

PROGRAM LISTINGS

2016-2017

The following pages list alphabetically by discipline area the curriculum programs to be offered by Catawba Valley Community College during the 2016-2017 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**

Associate in Engineering Degree:

- **Associate in Engineering: General**

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

Minimum time for completion:

Day – four semesters full-time attendance;

Evening – will vary according to semester load of student.

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

Comprehensive Articulation Agreement (CAA)

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

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

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

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

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

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

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

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

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

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

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

Mission Statement for the General Education Program

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

Goals and Competencies of General Education Courses

Communication

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

Mathematics

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

Arts and Humanities

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

Social and Behavioral Sciences

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

Natural Science

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

Foreign Languages

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

ASSOCIATE IN ARTS DEGREE (A10100)

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

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

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

GENERAL EDUCATION COURSES: Total of 45 SHC

UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (UGETC)

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

English Composition (6 SHC)

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

Humanities/Fine Arts/Communications (9 SHC)

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

| | | |
|---------|-----------------|---|
| COM 231 | Public Speaking | 3 |
|---------|-----------------|---|

Humanities/Fine Arts

| | | |
|---------|------------------------|---|
| ART 111 | Art Appreciation | 3 |
| ART 114 | Art History Survey I | 3 |
| ART 115 | Art History Survey II | 3 |
| ENG 241 | British Literature I | 3 |
| ENG 242 | British Literature II | 3 |
| ENG 231 | American Literature I | 3 |
| ENG 232 | American Literature II | 3 |
| MUS 110 | Music Appreciation | 3 |
| MUS 112 | Introduction to Jazz | 3 |
| PHI 215 | Philosophical Issues | 3 |
| PHI 240 | Introduction to Ethics | 3 |

Social/Behavioral Sciences (9 SHC)

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

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

Mathematics (3/4 SHC)

Select one (1) course from the following:

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

Natural/Physical Sciences (4 SHC)

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

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

Additional General Education Hours (13/14 SHC)

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

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

Comprehensive Articulation Agreement General Education Course Listing:

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

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

Total General Education Hours Required 45

OTHER REQUIRED HOURS

ACA 122 College Transfer Success

Total of 15 SHC

1

**ASSOCIATE IN ARTS DEGREE
(continued)**

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

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

Comprehensive Articulation Agreement Pre-Major/Elective Course Listing:

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

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 |
| MAT | MAT 001 (MAT 171)..... | 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, and mathematics. Please refer to the Course Description section for prerequisite course information.

ASSOCIATE IN SCIENCE DEGREE (A10400)

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

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

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

GENERAL EDUCATION COURSES: Total of 45 SHC

UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (UGETC)

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

English Composition (6 SHC)

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

Humanities/Fine Arts/Communication (6 SHC)

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

| | | |
|----------------------|------------------------|---|
| Communications | | |
| COM 231 | Public Speaking | 3 |
| Humanities/Fine Arts | | |
| ART 111 | Art Appreciation | 3 |
| ART 114 | Art History Survey I | 3 |
| ART 115 | Art History Survey II | 3 |
| ENG 231 | American Literature I | 3 |
| ENG 232 | American Literature II | 3 |
| ENG 241 | British Literature I | 3 |
| ENG 242 | British Literature II | 3 |
| MUS 110 | Music Appreciation | 3 |
| MUS 112 | Introduction to Jazz | 3 |
| PHI 215 | Philosophical Issues | 3 |
| PHI 240 | Introduction to Ethics | 3 |

Social/Behavioral Sciences (6 SHC)

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

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

Mathematics (8 SHC)

Select two (2) courses from the following list:

| | | |
|---------|---------------------------|---|
| MAT 171 | Precalculus Algebra | 4 |
| MAT 172 | Pre-calculus Trigonometry | 4 |
| MAT 263 | Brief Calculus | 4 |
| MAT 271 | Calculus I | 4 |
| MAT 272 | Calculus II | 4 |

Natural/Physical Sciences (8 SHC)

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

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

Additional General Education Hours (11 SHC)

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

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

Comprehensive Articulation Agreement General Education Course Listing:

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

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

Total General Education Hours Required 45

OTHER REQUIRED HOURS

ACA 122 College Transfer Success

Total of 15 SHC

1

**ASSOCIATE IN SCIENCE DEGREE
(continued)**

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

- from the UGETC courses the student did not select for the first 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 | CHI 181 | EGR 150 | MUS 111 | PED 110 | PED 217 |
| ACC 121 | CHI 182 | EGR 210 | MUS 121 | PED 113 | PED 218 |
| ARA 181 | CHM 130 | EGR 220 | MUS 122 | PED 114 | PED 220 |
| ARA 182 | CHM 130A | ENG 125 | MUS 131 | PED 117 | PED 252 |
| ART 130 | CHM 251 | ENG 126 | MUS 132 | PED 118 | PED 254 |
| ART 131 | CHM 252 | ENG 235 | MUS 133 | PED 120 | PED 256 |
| ART 132 | CJC 111 | ENG 273 | MUS 134 | PED 121 | PED 259 |
| ART 140 | CJC 121 | ENG 275 | MUS 135 | PED 122 | PHS 130 |
| ART 171 | CJC 141 | FRE 181 | MUS 136 | PED 123 | POL 130 |
| ART 231 | COM 251 | FRE 182 | MUS 141 | PED 124 | PSY 211 |
| ART 232 | CSC 120 | FRE 281 | MUS 142 | PED 125 | PSY 231 |
| ART 240 | CSC 130 | FRE 282 | MUS 151 | PED 128 | PSY 243 |
| ART 241 | CSC 134 | GER 181 | MUS 152 | PED 129 | PSY 246 |
| ART 264 | CSC 139 | GER 182 | MUS 161 | PED 130 | PSY 263 |
| ART 271 | CSC 151 | HEA 110 | MUS 162 | PED 131 | PSY 275 |
| ART 281 | CSC 239 | HEA 112 | MUS 181 | PED 137 | SOC 215 |
| ART 282 | CTS 115 | HEA 120 | MUS 182 | PED 138 | SOC 234 |
| ART 283 | DFT 170 | HIS 141 | MUS 214 | PED 139 | SOC 242 |
| ART 284 | DRA 120 | HIS 145 | MUS 215 | PED 142 | SOC 244 |
| BIO 143 | DRA 124 | HIS 151 | MUS 217 | PED 143 | SOC 250 |
| BIO 145 | DRA 128 | HIS 162 | MUS 221 | PED 144 | SOC 254 |
| BIO 146 | DRA 130 | HIS 211 | MUS 222 | PED 145 | SPA 141 |
| BIO 155 | DRA 131 | HIS 221 | MUS 231 | PED 146 | SPA 161 |
| BIO 163 | DRA 132 | HIS 226 | MUS 232 | PED 147 | SPA 181 |
| BIO 168 | DRA 135 | HIS 227 | MUS 233 | PED 148 | SPA 182 |
| BIO 169 | DRA 136 | HIS 228 | MUS 234 | PED 150 | SPA 221 |
| BIO 175 | DRA 140 | HIS 232 | MUS 235 | PED 152 | SPA 281 |
| BIO 224 | DRA 141 | HIS 236 | MUS 236 | PED 153 | SPA 282 |
| BIO 230 | DRA 142 | HIS 261 | MUS 241 | PED 154 | |
| BIO 250 | DRA 145 | JOU 110 | MUS 242 | PED 156 | |
| BIO 275 | DRA 170 | MAT 280 | MUS 251 | PED 158 | |
| BIO 280 | DRA 171 | MAT 285 | MUS 252 | PED 160 | |
| BUS 110 | DRA 240 | | MUS 261 | PED 161 | |
| BUS 115 | DRA 260 | | MUS 262 | PED 163 | |
| BUS 137 | DRA 270 | | MUS 281 | PED 171 | |
| | DRA 271 | | MUS 282 | PED 181 | |
| | | | MUS 283 | PED 212 | |

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 Science program of study. The transfer of this hour is not guaranteed.*

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

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | | |
|-----|---------------------------------------------------------------------|--------------------------------------|---|
| DRE | 098 | Integrated Reading Writing III | 3 |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 (MAT 171)..... | | 7 |
| MAT | MAT 001 (MAT 171)..... | | 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, and mathematics. Please refer to the Course Description section for prerequisite course information.

ASSOCIATE IN ENGINEERING DEGREE (A10500)

The Associate in Engineering (AE) degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of 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.

The degree plan includes required general education and prerequisite courses that are acceptable to all state funded Bachelor of Engineering programs. Students who follow the degree progression plan will meet the entrance requirements at all of the North Carolina public Bachelor of Science Engineering programs. Associate in Engineering graduates may then apply to any of these programs without taking additional and sometimes duplicative courses. *Admission to Engineering programs is highly competitive and admission is not guaranteed.*

To be eligible for the transfer of credits under the AE to the Bachelor of Science in Engineering Articulation Agreement, community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.5 on a 4.0 scale.

GENERAL EDUCATION COURSES: Total of 42 SHC

GENERAL EDUCATION

The general education common course pathway includes study in areas of English composition; humanities and fine arts; social and behavioral sciences; natural sciences, and mathematics.

UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (UGETC)

(Universal General Transfer Component (UGETC) courses will transfer for equivalency credit to all UNC institutions) • Exceptions (i.e. courses which are not classified as UGETC) are italicized.

English Composition (6 SHC)

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

Humanities/Fine Arts/Communications (6 SHC)

Students must select (1) course from **each category** for a total of 6 SHC.

Humanities:

| | | |
|-----------------|------------------------|---|
| ENG 231 | American Literature I | 3 |
| ENG 232 | American Literature II | 3 |
| PHI 215 | Philosophical Issues | 3 |
| PHI 240 | Introduction to Ethics | 3 |
| <i>*REL 110</i> | <i>World Religions</i> | 3 |

*(*REL 110 will transfer for equivalency credit to the engineering programs at all five UNC institutions that offer undergraduate engineering programs. It may not transfer with equivalency to other programs.)*

Fine Arts and Communication:

Students **must take one (1)** of the following courses:

| | | |
|---------|-----------------------|---|
| COM 231 | Public Speaking | 3 |
| ART 111 | Art Appreciation | 3 |
| ART 114 | Art History Survey I | 3 |
| ART 115 | Art History Survey II | 3 |
| MUS 110 | Music Appreciation | 3 |
| MUS 112 | Introduction to Jazz | 3 |

Social/Behavioral Sciences (6 SHC)

Students must take the following **required** course:

| | | |
|---------|------------------------------|---|
| ECO 251 | Principles of Microeconomics | 3 |
|---------|------------------------------|---|

Students must **select one (1) additional** course from the following courses:

| | | |
|---------|---------------------------|---|
| 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 (12 SHC)

*Calculus I is the **lowest** level math course that will be accepted by the engineering programs for transfer as a math credit. Students who are not calculus-ready will need to take additional math courses.*

Students **must take the following three (3) courses.**

| | | |
|---------|--------------|---|
| MAT 271 | Calculus I | 4 |
| MAT 272 | Calculus II | 4 |
| MAT 273 | Calculus III | 4 |

Natural Sciences (12 SHC)

Students **must take the following three (3) courses:**

| | | |
|---------|---------------------|---|
| CHM 151 | General Chemistry I | 4 |
| PHY 251 | General Physics I | 4 |
| PHY 252 | General Physics II | 4 |

Total General Education Hours Required 42 SHC

OTHER REQUIRED HOURS Total of 18 SHC

Academic Transition

Student must take the following **required** course:

| | | |
|---------|--------------------------|---|
| ACA 122 | College Transfer Success | 1 |
|---------|--------------------------|---|

Students must complete ACA 122 within the first 30 hours of enrollment.

Pre-Major Elective

Students must take the following **required** course:

| | | |
|---------|-----------------------------|---|
| EGR 150 | Introduction to Engineering | 2 |
|---------|-----------------------------|---|

Other General Education and Pre-major Elective Hours (15 SHC)

Other General Education and Pre-major Elective Hours (15 SHC)

Students **must choose 15 SHC** from the following courses classified as pre-major, elective, or general education courses within the Comprehensive Articulation Agreement. *(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.)*

Students should choose courses appropriate to the specific university and engineering major requirements.

| | | |
|---------|----------------------------------------------|---|
| BIO 111 | General Biology I | 4 |
| CHM 152 | General Chemistry II | 4 |
| COM 110 | Introduction to Communication | 3 |
| CSC 134 | C++ Programming | 3 |
| CSC 151 | JAVA Programming | 3 |
| DFT 170 | Engineering Graphics | 3 |
| ECO 252 | Principles of Macroeconomics | 3 |
| EGR 210 | Intro to Electrical/Computer Engineering Lab | 2 |
| EGR 212 | Logic System Design I | 3 |
| EGR 215 | Network Theory I | 3 |
| EGR 216 | Logic and Network Lab | 1 |
| EGR 220 | Engineering Statics | 3 |
| EGR 225 | Engineering Dynamics | 3 |
| EGR 228 | Introduction to Solid Mechanics | 3 |
| HUM 110 | Technology and Society | 3 |
| MAT 280 | Linear Algebra | 3 |
| MAT 285 | Differential Equations | 3 |
| PED 110 | Fitness and Wellness for Life | 2 |

Total Semester Hours Credit in the Associate in Engineering Program 60

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | |
|---------|----------------------------------------------------------------|---|
| DRE 098 | Integrated Reading Writing III | 3 |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 (MAT 171) | 7 |
| MAT | MAT 001 (MAT 171) | 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, 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. Coursework 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: quantitative literacy, 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 (A.A.S.), 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 (A.A.S.), 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 A.A.S. 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, and 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 119.

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
- 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, and 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:

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

SCHOOL OF HEALTH & PUBLIC SERVICES

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

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

WORK-BASED LEARNING

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

WBL students work one or more semesters in part-time or full time jobs related to their major. Academic credit is given for the knowledge gained during the work period. Students are assigned to a WBL faculty advisor 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 for their position; therefore, the college does not guarantee placement or pay 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 2.0 GPA.
2. Obtain approval from the WBL Coordinator.
3. Have approval of WBL Faculty Advisor.
4. Willing to follow program guidelines.
5. Certain curriculum programs may specify additional conditions.

Application Procedure. Interested students should schedule an interview with the Work-Based Learning Coordinator. Students are selected on the basis of information obtained from their resume, college transcripts, and an interview regarding career goals. After students have been accepted into the program, the WBL Program Coordinator or Faculty Advisor 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. One credit hour equals 160 work hours.

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

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

NOTE: WBL options are listed under each participating curriculum course schedule. The Work-Based Coordinator must enroll students in WBL classes (one exception WBL 110).

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, approved courses in these categories that are generally offered at CVCC are listed below. If a course is specified as a required course in the program sequence, it may not be chosen as an elective. All prerequisites and corequisites must be met for these courses. In programs where only one (1) Humanities/ Fine Arts elective is required, introductory foreign language courses are not accepted as the elective. If you have additional questions about program electives please contact the Advising Center.

Humanities/Fine Arts Elective

| | | | |
|-----|-----|-----------------------------|---------|
| ART | 111 | Art Appreciation | 3-0-0-3 |
| ART | 114 | Art History Survey I | 3-0-0-3 |
| ART | 115 | Art History Survey II | 3-0-0-3 |
| ART | 131 | Drawing I | 0-6-0-3 |
| ART | 132 | Drawing II | 0-6-0-3 |
| ART | 171 | Computer Art I | 0-6-0-3 |
| ART | 240 | Painting I | 0-6-0-3 |
| ART | 241 | Painting II | 0-6-0-3 |
| ART | 271 | Computer Art II | 0-6-0-3 |
| ART | 281 | Sculpture I | 0-6-0-3 |
| ART | 283 | Ceramics I | 0-6-0-3 |
| DAN | 110 | Dance Appreciation | 3-0-0-3 |
| DRA | 111 | Theatre Appreciation | 3-0-0-3 |
| DRA | 112 | Literature of the Theatre | 3-0-0-3 |
| DRA | 115 | Theatre Criticism | 3-0-0-3 |
| DRA | 120 | Voice for Performance | 3-0-0-3 |
| DRA | 122 | Oral Interpretation | 3-0-0-3 |
| DRA | 124 | Readers Theatre | 3-0-0-3 |
| DRA | 126 | Storytelling | 3-0-0-3 |
| DRA | 128 | Children's Theatre | 3-0-0-3 |
| DRA | 130 | Acting I | 0-6-0-3 |
| DRA | 211 | Theatre History I | 3-0-0-3 |
| DRA | 212 | Theatre History II | 3-0-0-3 |
| ENG | 125 | Creative Writing I | 3-0-0-3 |
| ENG | 131 | Introduction to Literature | 3-0-0-3 |
| ENG | 231 | American Literature I | 3-0-0-3 |
| ENG | 232 | American Literature II | 3-0-0-3 |
| ENG | 241 | British Literature I | 3-0-0-3 |
| ENG | 242 | British Literature II | 3-0-0-3 |
| ENG | 251 | Western World Literature I | 3-0-0-3 |
| ENG | 252 | Western World Literature II | 3-0-0-3 |
| ENG | 273 | African-American Literature | 3-0-0-3 |
| ENG | 275 | Science Fiction | 3-0-0-3 |
| HUM | 110 | Technology and Society | 3-0-0-3 |
| HUM | 115 | Critical Thinking | 3-0-0-3 |
| HUM | 120 | Cultural Studies | 3-0-0-3 |
| HUM | 211 | Humanities I | 3-0-0-3 |
| HUM | 220 | Human Values and Meaning | 3-0-0-3 |
| MUS | 110 | Music Appreciation | 3-0-0-3 |
| MUS | 111 | Fundamentals of Music | 3-0-0-3 |
| MUS | 112 | Introduction to Jazz | 3-0-0-3 |
| MUS | 113 | American Music | 3-0-0-3 |
| MUS | 121 | Music Theory I | 3-0-0-3 |
| MUS | 122 | Music Theory II | 3-0-0-3 |
| MUS | 210 | History of Rock Music | 3-0-0-3 |
| MUS | 211 | History of Country Music | 3-0-0-3 |
| MUS | 213 | Opera and Musical Theatre | 3-0-0-3 |

| | | | |
|-----|-----|--------------------------|---------|
| PHI | 210 | History of Philosophy | 3-0-0-3 |
| PHI | 215 | Philosophical Issues | 3-0-0-3 |
| PHI | 240 | Introduction to Ethics | 3-0-0-3 |
| REL | 110 | World Religions | 3-0-0-3 |
| REL | 211 | Intro to Old Testament | 3-0-0-3 |
| REL | 212 | Intro to New Testament | 3-0-0-3 |
| REL | 221 | Religion in America | 3-0-0-3 |
| SPA | 141 | Culture and Civilization | 3-0-0-3 |

Social/Behavioral Science Elective

| | | | |
|-----|-----|----------------------------|---------|
| ANT | 220 | Cultural Anthropology | 3-0-0-3 |
| ANT | 221 | Comparative Cultures | 3-0-0-3 |
| ANT | 230 | Physical Anthropology | 3-0-0-3 |
| ECO | 251 | Prin of Microeconomics | 3-0-0-3 |
| ECO | 252 | Prin of Macroeconomics | 3-0-0-3 |
| GEO | 111 | World Regional Geography | 3-0-0-3 |
| GEO | 112 | Cultural Geography | 3-0-0-3 |
| GEO | 130 | General Physical Geography | 3-0-0-3 |
| HIS | 111 | World Civilizations I | 3-0-0-3 |
| HIS | 112 | World Civilizations II | 3-0-0-3 |
| HIS | 121 | Western Civilization I | 3-0-0-3 |
| HIS | 122 | Western Civilization II | 3-0-0-3 |
| HIS | 131 | American History I | 3-0-0-3 |
| HIS | 132 | American History II | 3-0-0-3 |
| HIS | 151 | Hispanic Civilization | 3-0-0-3 |
| HIS | 162 | Women and History | 3-0-0-3 |
| HIS | 211 | Ancient History | 3-0-0-3 |
| HIS | 221 | African-American History | 3-0-0-3 |
| HIS | 226 | The Civil War | 3-0-0-3 |
| HIS | 227 | Native American History | 3-0-0-3 |
| HIS | 236 | North Carolina History | 3-0-0-3 |
| HIS | 261 | East Asian History | 3-0-0-3 |
| POL | 110 | Intro Political Science | 3-0-0-3 |
| POL | 120 | American Government | 3-0-0-3 |
| POL | 130 | State & Local Government | 3-0-0-3 |
| PSY | 110 | Life Span Development | 3-0-0-3 |
| PSY | 150 | General Psychology | 3-0-0-3 |
| PSY | 211 | Psychology of Adjustment | 3-0-0-3 |
| PSY | 237 | Social Psychology | 3-0-0-3 |
| PSY | 239 | Psychology of Personality | 3-0-0-3 |
| PSY | 241 | Developmental Psychology | 3-0-0-3 |
| PSY | 243 | Child Psychology | 3-0-0-3 |
| PSY | 244 | Child Development I | 3-0-0-3 |
| PSY | 245 | Child Development II | 3-0-0-3 |
| PSY | 246 | Adolescent Psychology | 3-0-0-3 |
| PSY | 263 | Educational Psychology | 3-0-0-3 |
| PSY | 275 | Health Psychology | 3-0-0-3 |
| PSY | 281 | Abnormal Psychology | 3-0-0-3 |
| SOC | 210 | Introduction to Sociology | 3-0-0-3 |
| SOC | 213 | Sociology of the Family | 3-0-0-3 |
| SOC | 215 | Group Processes | 3-0-0-3 |
| SOC | 220 | Social Problems | 3-0-0-3 |
| SOC | 225 | Social Diversity | 3-0-0-3 |
| SOC | 230 | Race and Ethnic Relations | 3-0-0-3 |
| SOC | 234 | Sociology of Gender | 3-0-0-3 |
| SOC | 242 | Sociology of Deviance | 3-0-0-3 |
| SOC | 244 | Soc of Death & Dying | 3-0-0-3 |
| SOC | 250 | Sociology of Religion | 3-0-0-3 |
| SOC | 254 | Rural and Urban Sociology | 3-0-0-3 |

ACCOUNTING

A.A.S. Program (A25100)

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

The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the “language of business,” accountants assemble and analyze, process, and communicate essential information about financial operations. In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics. Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

Natural Sciences/Mathematics:

| | | |
|---------|-------------------------------------|---|
| MAT 110 | Math Measurement & Literacy | 3 |
| OR | MAT 143 Quantitative Literacy | 3 |

Social/Behavioral Sciences:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

MAJOR COURSES:

| | | |
|---------|-------------------------------------|---|
| ACC 120 | Prin of Financial Accounting | 4 |
| ACC 121 | Prin of Managerial Accounting | 4 |
| ACC 129 | Individual Income Taxes | 3 |
| ACC 130 | Business Income Taxes | 3 |
| ACC 140 | Payroll Accounting | 2 |
| ACC 150 | Accounting Software Appl | 2 |
| ACC 220 | Intermediate Accounting I | 4 |
| ACC 221 | Intermediate Acct II | 4 |
| ACC 225 | Cost Accounting | 3 |
| ACC 240 | Gov & Not-for-Profit Acct | 3 |
| BUS 110 | Introduction to Business | 3 |
| BUS 115 | Business Law I | 3 |
| BUS 116 | Business Law II | 3 |
| CIS 110 | Introduction to Computers | 3 |
| CTS 130 | Spreadsheet | 3 |
| ECO 251 | Prin of Microeconomics | 3 |

| | | |
|-----------------------------------|-------------------------------------|----------|
| Accounting Electives | | 3 |
| ACC 269 | Auditing & Assurance Services | 3 |
| BUS 125 | Personal Finance | 3 |
| BUS 139 | Entrepreneurship I | 3 |
| BUS 217 | Employment Law and Regs | 3 |
| ETR 240 | Funding for Entrepreneurs | 3 |
| INT 110 | International Business | 3 |
| WBL 110 | World of Work | 1 |
| WBL XXX | Work-Based Learning | 1-3 |

Total Credit Hours Required68

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Accounting • A25100

Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|-------------------|------------------------------------------|--|-------|-----|------------|--------|
| Fall - 1st year | | | | | | |
| ACC 120 | Prin of Financial Accounting | | 3 | 2 | 0 | 4 |
| BUS 110 | Introduction to Business | | 3 | 0 | 0 | 3 |
| ENG 111 | Writing and Inquiry | | 3 | 0 | 0 | 3 |
| MAT 110 | Math Measurement & Literacy | | 2 | 2 | 0 | 3 |
| OR MAT 143 | Quantitative Literacy | | 2 | 2 | 0 | 3 |
| | Social/Behavioral Science Elective | | 3 | 0 | 0 | 3 |
| Total | | | 14 | 4 | 0 | 16 |
| Spring - 1st year | | | | | | |
| ACC 121 | Principles of Managerial Accounting | | 3 | 2 | 0 | 4 |
| ACC 150 | Accounting Software Appl | | 1 | 2 | 0 | 2 |
| BUS 115 | Business Law I | | 3 | 0 | 0 | 3 |
| CIS 110 | Introduction to Computers | | 2 | 2 | 0 | 3 |
| ENG 112 | Writing/Research in the Disc (Preferred) | | 3 | 0 | 0 | 3 |
| OR ENG 113 | Literature-Based Research | | 3 | 0 | 0 | 3 |
| OR ENG 114 | Prof Research & Development | | 3 | 0 | 0 | 3 |
| Total | | | 12 | 6 | 0 | 15 |
| Summer - 1st year | | | | | | |
| BUS 116 | Business Law II | | 3 | 0 | 0 | 3 |
| ECO 251 | Prin of Microeconomics | | 3 | 0 | 0 | 3 |
| Total | | | 6 | 0 | 0 | 6 |
| Fall - 2nd year | | | | | | |
| ACC 129 | Individual Income Taxes | | 2 | 2 | 0 | 3 |
| ACC 220 | Intermediate Accounting I | | 3 | 2 | 0 | 4 |
| ACC 225 | Cost Accounting | | 3 | 0 | 0 | 3 |
| CTS 130 | Spreadsheet | | 2 | 2 | 0 | 3 |
| | Humanities/Fine Arts Elective | | 3 | 0 | 0 | 3 |
| Total | | | 13 | 6 | 0 | 16 |
| Spring - 2nd year | | | | | | |
| ACC 130 | Business Income Taxes | | 2 | 2 | 0 | 3 |
| ACC 140 | Payroll Accounting | | 1 | 2 | 0 | 2 |
| ACC 221 | Intermediate Acct II | | 3 | 2 | 0 | 4 |
| ACC 240 | Gov & Not-for-Profit Acct | | 3 | 0 | 0 | 3 |
| | Accounting Elective | | 3 | 0 | 0 | 3 |
| Total | | | 12 | 6 | 0 | 15 |
| Grand Total | | | 57 | 22 | 0 | 68 |

ACCOUNTING – Diploma Program (D25100)

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

Total Credit Hours Required36

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Accounting – Diploma Program (D25100) Suggested Sequence

| | | | | |
|-------------------|------------------------------------|----|----|------|
| Fall – 1st year | | | | |
| ACC 120 | Prin of Financial Accounting | 3 | 2 | 0 4 |
| BUS 110 | Introduction to Business | 3 | 0 | 0 3 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 3 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 3 |
| | Total | 11 | 4 | 0 13 |
| Spring – 1st year | | | | |
| ACC 121 | Prin of Managerial Accounting | 3 | 2 | 0 4 |
| ACC 140 | Payroll Accounting | 1 | 2 | 0 2 |
| ACC 150 | Accounting Software Appl | 1 | 2 | 0 2 |
| BUS 115 | Business Law I | 3 | 0 | 0 3 |
| | Total | 8 | 6 | 0 11 |
| Fall – 2nd year | | | | |
| ACC 129 | Individual Income Taxes | 2 | 2 | 0 3 |
| CTS 130 | Spreadsheet | 2 | 2 | 0 3 |
| ECO 251 | Prin of Microeconomics | 3 | 0 | 0 3 |
| | Total | 7 | 4 | 0 9 |
| Spring – 2nd year | | | | |
| | Social/Behavioral Science Elective | 3 | 0 | 0 3 |
| | Total | 3 | 0 | 0 3 |
| | Grand Total | 29 | 14 | 0 36 |

ACCOUNTING

General – Certificate Program (C2510001)

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

Total Credit Hours Required13

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

General – Certificate Program • (C2510001)

Suggested Program Sequence Day

| | | | | |
|-------------------|-------------------------------|---|---|------|
| Fall – 1st Year | | | | |
| ACC 120 | Prin of Financial Accounting | 3 | 2 | 0 4 |
| ACC 129 | Individual Income Taxes | 2 | 2 | 0 3 |
| | Total | 5 | 4 | 0 7 |
| Spring – 1st Year | | | | |
| ACC 121 | Prin of Managerial Accounting | 3 | 2 | 0 4 |
| ACC 140 | Payroll Accounting | 1 | 2 | 0 2 |
| | Total | 4 | 4 | 0 6 |
| | Grand Total | 9 | 8 | 0 13 |

ACCOUNTING

Computerized – Certificate Program (C2510003)

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

Total Credit Hours Required12

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Computerized – Certificate Program • (C2510003)

Suggested Program Sequence Day

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

ACCOUNTING

Taxation – Certificate Program (C2510004)

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

Total Credit Hours Required12

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Taxation – Certificate Program • (C2510004)

Suggested Program Sequence Day

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

ADVERTISING AND GRAPHIC DESIGN

A.A.S. Program (A30100)

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

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

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

Elective 3

Natural Sciences/Mathematics:

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

Social/Behavioral Sciences:

Elective 3

MAJOR COURSES:

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

Students are required to take 3 SHC from the following:

| | | |
|---------|---------------------------------|-----|
| ART 131 | Drawing I | 3 |
| ART 231 | Printmaking I | 3 |
| ART 264 | Digital Photography I | 3 |
| CIS 110 | Introduction to Computers | 3 |
| GRA 121 | Graphic Arts I | 4 |
| GRA 256 | Image Manipulation II | 2 |
| GRD 271 | Multimedia Design I | 2 |
| MKT 220 | Advertising and Sales Promotion | 3 |
| MKT 221 | Consumer Behavior | 3 |
| PHO 110 | Fund of Photography | 5 |
| PRN 155 | Screen Printing I | 2 |
| PRN 156 | Screen Printing II | 2 |
| SGD 111 | Introduction to SGD | 3 |
| SGD 112 | SGD Design | 3 |
| SGD 114 | 3D Modeling | 3 |
| WBL XXX | Work-Based Learning | 1-3 |
| WEB 110 | Internet/Web Fundamentals | 3 |
| WEB 111 | Intro to Web Graphics | 3 |
| WEB 120 | Intro Internet Multimedia | 3 |

OTHER REQUIRED COURSES:

| | | |
|---------|-------------------------|---|
| ACA 111 | College Student Success | 1 |
|---------|-------------------------|---|

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

Total Credit Hours Required 66/67

Con't.

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | |
|---------------------------------------------------------------------|--------------------------------|---|
| CTS 080 | Computing Fundamentals | 3 |
| DRE 098 | Integrated Reading Writing III | 3 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143/MAT 152) | | 5 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065, (MAT 171) | | 7 |
| MAT MAT 001, (MAT 171) | | |

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

Advertising and Graphic Design • A30100

Suggested Program Sequence Day

| | | Class | Lab | Clin/WkExp | Credit |
|---------------------------------------|---------------------------|-------|-----|------------|--------|
| Fall – 1st Year | | | | | |
| ACA 111 | College Student Success | 1 | 0 | 0 | 1 |
| GRA 151 | Computer Graphics I | 1 | 3 | 0 | 2 |
| GRD 141 | Graphic Design I | 2 | 4 | 0 | 4 |
| GRD 110 | Typography I | 2 | 2 | 0 | 3 |
| GRD 121 | Drawing Fundamentals I | 1 | 3 | 0 | 2 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| Total | | 10 | 12 | 0 | 15 |
| Spring – 1st year | | | | | |
| GRA 152 | Computer Graphics II | 1 | 3 | 0 | 2 |
| GRD 142 | Graphic Design II | 2 | 4 | 0 | 4 |
| GRA 255 | Image Manipulation I | 1 | 3 | 0 | 2 |
| GRD 131 | Illustration I | 1 | 3 | 0 | 2 |
| ENG 113 | Literature-Based Research | 3 | 0 | 0 | 3 |
| OR ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| Total | | 8 | 13 | 0 | 13 |
| Summer – 1st year | | | | | |
| BUS 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| MAT 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| OR MAT 152 | Statistical Methods I | 3 | 2 | 0 | 4 |
| OR MAT 171 | Precalculus | 3 | 2 | 0 | 4 |
| Social/Behavioral Science Elective | | 3 | 0 | 0 | 3 |
| Total | | 8/9 | 2 | 0 | 9/10 |
| Fall – 2nd year | | | | | |
| GRA 153 | Computer Graphics III | 1 | 3 | 0 | 2 |
| GRD 180 | Interactive Design | 1 | 4 | 0 | 3 |
| GRD 241 | Graphic Design III | 2 | 4 | 0 | 4 |
| GRD 265 | Digital Print Production | 1 | 4 | 0 | 3 |
| MKT 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| Total | | 8 | 15 | 0 | 15 |
| Spring – 2nd year | | | | | |
| GRD 249 | Advanced Design Practice | 1 | 9 | 0 | 4 |
| GRD 280 | Portfolio Design | 2 | 4 | 0 | 4 |
| Humanities/Fine Arts Elective | | 3 | 0 | 0 | 3 |
| Program/ Work-Based Learning Elective | | | | | 3 |
| Total | | 6 | 13 | 0 | 14 |
| Grand Total | | 40/41 | 55 | 0 | 66/67 |

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

ART 131, ART 231, ART 264, CIS 110, GRA 121, GRA 256, GRD 271, MKT 220, MKT 221, PHO 110, PRN 155, PRN 156, SGD 111, SGD 112, SGD 114, WEB 110, WEB 111, WEB 120, WBL XXX.

AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY

Diploma Program (D35100)

Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day – two semesters full-time attendance; Evening – four semesters of part-time attendance. The Diploma is awarded graduates of this curriculum.

The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems. Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems.

GENERAL EDUCATION COURSES:.....SHC

English/Communications:

| | |
|-------------------------------------------|---|
| ENG 111 Writing and Inquiry..... | 3 |
| OR ENG 102 Applied Communications II..... | 3 |

Natural Sciences/Mathematics:

| | |
|------------------------------------------|---|
| MAT 110 Math Measurement & Literacy..... | 3 |
| OR MAT 121 Algebra/Trigonometry I..... | 3 |

MAJOR COURSES:

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

Total Credit Hours Required39

DEVELOPMENTAL COURSE REQUIREMENTS*

| | |
|-------------------------------------------------------------------------|---|
| CTS 080 Computing Fundamentals..... | 3 |
| DRE 098 Integrated Reading Writing II..... | 3 |
| DMA DMA 010, DMA 020, DMA 030 (MAT 110)..... | 3 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 (MAT 121)..... | 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.

Air Conditioning, Heating and Refrigeration • D35100

Suggested Program Sequence Day

| | Class | Lab | Clin/WkExp | Credit |
|--------------------------------------------------|-----------|-----------|------------|-----------|
| Fall – 1st year | | | | |
| AHR 110 Intro to Refrigeration (1st 8 weeks) | 2 | 6 | 0 | 5 |
| AHR 111 HVACR Electricity (1st 8 weeks) | 2 | 2 | 0 | 3 |
| AHR 112 Heating Technology (2nd 8 weeks) | 2 | 4 | 0 | 4 |
| AHR 151 HVAC Duct Systems I | 1 | 3 | 0 | 2 |
| AHR 180 HVACR Customer Relations (2nd 8 weeks) | 1 | 0 | 0 | 1 |
| AHR 211 Residential Systems Design (2nd 8 weeks) | 2 | 2 | 0 | 3 |
| Total | 10 | 17 | 0 | 18 |

Spring – 1st year

| | | | | |
|-------------------------------------------------|-----------|-----------|----------|-----------|
| AHR 113 Comfort Cooling (2nd 8 weeks) | 2 | 4 | 0 | 4 |
| AHR 210 Residential Building Code (1st 8 weeks) | 1 | 2 | 0 | 2 |
| AHR 114 Heat Pump Technology (1st 8 weeks) | 2 | 4 | 0 | 4 |
| AHR 130 HVAC Controls (2nd 8 weeks) | 2 | 2 | 0 | 3 |
| AHR 160 Refrigerant Certification (2nd 8 weeks) | 1 | 0 | 0 | 1 |
| WBL 110 World of Work | 1 | 0 | 0 | 1 |
| MAT 110 Math Measurement & Literacy | 2 | 2 | 0 | 3 |
| OR MAT 121 Quantitative Literacy | 2 | 2 | 0 | 3 |
| Total | 11 | 14 | 0 | 18 |

Summer – 1year

| | | | | |
|--------------------------------------|-----------|-----------|----------|-----------|
| ENG 111 Writing and Inquiry | 3 | 0 | 0 | 3 |
| OR ENG 102 Applied Communications II | 3 | 0 | 0 | 3 |
| Total | 3 | 0 | 0 | 3 |
| Grand Total | 24 | 31 | 0 | 39 |

Air Conditioning, Heating and Refrigeration • D35100

Evening Courses Are Offered On Demand

(See Your HVAC Advisor)

| | |
|-------------------------------------------|---|
| ENG 111 Writing and Inquiry..... | 3 |
| OR ENG 102 Applied Communications II..... | 3 |
| MAT 110 Math Measurement & Literacy..... | 3 |
| OR MAT 121 Algebra/Trigonometry I..... | 3 |
| AHR 110 Intro to Refrigeration..... | 5 |
| AHR 111 HVACR Electricity..... | 3 |
| AHR 112 Heating Technology..... | 4 |
| AHR 113 Comfort Cooling..... | 4 |
| AHR 114 Heat Pump Technology..... | 4 |
| AHR 130 HVAC Controls..... | 3 |
| AHR 151 HVAC Duct Systems I..... | 2 |
| AHR 160 Refrigerant Certification..... | 1 |
| AHR 180 HVACR Customer Relations..... | 1 |
| AHR 210 Residential Building Code..... | 2 |
| AHR 211 Residential System Design..... | 3 |
| WBL 110 World of Work..... | 1 |

Total Credit Hours Required39

DEVELOPMENTAL COURSE REQUIREMENTS*

| | |
|-------------------------------------------------------------------------|---|
| CTS 080 Computing Fundamentals..... | 3 |
| DRE 098 Integrated Reading Writing II..... | 3 |
| DMA DMA 010, DMA 020, DMA 030 (MAT 110)..... | 3 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 (MAT 121)..... | 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.

