

# COLLEGE CREDIT PROGRAM AREAS

## THE ASSOCIATE IN ARTS DEGREE

### For Transfer to a University

The College offers a two-year program leading to the Associate in Arts degree. Usually referred to as the Transfer or University Parallel Program, it is designed for students who plan to complete their first two years of college work at Florida Junior College at Jacksonville and then transfer as juniors to senior institutions of their choice. The specific programs of study of a given major such as pre-medical, pre-law, pre-dental, pre-optometry, pre-agriculture, pre-architectural, pre-engineering, and pre-veterinary should be worked out individually between the student and the counselor soon after the student enrolls at Florida Junior College at Jacksonville. Earned credits may be transferred to senior institutions and applied toward a Bachelor's degree.

In planning a program at Florida Junior College at Jacksonville, the student should be certain to meet the General Education requirements for the Associate in Arts degree and complete a program of at least 62 semester hours exclusive of occupational courses and exclusive of physical education activity courses in excess of two one-semester hour courses. Within this 62 semester hours the student should be certain to fulfill the pre-major course requirements for the major which the student intends to take at the university the student plans to attend.

Any student transferring to a senior college from Florida Junior College at Jacksonville is advised to write the registrar of that college for information concerning special course requirements that should be met while attending Florida Junior College at Jacksonville. These requirements vary from university to university; thus, specific programs of study for a given major at a given university should be worked out individually by the student and an advisor or counselor soon after the student enrolls at Florida Junior College at Jacksonville. To maximize transferability, the student is advised to choose a major as early as possible while at Florida Junior College at Jacksonville.

The counselors in the office of Student Development on each campus have counseling manuals provided by each state university in Florida, which list courses to be taken at the junior college for each undergraduate major the university offers. Using these manuals, as well as catalogs from the universities, the counselor or advisor will work out a program of study at Florida Junior College at Jack-

sonville for the student. The student has the responsibility for making contact with a counselor or advisor in the office of Student Development to work out the student's program of study at FJC.

### Graduation Requirements

In order to be awarded the Associate in Arts degree, the student must have met the following requirements:

1. Earned a cumulative grade point average of 2.00 (C) on all college credit courses, including transfer credits, exclusive of courses designated as occupational, and exclusive of physical education activity courses in excess of two one-semester hour courses.
2. Earned a grade point average of 2.00 (C) on all courses taken at Florida Junior College at Jacksonville exclusive of courses designated as occupational, and exclusive of physical education activity courses in excess of two one-semester hour courses.
3. Completed in residence at Florida Junior College at Jacksonville at least 15 semester hours of the total of 62 semester hours required for the degree.
4. Completed 62 semester hours of college credit work as follows:
  - a. Complete the general education requirements (36 semester hours) set forth on pages 45 through 47 of this catalog.
  - b. Complete the elective requirements (26 semester hours) set forth on page 47 of this catalog.

Before a student may graduate, the student must have fulfilled all financial obligations to the College.

**Note:** Students are cautioned to pay particular attention to conditions on page 47 of this catalog concerning acceptable credits to meet degree requirements.

A student has the option of meeting the graduation requirements stated in any catalog which was in effect between the term in which the student in-

initially entered Florida Junior College at Jacksonville as a college credit student and the term in which the student graduates.\*

\*NOTE: See page 36 for determination of the term in which a student graduates.

## General Education Requirements

1. The General Education program for the Associate in Arts degree shall consist of a minimum of 36 semester hours of work. This 36 semester hours is part of the minimum of 62 semester hours required for the Associate in Arts degree. General Education, as conceived at Florida Junior College at Jacksonville, is concerned with developing responsible citizenship in a democratic situation. It is formulated to develop skills, attitudes, and understandings in broad areas; the humanities, communications, the social sciences, mathematics, and the natural sciences.
2. The following subject areas shall be included in the program in the manner specified:

### I. SOCIAL SCIENCE . . . . 6 semester hours

- A. Three semester hours from any of the following: (Meets FJC requirement for Study of U.S. Constitution)
  - AMH 2010 — UNITED STATES HISTORY I
  - EUH 1001 — WESTERN CIVILIZATION
  - POS 2041 — AMERICAN FEDERAL GOVERNMENT
  - SSI 1120 — ORIGINS OF AMERICAN SOCIETY II
- B. Three semester hours from any of the following:
  - AMH 2020 — UNITED STATES HISTORY II
  - AMH 2420 — HISTORY OF FLORIDA
  - AMH 2571 — AFRO-AMERICAN HISTORY AND CULTURE I
  - AMH 2572 — AFRO-AMERICAN HISTORY AND CULTURE II
  - ANT 2410 — CULTURAL ANTHROPOLOGY
  - ANT 2511 — PHYSICAL ANTHROPOLOGY
  - ASH 2300 — HISTORY OF THE FAR EAST
  - CPO 2002 — INTRODUCTION TO COMPARATIVE GOVERNMENT
  - DEP 2004 — HUMAN GROWTH & DEVELOPMENT

DEP 2102 — CHILD PSYCHOLOGY  
 DEP 2302 — ADOLESCENT PSYCHOLOGY  
 DEP 2401 — ADULT PSYCHOLOGY  
 ECO 2000 — FOUNDATIONS OF THE AMERICAN ECONOMY  
 ECO 2013 — PRINCIPLES OF ECONOMICS I  
 ECO 2023 — PRINCIPLES OF ECONOMICS II  
 EDP 2002 — EDUCATIONAL PSYCHOLOGY  
 EUH 1000 — WESTERN CIVILIZATION  
 GEA 1000 — WORLD GEOGRAPHY  
 GEO 2370 — CONSERVATION OF RESOURCES  
 HES 1000 — PERSONAL AND COMMUNITY HEALTH  
 HIS 1907 — HONORS SURVEY OF HISTORY  
 INR 2002 — INTERNATIONAL RELATIONS  
 LAH 2000 — HISTORY OF THE AMERICAS  
 MAF 2200 — MARRIAGE AND FAMILY  
 \*\*PCB 2030 — THE ECOLOGICAL CRISIS  
 POS 2112 — STATE AND LOCAL GOVERNMENT  
 PSY 1012 — GENERAL PSYCHOLOGY  
 \*REL 2300 — WORLD RELIGIONS  
 SOC 2000 — INTRODUCTORY SOCIOLOGY  
 SOC 2020 — SOCIAL PROBLEMS  
 SOP 1002 — HUMAN RELATIONS  
 SOP 1502 — DYNAMICS OF BEHAVIOR  
 SSI 1110 — ORIGINS OF AMERICAN SOCIETY I

### II. HUMANITIES . . . . . 6 semester hours

- A. Six semester hours from any of the following:
  - HUM 2211 — WESTERN HUMANITIES I **or** HUM 2477 — MEDITERRANEAN HUMANITIES
  - HUM 2231 — WESTERN HUMANITIES II **or** HUM 2478 — NORTHERN EUROPEAN HUMANITIES
  - HUM 2250 — WESTERN HUMANITIES III
  - HUM 2410 — ASIAN HUMANITIES
  - HUM 2450 — AMERICAN HUMANITIES

\*May be used to satisfy area I. B. or II. B., but not both.

\*\*May be used to satisfy area I. B. or III. A., but not both.

HUM 2460 — LATIN AMERICAN HUMANITIES

**OR**

- B. Three semester hours from the foregoing category A, and three semester hours from any of the following:

ARH 1000 — ART APPRECIATION  
 ARH 2050 — ART HISTORY I (Course designed primarily for Art majors)  
 ARH 2051 — ART HISTORY II (Course designed primarily for Art majors)  
 HUMA 1740 — OVERSEAS STUDY  
 HUMB 1740 — OVERSEAS STUDY  
 LIT 2211 — GREAT IDEAS IN WORLD LITERATURE I  
 LIT 2221 — GREAT IDEAS IN WORLD LITERATURE II  
 MUH 2211 — SURVEY OF MUSIC HISTORY (Course designed primarily for Music majors)  
 MUL 1011 — MUSIC APPRECIATION  
 PHI 2010 — INTRODUCTION TO PHILOSOPHY  
 PHI 2600 — INTRODUCTION TO MORAL AND POLITICAL PHILOSOPHY  
 \*REL 2300 — WORLD RELIGIONS  
 THE 1000 — INTRODUCTION TO THEATRE

**III. MATHEMATICS — NATURAL SCIENCE . . . . . 9 semester hours**

- A. Six semester hours from any of the following:

APB 1150 — LIFE IN ITS BIOLOGICAL ENVIRONMENT  
 APB 2190C — HUMAN ANATOMY AND PHYSIOLOGY I  
 APB 2191C — HUMAN ANATOMY AND PHYSIOLOGY II  
 AST 1002 — INTRODUCTION TO ASTRONOMY  
 BOT 1010C — BOTANY  
 BSC 1011C — PRINCIPLES OF BIOLOGY  
 CHM 1020 — CHEMISTRY FOR LIBERAL ARTS  
 CHM 1040C — INTRODUCTORY CHEMISTRY  
 CHM 1041C — INTRODUCTORY CHEMISTRY  
 CHM 1045C — GENERAL CHEMISTRY & QUALITATIVE ANALYSIS I  
 CHM 1046C — GENERAL CHEMISTRY & QUALITATIVE ANALYSIS II  
 GLY 1000 — EARTH AND SPACE SCIENCE

GLY 1010 — PHYSICAL GEOLOGY  
 GLY 1100 — HISTORICAL GEOLOGY  
 ISC 1000 — UNIFIED SCIENCE  
 MCB 2013C — MICROBIOLOGY  
 MET 1001 — METEOROLOGY  
 \*\*PCB 2030 — THE ECOLOGICAL CRISIS  
 PHY 1020 — PHYSICS FOR LIBERAL ARTS  
 PHY 2048C — PHYSICS I WITH CALCULUS  
 PHY 2049C — PHYSICS II WITH CALCULUS  
 PHY 2053C — GENERAL PHYSICS I  
 PHY 2054C — GENERAL PHYSICS II  
 PSC 1341 — PHYSICAL SCIENCE  
 ZOO 1010C — GENERAL ZOOLOGY  
 ZOO 2713C — COMPARATIVE ANATOMY

- B. Three semester hours from any of the following:

CNM 1001 — COMPUTER ORIENTED MATHEMATICS  
 \*\*\*MAC 1104 — COLLEGE ALGEBRA  
 \*\*\*MAC 1114 — COLLEGE TRIGONOMETRY  
 MAC 1132 — COLLEGE ALGEBRA AND TRIGONOMETRY  
 MAC 1311 — CALCULUS WITH ANALYTIC GEOMETRY I  
 MAC 2312 — CALCULUS WITH ANALYTIC GEOMETRY II  
 MAC 2313 — CALCULUS WITH ANALYTIC GEOMETRY III  
 MAP 2302 — DIFFERENTIAL EQUATIONS  
 MAT 1003 — GENERAL MATHEMATICS  
 MAT 1024 — ELEMENTARY ALGEBRA  
 MAT 1033 — INTERMEDIATE ALGEBRA  
 MGF 1113 — COLLEGE MATHEMATICS  
 STA 1014 — ELEMENTARY STATISTICS

**IV. COMMUNICATIONS . 9 semester hours**

- A. BOTH of the following three semester hour courses are required of all students:

ENC 1103 — ENGLISH COMPOSITION I

\*May be used to satisfy area I, B, or II, B., but not both.

\*\*May be used to satisfy area I, B, or III, A., but not both.

\*\*\*Will not apply toward Associate in Arts degree if credit is also earned in MAC 1132 — College Algebra and Trigonometry.

ENC 1136 — ENGLISH COMPOSITION II

- B. ONE of the following three semester hour courses is required of all students:

\*ENC 1005 — INTRODUCTION TO COMPOSITION

LIT 2021 — INTRODUCTION TO LITERATURE

\*\*REA 1305 — DEVELOPMENTAL READING

SPC 1010 — FUNDAMENTALS OF SPEECH

**V. COURSES FROM ANY ONE OR MORE OF THE ABOVE FOUR AREAS (I, II, III, IV).....6 semester hours**

**VI. ELECTIVES.....26 semester hours  
TOTAL: 62 SEMESTER HOURS**

The 26 semester hours of elective credit required in Area VI may be selected from among the courses listed in the catalog with the following designations, subject to conditions listed below:

**(P) University Parallel** . . . This course is intended to transfer to a university.

**(D) Dual Purpose** . . . Any course identified by this symbol is a university parallel course. The course is also part of certain occupational programs; hence, it serves both university parallel and occupational objectives.

**Conditions:**

- (1) Not more than two of the 26 semester hours may consist of physical education activity courses (all one-semester hour courses).
- (2) Not more than four of the 26 semester hours may consist of music, speech, and drama activity courses. These courses are: MUO 1001, MUN 1130, MUN 1280, MUN 1380, MUN 1410, MUN 1710, MUNA 1310, MUNB 1310, SPC 2594, THE 2925.

Many courses in this catalog have prerequisite courses listed in the course descriptions. Students are advised to be guided by these requirements.

\*ENC 1005 is a composition skills course and will not apply toward Associate in Arts degree if taken AFTER passing ENC 1103 or ENC 1136 with a grade of C or better, or after earning credit in ENC 1103 or ENC 1136 through CLEP or AP (Advanced Placement).

\*\*Students may be advised to enroll in REA 1005, 1006, and 1007 in lieu of REA 1305.

## The Associate in Science Degree

### For General Education or To a Job and Career in Two Years

Florida Junior College at Jacksonville offers a comprehensive series of business, health, engineering and industrial related, home economics, distributive, public service, and other programs designed to fulfill the occupational needs of the community's citizens and employers.

The Occupational Education Programs are designed to prepare the student who, at the completion of a program of study listed in this section of the catalog, is planning to enter a chosen career at the semi-professional level, or who plans to transfer to a senior institution offering the baccalaureate degree in a related technology area, based on the articulation agreement with the senior institutions.

Advisory committees help Florida Junior College at Jacksonville create programs and courses to prepare today's youth and adults for the world of work. The advisory committees are made up of civic-minded representatives of business, industry, government, health agencies, public service, and labor.

Individuals who seek to pursue a career at the technician or at the para-professional level may enroll in a two-year college credit program leading to the Associate in Science degree. For those persons desiring to spend less than two years in preparation, College Credit Certificate programs are available in several areas.

The program director may prescribe deficiency courses which are necessary for successful completion of the Associate in Science degree. If the student is a veteran, a copy of the director's recommendation must be on file and the course or courses certified as deficiency to the Veterans Administration.

The program director may approve another elective or professional course not listed as an approved elective in the Associate in Science degree curriculum which will apply toward Associate in Science degree graduation. If the student is a veteran, it is necessary that such course substitution be obtained from the State approving agency prior to the student's enrollment in the course being substituted. A record of the approval will be maintained in the veteran's file.

### Graduation Requirements

In order to be awarded the Associate in Science degree, the student must have met the following requirements:

1. Earned a cumulative grade point average

of 2.00 (C) on all college credit courses, including transfer credits.

2. Earned a grade point average of 2.00 (C) on all courses taken at Florida Junior College at Jacksonville.
3. Completed in residence at Florida Junior College at Jacksonville at least 15 semester hours of the required program.
4. Completed the general education requirements and required courses as set forth in the college catalog or as approved by the director of the program. The health education programs of study may require a "C" grade or better in professional courses. A minimum of 60 semester hours is required for this degree, of which at least 15 semester hours must be in general education.

Before a student may graduate, the student must have fulfilled all financial obligations to the College.

### General Education Requirements

1. A minimum of fifteen semester hours of General Education is required for all Associate in Science degree programs of study.
2. The following subject areas shall be included in each program in the manner specified hereafter:

#### I. SOCIAL SCIENCE . . . . . 3 Semester Hours

Any one of the following 3 semester hour courses to meet FJC requirement for study of the U.S. Constitution:

AMH 2010 — UNITED STATES HISTORY I  
 EUH 1001 — WESTERN CIVILIZATION  
 POS 2041 — AMERICAN FEDERAL GOVERNMENT  
 SSI 1120 — ORIGINS OF AMERICAN SOCIETY II

#### II. HUMANITIES . . . . . 3 Semester Hours

Any course(s) listed under Area II (Humanities) for Associate in Arts degree.

#### III. MATHEMATICS — NATURAL SCIENCE . . . . . 3 Semester Hours

Any course(s) listed under Area III (Mathematics—Natural Science) for Associate

in Arts degree—OR as specified in individual Associate in Science degree programs from the course(s) listed under Area III (Mathematics—Natural Science) for Associate in Arts degree.

#### IV. COMMUNICATIONS. 3 Semester Hours

One of the following three semester hour courses is required of all Associate in Science degree students.

ENC 1103 — ENGLISH COMPOSITION I  
or  
ENC 1005 — INTRODUCTION TO COMPOSITION

#### V. THE REMAINING GENERAL EDUCATION REQUIREMENT

may be selected from courses listed in any one of the four categories under requirements for Associate in Arts degree OR as specified in individual Associate in Science degree programs.

A minimum of 60 semester hours is required for the Associate in Science degree. Some programs require more. Lists of additional courses required are set forth in individual Associate in Science degree programs. The total credit hours listed for each individual program are minimum hours required for program completion.

## Associate in Applied Science Degree

### To Prepare For an Occupation in Two Years

The objective of the Associate in Applied Science degree is to provide a more comprehensive

and higher level of training than can be offered by the non-college credit occupational preparatory programs of study.

Associate in Applied Science degree general education requirements and graduation requirements are the same as those for the Associate in Science degree.

## College Credit Certificate

### To a Job in One Year

Florida Junior College at Jacksonville provides a number of educational programs of less than two years duration for which technical certificates are awarded upon satisfactory completion.

### Graduation Requirements

In order to be awarded a College Credit Technical Certificate, the student must have met the following requirements:

1. Earned a grade point average of 2.00 (C) on all courses taken at Florida Junior College at Jacksonville.
2. Completed the required courses as set forth in the College catalog or as approved by the director of the program.
3. Completed at least one-fourth of the total hours required for a certificate in residence at Florida Junior College at Jacksonville.

