

GENERAL EDUCATION REQUIREMENTS

ASSOCIATE IN ARTS DEGREE

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 60 semester hours required for the Associate in Arts degree. General Education, as conceived at the 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 below:
 1. **Social Science**6 semester hours
 - A. Three semester hours from any of the following: (Meets State Requirement for Study of U.S. Constitution)
 - HIS 102 - Western Civilization
 - HIS 204 - United States History
 - POS 204 - American Federal Government
 - SSS 102 - Origins of American Society
 - B. Three semester hours from any of the following:
 - ANT 220 - Cultural Anthropology
 - ANT 230 - Physical Anthropology
 - BLC 210 - Afro-American History and Culture to 1877
 - BLC 220 - Afro-American History and Culture from 1877
 - ECO 220 - Foundations of the American Economy
 - ECO 210 - Principles of Economics
 - ECO 211 - Principles of Economics
 - ECY 201 - The Ecological Class
 - GEO 110 - World Geography
 - GEO 220 - Conservation of Resources
 - HEN 107 - Personal and Community Health
 - HIS 101 - Western Civilization
 - HIS 193 - Honors Survey of History
 - HIS 205 - United States History
 - HIS 211 - History of the Far East
 - HIS 212 - History of the Americas
 - HIS 254 - History of Florida
 - IDS 150 - Dynamics of Behavior
 - INR 230 - International Relations
 - POS 205 - State and Local Government

POS 220 - Introduction to Comparative Government
 PSY 111 - General Psychology
 PSY 242 - Child Psychology
 PSY 243 - Adolescent Psychology
 PSY 214 - Educational Psychology
 PSY 241 - Human Growth and Development
 REL 201 - World Religions
 SOC 201 - Introductory Sociology
 SOC 210 - Social Problems
 SOC 220 - Marriage and Family
 SOP 110 - Human Relations
 SSS 101 - Origins of American Society

II. Humanities6 semester hours

A. Six Semester hours from any of the following:

ART 110 - Art Appreciation
 ART 211 - Art History I
 ART 212 - Art History II
 DRA 101 - Introduction to Theatre
 HUM 182-183 - Overseas Study
 HUM 201 - Humanities
 HUM 202 - Humanities
 HUM 213 - International Understanding I
 HUM 214 - International Understanding II
 HUM 215 - American Understanding
 HUM 216 - International Understanding III
 HUM 217 - International Understanding IV
 LIT 240 - Great Ideas in World Literature
 LIT 241 - Great Ideas in World Literature
 MUY 101 - Music Appreciation
 MUY 211 - Survey of Music History
 PHI 201 - Introduction to Philosophy
 PHI 240 - Introduction to Ethical Theory
 REL 201 - Religious Thought in the Old Testament
 REL 211 - Religious Thought in the New Testament

III. Mathematics - Natural Science9 semester hours

A. Six semester hours from any of the following:

ANA 205 - Comparative Anatomy
 ANA 215 - Human Anatomy & Physiology
 ANA 216 - Anatomy & Physiology
 AST 110 - Introduction to Astronomy
 BIO 101 - Life in its Biological Environment
 BIO 102 - Principles of Biology
 BIO 241 - Microbiology
 BOT 101 - Botany
 CHE 100 - Chemistry for Liberal Arts
 CHE 101 - Introductory Chemistry
 CHE 102 - Introductory Chemistry
 CHE 110 - General Chemistry & Qualitative Analysis

CHE 111 - General Chemistry & Qualitative Analysis
ECY 201 - The Ecological Class
GEY 101 - Physical Geology
GEY 121 - Historical Geology
MET 101 - Meteorology
PHS 101 - Life in its physical Environment
PHS 102 - Life in its Physical Environment
PHY 100 - Introduction to Physics
PHY 201 - General Physics
PHY 202 - General Physics
PHY 210 - Physics I with Calculus
PHY 211 - Physics II with Calculus
ZOO 101 - General Zoology

B. Three semester hours from any of the following:

MAT 101 - College Mathematics
MAT 111 - Introductory Analysis
MAT 119 - Beginning Algebra
MAT 120 - Intermediate Algebra
MAT 121 - College Algebra
MAT 122 - College Trigonometry
MAT 124 - College Algebra & Trigonometry
MAT 131 - Calculus with Analytic Geometry I
MAT 151 - Elementary Statistics
MAT 161 - Computer Oriented Mathematics
MAT 232 - Calculus with Analytic Geometry
MAT 233 - Calculus with Analytic Geometry III
MAT 242 - Differential Equations

IV. Communications6 Semester Hours

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

ENG 105 - Communication for Today's World

B. Three semester hours from any of the following:

COM 207 - Imaginative Writing
COS 205 - Writing for Mass Communications
ENG 101 - English Composition
ENG 102 - English Composition
ENG 161 - Developmental Reading
LIT 210 - English Literature
LIT 211 - English Literature
LIT 220 - American Literature
LIT 221 - American Literature
SPE 110 - Fundamentals of Speech
SPE 236 - Argumentation and Debate
SPE 240 - Discussion
SPE 250 - Oral Interpretation

- V. Courses from any one or more of the above four categories (I, II, III, IV)9 Semester Hours
- VI. Electives24 Semester Hours

Total: 60 Semester Hours

The remaining 24 semester hours (Area VI) of the 60 semester hours required for the Associate in Arts degree are elective. Any course listed in the catalog with the designations shown below may be used as electives.