Air Conditioning, Heating and Refrigeration Certificate • C35100

MAJOR COURSES:

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

Total Credit Hours Required13

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Air Conditioning, Heating and Refrigeration Certificate • C35100

Suggested Program Sequence Day

Fall – 1st year

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

Air Conditioning, Heating and Refrigeration Certificate • C35100

Evening Courses Are Offered On Demand

(See Your HVAC Advisor)

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

Total Credit Hours Required13

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

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. Coursework includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement, and informatics. Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global health care system and may include positions within acute, chronic, extended, industrial, and community health care facilities.

GENERAL EDUCATION COURSES:SHC

English/Communications:

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

Humanities/Fine Arts:

| | |
|----------------------|---|
| Nursing HFA Elective | 3 |
|----------------------|---|

Natural Sciences/Mathematics:

| | | |
|---------|---------------------------|---|
| BIO 168 | Anatomy and Physiology I | 4 |
| BIO 169 | Anatomy and Physiology II | 4 |

Social/Behavioral Sciences:

| | | |
|---------|--------------------|---|
| PSY 150 | General Psychology | 3 |
|---------|--------------------|---|

MAJOR COURSES:

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

Total Credit Hours Required70

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Nursing Humanities/Fine Arts Elective3

Students must select one course from the following:

| | | |
|---------|------------------------|---|
| ART 111 | Art Appreciation | 3 |
| ART 114 | Art History Survey I | 3 |
| ART 115 | Art History Survey II | 3 |
| HUM 115 | Critical Thinking | 3 |
| MUS 110 | Music Appreciation | 3 |
| MUS 112 | Introduction to Jazz | 3 |
| PHI 215 | Philosophical Issues | 3 |
| PHI 240 | Introduction to Ethics | 3 |

NOTE: The courses listed in CVCC's Associate Degree Nursing Program have a Uniform Articulation Agreement between the University of North Carolina Registered Nurse to Bachelor of Science in Nursing (RN to BSN) Programs. Students who transfer to senior institutions outside of the University of North Carolina system should contact each college directly for transfer information.

Associate Degree Nursing • A45110 Suggested Program Sequence Day

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------------------------------------------------------------------|------------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| NUR 111 | Intro to Health Concepts | 4 | 6 | 6 | 8 |
| BIO 168 | Anatomy and Physiology I | 3 | 3 | 0 | 4 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| Total | | 10 | 9 | 6 | 15 |
| Spring – 1st year | | | | | |
| NUR 112 | Health-Illness Concepts | 3 | 0 | 6 | 5 |
| NUR 114 | Holistic Health Concepts | 3 | 0 | 6 | 5 |
| BIO 169 | Anatomy and Physiology II | 3 | 3 | 0 | 4 |
| PSY 241 | Developmental Psychology | 3 | 0 | 0 | 3 |
| Total | | 12 | 3 | 12 | 17 |
| Summer – 1st year | | | | | |
| NUR 212 | Health System Concepts | 3 | 0 | 6 | 5 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| Total | | 6 | 0 | 6 | 8 |
| Fall – 2nd year | | | | | |
| NUR 113 | Family Health Concepts | 3 | 0 | 6 | 5 |
| NUR 211 | Health Care Concepts | 3 | 0 | 6 | 5 |
| BIO 275 | Microbiology | 3 | 3 | 0 | 4 |
| | Nursing Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Total | | 12 | 3 | 12 | 17 |
| Spring – 2nd year | | | | | |
| NUR 213 | Complex Health Concepts | 4 | 3 | 15 | 10 |
| ENG 112 | Writing/Research in the Disc (Preferred) | 3 | 0 | 0 | 3 |
| OR ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| (Students considering transfer to a four-year university should take ENG 112) | | | | | |
| Total | | 7 | 3 | 15 | 13 |
| Grand Total | | 47 | 18 | 51 | 70 |

Associate Degree Nursing • A45110 Suggested Prog. Sequence Evening

| | | | | | |
|-------------------------------------------------------------------------------|------------------------------------------|----|----|----|----|
| Spring – 1st year | | | | | |
| NUR 111 AB | Intro to Health Concepts-AB | 2 | 3 | 3 | 4 |
| BIO 168 | Anatomy and Physiology I | 3 | 3 | 0 | 4 |
| Total | | 5 | 6 | 3 | 8 |
| Summer – 1st year | | | | | |
| NUR 111 BB | Intro to Health Concepts-BB | 2 | 3 | 3 | 4 |
| BIO 169 | Anatomy and Physiology II | 3 | 3 | 0 | 4 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| Total | | 8 | 6 | 3 | 11 |
| Fall – 1st year | | | | | |
| NUR 112 | Health-Illness Concepts | 3 | 0 | 6 | 5 |
| NUR 114 | Holistic Health Concepts | 3 | 0 | 6 | 5 |
| PSY 241 | Developmental Psych | 3 | 0 | 0 | 3 |
| Total | | 9 | 0 | 12 | 13 |
| Spring – 2nd year | | | | | |
| NUR 211 | Health Care Concepts | 3 | 0 | 6 | 5 |
| NUR 212 | Health System Concepts | 3 | 0 | 6 | 5 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| Total | | 9 | 0 | 12 | 13 |
| Summer – 2nd year | | | | | |
| NUR 113 | Family Health Concepts | 3 | 0 | 6 | 5 |
| BIO 275 | Microbiology | 3 | 3 | 0 | 4 |
| Total | | 6 | 3 | 6 | 9 |
| Fall – 2nd year | | | | | |
| NUR 213 AB | Complex Health Concepts-AB | 2 | 2 | 7 | 5 |
| | Nursing Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Total | | 5 | 2 | 7 | 8 |
| Spring – 3rd year | | | | | |
| NUR 213 BB | Complex Health Concepts-BB | 2 | 1 | 8 | 5 |
| ENG 112 | Writing/Research in the Disc (Preferred) | 3 | 0 | 0 | 3 |
| OR ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| (Students considering transfer to a four-year university should take ENG 112) | | | | | |
| Total | | 5 | 1 | 8 | 8 |
| Grand Total | | 47 | 18 | 51 | 70 |

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

Catawba Valley Community College
Associate Degree Nursing
and

Lenoir-Rhyne University

Bachelor of Science Degree with a Major in Nursing

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

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

All courses designated by (BS) will be taken on CVCC's campus, and will be credited toward the Bachelor of Science degree. Nursing students will enroll in NUR 420, Transition to Professional Nursing (3 SHC), during the eighth semester. Successful completion of this course results in the awarding of a 39 semester hour block of credit.

GENERAL EDUCATION COURSES:SHC

English/Communications:

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

Humanities/Fine Arts:

| | |
|----------------------|---|
| Nursing HFA Elective | 3 |
|----------------------|---|

Natural Sciences/Mathematics:

| | | |
|---------|---------------------------|---|
| BIO 168 | Anatomy and Physiology I | 4 |
| BIO 169 | Anatomy and Physiology II | 4 |

Social/Behavioral Sciences:

| | | |
|---------|--------------------|---|
| PSY 150 | General Psychology | 3 |
|---------|--------------------|---|

MAJOR COURSES:

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

Total Credit Hours Required70

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Nursing Humanities/Fine Arts Elective3

Students must select one course from the following:

| | | |
|---------|-----------------------|---|
| ART 111 | Art Appreciation | 3 |
| ART 114 | Art History Survey I | 3 |
| ART 115 | Art History Survey II | 3 |
| MUS 110 | Music Appreciation | 3 |
| MUS 112 | Introduction to Jazz | 3 |

Associate Degree Nursing/RIBN • A45110RB

Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|----------------------------|------------------------------------|--|-------|-------|------------|--------|
| Fall - 1st year | | | | | | |
| BIO 168 | Anatomy and Physiology I | | 3 | 3 | 0 | 4 |
| CHM 131 | Introduction to Chemistry (BS) | | 3 | 0 | 0 | 3 |
| CHM 131A | Introduction to Chemistry Lab (BS) | | 0 | 3 | 0 | 1 |
| ENG 111 | Writing and Inquiry | | 3 | 0 | 0 | 3 |
| PSY 150 | General Psychology | | 3 | 0 | 0 | 3 |
| FYE 191 | First Year Experience I (LRU/BS) | | | | | 3 |
| Total | | | 12 | 6 | 0 | 17 |
| Spring - 1st year | | | | | | |
| BIO 169 | Anatomy and Physiology II | | 3 | 3 | 0 | 4 |
| CIS 110 | Introduction to Computers (BS) | | 2 | 0 | 0 | 3 |
| OR | | | | | | |
| CIS 111 | Basic PC Literacy (BS) and | | 3 | 2 | 0 | 2 |
| PED (1 Hour Activity) (BS) | | | 0 | 2 | 0 | 1 |
| MAT 152 | Statistical Methods I (BS) | | 3 | 2 | 0 | 4 |
| PSY 241 | Developmental Psych | | 3 | 0 | 0 | 3 |
| FYE 192 | First Year Experience II (LRU/BS) | | | | | 3 |
| Total | | | 11/12 | 7/9 | 0 | 17 |
| Fall - 2nd year | | | | | | |
| NUR 111 | Intro to Health Concepts | | 4 | 6 | 6 | 8 |
| BIO 275 | Microbiology | | 3 | 3 | 0 | 4 |
| | Foreign Language (LRU/BS) | | | | | 3 |
| Total | | | 7 | 9 | 6 | 15 |
| Spring - 2nd year | | | | | | |
| NUR 112 | Health-Illness Concepts | | 3 | 0 | 6 | 5 |
| NUR 114 | Holistic Health Concepts | | 3 | 0 | 6 | 5 |
| HEA 110 | Personal Health/Wellness (BS) | | 3 | 0 | 0 | 3 |
| | Foreign Language (LRU/BS) | | | | | 3 |
| Total | | | 9 | 0 | 12 | 16 |
| Summer - 2nd year | | | | | | |
| NUR 212 | Health System Concepts | | 3 | 0 | 6 | 5 |
| ENG 112 | Writing/Research in the Disc | | 3 | 0 | 0 | 3 |
| OR | ENG 114 Prof Research & Rep. | | 3 | 0 | 0 | 3 |
| Total | | | 6 | 0 | 6 | 8 |
| Fall - 3rd year | | | | | | |
| NUR 113 | Family Health Concepts | | 3 | 0 | 6 | 5 |
| NUR 211 | Health Care Concepts | | 3 | 0 | 6 | 5 |
| REL 100 | Christian Faith (LRU/BS) | | | | | 3 |
| | Fine Arts Elective | | 3 | 0 | 0 | 3 |
| Total | | | 9 | 0 | 12 | 16 |
| Spring 3rd year | | | | | | |
| NUR 213 | Complex Health Concepts | | 4 | 3 | 15 | 10 |
| COM 231 | Public Speaking (BS) | | 3 | 0 | 0 | 3 |
| SOC XXX | Sociology (LRU/BS) | | | | | 3 |
| Total | | | 7 | 3 | 15 | 16 |
| Grand Total | | | 61/62 | 25/27 | 51 | 105 |

• Semester Hour Totals include courses taken at Lenoir Rhyne

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

| | | | | | | |
|-----------------|------------------------------------------------------|--|--|--|--|----|
| Fall 4th year | | | | | | |
| NUR 400 | Health Assessment of Individuals & Populations (LRU) | | | | | 3 |
| NUR 420 | Transition to Professional Practice (LRU) | | | | | 3 |
| NAT 388 | Environmental Science-Level II (LRU) | | | | | 3 |
| | Humanities Level I (LRU) | | | | | 3 |
| Total | | | | | | 12 |
| Spring 4th year | | | | | | |
| NUR 455G | Health Promotion with Populations (LRU) | | | | | 3 |
| NUR 460 | Concepts of Leadership in Nursing: (LRU) | | | | | 4 |
| | Theory and Application | | | | | |
| HSB 388 | Level II (LRU) | | | | | 3 |
| OR | | | | | | |
| HUM 388 | Level II (LRU) | | | | | 3 |
| | NUR Elective-Select Topics (LRU) | | | | | 2 |
| Total | | | | | | 12 |
| Summer 4th year | | | | | | |
| NUR 435 | Concepts of Evidence-Based Practice (LRU) | | | | | 3 |
| NUR 470 G | Trends in Professional Nursing In a Global Society | | | | | 3 |
| Total | | | | | | 6 |

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

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

The Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field. Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains. Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time employment in dealerships and repair shops in the automotive service industry. The Automotive Systems Technology program is Accredited by the National Automotive Technicians Education Foundation.

GENERAL EDUCATION COURSES:SHC

English/Communications:

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

Humanities/Fine Arts:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

Natural Sciences/Mathematics:

| | | |
|------------|-----------------------------------|---|
| MAT 110 | Math Measurement & Literacy | 3 |
| OR MAT 143 | Quantitative Literacy | 3 |

Social/Behavioral Sciences:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

MAJOR COURSES:

| | | |
|----------|----------------------------------|---|
| AUT 113 | Automotive Servicing I | 2 |
| AUT 116 | Engine Repair | 3 |
| AUT 116A | Engine Repair Lab | 1 |
| AUT 141 | Suspension & Steering Sys | 3 |
| AUT 141A | Suspension & Steering Lab | 1 |
| AUT 151 | Brake Systems | 3 |
| AUT 151A | Brake Systems Lab | 1 |
| AUT 163 | Adv Auto Electricity | 3 |
| AUT 163A | Adv Auto Electricity Lab | 1 |
| AUT 181 | Engine Performance 1 | 3 |
| AUT 181A | Engine Performance 1 Lab | 1 |
| AUT 183 | Engine Performance 2 | 4 |
| AUT 212 | Auto Shop Management | 3 |
| AUT 221 | Auto Transm/Transaxles | 3 |
| AUT 221A | Auto Transm/Transax Lab | 1 |
| AUT 231 | Man Trans/Axles/Drrtrains | 3 |
| AUT 231A | Man Trans/Ax/Drrtrains Lab | 1 |
| AUT 281 | Adv Engine Performance | 3 |
| TRN 110 | Intro to Transport Tech | 2 |
| TRN 120 | Basic Transp Electricity | 5 |
| TRN 140 | Transp Climate Control | 2 |
| TRN 140A | Transp Climate Cont Lab | 2 |
| TRN 170 | Pc Skills for Transp | 2 |
| WBL 110 | World of Work | 1 |
| WLD 112 | Basic Welding Processes | 2 |

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

Total Credit Hours Required71

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.

Automotive Systems Technology • A60160 Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|-----------------|----------------------------------------|--|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| AUT 116 | Engine Repair (1st 8 weeks) | | 2 | 3 | 0 | 3 |
| AUT 116A | Engine Repair Lab (1st 8 weeks) | | 0 | 3 | 0 | 1 |
| AUT 181 | Engine Performance 1 (2nd 8 weeks) | | 2 | 3 | 0 | 3 |
| AUT 181A | Engine Performance 1 Lab (2nd 8 weeks) | | 0 | 3 | 0 | 1 |
| TRN 110 | Intro to Transport Tech | | 1 | 2 | 0 | 2 |
| TRN 120 | Basic Transp Electricity | | 4 | 3 | 0 | 5 |
| TRN 170 | Pc Skills for Transp | | 1 | 2 | 0 | 2 |
| Total | | | 10 | 19 | 0 | 17 |

Spring – 1st year

| | | | | | | |
|----------|------------------------------------|--|---|----|---|----|
| AUT 113 | Automotive Servicing I | | 0 | 6 | 0 | 2 |
| AUT 183 | Engine Performance 2 (1st 8 weeks) | | 2 | 6 | 0 | 4 |
| AUT 151 | Brake Systems (2nd 8 weeks) | | 2 | 3 | 0 | 3 |
| AUT 151A | Brake Systems Lab (2nd 8 weeks) | | 0 | 3 | 0 | 1 |
| AUT 163 | Adv Auto Electricity | | 2 | 3 | 0 | 3 |
| AUT 163A | Adv Auto Electricity Lab | | 0 | 3 | 0 | 1 |
| WBL 110 | World of Work | | 1 | 0 | 0 | 1 |
| Total | | | 7 | 24 | 0 | 15 |

Summer – 1st year

| | | | | | | |
|------------|-----------------------------|--|---|---|---|---|
| ENG 111 | Writing and Inquiry | | 3 | 0 | 0 | 3 |
| MAT 110 | Math Measurement & Literacy | | 2 | 2 | 0 | 3 |
| OR MAT 143 | Quantitative Literacy | | 2 | 2 | 0 | 3 |
| Total | | | 5 | 2 | 0 | 6 |

Fall – 2nd year

| | | | | | | |
|----------|-----------------------------------------|--|---|----|---|----|
| AUT 141 | Suspension & Steering Sys (2nd 8 Weeks) | | 2 | 3 | 0 | 3 |
| AUT 141A | Suspension & Steering Lab (2nd 8 Weeks) | | 0 | 3 | 0 | 1 |
| AUT 212 | Auto Shop Management | | 3 | 0 | 0 | 3 |
| AUT 281 | Adv Engine Performance | | 2 | 2 | 0 | 3 |
| TRN 140 | Transp Climate Control (1st 8 weeks) | | 1 | 2 | 0 | 2 |
| TRN 140A | Transp Climate Cont Lab (1st 8 weeks) | | 1 | 2 | 0 | 2 |
| Total | | | 9 | 12 | 0 | 14 |

Spring – 2nd year

| | | | | | | |
|------------------------------------|------------------------------------------|--|---|----|---|----|
| AUT 221 | Auto Transm/Transaxles (2nd 8 Weeks) | | 2 | 3 | 0 | 3 |
| AUT 221A | Auto Transm/Transax Lab (2nd 8 Weeks) | | 0 | 3 | 0 | 1 |
| AUT 231 | Man Trans/Axles/Drrtrains (1st 8 weeks) | | 2 | 3 | 0 | 3 |
| AUT 231A | Man Trans/Ax/Drrtrains Lab (1st 8 weeks) | | 0 | 3 | 0 | 1 |
| WLD 112 | Basic Welding Processes | | 1 | 3 | 0 | 2 |
| Social/Behavioral Science Elective | | | 3 | 0 | 0 | 3 |
| Total | | | 8 | 15 | 0 | 13 |

Summer – 2nd year

| | | | | | | |
|------------------------------|---------------------------------------|--|----|----|---|----|
| ENG 114 | Prof Research & Reporting (Preferred) | | 3 | 0 | 0 | 3 |
| OR ENG 112 | Writing/Research in the Disc | | 3 | 0 | 0 | 3 |
| OR ENG 113 | Literature-Based Research | | 3 | 0 | 0 | 3 |
| Humanities/Fine Art Elective | | | 3 | 0 | 0 | 3 |
| Total | | | 6 | 0 | 0 | 6 |
| Grand Total | | | 45 | 72 | 0 | 71 |

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

AUTOMOTIVE SYSTEMS TECHNOLOGY Diploma Program (D60160)

GENERAL EDUCATION COURSES:SHC

English/Communications:

ENG 111 Writing and Inquiry3

Natural Sciences/Mathematics:

MAT 110 Math Measurement & Literacy3

OR MAT 143 Quantitative Literacy3

MAJOR COURSES:

AUT 116 Engine Repair3

AUT 116A Engine Repair Lab1

AUT 141 Suspension & Steering Sys3

AUT 141A Suspension & Steering Lab1

AUT 151 Brake Systems3

AUT 151A Brake Systems Lab1

AUT 163 Adv Auto Electricity3

AUT 181 Engine Performance 13

AUT 181A Engine Performance 1 Lab1

AUT 183 Engine Performance 24

AUT 221 Auto Transm/Transaxles3

AUT 221A Auto Transm/Transax Lab1

AUT 231 Man Trans/Axles/Drtrains3

AUT 231A Man Trans/Ax/Drtrains Lab1

TRN 110 Intro to Transport Tech2

TRN 120 Basic Transp Electricity5

TRN 140 Transp Climate Control2

TRN 140A Transp Climate Cont Lab2

Automotive Systems Technology

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

Total Credit Hours Required48

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals3

DMA DMA 010, DMA 020, DMA 030 (MAT 110)3

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

DRE 098 Integrated Reading Writing III3

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

Automotive Systems Technology – Diploma • D60160 Suggested Program Sequence Evening

Fall – 1st year

AUT 116 Engine Repair (2nd 8 Wks) 2 3 0 3

AUT 116A Engine Repair Lab (2nd 8 Wks) 0 3 0 1

TRN 110 Intro to Transport Tech 1 2 0 2

TRN 120 Basic Transp Electricity (1st 8 Wks) 4 3 0 5

Total 7 11 0 11

Spring – 1st year

AUT 151 Brake Systems (2nd 8 Wks) 2 3 0 3

AUT 151A Brake Systems Lab (2nd 8 Wks) 0 3 0 1

AUT 163 Adv Auto Electricity (1st 8 Wks) 2 3 0 3

MAT 110 Math Measurement & Literacy 2 2 0 3

OR MAT 143 Quantitative Literacy 2 2 0 3

Total 6 11 0 10

Fall – 2nd year

AUT 181 Engine Performance 1 (1st 8 Wks) 2 3 0 3

AUT 181A Engine Performance 1 Lab (1st 8 Wks) 0 3 0 1

AUT 231 Man Trans/Axles/Drtrains (2nd 8 Wks) 2 3 0 3

AUT 231A Man Trans/Axl/Drtrains Lab (2nd 8 Wks) 0 3 0 1

Total 4 12 0 8

Spring – 2nd year

AUT 221 Auto Transm/Transaxles (1st 8 Wks) 2 3 0 3

AUT 221A Auto Transm/Transax Lab (1st 8 Wks) 0 3 0 1

AUT 183 Engine Performance 2 (2nd 8 Wks) 2 6 0 4

ENG 111 Writing and Inquiry 3 0 0 3

Total 7 12 0 11

Fall – 3rd year

AUT 141 Suspension & Steering (2nd 8 Wks) 2 3 0 3

AUT 141A Suspension & Steering Lab (2nd 8 Wks) 0 3 0 1

TRN 140 Transp Climate Control (1st 8 weeks) 1 2 0 2

TRN 140A Transp Climate Cont Lab (1st 8 weeks) 1 2 0 2

Total 4 10 0 8

Grand Total 28 56 0 48

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

Major CoursesSHC

AUT 141 Suspension & Steering Sys3

AUT 141A Suspension & Steering Lab1

AUT 151 Brake Systems3

AUT 151A Brake Systems Lab1

TRN 110 Intro to Transport Tech2

TRN 120 Basic Transp Electricity5

Total Credit Hours Required 15

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals3

DMA DMA 010, DMA 020, DMA 0303

DRE 097 Integrated Reading Writing II3

* 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 – Under Car Services Concentration Certificate Program (C60160) Suggested Sequence

Fall – 1st Year

TRN 110 Intro to Transport Tech 1 2 0 2

TRN 120 Basic Transp Electricity 4 3 0 5

AUT 141 Suspension & Steering Sys 2 3 0 3

AUT 141A Suspension & Steering Lab 0 3 0 1

Total 7 11 0 11

Spring – 1st Year

AUT 151 Brake Systems 2 3 0 3

AUT 151A Brake Systems Lab 0 3 0 1

Total 2 6 0 4

Grand Total 9 17 0 15

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

BASIC LAW ENFORCEMENT TRAINING Certificate Program (C55120)

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

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. Coursework includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making. Graduates are prepared for employment opportunities in governmental agencies, financial institutions, and large to small business or industry.

GENERAL EDUCATION COURSES:.....SHC

English/Communications:

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

Humanities/Fine Arts:

| | | |
|----------|--|---|
| Elective | | 3 |
|----------|--|---|

Natural Sciences/Mathematics:

| | | |
|------------|-----------------------------|---|
| MAT 110 | Math Measurement & Literacy | 3 |
| OR MAT 143 | Quantitative Literacy | 3 |

Social/Behavioral Sciences:

| | | |
|----------|--|---|
| Elective | | 3 |
|----------|--|---|

MAJOR COURSES:

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

Business/WBL Electives.....12

Students are required to take 12 SHC from the following:

| | | |
|---------|---------------------------------|-----|
| BUS 125 | Personal Finance | 3 |
| BUS 139 | Entrepreneurship I | 3 |
| BUS 153 | Human Resource Management | 3 |
| BUS 217 | Employment Law and Regs | 3 |
| BUS 230 | Small Business Management | 3 |
| BUS 245 | Entrepreneurship II | 3 |
| BUS 253 | Leadership and Mgt Skills | 3 |
| CTS 130 | Spreadsheet | 3 |
| ETR 215 | Law for Entrepreneurs | 3 |
| ETR 220 | Innovation and Creativity | 3 |
| ETR 230 | Entrepreneur Marketing | 3 |
| ETR 240 | Funding for Entrepreneurs | 3 |
| INT 110 | International Business | 3 |
| MKT 123 | Fundamentals of Selling | 3 |
| MKT 220 | Advertising and Sales Promotion | 3 |
| MKT 221 | Consumer Behavior | 3 |
| MKT 223 | Customer Service | 3 |
| WBL 110 | World of Work | 1 |
| 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 Required65

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Business Administration • A25120 Suggested Program Sequence Day

| | | Class | Lab | Clin/WkExp | Credit |
|-----------------------|------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| BUS 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS 137 | Principles of Management | 3 | 0 | 0 | 3 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT 110 | Math Measurement & Literacy | 2 | 2 | 0 | 3 |
| OR MAT 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| Total | | 13 | 4 | 0 | 15 |
| Spring – 1st year | | | | | |
| ACC 120 | Prin of Financial Accounting | 3 | 2 | 0 | 4 |
| BUS 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS 240 | Business Ethics | 3 | 0 | 0 | 3 |
| MKT 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| OR ENG 112 or ENG 113 | | | | | |
| Total | | 15 | 2 | 0 | 16 |
| Fall – 2nd year | | | | | |
| ACC 121 | Prin in Managerial Accounting | 3 | 2 | 0 | 4 |
| BUS 116 | Business Law II | 3 | 0 | 0 | 3 |
| ECO 251 | Prin of Microeconomics | 3 | 0 | 0 | 3 |
| | Business Elective | 3 | 0 | 0 | 3 |
| | Business Elective | 3 | 0 | 0 | 3 |
| | Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| Total | | 18 | 2 | 0 | 19 |
| Spring – 2nd year | | | | | |
| BUS 285 | Business Management Issues | 2 | 2 | 0 | 3 |
| ECO 252 | Prin of Macroeconomics | 3 | 0 | 0 | 3 |
| | Business Elective | 3 | 0 | 0 | 3 |
| | Business Elective | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Total | | 14 | 2 | 0 | 15 |
| Grand Total | | 60 | 10 | 0 | 65 |

Business Administration • A25120

Evening Courses Offered On Demand (See Your Business Advisor)

| | | |
|--------------------------------------|-------------------------------|----|
| ACC 120 | Prin of Financial Accounting | 4 |
| ACC 121 | Prin in Managerial Accounting | 4 |
| BUS 110 | Introduction to Business | 3 |
| BUS 115 | Business Law I | 3 |
| BUS 116 | Business Law II | 3 |
| BUS 137 | Principles of Management | 3 |
| BUS 240 | Business Ethics | 3 |
| BUS 285 | Business Management Issues | 3 |
| CIS 110 | Introduction to Computers | 3 |
| ECO 251 | Prin of Microeconomics | 3 |
| ECO 252 | Prin of Macroeconomics | 3 |
| ENG 111 | Writing and Inquiry | 3 |
| ENG 112 | Writing/Research in the Disc | 3 |
| OR ENG 113 | Literature-Based Research | 3 |
| OR ENG 114 | Prof Research & Reporting | 3 |
| MAT 110 | Math Measurement & Literacy | 3 |
| OR MAT 143 | Quantitative Literacy | 3 |
| MKT 120 | Principles of Marketing | 3 |
| Humanities/Fine Arts: Elective | | 3 |
| Social/Behavioral Sciences: Elective | | 3 |
| Business/WBL Electives | | 12 |

Students are required to take 12 SHC from the following:

| |
|----------------------------------------------------------------|
| BUS 125, BUS 139, BUS 153, BUS 217, BUS 230, BUS 245, BUS 253, |
| CTS 130, ETR 215, ETR 220, ETR 230, ETR 240, INT 110, MKT 123, |
| MKT 220, MKT 221, MKT 223, WBL 110, WBL XXX. |

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 Required65

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Business Administration Diploma Program • D25120**GENERAL EDUCATION COURSES:.....SHC**

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

MAJOR COURSES:

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

Business Electives.....6

Business Diploma Electives – Must be selected from the following list:
 ACC 121, BUS 116, BUS 125, BUS 153, BUS 217, BUS 230, BUS 253, CTS 130,
 BUS 139, BUS 245, ECO 252, ETR 220, ETR 240, INT 110, MKT 123,
 MKT 220, MKT 223, WBL XXX (1–4 SHC).

Total Credit Hours Required.....37**DEVELOPMENTAL COURSE REQUIREMENTS***

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

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

Business Administration • D25120 Suggested Program Sequence

| | | | | | |
|-----------------|---------------------------|----|---|---|----|
| Fall – 1st year | | | | | |
| BUS 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS 137 | Principles of Management | 3 | 0 | 0 | 3 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| Total | | 11 | 2 | 0 | 12 |

| | | | | | | |
|-------------------|------------------------------|-------|----|---|---|----|
| Spring – 1st year | | Total | 12 | 2 | 0 | 13 |
| ACC 120 | Prin of Financial Accounting | | 3 | 2 | 0 | 4 |
| BUS 115 | Business Law I | | 3 | 0 | 0 | 3 |
| BUS 240 | Business Ethics | | 3 | 0 | 0 | 3 |
| MKT 120 | Principles of Marketing | | 3 | 0 | 0 | 3 |
| Total | | | 12 | 2 | 0 | 13 |

| | | | | | | |
|-----------------|------------------------|-------|----|---|---|----|
| Fall – 2nd year | | Total | 12 | 2 | 0 | 15 |
| ECO 251 | Prin of Microeconomics | | 3 | 0 | 0 | 3 |
| | Business Elective | | 3 | 0 | 0 | 3 |
| | Business Elective | | 3 | 0 | 0 | 3 |
| Total | | | 9 | 0 | 0 | 9 |

| | | | | | |
|-------------------|------------------------------------|----|---|---|----|
| Spring – 2nd year | | | | | |
| | Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| | Total | 3 | 0 | 0 | 3 |
| | Grand Total | 35 | 4 | 0 | 37 |

BUSINESS ADMINISTRATION General Cert. Prog. (C2512001)**MAJOR COURSES:.....SHC**

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

Total Credit Hours Required.....12**Business Administration – General Certificate (C2512001)**

| | | | | | |
|-----------------|-------------------|---|---|---|---|
| Fall – 1st year | | | | | |
| BUS 110 | Intro to Business | 3 | 0 | 0 | 3 |
| MKT 120 | Prin of Marketing | 3 | 0 | 0 | 3 |
| Total | | 6 | 0 | 0 | 6 |

| | | | | | | |
|-------------------|--------------------|-------|----|---|---|----|
| Spring – 1st year | | Total | 0 | 0 | 0 | 0 |
| BUS 115 | Business Law I | | 3 | 0 | 0 | 3 |
| BUS 137 | Prin of Management | | 3 | 0 | 0 | 3 |
| | | Total | 6 | 0 | 0 | 6 |
| Grand Total | | | 12 | 0 | 0 | 12 |

BUSINESS ADMINISTRATION Advanced Cert. #1 (C2512002)**MAJOR COURSES:.....SHC**

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

Total Credit Hours Required.....13**Business Administration – Advanced Certificate #1 (C2512002)**

| Business Administration | | Advanced Certificate #1 (CB120) | | | |
|-------------------------|--------------------------|---------------------------------|---|---|---|
| Fall – 1st year | | | | | |
| BUS 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| BUS 137 | Principles of Management | 3 | 0 | 0 | 3 |
| Total | | 6 | 0 | 0 | 6 |

| | | | | | | |
|-------------------|------------------------------|-------|----|---|---|----|
| Spring – 1st year | | Total | 6 | 0 | 0 | 6 |
| ACC 120 | Prin of Financial Accounting | | 3 | 2 | 0 | 4 |
| BUS 115 | Business Law I | | 3 | 0 | 0 | 3 |
| | | Total | 6 | 2 | 0 | 7 |
| Grand Total | | | 12 | 2 | 0 | 13 |

BUSINESS ADMINISTRATION**Advanced Certificate #2 (C2512003)****MAJOR COURSES:**

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

Total Credit Hours Required.....17**DEVELOPMENTAL COURSE REQUIREMENTS***

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

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

Business Administration – Advanced Certificate #2 (C251003)

| | | | Class | Lab | Clin/WkExp | Credit |
|-----------------|------------------------------|--|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| ACC 120 | Prin of Financial Accounting | | 3 | 2 | 0 | 4 |
| CIS 110 | Introduction to Computers | | 2 | 2 | 0 | 3 |
| ECO 251 | Prin of Microeconomics | | 3 | 0 | 0 | 3 |
| Total | | | 8 | 4 | 0 | 10 |

| | | | | | |
|-------------------|-------------------------------|---|---|---|---|
| Spring – 1st year | | | | | |
| ACC 121 | Prin of Managerial Accounting | 3 | 2 | 0 | 4 |
| ECO 252 | Prin of Macroeconomics | 3 | 0 | 0 | 3 |
| Total | | 6 | 2 | 0 | 7 |

Grand Total 14 6 0 17**BUSINESS ADMINISTRATION****Marketing Certificate Program (C2512005)****MAJOR COURSES:**

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

Total Credit Hours Required.....12**Business Administration – Marketing Certificate (C2512005)**

| | | | | | |
|-----------------|--------------------------|---|---|---|---|
| Fall – 1st year | | | | | |
| BUS 110 | Introduction to Business | 3 | 0 | 0 | 3 |
| MKT 123 | Fundamentals of Selling | 3 | 0 | 0 | 3 |
| Total | | 6 | 0 | 0 | 6 |

| | | | | | |
|-------------------|---------------------------------|----|---|---|----|
| Spring – 1st year | | | | | |
| MKT 120 | Principles of Marketing | 3 | 0 | 0 | 3 |
| MKT 220 | Advertising and Sales Promotion | 3 | 0 | 0 | 3 |
| Total | | 6 | 0 | 0 | 6 |
| Grand Total | | 12 | 0 | 0 | 12 |

BUSINESS ADMINISTRATION**International Business Certificate Program (C512006)****MAJOR COURSES:**

| | | |
|---------|------------------------------------|---|
| ACC 120 | Prin of Financial Accounting | 4 |
| BUS 115 | Business Law I | 3 |
| BUS 137 | Principles of Management | 3 |
| INT 110 | International Business | 3 |
| ECO 252 | Prin of Macroeconomics | 3 |

Total Credit Hours Required.....16**Business Administration –
International Business Cert (C2512006)**

| | | | | | | |
|-----------------|-----|------------------------------|---|---|---|---|
| Fall – 1st year | | | | | | |
| ACC | 120 | Prin of Financial Accounting | 3 | 2 | 0 | 4 |
| INT | 110 | International Business | 3 | 0 | 0 | 3 |
| Total | | | 6 | 2 | 0 | 7 |

| | | | | | |
|-------------------|--------------------------|----|---|---|----|
| Spring – 1st year | | | | | |
| BUS 115 | Business Law I | 3 | 0 | 0 | 3 |
| BUS 137 | Principles of Management | 3 | 0 | 0 | 3 |
| ECO 252 | Prin of Macroeconomics | 3 | 0 | 0 | 3 |
| Total | | 9 | 0 | 0 | 9 |
| Grand Total | | 15 | 2 | 0 | 16 |

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.