Before a student may graduate, the student must have fulfilled all financial obligations to the College.

<b>ASSOCIATE IN SCIENCE DEGREE</b> <b>Special Areas of Study In:</b>	Fred H. Kent Campus	North Campus	South Campus	Downtown Campus
<b>BUSINESS</b>				
Accounting	X	X	X	X
Data Processing		X		
*Computer Operations		X		
*Computer Programming		X		
General Business	X	X	X	X
Secretarial Science	X	X	X	X
*Clerical	X	X	X	X
*Stenography	X	X	X	X
<b>DISTRIBUTIVE</b>				
Banking	X			
Hospitality Management	X			
Insurance	X		X	
Real Estate	X		X	
Sales-Marketing-Retailing	X	X	X	
Transportation	X			
<b>ENGINEERING &amp; INDUSTRIAL RELATED</b>				
Air Traffic Management		X		
Architectural & Building Construction Technology				X
*Architectural & Building Construction				X
Civil Engineering Technology				X
*Civil Engineering				X
Drafting and Design Technology				X
*Drafting			X	X
Electronic Engineering Technology				X
*Electronics				X
Mechanical Engineering Technology				X
*Mechanical Engineering				X
Printing/Graphic Arts		X		
X-Ray Engineering Technology				X
<b>HEALTH</b>				
Dental Hygiene		X		
*Dental Assisting		X		
Emergency Medical Technology		X		
Medical Laboratory Technology		X		
Radiologic Technology		X		
Respiratory Therapy		X		
Technical Nursing		X		
<b>HOME ECONOMICS</b>				
Child Care Services		X		
*Child Care Services		X		
*Residential Child Care Services		X		
Fashion Merchandising	X			
Food Service Technology	X			
*Food Service Technology	X			
Interior Design Technology	X			

\*College Credit Technical Certificate for completion of specialized courses of study.

(An "X" in any of the right hand columns of the above chart indicates the campus on which a program is located.)







# Associate in Science Degree, Technical Certificate, and University of North Florida Transfer Programs

## BUSINESS EDUCATION

### Accounting

The Accounting Program is primarily designed for those students who intend to seek immediate employment in some area of accounting. The program is also intended for, and most beneficial to, those individuals who are presently using accounting and/or accounting information in their employment. The aim of the Accounting Program is to prepare students for positions in industry; federal, state, and local government; and public accounting. The professional certified public accountant candidate should follow the Associate in Arts degree for the Business Administration program of studies.

This program is based upon the development of a thorough knowledge of accounting principles and theory, and then seeks to develop the student's ability to apply this knowledge to problem situations. An intensive study of accounting and related business subjects is combined with general education courses to provide a well-balanced program.

<b>General Education</b>		<b>Associate In Science</b>		
ECO 2013 Principles of Economics I . . . . .	3			
*Communications . . . . .	3			
*Humanities . . . . .	3			
*Mathematics — Natural Science . . . . .	3			
*Social Science . . . . .	<u>3</u>			
credit hours		15		
<b>Professional and Other Required Courses</b>				<b>credit hours</b>
ACC 2001 Principles of Accounting I . . . . .	3		ACC 2409 Cost Accounting . . . . .	3
ACC 2021 Principles of Accounting II . . . . .	3		ACC 2501 Individual Taxes . . . . .	3
ACC 2109 Intermediate Accounting I . . . . .	3		ACC 2529 Corporate, Estate, and Trust Taxes . . . . .	3
ACC 2129 Intermediate Accounting II . . . . .	3		ACC 2869 Fund Accounting . . . . .	3
**ACC 2409 Cost Accounting . . . . .	3		BUL 2111 Business Law . . . . .	3
**ACC 2501 Individual Taxes . . . . .	3		BUL 2112 Business Law . . . . .	3
**ACC 2869 Fund Accounting . . . . .	3		COC 2001 Computer Concepts . . . . .	3
QMB 1001 Business Mathematics . . . . .	3		COE 1000 Cooperative Education Seminar . . . . .	1
SES 2335 Business Communications . . . . .	3		— 1949 Cooperative Education Work Experience I (with program director's prior consent) . . . . .	3
***Approved Electives . . . . .	<u>21</u>		— 2949 Cooperative Education Work Experience II (with program director's prior consent) . . . . .	3
credit hours		<u>45</u>	FIN 2000 Principles of Finance . . . . .	3
			GEB 1011 Introduction to Business . . . . .	3
Total credit hours		<u>60</u>	MAN 2000 Principles of Management . . . . .	3
			MAN 2300 Personnel Management . . . . .	3
			MAR 1011 Principles of Marketing . . . . .	3
			RMI 1030 Principles of Insurance . . . . .	3
			SES 1324 Calculating Machines . . . . .	3

The program director may require additional courses or make substitutions required to meet the needs of students.

### Data Processing

There are three programs in Data Processing at Florida Junior College at Jacksonville. These programs are: (a) Associate in Science with an emphasis in Data Processing, (b) Certificate in Computer Operations, and (c) Certificate in Computer Programming.

Students who are interested in pursuing a Computer/Information Systems Science degree at a senior in-

stitution should elect the Associate in Arts degree and utilize the program requirements at the senior institution and Florida Junior College at Jacksonville to determine the best combination of courses for transfer.

The Associate in Science degree is a two-year course of study to prepare students for a variety of positions in data processing. The following are some of the job titles: (a) program coders, (b) control analysts, (c) junior programmers, and (d) programmer-analyst trainees.

The Certificate in Computer Operations is a one-year program which includes experience with the operation of data processing equipment in the College's Data Center and the Data Processing instructional laboratory. Field trips enable students to be exposed to a greater variety of equipment, operating systems, and computer applications.

A limited number of laboratory assistantships are available for students to gain valuable experience with the operation of the IBM System/370 Model 138 Computer System and the Prime 300 minicomputer system in the data processing instructional laboratory on the North Campus.

The Certificate in Computer Programming is an abbreviated program recommended for those students with previous college-level course work and/or business experience. It is a one-year course of study for those who wish to be gainfully employed as junior programmers or programmer-analyst trainees.

Students interested in a computer programming career are urged to take the Programmer's aptitude test available through the Student Development Office on the North Campus.

Full-time students wishing to complete any of the above programs must be enrolled in two Data Processing courses as part of their course load during the Fall and Winter Terms (I and II). However, these courses are not to be taken in the order as listed hereafter.

General Education	Associate In Science	Technical Certificate In:	
		Computer Operations	Computer Programming
*Communications .....	3	3	
*Natural Science Elective .....	3		
*Humanities .....	3		
****Mathematics—Natural Science .....	3		
*Social Science .....	3		
	<hr/>		
	credit hours 15	<hr/>	3
 <b>Professional and Other Required Courses</b>			
**ACC 2001 Principles of Accounting I .....	3	3	3
CAP 1001 Data Processing Applications .....	3	3	3
CIS 2100 Data Management & Utility Programs .....	3	3	3
CIS 2321 System Development & Design .....	3	3	3
CNM 1005 Data Processing Mathematics .....	3	3	3
COC 1300 Introductory Computer Concepts .....	3	3	3
COP 2120 Basic COBOL Programming .....	3	3	3
COP 2610 Advanced Computing & Programming Systems ..	3		
*****CRM 1039 Data Processing Workshop .....		3	
GEB 1011 Introduction to Business .....	3	3	3
MAN 2000 Principles of Management .....	3	3	
***SES 1100 Beginning Typewriting I .....	3	3	3
SES 2335 Business Communications .....	3	3	3
Data Processing Elective .....	3		3
Data Processing or General Business Elective .....	3		
Programming Elective .....			3
Natural Science Elective .....	3		
	<hr/>	<hr/>	<hr/>
	credit hours 45	30	36
	<hr/>	<hr/>	<hr/>
	Total credit hours 60	33	36

\*Refer to AS degree General Education Requirements

\*\*ACC 1009 and ACC 1029 may be used in place of ACC 2001

\*\*\*Students with touch typing skills may elect to substitute a Data Processing or General Business Elective course for SES 1100.

\*\*\*\*Prefer MAC 1104 College Algebra or above as desired mathematics requirement.

\*\*\*\*\*In lieu of CRM 1039, verifiable data processing experience may be approved by the appropriate dean.

<b>Data Processing Electives</b>		<b>credit hours</b>			<b>credit hours</b>
COP 1160	RPG Programming	3	COP 2110	FORTRAN Programming	3
COP 1400	Basic Assembly Language Programming	3	COP 2121	Advanced COBOL Programming	3
COP 2110	FORTRAN Programming	3	COP 2130	PL/I Programming	3
COP 2121	Advanced COBOL Programming	3	COP 2170	Basic Programming	3
COP 2130	PL/I Programming	3	COP 2401	Advanced Assembly Language Programming	3
COP 2170	Basic Programming	3	COP 2610	Advanced Computing and Programming Systems	3
COP 2401	Advanced Assembly Language Programming	3	<b>General Business Electives</b>		
CRM 1039	Data Processing Workshop	3	ACC 2021	Principles of Accounting II	3
<b>Programming Electives</b>			BUL 2111	Business Law	3
COP 1160	RPG Programming	3	MAN 2000	Principles of Management	3
COP 1400	Basic Assembly Language Programming	3			

The program director may require additional courses or make substitutions required to meet the needs of students.

### General Business

The two-year General Business Program is designed to prepare students for advancement in a business profession. The emphasis of the course selections is on business courses as only five General Education Courses are required. It is important to note that this program is not intended to be a substitute for the four-year Business Administration program. The Director of the Program may require and/or approve additional courses for program completion or may approve substitution of courses based on student needs.

		<b>Associate In Science</b>			<b>credit hours</b>
<b>General Education</b>			ACC 2021	Principles of Accounting II	3
ECO 2013	Principles of Economics I	3	ADV 2000	Advertising	3
*Communications		3	BUL 2111	Business Law	3
*Humanities		3	BUL 2112	Business Law	3
*Mathematics — Natural Science		3	COC 1300	Introductory Computer Concepts	3
*Social Science		3	COE 1000	Cooperative Education Seminar	1
	<b>credit hours</b>	<b>15</b>	— 1949	Cooperative Education Work Experience I (With Program Director's prior consent)	3
<b>Professional and Other Required Courses</b>			— 2949	Cooperative Education Work Experience II (With Program Director's prior consent)	3
ACC 1009, 1029	Accounting I & II		FIN 2000	Principles of Finance	3
or			FIN 2100	Personal Finance	3
ACC 2001	Principles of Accounting I	3-6	GEB 1011	Introduction to Business	3
QMB 1001	Business Mathematics	3	MAN 2000	Principles of Management	3
SES 2335	Business Communications	3	MAN 2300	Personnel Management	3
**Approved Electives		33-36	MAR 1011	Principles of Marketing	3
	<b>credit hours</b>	<b>45</b>	MAR 1101	Salesmanship	3
	<b>Total credit hours</b>	<b>60</b>	MAR 1151	Retail Merchandising	4
			MAR 1301	Sales Promotion	4
			MAR 2401	Sales Management	3
			RMI 1030	Principles of Insurance	3
			SES 1100	Beginning Typewriting I	3
			SES 1101	Beginning Typewriting II	3
			SES 1110	Intermediate Typewriting	3
			SES 1150	Introduction to Word Processing	3
			SES 1324	Calculating Machines	3
			SES 1361	Machine Transcription	3
			SES 2151	Word Processing — Magnetic Typewriting	3

\*Refer to AS degree General Education Requirements  
 \*\*Approved Electives:

### Secretarial Science

The two-year Secretarial Science Program is designed to fill the needs of the student who is preparing for a top level secretarial position. The program is a combination of general education, business education, and special education to develop the skills necessary for a secretarial position. Classroom experiences aid the student in successfully coping with the different phases of secretarial work: dictation and transcription; office practice, procedures, and management; and problems in typewriting at the vocational competency level.

The student may elect to learn either machine shorthand or Gregg shorthand in order to satisfy the re-

quirements of the program. The student selecting machine shorthand must complete the course sequence SES 1221, SES 2222, and SES 2223. The student selecting Gregg shorthand must complete the course sequence SES 1211, SES 2212, and SES 2213: Individual courses in one course sequence are not interchangeable with courses in the other course sequence. Machine shorthand is offered only on the South Campus.

A student may obtain a Certificate in Clerical or Stenography by completing the courses identified hereafter.

The Director of the Program may require and/or approve additional courses for program completion or may approve the substitution of courses based on student needs.

General Education	Associate	Technical	
	In Science	Clerical	In Stenography
*Communications	3	3	3
*Humanities	3		
*Mathematics — Natural Science	3		
*Social Science	<u>6</u>	<u>6</u>	<u>3</u>
credit hours	15	9	6
<b>Professional and Other Required Courses</b>			
+ACC 1009, 1029 Accounting	6	6	6
BUL 2111 Business Law	3	3***	3***
GEB 1011 Introduction to Business	3	3***	3
MAN 2000 Principles of Management		3***	
QMB 1001 Business Mathematics	3	3	3
COC 1300 Introductory Computer Concepts	3		
SES 1003 General Office Procedures	3	3	3
SES 1101 Beginning Typewriting II	3**		
SES 1110 Intermediate Typewriting	3**	3****	3****
SES 1211 Intermediate Shorthand			
or			
SES 1221 Machine Shorthand I	3**		3
SES 1324 Calculating Machines		3***	
SES 1361 Machine Transcription	3	3	3***
SES 2120 Advanced Typewriting — Executive	3**	3****	3****
SES 2131 Advanced Typewriting — Legal	3**	3****	3****
SES 2132 Advanced Typewriting — Medical	3**	3****	3****
SES 2133 Advanced Typewriting — Technical	3**	3****	3****
SES 2151 Word Processing — Magnetic Typewriting	3**		
SES 2212 Advanced Shorthand			
or			
SES 2222 Machine Shorthand II	3**		3
SES 2213 Dictation & Transcription			
or			
SES 2223 Machine Shorthand III	3**		3***
SES 2335 Business Communications	3	3	3
SES 2402 Secretarial Practices	<u>3</u>		<u>3</u>
	<u>48</u>	<u>30</u>	<u>39</u>
Total credit hours	63	39	45

\*Refer to AS degree General Education Requirements.

\*\*Students will be placed at proper level in typewriting and shorthand. Students without skills required for completion of SES 1210 Beginning Shorthand, if Gregg Shorthand method is selected, and SES 1100 Beginning Typewriting I will be required to take these courses, which may increase the hours required for graduation. The Secretarial Science two-year degree program requires nine hours in typewriting and nine hours in shorthand.

\*\*\*Students are required to take any two of these courses.

\*\*\*\*Certificate programs require six hours in typing.

+ACC 2001 may be taken in place of ACC 1009 and 1029.

## DISTRIBUTIVE EDUCATION

### Banking

This two-year program is structured to provide students with both the general and specialized skills and competencies needed to embark upon a profitable and rewarding banking career. Jacksonville is a hub of financial activity, and financial institutions such as banks are looking for qualified and motivated degree students to enter their executive training programs. Opportunities in banking are especially good because of the variety of departments such as business development, public relations, installment credit, international trade development, commercial services, loans and securities.

Those already employed in banks have the opportunity to register for in-house courses leading to American Institute of Banking certification and at the same time earning college credit toward degree requirements.

An option transfer program is available to students for admittance to the University of North Florida. Students electing this option are accepted as third year students at UNF. Students electing the transfer program to the University of North Florida must complete the transfer program requirements.

General Education	Associate In Science	AS Degree Option UNF Transfer
ECO 2013 Principles of Economics I .....	3	3
ECO 2023 Principles of Economics II .....		3
ENC 1005 Introduction to Composition .....		3
ENC 1103 English Composition I .....		3
ENC 1005 Introduction to Composition or		
ENC 1103 English Composition I .....	3	
HUM 2211 Western Humanities I .....	3	3
MAC 1104 College Algebra .....		3
POS 2041 American Federal Government .....		3
PSY 1012 General Psychology .....	3	3
SPC 1010 Fundamentals of Speech .....	3	
STA 1014 Elementary Statistics .....		3
*General Education Electives .....		6
*Mathematics — Natural Science .....	3	
*Social Science .....	3	
*Social Science or Humanities .....	3	
	credit hours	33

### Professional and Other Required Courses

ACC 1009 General Accounting I .....	3	
ACC 2001 Principles of Accounting I .....		3
ACC 2021 Principles of Accounting II .....		3
BAN 1110 Principles of Bank Operation .....	3	3
BAN 1700 Financing Business Enterprise .....	3	
BAN 2303 Savings and Time Deposits .....	3	3
BUL 2111 Business Law .....	3	3
FIN 2000 Principles of Finance .....	3	3
FIN 2230 Money and Banking .....	3	3
GEB 1011 Introduction to Business .....	3**	3
MAN 2000 Principles of Management .....	3	3
QMB 1001 Business Mathematics .....	3	
***Approved Electives .....	6	
	credit hours	27
	Total credit hours	60

\*Refer to General Education Requirements

\*\*Another course may be selected upon approval of program director.

\*\*\*Approved Electives:

	<b>credit hours</b>
BAN 1100 Bank Starter Series .....	3
BAN 1160 Bank Letters and Reports .....	3
BAN 1210 Analyzing Financial Statements ..	3
BAN 2150 Public Relations and Marketing ..	3
BAN 2200 Credit Administration .....	3

	<b>credit hours</b>
BAN 2230 Bank Investment .....	3
BAN 2240 Installment Credit .....	3
BAN 2400 Trust Functions and Services ....	3
BAN 2500 International Banking .....	3
BAN 2720 Bank Management .....	3

The program director may require additional courses or make substitutions required to meet the needs of students.

### Hospitality Management

This program is designed to provide career-oriented students with the basic principles and job entry working skills and the training for supervisory and management positions in the hotel, motel, apartment, lodging and food service industry. The program is designed to provide the student with a foundation for building a rewarding position and satisfying career in a dynamic, growing industry.