- ***University Parallel** - This course is intended for transfer to a university.
- +**Dual Purpose** - Any course identified by this symbol is a university parallel offering. As well, the course is also part of certain occupational programs; hence, it serves both university parallel and occupational objectives.

PREREQUISITES

Prerequisites, as listed in the catalog, are advisory.



ASSOCIATE IN SCIENCE DEGREE

1. At least twenty-five (25) percent of each Associate in Science degree program shall be devoted to general education.
2. The following subject areas shall be included in each program in the manner specified below:

I. Social Science3 semester hours

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

- HIS 102 - Western Civilization
- HIS 204 - United States History
- POS 204 - American Federal Government
- SSS 102 - Origins of American Society

II. Humanities3 semester hours

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

III. Mathematics - Natural Science3 semester hours

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

IV. Communications3 semester hours

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

- ENG 101 - English Composition OR
- ENG 105 - Communication for Today's World

- 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.

CURRICULA OFFERED

THE ASSOCIATE IN ARTS DEGREE FOR TRANSFER TO A UNIVERSITY

Any student expecting to transfer to a senior college from Florida Junior College at Jacksonville is advised to write the Registrar of the 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 his advisor or counselor soon after the student enrolls at FJC. The student is advised to choose his major as soon as possible while at FJC.

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 FJC 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 his program of study.

In planning his/her program at Florida Junior College at Jacksonville, the student should be certain he meets the General Education Requirements for the Associate in Arts degree and completes a program of at least sixty semester hours exclusive of occupational courses and physical education activity courses.

ASSOCIATE IN ARTS DEGREE	Special Areas of Study In:			
	Cumberland Campus	North Campus	South Campus	Downtown Campus
Art or Art Education			X	
Business Administration	X	X	X	
Business Education	X	X	X	
Child Care Services		X		
Criminal Justice Education—Corrections			X	
Criminal Justice Ed.—Law Enforcement			X	
Data Processing		X		
Fire Science and Prevention			X	
Forestry	X	X	X	
Health, Physical Education and Recreation	X	X	X	
Home Economics Education	X			
Liberal Arts	X	X	X	
Marine Sciences			X	
Medical Laboratory Technology		X		
Music or Music Education			X	
Occupational Therapy	X	X	X	
Pharmacy		X	X	
Physical Therapy	X	X	X	
Pre-Dental, Pre-Medical, Pre-Optometry and Pre-Veterinary Medicines	X	X	X	
Pre-Engineering		X	X	
Pre-Law	X	X	X	
Pre-Nursing		X	X	
Teacher Education	X	X	X	

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

THE ASSOCIATE IN SCIENCE DEGREE

FOR A GENERAL EDUCATION OR TO A JOB AND CAREER IN TWO YEARS

The Career Education Programs are designed to prepare the student who, at the completion of a program of study listed in this section of the bulletin, is planning to enter his chosen career at the semi-professional level, or who plans to transfer to a four-year university offering the baccalaureate degree in engineering technology.

Occupational patterns in industry have changed significantly in the past twenty years. The rate of change is increasing. The growth of automation, new materials, new processes, and improved techniques of measurement and control have combined to increase the need for technically competent persons with special abilities who can support and supplement the efforts of engineers, scientists, and managers.

Advisory committees representing business and industry, and survey information that has helped to identify areas of manpower needs, have provided assistance in the development of the various programs of study. The broad area of Career Education at Florida Junior College at Jacksonville, in all of its philosophy, concepts, and functions, reflects the image of the worth of the individual, the needs of the individual and industry, and is conceived as one means of providing a quality program of education which not only recognizes the importance of essential skills and knowledge, but in addition, recognizes the need for desirable attitudes and habits.

