigonometry I WBL 110 World of Work	1	0	0	<i>3</i>
	-			-
Total	8	16	0	14
C				
Summer - 1st year	2	0	0	2
ENG 111 Writing and Inquiry	3	0	0	
MEC 110 Intro to CAD/CAM	1	2	0	2
MAC 143 Machining Applications III	2	6	0	
Total	6	8	0	9
Fall 2nd				
Fall - 2nd year	1	4	0	2
MAC 231 CAM:CNC Turning	1	4	0	3
MAC 232 CAM:CNC Milling		4	0	
MAC 241 Jigs & Fixtures I Humanities/Fine Arts Elective	2	6	0	3
	-			
Total	7	14	0	13
Spring 2nd years				
Spring - 2nd year	2	2	0	2
MAC 234 Adv Multi-Axis Machining	2	3	0	
MAC 242 Jigs & Fixtures II	1	9	0	
MEC 142 Physical Metallurgy	1	2	0	2
Social/Behavioral Science Elective	3	0	0	3
Total	7	14	0	12
Summer - 2nd year	^		_	2
ENG 114 Literature-Based Research (Preferred)	3	0	0	3
OR ENG 112 Writing/Research in the Dis		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	12/43	382	0	73/74

Computer-Integrated Machining Technology - A50210

Computer-Integrated Machining Technology Diploma (D50210)

GENE	RAL	EDUC A	ATION COURSES:	SHC
English	/Comr	nunicatio	ns:	
ENG	111	Writi	ng and Inquiry	3
Natural	Science	ces/Mathe	ematics:	
MAT	121	Alge	bra/Trigonometry I	3
MAJO	R CO	URSES:		
CIS	111	Basic	PC Literacy	2
	OR		110 Introduction to Computers	
MAC	122	CNC	Turning	2
MAC	124	CNC	Milling	2
MAC	131	Blue	print Reading/Mach I	2
MAC	132	Blue	print Reading/Mach II	2
MAC	141	Macl	nining Applications I	4
MAC	142	Macl	nining Applications II	4
MAC	151	Macl	nining Calculations	2
MAC	222	Adva	nnced CNC Turning	2
MAC	224	Adva	nced CVC Milling	2
MEC	110	Intro	to CAD/CAM	2
WBL	110	Worl	d of Work	1
*CIM/\	VBL P	rogramEl	lective	6
N	MAC 2		AM: CNC Turning	
N	MAC 2		AM: CNC Milling	
-	MAC 2		igs & Fixtures I	
-			hysical Metallurgy	
1	VBL :	XXX V	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 Requi	red	39/40
DEVE	LOPMENTAL COU	RSE REQUIREMEN	TS*
CTS	080 Computing	Fundamentals	3
DRE	097 Integrated	Reading Writing II	3
DMA	DMA 010. DMA 020	0. DMA 030. DMA 049	0. DMA 050. DMA 060

*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

Suggested Program Sequence Day Suggested Program Sequence Day								
Fall - 1	st vea	r	Class	Lab	Clin/Wk	2 3 2 4 4 2 3		
	111	Basic PC Literacy	1	2	0	2		
	R	CIS 110 Introduction to Computers	2	2	Õ	3		
		Blueprint Reading/Mach I	1	2	Õ	2		
MAC	141	Machining Applications I	2	6	Õ	4		
MAC		Machining Applications II	2	6	Õ	4		
MAC		Machining Calculations	1	2	0	2		
		Elective				3		
		Total	10/11	18	0	17/18		
Spring								
MAC			1	3 2 3 3 2 0	0	2		
MAC		Advanced CNC Turning (2nd 4 Wks	s) 1	3	0 0 0 0 0	2		
MAC		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	1 2	2	0	3		
WBL	110	World of Work	1	0	0	2 2 2 2 2 3 1 3		
P	rogram	Elective				3		
_		Total	11	16	0	17		
Summ								
		Writing and Inquiry	3 1	0	0	3 2		
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

E 11 1 4	Suggested Frogram	sequence <u>Ever</u>				
Fall - 1st year MAC 131 MAC 141 MAC 151 CIS 111 OR	Blueprint Reading/Ma Machining Application Machining Calculation Basic PC Literacy CIS 110 Introduction	ns I ns	1 2 1 1 2	2 6 2 2 2	$\begin{matrix} 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{matrix}$	2 4 2 2 3
g : 1 :		Total	5/6	12	0	10/11
Spring - 1st y	ear					
MAC 132 MAC 142 MEC 110	Blueprint Reading/Ma Machining Application Intro to CAD/CAM	ach II ons II	1 2 1	2 6 2	0 0	2 4 2
		Total	4	10	0	8
Fall - 2nd year	ır	Total	4	10	U	o
MAC 122			1	3	0	2
MAC 124	CNC Milling		1	3	0	2
MAT 121	Algebra/Trigonometr	y I	2	2	0	
WBL 110	World of Work	•	1	0	0	1
Progra	ım Elective					3
S		Total	8	8	0	11
Spring - 2nd	vear					
MAC 222	Advanced CNC Turni	ing	1	3	$0 \\ 0$	2
MAC 224 Progra	Advanced CNC Milli m Elective	ng	1	3	0	2 2 3
		Total	5	6	0	7
Summer - 2nd	d year		2	0	Λ	2
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		
MAC	141	Machining Applications I	4	
MAC	151	Machining Calculations	2	
MEC	110	Intro to CAD/CAM	2	
Total Credit Hours Required14				
Total (Credit He	ours Required	.14	
		ours Required TAL COURSE REQUIREMENTS*	.14	
		-		
DEVE	LOPMEN	VTAL COURSE REQUIREMENTS*	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 <u>Day</u> (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 <u>Evening</u> (C50210)

Fan - 18	st 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
		Gran	d 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.

CENTER IX PRIVATED CONTRARA

GENE	RAI	LEI	DUCATION COURSES:SHC
English	/Com	ımun	ications:
ENG	111		Writing and Inquiry
ENG	114		Prof Research & Reporting
LITO	OR		ENG 113 Literature-Based Research.
**			
Humani		rine A	
Elective			3
Natural	Scien	nces/	Mathematics:
MAT	143		Quantitative Literacy
Social/E	Behav	vioral	Sciences:
Elective			3
MAJO		MID	
CIS	110	JUK	Introduction to Computers
CIS	115		Intro to Prog & Logic
CSC	138		RPG Programming
CSC	139		Visual BASIC Programming 3
CSC	141		Visual C++ Programming 3
	OR		CSC 134 C++ Programming
CSC	238		Advanced RPG Programming
CSC	239		Advanced Visual BASIC Prog. 3
CSC	289		Programming Capstone Project
CTS	115		Info Sys Business Concepts
CTS	130		Spreadsheet3
CTS	285		Systems Analysis & Design
DBA	110		Database Concepts
NET	125		Networking Basics
NOS	110		Operating System Concepts
NOS	244		Operating System - AS/400
SEC	110		Security Concepts
			ctive
	tuder CSC	nts m 151	ust select 3 SHC from the following courses:
		115	JAVA Programming 3 Database Applications 3
		120	Database Programming I
	GD	111	Introduction to SGD
	GD	112	SGD Design
S	GD	114	3D Modeling
Progran	nmin	g/Wo	rk-Based Learning Elective1-3
S	tude	nts ar	re required to take one (1) course from the following:
	CSC	151	ĴAVA Programming
	DBA		Database Applications
		120	Database Programming I
		111	Introduction to SGD
	GD GD	112 114	SGD Design
	VBL		
Work	k-Bas	ed L	earning Option: Qualified students may elect to take 1-3 credit
			Based Learning in place of Programming elective.
			RED COURSES:
ACA	111		ollege Student Success
Total C	redi	t Ho	ours Required 68/70

DEVELOPMENTAL COURSE REQUIREMENTS*

Computer Programming • A251: Suggested Program Sequence Da	y		Clin/WkExp	dit
Fall - 1st year ACA 111 College Student Success CIS 110 Introduction to Computers	1 2 2 2	0 2 3	0	1 Credit
CIS 115 Intro to Prog & Logic DBA 110 Database Concepts NET 125 Networking Basics	2 1	3 4	0 0 0	3 3 3 3
Total	8	12	0	13
Spring - 1st year CSC 141 Visual C++ Programming OR CSC 134 C++ Programming	2	3	0	3
CTS 115 Info Sys Business Concepts NOS 110 Operating Systems Concepts	3 2 2	0	0	3 3
NOS 244 Operating Systems - AS/400 Program Elective	2	2	0	3
Total	12	8	0	15
Summer - 1st year ENG 111 Writing and Inquiry MAT 143 Quantitatiave Literacy Humanities/Fine Arts Elective	3 2 3	0 2 0	0 0 0	3 3 3
Total	8	2	0	9
Fall - 2nd year CTS 130 Spreadsheet CTS 285 Systems Analysis & Design CSC 138 RPG Programming CSC 139 Visual BASIC Programming SEC 110 Security Concepts	2 3 2	2 0 3 2 2	0 0 0 3 0	3 3 0 3 0 3
Total	11	10	0	15
Spring - 2nd year ENG 114 Prof Research & Reporting OR ENG 113 Literature-Based Research CSC 289 Programming Capstone Project CSC 238 Advanced RPG Programming CSC 239 Advanced Visual BASIC Programming Social/Behavioral Science Elective Programming/WBL Elective	3 1 2 2 3 0	0 0 4 3 3 0 0	0 0 0 0 0 0	3 3 3 3 3 3 1/3
Total	11	10	0	16/18
Grand Total	50	42	0	68/70
COMPUTER PROGRAMMING - Cert. P	rog	g. (C	25	130)
MAJOR COURSES:				SHC
CIS 115 Intro to Prog & Logic				

MAJ	JR COURSES:	SHC
CIS	115 Intro to Prog & Logic	3
	139 Visual BASIC Programming	
CSC	141 Visual C++ Programming	3
CSC	239 Advanced Visual BASIC Prog	3
Total	Credit Hours Required	12

MAT DMA 010, DMA 020, DMA 030, DMA 040, DMA 050..... *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 Descrip-

tions section for prerequisite course information.

Fall - 1st year

DEVELOPMENTAL COURSE REQUIREMENTS*

Computer Programming - Cert. Suggested Sequence (C25130)

ran - rst yc	zαı					
CIS 115	Intro to Prog & Logic		2	3	0	3
		Total	2	3	0	3
Spring - 1st	t year					
CSC 139	Visual BASIC Programmin	ng	2	3	0	3
CSC 141	Visual C++ Programming	_	2	3	0	3
		Total	4	6	0	6
Spring - 2n	d year					
CSC 239	Advanced Visual BASIC F	Prog	2	3	0	3
		Total	2	3	0	3
		Grand Total	8	12	0	12

CTS DRE

^{*}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 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 comptency-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:

_			DUCATION COURSES:	SHC			
	_	/Commun					
	۱G	102	Applied Communications II	3			
			l Sciences:				
PS	Y	150	General Psychology	3			
M.	AJO	R COUR					
CO	OS	111	Cosmetology Concepts I	4			
CC		111AB 111BB	Cosmetology Concepts I-AB	2			
CC	OS OR	112	Salon I	8			
CC	OS	112AB 112BB	Salon I-AB Salon I-BB				
CC	OS OR	113	Cosmetology Concepts II	4			
CC		113AB 113BB	Cosmetology Concepts II-AB Cosmetology Concepts II-BB.	2			
CO	OS OR	114	Salon II	8			
CC	OS	114AB 114BB	Salon II-ABSalon II-BB				
CC		115	Cosmetology Concepts III	4			
CC		115AB 115BB	Cosmetology Concepts III-AB	2			
CC	OS OR	116	Salon III	4			
CC		116AB 116BB	Salon III-ABSalon III-BB				
CC	OS OR	117	Cosmetology Concepts IV	2			
CC	OS	117AB 117BB	Cosmetology Concepts IV-AB	1			
CC	OS OR	118	Salon IV				
CC		118AB 118BB	Salon IV-AB Salon IV-BB				
W	BL	110	World of Work	1			
То	Total Credit Hours Required48						
DI	EVEI	LOPMEN	NTAL COURSE REQUIREMENTS*				
DF			stegrated 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.

Cosmetology - Diploma • D55140 Suggested Program Sequence Day										
F. II. 4			Class	Lab	Clin/WkExp	Credit				
COS 112 Salon	etology Concepts I I Of Work		4 0 1	0 24 0	0 0 0	4 8 1				
Spring 1st year		Total	5	24	0	13				
COS 114 Salon	etology Concepts II II ed Communication I		4 0 3	0 24 0	$\begin{matrix} 0 \\ 0 \\ 0 \end{matrix}$	4 8 3				
Summar 1st vaar		Total	7	24	0	15				
Summer - 1st year COS 115 Cosmo COS 116 Salon	etology Concepts III		4 0	0 12	0	4 4				
Fall - 2nd year		Total	4	12	0	8				
COS 118 Salon	etology Concepts IV IV al Psychology	•	2 0 3	0 21 0	0 0 0	2 7 3				
		Total Grand Total	5 21	21 81	0	12 48				
~					Ü	10				
Su	etology - Diploma/F ggested Program S			140						
Fall - 1st year COS 111AB COS 112AB WBL 110	Cosmetology Cond Salon I-AB World Of Work	cepts I-AB	2 0 1	0 12 0	0 0 0	2 4 1				
		Total	3	12	0	7				
Spring - 1st year COS 111BB COS 112BB ENG 102	Cosmetology Cond Salon I-BB Applied Communi		2 0 3	0 12 0	0 0 0	2 4 3				
	**	Total	5	12	0	9				
Summer - 1st year PSY 150	General Psycholog	gy	3	0	0	3				
		Total	3	0	0	3				
Fall - 2nd year COS 113AB COS 114AB	Cosmetology Cond Salon II-AB	cepts II-AB	2	0 12	0	2 4				
Spring and year		Total	2	12	0	6				
Spring - 2nd year COS 113BB COS 114BB	Cosmetology Conc Salon II-BB	-	2	0 12	0	2 4				
Fall - 3rd year		Total	2	12	0	6				
COS 115AB COS 116AB	Cosmetology Conc Salon III-AB		2 0	0 6	0	2 2				
Spring - 3rd year		Total	2	6	0	4				
COS 115BB COS 116BB	Cosmetology Cond Salon III-BB	cepts III-BB Total	2 0 2	0 6	0 0	2 2 4				
Fall - 4th year										
COS 117AB COS 118AB	Cosmetology Cone Salon IV-AB	Total	1 0 1	0 12 12	$0 \\ 0 \\ 0$	1 4 5				
Spring - 4th year COS 117BB COS 118BB	Cosmetology Conc Salon IV-BB		1 0	0 9	0 0	1 3				
		Total	1	9	0	4				
		Grand Total	21	81	0	48				

SHC

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

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.

		DUCATION COURSES:	SHC
English/C	ommun	ications:	
ENG 1	11	Writing and Inquiry	3
ENG 1	13	Literature-Based Research.	3
C)R	ENG 114 Prof Research & Reporting	
Humanitie	es/Fine		
Elective	00/1 1110 1		3
	ciences/	Mathematics:	
	10	Math Measurement & Literacy	3
)R	MAT 143 Quantitative Literacy	3
Social/Be	havioral	Sciences:	
	50	General Psychology	3
		, 6,	
MAJOR			_
	10	Introduction to Computers (Effective Spr 2015)	
	11	Intro to Criminal Justice	
	12 13	Criminology	
202	21	Juvenile Justice	3
	31	Criminal Law	3
	32	Court Procedure & Evidence	3
	41	Corrections.	
	51	Intro to Loss Prevention	
	60	Terrorism: Underlying Issues	
	12	Ethics & Comm Relations	
CJC 2	15	Organization & Administration	
CJC 2	21	Investigative Principles	
CJC 2	25	Crisis Intervention	
	31	Constitutional Law	
SOC 2	10	Introduction to Sociology	3
Duo onoma I	Clastica		2
Program I CJC	114	Investigative Photography2	3
CJC	222	Criminalistics	
HIS	111	World Civilizations I	
HIS	112	World Civilizations II	
HIS	121	Western Civilization I	
HIS	122	Western Civilization II	
POL	120	American Government3	
POL	130	State & Local Government3	
PSY	231	Forensic Psychology3	
PSY	241	Developmental Psych3	
PSY	281	Abnormal Psychology3	
SOC	220	Social Problems3	
WBL	XXX	Work-Based Learning1-3	
Work_Ro	ea I has	arning Ontion: Qualified students may elect to take 1-3 cred	dit hour

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					
DEVE	LOPMI	ENTAL 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 Tech Suggested Progran	nnology • A5 n Sequence D	55180 Oay		'kExp	
Fall - 1st y	ear		Class	Lab	Clin/WkExp	Credit
CJC 111	Intro to Criminal Justice		3	0	0	3
CJC 131 CJC 132	Criminal Law		3	0	0	3 3 3 3
CJC 132 CJC 160	Court Procedures & Evide Terrorism: Underlying Iss		3	0	0	3
ENG 111	Writing and Inquiry	ou.	3	0	0	3
		Total	15	0	0	15
Spring - 1s						
CJC 112	Criminology		3	0	0	3
CJC 121 CJC 221	Law Enforcement Operati Investigative Principles	ons	3	0	0	3 4
CIS 110		S	2	2	0	3
		Total	11	4	0	13
Summer -	1st vear					
ENG 113	Literature-Based Research		3	0	0	3
	ENG 114 Prof Research & R		3	0	0	3 3 3
	Math Measurement & Liter		2 2	2 2	0	3
PSY 150	MAT 143 Quantitative Litera General Psychology	acy	3	0	$0 \\ 0$	3
	<i>y</i> 23	Total	8	2	0	9
Fall - 2nd	vear					
CJC 113			3	0	0	3
CJC 215	Organization & Administr	ration	3	0	0	3
CJC 231			3	0	0	3
SOC 210	Introduction to Sociology anities/Fina Arts Elective		3	0	0	3
пиш	amues/Fina Arts Elective		3	U	U	
		Total	15	0	0	15
Spring - 2r						
	Corrections		3	0	0	3
CIC 212	Intro to Loss Prevention Ethics & Comm Relations	,	3	0	0	3
CJC 212		,	3	0	0	3
	ram Elective					3
		Total	15	0	0	15
	Gra	and Total	64	6	0	67

Criminal Justice Technology • A55180 Suggested Prog Sequence Evening	Exp			Correctional Probation & Parole Certificate Prog (C5518002)
Suggested Frog Sequence Evening	Clin/WkExp	:	Ħ	MAJOR COURSES: SHC CJC 111 Intro to Criminal Justice 3
			Credit	CJC 141 Corrections 3 CJC 212 Ethics & Comm Relations 3
CJC 111 Intro to Criminal Justice 3 0 CJC 131 Criminal Law 3 0			3	CJC 215 Organization & Administration 3
ENG 111 Writing and Inquiry 3 0	0		3	CJC 225 Crisis Intervention
Spring - 1st year Total 9 0	0		9	Correctional Probation & Parole
CJC 121 Law Enforcement Operations 3 0 CIS 110 Introduction to Computers 2 2	0		3	Cert. Suggested Sequence (C5518002) Fall - 1st year
Summer - 1st year Total 5 2			6	CJC 111 Intro to Criminal Justice 3 0 0 3 CJC 215 Organization & Administration 3 0 0 3 Total 6 0 0 6
MAT 110 Math Measurement & Literacy 2 2 OR MAT 143 Quantitative Literacy 2 2 PSY 150 General Psychology 3 0				Spring - 2nd year
	0		3	CJC 141 Corrections 3 0 0 3
Fall - 2nd year Total 5 2			6	CJC 212 Ethics & Comm Relations 3 0 0 3 CJC 225 Crisis Intervention 3 0 0 3
Fall - 2nd year CJC 113 Juvenile Justice 3 0 SOC 210 Introduction to Sociology 3 0	0		3	Total 9 0 0 9 Grand Total 15 0 0 15
Spring - 2nd year Total 6 0	0		6	Grand Total 13 0 0 13
Spring - 2nd year CJC 141 Corrections 3 0 CJC 212 Ethics & Comm Relations 3 0				
Humanities/Fine Arts Elective 3 0			3	CRIMINAL JUSTICE TECHNOLOGY
Summer - 2nd year Total 9 0	0		9	Judicial Court Administrator Certificate Prog (C5518004)
ENG 113 Literature-Based Research 3 0 OR ENG 114 Prof. Research & Reporting 3 0				MAJOR COURSES: SHC CJC 111 Intro to Criminal Justice 3
Total 3 0			_	CIC 131 Criminal Law 3
Fall - 3rd year CJC 132 Court Procedures & Evidence 3 0				CJC 215 Organization & Administration 3 CJC 225 Crisis Intervention 3 Total Credit Hours Required 15
CJC 132 Court Procedures & Evidence 3 0 CJC 160 Terrorism: Underlying Issu 3 0 Program Elective 3 0	0		3	Total Credit Hours Required15
	0		9	Judicial Court Administrator - Cert. Suggested Sequence (C5518004)
Spring - 3rd year CJC 112 Criminology 3 0 CJC 221 Investigative Principles 3 2				Fall - 1st year
Total 6 2	-		-	CJC 111 Intro to Criminal Justice 3 0 0 3 CJC 131 Criminal Law 3 0 0 3
Fall - 4th year	0		2	CJC 131 Criminal Law CJC 132 Court Procedure & Evidence CJC 215 Organization & Administration 3 0 0 3 3 0 0 3
CJC 215 Organization & Administration 3 0 CJC 231 Constitutional Law 3 0				Total 12 0 0 12
Spring - 4th year Total 6 0	0		6	Spring - 1st year CJC 225 Crisis Intervention 3 0 0 3
CJC 151 Intro to Loss Prevention 3 0	0		3	Total 3 0 0 3
CJC 225 Crisis Intervention 3 0 Total 6 0	-		-	Grand Total 15 0 0 15
Grand Total 64 6				
CRIMINAL JUSTICE TECHNOLOGY				CRIMINAL JUSTICE TECHNOLOGY
Law Enforcement Certificate Prog (C5518001	l)			Retail Industrial Security Certificate Prog (C5518003)
MAJOR COURSES: CJC 111 Intro to Criminal Justice		. S	SHC	MAJOR COURSES: SHC CJC 111 Intro to Criminal Justice 3
CJC 121 Law Enforcement Operations. CJC 132 Court Procedure & Evidence.			3	CJC 131
CJC 212 Ethics & Comm Relations CJC 225 Crisis Intervention			3	CIC 215 Organization & Administration 3
Total Credit Hours Required			15	CJC 221 Investigative Principles
Criminal Justice Technology Law Enforcement Cert. (C5518001) Suggested Seq	uei	100	e	Retail Industrial Security - Cert. Suggested Sequence (C551803)
Fall - 1st year				Fall - 1st year CJC 111 Intro to Criminal Justice 3 0 0 3
CJC 132 Court Procedure & Evidence 3 0	0		3	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
10131 6 0	0		6	Total 9 0 0 9
Spring - 1st year CJC 121 Law Enforcement Operations 3 0 CJC 212 Ethics & Comm Relations 3 0	0		3	Spring - 1st year CJC 221 Investigative Principles 3 2 0 4
CJC 225 Crisis Intervention 3 0	0		3	CJC 151 Intro to Loss Prevention 3 0 0 3 Total 6 2 0 7
Total 9 0 Grand Total 15 0	0		9 15	Grand Total 15 2 0 16
				Grand rotal 13 2 0 10

CRIMINAL JUSTICE TECHNOLOGY

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.