GENERAL EDUCATION COURSES:.....SHC

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

| | |
|-----------------------|--------|
| Humanities/Fine Arts: | |
| Elective |3 |

| | |
|-------------------------------|------------------------------|
| Natural Sciences/Mathematics: | |
| MAT 171 | Precalculus Algebra.....4 |
| OR MAT 121 | Algebra/Trigonometry I.....3 |

| | |
|-----------------------------|--------|
| Social/Behavioral Sciences: | |
| Elective |3 |

MAJOR COURSES:

| | |
|---------------|---------------------------------|
| CTS 120 | Hardware/Software Support.....3 |
| OR CET 111 | Computer Upgrade/Repair I.....3 |
| CIS 110 | Introduction to Computers.....3 |
| CSC 134 | C++ Programming.....3 |
| DFT 117 | Technical Drafting.....2 |
| DFT 151 | CAD I.....3 |
| EGR 110 | Intro to Engineering Tech.....2 |
| ELC 131 | Circuit Analysis I.....4 |
| ELC 133 | Circuit Analysis II.....4 |
| ELN 131 | Analog Electronics I.....4 |
| ELN 133 | Digital Electronics.....4 |
| ELN 232 | Intro to Microprocessors.....4 |
| MAT 172 | Precalculus Trigonometry.....4 |
| OR MAT 122 | Algebra/Trigonometry II.....3 |
| MEC 180 | Engineering Materials.....3 |
| NOS 110 | Operating System Concepts.....3 |
| PHY 151 | College Physics I.....4 |
| OR PHY 131 | Physics-Mechanics.....4 |
| CET Electives |6 |

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

| | |
|---------|----------------------------------|
| CET 211 | Computer Upgrade/Repair II.....3 |
| CSC 139 | Visual BASIC Programming.....3 |
| CSC 151 | JAVA Programming.....3 |
| DBA 110 | Database Concepts.....3 |
| NET 125 | Networking Basics.....3 |
| NET 126 | Routing Basics.....3 |
| NET 175 | Wireless Technology.....3 |
| NOS 120 | Linux/UNIX Single User.....3 |
| NOS 130 | Windows Single User.....3 |
| SEC 110 | Security Concepts.....3 |
| WBL XXX | Work-Based Learning.....1-3 |
| WEB 110 | Internet/Web Fundamentals.....3 |
| WEB 140 | Web Development Tools.....3 |

Math/Physics Note: Students planning to transfer to a 4-year college should consider taking MAT 171, MAT 172, and PHY 151. Please see your Computer Engineering Technology advisor.

Total Credit Hours Required..... 70/72

DEVELOPMENTAL COURSE REQUIREMENTS*

| | |
|--------------------------------------------------|--------------------------------------|
| CTS 080 | Computing Fundamentals.....3 |
| DRE 098 | Integrated Reading Writing III.....3 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, | |
| DMA 060 (MAT 121).....6 | |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, | |
| DMA 065 (MAT 171).....7 | |
| MAT MAT 001 (MAT 171).....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.

Computer Engineering Technology • A40160 Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|------------------------------------|------------------------------|--|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| DFT 151 | CAD I | | 2 | 3 | 0 | 3 |
| EGR 110 | Intro to Engineering Tech | | 1 | 2 | 0 | 2 |
| ELC 131 | Circuit Analysis I | | 3 | 3 | 0 | 4 |
| MEC 180 | Engineering Materials | | 2 | 3 | 0 | 3 |
| MAT 171 | Precalculus Algebra | | 3 | 2 | 0 | 4 |
| OR MAT 121 | Algebra/Trigonometry I | | 2 | 2 | 0 | 3 |
| Total | | | 10/11 | 13 | 0 | 15/16 |
| Spring – 1st year | | | | | | |
| CIS 110 | Intro to Computers | | 2 | 2 | 0 | 3 |
| DFT 117 | Technical Drafting | | 1 | 2 | 0 | 2 |
| ELC 133 | Circuit Analysis II | | 3 | 3 | 0 | 4 |
| ELN 131 | Analog Electronics I | | 3 | 3 | 0 | 4 |
| MAT 172 | Precalculus Trigonometry | | 3 | 2 | 0 | 4 |
| OR MAT 122 | Algebra/Trigonometry II | | 2 | 2 | 0 | 3 |
| Total | | | 11/12 | 12 | 0 | 16/17 |
| Summer – 1st year | | | | | | |
| ENG 111 | Writing and Inquiry | | 3 | 0 | 0 | 3 |
| Humanities/Fine Arts Elective | | | 3 | 0 | 0 | 3 |
| Total | | | 6 | 0 | 0 | 6 |
| Fall – 2nd year | | | | | | |
| CSC 134 | C++Programming | | 2 | 3 | 0 | 3 |
| CTS 120 | Hardware/Software Support | | 2 | 3 | 0 | 3 |
| OR CET 111 | Computer Upgrade/Repair I | | 2 | 3 | 0 | 3 |
| ELN 133 | Digital Electronics | | 3 | 3 | 0 | 4 |
| ENG 112 | Writing/Research in the Disc | | 3 | 0 | 0 | 3 |
| OR ENG 114 | Prof Research and Reporting | | 3 | 0 | 0 | 3 |
| OR ENG 113 | Literature-Based Research | | 3 | 0 | 0 | 3 |
| CET Elective | | | 2 | 3 | 0 | 3 |
| Total | | | 12 | 12 | 0 | 16 |
| Spring – 2nd year | | | | | | |
| ELN 232 | Intro to Microprocessors | | 3 | 3 | 0 | 4 |
| NOS 110 | Operating System Concepts | | 2 | 3 | 0 | 3 |
| PHY 151 | College Physics I | | 3 | 2 | 0 | 4 |
| OR PHY 131 | Physics-Mechanics | | 3 | 2 | 0 | 4 |
| CET Elective | | | 2 | 3 | 0 | 3 |
| Social/Behavioral Science Elective | | | 3 | 0 | 0 | 3 |
| Total | | | 13 | 11 | 0 | 17 |
| Grand Total | | | 52/54 | 48 | 0 | 70/72 |

CON'T

Computer Engineering Technology • A40160
Evening Courses Are Offered On Demand
(See Your Computer Engineering Tech. Advisor)

GENERAL EDUCATION COURSES:.....SHC

| | |
|-------------------------------|------------------------------------|
| English/Communications: | |
| ENG 111 | Writing and Inquiry.....3 |
| ENG 112 | Writing/Research in the Disc.....3 |
| OR ENG 114 | Prof Research & Reporting.....3 |
| OR ENG 113 | Literature-Based Research.....3 |
| Humanities/Fine Arts: | |
| Elective.....3 | |
| Natural Sciences/Mathematics: | |
| MAT 171 | Precalculus Algebra.....4 |
| OR MAT 121 | Algebra/Trigonometry I.....3 |
| Social/Behavioral Sciences: | |
| Elective.....3 | |

MAJOR COURSES:

| | |
|---------------|---------------------------------|
| CTS 120 | Hardware/Software Support.....3 |
| OR CET 111 | Computer Upgrade/Repair I.....3 |
| CIS 110 | Introduction to Computers.....3 |
| CSC 134 | C++ Programming.....3 |
| DFT 117 | Technical Drafting.....2 |
| DFT 151 | CAD I.....3 |
| EGR 110 | Intro to Engineering Tech.....2 |
| ELC 131 | Circuit Analysis I.....4 |
| ELC 133 | Circuit Analysis II.....4 |
| ELN 131 | Analog Electronics I.....4 |
| ELN 133 | Digital Electronics.....4 |
| ELN 232 | Intro to Microprocessors.....4 |
| MAT 172 | Precalculus Trigonometry.....4 |
| OR MAT 122 | Algebra/Trigonometry II.....3 |
| MEC 180 | Engineering Materials.....3 |
| NOS 110 | Operating System Concepts.....3 |
| PHY 151 | College Physics I.....4 |
| OR PHY 131 | Physics-Mechanics.....4 |
| CET Electives |6 |

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

| | |
|---------|----------------------------------|
| CET 211 | Computer Upgrade/Repair II.....3 |
| CSC 139 | Visual BASIC Programming.....3 |
| CSC 151 | JAVA Programming.....3 |
| DBA 110 | Database Concepts.....3 |
| NET 125 | Networking Basics.....3 |
| NET 126 | Routing Basics.....3 |
| NET 175 | Wireless Technology.....3 |
| NOS 120 | Linux/UNIX Single User.....3 |
| NOS 130 | Windows Single User.....3 |
| SEC 110 | Security Concepts.....3 |
| WBL XXX | Work-Based Learning.....1-3 |
| WEB 110 | Internet/Web Fundamentals.....3 |
| WEB 140 | Web Development Tools.....3 |

Physics Note: Students planning to transfer to a 4-year college should consider taking MAT 171, MAT 172, and PHY 151. Please see your Computer Engineering Technology advisor.

Total Credit Hours Required 70/72

DEVELOPMENTAL COURSE REQUIREMENTS*

| | |
|--------------------------------------------------|--------------------------------------|
| CTS 080 | Computing Fundamentals.....3 |
| DRE 098 | Integrated Reading Writing III.....3 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, | |
| DMA 060 (MAT 121).....6 | |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, | |
| DMA 065 (MAT 171).....7 | |
| MAT MAT 001 (MAT 171).....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.

COMPUTER ENGINEERING TECHNOLOGY
Certificate Program (C40160)

Fall - 1st Year

| | | | | | |
|--------------|---------------------------|--------------|-----------|----------|--------------|
| EGR 110 | Intro to Engineering Tech | 1 | 2 | 0 | 2 |
| ELC 131 | Circuit Analysis I | 3 | 3 | 0 | 4 |
| MEC 180 | Engineering Materials | 2 | 3 | 0 | 3 |
| DFT 151 | CAD I | 2 | 3 | 0 | 3 |
| MAT 171 | Precalculus Algebra | 3 | 2 | 0 | 4 |
| OR MAT 121 | Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| Total | | 10/11 | 13 | 0 | 15/16 |

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. Coursework will develop a student's ability to communicate complex technical issues related to computer hardware, software, and networks in a manner that computer users can understand. Classes cover computer operations and terminology, operating systems, database, networking, security, and technical support. Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to manage information. Graduates should be prepared to sit for industry-recognized certification exams.

GENERAL EDUCATION COURSES:SHC

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

MAJOR COURSES:

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

Students must select one course from the following:

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

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

Total Credit Hours Required68

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

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

Computer Information Technology • A25260
Suggested Program Sequence Day

| | Class | Lab | Clin/WkExp | Credit |
|---------------------------------------------|-----------|-----------|------------|-----------|
| Fall – 1st year | | | | |
| CIS 110 Introduction to Computers | 2 | 2 | 0 | 3 |
| CIS 115 Intro to Prog & Logic | 2 | 3 | 0 | 3 |
| DBA 110 Database Concepts | 2 | 3 | 0 | 3 |
| NOS 110 Operating System Concepts | 2 | 3 | 0 | 3 |
| Total | 8 | 11 | 0 | 12 |
| Spring – 1st year | | | | |
| CSC 139/134 Visual BASIC OR C++ Programming | 2 | 3 | 0 | 3 |
| DBA 115 Database Applications | 2 | 2 | 0 | 3 |
| CTS 120 Hardware/Software Support | 2 | 3 | 0 | 3 |
| NOS 130 Windows Single User | 2 | 2 | 0 | 3 |
| WBL XXX Work-Based Learning | 0 | 0 | 20 | 2 |
| Total | 8 | 10 | 20 | 14 |
| Summer – 1st year | | | | |
| ENG 111 Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT 143 Quantitative Literacy | 2 | 2 | 0 | 3 |
| Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| Total | 8 | 2 | 0 | 9 |
| Fall – 2nd year | | | | |
| CTS 130 Spreadsheet | 2 | 2 | 0 | 3 |
| CTS 285 Systems Analysis & Design | 3 | 0 | 0 | 3 |
| DBA 120 Database Programming I | 2 | 2 | 0 | 3 |
| NET 125 Networking Basics | 1 | 4 | 0 | 3 |
| NOS 230 Windows Administration I | 2 | 2 | 0 | 3 |
| SEC 110 Security Concepts | 2 | 2 | 0 | 3 |
| Total | 12 | 12 | 0 | 18 |
| Spring – 2nd year | | | | |
| CTS 115 Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CTS 289 System Support Project | 1 | 4 | 0 | 3 |
| ENG 114 Prof Research & Reporting | 3 | 0 | 0 | 3 |
| OR ENG 113 Literature-Based Research | 3 | 0 | 0 | 3 |
| Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Program Elective | 3 | 0 | 0 | 3 |
| Total | 13 | 4 | 0 | 15 |
| Grand Total | 43 | 39 | 20 | 68 |

Computer Information Technology • A25260
Suggested Program Sequence Evening

| | | | | |
|---------------------------------------------|-----------|-----------|-----------|-----------|
| Fall – 1st year | | | | |
| CIS 110 Introduction to Computers | 2 | 2 | 0 | 3 |
| SEC 110 Security Concepts | 2 | 2 | 0 | 3 |
| Total | 4 | 4 | 0 | 6 |
| Spring – 1st year | | | | |
| CTS 115 Info Sys Business Concepts | 3 | 0 | 0 | 3 |
| CSC 139/134 Visual BASIC OR C++ Programming | 2 | 3 | 0 | 3 |
| NOS 110 Operating Systems Concepts | 2 | 3 | 0 | 3 |
| Total | 7 | 6 | 0 | 9 |
| Summer – 1st year | | | | |
| ENG 111 Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT 143 Quantitative Literacy | 2 | 2 | 0 | 3 |
| Total | 5 | 2 | 0 | 6 |
| Fall – 2nd year | | | | |
| CIS 115 Intro to Prog & Logic | 2 | 3 | 0 | 3 |
| CTS 130 Spreadsheet | 2 | 2 | 0 | 3 |
| DBA 110 Database Concepts | 2 | 3 | 0 | 3 |
| NET 125 Networking Basics | 1 | 4 | 0 | 3 |
| Total | 7 | 12 | 0 | 12 |
| Spring – 2nd year | | | | |
| DBA 115 Database Applications | 2 | 2 | 0 | 3 |
| NOS 130 Windows Single User | 2 | 2 | 0 | 3 |
| Total | 4 | 4 | 0 | 6 |
| Summer – 2nd year | | | | |
| ENG 114 Prof Research & Reporting | 3 | 0 | 0 | 3 |
| OR ENG 113 Literature-Based Research | 3 | 0 | 0 | 3 |
| WBL XXX Work-Based Learning | 0 | 0 | 20 | 2 |
| Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| Total | 6 | 0 | 20 | 8 |
| Fall – 3rd year | | | | |
| CTS 285 Systems Analysis & Design | 3 | 0 | 0 | 3 |
| DBA 120 Database Programming I | 2 | 2 | 0 | 3 |
| NOS 230 Windows Administration I | 2 | 2 | 0 | 3 |
| Total | 7 | 4 | 0 | 9 |
| Spring – 3rd year | | | | |
| CTS 289 System Support Project | 1 | 4 | 0 | 3 |
| CTS 120 Hardware/Software Support | 2 | 3 | 0 | 3 |
| Total | 3 | 7 | 0 | 6 |
| Summer – 3rd year | | | | |
| Program Elective | 3 | 0 | 0 | 3 |
| Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Total | 6 | 0 | 0 | 6 |
| Grand Total | 49 | 39 | 20 | 68 |

COMPUTER INFORMATION TECHNOLOGY
Certificate Program (C25260)

| | |
|------------------------------------------|---|
| MAJOR COURSES:.....SHC | |
| CIS 110 Introduction to Computers | 3 |
| CTS 115 Info Sys Business Concepts | 3 |
| CTS 130 Spreadsheet | 3 |
| DBA 110 Database Concepts | 3 |
| DBA 115 Database Applications | 3 |

Total Credit Hours Required15

DEVELOPMENTAL COURSE REQUIREMENTS*

| | |
|----------------------------------------------|---|
| CTS 080 Computing Fundamentals | 3 |
| DRE 098 Integrated Reading Writing III | 3 |

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

Computer Information Technology (C25260)
Certificate Suggested Sequence

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

COMPUTER INFORMATION TECHNOLOGY
Database Certificate (C2526001)
Suggested Sequence

| | |
|----------------------------------------|---|
| MAJOR COURSES:.....SHC | |
| DBA 110 Database Concepts | 3 |
| DBA 115 Database Applications | 3 |
| DBA 120 Database Programming I | 3 |
| DBA 220 Oracle DB Programming II | 3 |

Total Credit Hours Required12

Computer Information Technology – Database Certificate
(C2526001) Suggested Sequence

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

COMPUTER-INTEGRATED MACHINING TECHNOLOGY

A.A.S. Program (A50210)

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

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

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

| | | |
|----------|-------|---|
| Elective | | 3 |
|----------|-------|---|

Natural Sciences/Mathematics:

| | | | |
|-----|-----|-----------------------------|---|
| MAT | 121 | Algebra/Trigonometry I..... | 3 |
|-----|-----|-----------------------------|---|

Social /Behavioral Sciences:

| | | |
|----------|-------|---|
| Elective | | 3 |
|----------|-------|---|

MAJOR COURSES:

| | | | |
|-----|-----|--------------------------------|---|
| CIS | 110 | Introduction to Computers..... | 2 |
| ISC | 112 | Industrial Safety..... | 2 |
| MAC | 122 | CNC Turning | 2 |
| MAC | 124 | CNC Milling | 2 |
| MAC | 131 | Blueprint Reading/Mach I..... | 2 |
| MAC | 132 | Blueprint Reading/Mach II..... | 2 |
| MAC | 141 | Machining Applications I..... | 4 |
| MAC | 142 | Machining Applications II..... | 4 |
| MAC | 143 | Machining Appl III..... | 4 |
| MAC | 151 | Machining Calculations | 2 |
| MAC | 222 | Advanced CNC Turning..... | 2 |
| MAC | 224 | Advanced CNC Milling..... | 2 |
| MAC | 231 | CAM: CNC Turning..... | 3 |
| MAC | 232 | CAM: CNC Milling..... | 3 |
| MAC | 234 | Adv Multi-Axis Machining | 3 |
| MAC | 241 | Jigs & Fixtures I..... | 4 |
| MAC | 242 | Jigs & Fixtures II..... | 4 |
| MAC | 245 | Mold Construction I..... | 4 |
| MEC | 110 | Intro to CAD/CAM..... | 2 |
| MEC | 142 | Physical Metallurgy..... | 2 |
| WBL | 110 | World of Work..... | 1 |
| WLD | 112 | Basic Welding Processes..... | 2 |

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

Total Credit Hours Required.....74

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Computer-Integrated Machining Technology – A50210 Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|-------------------|-----|---------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| ISC | 112 | Industrial Safety | 2 | 0 | 0 | 2 |
| MAC | 131 | Blueprint Reading/Mach I | 1 | 2 | 0 | 2 |
| MAC | 141 | Machining Applications I (1st 8 Wks) | 2 | 6 | 0 | 4 |
| MAC | 142 | Machining Application II (2nd 8 Wks) | 2 | 6 | 0 | 4 |
| MAC | 151 | Machining Calculations I | 1 | 2 | 0 | 2 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| Total | | | 10 | 18 | 0 | 17 |
| Spring – 1st year | | | | | | |
| MAC | 122 | CNC Turning (1st 8 Wks) | 1 | 3 | 0 | 2 |
| MAC | 222 | Advanced CNC Turning (2nd 8 Wks) | 1 | 3 | 0 | 2 |
| MAC | 132 | Blueprint Reading Mach. II | 1 | 2 | 0 | 2 |
| MAC | 124 | CNC Milling (1st 8 Wks) | 1 | 3 | 0 | 2 |
| MAC | 224 | Advanced CNC Milling (2nd 8 Wks) | 1 | 3 | 0 | 2 |
| MAT | 121 | Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| WBL | 110 | World of Work | 1 | 0 | 0 | 1 |
| Total | | | 8 | 16 | 0 | 14 |
| Summer – 1st year | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MEC | 110 | Intro to CAD/CAM | 1 | 2 | 0 | 2 |
| MAC | 143 | Machining Applications III | 2 | 6 | 0 | 4 |
| Total | | | 6 | 8 | 0 | 9 |
| Fall – 2nd year | | | | | | |
| MAC | 231 | CAM:CNC Turning | 1 | 4 | 0 | 3 |
| MAC | 232 | CAM:CNC Milling | 1 | 4 | 0 | 3 |
| MAC | 241 | Jigs & Fixtures I | 2 | 6 | 0 | 4 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Total | | | 7 | 14 | 0 | 13 |
| Spring – 2nd year | | | | | | |
| MAC | 234 | Adv Multi-Axis Machining | 2 | 3 | 0 | 3 |
| MAC | 242 | Jigs & Fixtures II | 1 | 9 | 0 | 4 |
| MEC | 142 | Physical Metallurgy | 1 | 2 | 0 | 2 |
| WLD | 112 | Basic Welding Processes | 1 | 3 | 0 | 2 |
| | | Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| Total | | | 8 | 17 | 0 | 14 |
| Summer – 2nd year | | | | | | |
| ENG | 114 | Literature-Based Research (Preferred) | 3 | 0 | 0 | 3 |
| | OR | ENG 112 Writing/Research in the Disc | 3 | 0 | 0 | 3 |
| | OR | ENG 113 Literature-Based Research | 3 | 0 | 0 | 3 |
| MAC | 245 | Mold Construction I | 2 | 6 | 0 | 4 |
| Total | | | 5 | 6 | 0 | 7 |
| Grand Total | | | 44 | 79 | 0 | 74 |

Computer-Integrated Machining Technology Diploma (D50210)

GENERAL EDUCATION COURSES:

SHC

English/Communications:

ENG 111 Writing and Inquiry 3

Natural Sciences/Mathematics:

MAT 121 Algebra/Trigonometry I 3

MAJOR COURSES:

CIS 111 Basic PC Literacy 2

OR CIS 110 Introduction to Computers 3

MAC 122 CNC Turning 2

MAC 124 CNC Milling 2

MAC 131 Blueprint Reading/Mach I 2

MAC 132 Blueprint Reading/Mach II 2

MAC 141 Machining Applications I 4

MAC 142 Machining Applications II 4

MAC 151 Machining Calculations 2

MAC 222 Advanced CNC Turning 2

MAC 224 Advanced CNC Milling 2

MEC 110 Intro to CAD/CAM 2

WBL 110 World of Work 1

*CIM/WBL Program Elective 6

MAC 231 CAM: CNC Turning 3

MAC 232 CAM: CNC Milling 3

MAC 241 Jigs & Fixtures I 4

MEC 142 Physical Metallurgy 2

WBL XXX Work-Based Learning 1-4

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

Total Credit Hours Required 39/40

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals 3

DRE 097 Integrated Reading Writing II 3

DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 6

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

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

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|-----------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| CIS 111 | Basic PC Literacy | 1 | 2 | 0 | 2 |
| OR | CIS 110 Introduction to Computers | 2 | 2 | 0 | 3 |
| MAC 131 | Blueprint Reading/Mach I | 1 | 2 | 0 | 2 |
| MAC 141 | Machining Applications I | 2 | 6 | 0 | 4 |
| MAC 142 | Machining Applications II | 2 | 6 | 0 | 4 |
| MAC 151 | Machining Calculations | 1 | 2 | 0 | 2 |
| | Program Elective | | | | 3 |
| Total | | 7/8 | 18 | 0 | 17/18 |
| Spring – 1st year | | | | | |
| MAC 122 | CNC Turning (1st 4 Wks) | 1 | 3 | 0 | 2 |
| MAC 222 | Advanced CNC Turning (2nd 4 Wks) | 1 | 3 | 0 | 2 |
| MAC 132 | Blueprint Reading/Mach II | 1 | 2 | 0 | 2 |
| MAC 124 | CNC Milling (3rd 4 Wks) | 1 | 3 | 0 | 2 |
| MAC 224 | Advanced CNC Milling (4th 4 Wks) | 1 | 3 | 0 | 2 |
| MAT 121 | Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| WBL 110 | World of Work | 1 | 0 | 0 | 1 |
| | Program Elective | | | | 3 |
| Total | | 8 | 16 | 0 | 17 |
| Summer – 1st year | | | | | |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MEC 110 | Intro to CAD/CAM | 1 | 2 | 0 | 2 |
| Total | | 4 | 2 | 0 | 5 |
| Grand Total | | 19/20 | 36 | 0 | 39/40 |

Computer-Integrated Machining Technology – Diploma • D50210 Courses Are Offered On Demand/Evening (See Your CIM Advisor)

| | | |
|-------------------------------|-----------------------------------|-----|
| CIS 111 | Basic PC Literacy | 2 |
| OR | CIS 110 Introduction to Computers | 3 |
| ENG 111 | Writing and Inquiry | 3 |
| MAC 122 | CNC Turning | 2 |
| MAC 124 | CNC Milling | 2 |
| MAC 131 | Blueprint Reading/Mach I | 2 |
| MAC 132 | Blueprint Reading/Mach II | 2 |
| MAC 141 | Machining Applications I | 4 |
| MAC 142 | Machining Applications II | 4 |
| MAC 151 | Machining Calculations | 2 |
| MAC 222 | Advanced CNC Turning | 2 |
| MAC 224 | Advanced CNC Milling | 2 |
| MEC 110 | Intro to CAD/CAM | 2 |
| WBL 110 | World of Work | 1 |
| Natural Sciences/Mathematics: | | |
| MAT 121 | Algebra/Trigonometry I | 3 |
| *CIM/WBL Program Elective | | 6 |
| MAC 231 | CAM: CNC Turning | 3 |
| MAC 232 | CAM: CNC Milling | 3 |
| MAC 241 | Jigs & Fixtures I | 4 |
| MEC 142 | Physical Metallurgy | 2 |
| WBL XXX | Work-Based Learning | 1-4 |

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

Total Credit Hours Required 39/40

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals 3

DRE 097 Integrated Reading Writing II 3

DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 6

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

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

MAJOR COURSES:

MAC 122 CNC Turning 2

MAC 124 CNC Milling 2

MAC 131 Blueprint Reading/Mach I 2

MAC 141 Machining Applications I 4

MAC 151 Machining Calculations 2

MEC 110 Intro to CAD/CAM 2

Total Credit Hours Required 14

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals 3

DRE 097 Integrated Reading Writing II 3

MAT DMA 010, DMA 020, 030 3

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

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

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

Computer-Integrated Machining Technology Evening (C50210) Courses Are Offered On Demand (See Your CIM Advisor)

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

Total Credit Hours Required 14

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals 3

DRE 097 Integrated Reading Writing II 3

MAT DMA 010, DMA 020, DMA 030 3

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

COMPUTER PROGRAMMING

A.A.S. Program (A25130)

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

The Computer Programming curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations. Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve. Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, computer operators, systems technicians, or database specialists.

GENERAL EDUCATION COURSES:.....SHC

English/Communications:

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

Humanities/Fine Arts:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

Natural Sciences/Mathematics:

| | | |
|---------|-----------------------------|---|
| MAT 143 | Quantitative Literacy | 3 |
|---------|-----------------------------|---|

Social/Behavioral Sciences:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

MAJOR COURSES:

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

Students must select 3 SHC from the following courses:

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

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

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

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

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

OTHER REQUIRED COURSES:

| | | |
|---------|-------------------------------|---|
| ACA 111 | College Student Success | 1 |
|---------|-------------------------------|---|

Total Credit Hours Required 68/70

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Computer Programming • A25130

Suggested Program Sequence Day

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

COMPUTER PROGRAMMING - Cert. Prog. (C25130)

MAJOR COURSES:.....SHC

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

Total Credit Hours Required 12

DEVELOPMENTAL COURSE REQUIREMENTS*

| | |
|-------------------------------------------------------|---|
| MAT DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 | 5 |
|-------------------------------------------------------|---|

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

Computer Programming – Cert. Suggested Sequence (C25130)

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

COSMETOLOGY

Diploma Program (D55140)

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

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

GENERAL EDUCATION COURSES: SHC

English/Communications:

ENG 111 Writing and Inquiry 3

Social/Behavioral Sciences:

PSY 150 General Psychology 3

MAJOR COURSES:

COS 111 Cosmetology Concepts I 4

OR

COS 111AB Cosmetology Concepts I-AB 2

COS 111BB Cosmetology Concepts I-BB 2

COS 112 Salon I 8

OR

COS 112AB Salon I-AB 4

COS 112BB Salon I-BB 4

COS 113 Cosmetology Concepts II 4

OR

COS 113AB Cosmetology Concepts II-AB 2

COS 113BB Cosmetology Concepts II-BB 2

COS 114 Salon II 8

OR

COS 114AB Salon II-AB 4

COS 114BB Salon II-BB 4

COS 115 Cosmetology Concepts III 4

OR

COS 115AB Cosmetology Concepts III-AB 2

COS 115BB Cosmetology Concepts III-BB 2

COS 116 Salon III 4

OR

COS 116AB Salon III-AB 2

COS 116BB Salon III-BB 2

COS 117 Cosmetology Concepts IV 2

OR

COS 117AB Cosmetology Concepts IV-AB 1

COS 117BB Cosmetology Concepts IV-BB 1

COS 118 Salon IV 7

OR

COS 118AB Salon IV-AB 4

COS 118BB Salon IV-BB 3

WBL 110 World of Work 1

Total Credit Hours Required 48

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.

Cosmetology – Diploma • D55140

Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|-------------------|-----|--------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| COS | 111 | Cosmetology Concepts I | 4 | 0 | 0 | 4 |
| COS | 112 | Salon I | 0 | 24 | 0 | 8 |
| Total | | | 4 | 24 | 0 | 12 |
| Spring – 1st year | | | | | | |
| COS | 113 | Cosmetology Concepts II | 4 | 0 | 0 | 4 |
| COS | 114 | Salon II | 0 | 24 | 0 | 8 |
| Total | | | 4 | 24 | 0 | 12 |
| Summer – 1st year | | | | | | |
| COS | 115 | Cosmetology Concepts III | 4 | 0 | 0 | 4 |
| COS | 116 | Salon III | 0 | 12 | 0 | 4 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| Total | | | 7 | 12 | 0 | 11 |
| Fall – 2nd year | | | | | | |
| COS | 117 | Cosmetology Concepts IV | 2 | 0 | 0 | 2 |
| COS | 118 | Salon IV | 0 | 21 | 0 | 7 |
| PSY | 150 | General Psychology | 3 | 0 | 0 | 3 |
| WBL | 110 | World Of Work | 1 | 0 | 0 | 1 |
| Total | | | 6 | 21 | 0 | 13 |
| Grand Total | | | 21 | 81 | 0 | 48 |

Cosmetology – Diploma/Part-Time • D55140

Suggested Program Sequence Evening

| | | | | | | |
|-------------------|-------|-----------------------------|----|----|---|----|
| Fall – 1st year | | | | | | |
| COS | 111AB | Cosmetology Concepts I-AB | 2 | 0 | 0 | 2 |
| COS | 112AB | Salon I-AB | 0 | 12 | 0 | 4 |
| Total | | | 2 | 12 | 0 | 6 |
| Spring – 1st year | | | | | | |
| COS | 111BB | Cosmetology Concepts I-BB | 2 | 0 | 0 | 2 |
| COS | 112BB | Salon I-BB | 0 | 12 | 0 | 4 |
| Total | | | 2 | 12 | 0 | 6 |
| Fall – 2nd year | | | | | | |
| COS | 113AB | Cosmetology Concepts II-AB | 2 | 0 | 0 | 2 |
| COS | 114AB | Salon II-AB | 0 | 12 | 0 | 4 |
| Total | | | 2 | 12 | 0 | 6 |
| Spring – 2nd year | | | | | | |
| COS | 113BB | Cosmetology Concepts II-BB | 2 | 0 | 0 | 2 |
| COS | 114BB | Salon II-BB | 0 | 12 | 0 | 4 |
| Total | | | 2 | 12 | 0 | 6 |
| Fall – 3rd year | | | | | | |
| COS | 115AB | Cosmetology Concepts III-AB | 2 | 0 | 0 | 2 |
| COS | 116AB | Salon III-AB | 0 | 6 | 0 | 2 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| Total | | | 5 | 6 | 0 | 7 |
| Spring – 3rd year | | | | | | |
| COS | 115BB | Cosmetology Concepts III-BB | 2 | 0 | 0 | 2 |
| COS | 116BB | Salon III-BB | 0 | 6 | 0 | 2 |
| Total | | | 2 | 6 | 0 | 4 |
| Fall – 4th year | | | | | | |
| COS | 117AB | Cosmetology Concepts IV-AB | 1 | 0 | 0 | 1 |
| COS | 118AB | Salon IV-AB | 0 | 12 | 0 | 4 |
| Total | | | 1 | 12 | 0 | 5 |
| Spring – 4th year | | | | | | |
| COS | 117BB | Cosmetology Concepts IV-BB | 1 | 0 | 0 | 1 |
| COS | 118BB | Salon IV-BB | 0 | 9 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 0 | 3 |
| WBL | 110 | World Of Work | 1 | 0 | 0 | 1 |
| Total | | | 5 | 9 | 0 | 8 |
| Grand Total | | | 21 | 81 | 0 | 48 |

CRIMINAL JUSTICE TECHNOLOGY

A.A.S. Program (A55180)

Criminal Justice Technology • A55180

Suggested Program Sequence Day

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

The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored. Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology. Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

GENERAL EDUCATION COURSES: SHC

English/Communications:

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

Humanities/Fine Arts:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

Natural Sciences/Mathematics:

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

Social/Behavioral Sciences:

| | | |
|---------|--------------------------|---|
| PSY 150 | General Psychology | 3 |
|---------|--------------------------|---|

MAJOR COURSES:

| | | |
|---------|------------------------------------------------------|---|
| CIS 110 | Introduction to Computers (Effective Spr 2015) | 3 |
| CJC 111 | Intro to Criminal Justice | 3 |
| CJC 112 | Criminology..... | 3 |
| CJC 113 | Juvenile Justice | 3 |
| CJC 121 | Law Enforcement Operations | 3 |
| CJC 131 | Criminal Law | 3 |
| CJC 132 | Court Procedure & Evidence..... | 3 |
| CJC 141 | Corrections..... | 3 |
| CJC 151 | Intro to Loss Prevention | 3 |
| CJC 160 | Terrorism: Underlying Issues | 3 |
| CJC 212 | Ethics & Comm Relations | 3 |
| CJC 215 | Organization & Administration | 3 |
| CJC 221 | Investigative Principles..... | 4 |
| CJC 225 | Crisis Intervention | 3 |
| CJC 231 | Constitutional Law | 3 |
| SOC 210 | Introduction to Sociology | 3 |

Program Elective

| | | |
|---------|---------------------------------|-----|
| CJC 114 | Investigative Photography | 2 |
| CJC 222 | Criminalistics | 3 |
| HIS 111 | World Civilizations I..... | 3 |
| HIS 112 | World Civilizations II | 3 |
| HIS 121 | Western Civilization I | 3 |
| HIS 122 | Western Civilization II..... | 3 |
| POL 120 | American Government..... | 3 |
| POL 130 | State & Local Government | 3 |
| PSY 231 | Forensic Psychology | 3 |
| PSY 241 | Developmental Psych | 3 |
| PSY 281 | Abnormal Psychology..... | 3 |
| SOC 220 | Social Problems | 3 |
| WBL XXX | Work-Based Learning | 1-3 |

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

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

Total Credit Hours Required67

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

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

Criminal Justice Technology • A55180
Suggested Program Sequence Evening

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

CRIMINAL JUSTICE TECHNOLOGY
Law Enforcement Certificate Prog (C5518001)

| | |
|------------------------------------|------------|
| MAJOR COURSES: | SHC |
| CJC 111 Intro to Criminal Justice | 3 |
| CJC 121 Law Enforcement Operations | 3 |
| CJC 131 Criminal Law | 3 |
| CJC 132 Court Procedure & Evidence | 3 |
| CJC 212 Ethics & Comm Relations | 3 |
| Total Credit Hours Required | 15 |

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

| | | | | | |
|-------------------|----------------------------|----|---|---|----|
| Fall – 1st year | | | | | |
| CJC 111 | Intro to Criminal Justice | 3 | 0 | 0 | 3 |
| CJC 131 | Criminal Law | 3 | 0 | 0 | 3 |
| CJC 132 | Court Procedure & Evidence | 3 | 0 | 0 | 3 |
| Total | | 9 | 0 | 0 | 9 |
| Spring – 1st year | | | | | |
| CJC 121 | Law Enforcement Operations | 3 | 0 | 0 | 3 |
| CJC 212 | Ethics & Comm Relations | 3 | 0 | 0 | 3 |
| Total | | 6 | 0 | 0 | 6 |
| Grand Total | | 15 | 0 | 0 | 15 |

CRIMINAL JUSTICE TECHNOLOGY

Correctional – Probation & Parole Certificate Prog (C5518002)

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

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

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

CRIMINAL JUSTICE TECHNOLOGY

Judicial – Court Administrator Certificate Prog (C5518004)

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

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

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

CRIMINAL JUSTICE TECHNOLOGY

Retail – Industrial Security Certificate Prog (C5518003)

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

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

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

CRIMINAL JUSTICE TECHNOLOGY

Latent Evidence Concentration

A.A.S. Program (A5518A)

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

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

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

Elective

Natural Sciences/Mathematics:

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

Social/Behavioral Sciences:

| | | |
|---------|-------------------------|---|
| PSY 150 | General Psychology..... | 3 |
|---------|-------------------------|---|

MAJOR COURSES:

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

Criminal Justice Elective

CJC 114 Investigative Photography.....