The hotel, motel, apartment, tourism, and food service industry is the largest and fastest growing business in Florida. AS degree students with an educational background of this business are in demand. Training includes communication and managerial skills, human relations, and leadership. Through the internship program of Hospitality Management, students gain college credit and valuable, profitable work experience. Job placement is available through the college Hospitality Management Advisory Committee.

<b>General Education</b>	<b>Associate In Science</b>	<b>Professional and Other Required Courses</b>	
ECO 2013 Principles of Economics I .....	3	ACC 2815 Hotel-Motel Accounting .....	3
*Communications .....	3	BUL 2111 Business Law .....	3
*Humanities .....	3	FIN 2100 Personal Finance .....	3
*Physical or Biological Science .....	3	FSS 1251 Restaurant Operations .....	3
*Social Science .....	<u>6</u>	FSS 2501 Food & Beverage Control ...	3
credit hours	18	HFT 1000 Introduction to Hospitality Management .....	3
		HFT 1250 Hotel-Motel Operation .....	3
		HFT 1270 Apartment Management .....	3
		HFT 2221 Customer-Personnel Relations .....	3
		HFT 2700 Tourism .....	3
		**HFT 2941 Internship .....	3
		**HFT 2942 Internship .....	3
		MAN 2000 Principles of Management ...	3
		MAR 1101 Salesmanship .....	3
		QMB 1001 Business Mathematics .....	<u>3</u>
		credit hours	<u>45</u>
		Total credit hours	<u>63</u>

\*Refer to AS degree General Education Requirements  
 \*\*Choices in these courses are determined by the student's employment outlook. This decision will determine what type of institution the student will be placed in for the internship courses of HFT 2941 and 2942. Internship will consist of 15 hours per week of on-the-job training. Students are encouraged to seek part-time employment in the hospitality industry while attending college and during the summer.

The program director may require additional courses or make substitutions required to meet the needs of students.

## Insurance

This program's objective is to provide students with the necessary course work that can lead to profitable and rewarding careers in the insurance industry — life, property and casualty, and health. Emphasis is placed on job preparation for affiliation with insurance agencies and home office operations. Jacksonville, being the "Insurance Capital of the South", offers great opportunity to qualified insurance AS graduates.

Courses are made available to those persons already employed for career advancement opportunities. These include Chartered Life Underwriters (CLU), Life Office Management (LOMA) and Insurance Institute of America (IIA). Courses leading to licensing requirements for property and casualty general agents, solicitors, and adjusters are also available.

An option transfer program is available to students for admittance to the University of North Florida. Students electing this option are accepted as third year students at UNF. Students electing the Transfer Program to the University of North Florida must complete the Transfer Program requirements.

		Associate In Science	AS degree Option UNF Transfer
<b>General Education</b>			
ECO 2013	Principles of Economics I .....		3
ECO 2023	Principles of Economics II .....		3
ENC 1005	Introduction to Composition .....		3
ENC 1103	English Composition I .....		3
HUM 2211	Western Humanities I .....		3
MAC 1104	College Algebra .....		3
POS 2041	American Federal Government .....		3
PSY 1012	General Psychology .....	3	3
STA 1014	Elementary Statistics .....		3
*Communications .....		3	
*General Education Electives .....			6
*Humanities .....		3	
*Mathematics — Natural Science .....		3	
*Social Science .....		6	
		credit hours 18	33
<b>Professional and Other Required Courses</b>			
ACC 1009	General Accounting I .....	3	
ACC 1029	General Accounting II .....	3	
ACC 2001	Principles of Accounting I .....		3
ACC 2021	Principles of Accounting II .....		3
BUL 2111	Business Law .....	3	3
FIN 2000	Principles of Finance .....	3	3
GEB 1011	Introduction to Business .....	3	3
MAN 2000	Principles of Management .....	3	3
MAR 1011	Principles of Marketing .....		3**
MAR 1101	Salesmanship .....	3	
QMB 1001	Business Mathematics .....	3	
RMI 1030	Principles of Insurance .....	3	3
RMI 1110	Principles of Life Insurance I .....		3***
RMI 1200	Principles of Casualty Insurance and Surety Bonding .....	3	3***
RMI 1210	Principles of Fire and Allied Lines .....	3	3***
****Approved Insurance Electives .....		9	
		credit hours 42	30
*Refer to AS degree General Education Requirements			
**Required course in UNF Transfer Option.			
***Any two of these courses.			
****Approved Insurance Electives:		Total credit hours 60	63

	credit hours
RMI 1110 Principles of Life Insurance .....	3
RMI 1120 Principles of Health Insurance .....	3
RMI 1160 Marketing Principles of Life and Health Insurance .....	3
RMI 1260 Principles of Insurance and Liability Claim Adjusting .....	3

	credit hours
RMI 1280 Principles of Property Insurance Adjusting I .....	3
RMI 1430 Legal Aspects of Life Insurance .....	3
RMI 1432 Life Company Operations .....	3
RMI 2270 Liability Insurance Adjusting .....	3
RMI 2281 Property Insurance Adjusting .....	3
RMI 2750 Life Insurance Accounting .....	3

The program director may require additional courses or make substitutions required to meet the needs of students.



## Real Estate

This program is designed to provide students with a meaningful background in real estate as particularly related to principles, practices, and license law. Pre-licensing requirements established by the Florida Real Estate Commission for licensed salespersons are incorporated into the program. Through a variety of course offerings, students are presented an opportunity to specialize in other areas of real estate including management.

An option transfer program is available to students for admittance to the University of North Florida. Students electing this option are accepted as third year students at UNF. Students electing the Transfer Program to the University of North Florida must complete the program requirements.

<b>General Education</b>		<b>Associate In Science</b>	<b>AS degree Option UNF Transfer</b>
ECO 2013	Principles of Economics I	3	3
ECO 2023	Principles of Economics II		3
ENC 1005	Introduction to Composition		3
ENC 1103	English Composition I		3
HUM 2211	Western Humanities I		3
MAC 1104	College Algebra		3
POS 2041	American Federal Government		3
PSY 1012	General Psychology		3
SPC 1010	Fundamentals of Speech	3	
STA 1014	Elementary Statistics		3
	*Communications	3	
	*General Education Electives		6
	*Humanities	6	
	*Mathematics — Natural Science (Except MAT 1024)	3	
	*Social Science	3	
		<u>21</u>	<u>33</u>
<b>Professional and Other Required Courses</b>			
ACC 1009	General Accounting I	3	
ACC 2001	Principles of Accounting I		3
ACC 2021	Principles of Accounting II		3
BUL 2111	Business Law	3	3
FIN 2000	Principles of Finance	3	3
GEB 1011	Introduction to Business	3**	3
MAN 2000	Principles of Management	3	3
MAN 2300	Personnel Management	3	
MAR 1011	Principles of Marketing		3****
QMB 1001	Business Mathematics	3	
REE 1000	Real Estate Principles and Practices	3	3
REE 1100	Real Estate Appraisal	3	
REE 1400	Real Estate License Law	3	3
REE 1810	Real Estate Sales	3***	
REE 2200	Real Estate Finance	3***	
REE 2270	Mortgage Broker in Mortgage Lending	3***	3*****
REE 2300	Real Estate Investment	3***	
REE 2430	Real Estate Law	3***	3*****
REE 2500	Real Estate Management	3***	
	*****Approved Real Estate Elective	3	
		<u>42</u>	<u>30</u>
		Total credit hours 63	63

\*Refer to AS degree General Education Requirements

\*\*Another course may be selected upon approval of Program Director.

\*\*\*Any three of these six courses

\*\*\*\*Required course in UNF Transfer Option

\*\*\*\*\*Any one of these courses

\*\*\*\*\*Approved Real Estate Electives:

	credit hours		credit hours		
REE 1810	Real Estate Sales .....	3	REE 2300	Real Estate Investment .....	3
REE 2200	Real Estate Finance .....	3	REE 2430	Real Estate Law .....	3
REE 2220	Home Mortgage Lending .....	3	REE 2500	Real Estate Management .....	3
REE 2270	Mortgage Broker in Mortgage Lending .....	3			

The program director may require additional courses or make substitutions required to meet the needs of students.

## Sales—Marketing—Retailing

The Sales-Marketing-Retailing Program provides the student with a background that will assist in preparing for a career in the areas of sales, sales management, sales promotion, advertising, wholesaling, retailing, and market research. Career opportunities in these fields exist in private industry, government, and the professions.

The curriculum includes the study of activities necessary to place goods and services in the hands of household consumers and industrial users. The classroom experiences provide a broad understanding of the marketing process, as well as specialized knowledge in the various areas of marketing.

The Director of the Program may require and/or approve additional courses for program completion or may approve the substitution of courses based on student needs.

	Associate In Science	credit hours		credit hours	
<b>General Education</b>			ACC 2021	Principles of Accounting II .....	3
ECO 2013	Principles of Economics I .....	3	BUL 2111	Business Law .....	3
*Communications	.....	3	BUL 2112	Business Law .....	3
*Humanities	.....	3	COE 1000	Cooperative Education Seminar	1
*Mathematics — Natural Science	.....	3	— 1949	Cooperative Education Work Experience I (with program director's prior consent) .....	3
*Social Science	.....	3	— 2949	Cooperative Education Work Experience II (with program director's prior consent) .....	3
	credit hours	15	FIN 2000	Principles of Finance .....	3
<b>Professional and Other Required Courses</b>			GEB 1011	Introduction to Business .....	3
ACC 1009, 1029	General Accounting I and II or		MAN 2000	Principles of Management .....	3
ACC 2001	Principles of Accounting I .....	3-6	MAN 2300	Personnel Management .....	3
ADV 2000	Advertising .....	3	MAR 1151	Retail Merchandising .....	4
MAR 1011	Principles of Marketing .....	3	MAR 1301	Sales Promotion .....	4
MAR 1101	Salesmanship .....	3	MAR 2221	Principles of Wholesale Distribution .....	3
QMB 1001	Business Mathematics .....	3	MAR 2240	Principles of International Trade: Export-Import .....	3
SES 2335	Business Communications .....	3	MAR 2401	Sales Management .....	3
**Approved Electives	.....	24-27	RMI 1030	Principles of Insurance .....	3
	credit hours	45	SES 1100	Beginning Typewriting I .....	3
			SES 1101	Beginning Typewriting II .....	3
			SES 1110	Intermediate Typewriting .....	3
			SES 1324	Calculating Machines .....	3
	Total credit hours	60			

\*Refer to AS Degree General Education Requirements

\*\*Approved Electives

## Transportation

The purpose of the Transportation Program is to enable students to obtain a meaningful career, either in industrial traffic management or in the commercial carrier industry.

The Transportation Advisory Committee continually keeps the faculty aware of industrial needs, job opportunities, changes in transportation technology, and placement services.

Transportation curricula are continually updated, and new courses developed to meet community requirements. The courses provide students with ample specialized training and skills to enter the highly technical field of transportation and distribution.

An option transfer program is available to students for admittance to the University of North Florida. Students electing this option are accepted as third year students at UNF. Students electing the Transfer Program to the University of North Florida must complete the Transfer Program requirements.

<b>General Education</b>		<b>Associate In Science</b>	<b>AS degree Option UNF Transfer</b>
ECO 2013	Principles of Economics I	3	3
ECO 2023	Principles of Economics II		3
ENC 1005	Introduction to Composition		3
ENC 1103	English Composition I		3
HUM 2211	Western Humanities I		3
MAC 1104	College Algebra		3
POS 2041	American Federal Government		3
PSY 1012	General Psychology		3
SPC 1010	Fundamentals of Speech	3	
STA 1014	Elementary Statistics		3
*Communications		6	
*General Education Electives			6
*Humanities		6	
*Mathematics — Natural Science, (Except MAT 1024)		3	
*Social Science		3	
	credit hours	24	33
<b>Professional and Other Required Courses</b>			
ACC 1009	General Accounting I	3	
ACC 2001	Principles of Accounting I		3
ACC 2021	Principles of Accounting II		3
BUL 2111	Business Law	3	3
FIN 2000	Principles of Finance	3	3
GEB 1011	Introduction to Business	3**	3
***MAN 2000	Principles of Management	3	3
QMB 1001	Business Mathematics	3	
TRA 1010	Principles of Transportation	3	
***TRA 1032	Transportation and Traffic Management I	3	
***TRA 1230	Material Handling	3	
***TRA 1420	Commercial Motor Transportation	3	
TRA 2020	Economics of Transportation	3	3
****Approved	Transportation/Aviation Electives	3	9
	credit hours	36	30
	Total credit hours	60	63

\*Refer to AS Degree General Education Requirements

\*\*Another course may be selected upon approval of Program Director.

\*\*\* For AS degree students wishing to specialize in the field of Aviation, Aviation courses from the list of approved electives may be substituted for these courses.

## \*\*\*\*Approved Electives for UNF Transfer Option:

		credit hours
ASC 1001	Introduction to Aviation/Aerospace .....	3
ATF 1000	Basic Flight I .....	3
ATF 1010	Ground School—Private Pilot .....	3
ATF 1100	Basic Flight II .....	3
ATF 2201C	Intermediate Flight I .....	3
ATF 2202C	Intermediate Flight II .....	3
ATF 2203C	Intermediate Flight III .....	3
ATF 2300	Advanced Flight .....	3
ATT 1110	Ground School III—Commercial Pilot .....	3
ATT 1120	Ground School IV—Instrument Pilot .....	3
MAR 2221	Principles of Wholesale Distribution .....	3
MAR 2240	Principles of International Trade: Export-Import .....	3
TRA 1010	Principles of Transportation .....	3
TRA 1032	Transportation and Traffic Management I .....	3
TRA 1033	Carrier Liability and Claims .....	3
TRA 1100	Transportation and Traffic Management .....	3
TRA 1121	Rate Clerk .....	3
TRA 1230	Material Handling .....	3
TRA 1420	Commercial Motor Transportation .....	3
TRA 1905	Independent Study of Transportation .....	3
TRA 2110	Transportation and Traffic Management III .....	3
TRA 2120	Transportation and Traffic Management IV .....	3
TRA 2300	Interstate Commerce Act I .....	3
TRA 2310	Interstate Commerce Act II .....	3
TRA 2311	Interstate Commerce Law and Practice .....	3
TRA 2312	Interstate Commerce Act III .....	3
TRA 2313	Interstate Commerce Act IV .....	3

## \*\*\*\*Approved Electives for AS degree program:

		credit hours
ASC 1001	Introduction to Aviation/Aerospace .....	3
ATF 1000	Basic Flight I .....	3
ATF 1010	Ground School—Private Pilot .....	3
ATF 1100	Basic Flight II .....	3
ATF 2201C	Intermediate Flight I .....	3
ATF 2202C	Intermediate Flight II .....	3
ATF 2203C	Intermediate Flight III .....	3
ATF 2300	Advanced Flight .....	3
ATT 1110	Ground School III—Commercial Pilot .....	3
ATT 1120	Ground School IV—Instrument Pilot .....	3
MAR 2221	Principles of Wholesale Distribution .....	3
MAR 2240	Principles of International Trade: Export-Import .....	3
TRA 1033	Carrier Liability and Claims .....	3
TRA 1100	Transportation and Traffic Management .....	3
TRA 1121	Rate Clerk .....	3
TRA 1420	Commercial Motor Transportation .....	3
TRA 1905	Independent Study of Transportation .....	3
TRA 2110	Transportation and Traffic Management III .....	3
TRA 2120	Transportation and Traffic Management IV .....	3
TRA 2300	Interstate Commerce Act I .....	3
TRA 2310	Interstate Commerce Act II .....	3
TRA 2311	Interstate Commerce Law and Practice .....	3
TRA 2312	Interstate Commerce Act III .....	3
TRA 2313	Interstate Commerce Act IV .....	3

The program director may require additional courses or make substitutions required to meet the needs of students.

## ENGINEERING AND INDUSTRIAL RELATED EDUCATION

### Air Traffic Management

The Air Traffic Management Program provides the student with a background that will assist in preparing for a career in air traffic control and air traffic facility operation. Career opportunities in the fields exist in private industry and government.

The curriculum includes the study of activities necessary to control aircraft in the air and on the ground safely and economically.

Upon completion of this program, the student would be able to step right into FAA vacancies precluding extensive additional training.

<b>General Education</b>	<b>Associate In Science</b>	<b>Professional And Other Required Courses</b>	
ENC 1103 English Composition I .....	3	ASC 1000 Principles of Flight .....	3
MGF 1113 College Mathematics .....	3	ASC 1005 History of Air Transportation ..	3
*REA 1305 Developmental Reading .....	3	ASC 1210 Aviation Weather .....	3
SPC 1010 Fundamentals of Speech .....	3	ASC 1310 Federal Air Regulations .....	3
SSI 1120 Origins of American Society ..	3	ASC 1690 Environment of the Air Traffic Controller .....	3
**Humanities .....	<u>3</u>	AVM 2431 The Flight Service Station ...	3
credit hours	18	AVM 2821 The Air Traffic Control Tower ..	3
		AVM 2823 Approach Control .....	3
		AVM 2825 Air Route Traffic Control Center .....	3
		AVM 2831 Radar/Computer Interface ...	3
		AVM 2941 Facility Internship .....	4
		COC 1300 Introductory Computer Concepts .....	3
		MET 1001 Meteorology .....	3
		***Approved Electives .....	<u>6</u>
		credit hours	<u>46</u>
		Total credit hours	<u>64</u>
ECO 2000 Foundations of the American Economy .....	3		
ENC 2315 Technical Report Writing .....	3		
MAN 2050 Transportation Management and Theory .....	3		
MAN 2300 Personnel Management .....	3		
SES 1100 Beginning Typewriting I .....	3		
SOP 1002 Human Relations .....	3		
TRA 1010 Principles of Transportation .....	3		

\*Individual Scores at an appropriate level Nelson-Denny Reading Test. Student may substitute another communications course, with director's approval.

