



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 comprised of courses designated as either college parallel (P) or dual purpose (D). (Occupational courses do not count toward an Associate in Arts degree.) Also, the Associate in Arts degree cannot include more than four one-semester hour courses in physical education and four one-semester hour courses from music, speech and drama activity courses as described under Conditions (1) and (2) on page 50. 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 Jacksonville 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 an all-college cumulative grade point average of 2.00 (C) on courses which comprise the Associate in Arts degree program.
2. Earned a Florida Junior College at Jacksonville cumulative grade point average of 2.00 (C) on courses which comprise the Associate in Arts degree program.
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 48 through 50 of this catalog.
 - b. Complete the elective requirements (26 semester hours) set forth on page 50 of this catalog.
5. Completed requirements of the Sophomore Testing Program in college-level communication and computation skills as required by State law and rule (refer to Testing Services section for details).

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

*NOTE: See page 35 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 SCIENCE6 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. HUMANITIES6 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 2110 – GREAT IDEAS IN WORLD LITERATURE I
 LIT 2120 – 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 12 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. A minimum of six semester hours from one of the following three pairs of courses is required of all students:

MAT 1033 – INTERMEDIATE ALGEBRA
 MGF 1113 – COLLEGE MATHEMATICS

OR

MAC 1104 – COLLEGE ALGEBRA
 MGF 1113 – COLLEGE MATHEMATICS

OR

MAC 1104 – COLLEGE ALGEBRA
 STA 1014 – ELEMENTARY STATISTICS

IV. COMMUNICATIONS . . . 9 semester hours

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

ENC 1101 – ENGLISH COMPOSITION I
 SPC 1010 – FUNDAMENTALS OF SPEECH COMMUNICATION

- B. The following three semester hour course is required of all students:

ENC 1102 – ENGLISH COMPOSITION II

*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.

V. Additional hours, if needed, to fulfill the 36 hour General Education Requirement. These may include excess hours from the above four areas and/or up to three one-hour physical education activity courses (DAA, LEI, PEL, PEM, PEN). Total hours required from Areas I - V 36 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 four of the 26 semester hours may consist of one-semester hour physical education activity courses less any used in Area V.
- (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.
- (3) A maximum of three credit hours earned in MAT 1002, MAT 1003, MAT 1003L, and MAT 1024 may be applied to the associate degree as elective credits.
- (4) A maximum of three credit hours earned in ENC 1001, ENC 1002, REA 1005, REA 1006, REA 1007, REA 1305, and REA 1315 may be applied to the associate degree as elective credits.
- (5) Not more than 48 semester hours of credit earned in courses offered via television may be applied towards the Associate in Arts degree.

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

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 listed under Area III (A) Natural Science for the Associate in Arts degree or any course listed below – OR as specified in individual Associate in Science degree programs:

- CNM 1001 – Computer Oriented Mathematics
- MAC 1104 – College Algebra
- MAC 1114 – College 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 1033 – Intermediate Algebra
- MGF 1113 – College Mathematics
- STA 1014 – Elementary Statistics

IV. COMMUNICATIONS . . 3 Semester Hours

The following three semester hour course is required of all Associate in Science degree students:

- ENC 1101 – ENGLISH COMPOSITION I

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.

Not more than 24 semester hours of credit earned in courses offered via television may be applied towards the Associate in Science degree.

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.

ASSOCIATE IN SCIENCE DEGREE				
Special Areas of Study In:	Fred H. Kent Campus	North Campus	South Campus	Downtown Campus
BUSINESS				
Accounting	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
DISTRIBUTIVE				
Banking	X			
Hospitality Management	X			
Insurance	X			
Real Estate	X			
Sales-Marketing-Retailing	X	X	X	X
Transportation	X			
ENGINEERING & INDUSTRIAL RELATED				
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
Electronic Engineering Technology				X
*Electronics				X
Mechanical Engineering Technology				X
*Mechanical Engineering				X
Printing/Graphic Arts		X		
X-Ray Engineering Technology				X
HEALTH				
Dental Hygiene		X		
Dental Assisting		X		
*Dental Assisting		X		
Emergency Medical Technology		X		
*Emergency Medical Technology		X		
Medical Laboratory Technology		X		
Nursing		X		
Radiologic Technology		X		
Respiratory Therapy		X		

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

**AS degree option.

(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.

General Education	Associate In Science credit hours	***Approved Electives:	credit hours
ECO 2013 Principles of Economics I	3		
*Communications	3	ACC 2409 Cost Accounting	3
*Humanities	3	ACC 2501 Individual Taxes	3
*Mathematics — Natural Science	3	ACC 2529 Corporate, Estate, and Trust Taxes	3
*Social Science	3	ACC 2869 Fund Accounting	3
	—	BUL 2111 Business Law	3
	credit hours 15	BUL 2112 Business Law	3
Professional and Other Required Courses		COC 2001 Computer Concepts	3
ACC 2001 Principles of Accounting I	3	COE 1000 Cooperative Education Seminar	1
ACC 2021 Principles of Accounting II	3	---1949 Cooperative Education Work Experience I (with program director's prior consent)	3
ACC 2109 Intermediate Accounting I	3	---2949 Cooperative Education Work Experience II (with program director's prior consent)	3
ACC 2129 Intermediate Accounting II	3	FIN 2000 Principles of Finance	3
**ACC 2409 Cost Accounting	3	GEB 1011 Introduction to Business	3
**ACC 2501 Individual Taxes	3	MAN 2000 Principles of Management	3
**ACC 2869 Fund Accounting	3	MAN 2300 Personnel Management	3
QMB 1001 Business Mathematics	3	MAN 2800 Small Business Management	3
SES 2335 Business Communications	3	MAR 1011 Principles of Marketing	3
***Approved Electives	21	RMI 1030 Principles of Insurance	3
	—	SES 1324 Calculating Machines	3
	credit hours 45		
	—		
	—		
Total credit hours	60		

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.

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.

Graduates with the AS degree may be able to continue studies in Information Systems Technology in

a senior institution. Those who wish to major in Computer Science are advised to elect the AA degree which should include the Calculus sequence as part of the program requirements.

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 is available for students to gain valuable experience with the operation of the IBM Computer System and the Prime 300 minicomputer system.

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	Computer Operations	Technical Certificate In Computer Programming
*Communications	3	3	
*Natural Science	6		
*Humanities	3		
*Social Science	3		
	—	—	
credit hours	15	3	

Professional and Other Required Courses

**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
CNM 1005	Data Processing Mathematics	3	3	3
COC 1300	Introductory Computer Concepts	3	3	3
COP 2120	Basic COBOL Programming	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
****Mathematics Elective	3			
	—	—	—	
credit hours	45	30	36	
	—	—	—	
	—	—	—	
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.