WBL XXX Work-Based Learning

Total Credit Hours Required 68/72

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

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

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| CJC 111 | Intro to Criminal Justice | 3 | 0 | 0 | 3 |
| CJC 131 | Criminal Law | 3 | 0 | 0 | 3 |
| CJC 132 | Court Procedures & Evidence | 3 | 0 | 0 | 3 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| Total | | 12 | 0 | 0 | 12 |
| Spring – 1st year | | | | | |
| CJC 112 | Criminology | 3 | 0 | 0 | 3 |
| CJC 121 | Law Enforcement Operations | 3 | 0 | 0 | 3 |
| CJC 221 | Investigative Principles | 3 | 2 | 0 | 4 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| Total | | 11 | 4 | 0 | 13 |
| Summer – 1st year | | | | | |
| ENG 113 | Literature-Based Research | 3 | 0 | 0 | 3 |
| OR | ENG 114 Prof. Research & Reporting | 3 | 0 | 0 | 3 |
| MAT 110 | Math Measurement & Literacy | 2 | 2 | 0 | 3 |
| OR | MAT 143 Quantitative Literacy | 2 | 2 | 0 | 3 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Total | | 11 | 2 | 0 | 12 |
| Fall – 2nd year | | | | | |
| CJC 113 | Juvenile Justice | 3 | 0 | 0 | 3 |
| CJC 146 | Trace Evidence | 2 | 3 | 0 | 3 |
| CJC 231 | Constitutional Law | 3 | 0 | 0 | 3 |
| CJC 245 | Friction Ridge Analysis | 2 | 3 | 0 | 3 |
| | Criminal Justice Elective | | | | 1/4 |
| Total | | 10 | 6 | 0 | 13/16 |
| Spring – 2nd year | | | | | |
| CJC 222 | Criminalistics | 3 | 0 | 0 | 3 |
| CJC 144 | Crime Scene Processing | 2 | 3 | 0 | 3 |
| CJC 212 | Ethics & Comm. Relations | 3 | 0 | 0 | 3 |
| CJC 246 | Adv. Friction Ridge Analy | 2 | 3 | 0 | 3 |
| CJC 250 | Forensic Biology I | 2 | 2 | 0 | 3 |
| OR | CJC 251 Forensic Chemistry I | 3 | 2 | 0 | 4 |
| PSY 231 | Forensic Psychology | 3 | 0 | 0 | 3 |
| Total | | 15/16 | 8 | 0 | 18/19 |
| Grand Total | | 59/60 | 20 | 0 | 68/72 |

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

| | | | Class | Lab | Clin/WkExp | Credit |
|-------------------|------------|-------------------------------|--------------|-----------|------------|--------------|
| Fall – 1st year | | | | | | |
| CJC | 111 | Intro to Criminal Justice | 3 | 0 | 0 | 3 |
| CJC | 131 | Criminal Law | 3 | 0 | 0 | 3 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| | | Total | 9 | 0 | 0 | 9 |
| Spring – 1st year | | | | | | |
| CJC | 121 | Law Enforcement Operations | 3 | 0 | 0 | 3 |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| | | Total | 5 | 2 | 0 | 6 |
| Summer – 1st year | | | | | | |
| MAT | 110 | Math Measurement & Literacy | 2 | 2 | 0 | 3 |
| | OR MAT 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 0 | 3 |
| | | Total | 5 | 2 | 0 | 6 |
| Fall – 2nd year | | | | | | |
| CJC | 113 | Juvenile Justice | 3 | 0 | 0 | 3 |
| CJC | 146 | Trace Evidence | 2 | 3 | 0 | 3 |
| | | Criminal Justice Elective | | | | 1/4 |
| | | Total | 5 | 3 | 0 | 7/10 |
| Spring – 2nd year | | | | | | |
| CJC | 144 | Crime Scene Processing | 2 | 3 | 0 | 3 |
| CJC | 212 | Ethics & Comm Relations | 3 | 0 | 0 | 3 |
| PSY | 231 | Forensic Psychology | 3 | 0 | 0 | 3 |
| | | Total | 8 | 3 | 0 | 9 |
| Summer – 2nd year | | | | | | |
| ENG | 113 | Literature-Based Research | 3 | 0 | 0 | 3 |
| | OR ENG 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | | Total | 6 | 0 | 0 | 6 |
| Fall – 3rd year | | | | | | |
| CJC | 132 | Court Procedures & Evidence | 3 | 0 | 0 | 3 |
| | | Total | 3 | 0 | 0 | 3 |
| Spring – 3rd year | | | | | | |
| CJC | 221 | Investigative Principles | 3 | 2 | 0 | 4 |
| CJC | 112 | Criminology | 3 | 0 | 0 | 3 |
| | | Total | 6 | 2 | 0 | 7 |
| Fall – 4th year | | | | | | |
| CJC | 231 | Constitutional Law | 3 | 0 | 0 | 3 |
| CJC | 245 | Friction Ridge Analysis | 2 | 3 | 0 | 3 |
| | | Total | 5 | 3 | 0 | 6 |
| Spring – 4th year | | | | | | |
| CJC | 222 | Criminalistics | 3 | 0 | 0 | 3 |
| CJC | 246 | Adv. Friction Ridge Analy | 2 | 3 | 0 | 3 |
| CJC | 250 | Forensic Biology I | 2 | 2 | 0 | 3 |
| | OR CJC 251 | Forensic Chemistry I | 3 | 2 | 0 | 4 |
| | | Total | 7/8 | 5 | 0 | 9/10 |
| | | Grand Total | 59/60 | 20 | 0 | 68/72 |

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

| MAJOR COURSES: | | SHC |
|------------------------------------------|---------------------------------|-----------|
| CJC 111 | Intro to Criminal Justice | 3 |
| CJC 114 | Investigative Photography | 2 |
| CJC 144 | Crime Scene Processing | 3 |
| CJC 146 | Trace Evidence | 3 |
| CJC 221 | Investigative Principles..... | 4 |
| CJC 245 | Friction Ridge Analysis | 3 |
| Total Credit Hours Required | | 18 |

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

| | | | | | |
|-------------------|-----|---------------------------|-----------|-----------|-------------|
| Fall – 1st year | | | | | |
| CJC | 111 | Intro to Criminal Justice | 3 | 0 | 0 3 |
| CJC | 146 | Trace Evidence | 2 | 3 | 0 3 |
| CJC | 114 | Investigative Photography | 1 | 2 | 0 2 |
| CJC | 245 | Friction Ridge Analysis | 2 | 3 | 0 3 |
| | | Total | 8 | 5 | 0 11 |
| Spring – 1st year | | | | | |
| CJC | 221 | Investigative Principles | 3 | 2 | 0 4 |
| CJC | 144 | Crime Scene Processing | 2 | 3 | 0 3 |
| | | Total | 5 | 5 | 0 7 |
| | | Grand Total | 13 | 13 | 0 18 |

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

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

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

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

| | | |
|---------|------------------------|---|
| HUM 115 | Critical Thinking..... | 3 |
|---------|------------------------|---|

Natural Sciences/Mathematics:

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

Social/Behavioral Sciences:

| | | |
|---------|-------------------------|---|
| PSY 150 | General Psychology..... | 3 |
|---------|-------------------------|---|

MAJOR COURSES:

| | | |
|---------|--------------------------------|---|
| BIO 163 | Basic Anat & Physiology..... | 5 |
| BIO 175 | General Microbiology..... | 3 |
| OR | BIO 275 Microbiology | 4 |
| DEN 110 | Orofacial Anatomy | 3 |
| DEN 111 | Infection/Hazard Control | 2 |
| DEN 112 | Dental Radiography..... | 3 |
| DEN 120 | Dental Hyg Preclinic Lec | 2 |
| DEN 121 | Dental Hygiene Precl Lab..... | 2 |
| DEN 123 | Nutrition/Dental Health | 2 |
| DEN 124 | Periodontology..... | 2 |
| DEN 130 | Dental Hygiene Theory I | 2 |
| DEN 131 | Dental Hygiene Clinic I..... | 3 |
| DEN 140 | Dental Hygiene Theory II..... | 1 |
| DEN 141 | Dental Hygiene Clinic II..... | 2 |
| DEN 220 | Dental Hygiene Theory III..... | 2 |
| DEN 221 | Dental Hygiene Clinic III..... | 4 |
| DEN 222 | General & Oral Pathology | 2 |
| DEN 223 | Dental Pharmacology | 2 |
| DEN 224 | Materials and Procedures..... | 2 |
| DEN 230 | Dental Hygiene Theory IV | 1 |
| DEN 231 | Dental Hygiene Clinic IV..... | 4 |
| DEN 232 | Community Dental Health..... | 3 |
| DEN 233 | Professional Development..... | 2 |

OTHER REQUIRED HOURS:

| | | |
|---------|------------------------------|---|
| MED 118 | Medical Law and Ethics | 2 |
|---------|------------------------------|---|

Total Credit Hours Required 75/76

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

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

Dental Hygiene • A45260 Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--|-------|-------|------------|--------|
| Spring – 1st year | | | | | | |
| BIO 163 | Basic Anatomy and Physiology | | 4 | 2 | 0 | 5 |
| CHM 130 | Gen, Org & Biochemistry | | 3 | 0 | 0 | 3 |
| CHM 130A | Gen, Org & Biochem Lab | | 0 | 2 | 0 | 1 |
| ENG 111 | Writing and Inquiry | | 3 | 0 | 0 | 3 |
| PSY 150 | General Psychology | | 3 | 0 | 0 | 3 |
| Total | | | 13 | 4 | 0 | 15 |
| Fall – 1st year | | | | | | |
| BIO 175 | General Microbiology | | 2 | 2 | 0 | 3 |
| OR | BIO 275 Microbiology | | 3 | 3 | 0 | 4 |
| COM 110 | Introduction to Communication | | 3 | 0 | 0 | 3 |
| ENG 112 | Writing/Research in the Disc (Preferred) | | 3 | 0 | 0 | 3 |
| OR | ENG 114 Prof Research & Reporting | | 3 | 0 | 0 | 3 |
| HUM 115 | Critical Thinking | | 3 | 0 | 0 | 3 |
| Total | | | 11/12 | 2/3 | 0 | 12/13 |
| Note: General Education Course Requirements —Applicants must have completed the following courses required for the program, prior to the Dental Hygiene Program application deadline (March 15). Students must complete BIO 163, BIO 175, CHM 130 & CHM 130A, COM 110, ENG 111, ENG 114, HUM 115, & PSY 150. Grades lower than C will not be accepted. Students must also be accepted into the Dental Hygiene program prior to taking DEN courses. | | | | | | |
| Fall – 2nd year | | | | | | |
| DEN 110 | Orofacial Anatomy | | 2 | 2 | 0 | 3 |
| DEN 111 | Infection/Hazard Control | | 2 | 0 | 0 | 2 |
| DEN 120 | Dental Hygiene Preclinic Lecture | | 2 | 0 | 0 | 2 |
| DEN 121 | Dental Hygiene Precl Lab | | 0 | 6 | 0 | 2 |
| Total | | | 9 | 8 | 0 | 9 |
| Spring – 2nd year | | | | | | |
| DEN 112 | Dental Radiography | | 2 | 3 | 0 | 3 |
| DEN 222 | General & Oral Pathology | | 2 | 0 | 0 | 2 |
| DEN 130 | Dental Hygiene Theory I | | 2 | 0 | 0 | 2 |
| DEN 131 | Dental Hygiene Clinic I | | 0 | 0 | 9 | 3 |
| DEN 123 | Nutrition/Dental Health | | 2 | 0 | 0 | 2 |
| Total | | | 8 | 3 | 9 | 12 |
| Summer – 2nd year | | | | | | |
| DEN 124 | Periodontology | | 2 | 0 | 0 | 2 |
| DEN 140 | Dental Hygiene Theory II | | 1 | 0 | 0 | 1 |
| DEN 141 | Dental Hygiene Clinic II | | 0 | 0 | 6 | 2 |
| MED 118 | Medical Law and Ethics | | 2 | 0 | 0 | 2 |
| Total | | | 5 | 0 | 6 | 7 |
| Fall – 3rd year | | | | | | |
| DEN 220 | Dental Hygiene Theory III | | 2 | 0 | 0 | 2 |
| DEN 221 | Dental Hygiene Clinic III | | 0 | 0 | 12 | 4 |
| DEN 223 | Dental Pharmacology | | 2 | 0 | 0 | 2 |
| DEN 232 | Community Dental Health | | 2 | 3 | 0 | 3 |
| Total | | | 6 | 3 | 12 | 11 |
| Spring – 3rd year | | | | | | |
| DEN 224 | Materials and Procedures | | 1 | 3 | 0 | 2 |
| DEN 230 | Dental Hygiene Theory IV | | 1 | 0 | 0 | 1 |
| DEN 231 | Dental Hygiene Clinic IV | | 0 | 0 | 12 | 4 |
| DEN 233 | Professional Development | | 2 | 0 | 0 | 2 |
| Total | | | 4 | 3 | 12 | 9 |
| Grand Total | | | 53/54 | 23/24 | 39 | 75/76 |

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 – five 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 and/or health assessments. If a student is excluded from an educational setting as a result of one of these requirements, the student may be asked to withdraw from the program. Some settings may also require additional vaccinations and/or health examinations. Completion of 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. Coursework 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 accredited by the National Accreditation through the National Association for the Education of Young Children. The standards for students are rigorous and require students to perform at a minimum competency level. Due to the minimum competency level expected for graduates, the Education Department requires a grade of C or higher on all required Education Courses for graduation with a certificate, diploma, or degree.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

Elective

Natural Sciences/Mathematics:

Elective

Social/Behavioral Science:

Elective

MAJOR COURSES:

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

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

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

(Early Childhood Education cont.)

OTHER REQUIRED COURSES:

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

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | |
|---------------------------------------------------------------------------|--------------------------------------|---|
| CTS 080 | Computing Fundamentals..... | 3 |
| DRE 098 | Integrated Reading Writing III | 3 |
| DMA DMA 010, DMA 020, DMA 030 (MAT 110)..... | | 3 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143 or MAT 152)..... | | 5 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 (MAT 121)..... | | 6 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 DMA 065 (MAT 171).... | | 7 |
| MAT MAT 001 (MAT 171) | | 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 • A55220

Suggested Program Sequence Day

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|--------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| ACA 111 | College Student Success | 1 | 0 | 0 | 1 |
| EDU 119 | Intro to Early Child Educ | 4 | 0 | 0 | 4 |
| *EDU 144 | Child Development I | 3 | 0 | 0 | 3 |
| EDU 151 | Creative Activities | 3 | 0 | 0 | 3 |
| EDU 271 | Educational Technology | 2 | 2 | 0 | 3 |
| 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 | 2/3 | 2 | 0 | 3/4 |
| | Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| Total | | 8/9 | 2 | 0 | 9/10 |
| Fall – 2nd year | | | | | |
| ENG 113 | Literature-Based Research | 3 | 0 | 0 | 3 |
| OR | ENG 112 Writing/Research in the Disc | 3 | 0 | 0 | 3 |
| OR | ENG 114 Prof Research & Reporting | 3 | 0 | 0 | 3 |
| EDU 131 | Child, Family, & Commun | 3 | 0 | 0 | 3 |
| EDU 221 | Children With Exceptional | 3 | 0 | 0 | 3 |
| EDU 259 | Curriculum Planning | 3 | 0 | 0 | 3 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| Total | | 15 | 0 | 0 | 15 |
| Spring – 2nd year | | | | | |
| COM 110 | Introduction to Communication | 3 | 0 | 0 | 3 |
| EDU 234 | Infants, Toddlers, & Twos | 3 | 0 | 0 | 3 |
| EDU 251 | Exploration Activities | 3 | 0 | 0 | 3 |
| EDU 280 | Language & Literacy Exp | 3 | 0 | 0 | 3 |
| EDU 284 | Early Child Capstone Prac | 1 | 9 | 0 | 4 |
| Total | | 13 | 9 | 0 | 16 |
| Grand Total | | 66/69 | 13 | 0 | 71/74 |

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

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

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

EARLY CHILDHOOD EDUCATION Diploma Program (D55220)

GENERAL EDUCATION COURSES:SHC

English/Communications:

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

MAJOR COURSES:

| | | |
|---------|---------------------------------|---|
| EDU 119 | Intro to Early Child Educ | 4 |
| EDU 131 | Child, Family, & Commun | 3 |
| EDU 144 | Child Development I | 3 |
| EDU 145 | Child Development II | 3 |
| OR | | |
| PSY 244 | Child Development I | 3 |
| PSY 245 | Child Development II | 3 |
| EDU 146 | Child Guidance | 3 |
| EDU 151 | Creative Activities | 3 |
| EDU 153 | Health, Safety, & Nutrit | 3 |
| EDU 221 | Children with Exceptional | 3 |
| EDU 259 | Curriculum Planning | 3 |
| EDU 271 | Educational Technology | 3 |
| EDU 280 | Language & Literacy Exp | 3 |
| EDU 284 | Early Child Capstone Prac | 4 |

OTHER REQUIRED COURSES:

| | | |
|---------|-------------------------------|---|
| ACA 111 | College Student Success | 1 |
|---------|-------------------------------|---|

Total Credit Hours Required45

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.

Early Childhood Education Diploma Suggested Sequence (D55220)

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|--------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| ACA 111 | College Student Success | 1 | 0 | 0 | 1 |
| EDU 119 | Intro to Early Child Educ | 4 | 0 | 0 | 4 |
| *EDU 144 | Child Development I | 3 | 0 | 0 | 3 |
| EDU 151 | Creative Activities | 3 | 0 | 0 | 3 |
| EDU 271 | Educational Technology | 2 | 2 | 0 | 3 |
| Total | | 13 | 2 | 0 | 14 |
| Spring – 1st year | | | | | |
| *EDU 145 | Child Development II | 3 | 0 | 0 | 3 |
| EDU 146 | Child Guidance | 3 | 0 | 0 | 3 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| EDU 153 | Health, Safety, & Nutriti | 3 | 0 | 0 | 3 |
| EDU 280 | Language & Literacy Exp | 3 | 0 | 0 | 3 |
| Total | | 15 | 0 | 0 | 15 |
| Fall – 2nd year | | | | | |
| EDU 131 | Child, Family, & Commun | 3 | 0 | 0 | 3 |
| EDU 221 | Children With Exceptional | 3 | 0 | 0 | 3 |
| EDU 259 | Curriculum Planning | 3 | 0 | 0 | 3 |
| EDU 284 | Early Child Capstone Prac | 1 | 9 | 0 | 4 |
| ENG 113 | Literature-Based Research | 3 | 0 | 0 | 3 |
| OR | ENG 112 Writing/Research in the Disc | 3 | 0 | 0 | 3 |
| OR | ENG 114 Prof Research & Reporting | 3 | 0 | 0 | 3 |
| Total | | 13 | 9 | 0 | 16 |
| Grand Total | | 41 | 11 | 0 | 45 |

EARLY CHILDHOOD EDUCATION School-Age Certificate Program (C5522004)

MAJOR COURSES:SHC

| | | |
|---------|--------------------------------|---|
| EDU 131 | Child, Family, & Commun | 3 |
| EDU 144 | Child Development I | 3 |
| EDU 145 | Child Development II | 3 |
| OR | | |
| PSY 244 | Child Development I | 3 |
| PSY 245 | Child Development II | 3 |
| EDU 146 | Child Guidance | 3 |
| EDU 235 | School-Age Dev & Program | 3 |
| EDU 275 | Effective Teach Train | 2 |

OTHER REQUIRED COURSES:

| | | |
|---------|-------------------------------|---|
| ACA 111 | College Student Success | 1 |
|---------|-------------------------------|---|

Total Credit Hours Required18

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.

School-Age Cert. Suggested Sequence (C5522004)

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

INFANT/TODDLER CARE Certificate Prog. (C55290)

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

MAJOR COURSES:SHC

| | | |
|--------------------------------------|----------------------------------|---|
| EDU 119 | Intro to Early Child Educ | 4 |
| EDU 131 | Child, Family & Commun | 3 |
| EDU 153 | Health, Safety & Nutrit | 3 |
| EDU 234 | Infants, Toddlers, & Twos | 3 |
| EDU | Child Development Elective | 3 |
| (Select a course from the following) | | |
| EDU 144 | Child Development I | 3 |
| PSY 244 | Child Development I | 3 |

OTHER REQUIRED COURSES:

| | | |
|---------|-------------------------------|---|
| ACA 111 | College Student Success | 1 |
|---------|-------------------------------|---|

Total Credit Hours Required:17

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | |
|---------|--------------------------------------|---|
| DRE 098 | Integrated Reading Writing III | 3 |
|---------|--------------------------------------|---|

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

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

ELECTRICAL SYSTEMS TECHNOLOGY Diploma Program (D35130)

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 111 Writing and Inquiry3

Natural Sciences/Mathematics:

MAT 121 Algebra/Trigonometry I3

OR MAT 110 Math Measurement & Literacy3

MAJOR COURSES:

BPR 111 Print Reading2

ELC 112 DC/AC Electricity5

ELC 113 Residential Wiring4

ELC 115 Industrial Wiring4

ELC 117 Motors and Controls4

ELC 118 National Electrical Code2

ELC 119 NEC Calculations2

ELC 128 Intro to PLC3

ELN 229 Industrial Electronics4

Total Credit Hours Required36

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals3

DRE 098 Integrated Reading Writing III3

DMA DMA 010, DMA 020, DMA 030 (MAT 110)3

DMA DMA 010, DMA 020, DMA 030, DMA, 040, DMA 050,
DMA 060 (MAT 121)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.

Electrical Systems Technology Diploma • D35130 Suggested Program Sequence Day

Fall – 1st year

BPR 111 Print Reading 1 2 0 2

ELC 112 DC/AC Electricity 3 6 0 5

ELC 113 Residential Wiring 2 6 0 4

ELC 118 National Electrical Code 1 2 0 2

ELC 119 NEC Calculations 1 2 0 2

Total 8 18 0 15

Spring – 1st year

ELC 115 Industrial Wiring 2 6 0 4

ELC 117 Motors and Controls 2 6 0 4

ELC 128 Intro to PLC 2 3 0 3

ELN 229 Industrial Electronics 2 4 0 4

Total 8 19 0 15

Summer – 1st yr

ENG 111 Writing and Inquiry 3 0 0 3

MAT 121 Algebra/Trigonometry I 2 2 0 3

OR MAT 110 Math Measurement & Literacy 2 2 0 3

Total 5 2 0 6

Grand Total 21 39 0 36

Electrical Systems Technology Diploma • D35130 Suggested Prog Seq Evening

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|-------------------------------------|-------|-----|------------|--------|
| Spring – 1st year | | | | | |
| BPR 111 | Print Reading | 1 | 2 | 0 | 2 |
| ELC 113 | Residential Wiring | 2 | 6 | 0 | 4 |
| ELC 118 | National Electrical Code | 1 | 2 | 0 | 2 |
| Total | | 4 | 10 | 0 | 8 |
| Summer - 1st year | | | | | |
| MAT 121 | Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| OR | MAT 110 Math Measurement & Literacy | 2 | 2 | 0 | 3 |
| Total | | 2 | 2 | 0 | 3 |
| Fall – 1st year | | | | | |
| ELC 112 | DC/AC Electricity | 3 | 6 | 0 | 5 |
| ELC 119 | NEC Calculations | 1 | 2 | 0 | 2 |
| Total | | 4 | 8 | 0 | 7 |
| Spring – 2nd year | | | | | |
| ELC 117 | Motors and Controls | 2 | 6 | 0 | 4 |
| ELN 229 | Industrial Electronics | 2 | 4 | 0 | 4 |
| Total | | 4 | 10 | 0 | 8 |
| Summer - 2nd Year | | | | | |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| Total | | 3 | 0 | 0 | 3 |
| Fall – 2nd year | | | | | |
| ELC 115 | Industrial Wiring | 2 | 6 | 0 | 4 |
| ELC 128 | Intro to PLC | 2 | 3 | 0 | 3 |
| Total | | 4 | 9 | 0 | 7 |
| Grand Total | | 21 | 39 | 0 | 36 |

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

MAJOR COURSES:

SHC

BPR 111 Print Reading2

ELC 113 Residential Wiring4

ELC 115 Industrial Wiring4

ELC 118 National Electrical Code2

Total Credit Hours Required12

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098 Integrated Reading Writing III3

Electrical Systems Technology Electrical/Installation Concentration (C35130) Certificate Program Suggested Sequence

Fall – 1st year

BPR 111 Print Reading 1 2 0 2

ELC 113 Residential Wiring 2 6 0 4

ELC 118 National Electrical Code 1 2 0 2

Total 4 10 0 8

Spring – 1st year

ELC 115 Industrial Wiring 2 6 0 4

Total 2 6 0 4

Grand Total 6 16 0 12

ELECTRONEURODIAGNOSTIC TECHNOLOGY

A.A.S. Program (A45320)

Electroneurodiagnostic Technology • A45320

Suggested Program Sequence Day

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

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

GENERAL EDUCATION COURSES:

SHC

English/Communications:

ENG 111 Writing and Inquiry3
English Elective3

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

ENG 112 Writing/Research in the Disc.....3
ENG 113 Literature-Based Research.....3
ENG 114 Prof Research & Reporting3

Humanities/Fine Arts:

Elective3

Natural Sciences/Mathematics:

MAT 143 Quantitative Literacy3

Social/Behavioral Sciences:

PSY 150 General Psychology3

MAJOR COURSES:

BIO 168 Anatomy and Physiology I4
BIO 169 Anatomy and Physiology II4
CIS 110 Introduction to Computers3
EDT 110 Neuroscience/Pathol Cond4
EDT 111 Laboratory Management1
EDT 111A EDT Laboratory Basics1
EDT 112 Instrument/Record Methods3
EDT 113 Clinical Correlates2
EDT 114 Special Procedures3
EDT 115 EDT Laboratory Practice2
EDT 116 EDT Clinical Experience12
EDT 118 EDT Laboratory Pract. II3
ELC 111 Intro to Electricity3
MED 118 Medical Law and Ethics2
MED 121 Medical Terminology I3
MED 122 Medical Terminology II3

Total Credit Hours Required68

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals3
DRE 098 Integrated Reading Writing III3
DMA DMA 010, 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.

| | | | Class | Lab | Clin/WkExp | Credit |
|-----------------|--------------------------|--|-----------|----------|------------|-----------|
| Fall – 1st year | | | | | | |
| EDT 110 | Neuroscience/Pathol Cond | | 4 | 0 | 0 | 4 |
| EDT 111 | Laboratory Management | | 1 | 0 | 0 | 1 |
| EDT 111A | EDT Laboratory Basics | | 1 | 0 | 0 | 1 |
| ELC 111 | Intro to Electricity | | 2 | 2 | 0 | 3 |
| ENG 111 | Writing and Inquiry | | 3 | 0 | 0 | 3 |
| MED 121 | Medical Terminology I | | 3 | 0 | 0 | 3 |
| PSY 150 | General Psychology | | 3 | 0 | 0 | 3 |
| | Total | | 17 | 2 | 0 | 18 |

| | | | | | | |
|-------------------|--------------------------------------|--|-----------|-----------|----------|-----------|
| Spring – 1st year | | | | | | |
| BIO 169 | Anatomy and Physiology II | | 3 | 3 | 0 | 4 |
| CIS 110 | Introduction to Computers | | 2 | 2 | 0 | 3 |
| EDT 112 | Instrumental/Record Methods | | 3 | 0 | 0 | 3 |
| EDT 113 | Clinical Correlates | | 2 | 0 | 0 | 2 |
| EDT 115 | EDT Laboratory Practice | | 0 | 6 | 0 | 2 |
| ENG 112 | Writing/Research in the Disc | | 3 | 0 | 0 | 3 |
| | OR ENG 113 Literature-Based Research | | | | | |
| | OR ENG 114 Prof Research & Reporting | | | | | |
| | Total | | 13 | 11 | 0 | 17 |

| | | | | | | |
|-----------------|-------------------------------|--|-----------|-----------|----------|-----------|
| Fall – 2nd year | | | | | | |
| EDT 114 | Special Procedures | | 3 | 0 | 0 | 3 |
| EDT 118 | EDT Laboratory Prac. II | | 0 | 9 | 0 | 3 |
| MAT 143 | Quantitative Literacy | | 2 | 2 | 0 | 3 |
| MED 118 | Medical Law and Ethics | | 2 | 0 | 0 | 2 |
| MED 122 | Medical Terminology II | | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | | 3 | 0 | 0 | 3 |
| | Total | | 13 | 11 | 0 | 17 |

| | | | | | | |
|-------------------|-------------------------|--|-----------|-----------|-----------|-----------|
| Spring – 2nd year | | | | | | |
| EDT 116 | EDT Clinical Experience | | 0 | 0 | 36 | 12 |
| | Total | | 0 | 0 | 36 | 12 |
| | Grand Total | | 43 | 24 | 36 | 64 |

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

Electroneurodiagnostic Technology Degree Completion Program (A4532009)

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:

| | <u>Credit Hours</u> |
|------------------------------------|---------------------|
| 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 Literature-Based Research | 3 |
| | OR ENG 114 Prof Research & Reporting | 3 |
| MAT 143 | Quantitative Literacy | 3 |
| MED 118 | Medical Law and Ethics | 2 |
| MED 121 | Medical Terminology I | 3 |
| MED 122 | Medical Terminology II | 3 |
| PSY 150 | General Psychology | 3 |
| | | 34 SHC |

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

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

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

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

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

Natural Sciences/Mathematics:

| | | |
|---------|-----------------------------------------|---|
| MAT 171 | Precalculus Algebra | 4 |
| | OR MAT 121 Algebra/Trigonometry I | 3 |

Social/Behavioral Sciences:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

MAJOR COURSES:

| | | |
|---------|------------------------------------------|---|
| ATR 112 | Intro to Automation | 3 |
| CSC 134 | C++ Programming | 3 |
| DFT 117 | Technical Drafting | 2 |
| DFT 151 | CAD I | 3 |
| EGR 110 | Intro to Engineering Tech | 2 |
| ELC 131 | Circuit Analysis I | 4 |
| ELC 133 | Circuit Analysis II | 4 |
| ELC 229 | Applications Project | 2 |
| ELN 131 | Analog Electronics I | 4 |
| ELN 132 | Analog Electronics II | 4 |
| ELN 133 | Digital Electronics | 4 |
| ELN 232 | Intro to Microprocessors | 4 |
| ELN 234 | Communication Systems | 4 |
| ELN 260 | Prog Logic Controllers | 4 |
| MAT 172 | Precalculus Trigonometry | 4 |
| | OR MAT 122 Algebra/Trigonometry II | 3 |
| MEC 180 | Engineering Materials | 3 |
| PHY 151 | College Physics I | 4 |
| | OR PHY 131 Physics-Mechanics | 4 |

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

Math/Physics Notes: Students planning to transfer to a 4-year college should consider taking MAT 171, MAT 172, and PHY 151. Please see your Electronics Engineering Technology advisor.

Total Credit Hours Required 72/74

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | |
|---------|-------------------------------------------------------------------------|---|
| DRE 098 | Integrated Reading Writing III | 3 |
| 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, MAT 065 (MAT 171) | 7 |
| MAT | MAT 001 (MAT 171) | 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.

Electronics Engineering Technology • A40200

Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|-------------------|-----|------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| DFT | 151 | CAD I | 2 | 3 | 0 | 3 |
| EGR | 110 | Intro to Engineering Tech | 1 | 2 | 0 | 2 |
| ELC | 131 | Circuit Analysis I | 3 | 3 | 0 | 4 |
| MAT | 171 | Precalculus Algebra | 3 | 2 | 0 | 4 |
| OR | | MAT 121 Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| MEC | 180 | Engineering Materials | 2 | 3 | 0 | 3 |
| Total | | | 10/11 | 13 | 0 | 15/16 |
| Spring – 1st year | | | | | | |
| DFT | 117 | Technical Drafting | 1 | 2 | 0 | 2 |
| ELC | 133 | Circuit Analysis II | 3 | 3 | 0 | 4 |
| ELN | 131 | Analog Electronics I | 3 | 3 | 0 | 4 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT | 172 | Precalculus Trigonometry | 3 | 2 | 0 | 4 |
| OR | | MAT 122 Algebra/Trigonometry II | 2 | 2 | 0 | 3 |
| Total | | | 12/13 | 10 | 0 | 16/17 |
| Summer – 1st year | | | | | | |
| ENG | 112 | Writing/Research in the Disc | 3 | 0 | 0 | 3 |
| OR | | ENG 114 Prof Research & Reporting | 3 | 0 | 0 | 3 |
| OR | | ENG 113 Literature-Based Research | 3 | 0 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Total | | | 6 | 0 | 0 | 6 |
| Fall – 2nd year | | | | | | |
| ATR | 112 | Intro to Automation | 2 | 3 | 0 | 3 |
| CSC | 134 | C++ Programming | 2 | 3 | 0 | 3 |
| ELN | 132 | Analog Electronics II | 3 | 3 | 0 | 4 |
| ELN | 133 | Digital Electronics | 3 | 3 | 0 | 4 |
| | | Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| Total | | | 13 | 12 | 0 | 17 |
| Spring – 2nd year | | | | | | |
| ELC | 229 | Applications Project | 1 | 3 | 0 | 2 |
| ELN | 232 | Intro to Microprocessors | 3 | 3 | 0 | 4 |
| ELN | 234 | Communication Systems | 3 | 3 | 0 | 4 |
| ELN | 260 | Prog Logic Controllers | 3 | 3 | 0 | 4 |
| PHY | 151 | College Physics I | 3 | 2 | 0 | 4 |
| OR | | PHY 131 Physics-Mechanics | 3 | 2 | 0 | 4 |
| Total | | | 13 | 14 | 0 | 18 |
| Grand Total | | | 54/56 | 49 | 0 | 72/74 |

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

Math/Physics Notes: Students planning to transfer to a 4-year college should consider taking MAT 171, MAT 172, and PHY 151. Please see your Electronics Engineering Technology advisor.

Electronics Engineering Technology Evening • A40200

Evening Courses Are Offered On Demand

(See Your Electronics Engineering Technology Advisor)

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

| | | | |
|----------|--|--|---|
| Elective | | | 3 |
|----------|--|--|---|

Natural Sciences/Mathematics:

| | | | |
|-----|-----|--------------------------------|---|
| MAT | 171 | Precalculus Algebra | 4 |
| OR | | MAT 121 Algebra/Trigonometry I | 3 |

Social/Behavioral Sciences:

| | | | |
|----------|--|--|---|
| Elective | | | 3 |
|----------|--|--|---|

MAJOR COURSES:

| | | | |
|-----|-----|---------------------------------|---|
| ATR | 112 | Intro to Automation | 3 |
| CSC | 134 | C++ Programming | 3 |
| DFT | 117 | Technical Drafting | 2 |
| DFT | 151 | CAD I | 3 |
| EGR | 110 | Intro to Engineering Tech | 2 |
| ELC | 131 | Circuit Analysis I | 4 |
| ELC | 133 | Circuit Analysis II | 4 |
| ELC | 229 | Applications Project | 2 |
| ELN | 131 | Analog Electronics I | 4 |
| ELN | 132 | Analog Electronics II | 4 |
| ELN | 133 | Digital Electronics | 4 |
| ELN | 232 | Intro to Microprocessors | 4 |
| ELN | 234 | Communication Systems | 4 |
| ELN | 260 | Prog Logic Controllers | 4 |
| MAT | 172 | Precalculus Trigonometry | 4 |
| OR | | MAT 122 Algebra/Trigonometry II | 3 |
| MEC | 180 | Engineering Materials | 3 |
| PHY | 151 | College Physics I | 4 |
| OR | | PHY 131 Physics-Mechanics | 4 |

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

Math/Physics Notes: Students planning to transfer to a 4-year college should consider taking MAT 171, MAT 172, and PHY 151. Please see your Electronics Engineering Technology advisor.