\*\*Any course with HUM prefix

\*\*\*Approved Electives:

### Architectural and Building Construction Technology

The objective of this program is to prepare the student for a career as a drafter or as an assistant to architects, engineers, or employers whose companies are associated through services or products with the architectural and building construction field.

A student will be considered as selected for this program when the student has an Associate in Science degree advising sheet signed by the program director. Students with an inadequate mathematics background will be required to enroll in MAT 1024, Elementary Algebra, and MAT 1033, Intermediate Algebra.

The objective of the certificate program is to prepare students for occupations related to the building construction industry. In particular the graduate of this program could be employed by a surveying company either as a field party member or as an office drafter transferring the field notes into survey plats. Other job opportunities would consist of working as a technician for an engineering testing company, making those in-place tests or laboratory tests required of the contractor. Still other possibilities are to assist the architect as the job inspector, or to assist the job superintendent on the job site, or to draw up preliminary sketches, for the contractor, architect or engineer. In summary, this certificate program provides a starting point for the graduate to enter building construction or related businesses.

Graduates of the one-year certificate program in Architectural and Building Construction Technology may elect to continue for the Associate in Science degree in Architectural and Building Construction Technology.

<b>General Education</b>	<b>Associate In Science</b>	<b>Technical Certificate In Architectural &amp; Bldg. Const.</b>
*Communications .....	3	3
*General Education Elective .....	3	
*Humanities .....	3	
*Mathematics — Natural Science .....	3	
*Social Science .....	<u>3</u>	
	credit hours 15	<u>3</u>
 <b>Professional and Other Required Courses</b>		
ARC 2120C Architectural Drafting .....	3	3
BCN 1001C Building Construction .....	3	3
BCN 2614 Planning and Estimating .....	3	3
COC 2001 Computer Concepts .....	3	
ENC 2315 Technical Report Writing .....	3	
ETD 1100C Engineering Drawing .....	3	3
ETD 2121C Civil Drafting .....	3	3
ETG 2504C Engineering Mechanics .....	4	
ETG 2535C Testing & Strength of Materials .....	4	
ETI 1421C Engineering Materials & Processes .....	4	4
ETI 1700 Industrial Safety .....	3	3
ETM 2610C Air Conditioning & Heating .....	3	3
MAC 1104 College Algebra .....	3	3
MTB 1322 Technical Math II .....	3	
SUR 1101C Surveying .....	3	3
**Professional Course Elective .....	<u>3</u>	
	credit hours <u>51</u>	<u>31</u>
	Total credit hours 66	<u>34</u>

\*Refer to AS Degree General Education Requirements  
 \*\*Approved Electives:

Any course included in any college credit Engineering Technology Program or one of the following:

	<b>credit hours</b>
BUL 2111 Business Law .....	3
ETE 1001 Fundamentals of General Electricity .....	3
GEB 1011 Introduction to Business .....	3
ETI 1121 Introduction to Non-destructive Testing .....	3
ETI 1122 Non-destructive Testing: Liquid Penetrants and Magnetic Particles .....	3

NOTE: Students are advised to refer to individual course descriptions for prerequisites.

The program director may specify some curriculum modifications. No changes or course substitutions will be made without the approval of the program director.

### Civil Engineering Technology

The objective of this program is to prepare the student for a career in fields related to Civil Engineering such as drafting, construction, surveying, road building, hydraulics, or instrumentation.

A student will be considered as selected for this program when the student has an Associate in Science degree advising sheet signed by the program director. Students with an inadequate mathematics background will be required to enroll in MAT 1024, Elementary Algebra, and MAT 1033, Intermediate Algebra.

The objective of the one-year certificate program in Civil Engineering Technology is to prepare the student for a career in the fields related to civil engineering such as drafting, construction, surveying and road building. A graduate of this program could be employed to assist the architect as the job inspector, or to draw up preliminary sketches for the contractor or engineer. In summary, this certificate program provides a starting point for the graduate to enter the building construction business or related businesses.

Graduates of the Civil Engineering Technology certificate program may elect to continue studies for the Associate in Science degree in Civil Engineering Technology.

<b>General Education</b>	<b>Associate In Science</b>	<b>Technical Certificate In Civil Engineering</b>
*Communications .....	3	3
*General Education Elective .....	3	
*Humanities .....	3	
*Mathematics — Natural Science .....	3	
*Social Science .....	<u>3</u>	
	credit hours 15	3

### Professional and Other Required Courses

BCN 1001C	Building Construction .....	3	3
BCN 2614C	Planning and Estimating .....	3	3
BUL 2111	Business Law or		
GEB 1011	Introduction to Business .....	3	
EGN 1130C	Descriptive Geometry .....	3	3
ENC 2315	Technical Report Writing .....	3	3
ETD 1100C	Engineering Drawing .....	3	3
ETD 2121C	Civil Drafting .....	3	3
ETG 2504C	Engineering Mechanics .....	4	
ETG 2535C	Testing & Strength of Materials .....	4	
ETI 1421C	Engineering Materials & Processes .....	4	4
ETM 2221	Elements of Applied Energy .....	3	
ETM 2310	Fluid Mechanics .....	3	
MAC 1104	College Algebra .....	3	
MTB 1322	Technical Math II .....	3	
SUR 1101C	Surveying .....	3	3
**Professional Course Elective .....		<u>3</u>	<u>3</u>
	credit hours	<u>51</u>	<u>28</u>

\*Refer to AS Degree General Education Requirements

\*\*Approved Electives:

Total credit hours 66 31

Any course included in any college credit Engineering Technology Program or one of the following:

	credit hours		credit hours
BUL 2111	3	ETI 1121	3
ETE 1001	3	ETI 1122	3
GEB 1011	3		

NOTE: Students are advised to refer to individual course descriptions for prerequisites.

The program director may specify some curriculum modifications. No changes or course substitutions will be made without the approval of the program director.

## DRAFTING AND DESIGN TECHNOLOGY

The objective of this program is to prepare students for careers as assistants to engineers or architects. The graduate will be prepared to translate ideas, sketches, calculations, and specifications into complete and accurate working drawings.

A student will be considered as selected for this program when the student has an Associate in Science degree advising sheet signed by the program director. Students with an inadequate mathematics background will be required to enroll in MAT 1024, Elementary Algebra, and MAT 1033, Intermediate Algebra.

The program director may specify some curriculum modifications. No changes or course substitutions will be made without the approval of the program director.

A certificate program is also offered in Drafting and is designed to prepare the student for employment as a drafter.

The graduate of the certificate program may elect to continue studies for the Associate in Science degree in Drafting and Design Technology.

	Associate In Science	Technical Certificate In Drafting
<b>General Education</b>		
*Communications .....	3	3
*General Education Elective .....	3	
*Humanities .....	3	
*Mathematics — Natural Science .....	3	
*Social Science .....	<u>3</u>	
credit hours	15	3
<b>Professional and Other Required Courses</b>		
ARC 2120C Architectural Drafting .....	3	3
BCN 2614C Planning and Estimating .....	3	
BCN 1001C Building Construction .....	3	
EGN 1130C Descriptive Geometry .....	3	3
ENC 2315 Technical Report Writing .....	3	3
ETD 1100C Engineering Drawing .....	3	3
ETD 1645C Mechanical and Electrical Drafting .....	3	3
ETD 2121C Civil Drafting .....	3	3
ETG 2504C Engineering Mechanics .....	4	
ETG 2535C Testing and Strength of Materials .....	4	
ETI 1421C Engineering Materials and Processes .....	4	4
ETI 1700 Industrial Safety .....	3	
ETI 2440 Industrial Design .....	3	3
MAC 1104 College Algebra .....	3	3
MTB 1322 Technical Math II .....	3	
SUR 1101C Surveying .....	<u>3</u>	
credit hours	<u>51</u>	<u>28</u>
Total credit hours	66	31

\*Refer to AS degree General Education Requirements

NOTE: Students are advised to refer to individual course descriptions for prerequisites.

## Electronic Engineering Technology

The objective of this program is to prepare the student for a career associated with the electronics industry as a technician or assistant to engineers and scientific personnel in electronic systems and processes.

A student will be considered as selected for this program when the student has an Associate in Science



degree advising sheet signed by the program director. Students with an inadequate mathematics background will be required to enroll in MAT 1024, Elementary Algebra, and MAT 1033, Intermediate Algebra.

The student completing the one-year program in Electronics may expect to find employment at the entry or beginning technician level in those local industries which normally employ highly skilled people to service and maintain the complex electronics equipment and systems used in modern industry. These industries may use automated process and production equipment, complex business and data processing systems, computer data terminals and other communications systems. In addition, the beginning technician may be employed as an assistant to engineers and engineering technicians in the design and implementation of automated production equipment, the production of technical manuals, blueprints and drawings, and electronics photocopy.

Graduates of the one-year certificate program in Electronics may elect to continue studies for the Associate in Science degree in Electronic Engineering Technology.

<b>General Education</b>	<b>Associate In Science</b>	<b>Technical Certificate In Electronics</b>
*Communications .....	3	3
*General Education Elective .....	3	
*Humanities .....	3	
*Mathematics — Natural Science .....	3	
*Social Science .....	<u>3</u>	
	credit hours	<u>3</u>
	15	

#### Professional and Other Required Courses

COC 2001	Computer Concepts .....	3	
ENC 2315	Technical Report Writing .....	3	3
ETD 1100C	Engineering Drawing .....	3	
ETE 1010	D/C Theory and Circuits .....	3	3
ETE 1020	A/C Theory and Circuits .....	3	3
ETE 2101	Electronics I .....	3	3
ETE 2111	Electronics II .....	3	3
ETE 2112	Electronics III .....	3	3
ETE 2121	Advanced Electronic Circuit Analysis .....	3	3
ETE 2141	Semi-conductor Circuit Design .....	3	
ETE 2527	Electrical-Electronic Control Systems .....	3	
ETE 2633C	Computer Logic Circuits .....	3	
ETE 2680C	Microprocessors .....	3	3
ETI 1700	Industrial Safety .....	3	3
MAC 1104	College Algebra .....	3	3
MTB 1322	Technical Math II .....	3	3
	or		
MAC 1114	College Trigonometry .....	4	
MTB 2323	Technical Math III .....	3	
	or		
MAC 1311	Calculus with Analytic Geometry I .....	<u>4</u>	
		credit hours	<u>51</u>
			<u>33</u>
*Refer to AS degree General Education Requirements			
**Approved Electives:		Total credit hours	<u>66</u>
			<u>36</u>

Any course included in any college credit Engineering Technology Program or one of the following:

	credit hours		credit hours
BUL 2111	3	ETI 1121	3
ETE 1001	3	ETI 1122	3
GEB 1011	3		

NOTE: Students are advised to refer to individual course descriptions for prerequisites.

The program director may specify some curriculum modifications. No changes or course substitutions will be made without the approval of the program director.

### Mechanical Engineering Technology

The objective of this program is to prepare the student for a career as an engineering aide or technical assistant in numerous specialty areas associated with mechanical engineering or technology.

A student will be considered as selected for this program when the student has an Associate in Science degree advising sheet signed by the program director. Students with an inadequate mathematics background will be required to enroll in MAT 1024, Elementary Algebra, and MAT 1033, Intermediate Algebra.

The Mechanical Engineering one-year certificate program is designed to prepare students to work as "engineering aides" in various mechanical engineering areas. The aide may work under the supervision of a mechanical engineer or a trained technician. The aide may complete drawings from sketches, prepare working drawings, work in production control, safety department, or in the maintenance department of a manufacturing or industrial organization.

Students completing the certificate program may elect to continue studies for the Associate in Science degree in Mechanical Engineering Technology.

	Associate In Science	Technical Certificate In Mechanical Engineering
<b>General Education</b>		
*Communications .....	3	3
*General Education Elective .....	3	
*Humanities .....	3	
*Mathematics — Natural Science .....	3	
*Social Science .....	<u>3</u>	
	credit hours 15	<u>3</u>
 <b>Professional and Other Required Courses</b>		
COC 2001 Computer Concepts .....	3	3
EGN 1130C Descriptive Geometry .....	3	
ENC 2315 Technical Report Writing .....	3	3
ETD 1100C Engineering Drawing .....	3	3
ETD 1645C Mechanical & Electrical Drafting .....	3	3
ETG 2504C Engineering Mechanics .....	4	4
ETG 2535C Testing & Strength of Materials .....	4	
ETI 1421C Engineering Materials & Processes .....	4	4
ETI 1700 Industrial Safety .....	3	3
ETI 2440 Industrial Design .....	3	
ETI 2681 Industrial Supervision .....	3	
ETM 2221 Elements of Applied Energy .....	3	
ETM 2310 Fluid Mechanics .....	3	
MAC 1104 College Algebra .....	3	3
MTB 1322 Technical Math II .....	3	3
**Professional Course Elective .....	<u>3</u>	
	credit hours 51	<u>29</u>
	<u>66</u>	<u>32</u>
	Total credit hours 66	32

\*Refer to AS degree General Education Requirements

\*\*Approved Electives:

Any course included in any college credit Engineering Technology Program or one of the following:

	credit hours		credit hours
BUL 2111 Business Law .....	3	ETI 1121 Introduction to Non-destructive Testing .....	3
ETE 1001 Fundamentals of General Electricity .....	3	ETI 1122 Non-destructive Testing: Liquid Penetrants and Magnetic Particles .....	3
GEB 1011 Introduction to Business .....	3		

NOTE: Students are advised to refer to individual course descriptions for prerequisites.

The program director may specify some curriculum modifications. No changes or course substitutions will be made without the approval of the program director.

### Printing/Graphic Arts

The two-year program in Printing/Graphic Arts is designed to provide the student with a working knowledge of each of six major areas of the printing industry, and then to develop in the student occupational skills in the one area or process in which the student demonstrates aptitude and interest.

Lecture courses and hands-on laboratory experience will be provided for training in Hand and Machine Composition and Form Make-up; Letterpress Press Operation and Form Lockup; Cold Typesetting and Pasteup; Camera Operation and Film Processing; Negative Stripping and Offset Platemaking; and Offset Press Operation and Related Bindery Functions.

<b>General Education</b>	<b>Associate In Science</b>		
*Communications .....	3	**ARV 2234 Camera Operation and Film Processing .....	3
*Social Science .....	3	***ARVA 2241C Advanced Camera Operation and Film Processing .....	5
*Humanities .....	3	**ARV 2250 Negative Stripping and Offset Platemaking .....	3
*Mathematics — Natural Science .....	3	***ARVA 2251 Advanced Stripping and Offset Platemaking .....	5
*General Education Electives .....	<u>6</u>	**ARV 2253 Offset Press Operation .....	3
credit hours	18	***ARVA 2254 Advanced Offset Press Operation .....	5
<b>Professional and Other Required Courses</b>			
ARV 1200 Theory of Printing Processes ..	5	**ARV 2256 Letterpress Press Operation and Lockup .....	3
ARV 1201 Printing Processes Lab .....	4	***ARVA 2257 Advanced Letterpress Operation and Lockup .....	5
ARV 1203 Layout and Design .....	3	ARV 2945 Practicum .....	6
ARV 1207 Theory of Lithographic Processes .....	5	HES 2400 Standard First Aid and Personal Safety .....	2
ARV 1209 Lithographic Processes Lab ..	4	SES 1101 Beginning Typewriting II .....	<u>3</u>
ARVA 1260 Graphic Arts Estimating .....	3	credit hours	<u>43</u>
**ARV 2225 Cold Type Typesetting and Pasteup .....	3	Total credit hours	<u>61</u>
***ARVA 2226 Advanced Cold Type Typesetting and Pasteup .....	5		
**ARV 2230 Hand and Machine Composition and Form Makeup ..	3		
***ARVA 2231 Advanced Compositional Makeup .....	5		

\*Refer to AS degree General Education Requirements

\*\*Students are required to select one of these courses for three credits.

\*\*\*Students are required to select one of these courses for five credits.

The program director may require additional courses or make substitutions required to meet the needs of students.

### X-Ray Engineering Technology

The objective of this program is to prepare a student for a career in the medical or industrial field as a technologist specializing in the use, installation, calibration, and maintenance of radiologic equipment.

A student will be considered as selected for this program when the student has an Associate in Science degree advising sheet signed by the program director. Students with an inadequate mathematics background will be required to enroll in MAT 1024 Elementary Algebra, and MAT 1033 Intermediate Algebra.