The following are recommended programs of study leading to the Associate in Science Degree in various areas of career education:

ASSOCIATE IN SCIENCE DEGREE:	Cumberland Campus	North Campus	South Campus	Downtown Campus
Accounting	X	X	X	
Architectural & Building Construction Technology		X		
Banking	X			
Child Care Services		X		
Civil Engineering Technology		X		
Criminal Justice Education—Corrections			X	
Criminal Justice Education—Law Enforcement			X	
Data Processing		X		
Dental Hygiene		X		
Drafting and Design Technology		X		
Electronic Engineering Technology		X		
Fashion Merchandising	X			
Fire Science and Prevention			X	
Food Service Technology	X			
General Business	X	X	X	
Hospitality Management	X			
Insurance	X			
Marketing		X	X	
Mechanical Engineering Technology		X		
Medical Laboratory Technology		X		
Printing/Graphic Arts		X		
Real Estate	X			
Retail Merchandising		X		
Secretarial Science		X	X	
Technical Nursing		X		
Transportation	X			
X-Ray Engineering Technology		X		

(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 PROGRAMS

ACCOUNTING

The accounting program is primarily designed for those students who intend to seek immediate employment in some area of accounting and, is also intended 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 of leadership and responsibility in industry; federal, state, and local government; and public accounting.

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.

Accounting graduates are among the most sought after college graduates and, in Jacksonville and the surrounding areas, the opportunities are unlimited.

Future courses to be included in the accounting curriculum based on need shown by the community at large might include: Auditing, Advanced Accounting, and an Accounting Internship.

General Education	Credits
*Communications	3
*Humanities	3
*Mathematics - Natural Science	3
*Social Science	<u>6</u>
	15
Professional and Other Required Courses	
AAC 260, 261, 262, 263, 280, 281 Accounting	19
APC 291 Business Communications	3
APM 141 Business Mathematics	3
BUW 260, 261 Business Law	6
ECO 220 Foundations of the American Economy	3
FCR 260 Principles of Finance	3
FMC 173 Calculating Machines	2
SAM 160 Introduction to Business	3
SAM 250 Principles of Management	<u>3</u>
	<u>45</u>
Total:	60

*Refer to General Education Requirements

ARCHITECTURAL & BUILDING CONSTRUCTION TECHNOLOGY

A course of study to prepare the student for a career in the architectural, building and construction field. The approach is toward a broad coverage of the existing specialties, which together form the requisite skills, techniques, and knowledge that are involved in these professions. The curriculum includes the basic courses in applied mathematics and science, in graphics, in communications, and in engineering fundamentals.

This program is specifically designed to provide qualified building construction technicians created by the phenomenal growth of both community and state. The graduate may elect to continue in the upper division of a university in a technological area.

General Education	Credits
*Communications	3
*Humanities	3
PHY 100 Introduction to Physics.....	3
*Social Science	6
	<u>15</u>
 Professional and Other Required Courses	
AIC 283 Air Conditioning and Heating.....	3
APM 160 Technical Math I	3
APM 161 Technical Math II.....	3
APM 164 Engineering Calculations	1
BCN 181 Building Construction	3
BCN 282 Planning and Estimating	3
CIT 180 Surveying	3
DTG 170 Engineering Drawing	3
DTG 280 Architectural Drafting	3
DTG 281 Civil Drafting	3
IEL 160 Fundamentals of Electricity	3
ISA 170 Industrial Safety	3
MEY 160 Engineering Materials & Processes	4
MTY 281 Engineering Mechanics	4
SAM 160 Introduction to Business	3
STT 282 Testing & Strength of Materials	4
TER 281 Technical Report Writing	3
	<u>52</u>
Total:	67

*Refer to General Education Requirements

BANKING

This is a two-year program for the student whose interests lie in the field of banking. Upon completion of the program, the student will be qualified to commence a career in banking or to continue with banking courses in an upper division institution. FCR 181, "Principles of Bank Operation," is a prerequisite to taking other banking courses. Required courses in related fields provide the student with an accompanying broad and strongly-based background.

General Education	Credits
ENG 101 English Composition	3
ECO 210 Principles of Economics	3
HUM 201 Humanities	4
*Mathematics-Natural Science—Except MAT 101	3
PSY 111 General Psychology	3
*Social Science	3
*Social Science or Humanities	3
SPE 110 Fundamentals of Speech	3
	<u>25</u>

Professional and Other Required Courses

AAC 160 General Accounting	3
APM 141 Business Mathematics	3
BUW 260 Business Law	3
FCR 168, 181, 260, 268, 281 Banking and Finance	15
**SAM 160 Introduction to Business	3
SAM 250 Principles of Management	3
FCR ELECTIVES	<u>6</u>
	<u>36</u>
Total:	61

*Refer to General Education Requirements

**Another course may be selected upon approval by Program Director

NOTE: FCR electives may be selected from any of the FCR courses shown in the course description section of the catalog. AAC 161, SAM 251 may also be selected.

CHILD CARE SERVICES

Students completing the program will have had an opportunity to observe and participate in the Child Care Laboratory at the North Campus. Graduates of the program will be qualified to work with young children.