Total Credit Hours Required 72/74

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | | |
|-----|----------------------------------------------------------------|--------------------------------|---|
| DRE | 098 | Integrated Reading Writing III | 3 |
| 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, MAT 065 (MAT 171) | | 7 |
| MAT | MAT 001 (MAT 171) | | 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.

ELECTRONICS ENGINEERING TECHNOLOGY

Certificate Program (C40200)

| | | | | | | |
|-----------------|-----|--------------------------------|-------|----|---|-------|
| Fall – 1st year | | | | | | |
| DFT | 151 | CAD I | 2 | 3 | 0 | 3 |
| EGR | 110 | Intro to Engineering Tech | 1 | 2 | 0 | 2 |
| ELC | 131 | Circuit Analysis I | 3 | 3 | 0 | 4 |
| MAT | 171 | Precalculus Algebra | 3 | 2 | 0 | 4 |
| OR | | MAT 121 Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| MEC | 180 | Engineering Materials | 2 | 3 | 0 | 3 |
| Total | | | 10/11 | 13 | 0 | 15/16 |

EMERGENCY MEDICAL SCIENCE

A.A.S. Program (A45340)

The paramedic program of Catawba Valley Community College is Accredited by the Commission on Accreditation of Allied Health Education Programs, (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

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

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

| | | |
|----------|-------|---|
| Elective | | 3 |
|----------|-------|---|

Natural Sciences/Mathematics:

| | | | |
|-----|-----|--------------------------------|---|
| BIO | 168 | Anatomy and Physiology I | 4 |
|-----|-----|--------------------------------|---|

Social/Behavioral Sciences:

| | | | |
|-----|-----|--------------------------|---|
| PSY | 150 | General Psychology | 3 |
|-----|-----|--------------------------|---|

MAJOR COURSES:

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

Total Credit Hours Required.....72

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Emergency Medical Science

Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|-------------------|---------|---------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| BIO | 168 | Anatomy and Physiology I | 3 | 3 | 0 | 4 |
| EMS | 110 | EMT | 6 | 6 | 0 | 8 |
| MED | 121 | Medical Terminology I | 3 | 0 | 0 | 3 |
| MED | 122 | Medical Terminology II | 3 | 0 | 0 | 3 |
| Total | | | 15 | 9 | 0 | 18 |
| Spring – 1st year | | | | | | |
| BIO | 169 | Anatomy and Physiology II | 3 | 3 | 0 | 4 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| EMS | 122 | EMS Clinical Practicum I | 0 | 0 | 3 | 1 |
| EMS | 130 | Pharmacology | 3 | 3 | 0 | 4 |
| EMS | 131 | Advanced Airway Management | 1 | 2 | 0 | 2 |
| EMS | 160 | Cardiology I | 1 | 3 | 0 | 2 |
| Total | | | 11 | 11 | 3 | 16 |
| Summer – 1st year | | | | | | |
| EMS | 140 | Rescue Scene Management | 1 | 3 | 0 | 2 |
| EMS | 220 | Cardiology II | 2 | 3 | 0 | 3 |
| EMS | 221 | EMS Clinical Practicum II | 0 | 0 | 6 | 2 |
| EMS | 240 | Patients W/Special Challenges | 1 | 2 | 0 | 2 |
| EMS | 260 | Trauma Emergencies | 1 | 3 | 0 | 2 |
| Total | | | 5 | 11 | 6 | 11 |
| Fall – 2nd year | | | | | | |
| EMS | 231 | EMS Clinical Pract III | 0 | 0 | 9 | 3 |
| EMS | 235 | EMS Management | 2 | 0 | 0 | 2 |
| EMS | 250 | Medical Emergencies | 3 | 3 | 0 | 4 |
| EMS | 270 | Life Span Emergencies | 2 | 3 | 0 | 3 |
| Total | | | 7 | 6 | 9 | 12 |
| Spring – 2nd year | | | | | | |
| ENG | 114 | Prof Research & Reporting (Preferred) | 3 | 0 | 0 | 3 |
| OR | ENG 112 | Writing/Research in the Disc | 3 | 0 | 0 | 3 |
| OR | ENG 113 | Literature-Based Research | 3 | 0 | 0 | 3 |
| EMS | 241 | EMS Clinical Practicum IV | 0 | 0 | 12 | 4 |
| EMS | 285 | EMS Capstone | 1 | 3 | 0 | 2 |
| PSY | 150 | General Psychology | 3 | 0 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Total | | | 10 | 3 | 12 | 15 |
| Grand Total | | | 48 | 40 | 30 | 72 |

Note: Students must complete BIO 168, Anatomy & Physiology I, and EMS 110, EMT, prior to admission into the program.

EMERGENCY MEDICAL SCIENCE CURRICULUM Certificate Paramedic Advancement Program (A4534009)

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

1. Meet CVCC's institutional requirements for admissions as an EMS student.
2. Letter from EMS director confirming 1000 hours or more of direct patient care.
3. Provider and/or instructor cards for ITLS or PHTLS, ACLS or ACLS-EP, PALS or PEPP.
4. Valid North Carolina or National Registry Paramedic Certification.
5. Letter of reference from service's Medical Director attesting to the individual's competence in basic and advanced life support skills.
6. Once the criterion above has been met, the student will then be offered Advanced Placement exams in the following courses so as to facilitate his or her 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 140 | Rescue Scene Management |
| E. EMS 160 | Cardiology I |
| F. EMS 220 | Cardiology II |
| G. EMS 240 | Patients W/Special Challenges |
| H. EMS 250 | Medical Emergencies |
| I. EMS 260 | Trauma Emergencies |
| J. EMS 270 | Life Span Emergencies |
| K. EMS 285 | Capstone |
| L. EMS 122, EMS, 221, EMS 231, and EMS 241 (Clinical Practicum) | |
| Advanced Placement requirement will be satisfied with documentation of 1000 hours or more of direct patient care. | |

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

| | | |
|---------|-----------------------------------|--------|
| BIO 168 | Anatomy and Physiology I | 4 |
| BIO 169 | Anatomy and Physiology II | 4 |
| ENG 111 | Expository Writing | 3 |
| ENG 112 | Argument-Based Research | 3 |
| OR | ENG 113 Literature-Based Research | 3 |
| OR | ENG 114 Prof Research & Reporting | 3 |
| EMS 235 | EMS Management | 2 |
| MED 121 | Medical Terminology I | 3 |
| MED 122 | Medical Terminology II | 3 |
| PSY 150 | General Psychology | 3 |
| | Humanities/Fine Arts Elective | 3 |
| | | 28 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 his or her success with advanced placement scores.

HEALTH SCIENCE: THERAPEUTIC AND DIAGNOSTIC SERVICES EMERGENCY MEDICAL SCIENCE Diploma Program (D45910)

This curriculum is designed to prepare students for careers in the Health Sciences. Students will complete general education courses that provide a foundation for success in nursing and allied health curricula. Students may select a career pathway that will prepare them for an entry level position in health care. Courses may also provide foundational knowledge needed in the pursuit of advanced health science degrees or programs.

Graduates should qualify for an entry-level job associated with the program major such as Emergency Medical Technician (EMT) or Advanced Emergency Medical Technician (AEMT), Medical Assistant, Nursing Assistant, Pharmacy Technician, Phlebotomist, or Massage Therapist dependent upon the selected program major. **Emergency Medical Science:** A program that prepares graduates to enter the workforce as Emergency Medical Technicians or Advanced Emergency Medical Technicians. The course of study provides the student an opportunity to acquire basic life support knowledge and skills by utilizing classroom instruction, practical laboratory sessions, and hospital/field internships. Students progressing through the program may be eligible to apply for both state and national certification exams. Employment opportunities include ambulance services, fire and rescue agencies, air medical services, specialty areas of hospitals, industry, educational institutions, and government agencies.

GENERAL EDUCATION COURSES:

English/Communication:

ENG 111 Writing and Inquiry3

ENG 112 Argument Based Research3

Humanities/Fine Arts:

PHI 240 Introduction to Ethics3

MAJOR COURSES:

Technical Core:

MED 121 Medical Terminology I3

MED 122 Medical Terminology II3

Program Major:

EMS 110 EMT8

EMS 120 Advanced EMT6

EMS 121 AEMT Clinical Practicum2

Other Major:

BIO 168 Anatomy and Physiology I4

BIO 169 Anatomy and Physiology II4

MAT 143 Quantitative Literacy3

PSY 150 General Psychology3

Total Credit Hours Required: 45

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098 Integrated Reading and Writing III3

DMA 010, 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, and mathematics. Please refer to the Course Description section for prerequisite course information.

Health Science: Therapeutic And Diagnostic Services
Emergency Medical Science • D45910
Suggested Program Sequence

| | | | Class | Lab | Clin/WkExp | Credit |
|-------------------|-----|-----------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| BIO | 168 | Anatomy and Physiology I | 3 | 3 | 0 | 4 |
| PSY | 150 | General Psychology | 3 | 0 | 0 | 3 |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| Total | | | 11 | 5 | 0 | 13 |
| Spring – 1st year | | | | | | |
| ENG | 112 | Argument Based Research | 3 | 0 | 0 | 3 |
| PHI | 240 | Introduction to Ethics | 3 | 0 | 0 | 3 |
| BIO | 169 | Anatomy and Physiology II | 3 | 0 | 0 | 4 |
| Total | | | 9 | 0 | 0 | 10 |
| Fall – 2nd year | | | | | | |
| EMS | 110 | EMT | 6 | 6 | 0 | 8 |
| MED | 121 | Medical Terminology I (1st 8wks) | 3 | 0 | 0 | 3 |
| MED | 122 | Medical Terminology II (2nd 8wks) | 3 | 0 | 0 | 3 |
| Total | | | 12 | 6 | 0 | 14 |
| Spring – 2nd year | | | | | | |
| EMS | 120 | Advanced EMT | 4 | 6 | 0 | 6 |
| EMS | 121 | AEMT Clinical Practicum | 0 | 0 | 6 | 2 |
| Total | | | 4 | 6 | 6 | 8 |
| Grand Total | | | 36 | 17 | 6 | 45 |

Note: General Education, Technical Core, Other Major, and EMS 110 must be successfully completed prior to admittance to EMS 120 Advanced EMT, and EMS 121 EMT Clinical Practicum.

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. Coursework 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 coursework includes computers and economics. Through these skills, students will have a sound education base in entrepreneurship for lifelong learning. Graduates are prepared to be self-employed and open their own businesses.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

| | | | |
|-----|-----|---------------------------|---|
| ENG | 111 | Writing and Inquiry | 3 |
| ENG | 114 | Prof Research & Reporting | 3 |

Humanities/Fine Arts:

| | |
|----------|---|
| Elective | 3 |
|----------|---|

Social/Behavioral Sciences:

| | |
|----------|---|
| Elective | 3 |
|----------|---|

Natural Sciences/Mathematics:

| | | | |
|-----|-----|-----------------------------|---|
| MAT | 110 | Math Measurement & Literacy | 3 |
| OR | | | |
| | MAT | 143 Quantitative Literacy | 3 |

MAJOR COURSES:

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

Entrepreneurship Electives:.....9

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

| | | | |
|-----|-----|---------------------------------|-----|
| ACC | 121 | Prin of Managerial Accounting | 4 |
| BUS | 125 | Personal Finance | 3 |
| BUS | 153 | Human Resource Management | 3 |
| BUS | 217 | Employment Law and Regs | 3 |
| CTS | 130 | Spreadsheet | 3 |
| ECO | 252 | Prin of Macroeconomics | 3 |
| INT | 110 | International Business | 3 |
| MKT | 123 | Fundamentals of Selling | 3 |
| MKT | 220 | Advertising and Sales Promotion | 3 |
| MKT | 221 | Consumer Behavior | 3 |
| MKT | 223 | Customer Service | 3 |
| RLS | 112 | Broker Prelicensing | 5 |
| WBL | 110 | World of Work | 1 |
| WBL | XXX | Work-Based Learning | 1-6 |

Total Credit Hours Required64

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Entrepreneurship • A25490
Suggested Program Sequence Day

| | Class | Lab | Clin/WkExp | Credit |
|--------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | |
| BUS 110 Introduction to Business | 3 | 0 | 0 | 3 |
| BUS 139 Entrepreneurship I | 3 | 0 | 0 | 3 |
| ENG 111 Writing and Inquiry | 3 | 0 | 0 | 3 |
| ETR 220 Innovation and Creativity | 3 | 0 | 0 | 3 |
| ETR 230 Entrepreneur Marketing | 3 | 0 | 0 | 3 |
| Total | 15 | 0 | 0 | 15 |
| Spring – 1st year | | | | |
| ACC 120 Prin of Financial Accounting | 3 | 2 | 0 | 4 |
| BUS 245 Entrepreneurship II | 3 | 0 | 0 | 3 |
| CIS 110 Introduction to Computers | 2 | 2 | 0 | 3 |
| ETR 215 Law for Entrepreneurs | 3 | 0 | 0 | 3 |
| MAT 110 Math Measurement & Literacy | 2 | 2 | 0 | 3 |
| OR MAT 143 Quantitative Literacy | 2 | 2 | 0 | 3 |
| Total | 13 | 6 | 0 | 16 |
| Fall – 2nd year | | | | |
| BUS 240 Business Ethics | 3 | 0 | 0 | 3 |
| ECO 251 Prin of Microeconomics | 3 | 0 | 0 | 3 |
| ENG 114 Prof Research & Reporting | 3 | 0 | 0 | 3 |
| Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| Entrepreneurship Elective | 3 | 0 | 0 | 3 |
| Entrepreneurship Elective | 3 | 0 | 0 | 3 |
| Total | 18 | 0 | 0 | 18 |
| Spring – 2nd year | | | | |
| BUS 253 Leadership and Mgt Skills | 3 | 0 | 0 | 3 |
| ETR 240 Funding For Entrepreneurs | 3 | 0 | 0 | 3 |
| ETR 270 Entrepreneurship Issues | 3 | 0 | 0 | 3 |
| Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Entrepreneurship Elective | 3 | 0 | 0 | 3 |
| Total | 15 | 0 | 0 | 15 |
| Grand Total | 61 | 6 | 0 | 64 |

Entrepreneurship - Certificate Program (C25490)

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

Entrepreneurship Certificate Suggested Day Sequence (C25490)

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

Entrepreneurship - Diploma Program (D25490)

GENERAL EDUCATION COURSES:

SHC

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

MAJOR COURSES:

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

Total Credit Hours Required:.....**37**

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Entrepreneurship Diploma Suggested Day Sequence (D25490)

| | | | | |
|------------------------------------|------------------------------|----|---|------|
| Fall – 1st year | | | | |
| BUS 110 | Introduction to Business | 3 | 0 | 0 3 |
| BUS 139 | Entrepreneurship I | 3 | 0 | 0 3 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 3 |
| ETR 230 | Entrepreneur Marketing | 3 | 0 | 0 3 |
| Total | | 12 | 0 | 0 12 |
| Spring – 1st year | | | | |
| ACC 120 | Prin of Financial Accounting | 3 | 2 | 0 4 |
| BUS 245 | Entrepreneurship II | 3 | 0 | 0 3 |
| ETR 215 | Law for Entrepreneurs | 3 | 0 | 0 3 |
| ETR 270 | Entrepreneurship Issues | 3 | 0 | 0 3 |
| Total | | 12 | 2 | 0 13 |
| Fall – 2nd year | | | | |
| BUS 253 | Leadership and Mgt Skills | 3 | 0 | 0 3 |
| ECO 251 | Principles of Microeconomics | 3 | 0 | 0 3 |
| ETR 220 | Innovation and Creativity | 3 | 0 | 0 3 |
| Total | | 9 | 0 | 0 9 |
| Spring – 2nd year | | | | |
| Social/Behavioral Science Elective | | 3 | 0 | 0 3 |
| Total | | 3 | 0 | 0 3 |
| Grand Total | | 36 | 2 | 0 37 |

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. Coursework 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. Due to the minimum competency level expected for graduates, the Education Department requires a grade of C or higher on all required Education Courses for graduation with a certificate, diploma, or degree.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

| | | | |
|-----|-----|---------------------------------------------------|---|
| ENG | 111 | Writing and Inquiry | 3 |
| ENG | 114 | Prof Research & Reporting..... | 3 |
| OR | | ENG 112 Writing/Research in the Disciplines | 3 |

Humanities/Fine Arts:

| | | | |
|----------|--|-------|---|
| Elective | | | 3 |
|----------|--|-------|---|

Natural Sciences/Mathematics:

| | | | |
|-----|-----|---------------------------------------------------|---|
| MAT | 143 | Quantitative Literacy | 3 |
| OR | | MAT 110 Mathematical Measurement & Literacy | 3 |

Social/Behavioral Sciences:

| | | | |
|-----|-----|-----------------------------------------|---|
| PSY | 150 | General Psychology | 3 |
| OR | | SOC 210 Introduction to Sociology | 3 |

MAJOR COURSES:

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

FIP Electives: 6/8

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

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

OTHER REQUIRED HOURS:

| | | | |
|-----|-----|-------------------------------|---|
| ACA | 111 | College Student Success | 1 |
|-----|-----|-------------------------------|---|

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

DEVELOPMENTAL COURSE REQUIREMENTS*

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

Fire Protection Technology • A55240 Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|-------------------|-----|-----------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| ACA | 111 | College Student Success | 1 | 0 | 0 | 1 |
| CIS | 110 | Introduction to Computers | 3 | 0 | 0 | 3 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| FIP | 120 | Intro to Fire Protection | 3 | 0 | 0 | 3 |
| FIP | 124 | Fire Prevention & Public Ed | 3 | 0 | 0 | 3 |
| FIP | 132 | Building Construction | 3 | 0 | 0 | 3 |
| Total | | | 16 | 0 | 0 | 16 |
| Spring – 1st year | | | | | | |
| ENG | 114 | Prof Research & Reporting | 3 | 0 | 0 | 3 |
| OR | | ENG 112 Writing/Reasearch | 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 | | FIP Elective | 3 | 0 | 0 | 3 |
| Total | | | 15 | 0 | 0 | 15 |
| Summer – 1st year | | | | | | |
| MAT | 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| OR | | MAT 110 Math Meas. & Literacy | 2 | 2 | 0 | 3 |
| PSY | 150 | General Psychology | 3 | 0 | 0 | 3 |
| OR | | SOC 210 Introduction to Sociology | 3 | 0 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Total | | | 8 | 2 | 0 | 9 |
| Fall – 2nd year | | | | | | |
| FIP | 146 | Fire Protection Systems | 3 | 2 | 0 | 4 |
| FIP | 220 | Fire Fighting Strategies | 3 | 0 | 0 | 3 |
| FIP | 229 | Fire Dynamics and Combust | 3 | 0 | 0 | 3 |
| FIP | 240 | Fire Service Supervision | 3 | 0 | 0 | 3 |
| Total | | | 12 | 2 | 0 | 13 |
| Spring – 2nd year | | | | | | |
| FIP | 228 | Local Govt Finance | 3 | 0 | 0 | 3 |
| FIP | 248 | Fire Svc Personnel Adm | 3 | 0 | 0 | 3 |
| FIP | 276 | Managing Fire Services | 3 | 0 | 0 | 3 |
| | | FIP Elective | | | | 3/5 |
| Total | | | 9 | 0 | 0 | 12/14 |
| Grand Total | | | 60 | 4 | 0 | 65/67 |

Fire Protection Management Technology Certificate Program (C5524004)

GENERAL EDUCATION COURSES:..... SHC
ENG 111 Expository Writing.....3

MAJOR COURSES:.....SHC
FIP 120 Intro to Fire Protection.....3
FIP 152 Fire Protection Law.....3
FIP 220 Fire Fighting Strategies.....3
FIP 228 Local Govt Finance.....3
FIP 240 Fire Service Supervision.....3

Total Credit Hours Required:..... 18

Fire Protection Technology Management Certificate Sequence (C5524004)

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|--------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| FIP 120 | Intro to Fire Protection | 3 | 0 | 0 | 3 |
| FIP 220 | Fire Fighting Strategies | 3 | 0 | 0 | 3 |
| FIP 240 | Fire Service Supervision | 3 | 0 | 0 | 3 |
| Total | | 9 | 0 | 0 | 9 |
| Spring – 1st year | | | | | |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| FIP 152 | Fire Protection Law | 3 | 0 | 0 | 3 |
| FIP 228 | Local Gov Finance | 3 | 0 | 0 | 3 |
| Total | | 9 | 0 | 0 | 9 |
| Grand Total | | 18 | 0 | 0 | 18 |

Industrial Fire Protection Certificate Program (C5524005)

GENERAL EDUCATION COURSES:..... SHC
ENG 111 Expository Writing.....3

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

Total Credit Hours Required:..... 18

Fire Protection Technology Industrial Certificate Sequence (C5524005)

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|---------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| FIP 120 | Introduction to Fire Protection | 3 | 0 | 0 | 3 |
| FIP 124 | Fire Prevention & Public Ed | 3 | 0 | 0 | 3 |
| FIP 132 | Building Construction | 3 | 0 | 0 | 3 |
| Total | | 9 | 0 | 0 | 9 |
| Spring – 1st year | | | | | |
| ENG 111 | Expository Writing | 3 | 0 | 0 | 3 |
| FIP 140 | Industrial Fire Protection | 3 | 0 | 0 | 3 |
| FIP 164 | OSHA Standards | 3 | 0 | 0 | 3 |
| Total | | 9 | 0 | 0 | 9 |
| Grand Total | | 18 | 0 | 0 | 18 |

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

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

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

GENERAL EDUCATION COURSES:..... SHC

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

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

Natural Sciences/Mathematics:
MAT 110 Math Measurement & Literacy.....3
OR MAT 143 Quantitative Literacy.....3
OR MAT 152 Statistical Methods I.....4

Social/Behavioral Sciences:
PSY 150 General Psychology.....3

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

PED Electives2

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

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

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

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Health and Fitness Science • A45630
Suggested Program Sequence Day

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

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

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

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

GENERAL EDUCATION COURSES: **SHC**

| | |
|------------------------------------------------------------------|-------------------------------------|
| English/Communications: | |
| ENG 111 | Writing and Inquiry .....3 |
| English Elective |3 |
| Students are required to take one (1) course from the following: | |
| ENG 112 | Writing/Research in the Disc .....3 |
| ENG 113 | Literature-Based Research .....3 |
| ENG 114 | Prof Research & Reporting .....3 |

| | |
|-------------------------------|------------------------------------|
| Humanities/Fine Arts: | |
| Elective |3 |
| Natural Sciences/Mathematics: | |
| MAT 110 | Math Measurement & Literacy .....3 |
| Social/Behavioral Sciences: | |
| PSY 150 | General Psychology .....3 |

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

Total Credit Hours Required 69-70

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Health Information Technology • (A45360)
Suggested Program Sequence Day

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|------------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| BIO 168 | Anatomy and Physiology I | 3 | 3 | 0 | 4 |
| CIS 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| OR | CIS 111 Basic PC Literacy | 1 | 2 | 0 | 2 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MED 121 | Medical Terminology I | 3 | 0 | 0 | 3 |
| HIT 110 | Fundamentals of HIM | 3 | 0 | 0 | 3 |
| PSY 150 | General Psychology | 3 | 0 | 0 | 3 |
| Total | | 16/17 | 5 | 0 | 18/19 |
| Spring – 1st year | | | | | |
| BIO 169 | Anatomy and Physiology II | 3 | 3 | 0 | 4 |
| DBA 110 | Database Concepts | 2 | 3 | 0 | 3 |
| HIT 112 | Health Law and Ethics | 3 | 0 | 0 | 3 |
| HIT 114 | Health Data Sys/Standards | 2 | 3 | 0 | 3 |
| MED 122 | Medical Terminology II | 3 | 0 | 0 | 3 |
| Total | | 13 | 9 | 0 | 16 |
| Summer – 1st year | | | | | |
| ENG 112 | Writing/Research in the Disc (Preferred) | 3 | 0 | 0 | 3 |
| OR | ENG 113 Literature-Based Research | | | | |
| OR | ENG 114 Prof Research & Reporting | | | | |
| HIT 122 | Prof Practice Exp I | 0 | 0 | 3 | 1 |
| MAT 110 | Math Measurement & Literacy | 2 | 2 | 0 | 3 |
| Total | | 5 | 2 | 3 | 7 |
| Fall – 2nd year | | | | | |
| HIT 210 | Healthcare Statistics | 2 | 2 | 0 | 3 |
| HIT 211 | ICD Coding | 2 | 6 | 0 | 4 |
| HIT 216 | Quality Management | 1 | 3 | 0 | 2 |
| HIT 220 | Health Informatics & EHRs | 1 | 2 | 0 | 2 |
| HIT 226 | Principles of Disease | 3 | 0 | 0 | 3 |
| Total | | 9 | 13 | 0 | 14 |
| Spring – 2nd year | | | | | |
| BUS 137 | Principles of Management | 3 | 0 | 0 | 3 |
| HIT 222 | Prof Practice Exp III | 0 | 0 | 6 | 2 |
| HIT 214 | CPT/Other Coding Systems | 1 | 3 | 0 | 2 |
| HIT 215 | Reimbursement Methodology | 1 | 2 | 0 | 2 |
| HIT 280 | Professional Issues | 2 | 0 | 0 | 2 |
| | Humanities Elective | 3 | 0 | 0 | 3 |
| Total | | 10 | 5 | 6 | 14 |
| Grand Total | | 53/54 | 34 | 9 | 69/70 |

HEALTH INFORMATION TECHNOLOGY
Certificate Program (C45360)

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

| | | |
|------------------------------------------|---------------------------------|--------------|
| MAJOR COURSES: | | SHC |
| CIS 110 | Introduction to Computers..... | 3 |
| OR | CIS 111 Basic PC Literacy | 2 |
| HIT 110 | Fundamentals of HIM | 3 |
| HIT 112 | Health Law and Ethics..... | 3 |
| HIT 114 | Health Data Sys/Standards | 3 |
| MED 121 | Medical Terminology I | 3 |
| MED 122 | Medical Terminology II..... | 3 |
| Total Credit Hours Required | | 17-18 |

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

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

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

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

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

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

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

| | | |
|----------|--|---|
| Elective | | 3 |
|----------|--|---|

Natural Sciences/Mathematics:

| | | |
|---------|-------------------------------------|---|
| MAT 143 | Quantitative Literacy | 3 |
| OR | MAT 110 Math Measurement & Literacy | 3 |
| OR | MAT 152 Statistical Methods I | 4 |

Social/Behavioral Sciences:

| | | |
|----------|--|---|
| Elective | | 3 |
|----------|--|---|

MAJOR COURSES:

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

OTHER REQUIRED COURSES:

| | | |
|---------|-------------------------|---|
| ACA 111 | College Student Success | 1 |
|---------|-------------------------|---|

Total Credit Hours Required 68/69

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/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

HealthCare Management Technology • (A25200) Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|-------------------|------------------------------------------|--|-------|-------|------------|--------|
| Fall – 1st year | | | | | | |
| ACA 111 | College Student Success | | 1 | 0 | 0 | 1 |
| ACC 120 | Prin of Financial Accounting | | 3 | 2 | 0 | 4 |
| HMT 110 | Intro to Healthcare Mgt | | 3 | 0 | 0 | 3 |
| MED 114 | Prof Interac in Heal Care | | 1 | 0 | 0 | 1 |
| MED 121 | Medical Terminology I (1st Eight Wks) | | 3 | 0 | 0 | 3 |
| MED 122 | Medical Terminology II (2nd Eight Wks) | | 3 | 0 | 0 | 3 |
| Total | | | 14 | 2 | 0 | 15 |
| Spring – 1st year | | | | | | |
| ACC 121 | Prin of Managerial Accounting | | 3 | 2 | 0 | 4 |
| CIS 110 | Introduction to Computers | | 2 | 2 | 0 | 3 |
| HMT 210 | Medical Insurance | | 3 | 0 | 0 | 3 |
| OST 149 | Medical Legal Issues | | 3 | 0 | 0 | 3 |
| OST 281 | Emer Issues in Med Ofc | | 3 | 0 | 0 | 3 |
| Total | | | 14 | 4 | 0 | 16 |
| Summer – 1st year | | | | | | |
| ENG 111 | Writing and Inquiry | | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | | 3 | 0 | 0 | 3 |
| | Social/Behavioral Science Elective | | 3 | 0 | 0 | 3 |
| Total | | | 9 | 0 | 0 | 9 |
| Fall – 2nd year | | | | | | |
| CTS 130 | Spreadsheet | | 2 | 2 | 0 | 3 |
| ENG 112 | Writing/Research in the Disc (Preferred) | | 3 | 0 | 0 | 3 |
| OR | ENG 113 Literature-Based Research | | 3 | 0 | 0 | 3 |
| OR | ENG 114 Pro Research & Reporting | | 3 | 0 | 0 | 3 |
| HMT 211 | Long-Term Care Admin | | 3 | 0 | 0 | 3 |
| MAT 143 | Quantitative Literacy | | 2 | 2 | 0 | 3 |
| OR | MAT 110 Math Measurement & Literacy | | 3 | 0 | 0 | 3 |
| OR | MAT 152 Statistical Methods I | | 3 | 2 | 0 | 4 |
| OST 247 | Procedure Coding | | 1 | 2 | 0 | 2 |
| Total | | | 11/12 | 4/6 | 0 | 14/15 |
| Spring – 2nd year | | | | | | |
| HMT 212 | Mgt. of Healthcare Org | | 3 | 0 | 0 | 3 |
| HMT 220 | Healthcare Financial Mgmt | | 4 | 0 | 0 | 4 |
| HMT 225 | Practice Mgmt Simulation | | 2 | 2 | 0 | 3 |
| OST 248 | Diagnostic Coding | | 1 | 2 | 0 | 2 |
| WBL XXX | Worked-Based Learning | | 0 | 0 | 20 | 2 |
| Total | | | 10 | 4 | 20 | 14 |
| Grand Total | | | 58/59 | 14/16 | 20 | 68/69 |

HEALTHCARE MANAGEMENT TECHNOLOGY Healthcare Management Certificate Program (C25200)

MAJOR COURSES:

SHC

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

Total Credit Hours Required18

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | |
|---------|-------------------------------|---|
| DRE 097 | Integrated Reading Writing II | 3 |
|---------|-------------------------------|---|

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

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

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

HEALTHCARE MANAGEMENT TECHNOLOGY

Healthcare Receptionist Certificate Program (C2520005)

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

Total Credit Hours Required16

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | |
|---------|------------------------------------|---|
| DRE 097 | Integrated Reading Writing II..... | 3 |
|---------|------------------------------------|---|

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

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

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

HEALTHCARE MANAGEMENT TECHNOLOGY Insurance Certificate Program (C2520004)

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

Total Credit Hours Required17

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | |
|---------|------------------------------------|---|
| DRE 097 | Integrated Reading Writing II..... | 3 |
|---------|------------------------------------|---|

*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 | | 3 | 0 | 0 | 3 |
| MED 121 | Medical Terminology I (1st 8 Wks) | | 3 | 0 | 0 | 3 |
| MED 122 | Medical Terminology II (2nd 8 Wks) | | 3 | 0 | 0 | 3 |
| | Total | | 9 | 0 | 0 | 9 |
| Spring – 1st year | | | | | | |
| MED 114 | Prof Interac In Heal Care | | 1 | 0 | 0 | 1 |
| HMT 210 | Medical Insurance | | 3 | 0 | 0 | 3 |
| OST 247 | Procedure Coding | | 1 | 2 | 0 | 2 |
| OST 248 | Diagnostic Coding | | 1 | 2 | 0 | 2 |
| | Total | | 6 | 4 | 0 | 8 |
| | Grand Total | | 15 | 4 | 0 | 17 |

HORTICULTURE TECHNOLOGY

A.A.S. Program (A15240)

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

GENERAL EDUCATION COURSES: SHC

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

Humanities/Fine Arts:

| | | |
|----------|-------|---|
| Elective | | 3 |
|----------|-------|---|

Natural Sciences/Mathematics:

| | | |
|---------|-------------------------------------|---|
| MAT 110 | Math Measurement & Literacy | 3 |
| OR | MAT 143 Quantitative Literacy | 3 |

Social/Behavioral Sciences:

| | | |
|----------|-------|---|
| Elective | | 3 |
|----------|-------|---|

MAJOR COURSES :

| | | |
|---------|---------------------------------|---|
| HOR 110 | Intro to Landscaping | 2 |
| HOR 112 | Landscape Design I | 3 |
| HOR 114 | Landscape Construction | 3 |
| HOR 116 | Landscape Management I | 3 |
| HOR 118 | Equipment Op & Maint | 2 |
| HOR 134 | Greenhouse Operations | 3 |
| HOR 160 | Plant Materials I | 3 |
| HOR 162 | Applied Plant Science | 3 |
| HOR 164 | Hort Pest Management | 3 |
| HOR 166 | Soils & Fertilizers | 3 |
| HOR 168 | Plant Propagation | 3 |
| HOR 170 | Hort Computer Apps | 2 |
| HOR 213 | Landscape Design II | 3 |
| HOR 215 | Landscape Irrigation | 3 |
| HOR 265 | Adv Plant Materials | 2 |
| HOR 273 | Hort Mgmt & Marketing | 3 |
| TRF 110 | Intro Turfgrass Cult & ID | 4 |
| TRF 130 | Native Flora ID | 2 |

Horticulture/Turf or Work-Based Learning Elective

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

Total Credit Hours Required69

(Con't)

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.

**Horticulture Technology • A15240
Suggested Program Sequence Day**

| | | Class | Lab | Clin/WkExp | Credit |
|--------------------------|---------|-----------------------------------------|-----------|------------|-----------|
| Fall – 1st year | | | | | |
| TRF | 110 | Intro Turfgrass Cult & ID | 3 | 2 | 0 4 |
| HOR | 118 | Equipment Op & Maint | 1 | 3 | 0 2 |
| HOR | 162 | Applied Plant Science | 2 | 2 | 0 3 |
| HOR | 166 | Soils & Fertilizers | 2 | 2 | 0 3 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 3 |
| Total | | 11 | 9 | 0 | 15 |
| Spring – 1st year | | | | | |
| MAT | 110 | Math Measurement & Literacy | 2 | 2 | 0 3 |
| OR | MAT 143 | Quantitative Literacy | 2 | 2 | 0 3 |
| HOR | 168 | Plant Propagation | 2 | 2 | 0 3 |
| HOR | 160 | Plant Materials I | 2 | 2 | 0 3 |
| HOR | 116 | Landscape Management I | 2 | 2 | 0 3 |
| HOR | 110 | Intro To Landscaping | 1 | 2 | 0 2 |
| ENG | 114 | Prof Research and Reporting (Preferred) | 3 | 0 | 0 3 |
| OR | ENG 112 | Writing/Research in the Disc | 3 | 0 | 0 3 |
| OR | ENG 113 | Literature-Based Research | 3 | 0 | 0 3 |
| Total | | 12 | 10 | 0 | 17 |
| Summer – 1st year | | | | | |
| HOR | 112 | Landscape Design I | 2 | 3 | 0 3 |
| HOR | 114 | Landscape Construction | 2 | 2 | 0 3 |
| TRF | 130 | Native Flora ID | 1 | 3 | 0 2 |
| Total | | 5 | 8 | 0 | 8 |
| Fall – 2nd year | | | | | |
| HOR | 170 | Hort Computer Apps | 1 | 3 | 0 2 |
| HOR | 213 | Landscape Design II | 2 | 2 | 0 3 |
| HOR | 215 | Landscape Irrigation | 2 | 2 | 0 3 |
| HOR | 134 | Greenhouse Operations | 2 | 2 | 0 3 |
| HOR | 273 | Hort. Mgmt. & Marketing | 3 | 0 | 0 3 |
| | | Hort/Turf/Work-Based Learning Elective | | | 2 |
| Total | | 10 | 9 | 0 | 16 |
| Spring – 2nd year | | | | | |
| HOR | 164 | Hort Pest Management | 2 | 2 | 0 3 |
| HOR | 265 | Advanced Plant Materials | 1 | 2 | 0 2 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 0 3 |
| | | Hort/Turf/Work-Based Learning Elective | 0 | | 2 |
| | | Social/Behavioral Science Elective | 3 | 0 | 0 3 |
| Total | | 9 | 4 | 0 | 13 |
| Grand Total | | 47 | 40 | 0 | 69 |

HORTICULTURE TECHNOLOGY Cert. Prog. (C15240)

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

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

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

HORTICULTURE TECHNOLOGY**Landscape Design Diploma Program (D1524001)****GENERAL EDUCATION COURSES:****SHC**

English/Communications:

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

MAJOR COURSES :

| | | | |
|-----|-----|-------------------------------|---|
| HOR | 110 | Intro to Landscaping..... | 2 |
| HOR | 112 | Landscape Design I..... | 3 |
| HOR | 114 | Landscape Construction..... | 3 |
| HOR | 160 | Plant Materials I..... | 3 |
| HOR | 162 | Applied Plant Science..... | 3 |
| HOR | 164 | Hort Pest Management..... | 3 |
| HOR | 166 | Soils & Fertilizers..... | 3 |
| HOR | 170 | Hort Computer Apps..... | 2 |
| HOR | 213 | Landscape Design II..... | 3 |
| HOR | 215 | Landscape Irrigation..... | 3 |
| HOR | 265 | Advanced Plant Materials..... | 2 |
| TRF | 130 | Native Flora ID..... | 2 |

Total Credit Hours Required38**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.