<b>General Education</b>	<b>Associate In Science</b>		
*Communications .....	3	*Mathematics — Natural Science .....	3
*General Education Elective .....	3	*Social Science .....	<u>3</u>
*Humanities .....	3	credit hours	15

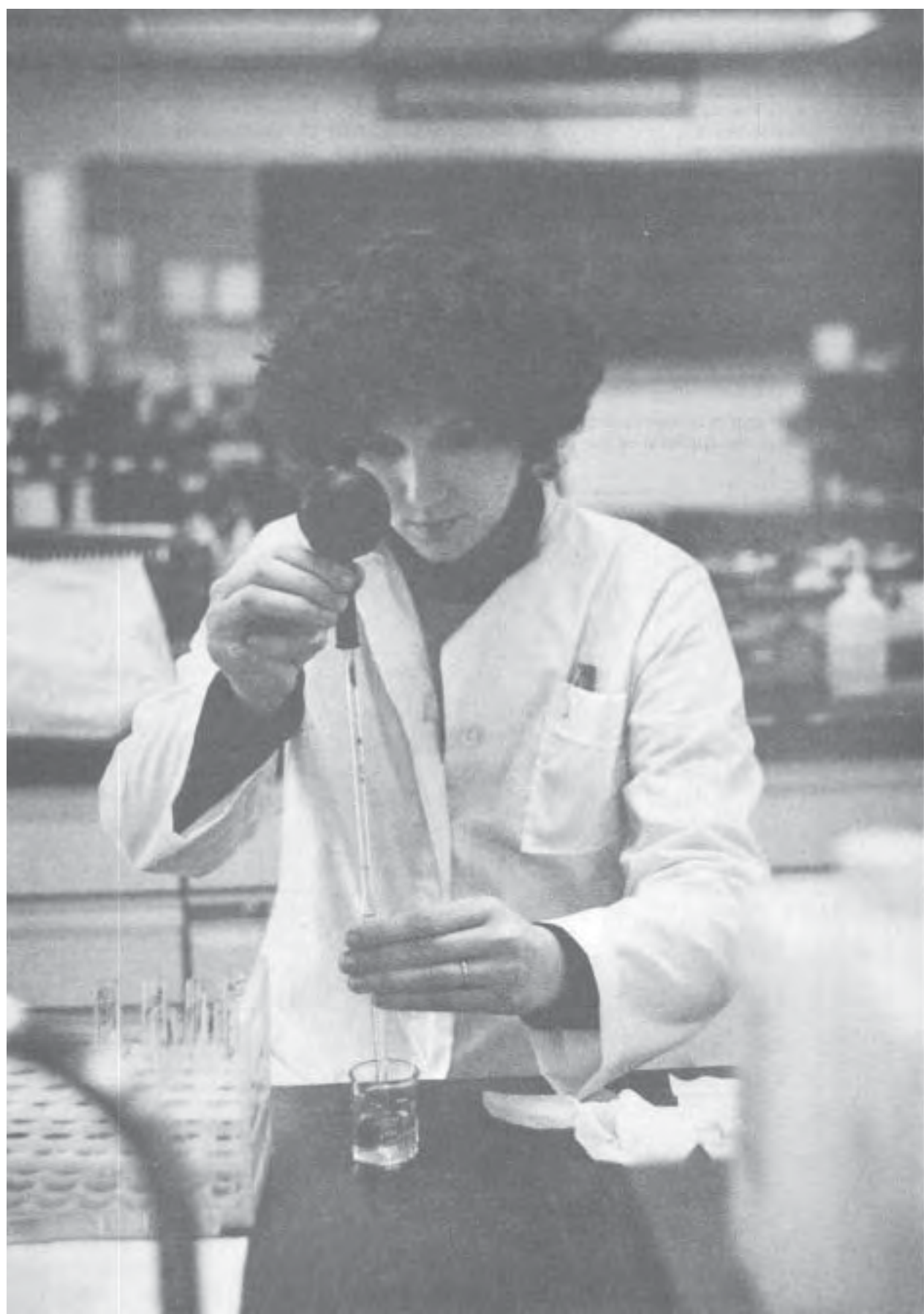
**Professional and Other Required Courses**

ENC 2315	Technical Report Writing	3	ETG 2202C	X-Ray Technology II	3
ETD 1100C	Engineering Drawing	3	ETG 2204C	X-Ray Technology III	3
ETE 1010	D/C Theory and Circuits	3	ETG 2205C	X-Ray Technology IV	3
ETE 1020	A/C Theory and Circuits	3	ETI 1700	Industrial Safety	3
ETE 2101	Electronics I	3	MAC 1104	College Algebra	3
ETE 2111	Electronics II	3	MTB 1322	Technical Math II	3
ETE 2112	Electronics III	3	or		
ETE 2527	Electrical-Electronic Control Systems	3	MAC 1114	College Trigonometry	4
ETE 2633C	Computer Logic Circuits	3		credit hours	<u>51</u>
ETE 2680C	Microprocessors	3		Total credit hours	<u>66</u>
ETG 1201C	X-Ray Technology I	3			

\*Refer to AS degree General Education Requirements

NOTE: Students are advised to refer to individual course descriptions for prerequisites.

The program director may specify some curriculum modifications. No changes or course substitutions will be made without the approval of the program director.



## HEALTH EDUCATION

### Dental Hygiene

The program in Dental Hygiene offers the student an opportunity to learn the technical and clinical skills of dental hygiene. The curriculum includes academic, technical, and clinical courses. Upon completion of the program, the student is prepared to take the dental hygiene licensure examinations. Upon successful completion of these examinations, the graduate will be licensed to practice in the field in dental hygiene.

One class is admitted annually to this two-year AS degree program. Due to facility requirements and accreditation standards, admission to the program is limited. Applicants must show evidence of good health and have an earned high school diploma or GED Certificate. College preparatory biology and chemistry are requirements for admission to the Dental Hygiene Program. A background of science and mathematics and good manual dexterity are strongly recommended. Continuation in the program's second year is dependent upon maintaining a 2.00 average in the first year. A grade of C or above must be maintained in all Dental Hygiene courses. Present program of studies is subject to change. Dental Hygiene is a limited admissions program.

An application for admission to the program must include the following:

1. Application to Florida Junior College at Jacksonville.
2. Application to the Dental Hygiene Program.
3. High School transcript or copy of General Education Development (GED) test scores.
4. College transcript (if any college work has been attempted).
5. Official copy of Dental Hygiene Aptitude Test Scores.
6. Official copy of California Achievement Test (CAT).

Students admitted to the program must present a report of a complete physical examination made not more than 30 days prior to the enrollment for the first dental hygiene course.

Information may be obtained by contacting the Director of Dental Programs, North Campus, Florida Junior College at Jacksonville concerning program requirements and admission procedures.

Any students who have academic deficiencies as determined by the program director will be scheduled into additional appropriate courses for correction of those deficiencies. This assessment may occur prior to or during the program.

General Education	Associate in Science	Professional and Other Required Courses	
APB 2190C Human Anatomy and Physiology I .....	3	DEH 1000C Principles of Dental Hygiene ..	4
APB 2191C Human Anatomy and Physiology II .....	3	DEH 1001 Clinical Dental Hygiene I ...	5
CHM 1040C, 1041C Introductory Chemistry .....	8	DEH 1701 Dental Health Education ....	3
ENC 1103 English Composition I .....	3	DEH 1802C Clinical Dental Hygiene II ...	5
MCB 2013C Microbiology .....	4	DEH 2101 Oral Histology and Embryology .....	2
PSY 1012 General Psychology .....	3	DEH 2303 Pharmacology .....	2
SPC 1010 Fundamentals of Speech ....	3	DEH 2401 Oral Pathology .....	2
SSI 1120 Origins of American Society II .....	3	DEH 2600 Advanced Periodontics .....	2
*Humanities .....	3	DEH 2702 Community Dental Health ..	2
credit hours	33	DEH 2804C Clinical Dental Hygiene III ..	5
		DEH 2806C Clinical Dental Hygiene IV ..	5
		DEH 2930 Dental Hygiene Seminar I ...	1
		DEH 2931 Dental Hygiene Seminar II ..	1
		DES 1000C Oral Anatomy .....	3
		DES 1100C Dental Materials & Assisting ..	3
		DES 1201C Dental Radiology .....	3
		HUN 1001 Principles of Nutrition .....	3
		credit hours	<u>51</u>
		Total credit hours	<u>84</u>

\*Refer to AS degree General Education Requirements

## Dental Assisting

This is a one-year certificate program that will enable the student to demonstrate skills in dental assisting and the expanded duty functions of the dental auxiliary procedures, such as x-ray technique, dental material manipulation and identification, and the use and sterilization of dental instruments. Chairside assisting, application and use of medicaments, and assisting in the care of dental patients are also included. This program will qualify the graduate to take the national examination to become a Certified Dental Assistant. A background in science and good manual dexterity are recommended. Applicants must show evidence of good health and have an earned high school diploma or GED Certificate.

Dental Assisting is a limited-admission program. The program admits students once a year in the Fall Term.

An application for admission to the program must include the following:

1. Application to Florida Junior College at Jacksonville.
2. Application to the Dental Assisting Program.
3. High School transcript or copy of General Education Development (GED) test.
4. College transcript (if any college work has been attempted).
5. Crawford Small Parts Dexterity Test Score.
6. California Achievement Test Score.

Students admitted to the program must present a report of a complete physical examination made not more than 30 days prior to the enrollment for the first dental assisting course.

Information may be obtained by contacting the Director of Dental Programs, North Campus, Florida Junior College at Jacksonville, concerning program requirements and admission procedures.

Any students who have academic deficiencies as determined by the program director will be scheduled into additional appropriate courses for correction of those deficiencies. This assessment may occur prior to or during the program.

<b>General Education</b>	<b>Technical Certificate In Dental Assisting</b>	<b>Professional and Other Required Courses</b>	
APB 2190C Human Anatomy and Physiology I .....	3	DEA 1000 Introduction to Practice .....	1
MCB 2013C Microbiology .....	4	DEA 1020 Preclinical Orientation .....	2
PSY 1012 General Psychology .....	3	DEA 1100 Science for Dental Assistants ..	2
SPC 1010 Fundamentals of Speech .....	3	DEA 2210 Office Management .....	2
*Communications .....	3	DEA 2800 Clinical Practice I .....	2
	<u>3</u>	DEA 2801 Clinical Practice II .....	2
credit hours	16	DEA 2802 Clinical Practice III .....	2
		DEA 2803 Clinical Practice IV .....	3
		DES 1102 Dental Materials and Laboratory .....	2
		DES 1200C Dental Radiology .....	2
		HES 1000 Personal and Community Health .....	3
		HUN 1001 Principles of Nutrition .....	3
		SES 2335 Business Communications ...	<u>3</u>
		credit hours	<u>29</u>
		Total credit hours	<u>45</u>

\*Refer to AS degree General Education Requirements

## Emergency Medical Technology

The program is a combination of general education, technical education and clinical skills. This process offers a student the opportunity to learn the technical skills of crisis emergency care necessary to support life.

Any students who have academic deficiencies, determined by the program director, will be scheduled into additional appropriate courses for correction of these deficiencies. This assessment may occur either prior to or during the program.

During the clinical phase the student will observe a special calendar, which is not identical with the college's published calendar. The schedule is designed to meet minimum requirements promulgated by the Health Program Office–Emergency Medical Services Section, of the State of Florida.

Emergency Medical Technology courses must be taken in sequence with the designated prerequisite and corequisite courses. A grade of 2.00 must be earned in each professional course, Human Anatomy & Physiology, Microbiology and Chemistry. A cumulative GPA of 2.00 must be achieved prior to scheduling EMT 2287 and must be maintained throughout the remainder of the program.

<b>General Education</b>		<b>Associate In Science</b>	<b>Professional and Other Required Courses</b>	
AMH 2010	United States History I or		EMT 1101	Basic Emergency Medical Technology ..... 6
EUH 1001	Western Civilization or		EMT 1185C	Fundamentals of Emergency Medical Care I ..... 6
POS 2041	American Federal Government or		EMT 2208	Fundamentals of Emergency Medical Care II ..... 6
SSI 1120	Origins of American Society II ..... 3		EMT 2287	Advanced Emergency Medical Technology ..... 6
APB 2190C, 2191C	Human Anatomy & Physiology I & II ..... 6		EMT 2806	Practicum in Emergency Medical Technology ..... 6
CHM 1020	Chemistry for Liberal Arts ... 3			credit hours <u>30</u>
ENC 1103	English Composition I ..... 3			
ENC 1136	English Composition II ..... 3			Total credit hours 61
MCB 2013C	Microbiology ..... 4			
PSY 1012	General Psychology ..... 3			
SOC 2000	Introductory Sociology ..... 3			
*Humanities	..... 3			
	credit hours	<u>31</u>		

\*Refer to AS degree General Education Requirements

## Medical Laboratory Technology

The goal of the program in Medical Laboratory Technology is to offer the student an opportunity to learn the technical skills of medical laboratory science. The curriculum includes academic, technical, and clinical courses.

Admission to the program for medical laboratory technicians is limited. Applicants must show evidence of good health and have an earned high school diploma or GED Certificate. Program admission procedures may be obtained from the Director of Medical Laboratory Technology, North Campus. Prior to registration for each term, all students must have academic advisement by the program director.

Students who have academic deficiencies and/or requirements as determined by the program director, will be placed in additional appropriate courses for the correction of these deficiencies and/or requirements. This assessment may occur either prior to or during the program.

Students must earn a grade of C or better in the medical laboratory courses and complete all campus-based courses with a grade point average of 2.00 or better before entering the clinical phase of their education. During the student's clinical phase, a special calendar which is not identical to the College's published calendar, will be observed. This will conform to the clinical facilities schedule and the requirements of the National Association for Accrediting Clinical Laboratory Science, AMA Council on Medical Education.



In order to be employed in a medical laboratory in Florida, program graduates must pass the Florida State Licensure Examination for Medical Technicians. Program graduates are eligible for the Florida State Licensure Examination for Medical Laboratory Technologists.

<b>General Education</b>	<b>Associate In Science</b>	<b>Professional and Other Required Courses</b>	
**CHM 1040C Introductory Chemistry . . .	4	MLS 1010C Hematology . . . . .	6
**CHM 1041C Introductory Chemistry . . .	4	MLS 1400C Medical Microbiology . . . . .	6
MAC 1104 College Algebra or		MLS 2530 Serology and Blood Banking . . .	6
MAT 1033 Intermediate Algebra . . . . .	3	MLS 2600C Principles of Clinical Instrumentation . . . . .	5
MCB 2013C Microbiology . . . . .	4	MLS 2610C Clinical Chemistry . . . . .	6
*Communications . . . . .	3	MLS 2802C Clinical Practicum I . . . . .	9
*Humanities . . . . .	3	MLS 2803 Clinical Diagnosis . . . . .	5
*Social Science . . . . .	3	MLS 2804 Clinical Practicum II . . . . .	<u>12</u>
	<u>24</u>		<u>55</u>
	credit hours		credit hours
			<u>79</u>
		Total credit hours	

\*Refer to AS degree General Education Requirements  
 \*\*Students who qualify may substitute CHM 1045C and CHM 1046C.

**Radiologic Technology**

The purpose of this program is to offer advanced training and supporting science and general education to persons who are currently Registered Radiologic Technologists. It is an advanced Associate in Science degree program in Radiologic Technology. Only persons currently on the American Registry of Radiologic Technologists are eligible to enroll in it. Upon enrollment and presentation of current ARRT Registry, degree-seeking students will be granted 30 semester hours toward the total of 63 semester hours required for the degree.

Specific information on program admission requirements and costs can be obtained from the Coordinator for Radiologic Technology, North Campus.

<b>General Education</b>	<b>Associate In Science</b>	<b>Professional and Other Required Courses</b>	
*Social Science . . . . .	3	RTE 2202 Radiologic Management and Education . . . . .	3
*Humanities . . . . .	3	RTE 2587 Advanced Developments in Radiologic Technology . . . . .	3
*Mathematics . . . . .	3	Credits Granted for ARRT Registry . . . . .	30
*Communications . . . . .	3	**Approved Electives . . . . .	<u>9</u>
APB 2190C Human Anatomy and Physiology I . . . . .	3		credit hours <u>45</u>
APB 2191C Human Anatomy and Physiology II . . . . .	<u>3</u>		<u>63</u>
	18		Total credit hours

\*Refer to AS degree General Education Requirements  
 \*\*Approved Electives:

SOP 1002 Human Relations . . . . .	3	COC 1300 Introductory Computer Concepts . . . . .	3
MCB 2013C Microbiology . . . . .	4	EMT 1101 Basic Emergency Medical Technology . . . . .	6
PHY 1020 Physics for Liberal Arts . . . . .	3		
CHM 1020 Chemistry for Liberal Arts . . . . .	3		

## Respiratory Therapy

This program is designed to help the student to learn the skills of a respiratory therapist. Graduates of this program are eligible to take the national examination, given by the National Board for Respiratory Therapy, to become Registered Therapists.

Admission to this two-year AS degree program is limited. Applicants must have an earned high school diploma or GED Certificate. A background in science and mathematics is strongly recommended.

The Respiratory Therapy Program admits students one time per year in the Fall Term; specific information on program requirements, admission procedures and dates, and costs may be obtained by contacting the coordinator for Respiratory Therapy, North Campus.

The curriculum includes technical courses, clinical practicum, and academic courses. Graduation from the program is dependent upon receiving a grade of C or above in all required science, mathematics, and respiratory therapy courses.

<b>General Education</b>	<b>Associate In Science</b>	<b>Professional and Other Required Courses</b>	
APB 2190C, 2191C Human Anatomy & Physiology I & II .....	6	APB 1260 Cardiopulmonary Anatomy and Physiology .....	3
CHM 1040C Introductory Chemistry .....	4	APB 2293 Pulmonary Pathology .....	3
ENC 1103 English Composition I .....	3	APB 2650 Pharmacology for the Respiratory Therapist .....	2
MAT 1024 Elementary Algebra or		RET 1024 Fundamentals of Respiratory Therapy .....	3
MAT 1033 Intermediate Algebra .....	3	RET 1244 Emergencies and the Respiratory Therapist .....	3
MCB 2013C Microbiology .....	4	RET 1264 Respiratory Therapy Advanced Equipment .....	3
PHY 1020 Physics for Liberal Arts .....	3	RET 1276 Respiratory Therapy Nursing Care .....	3
*Humanities .....	3	RET 1414 Arterial Blood Gases and Pulmonary Function Studies .....	4
*Psychology .....	3	RET 2272 Respiratory Therapy Clinical Applications .....	4
*Social Science .....	3	RET 2273C Clinical Seminar In Intensive Respiratory Care I .....	2
credit hours	32	RET 2274L Respiratory Intensive Care Practicum I .....	7
		RET 2284C Clinical Seminar In Intensive Respiratory Care II .....	2
		RET 2285L Respiratory Intensive Care Practicum II .....	7
		credit hours	46
		Total credit hours	78

\*Refer to AS degree General Education Requirements

## Technical Nursing

The program of study is a combination of General Education and Technical Nursing Education. Nursing courses are based on the concept of the Wellness-Illness Continuum. It is this concept that the faculty accepts as the framework for unifying all experiences within the program. Graduates of the program are prepared to function as beginning Technical Nurse Practitioners in giving direct care to patients. Upon completion of the program, graduates are awarded an Associate in Science Degree in Technical Nursing and are eligible to write the State Board Test Pool Examination to qualify for licensure to practice as a Registered Nurse.