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

Data Processing Electives		credit hours			credit hours
COP 1160	RPG Programming	3	COP 2110	FORTTRAN Programming	3
COP 1400	Basic Assembly Language Programming	3	COP 2121	Advanced COBOL Programming	3
COP 2110	FORTTRAN Programming	3	COP 2130	PL/I Programming	3
COP 2121	Advanced COBOL Programming	3	COP 2170	Programming in BASIC	3
COP 2130	PL/I Programming	3	COP 2401	Advanced Assembly Language Programming	3
COP 2170	Programming in BASIC	3	COP 2610	Advanced Computing and Programming Systems	3
COP 2401	Advanced Assembly Language Programming	3	General Business Electives		
CRM 1039	Data Processing Workshop	3	ACC 2021	Principles of Accounting II	3
Programming Electives			BUL 2111	Business Law	3
COP 1160	RPG Programming	3	MAN 2800	Small Business 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.

		Associate In Science	**Approved Electives:	credit hours	
General Education			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
		—	-- 1949	Cooperative Education Work Experience I (with program director's prior consent)	3
	credit hours	15	-- 2949	Cooperative Education Work Experience II (with program director's prior consent)	3
Professional and Other Required Courses			FIN 2000	Principles of Finance	3
ACC 1009,	1029 Accounting I & II	6	FIN 2100	Personal Finance	3
or			GEB 1011	Introduction to Business	3
ACC 2001	Principles of Accounting I	3	MAN 2000	Principles of Management	3
QMB 1001	Business Mathematics	3	MAN 2300	Personnel Management	3
SES 2335	Business Communications	3	MAN 2800	Small Business Management	3
**Approved Electives		33-36	MAR 1011	Principles of Marketing	3
		—	MAR 1101	Salesmanship	3
	credit hours	45	MAR 1151	Retail Merchandising	4
		—	MAR 1301	Sales Promotion	4
		—	MAR 2401	Sales Management	3
	Total credit hours	60	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 1171	Machine Transcription	3
			SES 2151	Word Processing – Magnetic Typewriting	3

*Refer to AS degree General Education Requirements.

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

he 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 requirements 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.

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 In Science
*Communications	.....	3
*Humanities	.....	3
*Mathematics – Natural Science	.....	3
*Social Science	.....	6
	credit hours	15
Professional and Other Required Courses		
+ACC 1009,1029	Accounting I & II	6
GEB 1011	Introduction to Business	3
QMB 1001	Business Mathematics	3
COC 1300	Introductory Computer Concepts	3
SES 1330	Business English	3
SES 1401	General Office Procedures	3
**SES 1101	Beginning Typewriting II	3
**SES 1110	Intermediate Typewriting	3
SES 1211	Intermediate Shorthand	3
	or	
**SES 1221	Machine Shorthand I	3
**SES 1171	Machine Transcription	3
**SES 2120	Advanced Typewriting – Executive	3
**SES 2131	Advanced Typewriting – Legal	3
**SES 2132	Advanced Typewriting – Medical	3
**SES 2133	Advanced Typewriting – Technical	3
**SES 2151	Word Processing – Magnetic Typewriting	3
SES 2212	Advanced Shorthand	3
	or	
**SES 2222	Machine Shorthand II	3
SES 2213	Dictation & Transcription	3
	or	
**SES 2223	Machine Shorthand III	3
SES 2335	Business Communications	3
SES 2402	Secretarial Practices	3
	credit hours	48
		—
		—
	Total credit hours	63

*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.

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

Clerical

This clerical certificate program prepares students for entry into the clerical job market. It combines training in communications, numerical skills, typewriting and office procedures to ensure the student's employability upon completion of the program.

The program director may require and/or approve additional courses for program completion or may approve course substitutions based on student needs.

		Technical Certificate In Clerical
General Education		
*Communications		3
	credit hours	3
Professional and Other Required Courses		
QMB 1001	Business Mathematics	3
SES 1401	General Office Procedures	3
SES 1330	Business English	3
	credit hours	9
Students are required to take three of the following courses:		
SES 1100	Beginning Typewriting I	3
SES 1101	Beginning Typewriting II	3
SES 1110	Intermediate Typewriting	3
SES 2120	Advanced Typewriting - Executive	3
SES 2131	Advanced Typewriting - Legal	3
SES 2132	Advanced Typewriting - Medical	3
SES 2133	Advanced Typewriting - Technical	3
SES 2151	Word Processing - Magnetic Typewriting	3
	credit hours	9
Approved Business Electives — Take three of the following courses:		
ACC 1009	General Accounting I	3
ACC 1029	General Accounting II	3
BUL 2111	Business Law	3
GEB 1011	Introduction to Business	3
SES 1324	Calculating Machines	3
SES 1171	Machine Transcription	3
SES 2335	Business Communications	3
	credit hours	9
		—
		—
	Total credit hours	30

*Refer to AS degree General Education Requirements.

Stenography

This technical certificate program is designed for the student who is preparing to enter the job market with typing and stenographic skills. It combines training in typing, office procedures, business communications, and shorthand.

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

General Education	Technical Certificate In Stenography
*Communications	3
	—
	credit hours 3
 Professional and Other Required Courses	
QMB 1001 Business Mathematics	3
SES 1401 General Office Procedures	3
SES 1330 Business English	3
	—
	credit hours 9
 Students are required to take three of the following courses:	
SES 1100 Beginning Typewriting I	3
SES 1101 Beginning Typewriting II	3
SES 1110 Intermediate Typewriting	3
SES 2120 Advanced Typewriting - Executive	3
SES 2131 Advanced Typewriting - Legal	3
SES 2132 Advanced Typewriting - Medical	3
SES 2133 Advanced Typewriting - Technical	3
SES 2151 Word Processing - Magnetic Typewriting	3
	—
	credit hours 9
 Students are required to take three of the following courses:	
SES 1210 Beginning Shorthand	3
SES 1211 Intermediate Shorthand	3
SES 2212 Advanced Shorthand	3
SES 2213 Dictation and Transcription	3
SES 2335 Business Communications	3
	—
	credit hours 9
	—
	—
	Total credit hours 30

*Refer to AS degree General Education Requirements

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.

The program is designed to serve both the younger student who recently completed high school and experienced bank employees. Besides providing college credit, completed banking courses count toward American Institute of Banking certificate programs.

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.

Those desiring credit union education should select two specialized credit union courses, replacing bank-oriented courses.

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 1101 English Composition I		3
ENC 1102 English Composition II		3
*Communications	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 Communication	3	
STA 1014 Elementary Statistics		3
*General Education Electives		6
*Mathematics – Natural Science	3	
*Social Science	3	
*Social Science or Humanities	3	
	—	—
credit hours	24	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	
**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	36	27
	—	—
	—	—
Total credit hours	60	60

*Refer to General Education Requirements

**For AS degree students wishing to specialize in Credit Unions, approved Credit Union electives may be substituted for BAN 1110, 1700.

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

****Approved Credit Union Electives:		credit hours		Banking Electives:	
FIN 2360	Foundation and Structure of Credit Union	3		BAN 1100	Bank Starter Series
ACC 2887	Credit Union Accounting	3		BAN 1160	Bank Letters and Reports
				BAN 1210	Analyzing Financial Statements
				BAN 2150	Public Relations and Marketing
				BAN 2200	Credit Administration
				FIN 2100	Personal Finance
				BAN 2240	Installment Credit
				BAN 2720	Bank Management
				MAN 2800	Small Business Management

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.