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

| | | Class | Lab | Clin/WkExp | Credit |
|--------------------------|---------|-----------------------------|-----------|------------|-----------|
| Spring – 1st year | | | | | |
| MAT | 110 | Math Measurement & Literacy | 2 | 2 | 0 3 |
| OR | MAT 143 | Quantitative Literacy | 2 | 2 | 0 3 |
| HOR | 110 | Intro to Landscaping | 1 | 2 | 0 2 |
| HOR | 160 | Plant Materials I | 2 | 2 | 0 3 |
| HOR | 164 | Hort Pest Management | 2 | 2 | 0 3 |
| HOR | 265 | Advanced Plant Materials | 1 | 2 | 0 2 |
| Total | | 8 | 10 | 0 | 13 |
| Summer – 1st year | | | | | |
| HOR | 112 | Landscape Design I | 2 | 3 | 0 3 |
| HOR | 114 | Landscape Construction | 2 | 2 | 0 3 |
| TRF | 130 | Native Flora ID | 1 | 3 | 0 2 |
| Total | | 5 | 8 | 0 | 8 |
| Fall – 1st year | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 3 |
| HOR | 162 | Applied Plant Science | 2 | 2 | 0 3 |
| HOR | 166 | Soils & Fertilizers | 2 | 2 | 0 3 |
| HOR | 170 | Hort Computer Apps | 1 | 3 | 0 2 |
| HOR | 213 | Landscape Design II | 2 | 2 | 0 3 |
| HOR | 215 | Landscape Irrigation | 2 | 2 | 0 3 |
| Total | | 12 | 11 | 0 | 17 |
| Grand Total | | 25 | 29 | 0 | 38 |

**HORTICULTURE TECHNOLOGY
ONLINE Certificate Prog. (C1524002)**

| | | | |
|------------------------------------------|-----|--------------------------------------------|------------|
| MAJOR COURSES: | | | SHC |
| HOR | 160 | Plant Materials I | 3 |
| HOR | 164 | Hort Pest Management | 3 |
| HOR | 166 | Soils & Fertilizers | 3 |
| HOR | 168 | Plant Propagation | 3 |
| TRF | 110 | Introduction Turfgrass and Cult & ID | 4 |
| Total Credit Hours Required | | | 16 |

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

| | | | | | |
|--------------------------|-----|--------------------------------------|-----------|----------|-----------|
| Fall – 1st year | | | | | |
| HOR | 166 | Soils & Fertilizers | 2 | 2 | 0 3 |
| TRF | 110 | Introduction Turfgrass and Cult & ID | 3 | 2 | 0 4 |
| Total | | 5 | 4 | 0 | 7 |
| Spring – 1st year | | | | | |
| HOR | 160 | Plant Materials | 2 | 2 | 0 3 |
| HOR | 164 | Hort Pest Management | 2 | 2 | 0 3 |
| HOR | 168 | Plant Propagation | 2 | 2 | 0 3 |
| Total | | 6 | 6 | 0 | 9 |
| Grand Total | | 11 | 10 | 0 | 16 |

HORTICULTURE TECHNOLOGY

Landscape Management Diploma Program (D1524002)

GENERAL EDUCATION COURSES: SHC

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

MAJOR COURSES:

| | | | |
|---------------------------------------------------------|-----|--------------------------------|---|
| HOR | 110 | Intro to Landscaping | 2 |
| HOR | 114 | Landscape Construction | 3 |
| HOR | 116 | Landscape Management I | 3 |
| HOR | 118 | Equipment Op & Maint | 2 |
| HOR | 160 | Plant Materials I | 3 |
| HOR | 162 | Applied Plant Science | 3 |
| HOR | 164 | Hort Pest Management | 3 |
| HOR | 166 | Soils & Fertilizers | 3 |
| HOR | 215 | Landscape Irrigation | 3 |
| HOR | 265 | Advanced Plant Materials | 2 |
| TRF | 130 | Native Flora ID | 2 |
| Horticulture/Turf or Work-Based Learning Elective | | | 2 |

Please choose from the following:

| | | | |
|-----|-----|----------------------------------|-----|
| HOR | 255 | Interiorscapes | 2 |
| SPA | 120 | Spanish for the Workplace | 3 |
| TRF | 110 | Intro Turfgrass Cult & ID | 4 |
| TRF | 120 | Turfgrass Irrigat & Design | 4 |
| TRF | 125 | Turfgrass Computer App | 2 |
| TRF | 140 | Turfgrass Mgmt Safety | 3 |
| TRF | 150 | Landscape Drafting | 2 |
| TRF | 151 | Intro Landscape Design | 3 |
| TRF | 152 | Landscape Maintenance | 3 |
| TRF | 210 | Turfgrass Eqmt Mgmt | 3 |
| TRF | 220 | Turfgrass Calculations | 2 |
| TRF | 230 | Turfgrass Mgmt Apps | 2 |
| TRF | 250 | Golf /Sport Field Const | 4 |
| TRF | 260 | Adv Turfgrass Mgmt | 4 |
| WBL | XXX | Work-Based Learning | 1-2 |

Total Credit Hours Required37

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Horticulture Technology – Landscape Management (D1524002) Suggested Sequence

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------------------------------|---------|-----------------------------|-----|------------|--------|
| Fall – 1st year | | | | | |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 3 |
| HOR | 118 | Equipment Op & Maint | 1 | 3 | 2 |
| HOR | 162 | Applied Plant Science | 2 | 2 | 3 |
| HOR | 166 | Soils & Fertilizers | 2 | 2 | 3 |
| HOR | 215 | Landscape Irrigation | 2 | 2 | 3 |
| MAT | 110 | Math Measurement & Literacy | 2 | 2 | 3 |
| OR | MAT 143 | Quantitative Literacy | 2 | 2 | 3 |
| Total | | 12 | 11 | 0 | 17 |
| Spring – 1st year | | | | | |
| HOR | 110 | Intro to Landscaping | 1 | 2 | 2 |
| HOR | 116 | Landscape Management I | 2 | 2 | 3 |
| HOR | 160 | Plant Materials I | 2 | 2 | 3 |
| HOR | 164 | Hort Pest Management | 2 | 2 | 3 |
| HOR | 265 | Advanced Plant Materials | 1 | 2 | 2 |
| Work-Based Learning or Hort/Turf Elective | | | | | 2 |
| Total | | 8 | 10 | 0 | 15 |
| Summer – 1st year | | | | | |
| HOR | 114 | Landscape Construction | 2 | 2 | 3 |
| TRF | 130 | Native Flora ID | 1 | 3 | 2 |
| Total | | 3 | 5 | 0 | 5 |
| Grand Total | | 23 | 26 | 0 | 37 |

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 coursework may be offered. Upon completion of this curriculum, graduates should be able to individually, or with a team, safely install, inspect, diagnose, repair, and maintain industrial process and support equipment. Students will also be encouraged to develop their skills as life-long learners.

GENERAL EDUCATION COURSES: SHC

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

Humanities/Fine Arts:

| | | |
|----------|-------|---|
| Elective | | 3 |
|----------|-------|---|

Natural Sciences/Mathematics:

| | | | |
|-----|---------|-----------------------------------|---|
| MAT | 110 | Math Measurement & Literacy | 3 |
| OR | MAT 121 | Algebra/Trigonometry I | 3 |

Social/Behavioral Sciences:

| | | |
|----------|-------|---|
| Elective | | 3 |
|----------|-------|---|

MAJOR COURSES:

| | | | |
|-----------------------------|---------|---------------------------------|---|
| BPR | 111 | Print Reading | 2 |
| CIS | 110 | Introduction to Computers | 3 |
| OR | CIS 111 | Basic PC Literacy | 2 |
| ELC | 112 | DC/AC Electricity | 5 |
| ELC | 113 | Residential Wiring | 4 |
| ELC | 115 | Industrial Wiring | 4 |
| ELC | 117 | Motors and Controls | 4 |
| ELC | 118 | National Electrical Code | 2 |
| ELC | 119 | NEC Calculations | 2 |
| ELC | 128 | Intro to PLC | 3 |
| HYD | 110 | Hydraulics/Pneumatics I | 3 |
| ISC | 112 | Industrial Safety | 2 |
| MAC | 141 | Machining Applications I | 4 |
| MAC | 142 | Machining Applications II | 4 |
| MNT | 110 | Intro to Maint Procedures | 2 |
| WLD | 112 | Basic Welding Processes | 2 |
| IST Program Electives | | | 6 |

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

| | | | |
|-----|-------|---------------------------------|-----|
| AHR | 110 | Intro to Refrigeration | 5 |
| AHR | 112 | Heating Technology | 4 |
| AHR | 113 | Comfort Cooling | 4 |
| AHR | 130 | HVAC Controls | 3 |
| AHR | 160 | Refrigerant Certification | 1 |
| DFT | 151 | CAD I | 3 |
| ELN | 229 | Industrial Electronics | 4 |
| MAC | 122 | CNC Turning | 2 |
| MAC | 124 | CNC Milling | 2 |
| MAC | 222 | Advanced CNC Turning | 2 |
| MAC | 224 | Advanced CNC Milling | 2 |
| WBL | XXX | Work-Based Learning | 1-3 |
| WLD | 110 | Cutting Processes | 2 |
| WLD | 115 | SMAW (Stick) Plate | 5 |
| OR | | | |
| WLD | 115AB | SMAW (Stick) Plate-AB | 3 |
| WLD | 115BB | SMAW (Stick) Plate-BB | 2 |
| WLD | 121 | GMAW (MIG) FCAW/Plate | 4 |
| WLD | 131 | GTAW (TIG) Plate | 4 |

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

Total Credit Hours Required 66-67

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | | |
|-----|-------------------------------------------------------------------------|--------------------------------------|---|
| CTS | 080 | Computing Fundamentals..... | 3 |
| DRE | 098 | Integrated Reading Writing III | 3 |
| DMA | DMA 010, DMA 020, DMA 030 (MAT 110) | 3 | |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 (MAT 121) | 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.

Industrial Systems Technology • A50240

Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|-------------------|-----|------------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| BPR | 111 | Print Reading | 1 | 2 | 0 | 2 |
| ELC | 112 | DC/AC Electricity | 3 | 6 | 0 | 5 |
| ELC | 113 | Residential Wiring | 2 | 6 | 0 | 4 |
| ELC | 118 | National Electrical Code | 1 | 2 | 0 | 2 |
| ISC | 112 | Industrial Safety | 2 | 0 | 0 | 2 |
| Total | | | 8 | 18 | 0 | 15 |
| Spring – 1st year | | | | | | |
| ELC | 115 | Industrial Wiring | 2 | 6 | 0 | 4 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAC | 141 | Machining Applications I | 2 | 6 | 0 | 4 |
| MAT | 110 | Math Measurement & Literacy | 2 | 2 | 0 | 3 |
| | OR | MAT 112 Algebra/Trigonometry | 2 | 2 | 0 | 3 |
| WLD | 112 | Basic Welding Processes | 1 | 3 | 0 | 2 |
| | | IST Program Elective | 3 | 0 | 0 | 3 |
| Total | | | 12 | 14 | 0 | 17 |
| Summer – 1st year | | | | | | |
| | | Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| | | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Total | | | 6 | 0 | 0 | 6 |
| Fall – 2nd year | | | | | | |
| CIS | 110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| | OR | CIS 111 Basic PC Literacy | 1 | 2 | 0 | 2 |
| ELC | 117 | Motors and Controls | 2 | 6 | 0 | 4 |
| ELC | 119 | NEC Calculations | 1 | 2 | 0 | 2 |
| MNT | 110 | Intro to Maint Procedures | 1 | 3 | 0 | 2 |
| | | IST Program Elective | 3 | 0 | 0 | 3 |
| Total | | | 10 | 15 | 0 | 15 |
| Spring – 2nd year | | | | | | |
| ELC | 128 | Intro to PLCs | 2 | 3 | 0 | 3 |
| ENG | 112 | Writing/Research in the Disc (Preferred) | 3 | 0 | 0 | 3 |
| | OR | ENG 114 Prof Research & Reporting | 3 | 0 | 0 | 3 |
| | OR | ENG 113 Literature-Based Research | 3 | 0 | 0 | 3 |
| HYD | 110 | Hydraulics/Pneumatics I | 2 | 3 | 0 | 3 |
| MAC | 142 | Machining Applications II | 2 | 6 | 0 | 4 |
| | | IST Program Elective | 3 | 0 | 0 | 3 |
| Total | | | 10/11 | 8 | 0 | 13/14 |
| Grand Total | | | 46/47 | 55 | 0 | 66/67 |

Industrial Systems Technology • A50240

Evening Courses Are Offered On Demand (See Your IST Advisor)

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

| | |
|----------|---|
| Elective | 3 |
|----------|---|

Natural Sciences/Mathematics:

| | | | |
|-----|-----|--------------------------------|---|
| MAT | 110 | Math Measurement & Literacy | 3 |
| | OR | MAT 121 Algebra/Trigonometry I | 3 |

Social/Behavioral Sciences:

| | |
|----------|---|
| Elective | 3 |
|----------|---|

MAJOR COURSES:

| | | | |
|-----------------------|-----|---------------------------|---|
| BPR | 111 | Print Reading | 2 |
| CIS | 110 | Introduction to Computers | 3 |
| | OR | CIS 111 Basic PC Literacy | 2 |
| ELC | 112 | DC/AC Electricity | 5 |
| ELC | 113 | Residential Wiring | 4 |
| ELC | 115 | Industrial Wiring | 4 |
| ELC | 117 | Motors and Controls | 4 |
| ELC | 118 | National Electrical Code | 2 |
| ELC | 119 | NEC Calculations | 2 |
| ELC | 128 | Intro to PLC | 3 |
| HYD | 110 | Hydraulics/Pneumatics I | 3 |
| ISC | 112 | Industrial Safety | 2 |
| MAC | 141 | Machining Applications I | 4 |
| MAC | 142 | Machining Applications II | 4 |
| MNT | 110 | Intro to Maint Procedures | 2 |
| WLD | 112 | Basic Welding Processes | 2 |
| IST Program Electives | | | 6 |

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

| | | | |
|-----|-------|---------------------------|-----|
| AHR | 110 | Intro to Refrigeration | 5 |
| AHR | 112 | Heating Technology | 4 |
| AHR | 113 | Comfort Cooling | 4 |
| AHR | 130 | HVAC Controls | 3 |
| AHR | 160 | Refrigerant Certification | 1 |
| DFT | 151 | CAD I | 3 |
| ELN | 229 | Industrial Electronics | 4 |
| MAC | 122 | CNC Turning | 2 |
| MAC | 124 | CNC Milling | 2 |
| MAC | 222 | Advanced CNC Turning | 2 |
| MAC | 224 | Advanced CNC Milling | 2 |
| WBL | XXX | Work-Based Learning | 1-3 |
| WLD | 110 | Cutting Processes | 2 |
| WLD | 115 | SMAW (Stick) Plate | 5 |
| | OR | | |
| WLD | 115AB | SMAW (Stick) Plate-AB | 3 |
| WLD | 115BB | SMAW (Stick) Plate-BB | 2 |
| WLD | 121 | GMAW (MIG) FCAW/Plate | 4 |
| WLD | 131 | GTAW (TIG) Plate | 4 |

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.

Total Credit Hours Required 66-67

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | | |
|-----|-------------------------------------------------------------------------|--------------------------------------|---|
| CTS | 080 | Computing Fundamentals..... | 3 |
| DRE | 098 | Integrated Reading Writing III | 3 |
| DMA | DMA 010, DMA 020, DMA 030 (MAT 110) | 3 | |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 (MAT 121) | 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.

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 degree is awarded graduates of this curriculum.

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

GENERAL EDUCATION COURSES: SHC

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

| | |
|-----------------------|--------|
| Humanities/Fine Arts: | |
| Elective |3 |

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

| | |
|-----------------------------|--------|
| Social/Behavioral Sciences: | |
| Elective |3 |

MAJOR COURSES:

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

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

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

DEVELOPMENTAL COURSE REQUIREMENTS*

| | |
|--------------------------------------------------------------|---------------------------------------|
| CTS 080 | Computing Fundamentals.....3 |
| DRE 098 | Integrated Reading Writing III .....3 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)... | 5 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, | |
| DMA 065 (MAT 171)..... | 7 |
| MAT MAT 001 (MAT 171)..... | 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.

Information Systems Security • A25270 Suggested Program Sequence Day

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

INFORMATION SYSTEMS SECURITY Network Security Certificate • Cert. Prog. (C2527001)

MAJOR COURSES: SHC

| | |
|---------|--------------------------------|
| NET 125 | Networking Basics.....3 |
| NET 126 | Routing Basics.....3 |
| SEC 110 | Security Concepts .....3 |
| SEC 160 | Secure Administration I .....3 |
| SEC 210 | Intrusion Detection .....3 |
| SEC 220 | Defense-In-Depth .....3 |

Total Credit Hours Required:.....18

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

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

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

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

Total Credit Hours Required18

Information Systems Security
Operating Security Certificate (C2527003) Suggested Sequence

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

INFORMATION SYSTEMS SECURITY
Wireless Security Certificate
Certificate Program (C2527004)

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

Total Credit Hours Required18

Information Systems Security
Wireless Security Certificate (C2527004) Suggested Sequence

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

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

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

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

| | | |
|----------|-------|---|
| Elective | | 3 |
|----------|-------|---|

Natural Sciences/Mathematics:

| | | | |
|-----|-----|-------------------------------------|---|
| MAT | 171 | Precalculus Algebra | 4 |
| | OR | MAT 121 Algebra/Trigonometry I..... | 3 |

Social/Behavioral Sciences:

| | | |
|----------|-------|---|
| Elective | | 3 |
|----------|-------|---|

MAJOR COURSES:

| | | | |
|-----|------|---------------------------------------|---|
| ATR | 112 | Intro to Automation | 3 |
| CSC | 134 | C++ Programming | 3 |
| DFT | 111 | Technical Drafting I | 2 |
| DFT | 111A | Technical Drafting I Lab..... | 1 |
| DFT | 151 | CAD I | 3 |
| DFT | 153 | CAD III..... | 3 |
| EGR | 110 | Intro to Engineering Tech | 2 |
| EGR | 251 | Statics..... | 3 |
| EGR | 252 | Strength of Materials | 3 |
| ELC | 131 | Circuit Analysis I | 4 |
| MAC | 141 | Machining Applications I | 4 |
| MAT | 172 | Precalculus Trigonometry | 4 |
| | OR | MAT 122 Algebra/Trigonometry II | 3 |
| MEC | 161 | Manufacturing Processes I..... | 3 |
| MEC | 180 | Engineering Materials..... | 3 |
| MEC | 231 | Comp-Aided Manufact I..... | 3 |
| MEC | 265 | Fluid Mechanics | 3 |
| MEC | 270 | Machine Design | 4 |
| PHY | 151 | College Physics I | 4 |
| | OR | PHY 131 Physics-Mechanics | 4 |
| WLD | 112 | Basic Welding Processes | 2 |

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

Math/Physics Note: Students planning to transfer to a 4 year college should consider taking MAT 171, MAT 172, and PHY 151. Please see you Mechanical Engineering Technology advisor.

Total Credit Hours Required 71/73

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | | |
|-----|-------------------------------------------------------------------------|--------------------------------------|---|
| CTS | 080 | Computing Fundamentals..... | 3 |
| DRE | 098 | Integrated Reading Writing III | 3 |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 (MAT 121) | 6 | |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, MAT 065 (MAT 171) | 7 | |
| MAT | MAT 001 (MAT 171) | 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.

Mechanical Engineering Technology • A40320 Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|------------------------------------|------|-----------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| DFT | 151 | CAD I | 2 | 3 | 0 | 3 |
| EGR | 110 | Intro to Engineering Tech | 1 | 2 | 0 | 2 |
| ELC | 131 | Circuit Analysis | 3 | 3 | 0 | 4 |
| MAT | 171 | Precalculus/Algebra | 3 | 2 | 0 | 4 |
| | OR | MAT 121 Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| MEC | 180 | Engineering Materials | 2 | 3 | 0 | 3 |
| Total | | | 10/11 | 13 | 0 | 15/16 |
| Spring – 1st year | | | | | | |
| DFT | 111 | Technical Drafting I | 1 | 3 | 0 | 2 |
| DFT | 111A | Technical Drafting I Lab | 0 | 3 | 0 | 1 |
| ENG | 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAC | 141 | Machining Applications I | 2 | 6 | 0 | 4 |
| MAT | 172 | Precalculus Trigonometry | 3 | 2 | 0 | 4 |
| | OR | MAT 122 Algebra/Trigonometry II | 2 | 2 | 0 | 3 |
| MEC | 161 | Manufacturing Processes I | 3 | 0 | 0 | 3 |
| Total | | | 11/12 | 14 | 0 | 16/17 |
| Summer – 1st year | | | | | | |
| ENG | 112 | Writing/Research in the Disc | 3 | 0 | 0 | 3 |
| | OR | ENG 114 Prof Research & Reporting | 3 | 0 | 0 | 3 |
| | OR | ENG 113 Literature-Based Research | 3 | 0 | 0 | 3 |
| Humanities/Fine Arts Elective | | | 3 | 0 | 0 | 3 |
| Total | | | 6 | 0 | 0 | 6 |
| Fall – 2nd year | | | | | | |
| DFT | 153 | CAD III | 2 | 3 | 0 | 3 |
| EGR | 251 | Statics (1st 8 Wks) | 2 | 2 | 0 | 3 |
| EGR | 252 | Strength of Materials (2nd 8 Wks) | 2 | 2 | 0 | 3 |
| PHY | 151 | College Physics I | 3 | 2 | 0 | 4 |
| | OR | PHY 131 Physics-Mechanics | 3 | 2 | 0 | 4 |
| WLD | 112 | Basic Welding Processes | 1 | 3 | 0 | 2 |
| Social/Behavioral Science Elective | | | 3 | 0 | 0 | 3 |
| Total | | | 13 | 12 | 0 | 18 |
| Spring – 2nd year | | | | | | |
| ATR | 112 | Intro to Automation | 2 | 3 | 0 | 3 |
| CSC | 134 | C++ Programming | 2 | 3 | 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 |
| Total | | | 10 | 15 | 0 | 16 |
| Grand Total | | | 50/52 | 54 | 0 | 71/73 |

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

MECHANICAL ENGINEERING TECHNOLOGY Certificate Program (C40320)

| | | | | | | |
|-------|-----|--------------------------------|-------|----|---|-------|
| DFT | 151 | CAD I | 2 | 3 | 0 | 3 |
| EGR | 110 | Intro to Engineering Tech | 1 | 2 | 0 | 2 |
| ELC | 131 | Circuit Analysis | 3 | 3 | 0 | 4 |
| MAT | 171 | Precalculus/Algebra | 3 | 2 | 0 | 4 |
| | OR | MAT 121 Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| MEC | 180 | Engineering Materials | 2 | 3 | 0 | 3 |
| Total | | | 10/11 | 13 | 0 | 15/16 |

MECHATRONICS ENGINEERING TECHNOLOGY A.A.S. Program (A40350)

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

Humanities/Fine Arts:

| | | |
|----------|--|---|
| Elective | | 3 |
|----------|--|---|

Natural Sciences/Mathematics:

| | | |
|---------|--------------------------------|---|
| MAT 171 | Precalculus Algebra | 4 |
| OR | MAT 121 Algebra/Trigonometry I | 3 |

Social/Behavioral Sciences:

| | | |
|----------|--|---|
| Elective | | 3 |
|----------|--|---|

MAJOR COURSES:

| | | |
|---------|---------------------------|---|
| ATR 112 | Intro to Automation | 3 |
| BPR 111 | Blueprint Reading | 2 |
| CIS 110 | Intro to Computers | 3 |
| DFT 151 | CAD I | 3 |
| EGR 110 | Intro to Engineering Tech | 2 |
| ELC 117 | Motors and Controls | 4 |
| ELC 128 | Intro to PLC | 3 |
| ELC 131 | Circuit Analysis I | 4 |
| ELC 213 | Instrumentation | 4 |
| ELN 229 | Industrial Electronics | 4 |
| HYD 110 | Hydraulics/Pneumatics | 3 |
| ISC 112 | Industrial Safety | 2 |
| MEC 130 | Mechanisms | 3 |
| MEC 180 | Engineering Materials | 3 |
| PHY 151 | College Physics I | 4 |
| OR | PHY 131 Physics-Mechanics | 4 |

Program electives: 6

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

| | | |
|---------|--------------------------|-----|
| ATR 212 | Industrial Robots | 3 |
| CSC 134 | C++ Programming | 3 |
| CSC 139 | Visual BASIC Prog. | 3 |
| ELC 111 | Intro to Electricity | 3 |
| ELC 135 | Electrical Machines I | 3 |
| ELN 260 | Prog Logic Controllers | 3 |
| MAC 141 | Machining Applications I | 4 |
| MAC 122 | CNC Turning | 2 |
| MAT 124 | CNC Milling | 2 |
| MNT 110 | Intro to Maintenance | 2 |
| NET 125 | Networking Basics | 3 |
| WBL XXX | Work-Based Learning | 1-3 |
| WLD 112 | Basic Welding Processes | 2 |

Math/Physics Note: Students planning to transfer to a 4 year college should consider taking MAT 171, MAT 172, and PHY 151. Please see you Mechatronics Engineering Technology advisor.

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

Total Credit Hours Required 71/73

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | |
|--------------------------------------------------|--------------------------------|---|
| CTS 080 | Computing Fundamentals | 3 |
| DRE 098 | Integrated Reading Writing III | 3 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, | | |
| DMA 060 (MAT 121) | | 6 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, | | |
| DMA 065 (MAT 171) | | 7 |
| MAT MAT 001 (MAT 171) | | 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.

Mechatronics Engineering Technology • A40350 Suggested Program Sequence Day

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| EGR 110 | Intro to Engineering Tech | 1 | 2 | 0 | 2 |
| ELC 131 | Circuit Analysis I | 3 | 3 | 0 | 4 |
| DFT 151 | CAD I | 2 | 3 | 0 | 3 |
| MAT 171 | Precalculus Algebra | 3 | 2 | 0 | 4 |
| OR | MAT 121 Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| MEC 180 | Engineering Materials | 2 | 3 | 0 | 3 |
| Total | | 10/11 | 13 | 0 | 15/16 |
| Spring – 1st year | | | | | |
| ATR 112 | Intro to Automation | 2 | 3 | 0 | 3 |
| BPR 111 | Blueprint Reading | 1 | 2 | 0 | 2 |
| CIS 110 | Intro to Computers | 2 | 2 | 0 | 3 |
| ELN 229 | Industrial Electronics | 3 | 3 | 0 | 4 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT 172 | Precalculus Trigonometry | 3 | 2 | 0 | 4 |
| OR | MAT 122 Algebra/Trigonometry II | 2 | 2 | 0 | 3 |
| Total | | 13/14 | 12 | 0 | 18/19 |
| Summer – 1st year | | | | | |
| ENG 112 | Writing/Research in the Disc | 3 | 0 | 0 | 3 |
| OR | ENG 114 Prof Research & Reporting | 3 | 0 | 0 | 3 |
| OR | ENG 113 Literature-Based Research | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| Total | | 6 | 0 | 0 | 6 |
| Fall – 2nd year | | | | | |
| ELC 117 | Motors and Controls | 2 | 6 | 0 | 4 |
| ELC 128 | Intro to PLC | 2 | 3 | 0 | 3 |
| ISC 112 | Industrial Safety | 2 | 0 | 0 | 2 |
| PHY 151 | College Physics I | 3 | 2 | 0 | 4 |
| OR | PHY 131 Physics-Mechanics | 3 | 2 | 0 | 4 |
| | Program Elective | 2 | 3 | 0 | 3 |
| Total | | 11 | 14 | 0 | 16 |
| Spring - 2nd year | | | | | |
| ELC 213 | Instrumentation | 3 | 2 | 0 | 4 |
| HYD 110 | Hydraulics/Pneumatics | 2 | 3 | 0 | 3 |
| MEC 130 | Mechanisms | 2 | 2 | 0 | 3 |
| | Program Elective | 2 | 3 | 0 | 3 |
| | Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| Total | | 12 | 10 | 0 | 16 |
| Grand Total | | 52/54 | 49 | 0 | 71/73 |

Mechatronics Engineering Technology Mechatronics Cert. Prog. (C40350)

MAJOR COURSES:

| | | |
|-----------------------------|-------------------------|----|
| ATR 112 | Intro to Automation | 3 |
| ELC 131 | Circuit Analysis I | 4 |
| HYD 110 | Hydraulics/Pneumatics I | 3 |
| ISC 112 | Industrial Safety | 2 |
| MEC 130 | Mechanisms | 3 |
| Total Credit Hours Required | | 15 |

Suggested Prog. Sequence Day

| | | | | | |
|-------------------|-------------------------|----|----|---|----|
| Fall – 1year | | | | | |
| ELC 131 | Circuit Analysis | 3 | 3 | 0 | 4 |
| ISC 112 | Industrial Safety | 2 | 0 | 0 | 2 |
| Total | | 5 | 3 | 0 | 6 |
| Spring – 1st year | | | | | |
| ATR 112 | Intro to Automations | 2 | 3 | 0 | 3 |
| HYD 110 | Hydraulics/Pneumatics I | 2 | 3 | 0 | 3 |
| MEC 130 | Mechanisms | 2 | 2 | 0 | 3 |
| Total | | 6 | 8 | 0 | 9 |
| Grand Total | | 11 | 11 | 0 | 15 |

Mechatronics Engineering Technology General Engineering Certificate Program (C4035001)

| | | |
|-----------------------------|--------------------------------|-------|
| EGR 110 | Intro to Engineering Tech | 2 |
| ELC 131 | Circuit Analysis I | 4 |
| DFT 151 | CAD I | 3 |
| MAT 171 | Precalculus Algebra | 4 |
| OR | MAT 121 Algebra/Trigonometry I | 3 |
| MEC 180 | Engineering Materials | 3 |
| Total Credit Hours Required | | 15/16 |

MEDICAL OFFICE ADMINISTRATION A.A.S. Program (A25310)

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

GENERAL EDUCATION COURSES:

English/Communications:

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

Humanities/Fine Arts

| | | |
|-----------|-------|---|
| Elective: | | 3 |
|-----------|-------|---|

Natural Science/Mathematics:

| | | |
|---------|-------------------------------------|---|
| MAT 110 | Math Measurement & Literacy | 3 |
| OR | MAT 143 Quantitative Literacy | 3 |
| OR | MAT 152 Statistical Methods I | 4 |

Social/Behavioral Sciences

| | | |
|-----------|-------|---|
| Elective: | | 3 |
|-----------|-------|---|

MAJOR COURSES:

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

Total Credit Hours Required 66/67

DEVELOPMENTAL COURSE REQUIREMENTS:

| | | |
|-------------------------------------------------|--------------------------------------|---|
| CTS 080 | Computing Fundamentals | 3 |
| DMA DMA 010, DMA 020, DMA 030 (MAT 110) | ..... | 3 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 | (MAT 143/MAT 152) | 5 |
| DRE 098 | Integrated Reading Writing III | 3 |
| OST 080 | Keyboarding Literacy | 2 |

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

Medical Office Administration • A40350 Suggested Program Sequence Day

| | | | Class | Lab | Clin/WkExp | Credit |
|------------------------------------|-------------------------------------------|--|-------|-----|------------|--------|
| Fall – 1st year | | | | | | |
| CIS 110 | Introduction to Computers | | 2 | 2 | 0 | 3 |
| HMT 110 | Introduction to Healthcare Mgt | | 3 | 0 | 0 | 3 |
| OST 132 | Keyboard Skill Building | | 1 | 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 | | | 14 | 6 | 0 | 17 |
| Spring – 1st Year | | | | | | |
| HMT 211 | Long-Term Care Admin | | 3 | 0 | 0 | 3 |
| MED 114 | Prof Interac in Heal Care | | 1 | 0 | 0 | 1 |
| MED 121 | Medical Terminology I | | 3 | 0 | 0 | 3 |
| MED 122 | Medical Terminology II | | 3 | 0 | 0 | 3 |
| OST 281 | Emerg Issues in Med Off | | 3 | 0 | 0 | 3 |
| Total | | | 13 | 0 | 0 | 13 |
| Summer – 1st Year | | | | | | |
| Social/Behavioral Science Elective | | | 3 | 0 | 0 | 3 |
| Humanities/Fine Arts Elective | | | 3 | 0 | 0 | 3 |
| ENG 111 | Writing and Inquiry | | 3 | 0 | 0 | 3 |
| Total | | | 9 | 0 | 0 | 9 |
| Fall – 2nd Year | | | | | | |
| OST 148 | Med Coding Billing & Insurance (1st 8wks) | | 3 | 0 | 0 | 3 |
| OST 243 | Med Office Simulation (2nd 8wks) | | 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 – 2nd Year | | | | | | |
| ENG 114 | 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 |
| OR | MAT 143 Quantitative Literacy | | 2 | 2 | 0 | 3 |
| OR | MAT 152 Statistical Methods I | | 3 | 2 | 0 | 4 |
| 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 | | | 9/10 | 6 | 20 | 14/15 |
| Grand Total | | | 55/56 | 18 | 20 | 66/67 |

MEDICAL OFFICE ADMINISTRATION Diploma Program (D25310)

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

GENERAL EDUCATION COURSES:

SHC

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

MAJOR COURSES:

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

Total Credit Hours Required: 43

DEVELOPMENTAL COURSE REQUIREMENTS

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

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

Medical Office Administration • D25310 Suggested Program Sequence Day

| | | Class | Lab | Clin/WkExp | Credit |
|--------------------------|----------------------------------------|-----------|-----------|------------|-----------|
| 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 | 13 | 8 | 0 | 17 |
| Summer – 1st year | | | | | |
| OST 149 | Medical Legal Issues | 3 | 0 | 0 | 3 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| | Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| | Total | 9 | 0 | 0 | 9 |
| | Grand Total | 37 | 12 | 0 | 43 |

NETWORKING TECHNOLOGY A.A.S. Program (A25340)

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

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

GENERAL EDUCATION COURSES:

SHC

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

MAJOR COURSES:

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

Networking Elective

Students must select one course from the following:

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

Total Credit Hours Required 71/72

DEVELOPMENTAL COURSE REQUIREMENTS*

| | |
|-----------------------------------------------------------------------|---|
| CTS 080 Computing Fundamentals | 3 |
| DRE 098 Integrated Reading Writing III | 3 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143) | 5 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 (MAT 171) .. | 7 |
| MAT MAT 001 (MAT 171) | 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 • A25340
Suggested Program Sequence Day

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

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

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

Total Credit Hours Required12

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

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

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

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

NETWORKING TECHNOLOGY
Operating Systems Certificate Program (C2534004)

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

Total Credit Hours Required15

Operating Systems Certificate (C2534004) – Suggested Sequence

| | | | | | |
|-------------------|----------------------------|--|----|----|------|
| Fall – 1st year | | | | | |
| NOS 110 | Operating Systems Concepts | | 2 | 3 | 0 3 |
| Total | | | 2 | 3 | 0 3 |
| Spring – 1st year | | | | | |
| NOS 130 | Windows Single User | | 2 | 2 | 0 3 |
| NOS 120 | Linux/UNIX Single User | | 2 | 2 | 0 3 |
| Total | | | 4 | 4 | 0 6 |
| Fall – 2nd year | | | | | |
| NOS 230 | Windows Admin I | | 2 | 2 | 0 3 |
| Total | | | 2 | 2 | 0 3 |
| Spring – 2nd year | | | | | |
| NOS 244 | Operating System – AS/400 | | 2 | 2 | 0 3 |
| Total | | | 2 | 2 | 0 3 |
| Grand Total | | | 10 | 11 | 0 15 |

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

Office Administration • A25370
Suggested Program Sequence Day

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

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

GENERAL EDUCATION COURSES: SHC

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

MAJOR COURSES:

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

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

Total Credit Hours Required.....64

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

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

**OFFICE ADMINISTRATION
Diploma Program (D25370)**

| GENERAL EDUCATION COURSES: | | SHC |
|-------------------------------------|---------------------------------|-----------|
| English/Communications: | | |
| ENG 111 | Writing and Inquiry..... | 3 |
| ENG 113 | Literature-Based Research..... | 3 |
| OR ENG 114 | Prof Research & Reporting | 3 |
| MAJOR COURSES: | | |
| BUS 115 | Business Law I | 3 |
| CIS 110 | Introduction to Computers | 3 |
| CTS 130 | Spreadsheet | 3 |
| OST 132 | Keyboard Skill Building | 2 |
| OST 136 | Word Processing | 3 |
| OST 137 | Office Software Applicat | 3 |
| OST 153 | Office Finance Solutions..... | 2 |
| OST 164 | Text Editing Applications..... | 3 |
| OST 181 | Intro to Office Systems | 3 |
| OST 184 | Records Management..... | 3 |
| WEB 110 | Internet/Web Fundamentals | 3 |
| Total Credit Hours Required: | | 37 |

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

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

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

**OFFICE ADMINISTRATION
Certificate Program (C25370)**

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

Total Credit Hours Required:.....17

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

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

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

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

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

Total Credit Hours Required:.....12

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

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

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

PHOTOGRAPHIC TECHNOLOGY

A.A.S. Program (A30280)

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

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

| | | |
|----------|--|---|
| Elective | | 3 |
|----------|--|---|

Natural Sciences/Mathematics:

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

Social/Behavioral Sciences:

| | | |
|----------|--|---|
| Elective | | 3 |
|----------|--|---|

MAJOR COURSES:

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

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

| | | |
|---------|---------------------------|---|
| BUS 110 | Introduction to Business | 3 |
| BUS 125 | Personal Finance | 3 |
| BUS 137 | Principles of Management | 3 |
| BUS 139 | Entrepreneurship I | 3 |
| CIS 110 | Introduction to Computers | 3 |
| PHO 131 | View Camera | 4 |
| PHO 180 | Creative Problem Solving | 3 |
| PHO 275 | Travel/Outdoor Photo | 3 |
| WBL 111 | Work-based Learning | 1 |

OTHER REQUIRED COURSES:

| | | |
|---------|-------------------------|---|
| ACA 111 | College Student Success | 1 |
|---------|-------------------------|---|

Total Credit Hours Required 68/72

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | |
|----------------------------------------------------------|--------------------------------|---|
| CTS 080 | Computing Fundamentals | 3 |
| DRE 098 | Integrated Reading Writing III | 3 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 | (MAT 143/MAT 152) | 5 |
| DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 | (MAT 171) | 7 |
| MAT MAT 001 (MAT 171) | | 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.