Enrollment in the Technical Nursing Program is limited. Applicants are admitted into the program three times a year: fall term, winter term, spring/summer term. A brochure outlining costs, admission requirements, cut-off dates, and procedures is available from the nursing counselor, North Campus, and from the Student Development offices at North, South, Kent, or the Downtown Campuses. Approximately three weeks prior to the beginning of each term, letters are sent to each applicant indicating admission, accepted for alternate, or not accepted. Both single and married men and women may be admitted to the program. There is no age limit.

#### Application Prerequisites:

Applicants to the Technical Nursing Program must:

1. Have an earned high school diploma or GED Certificate.
2. Be accepted for admission to Florida Junior College at Jacksonville, be currently enrolled at FJC, or a former student of FJC.
3. Have completed a course in chemistry with a minimum grade of C, in high school or college.
4. Have six college credits in anatomy and physiology with a minimum grade of C earned.

NOTE: It is recommended that students have a conference with the nursing counselor prior to applying to the Nursing Program.

General Education	Associate In Science	Professional and Other Required Courses	
APB 2190C, 2191C Human Anatomy & Physiology I & II .....	6	NUR 1040C Nursing Process I — Fundamentals of Nursing .....	10
DEP 2004 Human Growth & Development .....	3	NUR 1200C Nursing Process II — Medical-Surgical Nursing .....	10
ENC 1103, 1136 English Composition I & II .....	6	NUR 2133C Nursing Process IIIa — Nursing Care of the Childbearing Family .....	6
MCB 2013C Microbiology .....	4	NUR 2120C Nursing Process IIIb — Nursing Care of Children .....	6
PSY 1012 General Psychology .....	3	NUR 2220C Nursing Process IVa — Medical-Surgical Nursing Care of the Adult Patient .....	9
SOC 2000 Introductory Sociology .....	3	NUR 2310C Nursing Process IVb — Psychiatric Nursing .....	<u>3</u>
*Humanities .....	3	credit hours	<u>44</u>
*Social Science .....	<u>3</u>	Total credit hours	<u>75</u>
credit hours	31		

\*Refer to AS degree General Education Requirements

## HOME ECONOMICS EDUCATION

### Child Care Services

Students completing the program will have had the opportunity to observe and participate in the Child Care Laboratory at the North Campus. Graduates of the program will be able to serve the community through acquired skills which will qualify them to work with young children.

Child Care students are expected to read at 10.5 grade level as measured by a standard reading test approved by the program director. Any students who have academic deficiencies, as determined by the program director, will be scheduled into additional appropriate courses for correction of these deficiencies. This assessment may occur either prior to or during the program.

	Associate In Science	Technical Certificate In Child Care Services	Technical Certificate In Residential Child Care Services
<b>General Education</b>			
BSC 1011C Principles of Biology .....	4		
DEP 2004 Human Growth and Development .....	3		
***DEP 2102 Child Psychology .....	3		
ENC 1103 English Composition I .....	3		3
ENC 1136 English Composition II .....	3		
GLY 1000 Earth and Space Science .....	3		
MUL 1011 Music Appreciation .....	3		
PSY 1012 General Psychology .....	3		
REA 1305 Developmental Reading .....	3	3	3
*Humanities .....	3		
**Mathematics .....	3		
**Social Science .....	3		
	37	3	6
<b>Professional and Other Required Courses</b>			
CHD 1220 Child Growth & Development I .....	3	3	3
CHD 1230 Child Growth & Development II .....	3	3	3
***CHD 1850 Training of Residential Child Care Workers I .....	3		3
***CHD 1851 Training of Residential Child Care Workers II .....	3		3
EDG 2940 Observing & Recording Child Behavior .....	6	6	6
EDG 2941 Supervised Student Participation .....	6	6	
***EEC 1001 Introduction to Early Childhood Education ...	3	3	
***EEC 1201 Overview of Early Childhood Curriculum I ...	3	3	
***EEC 1202 Overview of Early Childhood Curriculum II ...	3	3	
	27	27	18
	64	30	24

\*Any course in Humanities, Section A, General Education Requirements.

\*\*Refer to AS degree General Education Requirements

\*\*\*For Associate in Science degree students wishing training as residential child care workers or foster parents, CHD 1850, CHD 1851, and DEP 2102 must be taken as a block in substitution for the three EEC courses.

## Fashion Merchandising

This is a program designed to prepare students for entering the fashion retailing industry. Employment may be secured in occupations such as salesperson, assistant department manager, display artist, fabric specialist, assistant buyer, department manager, and mid-management positions in sales supporting areas. The program will include instruction in career orientation, merchandising functions and techniques, garment construction, textile performance, and general business practices and procedures along with practical on-the-job work experiences.

<b>General Education</b>	<b>Associate In Science</b>	<b>Professional and Other Required Courses</b>	
PSY 1012 General Psychology .....	3	CTE 1310 Basic Clothing Construction ..	3
*Communications .....	3	CTE 1401 Basic Textiles .....	3
*Humanities .....	3	CTE 2851 Fashion Sales Promotion ....	3
*Mathematics — Natural Science .....	3	MKA 1402, 1403 Fashion Merchandising	
*Social Science .....	3	I & II .....	6
credit hours	15	MKA 2364 Fashion Merchandising	
		Practicum/Seminar I .....	4
		MKA 2366 Fashion Merchandising	
		Practicum/Seminar II .....	4
		MKA 2367 Fashion Merchandising	
		Practicum/Seminar III .....	4
		**Approved Electives .....	18
		credit hours	45
		Total credit hours	60

\*Refer to AS degree General Education Requirements

\*\*Approved Electives:

	<b>credit hours</b>		<b>credit hours</b>
ACC 1009, 1029 Accounting .....	6	GEB 1011 Introduction to Business .....	3
or		HME 1200 Home Management .....	3
ACC 2001 Principles of Accounting I .....	3	MAN 2000 Principles of Management .....	3
BUL 2111 Business Law .....	3	MAN 2300 Personnel Management .....	3
COA 1100 Consumer Decisions .....	3	MAR 1101 Salesmanship .....	3
CTE 1402 Advanced Textiles .....	3	QMB 1001 Business Mathematics .....	3
FAD 1230 Dynamics of Modern Living .....	3	SPC 1010 Fundamentals of Speech .....	3

The program director may require additional courses or make substitutions required to meet the needs of students.

## Food Service Technology

This competency-based program is designed to prepare students to seek employment in the food service industry at the mid-management level in restaurants, cafeterias, extended care facilities, schools, hospitals, and fast food service operations. Competencies needed may be acquired through a combination of theory, laboratory and community experiences. Students may acquire credits for demonstrated specified competencies acquired through previous education and/or experience.

Students must purchase individualized instructional modules from the book store.

<b>General Education</b>	<b>Associate In Science</b>	<b>Technical Certificate In Food Service Technology</b>
*Communications .....	3	3
*Humanities .....	3	
*Mathematics — Natural Science .....	3	
*Social Science .....	3	
*General Education Elective .....	<u>3</u>	<u>    </u>
	credit hours 15	3
 <b>Professional and Other Required Courses</b>		
FOS 1201 Sanitation and Safety .....	3	3
FSS 1004 Orientation to Food Service Technology .....	3	3
FSS 1100 Menu Design and Food Merchandising .....	3	3
FSS 1120 Food and Beverage Purchasing .....	3	3
FSS 1201 Basic Food Preparation .....	3	3
FSS 1221 Quantity Food Production .....	3	3
FSS 1410 Food Service Equipment/Facility Planning .....	3	3
FSS 2300 Supervision and Personnel Management .....	3	3
FSS 2501 Food and Beverage Control .....	3	3
FSS 2945 Food Service Internship .....	9	
HUN 1001 Principles of Nutrition .....	3	3
**Approved Electives .....	<u>6</u>	<u>6</u>
	credit hours 45	<u>36</u>
	<u>        </u>	<u>        </u>
	Total credit hours 60	39

\*Refer to AS degree General Education Requirements

\*\*Approved Electives:

	<b>credit hours</b>
ACC 1009 General Accounting I .....	3
COA 1100 Consumer Decisions .....	3
DIE 1201 Therapeutic Nutrition .....	3
FAD 1230 Dynamics of Modern Living .....	3
FSS 1246 Baking .....	3
FSS 1248 Garde Manger I .....	3
FSS 1249 Garde Manger II .....	3
FSS 1250 Food and Beverage Service .....	3
HME 1200 Home Management .....	3
QMB 1001 Business Mathematics .....	3

The program director may require additional courses or make substitutions as required to meet the needs of students.

**Interior Design Technology**

The program includes a combination of theory and laboratory and community experiences for the development of competencies in all phases of interior design technology. Concepts of the program include characteristics and performance of textiles; selection, arrangement and maintenance of furniture and accessories; art principles; decorating and design skills; materials and sources; exhibition design; architectural design, history of interiors and business aspects. Management, safety, free enterprise, consumer and economic education are also included. Application of communication, computation and human relations skills are an integral part of the instructional program. Instruction related to rules, regulations and legislation will be included.

<b>General Education</b>	<b>Associate In Science</b>	<b>Professional and Other Required Courses</b>	
*Communications .....	3	IND 1100 History of Interiors I .....	3
*Humanities .....	3	IND 1130 History of Interiors II .....	3
ARH 1000 Art Appreciation .....	3	IND 1001 Interior Design I .....	3
*Math/Natural Science .....	3	IND 1200 Interior Design II .....	3
*Social Science .....	3	IND 2210 Interior Design III (Residential) .....	3
SOP 1002 Human Relations .....	3	IND 2220 Interior Design IV (Commercial)) .....	3
credit hours	18	CTE 1401 Basic Textiles .....	3
		IND 1420 Materials and Sources .....	3
		ETD 1100C Engineering Drawing .....	3
		ARC 2120C Architectural Drafting .....	3
		IND 2300 Interior Design Presentations I .....	3
		IND 2305 Interior Design Presentations II .....	3
		IND 2940 Interior Design Internship and Seminar .....	6
		**Approved Professional Electives .....	3
	<b>credit hours</b>	credit hours	<b>45</b>
QMB 1001 Business Math .....	3		
CTE 1402 Advanced Textiles .....	3		
HME 1200 Home Management .....	3		
		Total credit hours	63

\*Refer to AS degree General Education Requirements  
 \*\*Approved Professional Electives:

## PUBLIC SERVICE EDUCATION

### Criminal Justice Education—Corrections

This program is under the guidance of an advisory committee composed of community leaders and administrators from local criminal justice agencies. This assures that the student will receive modern, up-to-date instruction that is relevant to current practices in the field.

Law enforcement courses and general education subjects are offered on a day and evening interchangeable basis.

The program director may require and/or approve additional courses for program completion or may approve the substitution of courses based on student needs.

<b>General Education</b>	<b>Associate in Science</b>
APB 1150 Life in Its Biological Environment .....	3
ENC 1005 Introduction to Composition or	
ENC 1103 English Composition I .....	3
HUM 2450 American Humanities .....	3
POS 2041 American Federal Government .....	3
POS 2112 State & Local Government .....	3
PSY 1012 General Psychology .....	3
SOC 2000 Introductory Sociology .....	3
SOC 2020 Social Problems .....	3
SOP 1002 Human Relations .....	<u>3</u>
	credit hours 27

### Professional and Other Required Courses

CCJ 1010 Introduction to Criminology .....	3
CCJ 1020 Introduction to Criminal Justice .....	3
CCJ 1030 Introduction to Criminal Behavior .....	3
CCJ 1300 Introduction to Corrections .....	3
CCJ 2220 State and Local Law — Criminal Law II .....	3
CCJ 2250 Constitutional Law — Criminal Law I .....	3
CCJ 2330 Probation, Pardon, and Parole .....	3
CCJ 2340 Introduction to Correctional Treatment .....	3
CCJ 2360 Introduction to Contemporary Practices in Corrections .....	3
CCJ 2500 Juvenile Delinquency .....	3
CCJ 2933 Introductions to Special Problems In Corrections .....	3
CJD 2310 Police Supervision .....	<u>3</u>
	credit hours <u>36</u>
	Total credit hours 63



## Criminal Justice Education—Law Enforcement

This program is under the guidance of an advisory committee composed of community leaders and administrators from local criminal justice agencies. This assures that the student will receive modern, up-to-date instruction that is relevant to current practices in the field.

Law enforcement courses and general education subjects are offered on a day and evening interchangeable basis.

The program director may require additional courses or make substitutions required to meet the needs of students.

A student may apply for and obtain a Certificate in Criminal Justice-Law Enforcement by completing the 12 law enforcement courses specified for that purpose hereafter under Professional and Other Required Courses.

		Associate In Science	Technical Certificate In Law Enforcement
<b>General Education</b>			
APB 1150	Life in its Biological Environment .....	3	
ENC 1005	Introduction to Composition or		
ENC 1103	English Composition I .....	3	
HUM 2450	American Humanities .....	3	
POS 2041	American Federal Government .....	3	
POS 2112	State and Local Government .....	3	
PSY 1012	General Psychology .....	3	
SOC 2000	Introductory Sociology .....	3	
SOP 1002	Human Relations .....	3	
	credit hours	24	
<b>Professional and Other Required Courses</b>			
CCJ 1010	Introduction to Criminology .....	3	
CCJ 1020	Introduction to Criminal Justice .....	3	3
CCJ 1030	Introduction to Criminal Behavior .....	3	3
CCJ 1400	Police Organization and Administration .....	3	3
CCJ 1420	Police Operations .....	3	3
CCJ 2220	State and Local Law — Criminal Law II .....	3	3
CCJ 2230	Evidence .....	3	3
CCJ 2250	Constitutional Law — Criminal Law I .....	3	3
CCJ 2500	Juvenile Delinquency .....	3	3
CCJ 2930	Seminar in Police Problems .....	3	3
CJD 2310	Police Supervision .....	3	3
CJT 2100	Criminal Investigation .....	3	3
CJT 2110	Introduction to Criminalistics .....	3	3
	credit hours	39	36
	Total credit hours	63	36

## Fire Science and Prevention

The Fire Science and Prevention Program is designed to provide training for persons who desire to enter the fire service; to seek employment in industrial fire protection, with insurance companies or with fire protection equipment companies; and to upgrade the professional status and intellectual competence of those currently employed in the fire service.

The program is under the guidance of an advisory committee composed of community leaders and administrators from local fire departments. This assures that the student will receive modern, up-to-date instruction that is relevant to current practices in the field.

Fire science and general education subjects are offered on a primary night and alternate night or day basis.

The program director may require additional courses or make substitutions required to meet the needs of students.

General Education		Associate In Science	AS Degree Option UNF Transfer	Technical Certificate In Fire Science and Prevention
CHM 1040C	Introductory Chemistry .....		4	
ENC 1005	Introduction to Composition or			
ENC 1103	English Composition I .....	3		
ENC 1103	English Composition I .....		3	
HUM 2450	American Humanities .....	3	3	
MAT 1024	Elementary Algebra .....	3		
MAC 1104	College Algebra** .....		3	
MAC 1114	College Trigonometry .....		3	
PHY 2053C	General Physics I .....		4	
POS 2041	American Federal Government .....	3	3	
POS 2112	State and Local Government .....	3		
PSC 1341	Physical Science .....	3		
PSY 1012	General Psychology .....	3	3	
SOC 2000	Introductory Sociology or			
SOP 1002	Human Relations .....	3		
SPC 1010	Fundamentals of Speech .....	3	3	
	credit hours	27	29	
<b>Professional and Other Required Courses</b>				
PHI 2100	Introduction to Logic .....		3	
FFP 1000	Introduction to Fire Science .....	3	3	3
FFP 1100	Fire Company Organization and Procedure .....	3		3
FFP 1110	Fire Operations .....	3		3
FFP 1203	Fundamentals of Fire Prevention .....	3		3
FFP 2240	Fire Investigation .....	3		3
FFP 2310	Fire Codes and Building Construction .....	3		3
FFP 2400	Fire Fighting Tactics and Strategy .....	3		3
FFP 2500	Flammable Hazardous Materials .....	3		3
FFP 2524	Explosive and Toxic Hazardous Materials .....	3		3
FFP 2600	Fire Fighting Equipment and Apparatus .....	3		3
FFP 2660	Rescue Practices .....	3		3
	Any nine of the above FFP courses not including FFP 1000 .....		27	
	credit hours	33 *	33	33
	Total credit hours	60	62	33

\*For the Associate in Science degree only, EMT 1101—Basic Emergency Medical Technology may be used to satisfy six hours of the requirements for 33 hours of FFP prefixed professional courses. If this option is selected, FFP 1000 must be taken and FFP 2660 may not also be taken for credit.

\*\*Students not having sufficient mathematics preparation may be required to take MAT 1024 and MAT 1033 before taking MAC 1104. In such cases total credit hours required for graduation will be increased.

## Legal Assistant

This program, under the guidance of an advisory committee of attorneys and legal assistants, is designed to prepare a student for a career as a lawyer's assistant in legal practice, or in various businesses, industries, or governmental agencies. Professional courses are taught by attorneys whenever possible, thereby assuring students of meaningful and direct instruction in specific areas of the law.

		<b>Associate In Science</b>
<b>General Education</b>		
	*Communications .....	3
	*Humanities .....	3
	*Mathematics — Natural Science .....	3
	*Social Science .....	<u>6</u>
	credit hours	15
 <b>Professional and Other Required Courses</b>		
ACC 1009	General Accounting I .....	3
ACC 1029	General Accounting II .....	3
BUL 2111	Business Law .....	3
LEA 1001	Introduction to Legal Technology .....	3
LEA 1013	Legal Writing and Research I .....	3
LEA 1014	Legal Writing and Research II .....	3
LEA 1101	Litigation .....	3
LEA 1151	Torts .....	3
LEA 1201	Real Property Law .....	3
LEA 1211	Wills, Trusts, and Probate .....	3
LEA 1311	Corporate Law .....	3
LEA 1501	Laws of Domestic Relations .....	3
**Approved Electives .....		<u>12</u>
	credit hours	<u>48</u>
	Total credit hours	<u>63</u>

\*Refer to AS degree General Education Requirements

\*\*Approved Electives:

		<b>credit hours</b>
BUL 2112	Business Law .....	3
COC 1300	Introductory Computer Concepts .....	3
— 1949	Cooperative Education Work Experience I .....	3
— 2949	Cooperative Education Work Experience II .....	3
LEA 1401	Law Office Management .....	3
LEA 1601	Criminal Law .....	3
LEA 1721	State and Federal Tax Law .....	3
PHI 2100	Introduction to Logic .....	3
SOP 1002	Human Relations .....	3

Courses other than those listed previously may be selected upon approval of the program director.