General Education	Credits
BIO 101 Life in its Biological Environment	3
ENG 101 English Composition	3
*Humanities	3
PSY 111 General Psychology	3
PSY 242 Child Psychology	3

SOC 210 Social Problems	3
SOC 220 Marriage and Family	3
SPE 110 Fundamentals of Speech	3
*Social Science	3
*Mathematics-Natural Science	3
	<u>30</u>

Professional and Other Required Courses

CGC 161 Child Growth and Development	3
CGC 162 Advanced Child Growth and Development	3
CGC 163 Principles of Early Childhood Education	3
CGC 164 Overview of Early Childhood Curriculum	3
CGC 165 Music for Young Children	2
CGC 166 Literature for Young Children	2
CGC 167 Child and Parent in the Community	2
CGC 291 Observing and Recording Child Behavior	4
CGC 292 Supervised Student Participation	6
CGC 293 Teaching of Early Childhood Games	2
FSM 166 Child Nutrition	2
HEN 215 Standard First Aid	2
CGC Approved Elective	2
	<u>36</u>
Total:	66

Approved Electives:

CGC 168 Art for Young Children	2
CGC 282 Science for Young Children	2
CGC 284 New Mathematics for Young Children	2
CGC 285 Introduction to Mental Retardation	2

*Refer to General Education Requirements.

CIVIL ENGINEERING TECHNOLOGY

The program of instruction in Civil Engineering Technology is designed to provide engineering assistants in the technical-occupational areas of drafting, construction, road building, surveying, hydraulics, and instrumentation. Upon successful completion of the curriculum, the student is awarded the Associate Degree in Science. At this time, the graduate is prepared to enter a chosen career or to continue in the upper division of a university in a technological area.

General Education	Credits
ENG 101 English Composition	3
*Humanities	3
*Social Science	3
PHY 100 Introduction to Physics	3
*Mathematics-Natural Science	3
	<u>15</u>

Professional and Other Required Courses

APM 160 Technical Math I	3
APM 161 Technical Math II	3
APM 164 Engineering Calculations	1
BCN 181 Building Construction	3
BCN 282 Planning and Estimating	3
CIT 180 Surveying	3
DTG 170 Engineering Drawing	3
DTG 171 Descriptive Geometry	3
DTG 281 Civil Drafting	3
IEL 160 Fundamentals of Electricity	3
MEY 160 Engineering Materials & Processes	4
MTY 280 Elements of Applied Energy	3
MTY 281 Engineering Mechanics	4
MTY 285 Fluid Mechanics	3
SAM 160 Introduction to Business	3
STT 282 Testing & Strength of Materials	4
TER 281 Technical Report Writing	3
	<u>52</u>
Total:	67

*Refer to General Education Requirements

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. The faculty are experienced, knowledgeable, and well-known in their field.

The student is assured of modern, up-to-date instruction which will aid him in his chosen occupation or in seeking a career in the correctional field.

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

General Education	Credits
BIO 101 Life in its Biological Environment	3
ENG 101, 102 Communications	6
HUM 201 Humanities	4
POS 204, 205 Political Science	6
PSY 111 General Psychology	3
SOC 201 Introductory Sociology	3
SOP 110 Human Relations	3
	<u>28</u>

Professional and Other Required Courses

COR 160, 161, 260, 265, 280, 281, 285 Corrections	21
LAE 160, 163, 260, 267 Law Enforcement	12
	<u>33</u>
Total:	61

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. The faculty are experienced, knowledgeable, and well-known in their field.

The student is assured of modern, up-to-date instruction which will aid him in his chosen occupation or in seeking a career in the field of law enforcement.

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

General Education	Credits
BIO 101 Life in its Biological Environment	3
ENG 101, 102 Communications	6
HUM 201 Humanities	4
POS 204, 205 Political Science	6
PSY 111 General Psychology	3
SOC 201 Introductory Sociology	3
SOP 110 Human Relations	3
	<u>28</u>
Professional and Other Required Courses	
LAE 160, 161, 162, 163, 260, 262, 264, 265, 266, 280, 281 Law Enforcement	33
Total:	<u>61</u>

DATA PROCESSING

The two-year course of study is designed to prepare the student for employment in the data processing field. The curriculum includes a mixture of business, general education, and data processing course offerings and is being continually up-graded as the state of the computer art changes. Data Processing courses are taught with hands-on approach where students prepare and run their own work on college equipment.