Photographic Technology • A30280

Suggested Program Sequence Day

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|-------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| ACA 111 | College Student Success | 1 | 0 | 0 | 1 |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| PHO 110 | Fund of Photography | 3 | 6 | 0 | 5 |
| PHO 113 | History of Photography | 3 | 0 | 0 | 3 |
| PHO 139 | Intro to Digital Imaging | 1 | 3 | 0 | 2 |
| Total | | 11 | 9 | 0 | 14 |
| Spring – 1st year | | | | | |
| PHO 115 | Basic Studio Lighting | 2 | 6 | 0 | 4 |
| PHO 120 | Intermediate Photography | 2 | 4 | 0 | 4 |
| PHO 219 | Digital Applications | 1 | 3 | 0 | 2 |
| PHO 220 | Business of Photography | 3 | 0 | 0 | 3 |
| PHO 224 | Multimedia Production | 2 | 3 | 0 | 3 |
| Total | | 10 | 16 | 0 | 16 |
| Summer – 1st year | | | | | |
| ENG 113 | Literature-Based Research | 3 | 0 | 0 | 3 |
| OR | ENG 114 Prof Research and Reporting | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | 3 | 0 | 0 | 3 |
| | Social/Behavioral Science Elective | 3 | 0 | 0 | 3 |
| Total | | 9 | 0 | 0 | 9 |
| Fall – 2nd year | | | | | |
| PHO 150 | Portfolio Development I | 3 | 3 | 0 | 4 |
| PHO 217 | Photojournalism I | 1 | 6 | 0 | 4 |
| PHO 226 | Portraiture | 3 | 3 | 0 | 4 |
| PHO 235 | Commercial Photography | 2 | 4 | 0 | 4 |
| Total | | 9 | 16 | 0 | 16 |
| Spring – 2nd year | | | | | |
| MAT 143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| OR | MAT 152 Statistical Methods I | 3 | 2 | 0 | 4 |
| OR | MAT 171 Precalculus Algebra | 3 | 2 | 0 | 4 |
| PHO 216 | Documentary Photography | 2 | 4 | 0 | 4 |
| PHO 250 | Portfolio Development II | 2 | 4 | 0 | 4 |
| | Program Elective | | | | 1/4 |
| WBL 110 | World of Work | 1 | 0 | 10 | 1 |
| Total | | 7/8 | 10 | 10 | 13/17 |
| Grand Total | | 46/47 | 51 | 10 | 68/72 |

Photographic Technology Certificate • (C30280)

| | | |
|-----------------------------|--------------------------|-----|
| MAJOR COURSES: | | SHC |
| PHO 110 | Fund of Photography | 5 |
| PHO 115 | Basic Studio Lighting | 4 |
| PHO 139 | Intro to Digital Imaging | 2 |
| PHO 219 | Digital Applications | 2 |
| PHO 224 | Multimedia Production | 3 |

Total Credit Hours Required16

Photographic Technology Certificate • (C30280)

Suggested Program Sequence

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

POLYSOMNOGRAPHY

A.A.S. Program (A45670)

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

GENERAL EDUCATION COURSES:

English/Communications:

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

Humanities/Fine Arts:

| | |
|----------|--------|
| Elective |3 |
|----------|--------|

Natural Sciences/Mathematics:

MAT 143 Quantitative Literacy.....3

Social/Behavioral Sciences:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

MAJOR COURSES:

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

OTHER REQUIRED COURSES:

| | | |
|---------|------------------------------|---|
| ACA 111 | College Student Success..... | 1 |
|---------|------------------------------|---|

Total Credit Hours Required66

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

POLYSOMNOGRAPHY • Certificate Program (C45650)

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

MAJOR COURSES:

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

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

Total Credit Hours Required17

Polysomnography Certificate • C45650 Suggested Seq.

| Polysomnography Certificate | | C45656 Suggested Seq. | | | |
|-----------------------------|--------------------|-----------------------|----|----|----|
| Summer – 1st year | | | | | |
| *PSG 189 | PSG Transition | | 1 | 3 | 3 |
| | | | 1 | 3 | 3 |
| Fall – 1st year | | | | | |
| PSG 210 | Polysomnography I | | 3 | 2 | 9 |
| | | | 3 | 2 | 9 |
| Spring – 1st year | | | | | |
| PSG 211 | Polysomnography II | | 2 | 6 | 9 |
| | | | 2 | 6 | 9 |
| | | | 6 | 11 | 21 |
| | | | 17 | | |

Polysomnography • A45670
Suggested Program Sequence Day

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

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

Polysomnography Associate Degree Completion Program (A4567009)

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

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

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

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

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

RADIOGRAPHY

A.A.S. Program (A45700)

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

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

GENERAL EDUCATION COURSES: SHC

| | |
|-----------------------------------|---|
| English/Communications: | |
| ENG 111 Writing and Inquiry | 3 |
| English Elective | 3 |

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

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

| | |
|-----------------------|---|
| Humanities/Fine Arts: | |
| Elective | 3 |

| | |
|----------------------------------------|---|
| Natural Sciences/Mathematics: | |
| BIO 168 Anatomy and Physiology I..... | 4 |
| BIO 169 Anatomy and Physiology II..... | 4 |
| MAT 143 Quantitative Literacy..... | 3 |
| Social/Behavioral Sciences: | |
| PSY 150 General Psychology..... | 3 |

MAJOR COURSES:

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

Total Credit Hours Required.....76

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Radiography Program • A45700

Suggested Program Sequence Day

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

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

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

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

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

GENERAL EDUCATION COURSES: SHC

English/Communications:

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

Humanities/Fine Arts:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

Natural Sciences/Mathematics:

| | | |
|---------|--------------------------------|---|
| BIO 168 | Anatomy and Physiology I | 4 |
| BIO 169 | Anatomy and Physiology II..... | 4 |

Social/Behavioral Sciences:

| | |
|----------------|---|
| Elective | 3 |
|----------------|---|

MAJOR COURSES:

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

Total Credit Hours Required72

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Respiratory Therapy • A45720 Suggested Program Sequence Day

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

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

SURGICAL TECHNOLOGY Diploma Program (D45740)

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

GENERAL EDUCATION COURSES:

SHC

English/Communications:

ENG 111 Writing and Inquiry3

Social/Behavioral Sciences:

PSY 150 General Psychology3

MAJOR COURSES:

BIO 163 Basic Anat & Physiology5

BIO 175 General Microbiology3

SUR 110 Intro to Surg Tech3

SUR 111 Periop Patient Care7

SUR 122 Surgical Procedures I6

SUR 123 SUR Clinical Practice I7

SUR 134 Surgical Procedures II5

SUR 135 SUR Clinical Practice II4

SUR 137 Prof Success Prep1

OTHER REQUIRED COURSES:

ACA 111 College Student Success1

Total Credit Hours Required48

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals3

DRE 098 Integrated Reading Writing III3

DMA DMA 010, DMA 020, DMA 030, DMA 0404

* 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.

* Students must complete MED 121 & MED 122 prior to admission to the Surgical Technology program.

Surgical Technology • (D45740) Suggested Program Sequence Day

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

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

Most courses required to meet graduation requirements in this curriculum are offered during day hours only. Minimum time for completion: five semesters full-time attendance. The Associate in Applied Science Degree is awarded graduates of this curriculum. CVCC has a 2 + 2 Articulation Agreement with NC 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.

The Turfgrass Management Technology curriculum is designed to provide skills necessary to perform duties related to management of golf courses, sports fields, lawn care, irrigation design, and sod production. Coursework includes turfgrass management, irrigation, ornamental horticulture, soil science, entomology, plant pathology, as well as courses in communications, computers, and the social sciences. Graduates should qualify for employment at golf courses, local, state, and national parks, sports complexes, highway vegetation, and turf maintenance companies. Graduates should also be prepared to take the North Carolina Pesticide Applicator's examination.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

ENG 111 Writing and Inquiry3

ENG 114 Prof Research & Reporting3

OR ENG 112 Writing/Research in the Disc3

OR ENG 113 Literature-Based Research3

Humanities/Fine Arts:

Elective3

Natural Sciences/Mathematics:

MAT 110 Math Measurement & Literacy3

OR MAT 143 Quantitative Literacy3

Social/Behavioral Sciences:

Elective3

MAJOR COURSES:

HOR 162 Applied Plant Science3

HOR 166 Soils & Fertilizers3

TRF 110 Intro Turfgrass Cult & ID4

TRF 120 Turfgrass Irrigat & Design4

TRF 125 Turfgrass Computer App2

TRF 130 Native Flora ID2

TRF 140 Turfgrass Mgmt Safety3

TRF 150 Landscape Drafting2

TRF 151 Intro Landscape Design3

TRF 152 Landscape Maintenance3

TRF 210 Turfgrass Eqmt Mgmt3

TRF 220 Turfgrass Calculations2

TRF 230 Turfgrass Mgmt Apps2

TRF 240 Turfgrass Pest Control3

TRF 250 Golf/Sport Field Const4

TRF 260 Adv Turfgrass Mgmt4

WBL XXX Work-Based Learning5

OTHER REQUIRED COURSES:

SPA 120 Spanish for the Workplace3

Total Credit Hours Required70

DEVELOPMENTAL COURSE REQUIREMENTS*

CTS 080 Computing Fundamentals3

DRE 098 Integrated Reading Writing III3

DMA DMA 010, DMA 020, DMA 030 (MAT 110)3

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

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

Turfgrass Management Technology • A15420

Suggested Program Sequence Day

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

TURFGRASS MANAGEMENT TECHNOLOGY OnLine Certificate Program (C1542002)

| MAJOR COURSES: | | SHC |
|-----------------------------------|---------------------------------|-----|
| HOR 166 | Soils & Fertilizers..... | 3 |
| TRF 110 | Intro Turfgrass Cult & ID..... | 4 |
| TRF 120 | Turfgrass Irrigat & Design..... | 4 |
| TRF 220 | Turfgrass Calculations..... | 2 |
| TRF 240 | Turfgrass Pest Control..... | 3 |
| Total Credit Hours Required | | 16 |

| | | | | | |
|-------------------|------------------------------|----|----|---|----|
| Fall – 1st year | | | | | |
| HOR 166 | Soils & Fertilizers | 2 | 2 | 0 | 3 |
| TRF 110 | Intro to Turfgrass Cult & ID | 3 | 2 | 0 | 4 |
| TRF 240 | Turfgrass Pest Control | 2 | 2 | 0 | 3 |
| Total | | 7 | 6 | 0 | 10 |
| Spring – 1st year | | | | | |
| TRF 120 | Turfgrass Irrigat & Design | 2 | 4 | 0 | 4 |
| TRF 220 | Turfgrass Calculations | 2 | 0 | 0 | 2 |
| Total | | 4 | 4 | 0 | 6 |
| Grand Total | | 11 | 10 | 0 | 16 |

TURFGRASS MANAGEMENT TECHNOLOGY Diploma Program (D15420)

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

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

Total Credit Hours Required41

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

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

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

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

| | | | | | |
|-------------------|---------------------|----|----|----|----|
| Summer – 1st year | | | | | |
| WBL XXX | Work-Based Learning | 0 | 0 | 20 | 2 |
| Total | | 0 | 0 | 20 | 2 |
| Grand Total | | 24 | 27 | 40 | 41 |

TURFGRASS MANAGEMENT TECHNOLOGY Certificate Program (C15420)

| MAJOR COURSES: | | SHC |
|-----------------------------------|---------------------------------|-----|
| TRF 110 | Intro Turfgrass Cult & ID..... | 4 |
| TRF 120 | Turfgrass Irrigat & Design..... | 4 |
| TRF 140 | Turfgrass Mgmt Safety..... | 3 |
| TRF 220 | Turfgrass Calculations..... | 2 |
| TRF 240 | Turfgrass Pest Control..... | 3 |
| Total Credit Hours Required | | 16 |

| | | | | | |
|-------------------|------------------------------|----|----|---|----|
| Fall – 1st year | | | | | |
| TRF 110 | Intro to Turfgrass Cult & ID | 3 | 2 | 0 | 4 |
| TRF 140 | Turfgrass Mgmt Safety | 2 | 2 | 0 | 3 |
| TRF 240 | Turfgrass Pest Control | 2 | 2 | 0 | 3 |
| Total | | 7 | 6 | 0 | 10 |
| Spring – 1st year | | | | | |
| TRF 120 | Turfgrass Irrigat & Design | 2 | 4 | 0 | 4 |
| TRF 220 | Turfgrass Calculations | 2 | 0 | 0 | 2 |
| Total | | 4 | 4 | 0 | 6 |
| Grand Total | | 11 | 10 | 0 | 16 |

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

Web Technologies • A25290 Suggested Program Sequence Day

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. Coursework in this program covers the terminology and use of computers, network devices, networks, servers, databases, applications, programming languages, as well as web applications, site development, and design. Studies will provide opportunity for students to learn related industry standards. Graduates should qualify for career opportunities as designers, administrators, or developers in the areas of web applications, websites, web services, and related areas of distributed computing.

GENERAL EDUCATION COURSES:

SHC

English/Communications:

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

Humanities/Fine Arts:

| | | |
|----------|--|---|
| Elective | | 3 |
|----------|--|---|

Natural Sciences/Mathematics:

| | | |
|---------|-----------------------|---|
| MAT 143 | Quantitative Literacy | 3 |
|---------|-----------------------|---|

Social/Behavioral Sciences:

| | | |
|----------|--|---|
| Elective | | 3 |
|----------|--|---|

MAJOR COURSES:

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

Program/WEB Industry Elective 3

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

| | | |
|---------|---------------------------|---|
| BUS 230 | Small Business Management | 3 |
| CSC 151 | JAVA Programming | 3 |
| MKT 120 | Principles of Marketing | 3 |
| MKT 223 | Customer Service | 3 |
| SGD 111 | Introduction to SGD | 3 |
| SGD 112 | SGD Design | 3 |
| SGD 114 | 3D Modeling | 3 |
| WEB 180 | Active Server Pages | 3 |
| WEB 186 | XML Technology | 3 |
| WEB 260 | E-Commerce Infrastructure | 3 |

WEB Technologies Elective 3

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

| | | |
|---------|--------------------------|---|
| WEB 111 | Intro to Web Graphics | 3 |
| WEB 151 | Mobile Application Dev 1 | 3 |
| WEB 220 | Advanced Multimedia | 3 |
| WEB 240 | Internet Security | 3 |

OTHER REQUIRED COURSES:

| | | |
|---------|-------------------------|---|
| ACA 111 | College Student Success | 1 |
|---------|-------------------------|---|

Total Credit Hours Required 69

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Fall – 1st year

| | | | Class | Lab | Clin/WkExp | Credit |
|---------|---------------------------|--|-------|-----|------------|--------|
| ACA 111 | College Student Success | | 1 | 0 | 0 | 1 |
| CIS 110 | Introduction to Computers | | 2 | 2 | 0 | 3 |
| CIS 115 | Intro to Prog & Logic | | 2 | 3 | 0 | 3 |
| DBA 110 | Database Concepts | | 2 | 3 | 0 | 3 |
| WEB 110 | Internet/Web Fundamentals | | 2 | 2 | 0 | 3 |
| MAT 143 | Quantitative Literacy | | 2 | 2 | 0 | 3 |
| Total | | | 11 | 12 | 0 | 16 |

Spring – 1st year

| | | | | | | |
|---------|---------------------------------|--|----|---|---|----|
| WEB 140 | Web Development Tools | | 2 | 2 | 0 | 3 |
| CTS 115 | Info Sys Business Concepts | | 3 | 0 | 0 | 3 |
| ENG 111 | Writing and Inquiry | | 3 | 0 | 0 | 3 |
| NET 125 | Networking Basics | | 1 | 4 | 0 | 3 |
| WEB 120 | Intro Internet Multimedia | | 2 | 2 | 0 | 3 |
| | WEB Technology Program Elective | | | | | 3 |
| Total | | | 11 | 8 | 0 | 18 |

Summer – 1st year

| | | | | | | |
|---------|-----------------------------------|--|---|---|---|---|
| ENG 114 | Prof Research & Reporting | | 3 | 0 | 0 | 3 |
| OR | ENG 113 Literature-Based Research | | 3 | 0 | 0 | 3 |
| | Humanities/Fine Arts Elective | | 3 | 0 | 0 | 3 |
| Total | | | 6 | 0 | 0 | 6 |

Fall – 2nd year

| | | | | | | |
|---------|---------------------------------|--|---|---|---|----|
| SEC 110 | Security Concepts | | 2 | 2 | 0 | 3 |
| WEB 250 | Database Driven Websites | | 2 | 2 | 0 | 3 |
| WEB 115 | Web Markup and Scripting | | 2 | 2 | 0 | 3 |
| WEB 230 | Implementing Web Serv | | 2 | 2 | 0 | 3 |
| | WEB Technology Program Elective | | | | | 3 |
| Total | | | 8 | 8 | 0 | 15 |

Spring – 2nd year

| | | | | | | |
|-------------|------------------------------------|--|----|----|----|----|
| WEB 210 | Web Design | | 2 | 2 | 0 | 3 |
| WEB 289 | Internet Technologies Project | | 1 | 4 | 0 | 3 |
| NOS 110 | Operating Systems Concepts | | 2 | 3 | 0 | 3 |
| WBL XXX | Work-Based Learning | | 0 | 0 | 20 | 2 |
| | Social/Behavioral Science Elective | | 3 | 0 | 0 | 3 |
| Total | | | 8 | 9 | 20 | 14 |
| Grand Total | | | 44 | 37 | 20 | 69 |

WEB TECHNOLOGIES

Basic Web Developer • Certificate Program (C25290)

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

Total Credit Hours Required12

Basic Web Developer Certificate • C25290 Suggested Sequence

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

WEB TECHNOLOGIES

Webmaster • Certificate Program (C2529001)

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

Total Credit Hours Required12

Web Technologies • Webmaster Certificate • C2529001 Suggested Sequence

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

WELDING TECHNOLOGY

A.A.S. Program (A50420)

Courses required to meet graduation requirements in this curriculum are offered during day, afternoon, and evening hours. Students may begin any semester. The Associate in Applied Science degree, is awarded graduates of this curriculum. A Diploma, Certificate is awarded graduates who complete the diploma, certificate program option. The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry. Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provide 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.

GENERAL EDUCATION COURSES: SHC

English/Communications:

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

Humanities/Fine Arts:

| | | |
|----------|-------|---|
| Elective | | 3 |
|----------|-------|---|

Natural Sciences/Mathematics:

| | | | |
|-----|---------|-----------------------------------|---|
| MAT | 110 | Math Measurement & Literacy | 3 |
| OR | MAT 121 | Algebra/Trigonometry I | 3 |
| OR | MAT 143 | Quantitative Literacy | 3 |

Social/Behavioral Science:

| | | |
|----------|-------|---|
| Elective | | 3 |
|----------|-------|---|

MAJOR COURSES:

| | | | |
|-----|-------|----------------------------------|---|
| WLD | 110 | Cutting Processes | 2 |
| WLD | 115 | SMAW (Stick) Plate | 5 |
| OR | | | |
| WLD | 115AB | SMAW (Stick) Plate-AB | 3 |
| WLD | 115BB | SMAW (Stick) Plate-BB | 2 |
| WLD | 116 | SMAW (Stick) Plate/Pipe | 4 |
| OR | | | |
| WLD | 116AB | SMAW (Stick) Plate/Pipe-AB | 2 |
| WLD | 116BB | SMAW (Stick) Plate/Pipe-BB | 2 |
| WLD | 121 | GMAW (MIG) FCAW/Plate | 4 |
| WLD | 122 | GMAW (MIG) Plate/Pipe | 3 |
| WLD | 131 | GTAW (TIG) Plate | 4 |
| WLD | 132 | GTAW (TIG) Plate/Pipe | 3 |
| WLD | 141 | Symbols & Specifications | 3 |
| WLD | 143 | Welding Metallurgy | 2 |
| WLD | 215 | SMAW (Stick) Pipe | 4 |
| OR | | | |
| WLD | 215AB | SMAW (Stick) Pipe-AB | 2 |
| WLD | 215BB | SMAW (Stick) Pipe-BB | 2 |
| WLD | 261 | Certification Practices | 2 |
| WLD | 262 | Inspection & Testing | 3 |
| WLD | 265 | Automated Welding/Cutting | 4 |

Program electives:.....7

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

DFT 111, DFT 151, DFT 153, ISC 112, MAC 122, MAC 124, MAC 131, MAC 132, MAC 141, MAC 142, MAC 151, MAC 222, MAC 224, MAC 231, MAC 233, MEC 110, MEC 130, MEC 161, MEC 180, MEC 231, WBL 110, WBL XXX.

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

Total Credit Hours Required65

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | | |
|-----|--------------------------------------------------------------------------|-------------------------------------|---|
| DRE | 098 | Integrated Reading Writing II | 3 |
| DMA | DMA 010, DMA 020, DMA 030 (MAT 110) | 3 | |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 (MAT 143)..... | 5 | |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 (MAT 121) | 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.

Welding Technology A.A.S. Program • A50420
Suggested Program Sequence Day/Evening

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|--------------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| WLD 110 | Cutting Processes | 1 | 3 | 0 | 2 |
| WLD 115 | SMAW (Stick) Plate | 2 | 9 | 0 | 5 |
| WLD 121 | GMAW (MIG) FCAW/Plate | 2 | 6 | 0 | 4 |
| WLD 141 | Symbols & Specifications | 2 | 2 | 0 | 3 |
| Total | | 7 | 20 | 0 | 14 |
| Spring – 1st year | | | | | |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT 110 | Math Measurement & Literacy | 2 | 2 | 0 | 3 |
| OR | MAT 121 Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| OR | MAT 143 Quantitative Literacy | 2 | 2 | 0 | 3 |
| WLD 122 | GMAW (MIG) Plate/Pipe | 1 | 6 | 0 | 3 |
| WLD 131 | GTAW (TIG) Plate | 2 | 6 | 0 | 4 |
| WLD 143 | Welding Metallurgy | 1 | 2 | 0 | 2 |
| Total | | 9 | 16 | 0 | 15 |
| Summer – 1st year | | | | | |
| WLD 132 | GMAW (TIG) Plate/Pipe | 1 | 6 | 0 | 3 |
| WLD 262 | Inspection & Testing | 2 | 2 | 0 | 3 |
| Total | | 3 | 8 | 0 | 6 |
| Fall – 2nd year | | | | | |
| ENG 114 | 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 |
| WLD 116 | SMAW (Stick) Plate/Pipe | 1 | 9 | 0 | 4 |
| WLD 261 | Certification Practices | 3 | 3 | 0 | 2 |
| | Humanities/Fine Arts | 3 | 0 | 0 | 3 |
| Total | | 10 | 12 | 0 | 12 |
| Spring – 2nd year | | | | | |
| WLD 265 | Automated Welding/Cutting | 2 | 6 | 0 | 4 |
| | Program Elective | 5 | 0 | 0 | 5 |
| | Social Behavioral Elective | 3 | 0 | 0 | 3 |
| Total | | 10 | 6 | 0 | 12 |
| Summer – 2nd year | | | | | |
| WLD 215 | SMAW (Stick) Pipe | 1 | 9 | 0 | 4 |
| | Program Elective | 2 | 0 | 0 | 2 |
| Total | | 3 | 9 | 0 | 6 |
| Grand Total | | 42 | 71 | 0 | 65 |

WELDING TECHNOLOGY Certificate Program (C50420)

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

Welding Technology Certificate • C50420 Suggested Sequence

| | | | | | |
|-------------------|--------------------------|---|----|---|----|
| Fall – 1st year | | | | | |
| WLD 110 | Cutting Processes | 1 | 3 | 0 | 2 |
| WLD 121 | GMAW (MIG) FCAW/Plate | 2 | 6 | 0 | 4 |
| WLD 141 | Symbols & Specifications | 2 | 2 | 0 | 3 |
| Total | | 5 | 11 | 0 | 9 |
| Spring – 1st year | | | | | |
| WLD 115 | SMAW (Stick) Plate | 2 | 9 | 0 | 5 |
| WLD 131 | GTAW (TIG) Plate | 2 | 6 | 0 | 4 |
| Total | | 4 | 15 | 0 | 9 |
| Grand Total | | 9 | 26 | 0 | 18 |

WELDING TECHNOLOGY
Diploma Program (D50420)

GENERAL EDUCATION COURSES:

SHC

English/Communications:

ENG 111 Writing and Inquiry3

Natural Sciences/Mathematics:

MAT 110 Math Measurement & Literacy3

OR MAT 121 Quantitative Literacy.....3

OR MAT 143 Quantitative Literacy.....3

MAJOR COURSES:

WBL 110 World of Work1

WLD 110 Cutting Processes2

WLD 115 SMAW (Stick) Plate5

OR

WLD 115AB SMAW (Stick) Plate-AB3

WLD 115BB SMAW (Stick) Plate-BB2

WLD 121 GMAW (MIG) FCAW/Plate.....4

WLD 131 GTAW (TIG) Plate4

WLD 141 Symbols & Specifications3

WLD 143 Welding Metallurgy.....2

WLD 262 Inspection & Testing.....3

Program electives:.....6

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

WLD 116 or WLD 116AB and WLD 116BB, WLD 122, WLD 132, WLD 151,
WLD 215 or 215AB and WLD 215 BB, WLD 265, WLD 261.

Total Credit Hours Required36

DEVELOPMENTAL COURSE REQUIREMENTS*

DRE 098 Integrated Reading Writing II3

DMA DMA 010, DMA 020, DMA 030 (MAT 110)3

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

DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050 DMA 060,
(MAT 121)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.

Welding Technology Diploma • D50420
Suggested Program Sequence Day/Evening

| | | Class | Lab | Clin/WkExp | Credit |
|-------------------|--------------------------------|-------|-----|------------|--------|
| Fall – 1st year | | | | | |
| WBL 110 | World of Work | 1 | 0 | 0 | 1 |
| WLD 110 | Cutting Processes | 1 | 3 | 0 | 2 |
| WLD 115 | SMAW (Stick) Plate | 2 | 9 | 0 | 5 |
| WLD 121 | GMAW (MIG) FCAW/Plate | 2 | 6 | 0 | 4 |
| WLD 141 | Symbols & Specifications | 2 | 2 | 0 | 3 |
| Total | | 8 | 20 | 0 | 15 |
| Spring – 1st year | | | | | |
| ENG 111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| MAT 110 | Math Measurement & Literacy | 2 | 2 | 0 | 3 |
| OR | MAT 121 Algebra/Trigonometry I | 2 | 2 | 0 | 3 |
| OR | MAT 143 Quantitative Literacy | 2 | 2 | 0 | 3 |
| WLD 131 | GTAW (TIG) Plate | 2 | 6 | 0 | 4 |
| WLD 143 | Welding Metallurgy | 1 | 2 | 0 | 2 |
| | Program Elective | 3 | 0 | 0 | 3 |
| Total | | 11 | 10 | 0 | 15 |
| Summer – 1st year | | | | | |
| WLD 262 | Inspection & Testing | 2 | 2 | 0 | 3 |
| | Program Elective | 3 | 0 | 0 | 3 |
| Total | | 5 | 2 | 0 | 6 |
| Grand Total | | 24 | 32 | 0 | 36 |

SPECIAL PROGRAMS

Associate in Applied Science Degree Curriculum:

- Funeral Service Education

Diploma Curriculum:

- NC Funeral Director

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

FUNERAL SERVICE EDUCATION

A.A.S. Program (A55260) Collaborative Program

Catawba Valley Community College/

Fayetteville Technical Community College

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

American Board of Funeral Service Education

3432 Ashland Avenue, Suite U • St. Joseph, MO 64506

Telephone: 816-223-3747

NC FUNERAL DIRECTOR

Diploma Program (D55260) • Collaborative Program

Catawba Valley Community College/

Fayetteville Technical Community College

Funeral Service Education – NC Funeral Director is a diploma program offered at CVCC by Fayetteville Technical Community College. The Funeral Service Education courses are offered by FTCC via a live interactive video feed in one of the NC Information Highway classrooms at CVCC, with the general education courses being offered by CVCC. For details, please contact CVCC's Advising Center 828-327-7000, Ext. 4687. The Funeral Service Education curriculum provides students with the opportunity to acquire the funeral service education necessary to become proficient in basic funeral directing skills. Students completing the diploma are eligible to sit for the NC Board of Funeral Service Funeral Director state exam. This academic program is designed to meet specific state or professional needs. It is not accredited by the American Board of Funeral Service Education owing to the fact that it does not include instruction in the following areas: anatomy, chemistry, embalming, microbiology and restorative arts. Students graduating from this program are not eligible to take the National Board Examination or any state examination for which graduation from an ABFSE accredited program is required.

CAREER AND COLLEGE PROMISE (High School Students)

The Career and College Promise program is established by the State Board of Education and the State Board of Community Colleges. Career and College Promise provides seamless dual enrollment educational opportunities for eligible North Carolina high school students in order to accelerate completion of college certificates, diplomas, and associate degrees that lead to college transfer or provide entry-level job skills. North Carolina community colleges may offer the following Career and College Promise pathways aligned with the K-12 curriculum and career and college ready standards adopted by the State Board of Education:

1. College Transfer Pathway leading to a minimum of 30 hours of college transfer credit.
2. A Career and Technical Education Pathway leading to a certificate, diploma or degree.
3. A Cooperative Innovative High School Pathway approved under Part 9 of Article 16 of Chapter 115D of the General Statutes.

College Transfer Pathway

1. The Career and College Promise College Transfer Pathway requires the completion of at least thirty semester hours of transfer courses, including English and mathematics, and ACA 122 College Transfer Success.

2. To be eligible for enrollment, a high school student must meet the following criteria:

- a. be a high school junior or senior;
- b. have a weighted GPA of 3.0 on high school courses; and
- c. demonstrate college readiness on an assessment or placement test. A student must demonstrate college readiness in English, reading and mathematics to be eligible for enrollment in a College Transfer Pathway.

3. A high school junior or senior who does not demonstrate college-readiness on an approved assessment or placement test may be provisionally enrolled in a College Transfer Pathway. To qualify for Provisional Status, a student must meet the following criteria:

- a. have a cumulative weighted GPA of 3.5;
- b. have completed two years of high school English with a grade of C or higher;
- c. have completed high school Algebra II (or a higher level math class) with a grade of C or higher;
- d. obtain the written approval of the high school principal or his/her designee; and,
- e. obtain the written approval of the community college president or his/her designee.

A Provisional Status student may register only for college mathematics (MAT) and college English (ENG) courses within the chosen Pathway. To be eligible to register for other courses in the Pathway, the student must first successfully complete mathematics and English courses with a grade of C or higher.

4. To maintain eligibility for continued enrollment, a student must

- a. continue to make progress toward high school graduation, and
- b. maintain a 2.0 GPA in college coursework after completing two courses.
- c. a student who falls below a 2.0 GPA after completing two college courses will be subject to the college's policy for satisfactory academic progress.

5. A student must enroll in one College Transfer Pathway program of study and may not substitute courses in one program for courses in another.

6. A student may change his or her program of study major with approval of the high school principal or his/her designee and the college's chief student development administrator.

7. With approval of the high school principal or his/her designee and the college's chief student development administrator, a student who completes a College Transfer Pathway while still enrolled in high school may continue to earn college transfer credits leading to the completion of the Associate in Arts or Associate in Science.

8. With approval of the high school principal or his/her designee and the college's chief student development administrator, a student may enroll in both a College Transfer Pathway program of study and up to two (2) Career Technical Education program of study (for a total of three (3)).

Career Technical Education Pathway

1. The Career and College Promise Career Technical Education Pathway for juniors and seniors leads to a certificate or diploma aligned with a high school Career Cluster.

2. To be eligible for enrollment, a high school student must meet the following criteria:

- a. be a high school junior or senior;
- b. have a weighted GPA of 3.0 on high school courses or have the recommendation of the high school principal or his/her designee; and
- c. meet the prerequisites for the career pathway.

3. High school counselors should consider students' PLAN scores in making pathway recommendations.

4. College Career Technical Education courses may be used to provide partial or full fulfillment of a four-unit career cluster. Where possible, students should be granted articulated credit based on the local or state North Carolina High School to Community College articulation agreement.

5. To maintain eligibility for continued enrollment, a student must

- a. continue to make progress toward high school graduation, and
- b. maintain a 2.0 in college coursework after completing two courses.
- c. a student who falls below a 2.0 GPA after completing two college courses will be subject to the college's policy for satisfactory academic progress.

6. A student may enroll in two programs of study but may not substitute courses in one program for courses in another. The student may change his or her program of study major with approval of the high school principal or his/her designee and the college's chief student development administrator. A student may concurrently enroll in two CTE programs of study provided the exception has been approved by the college's Chief Academic Officer or his/her designee.

CAREER & COLLEGE PROMISE COLLEGE TRANSFER PATHWAY

Leading to the Associate in Arts (P1012C)

The CCP College Transfer Pathway leading to the Associate in Arts is designed for high school juniors and seniors who wish to begin study toward the Associate in Arts degree and a baccalaureate degree in a non-STEM major.

GENERAL EDUCATION (31/32 SHC)

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) component of the Comprehensive Articulation Agreement.

English Composition (6 SHC)

The following two English composition courses are required.

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

Select three courses from the following from at least two different disciplines (9 SHC)

Communication (3 SHC)

Humanities/Fine Arts (9 SHC)

| | | |
|---------|------------------------|---|
| 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 |
| ENG 241 | British Literature I | 3 |
| ENG 242 | British Literature II | 3 |
| MUS 110 | Music Appreciation | 3 |
| MUS 112 | Introduction to Jazz | 3 |
| PHI 215 | Philosophical Issues | 3 |
| PHI 240 | Introduction to Ethics | 3 |

Social/Behavioral Sciences (9 SHC)

Select three courses from the following from at least two different disciplines:

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

Math (3/4 SHC)

Select one course from the following:

| | | |
|---------|-----------------------|---|
| MAT 143 | Quantitative Literacy | 3 |
| MAT 152 | Statistical Methods I | 4 |
| MAT 171 | Precalculus Algebra | 4 |

Natural Sciences (4 SHC)

Select 4 SHC from the following course(s):

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

Academic Transition (1 SHC)

The following course is required:

| | | |
|---------|--------------------------|-------|
| ACA 122 | College Transfer Success | 1 SHC |
|---------|--------------------------|-------|

Total Semester Hours Credit (SHC) in Pathway.....32/33

Optional General Education Hours (0-8 SHC)

A student may take up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of C or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

| | | |
|---------|-------------|---|
| Chinese | 111/CHI 181 | 4 |
| Chinese | 112/CHI 182 | 4 |
| French | 111/FRE 181 | 4 |
| French | 112/FRE 182 | 4 |
| Spanish | 111/SPA 181 | 4 |
| Spanish | 112/SPA 182 | 4 |

Total Semester Hours Credit (SHC) in Pathway:32 – 41*

High school students in the CCP College Transfer Pathway leading to the Associate in Arts must complete the entire pathway before taking additional courses in the Associate in Arts degree.