CENEDAL EDUCATION COURCES

GENI	ERAL 1	EDUCATION COURSES:	SHC
Englisl	h/Comm	unications:	
ENG	111	Writing and Inquiry	3
ENG	113	Literature-Based Research	3
	OR	ENG 114 Prof Research & Reporting	3
Humar	nities/Fir	ne Arts:	
Electiv	re		3
Natura	1 Science	es/Mathematics:	
MAT	110	Math Measurement & Literacy	3
	OR	MAT 143 Quantitative Literacy	
Social/	Behavio	oral Sciences:	
PSY	150	General Psychology	3
MAIC	DR COU	DSFS:	
CIS	110	Introduction to Computers	3
CJC	111	Intro to Criminal Justice	
CJC	112	Criminology	
CJC	113	Juvenile Justice	
CJC	121	Law Enforcement Operations	3
CJC	131	Criminal Law	3
CJC	132	Court Procedure & Evidence	
CJC	144	Crime Scene Processing	
CJC	146	Trace Evidence	
CJC	212	Ethics & Comm Relations	
CJC	221	Investigative Principles	
CJC	222	Criminalistics	
CJC	231	Constitutional Law	
CJC CJC	245 246	Friction Ridge Analysis	
CJC	250		
CJC	OR	Forensic Biology I	
		CJC 251 Forensic Chemistry I	
PSY	231	Forensic Psychology	3
Crimin	al Inetic	ee Elective	1_1
Crimin		114 Investigative Photography	
	WDI	XXX Work-Based Learning	
Total	Credit l	Hours Required	. 68-72
DEVE	LOPMI	ENTAL COURSE REQUIREMENTS*	
CTS	080	Computing Fundamentals	3
DRE	098	Integrated Reading Writing III	
DMA	DMA	010, DMA 020, DMA 030 (MAT 110)	

^{*}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.

DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)5

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

		Suggested Frogram	Sequence 1	Јау		kExp	
Fall -	· 1st yea	r		Class	Lab	Clin/W	Credit
CJC CJC CJC ENG	111 131 132	Intro to Criminal Justice Criminal Law Court Procedures & Evid Writing and Inquiry	ence	3 3 3 3	$\begin{matrix} 0 \\ 0 \\ 0 \\ 0 \end{matrix}$	0 0 0 0	3 3 3
			Total	12	0	0	12
	ng - 1st y 112 121 221 110	year Criminology Law Enforcement Operat Investigative Principles Introduction to Computer		3 3 3 2	0 0 2 2	0 0 0 0	3 3 4 3
			Total	11 2	2/4	0	13
Sumi ENG MAT	OR	t year Literature-Based Researc ENG 114 Prof. Research Math Measurement & Lit	& Reporting	_	0 0 2	0 0 0	3 3 3
PSY		MAT 143 Quantitative L General Psychology ities/Fine Arts Elective		2 2 3 3	2 0 0	0 0 0	3 3 3 3
			Total	12	2	0	12
Fall - CJC CJC CJC CJC	2nd ye 113 146 231 245 Crimin	ar Juvenile Justice Trace Evidence Constitutional Law Friction Ridge Analysis al Justice Elective		3 2 3 2	0 3 0 3	0 0 0 0	3 3 3 1/4
			Total	10	6	0	13/16
CJC CJC CJC	144 212 246 250 OR CJ	year Criminalistics Crime Scene Processing Ethics & Comm. Relation Adv. Friction Ridge Anal Forensic Biology I C 251 Forensic Chemistry Forensic Psychology	y / I	3 2 3 2 2 2 3 3	0 3 0 3 2 2 0	0 0 0 0 0 0	3 3 3 3 4 3
			Total 1	15/16	10	0	18/19

Grand Total

60/61 20/22 0 68/72

	Criminal Justice Technolo at Evidence Concentration • gested Program Sequence Ev	A5518A	Class	Lab	Clin/WkExp	Credit
Fall - 1st y CJC 111 CJC 131 ENG 111	ear Intro to Criminal Justice Criminal Law Writing and Inquiry		3 3 3	0 0 0	0 0 0	3 3 3
		Total	9	0	0	9
Spring - 1s CJC 121 CIS 110	t year Law Enforcement Operation Introduction to Computers	s Total	3 2 5	0 2 2	0 0 0	3 3 6
Summer - MAT 110 OR PSY 150	Math Measurement & Litera MAT 143 Quantitative Literacy	cy	2 2 3	2 2 0	0 0 0	3 3 3
PS1 130	General Psychology	Total	5	2	0	6
Fall - 2nd CJC 113 CJC 146 Crir	year Juvenile Justice Trace Evidence ninal Justice Elective		3 2	0	0	3 3 1/4
		Total	5	3	0	7/10
Spring - 21 CJC 144 CJC 212 PSY 231		Total	2 3 3 8	3 0 0 3	0 0 0 0	3 3 3
			3 3 3 6	0 0 0 0	0 0 0 0	3 3 3 6
Fall - 3rd y CJC 132	court Procedures & Evidence	e Total	3	0	0	3
Spring - 31 CJC 221 CJC 112	d year Investigative Principles Criminology	Total	3 3 6	2 0 2	0 0 0	4 3 7
Fall - 4th y CJC 231 CJC 245		Total	3 2 5	0 3 3	0 0 0	3 3 6
Spring - 41 CJC 222 CJC 246 CJC 250 OR	Criminalistics Adv. Friction Ridge Analy Forensic Biology I CJC 251 Forensic Chemistry I	Total and Total	3 2 2 3 7/8 59/61	0 3 2 2 5 20/22	0 0 0 0 0	3 3 4 9/10 68/72

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

MAJ	OR COU	JRSES:	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 Required15					

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

Fall - 1st year CJC 111 CJC 146 CJC 114	Intro to Criminal Justice Trace Evidence Investigative Photography		3 2 1	0 3 2	0 0 0	3 3 2
		Total	6	5	0	8
Spring - 1st y	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				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 operatory, 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.

GENI	ERAL I	EDUCATION COURSES: SHC
English	n/Commi	unications:
COM	110	Introduction to Communication
ENG	111	Writing and Inquiry
ENG	114	Prof Research & Reporting. 3
Livo	OR	ENG 112 Writing/Research in the Disc
	OR	ENG 113 Literature-Based Research 3
Humar	nities/Fin	e Arts:
Electiv		3
Natura	l Science	es/Mathematics:
CHM	130	Gen, Org, & Biochemistry3
CHM	130A	Gen, Org, & Biochem Lab
		ral Sciences:
PSY	150	General Psychology
SOC	210	Introduction to Sociology 3
	R COU	
BIO	163	Basic Anat & Physiology5
BIO	175	General Microbiology
DEN	110	Orofacial Anatomy
DEN	111	Infection/Hazard Control
DEN	112	Dental Radiography
DEN	120	Dental Hyg Preclinic Lec
DEN	121	Dental Hygiene Precl Lab
DEN DEN	123 124	Nutrition/Dental Health2
DEN	130	Periodontology
DEN	130	Dental Hygiene Clinic I
DEN	140	Dental Hygiene Chinic I
DEN	140	Dental Hygiene Clinic II
DEN	220	Dental Hygiene Theory III
DEN	221	Dental Hygiene Clinic III
DEN	222	General & Oral Pathology
DEN	223	Dental Pharmacology
DEN	224	Materials and Procedures 2
DEN	230	Dental Hygiene Theory IV
DEN	231	Dental Hygiene Clinic IV
DEN	232	Community Dental Health 3
DEN	233	Professional Development 2
Total (Credit I	Hours Required76
DEVE	LOPME	ENTAL COURSE REQUIREMENTS*
ENG	090	Composition Strategies
DRE	098	Integrated Reading Writing III
		010, DMA 020, DMA 030, DMA 040, DMA 050

*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					
Spring - 1s	t year	Class	Lab	Clin/WkExp	Credit
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
<u>Fall</u> - 1st ye	ear				
BIO 175	General Microbiology	2	2	0	3
COM 110	Introduction to Communication	3	0		3
ENG 114	Prof Research & Reporting (Preferred)	3	0	0	3
OR	ENG 112 Writing/Research in the Disc	3	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 compeleted 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 L	ecture	2	0	0	2	
DEN 121	Dental Hygiene Precl Lab		0	6	0	2	
Hum	nanities/Fine Arts Elective		3	0	0	3	
		Total	9	8	0	12	
Spring - 2r	nd 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 3	
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 y	vear						
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 - 3r	d vear						
DEN 224	Materials and Procedures		1	3	0	2	
DEN 230	Dental Hygiene Theory IV	7	1	0	0		
DEN 231	Dental Hygiene Clinic IV		0	0	-	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 minum 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.

GEN	GENERAL EDUCATION COURSES: SHC							
Englis	h/Commur	nications:						
COM	110	Introduction to Communication	3					
ENG	111	Writing and Inquiry	3					
ENG	113	Literature-Based Research						
	OR	ENG 114 Prof Research & Reporting	3					
Humai	nities/Fine	Arts:						
Electiv			3					
		/Mathematics:						
Electiv			3/4					
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Behaviora/		2					
Electiv			3					
	OR COUR							
EDU	119	Intro to Early Child Educ						
EDU	131	Child, Family, & Commun						
EDU	144	Child Development I	3					
EDU	145	Child Development II	3					
	OR	Add Children I and	2					
	PSY PSY	244 Child Development I						
		= ··						
EDU	146	Child Guidance						
EDU	151	Creative Activities						
EDU EDU	153 221	Health, Safety, & Nutrit						
EDU	234	Children With Exceptional						
EDU	251	Exploration Activities						
EDU	259	Curriculum Planning.	3					
EDU	271	Educational Technology	3					
EDU	280	Language & Literacy Exp						
EDU	284	Early Child Capstone Prac	4					
PSY	150	General Psychology	3					
SOC	210	Introduction to Sociology						
		/e	2/4					
	Students a	re required to take one (1) course from the following:						
	EDU 216 EDU 235							
	EDU 233							
	EDU 261							
	LDC 202	Larry Childhood Hammi II						

(Early Childhood Education cont.)

OTHE	ER REQ	UIRED COURSES:	
ACA	111	College Student Success	1
Total	Credit 1	Hours Required	71/74
DEVE	LOPMI	ENTAL COURSE REOUIREMENTS*	
CTS	080		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 14	3 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 DM	MA 065,

*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.

(MAT 171)......7

Early Childhood Educ Suggested Program Fall - 1st year	cation • A Sequence	55220 Day	Lab	Clin/WkExp	Credit
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 EDU 271 Educational Technology		3 2	0 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		2	0	^	3/4
Social/Behavioral Science Elective		3	0	0	3
	Total	8/9	2/3	0	9/10
Fall - 2nd year					2
ENG 113 Literature-Based Research		3	0	0	3
OR ENG 114 Prof Research & Report EDU 131 Child, Family, & Commun	ing	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	0	0	3		
EDU 234 Infants, Toddlers, & Twos	п	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
Gra	nd 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 151A, 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.

EDU 275

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

EARLY CHILDHOOD EDUCATION Diploma Program (D55220)

GENERA	L EDUCATION COURSES:SHC							
English/Cor ENG 111	English/Communications: ENG 111 Writing and Inquiry							
ENG 113	Literature-Based Research							
OR	ENG 114 Prof Research & Reporting							
MAJOR C	OURSES:							
EDU 119 EDU 131	Intro to Early Child Educ							
EDU 144 Child Development I								
	PSY 244 Child Development I							
EDU 146	Child Guidance 3							
EDU 151	Creative Activities3							
EDU 153	Health, Safety, & Nutrit							
EDU 221	Children with Exceptional							
EDU 259	Curriculum Planning							
EDU 271	Educational Technology							
EDU 280	Language & Literacy Exp							
EDU 284	Early Child Capstone Prac							
OTHER R	EQUIRED COURSES:							
ACA 111	College Student Success							
	Lit Hours Required							
*D 1								

^{*}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)

Fall -	1st vo	ear	Class	Lab	Clin/WkEx	Credit
ACA EDU	111	College Student Success Intro to Early Child Educ	1 4	0	$0 \\ 0$	1 4
*EDU EDU	151	Child Development I Creative Activities	4 3 3 2	0	0	4 3 3 3
EDU	271	Educational Technology	2	2	0	3
		Total	13	2	0	14
Spring			2	0	0	2
*EDU EDU		Child Development II Child Guidance	3	0	0	3
ENG	111	Writing and Inquiry	3	0	0 0 0	3
EDU EDU	153 280	Health, Safety, & Nutriti Language & Literacy Exp	3 3 3 3	0	$0 \\ 0$	3 3 3 3
		Total	15	0	0	15
Fall - 2						
EDU EDU	131	Children With Expensional	3 3 1 3	0	0	3
EDU	221 259	Children With Exceptional Curriculum Planning	3	0	0	3 3 4 3
EDU	284	Early Child Capstone Prac	ĩ	š	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)

MAJO	R COUR	SES:	SHC				
EDU	131	Child, Family, & Commun	3				
EDU	144	Child Development I					
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	235	School-Age Dev & Program					
EDU	275	Effective Teach Train	2				
OTHE	R REQU	IRED COURSES:					
ACA	111	College Student Success	1				
Total Credit Hours Required18							
DEVE	LOPMEN	NTAL COURSE REQUIREMENTS*					
DRE	098 In	stegrated 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.

School-Age Cert. Suggested Sequence (C5522004)

Fall - 1st year						
ACA 111	College Student Succes	SS	1	0	0	1
EDU 131	Child, Family, & Comr	nun	3	0	0	3
*EDU 144	Child Development I		3	0	0	3
EDU 235	School-Age Dev & Pro	gram	3	0	0	3
		Total	10	0	0	10
Spring - 1st ye	ar					
*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.

centers, Early Head Start Programs, and other infant/toddler programs.					
MAJOR COURSES: EDU 119 Intro to Early Child Educ			3	3 3 3	
OTHER REQUIRED COURSES: ACA 111 College Student Success 1 Total Credit Hours Required: 17 DEVELOPMENTAL COURSE REQUIREMENTS* 1 DRE 098 Integrated Reading Writing III 3					
Infant/Toddler Care Cert. Prog, (C55290) Suggested Sequence					
Fall - 1st year ACA 111 College Student Success EDU 119 Intro to Early Childhood Education EDU 131 Child, Family and Community Child Development Elective	1 4 3 3	0 0 0 0	0 0 0 0	1 4 3 3	
Spring - 1st year	11	0	0	11	
EDU 153 Health, Safety and Nutrition EDU 234 Infants, Toddlers, & Twos	3	0	0	3 3	

Total Grand Total

ELECTRICAL SYSTEMS TECHNOLOGY Diploma Program (D35130)

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				
Natura	Natural Sciences/Mathematics:						
MAT	110	Math Measurement & Literacy	3				
	OR	MAT 143 Quantitative Literacy	3				
MAJO	R CO	URSES:					
BPR	111	Print Reading	2				
ELC	112	DC/AC Electricity	5				
ELC	113	Residential Wiring	4				
ELC	115	Industrial Wiring					
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	Total Credit Hours Required36						
DEVE	LOPM	IENTAL COURSE REQUIREMENTS*					
CTS	080	Computing Fundamentals	3				
DRE	098	Integrated Reading Writing III					
DMA	DMA	A 010, DMA 020, DMA 030, (MAT 110)	3				
DMA	DMA DMA 010, DMA 020, DMA 030, DMA, 040, DMA 050, (MAT 143)5						
*Developmental assessment (in all directly managinities) will be required of attribute							

^{*}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 <u>Day</u>

Fall - 1st ye	ear					
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 & Li	teracy	2	2	0	3
OR	MAT 143 Quantitative L	iteracy	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 Inc	quiry	3	0	0	3
		Total	11	19	0	18
		Grand Total	21	39	0	36

Electrical Systems Technology Diploma • D35130 Suggested Prog Seq Evening						
Fall - 1st yea ELC 113 ELC 118 MAT 110 OR	r Residential Wiring National Electrical Code Math Measurement & Li MAT 143 Quantitative L	teracy	2 1 2 2	qe 7 6 2 2 2	0 0 0 Clin/Wk	2 2 3 3
		Total	5	10	0	9
Spring - 1st y BPR 111 ELC 112 ELC 119 ENG 102 OR	Print Reading Print Reading DC/AC Electricity NEC Calculations Applied Communication ENG 111 Writing and In-		1 3 1 3 3	2 6 2 0 0	0 0 0 0	2 5 2 3 3
		Total	8	10	0	12
Fall - 2nd year						
ELC 117 ELN 229	Motors and Controls Industrial Electronics		2 2 0	6 4 0	0 0 0	4 4 0
Spring 2nd	vaar	Total	4	10	0	8
Spring - 2nd ELC 115 ELC 128	Industrial Wiring Intro to PLC		2 2	6	0	4 3
		Total Grand Total	4 21	9 39	0	7 36

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

MAJOR COURSES: S				
BPR	111	Print Reading	2	
ELC	113	Residential Wiring	4	
ELC	115	Industrial Wiring	4	
ELC	118	National Electrical Code		
Total Credit Hours Required12				
DEVELOPMENTAL COURSE REQUIREMENTS* DRE 098 Integrated Reading Writing III				

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			6		
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)

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:							
č							
		Writing and Inquiry					
			3				
	Students are required to take one (1) course from the following:						
1	ENG 112 Writing/Research in the Disc						
	ENG 113	Prof Research & Reporting 3					
	ities/Fine						
Electiv			2				
		/Mathematics:					
	143	Quantitative Literacy	2				
		Sciences:	3				
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			2				
PSY	150	General Psychology	3				
MAJO	R COUR	SES:					
BIO	168	Anatomy and Physiology I	4				
BIO	169	Anatomy and Physiology II					
CIS	110	Introduction to Computers	3				
EDT	110	Neuroscience/Pathol Cond	4				
EDT	111	Laboratory Management.	1				
EDT	111A	EDT Laboratory Basics					
EDT	112	Instrument/Record Methods	3				
EDT	113	Clinical Correlates	2				
EDT	114	Special Procedures					
EDT	115	EDT Laboratory Practice	2				
EDT	116	EDT Clinical Experience					
EDT	118	EDT Laboratory Pract. II					
ELC	111	Intro to Electricity					
MED	118	Medical Law and Ethics					
MED	121	Medical Terminology I					
MED	122	Medical Terminology II	3				
Total (Credit Ho	ours Required	68				
DEVE	DEVELOPMENTAL COURSE REQUIREMENTS*						
		~	2				
CTS DRE	080 098	Computing Fundamentals					
DKE DMA		Integrated Reading Writing III					
DIVIA	DIMA UI	.u, DIVIA 020, DIVIA 030, DIVIA 040, DIVIA 030	J				

^{*}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.