General Education	Credits
*Communications	3
*General Education	6
*Mathematics	3
PSY 111 General Psychology or SOP 110 Human Relations	3
*Science	3
*Social Science	3
SPE 110 Fundamentals of Speech	3
	<u>24</u>

Professional and Other Required Courses

AAC 260 Principles of Accounting I	3
BDP 170 Introductory Computer Concepts	3
BDP 171 Data Processing Mathematics	3
BDP 172 Basic Assembly Language Programming	3
BDP 173 Data Processing Applications	3
BDP 290 COBOL Programming	3
BDP 291 Systems Development and Design	3
BDP 296 Advanced Computing and Programming Systems	3
SAM 160 Introduction to Business	3
SAM 250 Principles of Management	3
TER 281 Technical Report Writing	3
**BDP approved elective	3
	36
Total:	60

*Refer to General Education Requirements

**Approved Electives:

- BDP 175 RPG Programming
- BDP 293 Advanced Assembly Language Programming
- BDP 294 FORTRAN/BASIC Programming
- BDP 295 PL/I Programming

DENTAL HYGIENE

Admission to this two-year A. S. Degree program is limited. Continuation in the program's second year is dependent upon maintaining a 2.0 average in the first year. A grade of "C" or above must be maintained in all Dental Hygiene courses. Applicants must be graduates of an accredited high school or its equivalent. A background of science and mathematics and good manual dexterity is strongly recommended. Admission requisites for the Dental Hygiene Program can be obtained from the Director of Dental Programs or Office of Student Development.

General Education	Credits
ANA 215 Anatomy and Physiology I	3
ANA 216 Anatomy and Physiology II	3
BIO 241 Microbiology	4
CHE 101 Introductory Chemistry	4
CHE 102 Introductory Chemistry	4
ENG 105 Communication for Today's World	3
HUM 215 Humanities	3
PSY 111 General Psychology	3
*Social Science	3
SPE 110 Fundamentals of Speech	3
	33

Professional and Other Required Courses

DEH 161 Principles of Dental Hygiene	2
DEH 162 Dental Hygiene I	4
DEH 163 Dental Hygiene II	4
DEH 164 Dental Health Education	3
DEH 165 Dental Anatomy	3
DEH 166 Dental Radiology	3
DEH 167 Dental Materials	3
FSM 162 Basic Nutrition	3
	<u>25</u>
Total:	58

*Refer to General Education Requirements
NOTE: DEH 200 level courses to be announced

DRAFTING AND DESIGN TECHNOLOGY

The Drafting and Design Technology program is designed to train persons who can be assistants to Engineers and Architects. They will translate ideas, sketches, specifications, and calculations into complete and accurate working drawings. They must have a knowledge of the fundamentals of design and be able to complete designs for which the basic calculations have been made. The graduate may elect to continue in the upper division of a university in a technological area.

General Education	Credits
*Communications	3
*Humanities	3
*Social Science	3
PHY 100 Introduction to Physics	3
*Mathematics-Natural Science	3
	<u>15</u>

Professional and Other Required Courses

APM 160 Technical Math I	3
APM 161 Technical Math II	3
APM 164 Engineering Calculations	1
BCN 282 Planning and Estimating	3
DTG 160 Mechanical and Electrical Drafting	3
DTG 170 Engineering Drawing	3
DTG 171 Descriptive Geometry	3
DTG 280 Architectural Drafting	3
DTG 281 Civil Drafting	3
DTG 282 Industrial Design	3
IEL 160 Fundamentals of Electricity	3
ISA 170 Industrial Safety	3
MEY 160 Engineering Materials & Processes	4
MTY 281 Engineering Mechanics	4
SAM 160 Introduction to Business	3

STT 282 Testing & Strength of Materials	4
TER 281 Technical Report Writing	<u>3</u>
	52
Total:	<u>67</u>

*Refer to General Education Requirements

ELECTRONIC ENGINEERING TECHNOLOGY

In analyzing the forecast of growth of the electronic industry, the immediate and long-term future for electronic technicians looks particularly bright. Computers and data processing systems, communications, instrumentation, electronic industrial controls, navigation aids, medical and therapeutic electronics, closed-circuit and educational television, and many other new electronic applications will increase at a rapid rate in industrial and commercial use.

The electronic industry record as a creator of jobs has been outstanding. Employment in the industry has more than doubled in the past decade. Since it is a realistic expectation that the electronic industry will more than double in volume in the next several years, employment opportunities will continue excellent, especially for electronic technicians, as technology advances.

The graduate may elect to continue in the upper division of a university in a technological area.