		Associate In Science	Professional and Other Required Courses	
General Education			ACC 2815	Hotel-Motel Accounting
			BUL 2111	Business Law
ECO 2013	Principles of Economics I	3	FIN 2100	Personal Finance
*Communications		3	FSS 1251	Restaurant Operations
*Humanities		3	FSS 2501	Food & Beverage Control
*Physical or Biological Science		3	HFT 1000	Introduction to Hospitality Management
*Social Science		6	HFT 1250	Hotel-Motel Operation
		—	HFT 1270	Apartment Management
	credit hours	18	HFT 2221	Customer-Personnel Relations
			HFT 2700	Tourism
			**HFT 2941	Internship
			**HFT 2942	Internship
			HFT 1410	Front Office Management Hotel/Motel
			MAR 1101	Salesmanship
			QMB 1001	Business Mathematics
				—
				credit hours
				45
				—
				—
				Total credit hours
				63

*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.

General Education		Associate In Science	AS degree Option UNF Transfer
ECO 2013	Principles of Economics I		3
ECO 2023	Principles of Economics II		3
ENC 1101	English Composition I		3
ENC 1102	English Composition II		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
Professional and Other Required Courses			
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.		—	—
	Total credit hours	60	63

***Approved Insurance Electives		credit hours			credit hours
MAN 2800	Small Business Management	3	RMI 1280	Principles of Property Insurance Adjusting I	3
RMI 1110	Principles of Life Insurance	3	RMI 1430	Legal Aspects of Life Insurance	3
RMI 1120	Principles of Health Insurance	3	RMI 1432	Life Company Operations	3
RMI 1160	Marketing Principles of Life and Health Insurance	3	RMI 2270	Liability Insurance Adjusting	3
RMI 1260	Principles of Insurance and Liability Claim 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.

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 1101	English Composition I		3
ENC 1102	English Composition II		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 Communication	3	
STA 1014	Elementary Statistics		3
*Communications		3	
*General Education Electives			6
*Humanities		6	
*Mathematics – Natural Science (Except MAT 1024)		3	
*Social Science		3	
		—	—
	credit hours	21	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
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 Electives		3	
		—	—
	credit hours	42	30
*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.		—	—
	Total credit hours	63	63

*****Approved Electives		credit hours			credit hours
MAN 2800	Small Business Management	3	REE 2300	Real Estate Investment	3
REE 1810	Real Estate Sales	3	REE 2430	Real Estate Law	3
REE 2200	Real Estate Finance	3	REE 2500	Real Estate Management	3
REE 2220	Home Mortgage Lending	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	**Approved Electives:	credit hours
General Education			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
		—	FIN 2000 Principles of Finance	3
	credit hours	15	GEB 1011 Introduction to Business	3
Professional and Other Required Courses			MAN 2000 Principles of Management	3
ACC 1009,	1029 General Accounting I and II	6	MAN 2300 Personnel Management	3
	or		MAN 2800 Small Business Management	3
ACC 2001	Principles of Accounting I	3	MAR 1151 Retail Merchandising	4
ADV 2000	Advertising	3	MAR 1301 Sales Promotion	4
MAR 1011	Principles of Marketing	3	MAR 2221 Principles of Wholesale Distribution	3
MAR 1101	Salesmanship	3	MAR 2240 Principles of International Trade: Export-Import	3
QMB 1001	Business Mathematics	3	MAR 2401 Sales Management	3
SES 2335	Business Communications	3	RMI 1030 Principles of Insurance	3
**Approved Electives		24-27	SES 1100 Beginning Typewriting I	3
		—	SES 1101 Beginning Typewriting II	3
	credit hours	45	SES 1110 Intermediate Typewriting	3
		—	SES 1324 Calculating Machines	3
		—		
	Total credit hours	60		

*Refer to AS Degree General Education Requirements

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.

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 1101	English Composition I		3
ENC 1102	English Composition II		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 Communication	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
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
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
MAN 2800 Small Business Management	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
MAN 2800 Small Business Management	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.

General Education	Associate In Science	Professional and Other Required Courses	
ENC 1101 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 Comm.	3	ASC 1310 Federal Air Regulations	3
SSI 1120 Origins of American Society	3	ASC 1690 Environment of the Air Traffic Controller	3
**Humanities	3	AVM 2431 The Flight Service Station	3
	—	AVM 2821 The Air Traffic Control Tower	3
	credit hours 18	AVM 2823 Approach Control	3
		AVM 2825 Air Route Traffic Control Center	3
*Individual Scores at an appropriate level Nelson-Denny Reading Test. Student may substitute another communications course, with director's approval.		AVM 2831 Radar/Computer Interface	3
**Any course with HUM prefix.		AVM 2941 Facility Internship	4
		COC 1300 Introductory Computer Concepts	3
***Approved Electives:	credit hours	MET 1001 Meteorology	3
ECO 2000 Foundations of the American Economy	3	***Approved Electives	6
ENC 2210 Technical Report Writing	3		—
MAN 2050 Transportation Management and Theory	3		credit hours 46
MAN 2300 Personnel Management	3		—
SES 1100 Beginning Typewriting I	3		—
SOP 1002 Human Relations	3		—
TRA 1010 Principles of Transportation	3		Total credit hours 64

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.

General Education	Associate In Science	Technical Certificate In Architectural & Bldg. Const.
*Communications	3	3
PHY 2053C General Physics I	4	
*Humanities	3	
PHY 2054C General Physics II	4	
*Social Science	3	
	—	—
	credit hours	3
 Professional and Other Required Courses		
ARC 2120C Architectural Drafting	3	3
BCN 1001C Building Construction	3	3
BCN 2614C Planning and Estimating	3	3
COC 2001 Computer Concepts	3	
ENC 2210 Technical Report Writing	3	
ETD 1100C Engineering Drawing	3	3
ETD 2121C Civil Drafting	3	3
ETG 2300C Mechanical Laboratory	2	
ETG 2504C Engineering Mechanics I: Statics	3	
ETG 2515C Engineering Mechanics II: Dynamics	3	
ETG 2535C Testing & Strength of Materials	3	
ETI 1421C Engineering Materials & Processes	3	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	
or		
MAC 1114 College Trigonometry	3	
SUR 1101C Surveying	3	3
	—	—
*Refer to AS Degree General Education Requirements	credit hours	30
	—	—
	—	—
	Total credit hours	67
		33

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.

General Education	Associate In Science	Technical Certificate In Civil Engineering
*Communications	3	3
PHY 2053C General Physics I	4	
*Humanities	3	
PHY 2054C General Physics II	4	
*Social Science	3	
	—	—
credit hours	17	3
 Professional and Other Required Courses		
BCN 1001C Building Construction	3	3
BCN 2614C Planning and Estimating	3	3
BUL 2111 Business Law	3	
or		
GEB 1011 Introduction to Business	3	
EGN 1130C Descriptive Geometry	3	3
ENC 2210 Technical Report Writing	3	3
ETD 1100C Engineering Drawing	3	3
ETD 2121C Civil Drafting	3	3
ETG 2504C Engineering Mechanics I: Statics	3	
ETG 2515C Engineering Mechanics II: Dynamics	3	3
ETG 2535C Testing & Strength of Materials	3	
ETI 1421C Engineering Materials & Processes	3	3
ETM 2221 Elements of Applied Energy	3	
ETM 2310 Fluid Mechanics	3	
MAC 1104 College Algebra	3	
MTB 1322 Technical Math II	3	
or		
MAC 1114 College Trigonometry	3	
SUR 1101C Surveying	3	3
*Refer to AS Degree General Education Requirements	—	—
credit hours	51	27
	—	—
	—	—
Total credit hours	68	30

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

The program director may specify some curriculum modification. 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.