	Electroneurodiagnostic T	echnology •	A453	20	_	
	Suggested Program	Sequence Da	ıy		O Clin/WkExp	
					×Κ	ı
			Class	Р	ij.	edi
Fall - 1st y	ear			Lab	J	Ċ
EDT 110	Neuroscience/Pathol Cond	i	4	0		4
EDT 111	Laboratory Management		1	0	0	
	EDT Laboratory Basics		1	0	0	1 3 3 3 3
ELC 111			2 3 3	2	0	3
ENG 111	Writing and Inquiry		3	0	0	3
MED 121	Medical Terminology I			0	0	3
PSY 150	General Psychology		3	0	0	3
		Total	17	2	0	18
a : 1						
Spring - 1s	2	***	2	2	^	,
BIO 169	Anatomy and Physiology		3 2 3	3	0	4
CIS 110	Introduction to Computers		2	2	0	3
EDT 112	Instrumental/Record Meth	iods	2	0	0	3
EDT 113				0	0	2
EDT 115 ENG 112	EDT Laboratory Practice	Viaa	0	6	0	3 2 2 3
	Writing/Research in the D NG 113 Literature-Based I		3	U	U	3
	NG 114 Prof Research & I					
OK E	and 114 1101 Research & 1	Reporting				
		Total	13	11	0	17
Fall - 2nd y	/ear					
EDT 114			3	0	0	3
EDT 118			0	9	0	3
MAT 143	Quantitative Literacy		2	2	0	3
MED 118	Medical Law and Ethics		2 2 3	0	0	2
MED 122	Medical Terminology II		3	0	0	3 3 2 3 3
Huma	nities/Fine Arts Elective		3	0	0	3
		Total	13	11	0	17
a : •	1					
Spring - 2n			0	0	26	12
EDI 116	EDT Clinical Experience	m . 1	0	0		12
		Total	0	0		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 Literatured-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..

GENI	ERAI	L EDUCATION COURSES:	SHC
Englisl	h/Com	nmunications:	
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
Humar	nities/I	Fine Arts:	
Electiv	re		3
Natura	l Scie	nces/Mathematics:	
MAT	121	Algebra/Trigonometry I	3
Social	Behay	vioral Sciences:	
Electiv			3
		DURSES:	
CSC	134	C++ Programming	3
DFT	117	Technical Drafting	
DFT	151	CAD I	
EGR	110	Intro to Engineering Tech	
ELC	138	DC Circuit Analysis	
ELC	139	· · · · · · · · · · · · · · · · · · ·	
ELC	229		
ELN	131	Analog Electronics I	
ELN	132	Analog Electronics II	
ELN	133	Digital Electronics	
ELN	234	Communication Systems	
ELN	260	Prog Logic Controllers	
MAT	122	Algebra/Trigonometry II	
PHY	131	Physics-Mechanics	
EET Electives			
	ELC	135 Electrical Machines	
	ELC	136 Electrical Machines II	
	ELN	235 Data Communication Sys	
	PHY	ž	
	гпі	133 Physics-Sound & Light4	
		Learning Option : Qualified students may elect to take 2 credit rk-Based Learning in place of ELC 229.	
DI	NT - 4	. Ct. doute alonging to top of Control Access allowed by the life considers	
		e: Students planning to transfer to a 4-year college should consider	
taking l	PHY 1	31 & PHY 133. Please see your advisor.	
Total	Credi	t Hours Required	69
DEVELOPMENTAL COURSE REQUIREMENTS*			
DRE	098		3
DMA		A 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060	
D11111	D.VI	5 5 5 6 5 6 5 6 5 6 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.

	El	ectronics Engineering T Suggested Program	٠,		200	Clin/WkExp	
				SS		××	dit
Fall -	1st year			Class	Lab	Clir	Cre
CSC	134	C++ Programming		2	3	0	3
DFT		Technical Drafting		1	2	0	2
EGR		Intro to Engineering Tec	h	1	2	0	2
ELC		DC Circuit Analysis		3	3	0	4
MAT		Algebra/Trigonometry 1	[2	2	0	3
			Total	9	12	0	14
Spring	g - 1st y	ear	Total		12	U	
DFT	151	CAD I		2	3	0	3
	139	AC Circuit Analysis		3	3	0	4
ELN		Analog Electronics I		3	3		4
ENG		Writing and Inquiry		3	0	0	3
MAT	122	Algebra/Trigonometry 1	II	2	2	0	3
		<i>c c</i> ,					
			Total	13	11	0	17
Summ	er - 1st	2					
ENG	114	Prof Research & Reportin		3	0	0	3
	OR	ENG 112 Writing/Research	th in the Disc	3	0	0	3
	OR	ENG 113 Literature-Based	d Research	3	0	0	3
	Humar	nities/Fine Arts Elective		3	0	0	3
			Total	6	0	0	6
	2nd yea						
ELN		Analog Electronics II		3	3	0	4
ELN		Digital Electronics		3	3	0	4
PHY		Physics-Mechanics		3	2	0	4
	Electro	nics Engineering Technolo	ogy Elective	2	2	0	3
			Total	11	10	0	15
Spring	g - 2nd y	/ear					
ELC	229	Applications Project		1	3	0	2
ELN	234	Communication Systems	S	3	3	0	4
ELN	260	Prog Logic Controllers		3	3	0	4
	Social/	Behavioral Science Elect	tive	3	0	0	3
	Electro	nics Engineering Technolo	ogy 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						
	Suggested 110gram	Sequence Even	mg		WKE	
Fall - 1st year			Class	Lab	Clin/WkExp	5 Credit
EGR 110	Intro to Engineering Te	ch	1	2	0	2
ELC 138 MAT 121	DC Circuit Analysis Algebra/Trigonometry	I	3 2	2	0	3
	8	Total	6	7	0	9
Spring - 1st	year	1000		,		
ELC 139	AC Circuit Analysis	**	3	3	0	4
MAT 122	Algebra/Trigonometry		2	2	0	_
Summer - 1s	et voor	Total	5	5	0	7
	Writing and Inquiry		3	0	0	3
	/Behavioral Science Ele	ctive	-	3	0	0 3
		Total	6	0	0	6
Fall - 2nd ye	ear		1	2	0	2
DFT 117 ELN 131	Technical Drafting Analog Electronics I		1 3	2	0	2
LLIV 131	Andiog Electionies 1	Total	4	5	0	6
Spring - 2nd	l year	Total	7	5	U	U
ELN 132	Analog Electronics II		3	3	0	4
ELN 133	Digital Electronics		3	3	0	4
G 2		Total	6	6	0	8
Summer - 21 ENG 114		ting (Preferred)	3	0	0	3
OR	ENG 112 Writing/Resea		3	0	0	3
OR	ENG 113 Literature-Bas		3	0	0	
Huma	nities/Fine Arts Elective		3	0	0	3
		Total	6	0	0	6
Fall - 3rd ye CSC 134	ar C++ Programming		2	3	0	3
	onics Engineering Techn	ology Elective	2	2	0	3
	2 2	Total	4	5	0	6
Spring - 3rd	year	Total	7	5	U	U
DFT 151	CAD I		2	3	0	3
ELN 260	Prog Logic Controllers		3	3	0	4
Fall - 4th ye	or	Total	5	6	0	7
ELN 234		ns	3	3	0	4
PHY 131	Physics-Mechanics		3	2	0	4
a :		Total	6	5	0	8
Spring - 4th ELC 229	year Applications Project		1	3	0	2
	onics Engineering Tech	nology Elective	3	3	0	4
- • • •	<i>5</i> 11 <i>5</i> 10	Total	4	6	0	6
	,	Grand Total	-			69
	(Jianu iotai	52	43	0	09

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 providés 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	
OR ENG 112 Writing/Research in the Disc	
OR ENG 113 Literature-Based Research	3
Humanities/Fine Arts:	
Elective	3
Natural Sciences/Mathematics:	
	4
BIO 168 Anatomy and Physiology I	4
Social/Behavioral Sciences:	
PSY 150 General Psychology	3
MAJOR COURSES:	
BIO 169 Anatomy and Physiology II	4
CIS 110 Introduction to Computers	3
EMS 110 EMT	
EMS 122 EMS Clinical Practicum I	1
EMS 130 Pharmacology	
EMS 131 Advanced Airway Management	2
EMS 140 Rescue Scene Management	2
EMS 160 Cardiology I	
EMS 220 Cardiology II	
EMS 221 EMS Clinical Practicum II	
EMS 231 EMS Clinical Pract III	
EMS 235 EMS Management	
EMS 240 Patients W/Special Challenges	2
EMS 241 EMS Clinical Practicum IV	
EMS 250 Medical Emergencies	
EMS 260 Trauma Emergencies	2
EMS 270 Life Span Emergencies	3
EMS 285 EMS Capstone	
MED 121 Medical Terminology I	
MED 122 Medical Terminology II	
Total Credit Hours Required	75
DEVELOPMENTAL COURSE REQUIREMENTS*	
CTS 080 Computing Fundamentals	3
DRE 098 Integrated Reading Writing III	
DMA DMA 010, DMA 020, DMA 030, DMA 040	

^{*}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.

- I		Emergency Med Suggested Program		Class	Lab	Clin/WkExp	Credit
	1st ye						
EMS	110	EMT		6	6	0	8
BIO	169	Anatomy and Physiology II		3	3	0	4
MED		Medical Terminoloy I		3	0	0	3
MED	122	Medical Termnology II		3	0	0	3
			Total	15	9	0	18
Ci	. 1-4-						
	y - 1st y			0	0	2	1
EMS	122	EMS Clinical Practicum I		0	0	3	1
EMS	130	Pharmacology		3	3	0	•
EMS	131	Advanced Airway Manageme	ent	1	2	0	2
EMS	140			1	3	0	2
EMS	160	Cardiology I		1	3	0	2
CIS	110	Introduction to Computers	m . 1	2	2	0	3
			Total	8	13	3	14
Summ	er - 1s	t vear					
EMS	220	Cardiology II		2	3	0	3
EMS	221	EMS Clinical Practicum II		0	0	6	2
EMS	240		3	1	2	0	2
PSY	150	General Psychology	•	3	0	0	3
131	130	General Esychology	Total	6	5	6	10
			Total	U	5	U	10
Fall - 1	2nd ye	ar					
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
~ .	_						
	g - 2nd			_			
EMS	235	EMS Management		2	0	0	2
EMS	241	EMS Clinical Practicum IV		0	0	12	•
EMS		EMS Capstone		1	3	0	2
ENG	114	Prof Research & Reporting (P		3	0	0	3
	OR	ENG 112 Writing/Research in		3	0	0	3
	OR	ENG 113 Literature-Based Re	search	3	0	0	3
	Huma	nities/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.
- 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.
- 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 maintiain a 2.0 GPA, in order to successfully complete the program requirements.

ENG	111	Expository Writing	
ENG	112	Argument-Based Research	
	OR	ENG 113 Literature-Based Research	
	OR	ENG 114 Prof Research & Reporting	
BIO	168	Anatomy and Physiology I4	
BIO	169	Anatomy and Physiology II4	
CIS	110	Introduction to Computers	
EMS	235	EMS Management	
EMS	280	EMS Bridging Course	
MED	121	Medical Terminology I	
MED	122	Medical Terminology II	
PSY	150	General Psychology	
		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.

_		L EDUC nmunicat	CATION COURSES: SHC
ENG	111		ting and Inquiry
ENG	114		f Research & Reporting
Human		Fine Arts	:
Electiv		vioral Sci	ences:
			hematics:
MAT 1			th Measurement & Literacy
	OR	MA	AT 143 Quantitative Literacy
MAJO	OR CO	OURSES	:
ACC	120	Pri	n of Financial Accounting4
BUS	110	Intr	oduction to Business
BUS	139	Ent	repreneurship I
BUS	240		siness Ethics
BUS	245		repreneurship II3
BUS	253		dership and Mgt Skills
CIS	110		oduction to Computers
ECO	251		n of Microeconomics
ETR	215		v for Entrepreneurs3
ETR	220		ovation and Creativity
ETR	230		repreneur Marketing
ETR	240		ding for Entrepreneurs
ETR	270		repreneurship Issues
WBL	110	Wo	rld of Work1
Entre	prene	eurship E	Clectives:9
			ip/Work-Based Electives: Students are required to take a
			IC from the following courses. Qualified student may elect
			edit hours of Work-Based learning.
	CC	121	Prin of Managerial Accounting
	US	125	Personal Finance
	US	153	Human Resource Management
	ΓS	130	Spreadsheet
	CO	252	Prin of Macroeconomics
	KT	123	Fundamentals of Selling
	KT	220	Advertising and Sales Promotion
	KT KT	221 223	Consumer Behavior
	LS	112	Customer Service 3
	BL.	XXX	Broker Prelicensing 5 Work-Based Learning 1-4
vv	DL	ЛЛЛ	HOIR-Dased Learning
Total	Cred	it Hours	Required65
			L COURSE REQUIREMENTS*
CTS	080		mputing Fundamentals
DRE	098		egrated Reading Writing III
DMA	DM	A UIU, D	MA 020, DMA 030, (MAT 110)

^{*}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.

DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)......5

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Entrepreneurship • A25490 Suggested Program Sequence Day								
Fall - 1st ye	ear		Class	Lab	J (3		
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	7	3	0	0	3		
ETR 230	Entrepreneur Marketing		3	0	0	3		
		Total	15	0	0	15		
Spring - 1st	t year							
ACC 120		ng	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 & Lite	eracy	2	2	0	3		
OR	MAT 143 Quantitative Lite	eracy	2	2	0	3		
		Total	13	6	0	16		
Fall - 2nd y	vear .							
BUS 240	Business Ethics		3	0	0	3		
ECO 251	Prin of Microeconomics		3	0	0	3		
ENG 114	Prof Research & Reporting	g	3	0	0	3		
Socia	al/Behavioral Science Electi	ive	3	0	0	3		
Entre	preneurship Elective		3	0	0	3		
Entre	preneurship Elective		3	0	0	3		
		Total	18	0	0	18		
Spring - 2n	d year							
BUS 253	Leadership and Mgt Skills		3	0	0	3		
ETR 240	Funding For Entrepreneurs	S	3	0	0	3		
ETR 270	Entrepreneurship Issues		3	0	0	3		
WBL 110	World of Work		1	0	0	1		
Huma	nities/Fine Arts Elective		3	0	0	3		
Entrep	oreneurship Elective		3	0	0	3		
		Total	16	0	0	16		
	Grand	l Total	62	6	0	65		

Entrepreneurship - Cert. Prog. (C25490)

MAJO	DR COU	JRSES:	SHC	
BUS	139	Entrepreneurship I	3	
BUS	245	Entrepreneurship II		
ETR	220	Innovation and Creativity		
ETR	230	Entrepreneur Marketing	3	
Total Credit Hours Required:				

Entrepreneurship Certificate Suggested Day Sequence (C25490)

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

Entrepreneurship - Diploma Program (D25490)

_		EDUCATION COURSES: SHC nunications:
_	111	
Social	Behavi	oral Sciences:
Electiv	e	3
MAJO	R CO	URSES:
ACC	120	Prin of Financial Acet
BUS	110	Introduction to Business
BUS	139	Entrepreneurship I
BUS	245	Entrepreneurship II
BUS	253	Leadership and Mgt Skills
ECO	251	Prin of Microeconomics 3
ETR	215	Law for Entrepreneurs
ETR	220	Innovation and Creativity
ETR	230	Entrepreneur Marketing3
ETR	270	Entrepreneurship Issues
WBL	110	World of Work1
Total (Tradit 1	Hours Required:38
Total	Ji cuit i	itours Required56
DEVE	LOPM	ENTAL COURSE REQUIREMENTS*
CTS	080	Computing Fundamentals
DRE	098	Integrated Reading Writing III
*D		tal assumantable (in aladina all muona assinitae) suill ba manaimad af atadanta

^{*}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 y	ear								
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	d 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.

Suram	ce rating	organizations, and educational organizations.
GENI	ERAL E	DUCATION COURSES: SHC
Englisl	h/Commu	nications:
ENG	111	Writing and Inquiry 3
ENG	114	Prof Research & Reporting
	nities/Fine	
Electiv	re	3
		/Mathematics:
MAT	143	Quantitative Literacy
Social	Rehaviora	al Sciences:
PSY	150	General Psychology
151	OR	SOC 210 Introduction to Sociology
	OK	SOC 210 Illuoduction to Sociology
MAIC	R COUR	CEC.
CIS	110	Introduction to Computers
EPT	140	Emergency Management 3
FIP	120	Intro to Fire Protection
FIP	124	Fire Prevention & Public Ed. 3
FIP	132	Building Construction
FIP	136	Inspections & Codes
FIP	146	Fire Protection Systems 4
FIP	152	Fire Protection Law
FIP	220	Fire Fighting Strategies
FIP	228	Local Govt Finance 3
FIP	229	Fire Dynamics and Combust
FIP	240	Fire Service Supervision
FIP	248	Fire Svc Personnel Adm3
FIP	276	Managing Fire Services
	P Electiv	
		required to select 6/8 credit hours from the following:
FI		=
FI		
FI		
FI		8 8
FI		
FI		
FI	P 230	Chem of Hazardous Mat I 5
ОТНЕ	D DEOI	IRED HOURS:
	CA 111	
7.1		1
m . ·	~	
		ours Required 65/67
DEVE	LOPME	NTAL COURSE REQUIREMENTS*
CTS	080	Computing Fundamentals
DRE	098	Integrated Reading Writing III
DMA	DMA 0	10, DMA 020, DMA 030, DMA 040, DMA 0505

^{*}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 Techn Suggested Program Sec	ology • A55 quence <u>Day</u>			Clin/WkExp	it.
Eo11	1 of woo	r		Class	Lab	Nin/	Credit
ACA	1st yea	College Student Success		1	0	0	1
CIS		Introduction to Computer	re	3	0	0	3
ENG		Writing and Inquiry	13	3	0	0	3
FIP		Intro to Fire Protection		3	0	0	3
FIP	124	Fire Prevention & Public	Ed	3	0	0	3 3 3 3
FIP	132	Building Construction		3	0	0	3
		C	Total	16	0	0	16
Sprin	g - 1st y	/ear					
ÉNG		Prof Research & Reporting	ng	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 Ele	ective		3	0	0	3
			Total	15	0	0	15
Sumr	ner - 1s	t vear					
MAT		Quantitative Literacy		2	2	0	3
PSY		General Psychology		3	0	0	
151	OR	SOC 210 Introduction to	Sociology	3	0	0	3
	Humai	nities/Fine Arts Elective	~	3	0	0	3
			Total	8	2	0	9
Б 11	2 1						
	2nd year			2	2	0	
	146	Fire Protection Systems		3	2	0	4
FIP	220	Fire Fighting Strategies	4	3	0	0	3
FIP FIP	229 276	Fire Dynamics and Comb	oust	3	0	0	3
FIP	276	Managing Fire Services	Total	3 14	2	0	3 13
			Total	14	2	U	13
Sprin	g - 2nd	year					
FÎP	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 El	ective					3/5
			Total	12	0	0	12/14
		Gran	d Total	64	4	0	65/67

Fire Protection Management Technology Certificate Program (C5524004)

MAJOR COURSES: SI					
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:					

Fire Protection Management Certificate Sequence (C5524004)

Fall	- 1st yea	ır		Class	Lab	Clin/WkEx	Credit
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
		2 2	Total	9	0	0	9
Spri	ng - 1st						
FIP	152	Fire Protection Law		3	0	0	3 3 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
		Grar	nd Total	18	0	0	18

Industrial Fire Protection Certificate Program (C5524005)

MAJ	JK COU	JRSES:	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 Cradit Hours Paguired:				

Industrial Fire Protection Certificate Sequence (C5524005)

Fall	- 1st yea	r					
FIP	120	Introduction to Fire Prote	ection	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
Sprii	ng - 1st y	vear					
FΪ́Ρ	140	Industrial Fire Protection	l .	3	0	0	3
FIP	164	OSHA Standards		3	0	0	3
			Total	6	0	0	6
		Grai	nd 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.