General Education	Credits
ENG 101 English Composition	3
*Humanities	3
*Mathematics-Natural Science	3
PHY 100 Introduction to Physics	3
*Social Science	<u>3</u>
	15

Professional and Other Required Courses

APM 160, 161, 164, 280 Technical Math	10
DTG 170 Drafting	3
ELS 270 Computer Concepts	3
ELS 280 Computer Logic Circuits	3
FMD 281 Industrial Supervision	3
IEL 163, 164, 165, 283, 285, 286, 287, 288 Electronics	24
ISA 170 Industrial Safety	3
TER 281 Technical Report Writing	<u>3</u>
	52
Total:	<u>67</u>

*Refer to General Education Requirements

FASHION MERCHANDISING

The cooperative program in Fashion Merchandising is designed to prepare students for gainful employment with business establishments which merchandise textiles, wearing apparel, and home furnishings. The curriculum includes courses in business, general education, home economics, and specialty courses in Fashion Merchandising as well as practical on-the-job work experiences. This program provides the student with a background for advancement into a mid-management career in sales, record keeping, fashion coordination, and display.

A high school diploma or its equivalent is required for admission to this two-year A.S. degree program.

General Education	Credits
ENG 101 English Composition	3
*Humanities	3
*Mathematics-Natural Science	3
*Social Science	3
SPE 110 Fundamentals of Speech	3
SOP 110 Human Relations or	
PSY 111 General Psychology	3
	<u>18</u>
Professional and Other Required Courses	
ADS 261 Advertising	3
APA 161, 162, 164, 172, 265, 266, 274, 275	
Apparel & Accessories	18
APM 141 Business Mathematics	3
BDP 170 Introductory Computer Concepts	3
BUW 260 Business Law	3
CLT 171, 172 Clothing and Textiles	6
GME 161 Salesmanship	3
GME 176 Retail Merchandising	4
SAM 160 Introduction to Business	3
	<u>46</u>
Total:	<u>64</u>

*Refer to General Education Requirements

FIRE SCIENCE AND PREVENTION

The program is under the guidance of an Advisory Committee composed of community leaders and administrators from local fire departments. The faculty are experienced, knowledgeable, and well-known in their field.

The student is assured of modern, up-to-date instruction which will aid him in his chosen occupation or in seeking a career as a fireman.

Classes in Fire Science and General Education subjects are offered on a primary night and alternative night basis.

General Education	Credits
ENG 101 English Composition	3
HUM 201 Humanities	4
MAT 101 College Mathematics	3
POS 204, 205 American Federal Government	6
PSY 111 General Psychology	3
SOC 201 Sociology	3
SOP 111 Human Relations	3
SPE 110 Fundamentals of Speech	<u>3</u>
	28

Professional and Other Required Courses

FIF 160, 161, 162, 163, 260, 261, 264, 265, 266, 267	
Firefighting	30
*Approved Elective	<u>3</u>
	33
Total:	61

*Students should consult the Director of Fire Science concerning the approved elective

FOOD SERVICE TECHNOLOGY

Students completing the two-year course of study are prepared to assume supervisory or management positions within the food service industry.

Students wishing to receive a certificate in Food Service technology may do so by taking only the required Food Service courses.

General Education	Credits
ENG 101 English Composition	3
**Humanities	4
**Mathematics-Natural Science	3
**Social Science	<u>6</u>
	16

Professional and Other Required Courses

FSM 161, 162, 163, 164, 165, 171, 281, 282, 283, 284, 291	
Food Service Management	33
*FSM 292 Areas of Specialization	3
HEN 107 Personal and Community Health	3

SAM 160, 250 Supervisory & Administrative Management	6
TYG 172 Beginning Typewriting	<u>2</u>
	47
Total:	<u>63</u>

- *Restaurant Management
- Cafeteria Management
- Nursing Home Supervision
- School Food Service Adm.
- Hospital Supervision
- Private Club Management

**Refer to General Education Requirements

GENERAL BUSINESS

The two-year general business program is designed to prepare those who complete the program for a business profession or advancement within their chosen profession. The program is structured to thoroughly prepare the student for work in those areas in which there are known shortages of competent personnel. The program is not intended to be a substitute for a four-year business administration program.

General Education	Credits
*Communications	3
*Humanities	3
*Physical or Biological Science	3
*Social Science	<u>6</u>
	15

Professional and Other Required Courses

AAC 160, 161 General Accounting	6
APC 291 Business Communications	3
APM 141 Business Mathematics	3
BUW 260, 261 Business Law	6
ECO 220 Foundations of the American Economy	3
FMC 173 Calculating Machines	2
FCR 260 Principles of Finance	3
GME 161 Salesmanship	3
INS 161 Principles of Insurance	3
SAM 160, 250 Introduction to Business, Principles of Management	6
**TYG 172-173 Typewriting	2
***Electives (Business Area)	<u>6</u>
	46
Total:	<u>61</u>

*Refer to General Education Requirements

**Students will be placed in the proper level based on their background

***Approved Electives:

- ADS 261 Advertising
- ECO 210 Principles of Economics
- MAG 162 Principles of Marketing

HOSPITALITY MANAGEMENT

A course of study designed to provide basic industry principles and working skills for the career-minded students seeking training for supervisory, mid-management job entry into the commercial food service and lodging industry, including hotels, motels, and restaurants. Personnel in the industry may obtain increased industry knowledge, better up-grading potential, greater job efficiency and more job satisfaction. The program is to provide the student with a foundation for building a rewarding and job-satisfying career in a dynamic, growing industry.