CAREER & COLLEGE PROMISE COLLEGE TRANSFER PATHWAY

Leading to the Associate in Science (P1042C)

The CCP College Transfer Pathway leading to the Associate in Science is designed for high school juniors and seniors who wish to begin study toward the Associate in Science degree and a baccalaureate degree in a STEM or technical major.

GENERAL EDUCATION (34 SHC)

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC).

English Composition (6 SHC)

The following two English composition courses are required.

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

Select two courses from the following from at least two different disciplines (6 SHC)

Communications (3 SHC)

| | | |
|---------|-----------------|---|
| COM 231 | Public Speaking | 3 |
|---------|-----------------|---|

Humanities/Fine Arts (9 SHC)

| | | |
|---------|------------------------|---|
| 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 |
| ENG 241 | British Literature I | 3 |
| ENG 242 | British Literature II | 3 |
| MUS 110 | Music Appreciation | 3 |
| MUS 112 | Introduction to Jazz | 3 |
| PHI 215 | Philosophical Issues | 3 |
| PHI 240 | Introduction to Ethics | 3 |

Social/Behavioral Sciences (6 SHC)

Select two courses from the following from at least two different disciplines:

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

Math (8 SHC)

Select two courses from the following:

| | | |
|---------|---------------------------|---|
| MAT 171 | Precalculus Algebra | 4 |
| MAT 172 | Pre-calculus Trigonometry | 4 |
| MAT 263 | Brief Calculus | 4 |
| MAT 271 | Calculus I | 4 |
| MAT 272 | Calculus II | 4 |

Natural Sciences (8 SHC)

Select 8 SHC from the following course(s):

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

Academic Transition (1SHC)

The following course is required:

| | | |
|---------|--------------------------|---|
| ACA 122 | College Transfer Success | 1 |
|---------|--------------------------|---|

Total Semester Hours Credit (SHC) in Pathway.....35

Optional General Education Hours (0-8 SHC)

A student may take up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of C or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

| | | |
|---------|-------------|---|
| Chinese | 111/CHI 181 | 4 |
| Chinese | 112/CHI 182 | 4 |
| French | 111/FRE 181 | 4 |
| French | 112/FRE 182 | 4 |
| Spanish | 111/SPA 181 | 4 |
| Spanish | 112/SPA 182 | 4 |

Total Semester Hours Credit (SHC) in Pathway:35 – 43*

High school students in the CCP College Transfer Pathway Leading to the Associate in Science must complete the entire pathway before taking additional courses in the Associate in Science degree.

CAREER TECHNICAL EDUCATION PATHWAY

Accounting Pathway (C25100P)

| CORE COURSES (11 SHC) | | |
|-----------------------|-----|-------------------------------------------|
| ACC | 120 | Principles of Financial Accounting.....4 |
| ACC | 121 | Principles of Managerial Accounting.....4 |
| ACC | 129 | Individual Income Taxes.....3 |

| OTHER MAJOR COURSES (2 SHC) | | |
|-------------------------------------|-----|--------------------------|
| ACC | 140 | Payroll Accounting.....2 |
| Total Credit Hours Required .....13 | | |

| DEVELOPMENTAL COURSE REQUIREMENTS* | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------------|
| CTS | 080 | 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 Descriptions section for prerequisite course information. | | |

Advertising and Graphic Design H.S. Pathway (C30100P)

| CORE COURSES (17 SHC): | | | SHC |
|-------------------------------------|-----|------------------------------|-----|
| GRA | 151 | Computer Graphics I.....2 | |
| GRA | 152 | Computer Graphics II.....2 | |
| GRD | 110 | Typography I.....3 | |
| GRD | 121 | Drawing Fundamentals I.....2 | |
| GRD | 141 | Graphic Design I.....4 | |
| GRD | 142 | Graphic Design II.....4 | |
| Total Credit Hours Required .....17 | | | |

Air Conditioning, Heating, and Refrigeration Technology H.S. Diploma Pathway (D35100P)

| GENERAL EDUCATION COURSES (6 SHC) | | | SHC |
|-----------------------------------|-----|---------------------------------------------|-----|
| ENG | 102 | Applied Communications II.....3 | |
| MAT | 110 | Mathematical Measurement and Literacy.....3 | |

| CORE COURSES (20 SHC) | | |
|-----------------------|-----|------------------------------|
| AHR | 110 | Intro to Refrigeration.....5 |
| AHR | 111 | HVACR Electricity.....3 |
| AHR | 112 | Heating Technology.....4 |
| AHR | 113 | Comfort Cooling.....4 |
| AHR | 114 | Heat Pump Technology.....4 |

| OTHER MAJOR COURSES (10 SHC) | | |
|-------------------------------------|-----|---------------------------------|
| AHR | 130 | HVAC Controls.....3 |
| AHR | 160 | Refrigerant Certification.....1 |
| AHR | 180 | HVACR Customer Relations.....1 |
| AHR | 210 | Residential Building Code.....2 |
| AHR | 211 | Residential System Design.....3 |
| Total Credit Hours Required .....36 | | |

| DEVELOPMENTAL COURSE REQUIREMENTS* | | |
|------------------------------------|---------------------------|-------------------------------------|
| CTS | 080 | Computing Fundamentals.....3 |
| DRE | 097 | Integrated Reading Writing II.....3 |
| DMA | DMA 010, DMA 020, DMA 030 |3 |

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

Air Conditioning, Heating, and Refrigeration Technology Pathway (C35100P)

| CORE COURSES (12 SHC) | | | SHC |
|-----------------------|-----|------------------------------|-----|
| AHR | 110 | Intro to Refrigeration.....5 | |
| AHR | 111 | HVACR Electricity.....3 | |
| AHR | 112 | Heating Technology.....4 | |

| OTHER MAJOR COURSES (1 SHC) | | |
|-------------------------------------|-----|---------------------------------|
| AHR | 160 | Refrigerant Certification.....1 |
| Total Credit Hours Required .....13 | | |

| DEVELOPMENTAL COURSE REQUIREMENTS* | | |
|------------------------------------|-----|-------------------------------------|
| CTS | 080 | Computing Fundamentals.....3 |
| DRE | 097 | Integrated Reading Writing II.....3 |

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

Automotive Systems Technology Diploma Pathway (D60160P)

| GENERAL EDUCATION COURSES (6 SHC) | | | SHC |
|-----------------------------------|-----|---------------------------|-----|
| English/Communication: | | | |
| ENG | 111 | Writing and Inquiry.....3 | |

| | | |
|------------------------------|-----|---------------------------------------------|
| Natural Science/Mathematics: | | |
| MAT | 110 | Mathematical Measurement and Literacy.....3 |

| CORE COURSES (18 SHC) | | |
|-----------------------|-----|---------------------------------|
| AUT | 141 | Suspension & Steering Sys.....3 |
| AUT | 151 | Brake Systems.....3 |
| AUT | 181 | Engine Performance 1.....3 |
| TRN | 110 | Intro to Transport Tech.....2 |
| TRN | 120 | Basic Trasp Electricity.....5 |
| TRN | 140 | Transp Climate Control.....2 |

| OTHER MAJOR COURSES (21 SHC) | | |
|------------------------------|------|---------------------------------|
| AUT | 141A | Suspension & Steering Lab.....1 |
| AUT | 151A | Brake Systems Lab.....1 |
| AUT | 116 | Engine Repair.....3 |
| AUT | 116A | Engine Repair Lab.....1 |
| AUT | 163 | Adv Auto Electricity.....3 |
| AUT | 181A | Engine Performance 1 Lab.....1 |
| AUT | 183 | Engine Performance 2.....4 |
| AUT | 221 | Auto Transm/Transaxles.....3 |
| AUT | 221A | Auto Transm/Transax Lab.....1 |
| AUT | 231 | Man Trans/Axles/Drtrains.....3 |

| OTHER REQUIRED COURSES (3 SHC) | | |
|-------------------------------------|------|---------------------------------|
| AUT | 231A | Man Trans/Ax/Drtrains Lab.....1 |
| TRN | 140A | Transp Climate Cont Lab.....2 |
| Total Credit Hours Required .....48 | | |

| DEVELOPMENTAL COURSE REQUIREMENTS* | | |
|------------------------------------|---------------------------|--------------------------------------|
| CTS | 080 | Computing Fundamentals.....3 |
| DRE | 098 | Integrated Reading Writing III.....3 |
| DMA | DMA 010, DMA 020, DMA 030 |3 |

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

**Automotive Systems Technology • Under Car
Services Conc. Pathway (C60160P)**

CORE COURSES (13 SHC)

| | | | |
|-----|-----|--------------------------------|---|
| AUT | 141 | Suspension & Steering Sys..... | 3 |
| AUT | 151 | Brake Systems..... | 3 |
| TRN | 110 | Intro to Transport Tech..... | 2 |
| TRN | 120 | Basic Trasp Electricity..... | 5 |

OTHER MAJOR COURSES (2 SHC)

| | | | |
|-----------------------------------|------|--------------------------------|----|
| AUT | 141A | Suspension & Steering Lab..... | 1 |
| AUT | 151A | Brake Systems Lab..... | 1 |
| Total Credit Hours Required | | | 15 |

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

**Business Administration
Advanced Certificate #1 Pathway(C25120P)**

CORE COURSES (13 SHC) SHC

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

Total Credit Hours Required13

**Business Administration
H.S. Certificate Pathway (C25120P2)**

CORE COURSES (12 SHC) SHC

| | | | |
|-----|-----|-------------------------------|---|
| BUS | 115 | Business Law I..... | 3 |
| BUS | 137 | Principles of Management..... | 3 |
| ECO | 251 | Prin of Microeconomics..... | 3 |
| MKT | 120 | Principles of Marketing..... | 3 |

OTHER MAJOR COURSES (3 SHC)

| | | | |
|-----------------------------------|-----|-----------------------------|----|
| ECO | 252 | Prin of Macroeconomics..... | 3 |
| Total Credit Hours Required | | | 15 |

Computer Engineering Technology Pathway (C40160P1)

GENERAL EDUCATION COURSES (3 SHC)

| | | | |
|-----|-----|-----------------------------|---|
| MAT | 121 | Algebra/Trigonometry I..... | 3 |
|-----|-----|-----------------------------|---|

CORE COURSES (4 SHC)

| | | | |
|-----|-----|-------------------------|---|
| ELC | 131 | Circuit Analysis I..... | 4 |
|-----|-----|-------------------------|---|

OTHER MAJOR COURSES (8 SHC)

| | | | |
|-----------------------------------|-----|--------------------------------|----|
| DFT | 151 | CAD I..... | 3 |
| EGR | 110 | Intro to Engineering Tech..... | 2 |
| MEC | 180 | Engineering Materials..... | 3 |
| Total Credit Hours Required | | | 15 |

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Computer Engineering Technology Pathway (C40160P2)

GENERAL EDUCATION COURSES (4 SHC)

| | | | |
|-----|-----|--------------------------|---|
| MAT | 171 | Precalculus Algebra..... | 4 |
|-----|-----|--------------------------|---|

CORE COURSES (4 SHC)

| | | | |
|-----|-----|-------------------------|---|
| ELC | 131 | Circuit Analysis I..... | 4 |
|-----|-----|-------------------------|---|

OTHER MAJOR COURSES (8 SHC)

| | | | |
|-----|-----|--------------------------------|---|
| DFT | 151 | CAD I..... | 3 |
| EGR | 110 | Intro to Engineering Tech..... | 2 |
| MEC | 180 | Engineering Materials..... | 3 |

Total Credit Hours Required16

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | | |
|-----|-----------------------------------------------------------|-------------------------------------|---|
| DRE | 098 | Integrated Reading Writing III..... | 3 |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065..... | | 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
H. S. Pathway (D50210P)**

GENERAL EDUCATION COURSES (6 SHC) SHC

| | | | |
|-----|-----|-----------------------------|---|
| ENG | 111 | Writing and Inquiry..... | 3 |
| MAT | 121 | Algebra/Trigonometry I..... | 3 |

CORE COURSES (12 SHC)

| | | | |
|-----|-----|--------------------------------|---|
| MAC | 122 | CNC Turning..... | 2 |
| MAC | 124 | CNC Milling..... | 2 |
| MAC | 131 | Blueprint Reading/Mach I..... | 2 |
| MAC | 141 | Machining Applications I..... | 4 |
| MAC | 142 | Machining Applications II..... | 4 |
| MEC | 110 | Intro to CAD/CAM..... | 2 |

OTHER MAJOR COURSES (18 SHC)

| | | | |
|-----|-----|--------------------------------|---|
| MAC | 132 | Blueprint Reading/Mach II..... | 2 |
| MAC | 151 | Machining Calculations..... | 2 |
| MAC | 222 | Advanced CNC Turning..... | 2 |
| MAC | 224 | Advanced CNC Milling..... | 2 |
| MAC | 231 | CAM: CNC Turning..... | 3 |
| MAC | 232 | CAM: CNC Milling..... | 3 |

OTHER REQUIRED COURSES (2 SHC)

| | | | |
|----------------------------------|-----|------------------------|----|
| CIS | 111 | Basic PC Literacy..... | 2 |
| Total Credit Hours Required..... | | | 38 |

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

**Computer-Integrated Machining Technology
Pathway (C50210P)**

CORE COURSES (8 SHC)

| | | | |
|-----|-----|--------------------------------|---|
| MAC | 122 | CNC Turning..... | 2 |
| MAC | 131 | Blueprint Reading/Mach. I..... | 2 |
| MAC | 141 | Machining Applications I..... | 4 |

OTHER MAJOR COURSES (6 SHC)

| | | | |
|-----|-----|-----------------------------|---|
| MAC | 124 | CNC Milling..... | 2 |
| MAC | 151 | Machining Calculations..... | 2 |
| MEC | 110 | Intro to CAD/CAM..... | 2 |

Total Credit Hours Required14

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Cosmetology • Pathway (D55140P)

| GENERAL EDUCATION COURSES (6 SHC) | | | SHC |
|------------------------------------|-------|--------------------------------|-----|
| ENG | 111 | Writing and Inquiry | 3 |
| PSY | 150 | General Psychology | 3 |
| CORE COURSES (32 SHC) | | | |
| COS | 111 | Cosmetology Concepts I | 4 |
| | OR | | |
| COS | 111AB | Cosmetology Concepts I-AB | 2 |
| COS | 111BB | Cosmetology Concepts I-BB | 2 |
| COS | 112 | Salon I | 8 |
| | OR | | |
| COS | 112AB | Salon I-AB | 4 |
| COS | 112BB | Salon I-BB | 4 |
| COS | 113 | Cosmetology Concepts II | 4 |
| | OR | | |
| COS | 113AB | Cosmetology Concepts II-AB | 2 |
| COS | 113BB | Cosmetology Concepts II-BB | 2 |
| COS | 114 | Salon II | 8 |
| | OR | | |
| COS | 114AB | Salon II-AB | 4 |
| COS | 114BB | Salon II-BB | 4 |
| COS | 115 | Cosmetology Concepts III | 4 |
| | OR | | |
| COS | 115AB | Cosmetology Concepts III-AB | 2 |
| COS | 115BB | Cosmetology Concepts III-BB | 2 |
| COS | 116 | Salon III | 4 |
| | OR | | |
| COS | 116AB | Salon III-AB | 2 |
| COS | 116BB | Salon III-BB | 2 |
| OTHER MAJOR COURSES (9 SHC) | | | |
| COS | 117 | Cosmetology Concepts IV | 2 |
| | OR | | |
| COS | 117AB | Cosmetology Concepts IV-AB | 1 |
| COS | 117BB | Cosmetology Concepts IV-BB | 1 |
| COS | 118 | Salon IV | 7 |
| Total Credit Hours Required | | | 47 |
| DEVELOPMENTAL COURSE REQUIREMENTS* | | | |
| DRE | 098 | Integrated Reading Writing III | 3 |

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

**Criminal Justice Technology
Law Enforcement H. S. Pathway (C55180P)**

| CORE COURSES (12 SHC) | | | SHC |
|--------------------------------|-----|------------------------------|-----|
| CJC | 111 | Intro to Criminal Justice | 3 |
| CJC | 131 | Criminal Law | 3 |
| CJC | 132 | Court Procedure and Evidence | 3 |
| CJC | 212 | Ethics & Comm Relations | 3 |
| OTHER REQUIRED COURSES (3 SHC) | | | |
| CJC | 121 | Law Enforcement Operations | 3 |
| Total Credit Hours Required | | | 15 |

**Criminal Justice Technology-Latent Evidence Concentration
Crime Scene H. S. Pathway (C5518AP)**

| CORE COURSES (16 SHC) | | | SHC |
|--------------------------------|-----|---------------------------|-----|
| CJC | 111 | Intro to Criminal Justice | 3 |
| CJC | 144 | Crime Scene Processing | 3 |
| CJC | 146 | Trace Evidence | 3 |
| CJC | 221 | Investigative Principles | 4 |
| CJC | 245 | Friction Ridge Analysis | 3 |
| OTHER REQUIRED COURSES (2 SHC) | | | |
| CJC | 114 | Investigative Photography | 2 |
| Total Credit Hours Required | | | 18 |

Electrical Systems Technology Pathway (C35130P1)

| CORE COURSES (4 SHC) | | | SHC |
|------------------------------------|-----|-------------------------------|-----|
| ELC | 113 | Basic Wiring I | 4 |
| OTHER MAJOR COURSES (8 SHC) | | | |
| BPR | 111 | Blueprint Reading | 2 |
| ELC | 115 | Industrial Wiring | 4 |
| ELC | 118 | National Electrical Code | 2 |
| Total Credit Hours Required | | | 12 |
| DEVELOPMENTAL COURSE REQUIREMENTS* | | | |
| DRE | 097 | Integrated Reading Writing II | 3 |

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

Electronics Engineering Technology Pathway (C40200P1)

| GENERAL EDUCATION COURSES (3 SHC) | | | SHC |
|------------------------------------|------------------------------------------------------|--------------------------------|-----|
| MAT | 121 | Algebra/Trigonometry | 3 |
| CORE COURSES (4 SHC) | | | |
| ELC | 131 | Circuit Analysis I | 4 |
| OTHER MAJOR COURSES (8 SHC) | | | |
| DFT | 151 | CAD I | 3 |
| EGR | 110 | Intro to Engineering Tech | 2 |
| MEC | 180 | Engineering Materials | 3 |
| Total Credit Hours Required | | | 15 |
| DEVELOPMENTAL COURSE REQUIREMENTS* | | | |
| DRE | 098 | Integrated Reading Writing III | 3 |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 | | 6 |

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

Electronics Engineering Technology Pathway (C40200P2)

| GENERAL EDUCATION COURSES (4 SHC) | | | SHC |
|------------------------------------|------------------------------------------------------|--------------------------------|-----|
| MAT | 171 | Algebra/Trigonometry | 4 |
| CORE COURSES (4 SHC) | | | |
| ELC | 131 | Circuit Analysis | 4 |
| OTHER MAJOR COURSES (8 SHC) | | | |
| DFT | 151 | CAD I | 3 |
| EGR | 110 | Intro to Engineering Tech | 2 |
| MEC | 180 | Engineering Materials | 3 |
| Total Credit Hours Required | | | 16 |
| DEVELOPMENTAL COURSE REQUIREMENTS* | | | |
| DRE | 098 | Integrated Reading Writing III | 3 |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 | | 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.

Emergency Medical Science H. S. Pathway (C45340P)

| GENERAL EDUCATION COURSES (3 SHC) | | | SHC |
|------------------------------------|-----|--------------------------------|-----|
| PSY | 150 | General Psychology | 3 |
| CORE COURSES (14 SHC) | | | |
| EMS | 110 | EMT | 8 |
| MED | 121 | Medical Terminology I | 3 |
| MED | 122 | Medical Terminology II | 3 |
| Total Credit Hours Required | | | 17 |
| 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.

Fire Protection Technology Management**H. S. Pathway (C55240P)**

| CORE COURSES (12 SHC) | | |
|-----------------------------|-----|--------------------------------------------|
| FIP | 120 | Introduction to Fire Protection.....3 |
| FIP | 124 | Fire Prevention and Education.....3 |
| FIP | 132 | Building Construction.....3 |
| FIP | 152 | Fire Protection Law.....3 |
| OTHER MAJOR COURSES (6 SHC) | | |
| FIP | 136 | Inspections and Codes.....3 |
| EPT | 140 | Introduction to Emergency Management.....3 |
| Total Credit Hours Required | | 18 |

Health Information Technology H. S. Pathway (C45360P)

| CORE COURSES (12 SHC) | | | SHC |
|------------------------------------|-----|--------------------------------------|-----|
| HIT | 110 | Fundamentals of HIM.....3 | |
| HIT | 112 | Health Law and Ethics.....3 | |
| MED | 121 | Medical Terminology I.....3 | |
| MED | 122 | Medical Terminology II.....3 | |
| OTHER REQUIRED COURSES (3 SHC) | | | |
| CIS | 110 | Introduction to Computers.....3 | |
| Total Credit Hours Required | | | 15 |
| DEVELOPMENTAL COURSE REQUIREMENTS* | | | |
| CTS | 080 | Computing Fundamentals.....3 | |
| DRE | 097 | 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.

**Healthcare Management Technology
Receptionist Pathway (C25200P)**

| CORE COURSES (15 SHC) | | | SHC |
|------------------------------------|-----|--------------------------------------------|-----|
| HMT | 110 | Intro to Healthcare Mgt.....3 | |
| HMT | 210 | Medical Insurance.....3 | |
| MED | 121 | Medical Terminology I (1st 8 weeks).....3 | |
| MED | 122 | Medical Terminology II (2nd 8 weeks).....3 | |
| OST | 149 | Medical Legal Issues.....3 | |
| OTHER REQUIRED COURSES (1 SHC) | | | |
| MED | 114 | Prof Interac in Heal Care.....1 | |
| Total Credit Hours Required | | | 16 |
| DEVELOPMENTAL COURSE REQUIREMENTS* | | | |
| DRE | 097 | Integrated Reading Writing II.....3 | |

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

Horticulture Technology Pathway (C15240P1)

| CORE COURSES (9 SHC) | | | SHC |
|-----------------------------|-----|-----------------------------|-----|
| HOR | 134 | Greenhouse Operations.....3 | |
| HOR | 164 | Hort Pest Management.....3 | |
| HOR | 168 | Plant Propagation.....3 | |
| OTHER MAJOR COURSES (9 SHC) | | | |
| HOR | 110 | Intro to Landscaping.....2 | |
| HOR | 118 | Equipment Op & Maint.....2 | |
| HOR | 215 | Landscape Irrigation.....3 | |
| HOR | 255 | Interiorscapes.....2 | |
| Total Credit Hours Required | | | 18 |

Infant/Toddler Care Certificate Pathway (C55290P)

| CORE COURSES (16 SHC) | | | SHC |
|------------------------------------|-----|-------------------------------------------------|-----|
| EDU | 119 | Introduction to Early Childhood Education.....4 | |
| EDU | 131 | Child, Family, and Community.....3 | |
| EDU | 144 | Child Development I.....3 | |
| EDU | 153 | Health, Safety, & Nutrit.....3 | |
| EDU | 234 | Infants, Toddlers, & Twos.....3 | |
| OTHER REQUIRED COURSES (1 SHC) | | | |
| ACA | 111 | College Student Success.....1 | |
| Total Credit Hours Rerequired | | | 17 |
| 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.

**Information Systems Security
Networking Security Certificate Pathway (C25270P1)**

| CORE COURSES (18 SHC) | | | SHC |
|-----------------------------|-----|---------------------------|-----|
| NET | 125 | Networking Basics.....3 | |
| NET | 126 | Routing Basics.....3 | |
| SEC | 110 | Security Concepts.....3 | |
| SEC | 160 | Secure Admin I.....3 | |
| SEC | 210 | Intrusion Detection.....3 | |
| SEC | 220 | Defense-In-Depth.....3 | |
| Total Credit Hours Required | | | 18 |

**Information Systems Security
Operating Systems Security Certificate Pathway (C25270P3)**

| CORE COURSES (18 SHC) | | | SHC |
|-----------------------------|-----|----------------------------------|-----|
| NET | 125 | Networking Basics.....3 | |
| NOS | 110 | Operating Systems Concepts.....3 | |
| NOS | 120 | Linux/UNIX Single User.....3 | |
| NOS | 130 | Windows Single User.....3 | |
| SEC | 110 | Security Concepts.....3 | |
| SEC | 150 | Secure Communication.....3 | |
| Total Credit Hours Required | | | 18 |

**Information Systems Security
Wireless Security Certificate Pathway (C25270P4)**

| CORE COURSES (12 SHC) | | | SHC |
|-----------------------------|-----|----------------------------------|-----|
| NET | 125 | Networking Basics.....3 | |
| NOS | 110 | Operating Systems Concepts.....3 | |
| SEC | 110 | Security Concepts.....3 | |
| SEC | 150 | Secure Communication.....3 | |
| OTHER MAJOR COURSES (6 SHC) | | | |
| NET | 175 | Wireless Technology.....3 | |
| SEC | 240 | Wireless Security.....3 | |
| Total Credit Hours Required | | | 18 |

Mechanical Engineering Technology Pathway (C40320P1)

| | | |
|-------------------------------------|----------------------------------------------------------------|--------------------------------------|
| CORE COURSES (3 SHC) | | |
| MAT | 121 | Algebra/Trigonometry I.....3 |
| CORE COURSES (6 SHC) | | |
| DFT | 151 | CAD I.....3 |
| MEC | 180 | Engineering Materials.....3 |
| OTHER MAJOR COURSES (6 SHC) | | |
| EGR | 110 | Intro to Engineering Tech .....2 |
| ELC | 131 | Circuit Analysis.....4 |
| Total Credit Hours Required .....15 | | |
| DEVELOPMENTAL COURSE REQUIREMENTS* | | |
| DRE | 098 | Integrated Reading Writing III.....3 |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 .....6 | |

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

Mechanical Engineering Technology Pathway (C40320P2)

| | | |
|-------------------------------------|----------------------------------------------------------------|--------------------------------------|
| CORE COURSES (4 SHC) | | |
| MAT | 171 | Precalculus Algebra .....4 |
| CORE COURSES (6 SHC) | | |
| DFT | 151 | CAD I.....3 |
| MEC | 180 | Engineering Materials.....3 |
| OTHER MAJOR COURSES (6 SHC) | | |
| EGR | 110 | Intro to Engineering Tech .....2 |
| ELC | 131 | Circuit Analysis.....4 |
| Total Credit Hours Required .....16 | | |
| DEVELOPMENTAL COURSE REQUIREMENTS* | | |
| DRE | 098 | Integrated Reading Writing III.....3 |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 .....6 | |

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

Mechatronics Engineering Technology H. S. Pathway (C40350P)

| | | | |
|-------------------------------------|-----|------------------------------|-----|
| CORE COURSES (16 SHC) | | | SHC |
| ATR | 112 | Intro to Automation.....3 | |
| ELC | 112 | DC/AC Electricity.....5 | |
| HYD | 110 | Hydraulics/Pneumatics .....3 | |
| ISC | 112 | Industrial Safety.....2 | |
| MEC | 130 | Mechanisms .....3 | |
| Total Credit Hours Required .....16 | | | |

| | | |
|------------------------------------|-----|-------------------------------------|
| DEVELOPMENTAL COURSE REQUIREMENTS* | | |
| DRE | 097 | Integrated Reading Writing II.....3 |

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

Mechatronics Engineering Technology Pathway (C40320P2)

| | | |
|-------------------------------------|----------------------------------------------------------------|--------------------------------------|
| CORE COURSES (3 SHC) | | |
| MAT | 121 | Algebra/Trigonometry I.....3 |
| CORE COURSES (7 SHC) | | |
| DFT | 151 | CAD I.....3 |
| ELC | 131 | Circuit Analysis.....4 |
| OTHER MAJOR COURSES (6 SHC) | | |
| EGR | 110 | Intro to Engineering Tech .....2 |
| MEC | 180 | Engineering Materials.....3 |
| Total Credit Hours Required .....16 | | |
| DEVELOPMENTAL COURSE REQUIREMENTS* | | |
| DRE | 098 | Integrated Reading Writing III.....3 |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 .....6 | |

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

Mechatronics Engineering Technology H. S. Pathway (C40350P3)

| | | | |
|-------------------------------------|----------------------------------------------------------------|--------------------------------------|-----|
| GENERAL EDUCATION COURSES (4 SHC) | | | SHC |
| MAT | 171 | Precalculus Algebra .....4 | |
| CORE COURSES (6 SHC) | | | |
| DFT | 151 | CAD I.....3 | |
| ELC | 131 | Circuit Analysis I .....4 | |
| OTHER MAJOR COURSES (6 SHC) | | | |
| EGR | 110 | Intro to Engineering Tech .....2 | |
| MEC | 180 | Engineering Materials.....3 | |
| Total Credit Hours Required .....16 | | | |
| DEVELOPMENTAL COURSE REQUIREMENTS* | | | |
| DRE | 098 | Integrated Reading Writing III.....3 | |
| DMA | DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 065 .....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.

Networking Technology

Cisco Certified Network Certificate Pathway (C25340P1)

| | | | |
|-------------------------------------|-----|------------------------------|-----|
| CORE COURSES (12 SHC) | | | SHC |
| NET | 125 | Networking Basics.....3 | |
| NET | 126 | Routing Basics .....3 | |
| NET | 225 | Routing & Switching I.....3 | |
| NET | 226 | Routing & Switching II.....3 | |
| Total Credit Hours Required .....12 | | | |

Networking Technology

Operating Systems Certificate Pathway (C25340P4)

| | | | |
|-------------------------------------|-----|----------------------------------|-----|
| CORE COURSES (12 SHC) | | | SHC |
| NOS | 110 | Operating System Concepts.....3 | |
| NOS | 120 | Linux/UNIX Single User .....3 | |
| NOS | 130 | Windows Single User.....3 | |
| NOS | 230 | Windows Admin I.....3 | |
| OTHER MAJOR COURSES (3 SHC) | | | |
| NOS | 244 | Operating System - AS/400 .....3 | |
| Total Credit Hours Required15 | | | |

Office Administration Diploma Pathway (D25370P)**GENERAL EDUCATION COURSES (6 SHC) SHC****English/Communication:**

| | | | |
|-----|-----|--------------------------------|---|
| ENG | 111 | Writing and Inquiry..... | 3 |
| ENG | 113 | Literature-Based Research..... | 3 |

CORE COURSES (12 SHC)

| | | | |
|-----|-----|-------------------------------------|---|
| OST | 136 | Word Processing..... | 3 |
| OST | 164 | Text Editing Applications..... | 3 |
| OST | 181 | Introduction to Office Systems..... | 3 |
| OST | 184 | Records Management..... | 3 |

OTHER MAJOR COURSES (19 SHC)

| | | | |
|-----|-----|-----------------------------------|---|
| BUS | 115 | Business Law..... | 3 |
| CIS | 110 | Introduction to Computers..... | 3 |
| CTS | 130 | Spreadsheet Software..... | 3 |
| OST | 132 | Keyboard Skill Building..... | 2 |
| OST | 137 | Office Software Applications..... | 3 |
| OST | 153 | Office Finance Solutions..... | 2 |
| WEB | 110 | Internet/Web Fundamentals..... | 3 |

Total Credit Hours Required37

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Office Administration Certificate Pathway (C25370P)**CORE COURSES (12 SHC)**

| | | | |
|-----|-----|-------------------------------------|---|
| OST | 136 | Word Processing..... | 3 |
| OST | 164 | Text Editing Applications..... | 3 |
| OST | 181 | Introduction to Office Systems..... | 3 |
| OST | 184 | Records Management..... | 3 |

OTHER MAJOR COURSES (5 SHC)

| | | | |
|-----|-----|--------------------------------|---|
| CIS | 110 | Introduction to Computers..... | 3 |
| OST | 132 | Keyboard Skill Building..... | 2 |

Total Credit Hours Required17

DEVELOPMENTAL COURSE REQUIREMENTS*

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

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

Photographic Technology H.S. Pathway #1 (C30280P)**CORE COURSES (14 SHC) SHC**

| | | | |
|-----|-----|-------------------------------|---|
| PHO | 110 | Fund of Photography..... | 5 |
| PHO | 115 | Basic Studio Lighting..... | 4 |
| PHO | 139 | Intro to Digital Imaging..... | 2 |
| PHO | 224 | Multimedia Production..... | 3 |

Total Credit Hours Required14

Photographic Technology H.S. Pathway # 2 (C30280P2)**CORE COURSES (14 SHC) SHC**

| | | | |
|-----|-----|-------------------------------|---|
| PHO | 110 | Fund of Photography..... | 5 |
| PHO | 115 | Basic Studio Lighting..... | 4 |
| PHO | 139 | Intro to Digital Imaging..... | 2 |
| PHO | 224 | Multimedia Production..... | 3 |

OTHER MAJOR COURSES (4 SHC)

| | | | |
|-----|-----|-------------------------------|---|
| PHO | 120 | Intermediate Photography..... | 4 |
|-----|-----|-------------------------------|---|

Total Credit Hours Required18

Photographic Technology Certificate Pathway (C30280P3)**CORE COURSES (14 SHC) SHC**

| | | | |
|-----|-----|-------------------------------|---|
| PHO | 110 | Fund of Photography..... | 5 |
| PHO | 115 | Basic Studio Lighting..... | 4 |
| PHO | 139 | Intro to Digital Imaging..... | 2 |
| PHO | 224 | Multimedia Production..... | 3 |

OTHER MAJOR COURSES (2 SHC)

| | | | |
|-----|-----|---------------------------|---|
| PHO | 219 | Digital Applications..... | 2 |
|-----|-----|---------------------------|---|

Total Credit Hours Required16

Turf Management H. S. Pathway (C15240P1)**CORE COURSES (14 SHC) SHC**

| | | | |
|-----|-----|------------------------------------|---|
| HOR | 166 | Soils and Fertilizers..... | 3 |
| TRF | 110 | Intro Turfgrass Cult & ID..... | 4 |
| TRF | 120 | Turfgrass Irrigation & Design..... | 4 |
| TRF | 240 | Turfgrass Pest Control..... | 3 |

Total Credit Hours Required14

Welding Technology H. S. Diploma Pathway (D50420P)**GENERAL EDUCATION COURSES (6 SHC) SHC****English/Communications:**

| | | | |
|-----|-----|--------------------------|---|
| ENG | 111 | Writing and Inquiry..... | 3 |
|-----|-----|--------------------------|---|

Natural Sciences/Mathematics

| | | | |
|-----|-----|--------------------------------------------|---|
| MAT | 110 | Mathematical Measurement and Literacy..... | 3 |
|-----|-----|--------------------------------------------|---|

CORE COURSES (18 SHC)

| | | | |
|-----|-----|-------------------------------|---|
| WLD | 110 | Cutting Processes..... | 2 |
| WLD | 115 | SMAW (Stick) Plate..... | 5 |
| WLD | 121 | GMAW (MIG) FCAW/Plate..... | 4 |
| WLD | 131 | GTAW (TIG) Plate..... | 4 |
| WLD | 141 | Symbols & Specifications..... | 3 |

OTHER MAJOR COURSES (12 SHC)

| | | | |
|-----|-----|------------------------------|---|
| WBL | 110 | World of Work..... | 1 |
| WLD | 116 | SMAW (Stick) Plate/Pipe..... | 4 |
| WLD | 143 | Welding Metallurgy..... | 2 |
| WLD | 261 | Certification Practices..... | 2 |
| WLD | 262 | Inspection & Testing..... | 3 |

Total Credit Hours Required36

DEVELOPMENTAL COURSE REQUIREMENTS*

| | | | |
|-----|--------------------------------|-------------------------------------|---|
| DRE | 098 | Integrated Reading Writing III..... | 3 |
| DMA | DMA 010, DMA 020, DMA 030..... | | 3 |

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

Welding Technology Certificate Pathway (C50420P)**CORE COURSES (18 SHC)**

| | | | |
|-----|-------|-------------------------------|---|
| WLD | 110 | Cutting Processes..... | 2 |
| WLD | 115 | SMAW (Stick) Plate..... | 5 |
| OR | | | |
| WLD | 115AB | SMAW (Stick) Plate-AC..... | 3 |
| WLD | 115BB | SMAW (Stick) Plate-BC..... | 2 |
| WLD | 121 | GMAW (MIG) FCAW/Plate..... | 4 |
| WLD | 131 | GTAW (TIG) Plate..... | 4 |
| WLD | 141 | Symbols & Specifications..... | 3 |

Total Credit Hours Required18