GENI	ERAL	EDUC	ATIO	N COURSI	ES:		SHC
Englis	h/Comr	nunica	tions:				
COM	110	Intr	oductio	n to Commu	inication		3
ENG	111	Wri	ting an	d Inquiry			3
ENG	112						3
	OR	ENG	G 113	Literature-I	Based Resea	rch	3
	OR	ENG	G 114	Prof Resear	ch & Repor	ting	3
Humai	nities/F	ine Arts	s:				
Electiv	/e						3
Natura	l Scien						
MAT	110	Mat	h Mea	surement &	Literacy		3
	OR	MA	T 143	Quantitative	e Literacy		3
	OR	MA	T 152	Statistical N	Лethods Ĭ		4
	Behavi	ioral Sc	iences:				2
PSY	150	Ger	ierai Ps	ycnology		•••••	3
	R COU						
BIO	155	Nut	rition				3
BIO	168	Ana	atomy a	and Physiolo	gy I		4
BIO	169						4
HEA	112						2
PED	110						2
PSF	110						4
PSF	111						4
PSF	114	Phy	s Fit T	neory & Inst	r		4
PSF	116	Pvn	it & Ca	re Exer Injui	nes		3
PSF	118	Fitn	iess Fac	cility Mgmt.			4
PSF	120						3
PSF	210						3
PSF	212						3
PSF	218	Life	estyle C	hng & Welli	ness		4
PSY WBL	275 111						3
WBL	111	WO	rk-Base	ed Learning	1		1
PED F	lectives	S					2
	Stude						llowing courses.
	PED	113					
	PED	117					
	PED	118					
	PED	120					
	PED	122					
T-4-1	C 324	TT	•				
							71/72
DEVE	LOPM	ENTAL	COUL	RSE REQUI	REMENTS*		
DRE	098	Integra	ated Re	ading Writing	g III		3
DMA DMA							3
DMA				, DMA 030, 1			5
	(IVIAI	143), (IVIAI I				

^{*}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							
Fall - : ENG HEA PED PSF PSY	111 112 110 110 150	r Writing and Inquiry First Aid & CPR Fit And Well For Life Exercise Science General Psychology Elective		3 1 1 4 3 1	qeT 0 2 2 0 0 0	0 0 0 0 0 Clin/WkExp	3 2 2 4 3 1
			Total	13	4	0	15
Spring ENG BIO BIO PSF PSF	OR OR 168 155 111 116	year Writing/Research in the DENG 113 Literature-Base ENG 114 Prof Research & Anatomy and Physiology Nutrition Fitness & Exer Testing I Pvnt & Care Exer Injuries	d Research & Reporting I	3 3 3 3 2	0 0 0 3 0 2 2	0 0 0 3 0 0	3 3 04 3 4 3
			Total	14	7	0	17
Summ MAT	OR OR	t year Math Measurement & Liter MAT 143 Quantitative Lit MAT 152 Statistical Metl anities/Fine Arts Elective	teracy	2 2 3 3	2 2 2 0	0 0 0 0	3 3 4 3
			Total	5/6	2	0	6/7
Fall - 2 WBL COM BIO PSF PSF	111 110 169 114 120	ar Work-Based Learning I Introduction to Communic Anatomy and Physiology Phys Fit Theory & Instr Group Exer Instruction Elective		0 3 3 4 2 1	0 0 3 0 2 0	10 0 0 0 0 0	1 3 4 4 3 1
			Total	13	5	10	16
Spring PSF PSF PSF PSF PSY	3 - 2nd 118 210 212 218 275	year Fitness Facility Mgmt Personal Training Exercise Programming Lifestyle Chng & Wellnes Health Psychology	ss	4 2 2 3 3	0 2 2 2 0	0 0 0 0	4 3 3 4 3
			Total	14	6	0	17
		Grand Total	1 5	9/60	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 nongovernmental 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.

GENE	ERAL E	EDUCATION COURSES:	SHC
English	h/Comm	unications:	
ENG	111	Writing and Inquiry	3
English	h Electiv	/e	3
]	ENG 11	are required to take one (1) course from the following: Writing/Research in the Disc	
	ENG 11 ENG 11	3 Literature-Based Research 3 4 Prof Research & Reporting 3	
	nities/Fir	ı E	
			2
Electiv	-	0.6.1	3
		es/Mathematics:	
MAT	110	Math Measurement & Literacy	3
	Behavio	oral Sciences:	
PSY	150	General Psychology	3
MAJO	R COUI	RSES:	
BIO	168	Anatomy and Physiology I	4
BIO	169	Anatomy and Physiology II	
BUS	137	Principles of Management	
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	
HIT	211 214	ICD Coding	4
HIT HIT	214	CPT/Other Coding Systems	2
HIT	216	Quality Management	2
HIT	220	Health Informatics & EHRs	2
HIT	222	Prof Practice Exp III	2
HIT	226	Principles of Disease	
HIT	280	Professional Issues	
MED	121	Medical Terminology I	3
MED	122	Medical Terminology II	3
Total (Trodit 4	Jours Required	70_71
		NTAL COURSE REQUIREMENTS*	/0-/1
CTS	080	Computing Fundamentals	2
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 • (A45360) **Suggested Program Sequence Day** Fall - 1st year 3 0 4 BIO 168 Anatomy and Physiology I 9

CIS 110 OR	Introduction to Computers CIS 111 Basic PC Literac		2	2 2	0	3 2
ENG 111	Writing and Inquiry	· y	3	0	0	3
MED 121	Medical Terminology I		3	0	0	3
HIT 110	Fundamentals of HIM		3	Õ	0	3
PSY 150	General Psychology		3	0	0	3
	, ,	Tr. 4 . 1	16/17	_	0	10/10
		Total	16/17	5	0	18/19
Spring - 1st						
BIO 169	<i>y y Cy</i>	II	3	3	0	4
DBA 110	1		2	3	0	3
HIT 112			3	0	0	3
HIT 114		S	2	3	0	3
MED 122	Medical Terminology II		3	0	0	3
		Total	13	9	0	16
Summer - 1	st vear					
	Writing/Research in the D	isc (Preferre	d) 3	0	0	3
OR			<i>(a)</i>	v	Ů	5
	ENG 114 Prof Research &					
	Prof Practice Exp I	reporting	0	0	3	1
MAT 110		eracy	2	2	0	3
	nities Elective	orac y	3	0	0	3
		Tr. 4 . 1	0	2	2	10
		Total	8	2	3	10
Fall - 2nd y	ear					
HIT 210	Healthcare Statistics		2	2	0	3
HIT 211			2	6	0	4
HIT 216	Quality Management		1	3	0	2
HIT 220	Health Informatics & EHI	Rs	1	2	0	2
HIT 226			3	0	0	3
		Total	9	13	0	14
Spring - 2n	d vear					
BUS 137		+	3	0	0	3
HIT 124			0	0	3	1
HIT 222	Prof Practice Exp III		0	0	6	2
HIT 214	CPT/Other Coding System	ne	1	3	0	2
HIT 215	Reimbursement Methodol		1	2	0	2
HIT 280	Professional Issues	ОБУ	2	0	0	2
1111 200	i ioressional issues		_	-	-	
		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.

MAJO	R COU	JRSES:	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 1	Hours Required	17-18
DEVE	LOPM	ENTAL COURSE REQUIREMENTS*	
CTS	080	Computing Fundamentals	3
DRE	098	Integrated Reading Writing III	3
		al coursework (including all prerequisites) will be required to the course indicate a mode for greater professional in	

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	g - 2nd	year					
ĤÎT Ì	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 T	otal	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.

CENT	DAT E	DUCATION COURCES. SHO
		DUCATION COURSES: SHC unications:
ENG	111	Writing and Inquiry
ENG	114	Prof Research & Reporting
	OR	ENG 112 Writing/Research in the Disc
	OR	ENG 113 Literature-Based Research
Humar	nities/Fin	
Electiv	re	3
		s/Mathematics:
MAT	143	Quantitative Literacy
		ral Sciences:
Electiv	-	3
	R COUR	
ACC	120	Prin of Financial Accounting4
ACC	121	Prin of Managerial Accounting4
CIS	110	Introduction to Computers
CTS	130	Spreadsheet
HMT	110	Intro to Healthcare Mgt3
HMT	210	Medical Insurance
HMT	211	Long-Term Care Admin
HMT	212	Mgt of Healthcare Org3
HMT	220	Healthcare Financial Mgmt4
HMT	225	Practice Mgmt Simulation
MED	114	Prof Interac in Heal Care1
MED	121	Medical Terminology I
MED	122	Medical Terminology II
OST	149	Medical Legal Issues3
OST	247	Procedure Coding2
OST	248	Diagnostic Coding
OST	281	Emer Issues in Med Ofc
WBL	XXX	Work-Based Learning2
OTHE	R REOU	IRED COURSES:
ACA	111	College Student Success
Total (Credit H	ours Required68
		NTAL COURSE REQUIREMENTS*
CTS	080	Computing Fundamentals
DRE	098	Integrated Reading Writing III
DMA	DMA 0	10, DMA 020, DMA 030, DMA 040, DMA 0505
		, , , , , , , , , , , , , , , , , , , ,

^{*}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

	re Management Technol uggested Program Seque			•	Clin/WkExp	dit
Fall - 1st year	ſ		Class	Lab	Cli	Credit
ACA 111	College Student Success		1	0	0	1
ACC 120	Prin of Financial Accounti	ng	3	2	0	4
HMT 110 MED 114	Intro to Healthcare Mgt Prof Interac in Heal Care		3	0	0	3
MED 114 MED 121	Medical Terminology I (1	st Eight Wks)	3	0	0	3
MED 122	Medical Terminology II (2	nd Eight Wks)	3	Ö	0	3
		Total	14	2	0	15
Spring - 1st y				_		
ACC121	Prin of Managerial Accoun		3	2	0	4
CIS 110 HMT 210	Introduction to Computers Medical Insurance		2 3	2	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 ENG 111			3	0	0	3
	Writing and Inquiry ties/Fine Arts Elective		3	0	0	3
	Behavioral Science Elective		3	Ö	0	3
		Total	9	0	0	9
Fall - 2nd yea CTS 130	r Spreadsheet		2	2	0	3
ENG 112	Writing/Research in the D	isc (Preferred)	3	0	0	3
OR	ENG 113 Literature-Based	l Research	3	ŏ	0	3 3 3
OR	ENG 114 Pro Research &	1 0	3	0	0	3
	highly encouraged to take l	ENG 114)				
HMT 211	Long-Term Care Admin		3	0	0	3
MAT 143 OST 247	Quantitative Literacy Procedure Coding		2	2	0	3 2
051 247	Troccaure Coaring		_	_		_
Spring - 2nd	vear	Total	11	6	0	15
HMT 212	Mgt. of Healthcare Org		3	0	0	3
HMT 220	Healthcare Financial Mgm		4	0	0	4
HMT 225	Practice Mgmt Simulation		2	2	0	3
OST 248	Diagnostic Coding Worked-Based Learning		1	2	0 20	2
WDL AAA	Worked-Dased Learning	Total	10	4	20	12
				-		
		Grand Total	58	16	20	68
HEAI	THCARE MANAGE	MENT TEC	HN	ΟL	OG	Y
	are Management Cert			_		
MAJOR COU	O .	8		•		SH
HMT 110	Intro to Healthcare Mgt					
HMT 210 HMT 211	Medical Insurance		•••••		•••••	

MAJO	OR CO	URSES:	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
		t Hours Required MENTAL COURSE REQUIREMENTS*	18
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.

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

Fall - 1st year	ar				
HMT 110	Intro to Healthcare Mgt	3	0	0	3
MED 121	Medical Terminology I (1st 8 weeks)	3	0	0	3
	Medical Terminology II (2nd 8 weeks)		0	0	3
Q : 1 :	Total	9	0	0	9
Spring - 1st					
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)

MAJO	R CO	URSES:	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	
OST	149	Medical Legal Issues	
Total (Credit	Hours Required	16
DEVE	LOPM	IENTAL 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

Healthcare Management Technology

Healthcare Receptionist (C2520005) Clin/WkExp **Certificate Program Suggested Sequence** Lab Fall - 1st year 3 HMT 110 0 Intro to Healthcare Mgt Medical Terminology I (1st 8 weeks) 121 0 0 3 MED MED 122 Medical Terminology II (2nd 8 weeks) 0 0 3 9 0 0 9 Total Spring - 1st year MED 114 Prof Interac in Heal Care 0 0 1 HMT 210 Medical Insurance 0 0 3 OST 149 Medical Legal Issues 0 3 Total 0 0 7 Grand Total 16 0 16

HEALTHCARE MANAGEMENT TECHNOLOGY Insurance Certificate Program (C2520004)

MAJO	OR CO	URSES:	SHC
HMT HMT MED	110 210 114	Intro to Healthcare Mgt Medical Insurance.	3
MED MED MED	114 121 122	Prof Interac in Heal Care	3
OST OST	247 248	Procedure Coding Diagnostic Coding	2
Total	Credit	t Hours Required	17
DEVE	LOPM	MENTAL 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.

HealthCare Management Technology Insurance (C2520004) Certificate Program Suggested Sequence

Fall - 1st year HMT 110 Intro to Healthcare Mgt MED 121 Medical Terminology I (1st 8 Wks) MED 122 Medical Terminology II (2nd 8 Wks)	3 3 3	0 0 0	0 0 0	3 3 3
Species 1st and 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.

GENE	ERAL EI	DUCATION COURSES:	SHC
English	h/Commu	inications:	
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
Humar	nities/Fine	e Arts:	
Electiv	e e		3
Natura	1 Science	s/Mathematics:	
MAT	110	Math Measurement & Literacy	3
	OR	MAT 143 Quantitative Literacy	3
Social/	Behavior 1981	ral Sciences:	
Electiv	e e		3
MAJO	R COUR		
HOR	110	Intro to Landscaping	2
HOR	112	Landscane Design I	3
HOR	114	Landscape Construction	3
HOR	116	Landscape Construction Landscape Management I	3
HOR	118	Equipment Op & Maint. Greenhouse Operations	2
HOR	134	Greenhouse Operations	3
HOR	160	Plant Materials I	3
HOR	161	Plant Materials II	
HOR	162	Applied Plant Science	3
HOR	164	Hort Pest Management	3
HOR	166	Soils & Fertilizers	
HOR	168	Plant Propagation	3
HOR	170	Hort Computer Apps	2
HOR HOR	213 215	Landscape Design II	
HOR	265	Landscape Irrigation	د
HOR	273	Hor Mgmt & Marketing	2
TRF	110	Intro Turfgrass Cult & ID.	3
		2	
Hortic	ulture/Tu	rf or Work-Based Learning Elective	4
J	Please ch	oose from the following:	
	HOR 255	5 Interiorscapes	
-	SPA 120		
	ΓRF 120	0 Turigrass Irrigat & Design4	
	ΓRF 12:		
	ΓRF 130 ΓRF 140		
	TRF 140		
	TRF 15		
	TRF 15	2 Landscape Maintenance	
	TRF 210		
	TRF 220		
	TRF 23		
	TRF 25		
	TRF 26	0 Adv Turfgrass Mgmt4	
	WBL XX	XX Work-Based Learning 1-4	
Total (Credit H	ours Required	70

con't

DEVELOPMENTAL COURSE REQUIR					2
DRE 098 Integrated Reading Writi DMA DMA 010, DMA 020, DMA 030,	-				
DMA DMA 010, DMA 020, DMA 030,					
*Developmental coursework (including a					
students whose placement test scores indicate the areas of reading, English, mathematics	s, and computers.	Plea			
Course Descriptions section for prerequisi	ite course informati	ion.		(xp	
T 1. T	1 15240			Clin/WkExp	. =
Horticulture Techno Suggested Program		Class	Lab	Clin	Credit
Fall - 1st year	-	•	•		
TRF 110 Intro Turfgrass Cult & ID HOR 118 Equipment Op & Maint		3	2	0	4
HOR 162 Applied Plant Science HOR 166 Soils & Fertilizers		2	2	0	3
ENG 111 Writing and Inquiry		3	0	0	3
6 . 1.	Total	11	9	0	15
Spring - 1st year MAT 110 Math Measurement & Lit	eracy	2 2	2 2	0	3
OR MAT 143 Quantitative Li HOR 168 Plant Propagation	iteracy	2	2	0	3
HOR 160 Plant Materials I		2 2	2	0	3
HOR 116 Landscape Management I HOR 110 Intro To Landscaping		2	2	0	3 2 3
ENG 114 Prof Research and Reporting	ng (Preferred)	3	0	0	3
OR ENG 112 Writing/Resear OR ENG 113 Literature-Base		3	$0 \\ 0$	0	3
	Total	12	10	0	17
Summer - 1st year HOR 112 Landscape Design I		2	3	0	3
HOR 114 Landscape Construction HOR 161 Plant Materials II		2 2 2	2	0	3
TION 101 Flant Waterials II	Total	6	7	0	9
Fall - 2nd year	101111		·		
HOR 170 Hort Computer Apps HOR 213 Landscape Design II		1 2	3	0	2 3 3 3 3
HOR 215 Landscape Irrigation HOR 134 Greenhouse Operations		2 2 3	2	0	3
HOR 273 Hort. Mgmt. & Marketing		3	0	0	3
Hort/Turf/Work-Based Learning		1.0	0	0	2
Spring - 2nd year	Total	10		0	16
HOR 164 Hort Pest Management HOR 265 Advanced Plant Materials		2	2	0	3 2
Humanities/Fine Arts Elective		3	0	0	3
Hort/Turf/Work-Based Learning Social/Behavioral Science Elective		0	0	0	2 3
	Total	9	4	0	13
	Grand Total	48	39	0	70
HORTICULTURE TECHNOI	LOGY Cert. P	rog	g. (C1	5240)
MAJOR COURSES:					
HOR 110 Intro to Landscaping HOR 118 Equipment Op & Maint					
HOR 134 Greenhouse Operations HOR 164 Hort Pest Management					3
HOR 168 Plant Propagation					3
HOR 215 Landscape Irrigation HOR 255 Interiorscapes					2
Total Credit Hours Required		•••••	•••••	•••••	18
Horticulture Technology Cert	t. Prog. (C15240) S	ug.	Sec	ŀ
Fall - 1st year HOR 110 Intro to Landscaping		1	2	0	2
HOR 118 Equipment Op & Maint HOR 134 Greenhouse Operations		1	2 3 2 2	0	2 2 3 3
HOR 215 Landscape Irrigation		2	$\frac{2}{2}$	0	3
Spring 1st year	Total	6	9	0	10
Spring - 1st year HOR 164 Hort Pest Management		2	2	0	3
HOR 168 Plant Propagation HOR 255 Interiorscapes		2 2 1	2 2 2	0	3 3 2
•	Total	5	6	0	8

HORTICULTURE TECHNOLOGY

Diploma Program (D1524001)
GENERAL EDUCATION COURSES: SHO
English/Communications:
ENG 111 Writing and Inquiry
Natural Sciences/Mathematics:
MAT 110 Math Measurement & Literacy 3 OR MAT 143 Quantitative Literacy 3
MAJOR COURSES:
HOR 110 Intro to Landscaping
HOR 112 Landscape Design I
HOR 114 Landscape Construction
HOR 160 Plant Materials I
HOR 161 Plant Materials II
HOR 162 Applied Plant Science
HOR 164 Hort Pest Management
HOR 166 Soils & Fertilizers
HOR 170 Hort Computer Apps
HOR 213 Landscape Design II
HOR 215 Landscape Irrigation
HOR 265 Advanced Plant Materials
Total Credit Hours Required39
DEVELOPMENTAL COURSE REQUIREMENTS*
DRE 098 Integrated Reading Writing III
DMA DMA 010, DMA 020, DMA 030, (MAT 110)
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, (MAT 143)5
*Device and the second (in Life all an emission) all home in the Catalant
*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 Clab Credit
X
ss ss
in the part of the
Credii Class
Fall - 1st year ENG 111 Writing and Inquiry HOR 162 Applied Plant Science 2 2 0 3

	6 4 14	` ' '	`			,
	Suggested S	Sequence			Clin/WkExp	
P. II. 4			Class	Lab	Clin/V	Credit
Fall - 1st ye	ear		•		^	2
ENG 111	Writing and Inquiry		3	0	0	3
HOR 162	Applied Plant Science		3 2 2 1 2 2	0 2 2 3 3 2	0	3 3 2 3 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 - 1s	t year					
	Math Measurement & Lite		2 2	2	0	3
OR	MAT 143 Quantitative Lit	eracy	2	2	0	3
HOR 110	Intro to Landscaping		1	2 2 2 2	0	2
HOR 160	Plant Materials I		2	2	0	3
HOR 164	Hort Pest Management		2	2	0	2 3 3 2
HOR 265	Advanced Plant Material	S	1	2	0	2
		Total	8	10	0	13
Summer - 1						
HOR 213			2	2	0	3
HOR 114	Landscape Construction		2 2 2	2 2 2	0 0	3 3
HOR 161	Plant Materials II		2	2	0	3
		Total	6	6	0	9
		Grand Total	26	28	0	39
		Grand Total	20	20	U	33