The lodging and food service industry, expanding and improving its service in the immediate, intermediate, and long-range periods ahead, will continue to generate an unprecedented need for supervisory, mid-management, and management personnel. The industry is now looking for the person with the educational requirements, as well as the experience. Through our internship program, a student is afforded the opportunity to gain the valuable on-the-job experience, as well as to receive college credits toward his degree. Course offerings include a professional knowledge of hotel-motel operations, technical operations, as well as training exposure to communications, human relations, teaching others, and leading people.

General Education	Credits
*Communications	3
*Humanities	3
*Physical or Biological Science	3
*Social Science	6
	<u>15</u>
 Professional and Other Required Courses	
AAC 160, 161 General Accounting	6
APM 141 Business Mathematics	3
BUW 260 Business Law	3
HOL 161, 162, 164, 264, 267 Hotel & Lodging	15
**HOL 271, 272 Internship	6
SAM 160 Introduction to Business	3
SAM 250 Principles of Management	3
SAM 251 Personnel Management	3
***Electives (Business Area)	3
	<u>45</u>
Total:	60

*Refer to 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 HOL 271 and 272. Internship will consist of fifteen 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.

***Electives:

- ADS 261 Advertising
- APC 291 Business Communications
- ECO 210 Principles of Economics
- FMC 173 Calculating Machines

INSURANCE

This program has as its objective to provide A.S. degree graduates with gainful and rewarding employment in the major insurance fields of life insurance, property and casualty insurance, and home office life operations. Jacksonville, being the "Insurance Center of the South," offers great opportunity to qualified insurance A.S. graduates.

Courses are also available leading to LOMA certification (Life Office Management) and IIA certification (Insurance Institute of America). Students can enter into internship programs where valuable employment experience can be obtained.

General Education	Credits
*Communications	3
*Humanities	3
*Mathematics-Natural Science (Physical or Biological)	3
PSY 111 General Psychology	3
*Social Science	6
	<hr/>
	18
 Professional and Other Required Courses	
AAC 160, 161 General Accounting	6
APM 141 Business Mathematics	3
BUW 260 Business Law	3
FCR 260 Principles of Finance	3
GME 161 Salesmanship	3
INS 161, 162, 163 Insurance	9
SAM 160 Introduction to Business	3
SAM 250 Principles of Management	3
**Approved Electives	9
	<hr/>
	42
	<hr/>
Total:	60

*Refer to General Education Requirements

**Approved Electives:

- APM 141 Business Math
- APC 291 Business Communications
- ADS 261 Advertising
- ECO 210 Principles of Economics
- FMC 173 Calculating Machines

MARKETING

The marketing program provides the student with a background that will assist him in preparing for a career in the areas of sales, sales management, sales promotion, advertising, wholesaling, retailing, and market research. Career opportunities in marketing 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 for a broad understanding of the marketing process, as well as specialized knowledge in the various areas of marketing.

General Education	Credits
ECO 220 Foundations of the American Economy	3
ENG 101 English Composition	3
*Humanities	6
*Mathematics-Natural Science (Excluding MAT courses)	3
*Social Science	6
	<u>21</u>

Professional and Other Required Courses

AAC 160, 161 General Accounting	6
APC 291 Business Communications	3
APM 141 Business Mathematics	3
BUW 260 Business Law	3
GME 161, 281 Salesmanship, Marketing Practices	6
MAG 162 Principles of Marketing	3
SAM 160, 250 Introduction to Business, Principles of Management	6
**Approved Electives	6
	<u>42</u>
Total:	63

*Refer to General Education Requirements

**Approved Electives:

ADS 261 Advertising	3
GME 175 Sales Promotion	4
GME 176 Retail Merchandising	4
GME 262 Wholesaling	3
MAM 282 Sales Management	3

Additional elective credits may be selected from the following:

BUW 261 Business Law	3
FCR 260 Principles of Finance	3
FMC 173 Calculating Machines	2
INS 161 Principles of Insurance	3
TYG 161, 172, 173 Typewriting	2

MECHANICAL ENGINEERING TECHNOLOGY

The program in Mechanical Engineering Technology is designed to prepare a student for a career as an engineering aide or technical assistant. The curriculum includes the basic courses in math, graphics, humanities, and sciences, with additional specialized courses in the field of Mechanical Engineering. The approach to the subject material is broad, thus enabling the student to obtain knowledge in a diversified

field which includes drafting, design, production, instrumentation, heat engines, fluidics, repair, and maintenance. The graduate may elect to continue in the upper division of a university in a technological area.