General Education	Associate In Science	Technical Certificate In Drafting
*Communications	3	3
PHY 2053C General Physics I	4	
*Humanities	3	
PHY 2054C General Physics II	4	
*Social Science	3	
	—	—
credit hours	17	3
 Professional and Other Required Courses		
ARC 2120C Architectural Drafting	3	3
BCN 2614C Planning and Estimating	3	
BCN 1001C Building Construction	3	
COC 2001 Computer Concepts	3	
EGN 1130C Descriptive Geometry	3	3
ENC 2210 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 I: Statics	3	
ETG 2535C Testing and Strength of Materials	3	
ETI 1421C Engineering Materials and Processes	3	3
ETI 1700 Industrial Safety	3	
ETI 2440 Industrial Design	3	3
MAC 1104 College Algebra	3	3
MTB 1322 Technical Math II	3	
or		
MAC 1114 College Trigonometry	3	
SUR 1101C Surveying	3	
	—	—
credit hours	51	27
	—	—
	—	—
Total credit hours	68	30

*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.

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.

General Education	Associate In Science	Technical Certificate In Electronics
*Communications	3	3
PHY 2053C General Physics I	4	
*Humanities	3	
PHY 2054C General Physics II	4	
*Social Science	3	
	—	—
	credit hours	17
		3
Professional and Other Required Courses		
COC 2001 Computer Concepts	3	
ENC 2210 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 Introduction to Solid State Electronics	3	3
ETE 2111 Amplifier Circuits	3	3
ETE 2601C Introduction to Digital Electronics	3	3
ETE 1121 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	3	
MTB 2323 Technical Math III	3	
or		
MAC 1311 Calculus with Analytic Geometry I	4	
	—	—
	credit hours	51
		33
	—	—
	Total credit hours	68
		36

*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.

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.

General Education	Associate In Science	Technical Certificate In Mechanical Engineering
*Communications	3	3
PHY 2053C General Physics I	4	4
*Humanities	3	
PHY 2054C General Physics II	4	
*Social Science	3	
	—	—
credit hours	17	7
 Professional and Other Required Courses		
EGN 1130C Descriptive Geometry	3	
ENC 2210 Technical Report Writing	3	3
ETD 1100C Engineering Drawing	3	3
ETD 1645C Mechanical & Electrical Drafting	3	3
ETE 1001 Fundamentals of General Electricity	3	3
ETG 2300 Mechanical Laboratory	3	
ETG 2504C Engineering Mechanics I: Statics	3	3
ETG 2515C Engineering Mechanics II: Dynamics	3	
ETG 2535C Testing & Strength of Materials	3	
ETI 1421C Engineering Materials & Processes	3	3
ETI 1700 Industrial Safety	3	3
ETI 2681 Industrial Supervision	3	
ETM 2221 Elements of Applied Energy	3	
ETM 2310 Fluid Mechanics	3	
ETM 2610C Air Conditioning & Heating	3	
MAC 1104 College Algebra	3	3
MTB 1322 Technical Math II	3	3
or		
MAC 1114 College Trigonometry	3	
	—	—
* Refer to AS degree General Education Requirements	credit hours	51
	—	—
	—	—
Total credit hours	68	34

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.

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.

General Education	Associate In Science	Professional and Other Required Courses	
		ENC 2210	Technical Report Writing 3
		ETD 1100C	Engineering Drawing 3
*Communications	3	ETE 1010	D/C Theory and Circuits 3
PHY 2053C General Physics I	4	ETE 1020	A/C Theory and Circuits 3
*Humanities	3	ETE 2101	Introduction to Solid State Electronics 3
PHY 2054C General Physics II	3	ETE 2111	Amplifier Circuits 3
*Social Science	3	ETE 2601C	Introduction to Digital Elec- tronics 3
	—	ETE 2527	Electrical-Electronic Control Systems 3
	credit hours 17	ETE 2633C	Computer Logic Circuits 3
		ETE 2680C	Microprocessors 3
		ETG 1201C	X-Ray Technology I 3
		ETG 2202C	X-Ray Technology II 3
		ETG 2204C	X-Ray Technology III 3
		ETG 2205C	X-Ray Technology IV 3
		ETI 1700	Industrial Safety 3
		MAC 1104	College Algebra 3
		MTB 1322	Technical Math II 3
		or	
		MAC 1114	College Trigonometry 3
			—
			credit hours 51
			—
			—
			Total credit hours 68

*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 Assisting

The object of this program is to prepare the student for a career in the field of dental assisting. The one-year (11 month) certificate program 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.

An AS degree option is also available for students who wish to continue their education and receive an Associate in Science degree in Dental Assisting. 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.

General Education	Associate In Science	Technical Certificate In Dental Assisting
ENC 1101 English Composition I	3	3
SPC 1010 Fundamentals of Speech Communication	3	3
HES 1010 Personal & Community Health	3	3
PSY 1012 General Psychology	3	3
APB 1150 Life and its Biological Environment	3	
HUM 2450 American Humanities	3	
SSI 1120 Origins of American Society	3	
	—	—
	credit hours 21	12

Professional and Other Required Courses

APB 1220C	Dental Assisting Anatomy and Physiology	4	4
HUN 1001	Principles of Nutrition	3	3
DES 1102	Dental Materials and Laboratory	3	3
DES 1201C	Dental Radiology	3	3
DEA 2800	Clinical Practice I	5	5
DEA 2801	Clinical Practice II	6	6
DEA 2802	Clinical Practice III	3	3
DEA 2803	Clinical Practice IV	5	5
DES 1002	Oral Anatomy and Development	2	2
DEA 2210	Office Management	3	3
DEA 1100	Science for Dental Assistants	3	3
DEA 1000	History and Jurisprudence of Dentistry	1	1
DEA 1820	Dental Assisting Expanded Duties	2	2
		—	—
	credit hours	43	43
		—	—
		—	—
	Total credit hours	64	55

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	
		DEH 1000C Principles of Dental Hygiene ..	5
		DEH 1001 Clinical Dental Hygiene I	6
APB 2190C Human Anatomy and Physiology I	3	DEH 1701 Dental Health Education	3
APB 2191C Human Anatomy and Physiology II	3	DEH 1802C Clinical Dental Hygiene II	8
BCH 2010C Bioorganic Chemistry for Allied Health Students	4	DEH 2101 Oral Histology and Embryology	3
CHM 1040C Introductory Chemistry	4	DEH 2303 Pharmacology	2
ENC 1101 English Composition I	3	DEH 2401 Oral Pathology	2
MCB 2013C Microbiology	4	DEH 2507L Dental Hygienists Expanded Duties	2
PSY 1012 General Psychology	3	DEH 2600 Periodontics	2
SPC 1010 Fundamentals of Speech Comm.	3	DEH 2702 Community Dental Health	2
SSI 1120 Origins of American Society II.	3	DEH 2804C Clinical Dental Hygiene III ...	8
*Humanities	3	DEH 2806C Clinical Dental Hygiene IV ...	8
	—	DEH 2930 Dental Hygiene Seminar I	2
credit hours	33	DEH 2931 Dental Hygiene Seminar II	2
		DES 1000C Oral Anatomy	3
		DES 1201C Dental Radiology	3
		HUN 1001 Principles of Nutrition	3
		DES 1102 Dental Material & Laboratory .	3
			—
		credit hours	67
			—
			—
		Total credit hours	100

*Refer to AS degree General Education Requirements

Emergency Medical Technology

The program is a combination of general education, technical 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.