Students wishing to enter the program without prior experience in the legal field must successfully complete the General Education Requirements or have permission of the director before enrolling in any professional course in the Legal Assistant Program.

## Postal Service Management

This is a program providing postal employees with educational opportunities to enhance their managerial potential. This Associate in Science degree and certificate program under the guidance of an advisory committee offers college level training within the specific field of Postal Management as one means of achieving upward mobility within the Postal Service.

		Associate In Science	Technical Certificate In Postal Service Management
<b>General Education</b>			
ENC 1103	English Composition I .....	3	
SPC 1010	Fundamentals of Speech .....	3	3
*Humanities .....		3	
*Mathematics — Natural Science .....		3	
*Social Science .....		6	
		<u>18</u>	<u>3</u>
		credit hours	
<b>Professional and Other Required Courses</b>			
MAN 1392	Postal Management — Customer Service I .....	3	3
MAN 1394	Postal Management — Finance I .....	3	3
MAN 2000	Principles of Management .....	3	3
MAN 2393	Postal Management — Customer Service II .....	3	3
MAN 2394	Postal Management — Finance II .....	3	3
MAN 2395	Postal Management — Mail Processing I .....	3	3
MAN 2396	Postal Management — Mail Processing II .....	3	3
MAN 2397	Postal Management — Employee Relations (Personnel) .....	3	3
MAN 2398	Postal Management — Labor Relations .....	3	3
**Approved Electives .....		15	
		<u>42</u>	<u>27</u>
		credit hours	
		<u>60</u>	<u>30</u>
		Total credit hours	

\*Refer to AS degree General Education Requirements

\*\*Approved Electives:

		credit hours
ACC 1009	General Accounting I .....	3
ACC 1029	General Accounting II .....	3
ACC 2001	Principles of Accounting I .....	3
ACC 2021	Principles of Accounting II .....	3
ACC 2109	Intermediate Accounting I .....	3
ACC 2129	Intermediate Accounting II .....	3
BUL 2111	Business Law .....	3
BUL 2112	Business Law .....	3
COC 1300	Introductory Computer Concepts .....	3
ECO 2000	Foundations of the American Economy .....	3
ECO 2013	Principles of Economics I .....	3
ECO 2023	Principles of Economics II .....	3
GEB 1011	Introduction to Business .....	3
MAN 2300	Personnel Management .....	3
SOP 1002	Human Relations .....	3
SOP 1502	Dynamics of Behavior .....	3
STA 1014	Elementary Statistics .....	3

Elective courses other than those listed previously may be selected upon approval of program director.



## The Associate in Applied Science Degree and Technical Certificate

The objective of the Associate in Applied Science degree is to provide a more comprehensive and higher level of training than can be offered by the non-college credit occupational preparatory programs of study. Education here is designed to meet the training needs of the individual as indicated by industry needs. Professionals from industry are very instrumental in assessing community needs and serve on special advisory committees to assist FJC with meeting these needs.

The technical competencies acquired by the individual will enhance the ability of the graduate to comprehend and stay current with rapid change in technology and employment requirements of a chosen occupation. A certificate option is also available to provide the basic professional courses of the occupation.

Associate in Applied Science degree general education requirements and graduation requirements are the same as those for the Associate in Science degree.

Before a student may graduate, the student must have fulfilled all financial obligations to the College.

### Air Conditioning Technology

The objective of this program is to prepare the student for a career in the fields related to Air Conditioning Technology.

The two-year program in Air Conditioning Technology is designed to provide the student with a working knowledge of the air conditioning industry. A certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the air conditioning industry.

	Associate In Applied Science	Technical Certificate In Air Conditioning Technology
<b>General Education</b>		
*Social Science .....	3	
*Humanities .....	3	
*Math/Natural Science .....	3	
*Communications .....	3	3
*General Education Electives .....	3	
	credit hours 15	3
<b>Professional and Other Required Courses</b>		
EER 1000 Math for Electricians I .....	3	3
EER 1200 Math for Electricians II .....	3	3
EER 1100 Electrical Theory I .....	3	3
EER 1210 Electrical Theory II .....	3	3
EER 1030 Safety in the Electrical Trades .....	3	3
ACT 1020 Introduction to Air Conditioning and Refrigeration .....	4	4
ACT 2520 Air Conditioning and Refrigeration Piping .....	4	4
ACT 2050 Major Components of Air Conditioning Refrigeration .....	4	4
ACT 1000 Refrigerant Characteristics, Oils and Accessories .....	4	4
ACT 2620 Air Conditioning: Commercial and Residential .....	4	
ACT 2060 Psychrometrics and Heat Load Calculations .....	4	
ACT 2840 Air Conditioning Service and Maintenance .....	4	4
ACT 2850 Basic Air Conditioning Troubleshooting .....	4	4
ACT 1730 Basic Residential Air Conditioning .....	4	
	credit hours 51	39
	Total credit hours 66	42

\*Refer to AS degree General Education Requirements

## Auto Body & Fender Repair Technology

The objective of this program is to prepare the student for a career in the fields related to Auto Body & Fender Repair Technology.

The two-year program in Auto Body & Fender Repair Technology is designed to provide the student with a working knowledge of the auto body & fender repair industry. Certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the auto body & fender repair industry.

		Associate In Applied Science	Technical Certificate In Auto Body & Fender Repair Technology
<b>General Education</b>			
ENC 1005	Introduction to Composition .....	3	3
*Social Science	.....	3	
*Humanities	.....	3	
MGF 1113	College Math .....	3	
REA 1305	Developmental Reading .....	<u>3</u>	
	credit hours	15	3
<b>Professional and Other Required Courses</b>			
AER 2210	Auto Metal Damage Analysis and Repair .....	4	4
AER 1221	Auto Paint Formulas and Application .....	4	4
AER 2214	Auto Body Panel Replacement and Frames .....	4	4
AER 2241	Auto Glass Replacement, Alignment and Sheet Metal Adjustment ..	4	4
AER 2272	Advanced Auto Body Major Repair and Appraising .....	4	4
AER 1100	Auto Electrical System .....	4	4
AER 2171	Heating and Air Conditioning .....	4	4
AER 1120	Steering and Suspension Systems .....	4	4
AER 1131	Transmission-Drive Systems .....	4	4
AER 1271	Introduction to Automotive Body Shop Management .....	4	
AER 1162	Introduction to Automotive Parts Department Management .....	3	
**Approved	Professional Electives .....	<u>6</u>	
	credit hours	<u>49</u>	<u>36</u>
	Total credit hours	64	39

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

		credit hours
ACC 1009	General Accounting I .....	3
BUL 2111	Business Law .....	3
GEB 1011	Introduction to Business .....	3
MAR 1101	Salesmanship .....	3
PSY 1012	General Psychology .....	3

## Automotive Machine Shop

The objective of this program is to prepare the student for a career in the fields related to Automotive Machine Shop.

The two-year program in Automotive Machine Shop is designed to provide the student with a working knowledge of the automotive machine shop industry. Certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the automotive machine shop industry.

	<b>Associate In Applied Science</b>	<b>Technical Certificate In Automotive Machine Shop</b>
<b>General Education</b>		
*Social Science .....	3	
*Humanities .....	3	
*Math/Natural Science .....	3	
*Communications .....	3	3
*General Education Elective .....	3	
	credit hours 15	3
<b>Professional and Other Required Courses</b>		
MTR 1502 Basic Engine Operation .....	4	4
MTR 1571 Basic Automotive Machine Shop Tools .....	3	3
MTR 1501 Engine Disassembly and Cleaning .....	4	4
MTR 1531 Basic Engine Crack Identification and Repair .....	4	4
MTR 2532 Advanced Engine Crack Identification and Repair .....	4	
MTR 1511 Engine Head Repair .....	4	4
MTR 1521 Engine Block Parts Repair .....	4	4
MTR 2512 Crankshaft and Power Train Parts Repair .....	4	4
MTR 2581 Basic Operation of the Engine Lathe Drill Press, and Milling Machine .....	4	
MTR 2591 Customer Relations .....	3	
AER 2004 Power Plant Overhaul .....	4	
MTR 1100 Welding for Related Trades .....	4	4
**Approved Professional Electives .....	6	
	credit hours 52	31
	Total credit hours 67	34

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

	<b>credit hours</b>
BUL 2111 Business Law .....	3
GEB 1011 Introduction to Business .....	3
MAR 1101 Salesmanship .....	3

Any courses from the Automotive Mechanics, Automotive Body and Fender or Machine Shop Technology Programs.



### Automotive Mechanics Technology

The objective of this program is to prepare the student for a career in the fields related to Automotive Mechanics Technology.

The two-year program in Automotive Mechanics Technology is designed to provide the student with a working knowledge of each of eight major areas of the automotive industry, to include development of managerial skills needed to run an efficient automotive shop.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the automotive industry.

		<b>Associate In Applied Science</b>	<b>Technical Certificate In Automotive Mechanics</b>
<b>General Education</b>			
ENC 1005	Introduction to Composition .....	3	
*Humanities	.....	3	
MGF 1113	College Math .....	3	3
*Social Science	.....	3	
REA 1305	Developmental Reading .....	<u>3</u>	
	credit hours	15	3
<b>Professional and Other Required Courses</b>			
AER 1100	Auto Electrical Systems .....	4	4
AER 1120	Steering & Suspension Systems .....	4	4
AER 1121	Brake Systems & Chassis Rep .....	4	4
AER 1131	Transmissions & Drive Systems .....	4	4
AER 1162	Introduction to Automotive Parts Dept. Management .....	3	
AER 1163	Introduction to Automotive Service Dept. Management .....	3	
AER 1180	Integrated Automotive Systems .....	4	4
AER 1271	Introduction to Automotive Body Shop Management .....	3	
AER 2004	Power Plant Overhaul .....	4	4
AER 2112	Advanced Engine Diagnosis .....	4	4
AER 2171	Heating & Air-Conditioning .....	4	4
**Professional Course Elective	.....	<u>6</u>	
	credit hours	<u>47</u>	<u>32</u>
	Total credit hours	62	35

\*Refer to AS degree General Education Requirements

\*\*Approved Electives:

		credit hours
ACC 1009	General Account I .....	3
BUL 2111	Business Law .....	3
GEB 1011	Introduction to Business .....	3
MAR 1101	Salesmanship .....	3
PSY 1012	General Psychology .....	3

## Brick and Blocklaying Technology

The objective of this program is to prepare the student for a career in the fields related to Brick and Blocklaying Technology.

The two-year program in Brick and Blocklaying Technology is designed to provide the student with a working knowledge of major areas of the brick and blocklaying industry. Certificate option is also available to provide the basic professional courses of the occupation.

The theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the brick and blocklaying industry.

	<b>Associate In Applied Science</b>	<b>Technical Certificate In Brick and Blocklaying Technology</b>
<b>General Education</b>		
*Communications .....	3	3
*Humanities .....	3	
*Social Science .....	3	
*Math/Natural Science .....	3	
*General Education Elective .....	3	
	<hr/>	<hr/>
	credit hours 15	3
<b>Professional and Other Required Courses</b>		
ETD 1100C Engineering Drawing .....	3	
BCT 1001 Quantitative Methods for Building Trades .....	3	3
BCT 1401 Introduction to Brick and Block Masonry .....	4	4
BCT 1412 Mortars I .....	4	4
BCT 1413 Mortars II .....	4	4
BCT 1431 Wall Layout and Construction .....	4	4
BCT 2430 Cut Stone .....	4	4
BCT 2460 Chimneys and Fireplaces .....	4	4
BCT 2432 Arch Construction and Related Layout .....	4	
BCT 2405 Advanced Masonry .....	4	
**Approved Professional Electives .....	6	
	<hr/>	<hr/>
	credit hours 44	27
	<hr/>	<hr/>
	Total credit hours 59	30

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

	<b>credit hours</b>
ACC 1009 Accounting I .....	3
BUL 2111 Business Law .....	3
GEB 1011 Introduction to Business .....	3

## Carpentry Technology

The objective of this program is to prepare the student for a career in the fields related to Carpentry Technology.

The two-year program in Carpentry Technology is designed to provide the student with a working knowledge of the carpentry industry. Certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the carpentry industry.

	<b>Associate In Applied Science</b>	<b>Technical Certificate In Carpentry Technology</b>
<b>General Education</b>		
*Humanities .....	3	
*Social Science .....	3	
*Math/Natural Science .....	3	
*General Education Elective .....	3	
*Communications .....	<u>3</u>	<u>3</u>
	credit hours 15	3
<b>Professional and Other Required Courses</b>		
BCT 1001 Quantitative Methods for Building Trades .....	3	3
BCT 1113 Blueprint Reading for Building Trades .....	4	4
BCT 1111 Woodworking for Building Trades .....	3	3
BCT 1114 Concrete Form Construction .....	4	4
BCT 2116 Framing Methods I .....	4	4
BCT 2125 Framing Methods II .....	4	4
BCT 1115 Roof Framing .....	4	4
BCT 2118 Exterior Finish and Cabinets .....	4	4
BCT 2117 Interior Trim .....	4	4
ETI 1700 Industrial Safety .....	3	
BCN 2614C Planning and Estimating .....	3	
ETD 1100C Engineering Drawing .....	3	
ARC 2120C Architectural Drafting .....	3	
**Approved Professional Electives .....	<u>6</u>	<u>—</u>
	credit hours <u>52</u>	<u>34</u>
	Total credit hours 67	37

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

	<b>credit hours</b>
BUL 2111 Business Law .....	3
GEB 1011 Introduction to Business .....	3
ACC 1009 General Accounting I .....	3
SUR 1101C Surveying .....	3

## Construction Electricity Technology

The objective of this program is to prepare the student for a career in the fields related to Construction Electricity Technology.

The two-year program in Construction Electricity Technology is designed to provide the student with a working knowledge of the construction electricity industry. Certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the construction electricity industry.

<b>General Education</b>	<b>Associate In Applied Science</b>	<b>Technical Certificate In Construction Electricity Technology</b>
*Social Science .....	3	
*Humanities .....	3	
*Math/Natural Science .....	3	
*Communications .....	3	3
*General Education Elective .....	<u>3</u>	
	credit hours 15	<u>3</u>

### Professional and Other Required Courses

BCT 1604	Introduction to Electrical Construction .....	3	3
EER 1000	Math for Electricians I .....	3	3
EER 1100	Electrical Theory I .....	3	3
EER 1210	Electrical Theory II .....	3	3
BCT 1632	Raceway Installation .....	3	3
EER 1200	Math for Electricians II .....	3	3
EER 1030	Safety in the Electrical Trades .....	3	
ACT 1020	Introduction to Air Conditioning and Refrigeration .....	4	
BCT 2622	Electrical Calculations .....	3	3
BCT 2692	Residential Electrical Installations .....	3	3
BCT 2624	Electrical Estimating and Job Control .....	3	
BCT 2690	Commercial Electrical Installations .....	3	3
BCT 2691	Industrial Electrical Installations .....	3	3
BCT 2623	Advanced Electrical Practices .....	3	3
BCT 2610	Codes for Electrical Exams .....	3	3
EER 2220	A/C, D/C Motor Controls .....	4	
EER 2261	A/C, D/C Machinery and Transformers .....	<u>4</u>	
	credit hours	<u>54</u>	<u>36</u>
	Total credit hours	69	39

### Industrial Electronics Technology

The objective of this program is to prepare the student for a career in the fields related to Industrial Electronics Technology.

The two-year program in Industrial Electronics Technology is designed to provide the student with a working knowledge of the industrial electronics industry. Certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the industrial electronics industry.

	<b>Associate In Applied Science</b>	<b>Technical Certificate In Industrial Electronics Technology</b>
<b>General Education</b>		
*Social Science .....	3	
*Humanities .....	3	
*Math/Natural Science .....	3	
*Communications .....	3	3
*General Education Elective .....	<u>3</u>	
	credit hours 15	<u>3</u>
 <b>Professional and Other Required Courses</b>		
EER 1000 Math for Electricians I .....	3	3
EER 1200 Math for Electricians II .....	3	3
EER 1100 Electrical Theory I .....	3	3
EER 1210 Electrical Theory II .....	3	3
EER 1030 Safety in the Electrical Trades .....	3	3
EER 1211 Introduction to Circuit Analysis .....	3	3
EER 1291 Basic Circuit Analysis .....	3	3
EER 2811 Sinusoidal Electronics .....	3	3
EER 2821 Non-Sinusoidal Electronics .....	4	
EER 2360 Basic Circuit Diagnosis and Repairs .....	4	4
EER 2352 Advanced Electrical/Electronic Systems .....	3	
EER 2411 Digital Electronics .....	4	
EER 2351 Test Equipment Maintenance and Service .....	4	
EER 2831 Computer Circuit Analysis .....	4	
EER 1021 Pole Climbing .....	<u>3</u>	
	credit hours 50	<u>28</u>
	Total credit hours 65	<u>31</u>

\*Refer to AS degree General Education Requirements

## Industrial Machine Technology

The objective of this program is to prepare the student for a career in the fields related to Industrial Machine Technology.

The two-year program in Industrial Machine Technology is designed to provide the student with a working knowledge of the industrial machine industry. Certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the industrial machine industry.