5 6 0 8

Grand Total 11 15 0 18

Total

HORTICULTURE TECHNOLOGY Landscape Management Diploma Program (D1524002)

GENERAL EDUCATION COURSES: SHC
English/Communications:
ENG 111 Writing and Inquiry
Natural Sciences/Mathematics:
MAT 110 Math Measurement & Literacy
OR MAT 143 Quantitative Literacy
MAJOR COURSES:
HOR 110 Intro to Landscaping 2
HOR 114 Landscape Construction
HOR 116 Landscape Management I
HOR 118 Equipment Op & Maint2
HOR 160 Plant Materials I
HOR 161 Plant Materials II
HOR 162 Applied Plant Science
HOR 164 Hort Pest Management
HOR 166 Soils & Fertilizers
HOR 215 Landscape Irrigation 3
HOR 265 Advanced Plant Materials2
Horticulture/Turf or Work-Based Learning Elective
Please choose from the following:
HOR 255 Interiorscapes
SPA 120 Spanish for the Workplace
TRF 120 Turfgrass Irrigat & Design
TRF 125 Turfgrass Computer App
TRF 130 Native Flora ID2
TRF 140 Turfgrass Mgmt Safety
TRF 150 Landscape Drafting2
TRF 151 Intro Landscape Design
TRF 152 Landscape Maintenance
TRF 210 Turfgrass Eqmt Mgmt
TRF 230 Turfgrass Mgmt Apps
TRF 250 Golf/Sport Field Const
TRF 260 Adv Turfgrass Mgmt4
WBL XXX Work-Based Learning1-2
Total Credit Hours Required38
DEVELOPMENTAL COURSE REQUIREMENTS*
DRE 098 Integrated Reading Writing III
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					kExp	,
P. H. 4			Class	Lab	Clin/WkExp	Credit
Fall - 1st ye			2		_	2
ENG 111	Writing and Inquiry		3	0	0	3
HOR 118	Equipment Op & Maint		1	3	0	2
HOR 162 HOR 166	Applied Plant Science Soils & Fertilizers		2	2	$0 \\ 0$	2
HOR 215	Landscape Irrigation		2	2	0	3
MAT 110	Math Measurement & Lite	roov	2	2	0	2
OR	MAT 143 Quantitative Lit		3 1 2 2 2 2 2 2	3 2 2 2 2 2	0	3 2 3 3 3 3
OK	WITH 143 Quantitative Lit	•	_	_	-	-
		Total	12	11	0	17
Spring - 1st	t year					
HOR 110	Intro to Landscaping		1	2 2 2 2 2	0	2
	Landscape Management I		2	2	0	3
	Plant Materials I		2	2	0	3
HOR 164	Hort Pest Management		2 2 2 1	2	0	3
HOR 265		0.771	1	2	0	2 3 3 2 2
Work-	Based Learning or Hort/Tur	f Elective				2
		Total	8	10	0	15
Summer - 1	st vear					
	Landscape Construction		2	2	0	3
HOR 161	Plant Materials II		2 2	2	ŏ	3
		Total	4	4	0	6
		Grand Total	24	25	0	38

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.

GENE	ERAL E	EDUCATION COURSES:	SHC				
English	/Comm	unications:					
ENG	111	Writing and Inquiry	3				
ENG	114	Prof Research & Reporting	3				
	OR		3				
	OR	ENG 113 Literatured-Based Research	3				
Human	ities/Fin	e Arts:					
Electiv	e		3				
Natural	Science	es/Mathematics:					
MAT	110		3				
	OR						
Social/	Behavio	ral Sciences:					
Electiv	e		3				
MAJO	R COU						
BPR	111	Print Reading	2				
CIS	110	Introduction to Computers	3				
	OR	CIS 111 Basic PC Literacy					
ELC	112	DC/AC Electricity	5				
ELC	113	Residential Wiring					
ELC	115	Industrial Wiring	4				
ELC	117	Motors and Controls					
ELC	118	National Electrical Code					
ELC	119	NEC Calculations	2				
HYD	110	Hydraulics/Pneumatics I					
ISC	112	Industrial Safety	2				
MAC	141	Machining Applications I	4				
MAC	142	Machining Applications II	4				
MNT	110	Intro to Maint Procedures					
WLD	112	Basic Welding Processes					
IST Pro	ogram El	lectives	9				
5	Students are required to take a minimum of 9 SHC from the following:						

Studen	is are re-	quired to take a minimum of 7 Site from the following	ıg.
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
OF	3		
WLD	115AC	SMAW (Stick) Plate-AC	.2
WLD	115BC	SMAW (Stick) Plate-BC	
WLD	115CC	SMAW (Stick) Plate-CC	.1

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.

		Industrial Systems Technology • A50 Suggested Program Sequence Day)	c Exp	
Fall - 1	lst year		Class	Lab	Clin/WkExp	Credit
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 y	ear				
ELC	115	Industrial Wiring	2	6	0	4
ELC	117	Motors and Controls	2	6	0	4
ENG	111	Writing and Inquiry	3 2 2	0	0	3
MAT	110	Math Measurement & Literacy	2	2	0	3
	OR	MAT 143 Quantitative Literacy		2	0	3
		IST Program Elective	3	0	0	3
		Total	12	14	0	17
Summ	er - 1 y	ear				
Social	Behavi	oral Science Elective	3	0	0	3
Humar	nities/F	ine Arts Elective	3	0	0	3
		Total	6	0	0	6
Fall - 2	2nd yea	r				
ISC	112	Industrial Safety	2	0	0	2
	141	Machining Applications I	2	6	0	4
MAC		Machining Applications II	2	6	0	4
MNT		Intro to Maint Procedures	1	3	0	2
1,11,1	110	IST Program Elective	3	0	0	3
		Total	10	15	0	15
	- 2nd y			_		_
CIS	111	Basic PC Literacy	1	2	0	2
		IS 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	-	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 46/4	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.

Industrial Systems Technology • A50240 Suggested Program Sequence Evening							
Fall - 1						Clin/WkExp	Credit
	113 118	Residential Wiring National Electrical Code		2	6 2	0	4 2 3 3
MAT	110	Math Measurement & Literacy		2 2	2	0	3
	OR	MAT 143 Quantitative Literacy	-		2	0	
Spring	- 1st	Tot	tal	5	10	0	9
ELC	112	DC/AC Electricity		3	6	0	5
	119 111	NEC Calculations Print Reading		1 1	2	0	2 2
DIK	111	Tot	tal	5	10	0	9
Fall - 2	2nd y		ıaı	3	10	U	,
		Motors and Controls		2	6	0	4
		IST Program Elective	41	3 5	0 6	0	3 7
Spring	- 2nd	Tot d vear	ıaı	3	0	0	/
ELC		Industrial Wiring		2	6	0	4
		IST Program Elective		3	0	0	3
Fall - 3	Rrd ve	Tot	tal	5	6	0	7
ENG 1	111	Writing and Inquiry		3	0	0	3
MNT	110	Intro to Maint Procedures Social/Behavioral Science Ele	ective	1 3	3	0	2 3
			otal	7	3	0	8
Spring	- 3rc		otai	,	5	U	O
CIS	111	Basic PC Literacy	4	1	2	0	2
ENG	OR 114	CIS 110 Introduction to Com Prof Research & Reporting (P	•	2 3	2	0	3
	OR	ENG 112 Writing/Research in		3	0	0	3
	OR	ENG 113 Literature-Based Ro	esearch	3	0	0	3
HYD	110	Hydraulics/Pneumatics I		2	3	0	3
Foll 4	1th 177		otal	6/7	5	0	8/9
Fall - 4 ISC	112	Industrial Safety		2	0	0	2
MAC		Machining Applications I		2	6	0	4
WLD	112	Basic Welding Processes	-4-1	1 5	3	0	2
Spring	- 4th		otal	3	9	0	8
MAC		Machining Applications II		2 3	6	0	4
		IST Program Elective Humanities/Fine Arts Elective	e	3	0	0	3
			otal	8	6	0	10
		Grand		-	55	0	66/67
		Grund		-, -,		•	30,01

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.

ATTD 110	T (D C: (2	,	0	_
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.

SHC

GENERAL EDUCATION COURSES:

English	ı/Commı	unications:
ENG	111	Writing and Inquiry
ENG	114	Prof Research & Reporting
	OR	ENG 113 Literatured-Based Research
I I	.:4: /T:	- A.d.
Electiv	nities/Fin	e Arts:
	-	
MAT	143	ss/Mathematics: Quantitative Literacy
IVIZAI	OR	MAT 171 Precalculus Algebra
Casia1/		ral Sciences:
Electiv		ai Sciences
	c R COUR	
CIS	110	Introduction to Computers
CIS	115	Intro to Prog & Logic
CTS	115	Info Sys Business Concepts
DBA	110	Database Concepts
NET	125	Networking Basics
NET	126	Routing Basics
NET	175	Wireless Technology
NET	225	Routing & Switching I
NET	226	Routing & Switching II
NOS	110	Operating Systems Concepts
NOS	120	Linux/UNIX Single User
NOS	130	Windows Single User
SEC	110	Security Concepts
SEC	150	Secure Communications 3
SEC	160	Secure Administration I
SEC	210	Intrusion Detection
SEC	220	Defense-In-Depth 3
SEC	240	Wireless Security
SEC	289	Security Capstone Project
Work-	Based Le	arning Option: Qualified students may elect to take 3 credit hours
		earning in place of SEC 240.
Total (Credit H	ours Required:72/73
DEVE	LOPME	NTAL COURSE REQUIREMENTS*
CTS	080	Computing Fundamentals3
DRE	098	Integrated Reading Writing III
DMA	DMA 0	10, 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.

DMA 065 (MAT 171)......7

DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050,

	Information Systems Security Suggested Program Sequen		0	Clin/WkExp				
	Suggested Frogram Seque	Class	Lab	N/uII	Credit			
Fall - 1st ye CIS 110 CIS 115 SEC 110 NET 125 DBA 110	ar Introduction to Computers Intro to Prog & Logic Security Concepts Networking Basics Database Concepts	2 2 2 2 1 2	2 3 2 4 3	0 0 0 0 0	3 3 3 3 3			
Spring 1st	Total	9	14	0	15			
Spring - 1st NET 126 CTS 115 NOS 110 ENG 111	Routing Basics Info Sys Business Concepts Operating Systems Concepts Writing and Inquiry Humanities/Fine Arts Elective	1 3 2 3 3	4 0 3 0 0	0 0 0 0	3 3 3 3			
Summer 1	Total	12	7	0	15			
Summer - 1 ENG 114 OR MAT 143 OR	Prof Researach & Reporting ENG 113 Literature-Based Resea	rch 3 2 3	0 0 2 2	0 0 0 0	3 3 4			
	Social/Behavioral Science Electiv	ve 3	0	0	3			
Fall - 2nd ye	Total	8/9	2	0	9/10			
SEC 160 NET 175 NET 225 NET 226 SEC 220	Secure Administration I Wireless Technology Routing & Switching I (1st eight Routing & Switching II (2nd eight Defense-in-Depth Total		2 2 4 4 2 14	0 0 0 0 0	3 3 3 3 15			
Spring - 2nd NOS 120 NOS 130 SEC 150 SEC 210 SEC 240 OR	Linux/UNIX Single User Windows Single User Secure Communications Intrusion Detection Wireless Security WBL Work-Based Learning	2 2 2 2 2 2 0	2 2 2 2 2 0	0 0 0 0 0 30	-			
SEC 289	Security Capstone Project	1	4	0	3			
	Total Grand Total	11 48/49	14 51	30 30	18 72/73			
					, _, , _			
	INFORMATION SYSTEMS rk Security Certificate • Cert.				01)			
MAJOR COL	•	110g. (C 2 0	_,,	SHC			
NET 125 NET 126 SEC 110 SEC 160 SEC 210 SEC 220	Networking Basics Routing Basics Security Concepts Secure Administration I Intrusion Detection Defense-In-Depth				3 3 3 3			
Total Credit	Hours Required:		•••••	•••••	18			
Information Systems Security - Network Security Cert. (C2527001) Suggested Sequence								
Fall - 1st ye	ar		_					
SEC 110 NET 125	Security Concepts Networking Basics	2 1	2 4	0	3			

Fall - 1st ye	ar					
SEC 110	Security Concepts		2	2 4	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 y						
SEC 160		[2	2	0	3
SEC 220	Defense-In-Depth		_	_	-	3
		Total	4	4	0	6
Spring - 2nd	d year Intrusion Detection					
SEC 210	Intrusion Detection		2	2	0	3
		Total	2	2	0	3
	Gra	nd Total	10	16	0	18

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

MAJO	OR COL	URSES:	SHC
NET	125	Networking Basics	
NOS	110	Operating Systems Concepts	3
NOS	120	Linux/UNIX Single User	
NOS	130	Windows Single User	3
SEC	110	Security Concepts	
SEC	150	Secure Communications	
Total	Credit 1	Hours Required	18
0		Information Systems Security	. 10

Operating Security Certificate (C2527003) Suggested Sequence

					'kExp	
Fall -	1st year		Class	Lab	Clin/WkExp	Credit
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	g - 1st y	ear				
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)

MAJ(DR COL	URSES:	SHC
NET	125	Networking Basics	3
NET	175	Wireless Technology	
NOS	110	Operating Systems Concepts	
SEC	110	Security Concepts	3
SEC	150	Secure Communications	
SEC	240	Wireless Security	3
Total	Credit 1	Hours Required	18

Information Systems Security Wireless Security Certificate (C2527004) Suggested Sequence

		`	· ·	-		•	
Fall -	1st year	r					
		Security Concepts		2	2 4	0	3
NET	125	Networking Basics					3
			Total	3	6	0	6
	g - 1st y						
NOS	110	Operating Systems Conc	epts	2	3	0	3
SEC	150	Secure Communications	•	2	2	0	3
			Total	4	3 2 5	0	6
Fall -	2nd yea	ar					
NET	175	Wireless Technology		2	2	0	3
		23	Total	2	2 2	0	3
Spring	- 2nd	vear					
SEC	240	year Wireless Security		2	2	0	3
		J	Total	2	2 2	0	3
		Grand	d Total	11	15	0	18

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

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.

		DUCATION COURSES: SHC mications:
ENG	111	Writing and Inquiry
ENG	114	Prof Research & Reporting
	OR	ENG 112 Writing/Research in the Disc
	OR	ENG 113 Literature-Based Research
Humar	ities/Fine	e Arts:
Electiv	e	3
Natura	l Sciences	s/Mathematics:
MAT		Algebra/Trigonometry I
		al Sciences:
Electiv		
Electiv	C	
MAJO	R COU	RSES:
CSC	134	C++ Programming3
EGR	251	Statics
EGR	252	Strength of Materials
DFT	111	Technical Drafting I
DFT	111A	Technical Drafting I Lab1
DFT	151	CAD I
DFT	153	CAD III
ELN	231	Industrial Controls
MAC	141	Machining Applications 14
MAT	122	Algebra/Trigonometry II3
MEC	161	Manufacturing Processes I
MEC	180	Engineering Materials3
MEC	231	Comp-Aided Manufact I
MEC	265	Fluid Mechanics
MEC	270	Machine Design4
PHY	131	Physics-Mechanics4
PHY	132	Physics-Elec & Magnetism4
WLD	112	Basic Welding Processes2

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

Total (Total Credit Hours Required69				
DEVE	LOPM	IENTAL 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.

Mechanical Engineering Technology • A40320								
Suggested Program Sequence Day	y		Æхį					
Fall - 1st year	Class	Lab	Clin/WkExp	Credit				
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 111ATechnical 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				
	U	U	U	U				
Fall - 2nd year DFT 153 CAD III	2	2	0	2				
EGR 251 Statics	2 2	3	0	3				
ELN 231 Industrial Controls	2	3	0	3				
MAC 141 Machining Applications I	2	6		<i>3</i>				
PHY 131 Physics-Mechanics	3	2	0	4				
PHY 131 Physics-Mechanics	3	2	U	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	
CIS 110 Intro to Computers	
DFT 151 CAD I	
ELC 112 DC/AC Electricity ELC 117 Motors and Controls	
ELC 117 Motors and Controls ELC 128 Intro to PLC	
ELC 213 Instrumentation.	
ELN 229 Industrial Electronics	
HYD 110 Hydraulics/Pneumatics	3
ISC 112 Industrial Safety	
MEC 130 Mechanisms	
MNT 110 Intro to Maintenance	
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	
000 124 CH P	2
CSC 134 C++ Programming CSC 139 Visual BASIC Prog	3
ELC 111 Intro to Electricity	
MAC 141 Machining Applications I	5
MAC 142 Machining Applications II	4
MEC 180 Engineering Materials	3
NET 125 Networking Basics	
PHY 133 Physics-Sound & Light	
WBL 110 World of Work	
WBL XXX Work-Based Learning	
WLD 112 Basic Welding Processes	2
Total Credit Hours Required	66
DEVELOPMENTAL COURSE REQUIREMENTS*	
CTS 080 Computing Fundamentals	
DRE 098 Integrated Reading Writing III	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060)6
WD 1 (1 1/11) 11 11 11 11 11 11 11 11 11 11 11 11	C . 1 .
*Developmental coursework (including all prerequisites) will be required or	
whose placement test scores indicate a need for greater proficiency in the	

reading, English, mathematics, and computers. Please refer to the Course Descriptions

Suggested Program Sequence Day Clin/WkExp (Pending State Approval for Spring 2015) Fall - 1st year 2 2 6 0 1 Blueprint Reading BPR 111 110 112 CIS Intro to Computers 0 ELC DC/AC Electricity 0 ENG 111 0 Writing and Inquiry 0 2 Algebra/Trigonometry I 0 MAT 121 Total 11 12 0 16 Spring - 1st year DFT 151 CA ELC 117 Mo CAD I 3 2 0 Motors and Controls 6 0 ELN 229 **Industrial Electronics** 2 4 0 4 ENG 114 Prof. Research and Reporting 0 0 3 MEC 130 Mechanisms 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 0 6 Total 0 Fall - 2nd year ATR 112 Intro to Automation 3 0 3 0 2 ISC 112 Industrial Safety 0 MNT 110 Intro to Maint Procedures 3 0 2 PHY 131 Physics-Mechanics 3 0 4 Program Elective 0 3 10 11 0 14 Total Spring - 2nd year ELC 213 ELC 128 Instrumentation 0 3 Intro to PLC 0 3 HYD 110 Hydraulics/Pneumatics 3 0 3 Program Elective 2 3 0 3 9 Total 11 0 13 47 49 0 66 Grand Total **Mechatronics Engineering Technology** Suggested Program Sequence Day Certificate Program (C40350) (Pending State Approval for Spring 2015) MAJOR COURSES: SHC ATR 112 FLC112 DC/AC Electricity5 HYD 110 ISC 112 Industrial Safety..... MNT 110 Intro to Maintenance Total Credit Hours Required15 Mechatronics Engineering Technology Suggested Sequence Fall - 1st year ATR 112 3 0 3 Intro to Automation DC/AC Electricity 5 2 2 ELC 112 6 0 2 112 Industrial Safety 0 0 ISC MNT 110 Intro to Maint Procedures 3 0 Total 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

Mechatronics Engineering Technology • A40350

section for prerequisite course information.