General Education		Associate In Science	Technical Certificate In Emergency Medical Technology
AMH 2010	United States History I	3	
	or		
EUH 1001	Western Civilization	3	
	or		
POS 2041	American Federal Government	3	
	or		
SSI 1120	Origins of American Society II	3	
APB 2190C	Human Anatomy and Physiology I	3	6
APB 2191C	Human Anatomy and Physiology II	3	
CHM 1020	Chemistry for Liberal Arts	3	
	or		
CHM 1040	Introductory Chemistry	4	
ENC 1101	English Composition I	3	
ENC 1102	English Composition II	3	
MCB 2013C	Microbiology	4	
*Humanities	.....	3	
**Approved Electives	.....	6	
		—	—
		credit hours 28	6

Professional and Other Required Courses		Associate In Science	Technical Certificate In Emergency Medical Technology
EMS 1119	Fundamentals of Emergency Medical Care.....	6	6
EMS 1119L	Fundamentals of Emergency Medical Care Lab/Clinical	2	2
EMS 2231	EMT-Paramedic Phase I	4	4
EMS 2231L	EMT-Paramedic Phase I - Lab/Clinical	3	3
EMS 2232	EMT-Paramedic Phase II	5	5
EMS 2232L	EMT-Paramedic Phase II - Lab/Clinical	3	3
EMS 2233	EMT-Paramedic Phase III	4	4
EMS 2233L	EMT-Paramedic Phase III - Lab/Clinical	6	6
		—	—
		credit hours 33	33
		—	—
		—	—
		Total credit hours 61	39

*Refer to AS degree General Education Requirements

**Approved Electives

SOC 2000	Introductory Sociology	3
DEP 2004	Human Growth and Development	3
PSY 1012	General Psychology	3
ENC 1102	English Composition II	3
EMS 1059	First Responders: Emergency Care Training	3

NOTE: It is recommended that students have a conference with the EMT counselor prior to applying to the Emergency Medical Technology Program.

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.

General Education	Associate In Science	Professional and Other Required Courses	
		MLS 1010C Hematology	6
		MLS 1400C Medical Microbiology	6
**CHM 1040C Introductory Chemistry	4	MLS 2530 Serology and Blood Banking ..	6
**CHM 1041C Introductory Chemistry	4	MLS 2600C Principles of Clinical	
MAC 1104 College Algebra	3	Instrumentation	5
		MLS 2610C Clinical Chemistry	6
MAT 1033 Intermediate Algebra	3	MLS 2802L Clinical Practicum I	12
MCB 2013C Microbiology	4	MLS 2803 Clinical Diagnosis	5
*Communications	3	MLS 2804 Clinical Practicum II	12
*Humanities	3		—
*Social Science	3		credit hours 58
	—		—
	credit hours 24		—
		Total credit hours	82

*Refer to AS degree General Education Requirements

**Students who qualify may substitute CHM 1045C and CHM 1046C.

Nursing

The program of study is a combination of General Education and 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 Nurse Practitioners in giving direct care to patients. Upon completion of the program, graduates are awarded an Associate in Science Degree in 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 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 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	
		NUR 1040C Nursing Process I – Fundamentals of Nursing . . .	10
APB 2190C Human Anatomy and Physiology I	3	NUR 1200C Nursing Process II – Medical-Surgical Nursing . . .	10
APB 2191C Human Anatomy and Physiology II	3	NUR 2133C Nursing Process IIIa – Nursing Care of the Childbearing Family	6
DEP 2004 Human Growth & Development	3	NUR 2120C Nursing Process IIIb – Nursing Care of Children	6
ENC 1101 English Composition I	3	NUR 2220C Nursing Process IVa – Medical- Surgical Nursing Care of the Adult Patient	9
ENC 1102 English Composition II	3	NUR 2310C Nursing Process IVb – Psychiatric Nursing	3
MCB 2013C Microbiology	4	—	—
PSY 1012 General Psychology	3	—	—
SOC 2000 Introductory Sociology	3	—	—
*Humanities	3	—	—
*Social Science	3	—	—
	—	—	—
	credit hours 31	—	—
		credit hours 44	—
		—	—
		—	—
		Total credit hours	75

*Refer to AS degree General Education Requirements

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 this program. 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.

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

*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.

General Education		Associate In Science	Technical Certificate In Child Care Services	Technical Certificate In Residential Child Care Services	Technical Certificate In Infant and Toddler Care Services
BSC 1011C	Principles of Biology	4			
DEP 2004	Human Growth and Development ..	3			
DEP 2102	Child Psychology	3		3	
ENC 1101	English Composition I	3			
ENC 1102	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	3
*Humanities		3			
**Mathematics		3			
**Social Science		3			
	credit hours	37	3	6	3
Professional and Other Required Courses					
CHD 1220	Child Growth & Development I ...	3	3	3	3
CHD 1230	Child Growth & Development II ..	3	3	3	3
***CHD 1850	Training of Residential Child Care/Workers I			3	
***CHD 1851	Training of Residential Child Care/Workers II			3	
EDG 2940	Observing & Recording Child Behavior	6	6	6	6
EDG 2941	Supervised Student Participation ..	6	6	6	6
EEC 1001	Introduction to Early Childhood Education	3	3		3
EEC 1201	Overview of Early Childhood Curriculum I	3*	3		
EEC 1202	Overview of Early Childhood Curriculum II	3*	3		
****CHD 1110	Infant and Toddler Care I/(Development)				3
****CHD 2120	Infant and Toddler Care II/(Educational)				3
	credit hour	27	27	24	27
	Total credit hours	64	30	30	30

*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, training of residential child care workers I and II will substitute for EEC 1201 and EEC 1202.

****For Associate in Science degree students wishing training as infant and toddler care workers, CHD 1110 and CHD 2120 will substitute for EEC 1201 and EEC 1202.

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.

General Education	Associate In Science	credit hours
PSY 1012 General Psychology	3	
*Communications	3	
*Humanities	3	
*Mathematics – Natural Science	3	
*Social Science	3	
	—	
	credit hours	15

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

Professional and Other Required Courses

CTE 1310 Basic Clothing Construction ...	3
CTE 1401 Basic Textiles	3
CTE 2851 Fashion Sales Promotion	3
MKA 1402 Fashion Merchandising I	3
MKA 1403 Fashion Merchandising II	3
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

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.