	Associate In Applied Science	Technical Certificate In Industrial Machine Technology
<b>General Education</b>		
*Social Science .....	3	
*Humanities .....	3	
MAT 1024 Elementary Algebra .....	3	
*Communications .....	3	3
*General Education Elective .....	3	
	credit hours 15	3
<b>Professional and Other Required Courses</b>		
MTR 1002 Production Blueprint Reading .....	3	
ETD 1100C Engineering Drawing .....	3	3
MTR 1004 Machine Bench Work .....	4	4
MTR 1471 Material and Processes of Metals .....	3	3
MTR 1472 Machine Lathe Work .....	4	4
MTR 1473 Drill Press .....	4	4
MTR 1474 Surface Grinder Methods and Procedures .....	4	4
MTR 2481 Vertical Milling Methods and Procedures .....	4	4
MTR 2482 Horizontal Milling Methods and Procedures .....	4	4
MTR 2483 Machine Shaper .....	4	4
MTR 2484 Machine Measurement .....	3	3
MTR 1100 Welding for Related Trades .....	3	
ETM 2800 Fundamentals of Metallurgy .....	3	
**Approved Professional Electives .....	6	
	credit hours 52	37
	—	—
	Total credit hours 67	40

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

	credit hours
GEB 1011 Introduction to Business .....	3
BUL 2111 Business Law .....	3
ACC 1009 General Accounting I .....	3

### Major Appliance Technology

The objective of this program is to prepare the student for a career in the fields related to Major Appliance Technology.

The two-year program in Major Appliance Technology is designed to provide the student with a working knowledge of the major appliance industry. Certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the major appliance industry.

<b>General Education</b>	<b>Associate In Applied Science</b>	<b>Technical Certificate In Major Appliance Technology</b>
*Social Science .....	3	
*Humanities .....	3	
*Math/Natural Science .....	3	
*Communications .....	3	3
*General Education Electives .....	<u>3</u>	
	credit hours 15	<u>3</u>

### Professional and Other Required Courses

EER 1000	Math for Electricians I .....	3	3
EER 1200	Math for Electricians II .....	3	3
EER 1100	Electrical Theory I .....	3	3
EER 1210	Electrical Theory II .....	3	3
EER 1030	Safety in the Electrical Trades .....	3	3
EER 2720	Business Appliance Service .....	3	3
EER 2350	Meter Movement and Appliance Motors .....	4	4
EER 2311	Home Appliances Maintenance and Service I .....	4	4
EER 2312	Home Appliances Maintenance and Service II .....	4	4
EER 2313	Cooking Appliances Maintenance and Service .....	4	4
ACT 1020	Introduction to Air Conditioning and Refrigeration .....	4	4
MTR 1100	Welding for Related Trades .....	4	4
ACT 2050	Major Components of Air Conditioning and Refrigeration .....	4	4
**Approved Professional Electives .....		<u>6</u>	
		credit hours <u>52</u>	<u>46</u>
		Total credit hours 67	<u>49</u>

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

	<b>credit hours</b>
GEB 1011 Introduction to Business .....	3
BUL 2111 Business Law .....	3
ACC 1009 General Accounting I .....	3

## Marine Electricity Technology

The objective of this program is to prepare the student for a career in the fields related to Marine Electricity Technology.

The two-year program in Marine Electricity Technology is designed to provide the student with a working knowledge of the marine electricity industry. Certificate option is also available to provide the basic professional courses of the occupation.

Theory course and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the marine electricity industry.

	<b>Associate In Applied Science</b>	<b>Technical Certificate In Marine Electricity Technology</b>
<b>General Education</b>		
*Social Science .....	3	
*Humanities .....	3	
*Math/Natural Science .....	3	
*Communications .....	3	3
*General Education Electives .....	3	
	-----	
	credit hours	3
<b>Professional and Other Required Courses</b>		
EER 1000 Math for Electricians I .....	3	3
EER 1100 Electrical Theory I .....	3	3
EER 1200 Math for Electricians II .....	3	3
EER 1210 Electrical Theory II .....	3	3
EER 1030 Safety in the Electrical Trades .....	3	3
ETD 1100C Engineering Drawing .....	3	
ENC 2315 Technical Report Writing .....	3	
EER 2360 Basic Circuit Diagnosis and Repair .....	4	4
EER 2352 Advanced Electrical/Electronic Systems .....	3	3
EER 2261 AC/DC Machinery and Transformers .....	4	4
EER 2220 AC/DC Motor Controls .....	4	4
MTE 2401 Shipboard Electrical Systems I .....	3	3
MTE 2402 Shipboard Electrical Systems II .....	3	3
MTE 2141 Navigational Aids and Interior Communications Circuits .....	4	
**Approved Professional Electives .....	6	
	-----	
	credit hours	36
	-----	
	Total credit hours	39

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

	<b>credit hours</b>
MTR 1100 Welding for Related Trades .....	4
ACT 1020 Introduction to Air Conditioning and Refrigeration .....	4
BCT 1604 Introduction to Electrical Construction .....	3
ETI 2681 Industrial Supervision .....	3
ETI 1700 Industrial Safety .....	3



## Plumbing and Pipefitting Technology

The objective of this program is to prepare the student for a career in the fields related to Plumbing and Pipefitting Technology.

The two-year program in Plumbing and Pipefitting Technology is designed to provide the student with a working knowledge of the plumbing industry. Certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated complex machines, instruments, and technical literature which are continually being developed by the plumbing industry.

	Associate In Applied Science	Technical Certificate In Plumbing and Pipefitting Technology
<b>General Education</b>		
*Social Science .....	3	
*Humanities .....	3	
*Math/Natural Science .....	3	
*Communications .....	3	3
*General Education Electives .....	<u>3</u>	
	credit hours 15	<u>3</u>
<b>Professional and Other Required Courses</b>		
BCT 1501 Introduction to Plumbing .....	4	4
BCT 1505 Plumbing Codes .....	4	4
BCT 1504 Plumbing Repairs .....	4	4
BCT 1523 Venting Systems .....	4	4
BCT 2527 Fixtures and Valves .....	4	4
BCT 2506 Building Layout .....	4	4
BCT 2521 Isometrics and Layouts .....	4	4
BCT 2535 Wastewater Treatment .....	4	
BCT 2531 Water Treatment .....	4	
BCT 1502 Estimating Plumbing Repairs .....	4	
BCT 1525 Water Distribution Systems .....	4	
**Approved Professional Electives .....	<u>6</u>	
	credit hours <u>50</u>	<u>28</u>
	Total credit hours 65	<u>31</u>

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

	credit hours
ACC 1009 General Accounting I .....	3
BUL 2111 Business Law .....	3
GEB 1011 Introduction to Business .....	3

## Sheet Metal Technology

The objective of this program is to prepare the student for a career in the fields related to Sheet Metal Technology.

The two-year program in Sheet Metal Technology is designed to provide the student with a working knowledge of each eight major areas of the sheet metal industry. Certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the sheet metal industry.

	<b>Associate In Applied Science</b>	<b>Technical Certificate In Sheet Metal Technology</b>
<b>General Education</b>		
*Communications .....	3	3
*Humanities .....	3	
*Social Science .....	3	
MAT 1003 General Mathematics .....	3	3
*General Education Electives .....	<u>3</u>	
	credit hours 15	<u>6</u>
<b>Professional and Other Required Courses</b>		
ETD 1100C Engineering Drawing .....	3	
ETI 1700 Industrial Safety .....	3	
ETI 1421C Materials and Processes .....	4	
MTR 1100 Welding for Related Trades .....	4	
MTR 2123 Advanced Gas Metal Arc Welding .....	4	
MTR 1301 Introduction to Sheet Metal Practices .....	3	3
MTR 1311 Basic Pattern Development and Fabrication .....	4	4
MTR 1313 Intermediate Pattern Development and Fabrication I .....	4	4
MTR 1314 Intermediate Pattern Development and Fabrication II .....	4	4
MTR 2316 Advanced Pattern Development and Fabrication I .....	4	4
MTR 2317 Advanced Pattern Development and Fabrication II .....	4	4
MTR 2345 Practicum in Sheet Metal .....	3	3
**Approved Professional Electives .....	<u>6</u>	
	credit hours <u>50</u>	<u>26</u>
	Total credit hours 65	<u>32</u>

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

	<b>credit hours</b>
GEB 1011 Introduction to Business .....	3
BUL 2111 Business Law .....	3
ACC 1009 General Accounting I .....	3

Any Courses from the Welding Technology Program

## Small Gasoline Engine Technology

The objective of this program is to prepare the student for a career in the fields related to Gasoline Engine Technology.

The two-year program in Small Gasoline Engine Technology is designed to provide the student with a working knowledge of the small gasoline engine industry. Two certificate options are also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the small gasoline engine industry.

	Associate In Applied Science	Technical Certificate In Outboard Motors	Technical Certificate In Small Engines
<b>General Education</b>			
*Communications .....	3	3	3
*Humanities .....	3		
*Social Science .....	3		
*Math/Natural Science .....	3		
*General Education Electives .....	3		
	<u>15</u>	<u>3</u>	<u>3</u>
	credit hours		
<b>Professional and Other Required Courses</b>			
AER 1301 Internal Combustion Engines I .....	4		4
AER 1402 Integrated Systems .....	4		4
AER 1302 Internal Combustion Engines II .....	4		4
AER 1304 Servicing and Maintaining Lawnmower Assemblies .....	4		4
AER 1600 Motorcycle Familiarization .....	4		
AER 1610 Motorcycle Power/Drive Systems .....	4		
AER 2400 Introduction to Outboard Motors .....	4	4	4
AER 2421 Outboard Ignition and Electrical Systems .....	4	4	
AER 2412 Outboard Systems-Diagnosis and Service .....	4	4	
AER 2411 Outboard Powerhead Repair .....	4	4	
AER 2423 Familiarization with Stern Drives .....	4	4	
MTR 1100 Welding for Related Trades .....	4	4	4
**Approved Professional Electives .....	3	3	3
	<u>51</u>	<u>27</u>	<u>27</u>
	credit hours		
	Total credit hours	30	30

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

	credit hours
GEB 1011 Introduction to Business .....	3
ACC 2009 Accounting .....	3
BUL 2111 Business Law .....	3

## Truck/Diesel Mechanics Technology

The objective of this program is to prepare the student for a career in the fields related to Truck/Diesel Mechanics Technology.

The two-year program in Truck/Diesel Mechanics Technology is designed to provide the student with a working knowledge of major areas of the truck/diesel industry, to include development of managerial skills needed to run an efficient maintenance shop. Certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the truck/diesel industry.

	Associate In Applied Science	Technical Certificate In Truck/Diesel Mechanics Technology
<b>General Education</b>		
*Humanities .....	3	
MGF 1113 College Math .....	3	
ENC 1005 Introduction to Composition .....	3	3
*Social Science .....	3	
REA 1305 Developmental Reading .....	<u>3</u>	
	credit hours 15	<u>3</u>
<b>Professional and Other Required Courses</b>		
AER 2705 Diesel Engine Fundamentals .....	4	4
AER 2706 Diesel Engine Diagnosis and Repair .....	4	4
AER 2505 Advanced Truck Repair .....	4	4
AER 1100 Auto Electrical Systems .....	4	4
AER 2171 Heating and Air Conditioning .....	4	
AER 1120 Steering and Suspension Systems .....	4	4
AER 1131 Transmission and Drive Systems .....	4	4
AER 1121 Brake Systems and Chassis Repair .....	4	4
AER 2112 Advanced Engine Diagnosis .....	4	4
AER 1163 Introduction to Automotive Service Department Manager .....	3	
AER 1162 Introduction to Automotive Parts Department Manager .....	3	
**Approved Professional Electives .....	<u>6</u>	
	credit hours 48	<u>32</u>
		<u>63</u>
	Total credit hours 63	35

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

	credit hours
GEB 1011 Introduction to Business .....	3
ACC 1009 General Accounting I .....	3
BUL 2111 Business Law .....	3

## Welding Technology

The objective of this program is to prepare the student for a career in the fields related to Welding Technology.

The two-year program in Welding Technology is designed to provide the student with a working knowledge of the welding industry. Certificate option is also available to provide the basic professional courses of the occupation.

Theory courses and hands-on laboratory experience will be provided to train students to keep pace with and handle competently the ever more sophisticated and complex machines, instruments, and technical literature which are continually being developed by the welding industry.

	<b>Associate In Applied Science</b>	<b>Technical Certificate In Welding Technology</b>
<b>General Education</b>		
*Social Science .....	3	
*Humanities .....	3	
*Math/Natural Science .....	3	
*Communications .....	3	3
*General Education Electives .....	<u>3</u>	<u>    </u>
	credit hours 15	3
<b>Professional and Other Required Courses</b>		
MTR 1001 Blueprint Reading for Welders .....	3	3
MTR 1120 Basic Shielded Metal-Arc Welding .....	4	4
MTR 1121 Advanced Shielded Metal-Arc Welding .....	4	4
MTR 1122 Basic Gas Metal-Arc Welding .....	4	4
MTR 1124 Flux Core Arc Welding .....	4	4
MTR 2123 Advanced Gas Metal-Arc Welding .....	4	4
MTR 2126 Basic Gas Tungsten-Arc Welding (Pipe and Tubing) .....	4	4
MTR 2142 Downhill Shielded Metal-Arc Pipe Welding .....	4	
MTR 2143 Uphill Shielded Metal-Arc Pipe Welding .....	4	
MTR 2146 Gas Metal-Arc Pipe Welding (M.I.G.) .....	4	
MTR 2147 Gas Tungsten Arc Welding Pipe and Tubing (T.I.G.) .....	4	
**Approved Professional Electives .....	<u>6</u>	<u>    </u>
	credit hours <u>49</u>	<u>27</u>
	Total credit hours 64	30

\*Refer to AS degree General Education Requirements

\*\*Approved Professional Electives:

	<b>credit hours</b>
GEB 1011 Introduction to Business .....	3
BUL 2111 Business Law .....	3
ACC 1009 General Accounting I .....	3

Courses from the Sheet Metal, or Machine Shop Technology Programs

## Additional Instructional Programs

### Experience-Based Education

Experience-based Education encompasses educational alternatives designed to integrate academic foundations with practical experiences while encouraging maximum self-discovery learning. The focus of learning is normally undertaken in an off-campus setting under the sponsorship of a mentor. In contrast, the traditional classroom educational experience emphasized the pre-determined syllabus, tests, lectures, and content to be mastered within the structured and controlled learning environment provided by the faculty member.

Cooperative Education, one form of off-campus Experience-based Education, combines classroom learning with on-the-job experience in an integrated academic/career program. Students who participate in the program are placed in career related work experiences that relate directly to their career goals. In addition to gaining valuable practical experience while attending college, students receive academic credit for their supervised work experience.

Work and study schedules may vary to meet the needs of the students and the employers. Common work-study patterns include parallel work and study and alternating work and study. In the parallel plan, the student attends school and works at the same time. In the alternating program, the student works full-time one semester and attends school full-time the next semester.

Cooperative Education is open to all students in the College pursuing an AA degree who have completed one semester of satisfactory college study. Students in AS degree programs require the program director's prior approval in order to include cooperative work experience in their program of study.

Another Experience-Based Education program is the University Year for Action (UYA). UYA is a program jointly sponsored by Florida Junior College at Jacksonville and the federal government in which full-time college students work in human service agencies.

Participating students enroll for a full load of regularly offered and accredited courses. All course work is done on a contractual, independent study basis. A professor will supervise the student's independent study and any course related field work until the course is completed.

The UYA student is assigned to a human service agency in Jacksonville and receives a small living stipend for full-time voluntary service, as well as a year of federal civil service credit. The UYA volunteer gains valuable career oriented service-learning

while participating in a program designed as one small step in overcoming the effects of poverty.

Other forms of Experience-based Education are prior learning assessments, internships, practicum, on-the-job training, and field research.

### Nursing Continuing Education

A Continuing Education program is planned to meet the needs of nurses in updating knowledge and skills essential in professional practice. Continuing education courses are designed to enhance nursing practice and to help ensure the public safe and high quality nursing care.

Nursing practice is based on a continuously expanding body of knowledge and skills which prepares nurses to function effectively as members of the health care team.

Reassessment and ongoing evaluation will be done to determine Continuing Education offerings.

### Developmental Education Program

The goal of this program is to assist college credit students who need additional help in the academic area to reach their educational goals.

Students may be advised to enroll in the Developmental Education Program as a result of testing or reviews of their previous academic record.

Depending on the student's evaluation, the student may be advised to take one or more of the following developmental courses:

- APB 1150 Life in its Biological Environment
- APB 1150L Biology Lab
- ENC 1005 Introduction to Composition
- ENC 1000 English Lab
- HSC 1002 Integrated Health Science
- HSC 1003 Integrated Health Science Lab
- MAT 1003 General Mathematics
- MAT 1003L Developmental Arithmetic Lab
- REA 1305 Developmental Reading
- REA 1315 Reading Lab (or three one-hour reading courses)
- REA 1605 Study Skills Development
- SOP 1502 Dynamics of Behavior

## Summer Overseas Studies

Florida Junior College at Jacksonville sponsors an Overseas Program offering college credit in the area of Humanities. Orientation meetings and regular classes designed to make the tours valid educational experiences are held during the weeks prior to trip departures.

Class attendance and participation in the scheduled events of the tours are mandatory for students taking the courses for credit. Regular admission policies of the College must be followed to enroll in the program. Complete information about the courses and tours may be obtained by contacting the Dean of Academics at the Kent Campus. Students are expected to pay their own transportation and other charges.

## Army ROTC — South Campus

Army ROTC is open to all students who wish to acquire a basic military education which, in conjunction with other college disciplines, develops individual character and those attributes essential to an officer.

Upon completion of the basic courses offered at FJC, a student is eligible for selection into the advanced program at any university with an ROTC program. A student enrolled in the advanced program will receive a daily monetary subsistence allowance amounting to \$100 for each academic month.

Students enrolled in the basic program incur no obligation towards the military.