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:

GL:	LIWIL.	ED CONTON COCKSES.
English	/Commu	nications:
ENG	111	Writing and Inquiry
ENG	114	Prof Research & Reporting
	OR	ENG 112 Writing/Research in the Disc
	OR	ENG 113 Literature-Based Research
Human	ities/Fine	e Arts
Electiv	e:	3
Natural	Science/	Mathematics:
MAT	110	Math Measurement & Literacy
Social/	Behavior	al Sciences
Electiv	e:	3
MAJO	R COUR	SES:
CIS	110	Introduction to Computers
HMT	110	Introduction to Healthcare Mgt
HMT	211	Long-Term Care Admin3
OST	132	Keyboard Skill Building2
OST	136	Word Processing
OST	140	Internet Comm/Research2
OST	148	Med Coding Billing & Insur3
OST	149	Medical Legal Issues
OST	164	Text Editing Applications
OST	243	Med Office Simulation
OST	247	Procedure Coding2
OST	248	Diagnostic Coding
OST	249	CPC Certification4
OST	281	Emerg Issues in Med Ofc
OST	286	Professional Development
MED	114	Prof Interac in Heal Care1
MED	121	Medical Terminology I
MED	122	Medical Terminology II
WBL	XXX	Word-Based Learning
m . 1 ~	11. 77	
		urs Required66
		Course Requirements:
CTS	080	Computing Fundamentals
DMA), DMA 20, DMA 30
DRE	098	Integrated Reading Writing III
OST	080	Keyboarding Literacy

^{*}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					kExp		
				Class	Lab	Clin/WkExp	Credit
	Fall -	-					
	CIS	110	Introduction to Computers	2 3	2	0	3 3 2
	HMT OST	110 132	Introduction to Healthcare Mgt Keyboard Skill Building	1	0 2	0	2
	OST	136	Word Processing	2	2	0	3
	OST	149	Medical Legal Issues	3	0	0	3
	OST	164	Text Editing Applications	3	0	0	3
			Total	11	6	0	17
	Spring	. 1at V	Waar				
	MED		Prof Interac in Heal Care	1	0	01	
	MED		Medical Terminology I	3	0	0	3
	MED		Medical Terminology II	3	0	0	3
	OST		Med Coding Billing & Insurance	3	0	0	3
	OST	281	Emerg Issues in Med Off	3	0	0	3
			Total	13	0	0	13
	Huma	/Behav nities/I	t Year vioral Science Elective Fine Arts Elective Writing and Inquiry Total	3 3 3 9	0 0 0	0 0 0	3 3 3 9
	Fall - 2	and Ve	ar				
	HMT		Long-Term Care Admin	3	0	0	3
	OST	243	Med Office Simulation	2	2	0	3
	OST	247	Prodedure Coding	1	2	0	2
	OST	248	Diagnostic Coding	1	2	0	2
	OST	286	Professional Development	3	0	0	3
			Total	10	6	0	13
	Spring	g - 2nd	Year				
			Prof Research & Reporting	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	110	Math Measurement & Literacy	2	2	0	3
	OST	140	Internet Comm/Research	1	2	0	2
	OST	249	CPC Certification	3	2	0	4
	WBL	XXX	Work-Based Learning	0	0	20	2
			Total	9	6	0	14
			C 1 T. (-1		1.0	20	

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.

GENI	ERAL I	EDUCATION COURSES: SHC
Englis	h/Comm	unications:
ENG	111	Writing and Inquiry
Social	Behavio	ral Sciences:
Electiv	re	3
MAJC	R COU	RSES:
CIS	110	Introduction to Computers
HMT	110	Intro to Healthcare Mgt
MED	114	Prof Interaction in HC1
MED	121	Medical Terminology I
MED	122	Medical Terminology II
OST	132	Keyboard Skill Building2
OST	136	Word Processing
OST	148	Med Coding Billing & Insu
OST	149	Medical Legal Issues
OST	164	Text Editing Applications
OST	243	Med Office Simulation
OST	247	Procedural Coding
OST	248	Diagnostic Coding
OST	281	Emer Issues in Med Ofc
Total (Credit H	ours Required:43
DEVE	LOPME	NTAL COURSE REQUIREMENTS
CTS	080	Computing Fundamentals
DRE	098	Integrated Reading Writing III
OST	080	Keyboarding Literacy2
*Deve	lonments	al coursework (including all prerequisites) will be required of students

^{*}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 - 1s	st year								
OST 149	Medical Legal Issues	3	0	0	3				
ENG 111	Writing and Inquiry	3	0	0	3				
Social/I	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: SHO	\mathcal{Z}
English/Communications:	
ENG 111 Writing and Inquiry	3
ENG 114 Prof Research & Reporting	
OR ENG 113 Literature-Based Research	3
Humanities/Fine Arts:	
Elective 3	3
Natural Sciences/Mathematics:	
MAT 143 Quantitative Literacy	2
OR MAT 171 Precalculus Algebra 4	1
	r
Social/Behavioral Sciences:	,
Elective 3	,
MAJOR COURSES:	
CIS 110 Introduction to Computers	
CIS 115 Intro to Prog & Logic	
CTS 115 Info Sys Business Concepts	3
CTS 120 Hardware/Software Support	
CTS 286 Network Support	
DBA 110 Database Concepts	3
NET 125 Networking Basics	
NET 126 Routing Basics 3	
NET 225 Routing & Switching I	5
NET 226 Routing & Switching II.	,
NET 240 Network Design	,
NOS 110 Operating System Concepts	,
NOS 120 Linux/UNIX Single User 3	,
NOS 130 Windows Single User	,
NOS 230 Windows Administration I	2
SEC 110 Security Concepts	2
WBL XXX Work-Based Learning	
WDL AAA WOIK-Dasca Ecanning	
Networking Elective	2
Students must select one course from the following:	,
CIS 277 Network Design & Imp	
NET 175 Wireless Technology	
NET 270 Building Scalable Networks 3	
NOS 244 Operating System - AS/400 3 SEC 150 Secure Communications 3	
SEC 150 Secure Communications	
SEC 160 Security Administration	
TILLE IVII D. 1.1	
Total Credit Hours Required71/72	L
DEVELOPMENTAL COURSE REQUIREMENTS*	
CTS 080 Computing Fundamentals	5
DRE 098 Integrated Reading Writing III	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)	
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 (MAT 171)7	1

*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 Suggested Program				kExp	
F-11 1-4			Class	Lab	Clin/WkExp	Credit
Fall - 1st ye		t a	2	3	0	
NOS 110 NET 125	Operating System Concept Networking Basics	ıs	1	<i>3</i>	0	3
SEC 110	Security Concepts		2	2	0	3
CIS 115	Intro to Prog & Logic		2	3	0	3
CIS 113	Introduction to Computers		2	2	0	3
CID 110	introduction to computers		_	_	Ü	5
		Total	9	14	0	15
Spring - 1s	t year					
CTS 120	Hardware/Software Suppo	rt	2	3	0	3
NET 126	Routing Basics		1	4	0	3
NET 240	Network Design		3	0	0	3
NOS 120	\mathcal{E}		2	2	0	3
NOS 130	0		2	2	0	3
Huma	anities/Fine Arts Elective		3	0	0	3
		Total	13	11	0	18
Summer - 1	-		2	0		2
ENG 111	0 1 3		3	0	0	3
MAT 143	(1	2	2	0	3
OR	MAT 171 Precalculus Alg		3	2	0	4
Socia	l/Behavioral Science Election	ve	3	0	0	3
		Total	8/9	2	0	9/10
Fall - 2nd y						
NET 225	Routing & Switching I (F			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
Spring - 2n	d veer	Total	6	13	0	12
CTS 286	Network Support		2	2	0	3
	orking Elective		3	0	0	3
ENG 114	Prof Research & Reporting	7	3	0	0	3
OR		-	3	0	0	3
CTS 115			3	0	0	3
NOS 231	-		2	2	0	3
WBL XXX			0	0	20	-
		Total	13	4	20	17

Grand Total 49/50 44 20 71/72

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

	Certificate Progra	m (C2534001	l)			
MAJOR C	OURSES:					SHC
NET 125	Networking Basics					3
NET 126	Routing Basics					
NET 225 NET 226	Routing & Switching I Routing & Switching II					
	8					
Total Credit	Hours Required		•••••	•••••	•••••	12
Networkin	ng Technology - CCNA Cer	t. (C2534001) St	ıgg	estec	l Se	q. <u>Day</u>
Fall - 1st ye	ar					
NET 125	Networking Basics	T-4-1	1	4	0	3
Spring - 1st	vear	Total	I	4	0	3
	Routing Basics		1	4	0	3
Eall 2nd v		Total	1	4	0	3
Fall - 2nd you	Routing & Switching I (Fi	rst eight weeks)	1	4	0	3
NET 226	Routing & Switching II (Sec			4	0	3
		Total	2	8	0	6
		Grand Total	4	16	0	12
Networking	g Technology - CCNA Cert	. (C2534001) Su	gge	sted	Sec	q. <u>Night</u>
Fall - 1st ye			1		0	2
NET 125 NET 126	Networking Basics Routing Basics		1	4	0	3
NET 120	Routing Dasies	Total	2	8	0	6
Spring - 1st	year					
NET 225	Routing & Switching I (Fi		1	4	0	3
NET 226	Routing & Switching II (Second		1	4	0	3
		Total	2	8	0	6
		Grand Total	4	16	U	12
	NETWORKING T	ECHNOLOG	Ϋ́			
Oper	ating Systems Certifica			2534	100	4)
MAJOR C	OURSES:					SHC
NOS 110 NOS 120	Operating System Concepts					3
NOS 120 NOS 130	Linux/UNIX Single User Windows Single User					3
NOS 230 NOS 244	Windows Administration I					
	Operating System - AS/400 Hours Required					
	•					
-	ng Systems Certificate (C2	334004) - Sugg	esi	eu s	eq	uence
Fall - 1st yea	Operating Systems Concepts		2	3	0	3
1105 110	operating systems concepts	Total	2	3	0	3
Spring - 1st			2	2	0	2
NOS 130 NOS 120	Windows Single User Linux/UNIX Single User		2	2	0	3
		Total	4	4	0	6
Fall - 2nd ye NOS 230	ar Windows Admin I		2	2	0	2
1105 230	windows Adiillii 1	Total	2	2	0	3
Spring - 2nd						
NOS 244	Operating System - AS/400		2	2	0	3
		Total Grand Total	2	2 13	0	3
		Granu Total	10	13	U	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.

GEN	GENERAL EDUCATION COURSES: SHC						
Englis	sh/Com	munications:					
		Writing and Inquiry3					
ENG	113 OR	Literature-Based Research					
Natura	al Scie	nces/Mathematics:					
MAT	110 OR	Math Measurement & Literacy					
-Huma Electi		Fine Arts:3					
Social Electi		vioral Sciences:					
	. •	URSES:					
ACC	120	Prin of Financial Accounting4					
BUS	115	Business Law I					
BUS	260	Business Communication					
CIS	110	Introduction to Computers					
CTS	130	Spreadsheet3					
OST	132	Keyboard Skill Building2					
OST	136	Word Processing					
OST	137	Office Software Applicat					
OST	153	Office Finance Solutions					
OST	164	Text Editing Applications					
OST	165	Adv Text Editing Apps					
OST	181	Intro to Office Systems 3					
OST	184	Records Management 3					
OST	284	Emerging Technologies2					
OST OST	286 289	Professional Development 3 Administrative Office Mgt 3					
WEB		Internet/Web Fundamentals					
WEB		internet/ web rundamentals					
WBL	XXX	Work-Based Learning					
Work	-Based	Learning Option: Qualified students may elect to take 3 credit hours	j				
of Wo	rk-Base	d Learning in place of WEB 110.					
Total	Credit	Hours Required64					
DEVE	LOPN	IENTAL COURSE REQUIREMENTS*					
CTS	080	Computing Fundamentals					
DRE	098	Integrated Reading Writing III					
DMA		. 010, DMA 020, DMA 030 (MAT 110)					
DMA		A 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)5					
OST	080	Keyboarding Literacy					

^{*}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 • A253 Suggested Program Sequence I			kExp	
Fall - 1st ye CIS 110 ENG 111 OST 132 OST 164 OST 136	ear Introduction to Computers Writing and Inquiry Keyboard Skill Building Text Editing Applications Word Processing	Sel D 2 3 1 3 2	qeT 2 0 2 0 2	0 0 0 Clin/WkEx	3 2 3 3 3 3
	Total	11	6	0	14
Spring - 1s OST 184 CTS 130 ENG 113 OR OST 284 OST 137 OST 181	t year Records Management Spreadsheet Literature-Based Research 3 ENG 114 Prof Research & Reporting Emerging Technologies Office Software Applicat Intro to Office Systems	2 2 0 3 1 2 2	2 2 0 0 2 2 2	0 0 3 0 0 0	3 3 2 3 3
	Total	12	2 10	0	17
	Prin of Financial Accounting Business Communication Math Measurement & Literacy 1AT 143 Quantitative Literacy Adv Text Editing Apps	3 2 2 2 3	2 0 2 2 2 0	0 0 0 0 0	4 3 3 3 3 3
	Administrative Office Mgt Internet/Web Fundamentals WBL XXX Work-Based Learning Office Finance Solutions	13 2 2 0 1 3 3 3	6 2 2 0 2 0 0 0	0 0 0 30 0 0 0	16 3 3 2 3 3 3
	Total	14	6	0/30	17
	Grand Total	50	28	0/30	64

OFFICE ADMINISTRATION Diploma Program (D25370)

_		EDUCATION COURSES: nunications:	SHC			
	111		3			
ENG	113					
	OR E	ENG 114 Prof Research & Reporting	3			
MAJO	R COU	RSES:				
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 (Total Credit Hours Required: 37					
DEVE	DEVELOPMENTAL COURSE REQUIREMENTS*					
CTS	080	Computing Fundamentals	3			
DRE	098	Integrated Reading Writing III				
OST	080	Keyboarding Literacy				

^{*}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					
	Suggested Sequence			×Κ.	-
	•	Class	Lab	lin/	Credit
Fall - 1st year	ır	Ö	ŭ	Ö	Ö
CIS 110	Introduction to Computers	2	2	0	3
OST 132	Keyboarding Skill Building	1	2 2 2	0	3 2 3 3
OST 136	Word Processing	2 3 3	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					
OST 181	Intro to Office Systems	2	2 2 2 2 2 2	0	3
OST 184	Records Management	2 2 2 1 2	2	0	3 3 2 3 3
OST 137	Office Software Applicat.	2	2	0	3
OST 153	Office Finance Solutions	1	2	0	2
CTS 130 WEB 110	Spreadsheet Internet/Web Fundamentals	2	2	0	3
WED IIU	internet/ web rundamentals	2	2	U	3
	Total	11	12	0	17
Summer - 1s					
ENG 113		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)

Certificate Progr	ram (C25370	0)			
MAJOR COURSES:					SHC
CIS 110 Introduction to Computer OST 132 Keyboard Skill Building. OST 136 Word Processing OST 164 Text Editing Applications OST 181 Intro to Office Systems					2 3
OST 184 Records Management Total Credit Hours Required:			•••••		3
DEVELOPMENTAL COURSE REQUIRI	EMENTS*				
CTS 080 Computing Fundamental DRE 098 Integrated Reading Writing OST 080 Keyboarding Literacy	ng III				3
*Developmental coursework (including all pr whose placement test scores indicate a need reading, English, mathematics, and computers section for prerequisite course information.	for greater profic	ciency	in tl	he a	reas of
Office Administration -		253	70)		
Fall - 1st year CIS 110 Introduction to Computer OST 132 Keyboarding Skill Buildi OST 136 Word Processing OST 164 Text Editing Applications	s ng	2 1 2 3	2 2 2 0	0 0 0 0	3 2 3 3
	Total	8	6	0	11
Spring - 1st year OST 181 Intro to Office Systems OST 184 Records Management		2 2	2 2	0	3 3
	Total Grand Total	4 12	4 10	0	6 17
OFFICE ADMI Microsoft Office Specia Certificate Progra	list Certificat	e (M	IOS)	
MAJOR COURSES:					SHC
CIS 110 Introduction to Computer CTS 130 Spreadsheet OST 136 Word Processing OST 0ST 0ST 0ST 0ST 0ST 0ST 0ST 0ST 0ST 0					3
Total Credit Hours Required:			•••••	••••	12
DEVELOPMENTAL COURSE REQUIRI	EMENTS*				
CTS 080 Computing Fundamental DRE 098 Integrated Reading Writing	sng III				3
*Developmental coursework (including all pr whose placement test scores indicate a need reading, English, mathematics, and computers section for prerequisite course information.	for greater profic	eiency	in th	ne a	reas of
Office Administration - Mi Certificate (C2537001)				st -	
Fall - 1st year		•	2	•	2

Fall - 1st year						
CIS 110	Introduction to Computers	3	2	3	0	3
OST 136	Word Processing		2	2	0	3
a :		Total	4	5	0	6
Spring - 1s	t 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.

		DUCATION COURS	SES: SHO
_		nications:	
ENG	111		3
ENG	113		earch3
	OR		rch & Reporting
Huma Electiv	nities/Fir ve		3
Natura	l Science	s/Mathematics:	
MAT	143	Quantitative Literacy	3
	OR	MAT 152 Statistical N	Methods I
	OR		s Algebra
		al Sciences:	
Electiv			
MAJO PHO	OR COUI		4
PHO PHO	110		ny
PHO	115	Basic Studio Lighting	
PHO	120	Intermediate Photogra	nphy
PHO	139	Intro to Digital Imagin	ng2
PHO	150	Portfolio Developmer	ıt I
PHO PHO	216 217		aphy
PHO	217	Digital Applications	
PHO	220		phy
PHO	224		n
PHO	226		
PHO	235		phy2
PHO	250	Portfolio Developmen	it IĬ
РНО І	rogram l	lectives	
	Studen	are required to take a	minimum of 1 SHC from the following
			Business3
			ee
			anagement3
			ip I3
			Computers3
	PHO		4
	PHO		m Solving3
	PHO 2		Photo
	WBL		arning
			ariiiig 1/3
	•	RED COURSES:	
ACA	111	College Student Succes	s1
DEVE	LOPME	TAL COURSE REQU	IREMENTS*
CTS	080	Computing Fundament	als
	098	Integrated Reading Wri	ting III
DRE DMA			MA 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.

Photographic Techno Suggested Program	0.			kExp	
T. II. 4		Class	Lab	Clin/WkExp	Credit
Fall - 1st year ACA 111 College Student Success ENG 111 Writing and Inquiry MAT 143 Quantitative Literacy OR MAT 152 Statistical Meth OR MAT 171 Precalculus Alg PHO 110 Fund of Photography		1 3 2 3 3 3	0 0 2 2 2 2 6	0 0 0 0 0	1 3 3 4 4 5
PHO 139 Intro to Digital Imaging	otal 10	1 /11	3 11	0	2 14/15
Spring - 1st year PHO 115 Basic Studio Lighting PHO 120 Intermediate Photography PHO 219 Digital Applications PHO 220 Business of Photography PHO 224 Multimedia Production	otal	2 2 1 3 2	6 4 3 0 3	0 0 0 0 0	4 4 2 3 3 16
Summer - 1st year					
ENG 113 Literature-Based Research OR ENG 114 Prof Research an Humanities/Fine Arts Elect Social/Behavioral Science	d Reporting tive	3 3 3	0 0 0 0	0 0 0 0	3 3 3 3
	otal	9	0	0	9
Fall - 2nd year PHO 150 Portfolio Development I PHO 217 Photojournalism I PHO 226 Portraiture PHO 235 Commercial Photography		3 1 3 2	3 6 3 4	0 0 0 0	4 4 4 4
	otal	9	16	0	16
Spring - 2nd year PHO 113 History of Photography PHO 216 Documentary Photography PHO 250 Portfolio Development II Program Elective	,	3 2 2	0 4 4	0 0 0	3 4 4 1/4
To	otal	7	8	0	12/15
Grand To	otal 45/	46	51	0	67/71
Photographic Technology (Certificate •	(C3	0280)	
MAJOR COURSES:PHO110Fund of PhotographyPHO115Basic Studio LightingPHO139Intro to Digital ImagingPHO219Digital ApplicationsPHO224Multimedia Production					5 4 2
Total Credit Hours Required				•••••	16
Photographic Technology C Suggested Progra			0280)	
Fall - 1st year PHO 110 Fund of Photography PHO 139 Intro to Digital Imaging	Total	3 1 4	6 3 9	0 0 0	5 2 7
Spring - 1st year PHO 219 Digital Applications	Total	1	3	0	2 2
Fall - 2nd year PHO 115 Basic Studio Lighting	Total	2 2	6	0	4 4
Spring - 2nd year PHO 224 Multimedia Production	Total	2 2	3	0	3 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.

CITO

CENEDAL EDUCATION COURSES.