The Dietetic Technician Option prepares students to function at the management level of dietetic care under the supervision of the Registered Dietitian or under general supervision in consultation with the dietitian. Typical duties include supervision of employees, menu planning, patient interviewing, diet instruction for routine modification, employee training, food purchasing, and supervision of food production. The dietetic technician is an integral member of the health care team in an occupation offering both personal and financial rewards. Upon completion of the Dietetic Technician Option, the student may apply for membership in the American Dietetic Association. Graduates of an ADA approved program meet licensure requirements under Public Law 10D-29.15.

General Education		Associate	AS Degree	Technical
		In	Option	Certificate In
		Science	Dietetic	Food Service
			Technician	Technology
*Communications	.....	3	6	3
*Humanities	.....	3	3	
*Mathematics – Natural Science	.....	3	3	
*Social Science	.....	3	3	
*General Education Elective	.....	3		
SOC 2000	Introductory Sociology	.....	3	
		—	—	—
	credit hours	15	18	3

Professional and Other Required Courses

FOS 1201	Sanitation and Safety	.....	3	3	3
FSS 1004	Orientation to Food Service Technology	.....	3	3	3
FSS 1100	Menu Design and Food Merchandising	.....	3	3	3
FSS 1120	Food and Beverage Purchasing	.....	3	3	3
FSS 1201	Basic Food Preparation	.....	3	3	3
FSS 1221	Quantity Food Production	.....	3	3	3
FSS 1410	Food Service Equipment/Facility Planning	.....	3	3	3
FSS 2300	Supervision and Personnel Management	.....	3	3	3
FSS 2501	Food and Beverage Control	.....	3	3	3
FSS 2945	Food Service Internship	.....	9		
HUN 1001	Principles of Nutrition	.....	3	3	3
FSS 2301	Food Service Delivery Systems	.....		3	
DIE 1100	Dietetic Seminar	.....		1	
FSS 1304	Management Clinical Practice I	.....		3	
FSS 1306	Management Clinical Practice II	.....		3	
FSS 2302	Management Clinical Practice III	.....		4	
**Approved Electives	.....	6		6	
		—	—	—	
*Refer to AS degree General Education Requirements	credit hours	45	44	36	
		—	—	—	
		—	—	—	
	Total credit hours	60	62	39	

**Approved Electives: credit hours

ACC 1009	General Accounting I	.....	3
COA 1100	Consumer Decisions	.....	3
COC 2001	Computer Concepts	.....	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.

		Associate In Science	Technical Certificate In Economic Revitalization Of Homes And Bus. Dwellings	Technical Certificate In Home Furnishings Design And Management
General Education				
*Communications		3		
*Humanities		3		
ARH 1000	Art Appreciation	3		
*Mathematics – Natural Science		3		
*Social Science		3	3	3
SOP 1002	Human Relations	3		
	credit hours	18	3	3
Professional and Other Required Courses				
CTE 1401	Basic Textiles	3		3
CTE 1402	Household Textiles			3
HHD 1001	Art in Home and Dress	3		3
HHD 1232	Functions and Psychology of Space	3	3	
HHD 1365	Home Accessories Construction			3
HHD 1500	Decorating with Slipcovers			3
HHD 1452	Home Maintenance and Repair		3	
HHD 1450	Fundamentals of Restoration and Preservation		3	
HHD 2240	Why Preservation?		3	
HHD 2600	Architectural Style: Exteriors and Interiors		3	
HHD 2234	Residential and Commercial Design	3		
HHD 2323	Perspective Renderings - Housing	3		
HHD 2810	Marketing Techniques for the Interior Designer	3		
HHD 2324	Graphic Presentation Techniques	3		
HHD 2943	Practicum in Economic Revitalization of Homes and Business Dwellings		6	
HME 1312	Home Equipment - Selection, Use, and Care		3	
HHD 2805	Professional Practices in Home Economics			3
IND 1010	Housing and Interior Design		3	
IND 1100	History of Interiors I	3		3
IND 1130	History of Interiors II	3		3
IND 1420	Materials and Sources	3	3	
IND 2940	Interior Design Internship and Seminar	6		
**Approved Professional Electives		9		6
	credit hours	45	30	30
		—	—	—
	Total credit hours	63	33	33

*Refer to Associate in Science Degree General Education Requirements

****Approved Professional Electives**
Approved Professional Electives for A.S. Degree Interior
Design Technology:

	credit hours
CTE 1402 Household Textiles	3
HHD 1365 Home Accessories Construction	3
HHD 1331 Decorating with Slipcovers	3
HHD 1362 Window Treatment Design	3
HHD 1360 Construction of Window Treatments and Draperies	3
HHD 1452 Home Maintenance and Repair	3
HHD 1450 Fundamentals of Restoration and Preservation	3
HHD 1510 Introduction to Upholstery	3
HHD 1511 Advanced Upholstery	3
HHD 2240 Why Preservation?	3
HHD 2600 Architectural Styles: Exteriors and Interiors	3
HME 1200 Home Management	3
HME 1312 Home Equipment - Selection, Use, and Care	3
HME 2805 Professional Practices in Home Economics	3
IND 1010 Housing and Interior Design	3
QMB 1001 Business Mathematics	3
ETC 1100C Engineering Drawing	3
ART 2120C Architectural Drafting	3

****Approved Professional Electives for Technical Certificate in**
Home Furnishings Design and Management

	credit hours
HHD 1355 Window Treatment Design	3
HHD 1360 Construction of Window Treatments and Draperies	3
HHD 1510 Introduction to Upholstery	3
HHD 1511 Advanced Upholstery	3

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.

General Education	Associate in Science
APB 1150 Life in Its Biological Environment	3
*Communications	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	3
	—
	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 1220 Criminal Law	3
CCJ 2250 Constitutional Law	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	3
	—
*Refer to AS degree General Education Requirements	credit hours 36
	—
	—
	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 listed hereafter under Professional and Other Required Courses.

General Education		Associate In Science	Technical Certificate In Law Enforcement
APB 1150	Life In its Biological Environment	3	
*Communications	.....	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	

Professional and Other Required Courses

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 1220	Criminal Law	3	3
CCJ 2230	Criminal Evidence and Procedure	3	3
CCJ 2250	Constitutional Law	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
		—	
*Refer to AS degree General Education Requirements		credit hours	39
		—	—
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	
*Communications	.....	3		
ENC 1101	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	3		
	or			
SOP 1002	Human Relations	3		
SPC 1010	Fundamentals of Speech Communication	3	3	
	credit hours	27	29	
PHI 2100	Introduction to Logic		3	
FFP 1000	Introduction to Fire Protection	3	3	3
FFP 1100	Introduction to Fire Organization	3		3
	and Administration			
FFP 1110	Fire Company Supervision and Management	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

*Refer AS degree General Education Requirements.