GENE	ERAL E	DUCATION COURSES: SHC
English	n/Commi	unications:
ENG	111	Writing and Inquiry
ENG	114	Prof Research & Reporting
	OR	ENG 112 Writing/Research in the Disc
	OR	ENG 113 Literature-Based Research
Humar	nities/Fin	e Arts:
Electiv	re	3
Natura	1 Science	s/Mathematics:
MAT	143	Quantitative Literacy
Social/	Behavio	ral Sciences:
Electiv	re	3
	R COUR	
BIO	163	Basic Anat & Physiology5
CIS	110	Introduction to Computers
ELC	111	Intro to Electricity
MED	118	Medical Law and Ethics2
MED	121	Medical Terminology I
MED	122	Medical Terminology II
PSG	110	Intro to Polysomnography4
PSG	111	Neuro/Cardiopulmonary A&P4
PSG	112	PSG Fundamentals
PSG	210	Polysomnography I
PSG	211	Polysomnography II
PSG PSG	212 213	Infant/Pediatric PSG
PSG	213	Case Study/Exam Review
		11
	-	IRED COURSES:
ACA		College Student Success
Total (Credit H	ours Required66
DEVE	LOPME	NTAL COURSE REQUIREMENTS*
CTS	080	Computing Fundamentals
DRE	098	Integrated Reading Writing III
DMA	DMA 0	10, DMA 020, DMA 030, DMA 040, DMA 0505
*Daval	onmental	coursework (including all prorequisites) will be required of students

^{*}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 18	PSG Transition	3
PSG 21	0 Polysomnography I	7
PSG 21	1 Polysomnography II	7
*Credit for	r course may be earned by successfully completin	g the
Polysomno	ography Entrance Test.	•
TD 4 1 C	W.H. B. I. I	

t mours recquired	•••••	•••••	•••••	•••••	•••••	
somnography Certificate	• C45650	Sug	ges	ted	Seq	ŀ
st year						
PSG Transition			1	3	3	3
	Total		1	3	3	3
ar						
Polysomnography I			3	2	9	7
5 6 1 5	Total		3	2	9	7
Polysomnography II			2	6	9	7
	Total		2	6	9	7
	Grand Tota	al	6	11	21	17
	somnography Certificate st year PSG Transition	ryear PSG Transition Total Polysomnography I year Polysomnography II Total	somnography Certificate • C45650 Sugst year PSG Transition Total Polysomnography I year Polysomnography II	somnography Certificate • C45650 Sugges st year PSG Transition	somnography Certificate • C45650 Suggested st year PSG Transition Polysomnography I year Polysomnography II Polysomnography II Total Total	somnography Certificate • C45650 Suggested Sequents year PSG Transition Polysomnography I year Polysomnography II Total Polysomnography II Total Total Polysomnography II Total Total

		Polysomnograph Suggested Program				Clin/WkExp	
Fall -	lst year			Class	Lab	Clin/V	Credit
ACA	111	College Student Success		1	0	0	1
ELC	111	Intro to Electricity		3	0	0	1 3 3 4
ENG	111	Writing and Inquiry		3 3 3	0	0	3
MED	121	Medical Terminology I		3	0	0	3
PSG	110	Intro to Polysomnography		3	2	0	4
			Total	13	2	0	14
	g - 1st yea						
CIS	110	Introduction to Computers		2 2 3 4	2	0	3 3 4
MAT		Quantitataive Literacy		2	2	0	3
MED		Medical Terminology II	0 P	3	0	0	3
PSG		Neuro/Cardiopulmonary A	&P		0	0	4
PSG	112	PSG Fundamentals		3	0	0	3
_			Total	14	4	0	16
	er - 1st y						
MED		Medical Law and Ethics		2 3 3 3	0	0	2 3 3 3
ENG	114	Prof Research & Reporting	: d B:	3	0	0	3
	OR	ENG 112 Writing/Research		3	0	0	3
	OR	ENG 113 Literature-Based		3	0	0	3
		Humanities/Fine Arts Electi		-	0	0	
F 11			Total	8	0	0	8
	2nd year	D. 1. 1. 1.		2	_	0	-
PSG	210	Polysomnography I		3	2 2	9	7
PSG	214	PSG Clinical Apps I	E14i	0	0	0	1 3
		Social Behavioral/Science		-	-		-
Carino	2nd v	oor	Total	6	4	9	11
PSG	g - 2nd ye 211	Polysomnography II		2	6	9	7
PSG		Infant/Pediatric PSG		3	2	0	4
PSG	213	Case Study/Exam Review		0	3	0	1
1 50	413	Case Study/Lizarii Review	Total	5	11	9	12
				_	11	-	

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

Grand Total

46 23 18 66

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
- b. Provide official documentation of current Basic Life Support certification
- c. 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:

- **a.** 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
- c. Complete all required general education requirements of the Polysomnography Technology curriculum
- d. Register and complete PSG 112 Fundamentals and PSG 212 Infant/Pediatric PSG classes
- e. 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.

GENE	ERAL	EDUCATION COURSES:	НС			
English/Communications:						
ENG	111	Writing and Inquiry	3			
English	h Elec	tive	3			
]	FNG	nts are required to take one (1) course from the following: 112 Writing/Research in the Disc				
1	ENG	114 Prof Research & Reporting				
Humar	nities/I	Fine Arts:				
Electiv	'e		3			
Natura	l Scie	nces/Mathematics:				
BIO	168	Anatomy and Physiology I				
BIO	169	Anatomy and Physiology II	4			
MAT	143	Quantitative Literacy				
Social/	Behav	vioral Sciences:				
PSY	150	General Psychology	3			
MAJO	R CO	URSES:				
RAD	110	Rad Intro & Patient Care	3			
RAD	111	RAD Procedures I				
RAD	112	RAD Procedures II	4			
RAD	121	Radiographic Imaging I				
RAD	122	Radiographic Imaging II	2			
RAD	131	Radiographic Physics I				
RAD	151	RAD Clinical Ed I				
RAD	161	RAD Clinical Ed II	5			
RAD	171	RAD Clinical Ed III	4			
RAD	211	RAD Procedures III				
RAD	231	Radiographic Physics II				
RAD	241	Radiobiology/Protection				
RAD	245	Image Analysis	2			
RAD	251	RAD Clinical Ed IV	7			
RAD	261	RAD Clinical Ed V				
RAD	271	Radiography Capstone	1			
Total Credit Hours Required76						
DEVE	LOPM	IENTAL COURSE REQUIREMENTS*				
DRE	098	Integrated Reading Writing III	3			
		A 010 DMA 020 DMA 030 DMA 040 DMA 050				

		Radiography Progr Suggested Program		7		Clin/WkExp	ij
E-11	1 at 210	0.5		Class	Lab	Clin	Crec
BIO	1st ye	Anatomy and Physiology	Ţ		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
	g - 1st			_			
BIO ENG	169 112	Anatomy and Physiology Writing/Research in the D		3	3	0	4
ENG	OR	ENG 113 Literature-Base		3	0	0	3
	OR			3	0	0	3
MAT	143	Quantitative Literacy		2	2	0	3
		Humanities/Fine Arts Elec	ctive	3	0	0	3
			Total	11	5	0	13
	2nd ye						
	110			2	3	0	3
RAD		RAD Procedures I		3	3	0	4
RAD	151	RAD Clinical Ed. I	_	0	0	6	2
a :			Total	5	6	6	9
Spring	g - 2nd	l year RAD Procedures II		3	3	0	4
RAD		Radiographic Imaging I		2	3	0	3
RAD		RAD Clinical Ed II		0	0	15	-
			Total	5	6	15	12
Sumn	ner - 21	nd year					
RAD		Radiographic Physics I		1	3	0	2
RAD		Radiographic Imaging II		1	3	0	2
RAD	171	RAD Clinical Ed III		0	0	12	4
			Total	2	6	12	8
	3rd ye			_			_
	211			2	3	0	3
RAD RAD		Radiographic Physics II Radiobiology/Protection		1 2	3	0	2 2
RAD		RAD Clinical Ed IV		0	0	21	
10.12	201	Tu ib cimitui bu i	Total	5	6		14
Spring	g - 3rd	vear	Total	3	U	21	14
RAD		Image Analysis		1	3	0	2
RAD		RAD Clinical Ed V		0	0	21	
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.

^{*}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 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.

		and a contract of contract of	SHC
Englis	h/Comm	nunications:	
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	
Humai	nities/Fir		
Electiv	/e		3
Natura	1 Science	es/Mathematics:	
BIO	168	Anatomy and Physiology I	4
BIO	169	Anatomy and Physiology II	
Social	Rehavio	oral Sciences:	
Electiv		Jul Sciences.	3
Liceti			
MAJO	R COUI	RSES:	
BIO	275	Microbiology	
RCP	110	Intro to Respiratory Care	
RCP	111	Therapeutics/Diagnostics	
RCP	113	RCP Pharmacology	2
RCP	114	C-P Anatomy & Physiology	
RCP	115	C-P Pathophysiology	2
RCP	122	Special Practice Lab	I
RCP	123	Special Practice Lab	<u>I</u>
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	
RCP	246	RCP Clinical Practice V	6
Total (Credit H	Iours Required	72
		-	
DEVE	LOPME	ENTAL 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 Thera				Clin/WkExp	
	Suggested Program	Sequence Da	y		₹	;;
			Class	Lab	Jin/	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 & Physiological C-P Anatomy		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
		Total	1.	O	U	1,
Spring - 1st	vear					
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	П	3	3	0	4
ENG 112	Writing/Research in the I		3	0	0	3
OR	ENG 113 Literature-Base		3	0	0	3
OR	ENG 114 Professional W		3	0	0	3
	e recommended to take EN	•	3	U	U	3
(Students and	c recommended to take Er	(G 11 4)				
		Total	12	6	15	19
Summer - 1s	st 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 ye	ear					
BIO 275	Microbiology		3	3	0	4
RCP 210	Critical Care Concepts		3	3	0	4
RCP 236	RCP Clinical Practice IV	7	0	0	18	6
RCP 214	Neonatal/Peds RC		1	3	0	2
	Humanities/Fine Arts Ele	ctive	3	0	0	3
		Total	10	9	18	19
			-	-	-	
Spring - 2nd	l vear					
RCP 211	Adv Monitoring/Procedu	res	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	e Elective	3	0	0	3
		T-4-1	,	(1.0	1.4
		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.

GENI	ERAL E	EDUCATION COURSES:	SHC
Englis	h/Comm	unications:	
ENG	111	Writing and Inquiry	3
Social	/Behavio	oral Sciences:	
PSY	150	General Psychology	3
MAJO	OR COU	JRSES:	
BIO	163	Basic Anat & Physiology	
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	
SUR	134	Surgical Procedures II	5
SUR	135	SUR Clinical Practice II	
SUR	137	Prof Success Prep	1
OTHE	R REQU	UIRED COURSES:	
		College Student Success	
Total (Credit H	Iours Required	48
DEVE	LOPME	NTAL COURSE REQUIREMENTS*	
CTS	080	Computing Fundamentals	3
DRE	098	. •	
DMA	DMA (010, DMA 020, DMA 030, DMA 040	

^{*}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					kExp	
Fall - 1st ye	ear		Class	Lab	Clin/WkExp	Credit
ENG 111 ACA 111 BIO 163 SUR 110 SUR 111	Writing and Inquiry College Student Success Basic Anat & Physiolog Intro to Surg Tech Periop Patient Care	у	3 1 4 3 5	0 0 2 0 6	0 0 0 0	3 1 5 3 7
	•	Total	16	8	0	19
Spring - 1s BIO 175 PSY 150 SUR 122 SUR 123	t year General Microbiology General Psychology Surgical Procedures I SUR Clinical Practice I		2 3 5 0	2 0 3 0	0 0 0 21	3 3 6 7
C 1	l = 4 =	Total	10	5	21	19
Summer - 1 SUR 135 SUR 134 SUR 137	SUR Clinical Practice II	Total	0 5 1 6	0 0 0	12 0 0 12	4 5 1 10
		Grand Total		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.

-		•
GENI	ERAL E	DUCATION COURSES: SHC
English	n/Comm	unications:
ENG	111	Writing and Inquiry
ENG	114	Prof Research & Reporting
Lito	OR	ENG 112 Writing/Research in the Disc
	OR	ENG 112 Witting/Research in the bise
Llumor	ok nities/Fin	
Electiv		3
	-	es/Mathematics:
MAT	110	Math Measurement & Literacy
	OR	MAT 143 Quantitive Literacy
Social/	Behavio	ral Sciences:
Electiv	re	3
MAJO	R COUF	RSES:
HOR	162	Applied Plant Science3
HOR	166	Soils & Fertilizers3
TRF	110	Intro Turfgrass Cult & ID4
TRF	120	Turfgrass Irrigat & Design4
TRF	125	Turfgrass Computer App
TRF	130	Native Flora ID
TRF	140	Turfgrass Mgmt Safety
TRF	150	Landscape Drafting
TRF	151	Intro Landscape Design
TRF	152	Landscape Maintenance
TRF TRF	210 220	Turfgrass Eqmt Mgmt
TRF	230	Turfgrass Calculations 2
TRF	240	Turfgrass Mgmt Apps
TRF	250	Golf/Sport Field Const
TRF	260	Adv Turfgrass Mgmt
WBL	XXX	Work-Based Learning 5
WDL	717171	Work Bused Ecuring
OTHE	R REQU	URED COURSES:
SPA	120	Spanish for the Workplace
Total (Credit H	ours Required70
DEVE	LOPME	NTAL COURSE REQUIREMENTS*
DRE	098	Integrated Reading Writing III
DMA		010, DMA 020, DMA 030, (MAT 110)
DMA	DMA 0	10, 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 Descrip-

tions section for prerequisite course information.

Turfgrass Management Technology • A15420					
	Suggested Program Sequence D	ay		Exp	
		SS	_	Clin/WkExp	địt
Fall - 1st ye	ear	Class	Lab	Ü	Credit
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
	m . 1	10		0	1.0
O	Total	13	11	0	18
Spring - 1st		2	0	0	2
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	
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 - 1		10		Ü	10
	Work-Based Learning	0	0	20	2
	_				
	Total	0	0	20	2
Fall - 2nd y					
TRF 240	Turfgrass Pest Control	2	2	0	3
TRF 140	Turfgrass Mgmt Safety	2	2	0	
TRF 125	Turfgrass Computer App	1	3	0	
TRF 130	Native Flora ID	1	3	0	
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 - 2n		11	12	10	1 /
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	
	Work-Based Learning	0	0	20	
SPA 120	Spanish for the Workplace	3	0	0	
51 A 120	Social/Behavioral Science Elective	3	0	0	3
	Social Beliavioral Science Licenve	5	J	U	5
	Total	12	8	20	18
	Grand Total	46	41	50	70

TURFGRASS MANAGEMENT TECHNOLOGY Diploma Program (D15420)

	Dipioma Progra	am (D1542	20)
GENERAL	EDUCATION COURSES		SHC
ENG 111	Writing amd Inquiry		3
MAT 110 OR	Math Measurement & Liter MAT 143 Quantitative Lit		
MAJOR CO	•	,	
HOR 166	Soils & Fertilizers		3
TRF 110	Intro Turfgrass Cult & ID		
TRF 120 TRF 130	Turfgrass Irrigat & Design. Native Flora ID		
TRF 140	Turfgrass Mgmt Safety		
TRF 151	Intro Landscape Design		
TRF 210 TRF 220	Turfgrass Eqmt Mgmt Turfgrass Calculations		3
TRF 240	Turfgrass Pest Control		3
TRF 250 WBL XXX	Golf/Sport Field Const Work-Based Learning		
	C		
	Hours Required		41
	IENTAL COURSE REQUIRE	EMENTS*	
DRE 098 MAT DMA	Integrated Reading Writing a 010, DMA 020, DMA 030, (M	; III [AT 110)	3
	1010, DMA 020, DMA 030, (N.		
	ntal coursework (including all pro	· ·	· ` ` · · · · · · · · · · · · · · · · ·
whose placen reading, Engli	nent test scores indicate a need sh, mathematics, and computers. erequisite course information.	for greater prof	ficiency in the areas of
•	•		
Fall - 1st ye ENG 111	ear Writing and Inquiry		3 0 0 3
MAT 110	Math Measurement & Lit	eracv	
OR	MAT 143 Quantitative Li		2 2 0 3 2 2 0 3 2 2 0 3
HOR 166	Soils & Fertilizers	ID.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
TRF 110 TRF 130	Intro to Turfgrass Cult & Native Flora ID	ID	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
TRF 140	Turfgrass Mgmt Safety		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
TRF 240	Turfgrass Pest Control		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	-	Total	15 13 0 21
Spring - 1st			
TRF 120 TRF 151	Turfgrass Irrigat & Design	n	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
TRF 210	Intro Landscape Design 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
Summer - 1	ct vear	Total	9 14 20 18
Summer - 1 WBL XXX	Work-Based Learning		0 0 20 2
		Total	0 0 20 2
	Gran	d Total	24 27 40 41
	O'un	u 10tui	2. 2,
THE	FGRASS MANAGEN	MENT TE	CHNOLOGY
TOR	Certificate Progr		
MAJOR CO	e e	am (C137	SHC
TRF 110	Intro Turfgrass Cult & ID		5110
TRF 120	Turfgrass Irrigat & Design.		4
TRF 140	Turfgrass Mgmt Safety Turfgrass Calculations		
TRF 220 TRF 240	Turfgrass Calculations Turfgrass Pest Control		
	Hours Required		
			20
Fall - 1st ye		••	
TRF 110	Intro to Turfgrass Cult &	ID	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
TRF 140 TRF 240	Turfgrass Mgmt Safety Turfgrass Pest Control		$\begin{array}{cccc}2&2&0&3\\2&2&0&3\end{array}$
	_	Total	7 6 0 10
Spring - 1st	t year		
TRF 120 TRF 220	Turfgrass Irrigat & Designations Turfgrass Calculations	n	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
1101 220	Tarigrass Calculations	Total	4 4 0 6
	Gran	d Total	11 10 0 16

Total 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.

CENI	TRAL E	EDUCATION COURSES: SHC
_		nunications:
ENG	111	Writing and Inquiry
ENG	114	Prof Research & Reporting
	OR	ENG 113 Literature-Based Research
	nities/Fir	
Electiv		3
Natura MAT	l Science	es/Mathematics: Quantitative Literacy
		•
Social Electiv		oral Sciences:
Electiv	/6	
MAJC	R COUI	
CIS	110	Introduction to Computers
CIS	115	Intro to Prog & Logic
CTS	115	Info Sys Business Concept
DBA	110	Database Concepts
NET	125	Networking Basics
NOS SEC	110 110	Security Concepts
WEB	110	Internet/Web Fundamentals 3
WEB	115	Web Markup and Scripting
WEB	120	Intro Internet Multimedia 3
WEB	140	Web Development Tools
WEB	210	Web Design
WEB	230	Implementing Web Serv
WEB	250	Database Driven Websites
WEB	289	Internet Technologies Project
WBL	XXX	Work-Based Learning
WEB	Students BUS 23 CSC 15 MKT 12 MKT 22 SGD 11 SGD 11 WEB 18 WEB 18 WEB 26	11 JAVA Programming 3 10 Principles of Marketing 3 12 Customer Service 3 13 Introduction to SGD 3 12 SGD Design 3 14 3D Modeling 3 16 Active Server Pages 3 16 XML Technology 3 19 E-Commerce Infrastructure 3 19 Ogies Elective 3
		required to take one (1) course from the following:
WEE		
WEE		r r
WEE		
WEE	3 240	Internet Security3
OTHE	R REOU	JIRED COURSES:
ACA	111	College Student Success
Total	Credit H	Jours Required69
		NTAL COURSE REQUIREMENTS*
CTS	080	
DRE	080	Computing Fundamentals
DMA	DMA	010, DMA 020, DMA 030, DMA 040, DMA 0505
	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.

		Web Technologies • A25290 Suggested Program Sequence Day			Exp	
		Suggested Frogram Sequence Day	SSE	P	Clin/WkExp	Credit
	1st year		Class	Lab		
ACA	111	College Student Success	1	0	0	1
CIS CIS	110 115	Introduction to Computers Intro to Prog & Logic	2	2	0	3
DBA	110	Database Concepts	2	3	0	3
WEB		Internet/Web Fundamentals	2	2	0	3
MAT	143	Quantitative Literacy	2	2	0	3
		Total	11	12	0	16
Spring	g - 1st y	vear				
WEB		Web Development Tools	2	2	0	3
CTS	115	Info Sys Business Concepts	3	0	0	3
ENG		Writing and Inquiry	3	0	0	3
NET		Networking Basics	1	4	0	3
WEB	120	Intro Internet Multimedia WEB Technology Program Elective	2	2	0	3
		WEB Teemology Frogram Elective				5
		Total	11	8	0	18
Summ	ier - 1st	tyear				
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 - 2	2nd yea	ar				
SEC	110	Security Concepts	2	2	0	3
WEB		Database Driven Websites	2	2	0	3
WEB		Web Markup and Scripting	2	2	0	3
WEB	230	Implementing Web Serv WEB Technology Program Elective	2	2	0	3
		WEB reclinology Frogram Elective				3
		Total	8	8	0	15
Spring	g - 2nd	year				
WEB		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		Work-Based Learning	0	0	20	
	Social	/Behavioral Science Elective	3	0	0	3
		Total	8	9	20	14
		Grand Total	14	37	20	69

WELDING TECHNOLOGY

Diploma Program (D50420)

WEB TECHNOLOGIES Basic Web Developer • Certificate Program (C25290)

MAJOR COURSES: CSC 151 JAVA Programming WEB 110 Internet/Web Fundamenta WEB 120 Intro Internet Multimedia WEB 140 Web Development Tools.	ıls				3		
Total Credit Hours Required					12		
Basic Web Developer Certificate • C25290 Suggested Sequence							
Fall - 1st year		Class	Lab	Clin/WkExp	Credit		
CSC 151 JAVA Programming WEB 110 Internet/Web Fundamenta	ıls	2 2	3 2	0	3		
	Total	4	5	0	6		
Spring - 1st year WEB 140 Web Development Tools WEB 120 Intro Internet Multimedia		2 2	2 2	0 0	3 3		
	Total	4	4	0	6		
	Grand Total	8	9	0	12		
WEB TECHN Webmaster • Certificate		252	900)1)			
MAJOR COURSES: CTS 115 Info Sys Business Concepts SEC 110 Security Concepts WEB 115 Web Markup and Scripting WEB 210 Web Design					3		
Total Credit Hours Required		•••••			12		
Web Technologies - Webmaste Suggested S				Clin/WkEx 00			
Fall - 1st year		Class	Lab	_	Credit		
SEC 110 Security Concepts WEB 115 Web Markup and Scriptin	g	2	2	0	3		
Suring 1st and	Total	4	4	0	6		
Spring - 1st year CTS 115 Info Sys Business Conce	epts	3	0	0	3		

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 nonconsumable 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.