**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.

		Associate In Science
General Education		
*Communications		3
*Humanities		3
*Mathematics – Natural Science		3
*Social Science		6
		—
	credit hours	15
Professional and Other Required Courses		
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		12
		—
*Refer to AS degree General Education Requirements	credit hours	48
		—
		—
	Total credit hours	63

**Approved electives:		credit hours
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.



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 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.

Construction Technology

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

The two-year program in construction technology is designed to provide the student with the knowledge/skill requirements necessary for building construction trades by providing the theory, basic skills, safety, and first aid training common to all building trades. The specialty courses provide the knowledge/-skills directed to specific construction technologies.

Students enrolled in this program of study are required to take the General Education Requirements and Core Courses listed.

General Education	Associate In Applied Science	Technical Certificate In Construction Technology
*Mathematics-Natural Science	3	3
*Communications	3	
*Social Science	3	
*Humanities	3	
*General Education Elective	3	
	—	—
	credit hours 15	3

Core Courses	Associate In Applied Science	Technical Certificate In Construction Technology
ETD 1100C Engineering Drawing	3	3
ARC 2120C Architectural Drafting	3	
BCT 1001 Quantitative Methods for Building Trades	3	3
BCT 1113 Blueprint Reading for Building Trades	4	4
BCN 2614C Planning and Estimating	3	
IEA 1305 Industrial Survival Procedures	3	3
BCT 1710 Energy Efficient Construction	3	3
	—	—
	credit hours 22	16

*Refer to AS degree General Education Requirements.

Specialty Courses

Carpentry Technology

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 2118	Exterior Finish	4	4
BCT 2117	Interior Trim and Cabinets	4	4
BCT 2130	Passive Solar Construction	3	3
**Approved Professional Elective		3	3
	credit hours	29	23
		—	—
		—	—
	Total credit hours	66	42

Masonry Technology

BCT 1401	Introduction to Brick & Block Masonry	4	4
BCT 1114	Concrete Form Construction	4	4
BCT 1431	Wall Layout & Construction	4	4
BCT 2405	Advanced Masonry	4	4
BCT 2460	Chimneys & Fireplaces	4	4
BCT 2416	Masonry Specialties, Stucco, & Plaster	4	4
AET 2103	Passive Solar Construction	3	3
**Approved Professional Elective		3	3
	credit hours	30	20
		—	—
		—	—
	Total credit hours	67	39

Plumbing Technology

BCT 1501	Introduction to Plumbing	4	4
BCT 1505	Plumbing Codes	4	4
BCT 2521	Isometrics & Layout	4	4
BCT 1523	Venting Systems	4	4
BCT 2527	Fixtures & Valves	4	4
BCT 1504	Plumbing Repairs	4	4
BCT 1502	Estimating Plumbing Repairs	4	4
BCT 1525	Water Distribution Systems	4	4
	credit hours	32	24
		—	—
		—	—
	Total credit hours	69	43

**Approved Professional Electives

COC 2001	Computer Concepts	3	ACC 1009	General Accounting I	3
QMB 1001	Business Mathematics	3	SUR 1101C	Surveying	3
MAN 2000	Principles of Management	3	ETI 2681	Industrial Supervision	3
REE 1000	Real Estate Principles and Practices	3	ACC 2001	Principles of Accounting I	3
BUL 2111	Business Law	3	ETI 1700	Industrial Safety	3
GE 1011	Introduction to Business	3	MTR 1100	Welding for Related Trades	4
			MAN 2800	Small Business Management	3

Electrical/Electronics Technology

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

The two-year program in electrical/electronics technology is designed to provide the student with the knowledge/skill requirements necessary for electrical/electronics trades by providing the theory, basic skills, safety, and first aid training common to all electrical/electronics trades. The specialty courses provide the knowledge/skills directed to specific electrical/electronics technologies.

Students enrolled in this program of study are required to take the General Education Requirements and Core Courses listed.

	Associate In Applied Science	Technical Certificate In Electrical/ Electronics Technology
General Education		
*Mathematics-Natural Science	3	3
*Communications	3	
*Social Science	3	
*Humanities	3	
*General Education Elective	3	
	—	—
	credit hours	15
Core Courses		
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
	—	—
	credit hours	15

Specialty Courses

	Associate In Applied Science	Technical Certificate In Electrical/ Electronics Technology
Air Conditioning and Appliance Technology		
ACT 1020 Introduction to Air Conditioning and Refrigeration	4	4
ACT 2050 Major Components of Air Conditioning and Refrigeration	4	4
ACT 2620 Air Conditioning: Commercial and Residential	4	4
ACT 2060 Psychrometrics and Heat Load Calculations	4	4
ACT 2850 Basic Air Conditioning Troubleshooting	4	4
EER 2311 Home Appliances Maintenance and Service I	4	
EER 2312 Home Appliances Maintenance and Service II	4	
EER 2313 Cooking Appliances Maintenance and Service	4	
	—	—
	credit hours	32
	—	—
	—	—
	Total credit hours	62
		38

*Refer to AS degree General Education Requirements

		Associate In Applied Science	Technical Certificate In Electrical/ Electronics Technology
Construction Electricity Technology			
ACT 1020	Introduction to Air Conditioning and Refrigeration	4	
BCT 1604	Introduction to Electrical Construction	3	3
BCT 1632	Raceway Installation	3	3
BCT 2622	Electrical Calculations	3	3
BCT 2692	Residential Electrical Installation	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	
BCT 2610	Codes for Electrical Exams	3	3
EER 2220	AC/DC Motor Controls	4	
EER 2261	AC/DC Machinery and Transformers	4	
		—	—
	credit hours	39	21
		—	—
		—	—
	Total credit hours	69	39

Industrial Electronics Technology

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	3
EER 2411	Digital Electronics	4	
EER 2351	Test Equipment Maintenance and Service	4	
EER 2831	Computer Circuit Analysis	4	
EER 1021	Pole Climbing	3	
		—	—
	credit hours	35	16
		—	—
		—	—
	Total credit hours	65	34

Marine Electricity Technology

ETD 1100C	Engineering Drawing	3	
ENC 2315	Technical Report Writing	3	
EER 1211	Introduction to Circuit Analysis	3	3
EER 1291	Basic Circuit Analysis	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	20
		—	—
		—	—
	Total credit hours	66	38

**Approved Professional Electives:

MTR 1100	Welding For Related Trades	4
ACT 1020	Introduction to Air Conditioning and Re- frigeration	4
BCT 1604	Introduction to Electrical Construction ...	3
ETI 2681	Industrial Supervision	3
ETI 1700	Industrial Safety	3

Total credit hours 66 38

Metal Trades Technology

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

The two-year program in metal trades technology is designed to provide the student with the knowledge/skill requirements necessary for metals trades by providing the theory, basic skills, safety, and first aid training common to all metal trades. The specialty courses provide the knowledge/skills directed to specific metal trades technologies.

Students enrolled in this program of study are required to take the General Education Requirements and Core Courses listed.