GENE	GENERAL EDUCATION COURSES: S			
English	h/Commu	inications:		
ENG	102	Applied Communications II		
	OR	ENG 111 Writing and Inquiry3		
Natura	l Science	s/Mathematics:		
MAT	110	Math Measurement & Literacy		
	OR	MAT 143 Quantitative Literacy3		
MAJO	R COUR	SES:		
WLD	110	Cutting Processes		
WLD	115	SMAW (Stick) Plate5		
OR		, ,		
WLD	115AC	SMAW (Stick) Plate-AC 2 SMAW (Stick) Plate-BC 2		
WLD	115BC	SMAW (Stick) Plate-BC		
WLD	115CC	SMAW (Stick) Plate-CC		
WLD	116	SMAW (Stick) Plate/Pipe4		
OR WLD	116AB	SMAW (Stick) Plate/Pipe-AB2		
WLD	116BB	SMAW (Stick) Plate/Pipe-BB 2		
WLD	121	GMAW (MIG) FCAW/Plate4		
WLD	131	GTAW (TIG) Plate4		
WLD	141	Symbols & Specifications		
WLD	143	Welding Metallurgy2		
WLD OR	215	SMAW (Stick) Pipe4		
WLD	215AB	SMAW (Stick) Pipe-AB		
WLD	215BB	SMAW (Stick) Pipe-BB		
WLD	261	Certification Practices 2		
WLD	262	Inspection & Testing		
WBL	110	World of Work		
Total (Credit H	ours Required40		
DEVE		NTAL COURSE REQUIREMENTS*		
DRE	097 Into	egrated Reading Writing II		
DMA	DMA 0	10, DMA 020, DMA 030 (MAT 110)		
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.

2 0 3

Grand Total 9 6 0 12

5 2 0 6

Total

WEB 210 Web Design

Welding Technology - Diploma • D50420 Suggested Program Sequence Evening

Suggested Program Sequence Evening					Exp	
Fall - 1st year WLD 110 WLD 115AC WLD 143	Cutting Processes SMAW (Stick) Plate-At Welding Metallurgy	C	1 1 1	9 Tap 3 3 2	0 0 0 Clin/WkExp	5 Credit
		Total	3	8	0	6
Spring - 1st ye WLD 115BC WLD 115CC WLD 141 MAT 110 OR	sar SMAW (Stick) Plate-BG SMAW (Stick) Plate-CG Symbols & Specificatio Math Measurement & I MAT 143 Quantitative	C ons Literacy	1 0 2 2 2	3 2 2 2	0 0 0 0 0	2 1 3 3 3
		Total	5	10	0	9
Fall - 2nd year WLD 116AB WLD 116BB ENG 102 OR		pe-BB ns II	1 0 3 3	4 5 0 0	0 0 0 0	2 2 3 3
		Total	4	9	0	7
Spring - 2nd y WLD 121 WLD 215AB WLD 215BB WLD 262	GMAW (MIG) FCAW/	3	2 1 0 2	6 4 5 2	0 0 0 0	4 2 2 3
		Total	5	17	0	11
Fall - 3rd year WLD 131 WLD 261 WBL 110	GTAW (TIG) Plate Certification Practices World of Work		2 1 1	6 3 0	0 0 0	4 2 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 OR	115	SMAW (Stick) Plate	5
WLD	115AC	SMAW (Stick) Plate-AC	2
WLD		SMAW (Stick) Plate-BC	
WLD	115CC	SMAW (Stick) Plate-CC	1
WLD	121	GMAW (MIG) FCAW/Plate	4
WLD	131	GTAW (TIG) Plate	4
WLD	141	Symbols & Specifications	
Total Credit Hours Required			18
		-	

Welding Technology - Certificate • C50420 - Suggested Sequence							
Fall - 1st year WLD 110	Cutting Processes		1	2	Λ	2	
	Cutting Processes	C	1	3	0		
WLD 113AC	SMAW (Stick) Plate-A	C	1	3	U	2	
		Total	2	6	0	4	
Spring - 1st ye	ar						
ŴLD 115BČ	SMAW (Stick) Plate-B	C	1	3	0	2	
WLD 115CC	SMAW (Stick) Plate-C	C	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 y	ear						
WLD 141	Symbols & Specification	ons	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 seemless 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;
 - 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 NorthCarolina 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 an other. 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 Compo	esition	(6 SHC)
The following	two English composition courses are required.	(0 2222)
ENG 111	Writing & Inquiry	3
ENG 112	Writing/Research in the Disciplines	
Select three cour	ses from the following from at least two different dis	
Communication	•	orpinios (> 5110)
COM 231	Public Speaking	3
Humanities/Fin		
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/Behavio	ral Sciences	(9 SHC)
	urses from the following from at least two diffe	rent disciplines:
ECO 251	Principles of Microeconomics	
ECO 252	Principles of Macroeconomics	
HIS 111	World Civilizations I	
HIS 112	World Civilizations II	
HIS 131	American History I	
HIS 132	American History II	
POL 120	American Government	
PSY 150	General Psychology	
SOC 210	Introduction to Sociology	
Math	maroadetton to sociology	(3/4 SHC)
	se from the following:	(3/ 1 5110)
MAT 143	Ouantitative Literacy	3
MAT 152	Statistical Methods I	
MAT 171	Precalculus Algebra	
Natural Science		(4 SHC)
	rom the following course(s):	(4 bite)
AST 151	General Astronomy I	3
	ST 151A General Astronomy Lab I	
CHM 151	General Chemistry I	
GEL 111	Introductory Geology	
PHY 110	Conceptual Physics	
	PHY 110A Conceptual Physics Lab	
	1	
	sition	(1 SHC)
	ng course is required:	(1 GHG)
ACA 122	College Transfer Success	(1 SHC)
Total Semest	er 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.

	OUCATION ucation requirement includes study in courses select General Education Transfer Component (UGETC).	(35 SHC) ted from
English Compo	osition	(6 SHC)
	two English composition courses are required.	
ENG 111	Writing & Inquiry	3
ENG 112	Writing/Research in the Disciplines	3
Select two cours	es from the following from at least two different disciplin	nes (6 SHC)
Communicatio		
COM 231	Public Speaking	3
Humanities/Fir		
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	
PHI 215	Philosophical Issues	3
PHI 240	Introduction to Ethics	3
Social/Behavio	oral Sciences	(6 SHC)
	rses from the following from at least two different of	
ECO 251	Principles of Microeconomics	
ECO 252	Principles of Macroeconomics	
HIS 111	World Civilizations I	
HIS 112	World Civilizations II	
HIS 131	American History I	
HIS 132	American History II	
POL 120	American Government	
PSY 150	General Psychology	
SOC 210	Introduction to Sociology	
Math	introduction to Sociology	(8 SHC)
	rses from the following:	(0 5110)
MAT 171	Precalculus Algebra	4
MAT 172	Pre-calculus Trigonometry	
MAT 263	Brief Calculus	
MAT 271	Calculus I	
Natural Science		(8 SHC)
	rom the following course(s):	(6 5110)
AST 151	General Astronomy I	3
	AST 151A General Astronomy Lab I	1
BIO 111	General Biology I	
210 111	BIO 112 General Biology II	
CHM 151	General Chemistry I	
and	CHM 152 General Chemistry II	4
GEL 111	Introductory Geology	
PHY 110	Conceptual Physics	
and	PHY 110A Conceptual Physics Lab	
PHY 151		
and	College Physics IPHY 152 College Physics II	
*****	• •	
PHY 251 and	General Physics I	4
and	FILE 232 General Physics II	4
Academic Tran	sition	(1SHC)
The following	course is required:	. ,
ACA 122	College Transfer Success	1

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.

35

Total Semester Hours Credit (SHC) in Pathway

CAREER TECHNICAL EDUCATION PATHWAY

Advertising and Graphic Design • Pathway (C30100P)

CORE	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 C	redit H	ours Required	17

Air Conditioning, Heating, and Refrigeration Technology Pathway (D35100P)

GENER	RAL E	DUCATION COURSES (6 SHC)	SHC
ENG	102	Applied Communications II	3
MAT	110	Mathematical Measurement and Literacy	3
CORE	COUR	RSES (20 SHC)	
AHR	110	Intro to Refrigeration	5
AHR	111	HVACR Electricity	
AHR	112	Heating Technology	
AHR	113	Comfort Cooling	4
AHR	114	Heat Pump Technology	
OTHER	R MAJ	OR 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	
Total Ci	redit F	Hours Required	36
DEVEL		ENTAL COURSE REQUIREMENTS*	
CTS	080	Computing Fundamentals	3
DRE	097	Integrated Reading Writing II	
MAT	DMA	A 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	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
DEVE	LOPM	IENTAL 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)

			,
GENE	RAL ED	UCATION COURSES (6 SHC)	SHC
English	ı/Commı	unication:	
ENG	111	Writing and Inquiry	3
Natura	l Science	e/Mathematics:	
MAT	110	Mathematical Measurement and Literacy	3
CORE	COURS	ES (18 SHC)	
AUT	141	Suspension & Steering Sys	3
AUT	151	Brake Systems	
AUT	181	Engine Performance 1	3
TRN	110	Intro to Transport Tech	
TRN	120	Basic TraspElectricity	5
TRN	140	Transp Climate Control	2
OTHE	R MAJO	R COURSES (21 SHC)	
AUT	141A	Suspension & Steering Lab	1
AUT	151A	Brake Systems Lab	
AUT	116	Engine Repair	3
AUT	116A	Engine Repair Lab	1
AUT	163	Adv Auto Electricity	
AUT	181A	Engine Performance 1 Lab	
AUT	183	Engine Performance 2	
AUT	221	Auto Transm/Transaxles	
AUT	221A	Auto Transm/Transax Lab	
AUT	231	Man Trans/Axles/Drtrains	3
		TRED COURSES (3 SHC)	
AUT	231A	Man Trans/Ax/Drtrains Lab	
TRN	140A	Transp Climate Cont Lab	2
Total C	redit Ho	urs Required	48
		1	
	LOPME	NTAL COURSE REQUIREMENTS*	
CTS	080	Computing Fundamentals	3
DRE	098	Integrated Reading Writing III	
MAT	DMA 0	10, 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)				
	141	` '	2	
AUT 1	141	Suspension & Steering Sys	د.	
AUT 1	151	Brake Systems	.3	
TRN 1	110	Intro to Transport Tech	.2	
TRN 1	120	Basic TraspElectricity	.5	
OTHER N	MAJOI	R COURSES (2 SHC)		
AUT 1	141A	Suspension & Steering Lab	.1	
AUT 1	151A	Brake Systems Lab	.1	
Total Cree	dit Hou	ırs Required	.15	
DEVELO	PMEN	ITAL COURSE REQUIREMENTS*		
CTS 08	80	Computing Fundamentals	.3	
DRE 09	97	Integrated Reading Writing II		
MAT D	MA 01	0, DMA 020, DMA 030		

^{*}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)

GENE	RAL ED	UCATION COURSES (6 SHC)	SHC
ENG	111	Writing and Inquiry	3
MAT	121	Algebra/Trigonometry I	3
CORE	COURS	ES (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
OTHE	R MAJO	R COURSES (18 SHC)	
MAC	132	Blueprint Reading/Mach. II	
MAC	151	Machining Calculations	
MAC	222	Advanced CNC Turning	2
MAC	224	Advanced CNC Milling	2
MAC	231	CAM: CNC Turning	3
MAC	232	CAM: CNC Milling	3
OTHE	R REQU	IRED COURSES (2 SHC)	
CIS	111	Basic PC Literacy	2
Total C	Credit Ho	urs Required	38
DELE	, op. æ	THE COURSE DECLURE OF STREET	
		NTAL COURSE REQUIREMENTS*	
CTS	080	Computing Fundamentals	
DRE	098	Integrated Reading Writing III	
MAT		0, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060	
		coursework (including all prerequisites) will be required tement test scores indicate a need for greater proficiency	
		English, mathematics, and computers. Please refer to the C	
		tion for prerequisite course information.	Juise
_ coerry		F	

Computer-Integrated Machining Technology Pathway (C50210P)

CORE COURS	SES (12 SHC)				
MAC 131	Blueprint Reading/Mach. I2				
MAC 141	Machining Applications I4				
MAC 142	Machining Applications II4				
MEC 110	Intro to CAD/CAM				
OTHER MAJO	OR COURSES (6 SHC)				
MAC 122	CNC Turning2				
MAC 124					
MAC 151	Machining Calculations2				
Total Credit Ho	ours Required18				
DEVELOPME	NTAL COURSE REQUIREMENTS*				
CTS 080	Computing Fundamentals				
DRE 097	Integrated Reading Writing II				
MAT DMA 0	10, DMA 020, DMA 0303				
	l coursework (including all prerequisites) will be required of stu-				
dents 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)

Cosmetology • Pathway (D55140P)						
GENEI	RAL EDU	CATION COURSES (6 SHC) SHC				
ENG	102	Applied Communications IÍ				
PSY	150	General Psychology				
CORE	CORE COURSES (32 SHC)					
COS OR	111	Cosmetology Concepts I4				
COS	111AB	Cosmetology Concepts I-AB2				
COS	111BB	Cosmetology Concepts I-BB				
COS OR	112	Salon I				
COS	112AB	Salon I-AB4				
COS	112BB	Salon I-BB4				
COS OR	113	Cosmetology Concepts II4				
COS	113AB	Cosmetology Concepts II-AB				
COS	113BB	Cosmetology Concepts II-BB				
COS OR	114	Salon II				
COS	114AB	Salon II-AB4				
COS	114BB	Salon II-BB4				
COS OR	115	Cosmetology Concepts III4				
COS	115AB	Cosmetology Concepts III-AB2				
COS	115BB	Cosmetology Concepts III-BB				
COS OR	116	Salon III4				
COS	116AB	Salon III-AB				
COS	116BB	Salon III-BB				
OTHE	R MAJOR	COURSES (9 SHC)				
COS OR	117	Cosmetology Concepts IV				
COS	117AB	Cosmetology Concepts IV-AB1				
COS	117BB	Cosmetology Concepts IV-BB1				
COS	118	Salon IV7				
Total Credit Hours Required47						
DRE *Develor dents wareas of	098 opmental co whose place reading, E	IAL COURSE REQUIREMENTS* Integrated Reading Writing III				

Criminal Justice Technology Law Enforcement Pathway (C55180P)

CORE	COURS	ES (12 SHC)	SHC			
CJC	111	Intro to Criminal Justice	3			
	113	Juvenile Justice				
CJC	131	Criminal Law	3			
CJC	212	Ethics & Comm Relations	3			
OTHER	REQU	TRED COURSES (3 SHC)				
CJC	121	Law Enforcement Operations	3			
Total C	Total Credit Hours Required					

Criminal Justice Technology-Latent Evidence Concentration Crime Scene Pathway (C5518AP)

CORE	COUR	SES (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
OTHE	R REQ	UIRED COURSES (2 SHC)	
CJC	114	Investigative Photography	2
Total (Credit H	fours Required	18

Electrical Systems Technology Pathway (C35220P1)	Horticulture Technology Pathway (C15240P3)
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	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
Electrical Systems Technology Pathway (C352202P2)	
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) 4 ELC 115 Industrial Wiring 4 Total Credit Hours Required 17 Health Information Technology Pathway (C45360P)	Networking Security Certificate Pathway (C25270P1)
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 CIS 110 Introduction to Computers 3 Total Credit Hours Required 15	Information Systems Security Operating Systems Security Certificate Pathway (C25270P3) CORE COURSES (18 SHC) SHC NET 125 Networking Basics
Healthcare Management Technology Receptionist Pathway (C25200P)	Total Credit Hours Required
CORE COURSES (15 SHC) HMT 110 Intro to Healthcare Mgt	Information Systems Security Wireless Security Certificate Pathway (C25270P4)
Horticulture Technology Pathway (C15240P1)	Cisco Certified Network Certificate Pathway (C25340P1)
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) 3 HOR 215 Landscape Irrigation 3 Total Credit Hours Required 15	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
	Operating Systems Certificate Pathway (C25340P4)
Horticulture Technology Pathway (C15240P2) CORE COURSES (12 SHC) SHC HOR 112	CORE COURSES (12 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)

		• ` ` /			
GENE	RAL EI	DUCATION COURSES (6 SHC) SHO	С		
Englisl	English/Communication:				
ENG	111	Writing and Inquiry3			
ENG	113	Literature-Based Research			
CORE	COURS	SES (12 SHC)			
OST	136	Word Processing			
OST	164	Text Editing Applications			
OST	181	Introduction to Office Systems			
OST	184	Records Management			
OTHE	R MAJO	OR COURSES (19 SHC)			
BUS	115	Business Law			
CIS	110	Introduction to Computers			
CTS	130	Spreadsheet Software			
OST	132	Keyboard Skill Building2			
OST	137	Office Software Applications			
OST	153	Office Finance Solutions			
WEB	110	Internet/Web Fundamentals			
Total C	Credit Ho	ours Required	37		
DEVE	LOPME	ENTAL COURSE REQUIREMENTS*			
CTS	080	Computing Fundamentals			
DRE	098	Integrated Reading Writing III			
OST	080	Keyboarding Literacy			
*Devel	onmenta	I coursework (including all prerequisites) will be required of stud			

*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	COURS	SES (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
OTHE	R MAJO	OR COURSES (5 SHC)	
CIS	110	Introduction to Computers	3
OST	132	Keyboard Skill Building	2
Total C	Credit Ho	ours Required	17
DEVE	I OPME	NTAL COURSE REQUIREMENTS*	
			2
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	COUR	SES (14 SHC)	SHC		
PHO	110	Fund of Photography	5		
PHO	115	Basic Studio Lighting	4		
PHO	139	Intro to Digital Imaging			
PHO	224	Multimedia Production	3		
Total Credit Hours Required					
DEVE	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	SHC					
PHO	110	Fund of Photography	5			
PHO	115	Basic Studio Lighting	4			
PHO	139	Intro to Digital Imaging				
PHO	224	Multimedia Production	3			
OTHER MAJOR COURSES (4 SHC)						
PHO	120	Intermediate Photography	4			
Total Credit Hours Required						
DEVEI	OPME	NTAL COURSE REQUIREMENTS*				
DRE	098	Integrated Reading Writing III	3			
*Devel	onmenta	d coursework (including all prerequisites) will be re	anired o			

*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)						
PHO	110	Fund of Photography	5			
PHO	115	Basic Studio Lighting	4			
PHO	139	Intro to Digital Imaging	2			
PHO	224	Multimedia Production				
OTHER MAJOR COURSES (2 SHC)						
PHO	219	Digital Applications	2			
Total Credit Hours Required						
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						

### Welding Technology Pathway (D50420P)

Course Descriptions section for prerequisite course information.

GENERAL EDUCATION COURSES (6 SHC) SHC							
ENG MAT	102 110	Applied Communications II	3				
	· · · · · · · · · · · · · · · · · · ·						
WLD	COURS 110	SES (18 SHC)	2				
		Cutting Processes					
WLD	115	SMAW (Stick) Plate	5				
OR	WLD	115AC SMAW (Stick) Plate-AC15BC SMAW (Stick) Plate-BC	2				
	WLD	115CC SMAW (Stick) Plate-CC	1				
WLD	121	GMAW (MIG) FCAW/Plate					
WLD	131	GTAW (TIG) Plate	4				
WLD	141	Symbols & Specifications	3				
OTHE	R MAJO	OR COURSES (16 SHC)					
WLD	116	SMAW (Stick) Plate/Pipe					
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					
	WLD	215BB SMAW (Stick) Pipe-BB	2				
WLD	261	Certification Practices					
WLD	262	Inspection & Testing					
WBL	110	World of Work					
		ours Required	40				
		NTAL COURSE REQUIREMENTS*					
MAT		010, DMA 020, DMA 030 (MAT 110)					
MAT DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)5							
DRE	097	Integrated Reading Writing II					
*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 Descrip-							
tions section for prerequisite course information							

#### Welding Technology Cert. Pathway (C50420P)

tions section for prerequisite course information.

CORE C	OURSE	ES (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				