	Associate in Applied Science	Technical Certificate in Metal Trades Technology
General Education		
*Mathematics-Natural Science	3	3
*Communications	3	
*Social Science	3	
*Humanities	3	
*General Education Elective	3	
	—	—
	credit hours	
	15	3
Core Courses		
ETD 1100C Engineering Drawing	3	3
IEA 1305 Industrial Survival Procedures	3	3
**MTR 1100 Welding for Related Trades	4	
ETI 1421C Engineering Materials & Processes	3	3
ETM 2800 Fundamentals of Metallurgy	3	
MTR 1171 Introduction to Non-Destructive Testing for Welders	3	
	—	—
	credit hours	
	19	9

Specialty Courses

Industrial Machine Technology		
MTR 2484 Machine Measurement	3	3
MTR 1472 Machine Lathe Work	4	4
MTR 1004 Machine Bench Work	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	
MTR 2483 Machine Shaper	4	
MAN 2800 Small Business Management	3	
***Professional Elective	3	
	—	—
	credit hours	
	33	19
	—	—
	—	—
	Total credit hours	
	67	31

*Refer to AS degree General Education Requirements

**Welding majors substitute MTR 1120

***Sheet Metal substitute a math course to be approved by Program Director.

		Associate In Applied Science	Technical Certificate In Metal Trades Technology
Sheet Metal Technology			
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	
MTR 2123	Advanced Gas Metal Arc Welding	4	
***Professional Elective		3	
	credit hours	33	23
		—	—
	Total credit hours	67	35

Welding Technology

MTR 1120	Basic Metal Arc Welding	4	
MTR 1121	Advanced Metal Arc Welding	4	
MTR 1122	Basic Gas Metal Arc Welding	4	4
MTR 2123	Advanced Gas Metal Arc Welding	4	4
MTR 2126	Gas Tungsten Arc Welding Tubing and Pipe (TIG)	4	4
MTR 2142	Shielded Metal Arc Welding	4	4
MTR 2146	Gas Metal Arc Pipe Welding (MIG)	4	
MTR 2147	Basic Gas Tungsten Arc Welding (TIG)	4	4
	credit hours	32	20
		—	—
	Total credit hours	66	32

*** Approved Professional Electives:

Any course from Metal Trades Technology Specialty Courses or:

		credit courses
GEB 1011	Introduction to Business	3
BUL 2111	Business Law	3
ACC 1009	General Accounting I	3
COC 2001	Computer Concepts	3
ETI 2681	Industrial Supervision	3
ACC 2001	Principles of Accounting I	3
ETD 1645C	Mechanical and Electrical Drafting	3
ETG 2504C	Engineering Mechanics	4
MAN 2800	Small Business Management	3

Road Vehicle and Small Gas Engine Technology

The objective of this program is to prepare the student for a career in the road vehicle and small engine fields.

The two-year program in road vehicle and small gas engine technology is designed to provide core courses that will meet the knowledge/skill requirements necessary for all vehicle specialized areas by providing theory, basic skills, safety and first aid training. Specialty courses provide knowledge and work tasks directed to a specific Occupational/Technical area.

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 industries.

Students enrolled in this program of study are required to take the General Education Requirements and Core Courses listed.

	Associate In Applied Science	Technical Certificate In Road Vehicle and Small Gas Engine Technology
General Education		
*Communications	3	
*Social Science	3	
*Humanities	3	
*Mathematics-Natural Science	3	3
*General Education Elective	3	
-or-		
REA 1305 - Developmental Reading with Lab	3	
	—	—
	credit hours	3
Core Courses		
AER 1100 Vehicle Electrical and Support Systems	4	4
ETI 1700 Industrial Safety	3	3
AER 2171 Heating and Air Conditioning	4	4
AER 1131 Transmission and Drive Systems	4	4
AER 1000 Basic Technician Skills	1	1
IEA 1305 Industrial Survival Procedures	3	3
	—	—
	credit hours	19

Specialty Courses

	Associate In Applied Science	Technical Certificate In Road Vehicle and Small Gas Engine Technology
Automotive Mechanics Technology		
AER 1160 Introduction to Vehicle Service/Parts Supervision	3	
AER 1180 Integrated Automotive Systems	4	4
AER 2112 Advanced Engine Diagnosis	4	
AER 2705 Diesel Engine Fundamentals	4	
AER 2004 Power Plant Overhaul	4	4
AER 1121 Brake Systems and Chassis Repair	4	4
AER 1120 Steering and Suspension Systems	4	4
**Professional Electives	6	
	—	—
	credit hours	16
	—	—
	Total credit hours	38

*Refer to AS degree General Education Requirements

		Associate In Applied Science	Technical Certificate In Road Vehicle and Small Gas Engine Technology
Vehicle Body Technology			
AER 1120	Steering and Suspension Systems.....	4	
AER 1271	Introduction to Automotive Body Shop Supervision	3	
AER 2210	Auto Metal Damage Analysis and Repair	4	4
AER 1221	Auto Paint Formulas and Applications	4	4
AER 2214	Auto Body Panel Replacement and Frames	4	4
AER 2272	Advanced Auto Body Major Repair and Appraising	4	4
AER 2241	Auto Glass Replacement and Alignment and Sheet Metal Adjustment.....	4	4
**Professional Electives		6	
	credit hours	33	20
		—	—
	Total credit hours	67	42

Truck/Diesel Mechanics Technology

AER 1160	Introduction to Vehicle Service/Parts Supervision	3	
AER 1120	Steering and Suspension Systems.....	4	
AER 2705	Diesel Engine Fundamentals	4	4
AER 2706	Diesel Engine Diagnosis and Repair	4	4
AER 2505	Advanced Truck Repair	4	4
AER 1121	Brake Systems and Chassis Repair	4	4
AER 1145	Fuel Injection & Control Systems	4	
TRA 1422	Truck Design and Federal/State Regulations	3	
**Professional Elective		3	
	credit hours	33	16
		—	—
	Total credit hours	67	38

Vehicle Machinist Technology

AER 2004	Power Plant Overhaul.....	4	4
AER 2705	Diesel Engine Fundamentals	4	
AER 1160	Introduction to Vehicle Service/Parts Supervision	3	
AER 1180	Integrated Automotive Systems	4	4
AER 2112	Advanced Engine Diagnosis	4	
MTR 2561	Basic Vehicle Machinist	4	4
MTR 2562	Advanced Vehicle Machinist	4	4
**Professional Electives		6	
	credit hours	33	16
		—	—
	Total credit hours	67	38

Small Engine Technology

AER 1160	Introduction to Vehicle Service/Parts Supervision	3	
MTR 2561	Basic Vehicle Machinist	4	4
AER 1120	Steering and Suspension Systems	4	
AER 1121	Brake Systems and Chassis Repair	4	
AER 2306	Outdoor Powered Equipment	4	4
AER 2601	Maintenance Procedures for Motorcycles/Mopeds	4	4
AER 2361	Small Engine Repair	4	4
**Professional Electives		6	
		—	—
	credit hours	33	16
		—	—
	Total credit hours	67	38

****Approved Professional Electives:**

Any course from the Road Vehicle and Small Gas Engine Technology

BUL 2111	Business Law	3
COC 2001	Computer Concepts	3
ECO 2013	Principles of Economics I	3
GEB 1011	Introduction to Business	3
MAN 2800	Small Business Management	3