General Education	Credits
*Communications	3
*Humanities	3
PHY 100 Introduction to Physics.....	3
*Social Science	6
	<u>15</u>
 Professional and Other Required Courses	
APM 160 Technical Math I	3
APM 161 Technical Math II	3
APM 164 Engineering Calculations	1
DTG 160 Mechanical and Electrical Drafting	3
DTG 170 Engineering Drawing	3
DTG 171 Descriptive Geometry	3
DTG 282 Industrial Design	3
ELS 270 Computer Concepts	3
FMD 281 Industrial Supervision	3
IEL 160 Fundamentals of Electricity	3
ISA 170 Industrial Safety	3
MEY 160 Engineering Materials & Processes	4
MTY 280 Elements of Applied Energy	3
MTY 281 Engineering Mechanics	4
MTY 285 Fluid Mechanics	3
STT 282 Testing & Strength of Materials	4
TER 281 Technical Report Writing	3
	<u>52</u>
Total:	67

*Refer to General Education Requirements

MEDICAL LABORATORY TECHNOLOGY

The Program in Medical Laboratory Technology offers the student an opportunity to learn the skills of medical laboratory technology. The curriculum includes technical courses, clinical practicum and academic courses.

Graduates of this program are required to sit for the Florida State Division of Health Licensure Examination in order to practice in Florida. Graduates of this program may sit for the American Medical Association Certification examination.

Program admission procedures may be obtained from the Director of Medical Laboratory Technology.

General Education	Credits
BIO 241 Microbiology	4
**CHE 101 Introductory Chemistry	4
**CHE 102 Introductory Chemistry	4
*Communications	3
*Humanities	3
*Mathematics-Natural Science	3
*Social Science	3
	<u>24</u>

Professional and Other Required Courses

MLT 172 Immunology	3
MLT 173 Hematology	6
MLT 174 Medical Microbiology	6
MLT 293 Clinical Chemistry	6
MLT 294 Principles of Clinical Instrumentation	5
MLT 295 Clinical Practicum I	9
MLT 296 Clinical Diagnosis	5
MLT 297 Clinical Practicum II	12
	<u>52</u>
Total:	<u>76</u>

*Refer to General Education Requirements

**Students who qualify may substitute CHE 111 and CHE 112

PRINTING/GRAPHIC ARTS

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

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

The inclusion of supportive related courses of study will provide the student with the background necessary to enable him to succeed to the employment level of mid-management with responsibilities of Printing Production.

General Education	Credits
*Communications	3
*Social Science	3
*Humanities	3
*Mathematics-Natural Science	3
*Electives	6
	<u>18</u>

Professional and Other Required Courses

GRA 121 Theory of Printing Processes	5
GRA 122 Theory of Lithographic Processes	5
GRA 123 Layout and Design	3
GRA 124 Graphic Arts Estimating	2
GRA 131 Printing Processes Laboratory	4
GRA 132 Lithographic Processes Laboratory	4
GRA 237 Practicum	6
GRA 231, 232, 233, 234, 235, 236 Graphic Arts	3
(Select One)	
GRA 251, 252, 253, 254, 255, 256 Graphic Arts	6
(Select One)	
HEN 215 First Aid III	2
TYG 172 Beginning Typewriting	2
	<u>42</u>
Total:	60

*Refer to General Education Requirements

REAL ESTATE

This two-year program is designed to prepare the student interested in a real estate career with the basic fundamentals necessary to the successful real estate salesman. Although stress is placed on the selling part of real estate, the student completing this program will gain valuable knowledge of Real Estate Finance, Appraising, and Law, in order for him to specialize in any phase he may desire.

General Education	Credits
*Communications	3
ECO 210 Principles of Economics	3
*Humanities	6
*Mathematics-Natural Science, except MAT 119	3
*Social Science	3
SPE 110 Fundamentals of Speech	3
	<u>21</u>

Professional and Other Required Courses

AAC 160 General Accounting	3
APM 141 Business Mathematics	3
BUW 260 Business Law	3
FCR 260 Principles of Finance	3
MAG 162 Principles of Marketing	3
RES 161, 162, 163, 281, 283 Real Estate	15

**SAM 160 Introduction to Business	3
SAM 250 Principles of Management	3
SAM 251 Personnel Management	3
	<u>39</u>
Total:	60

*Refer to General Education Requirements

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

RETAIL MERCHANDISING

The major objective of the Retail Merchandising Program is to prepare persons for gainful employment at a level above the basic entry status. The program provides education in supervisory, managerial, and the broad marketing concepts. This program should result in immediate job efficiency, greater promotional opportunity, and a better understanding of the concepts of economic activity in the field of Retail Merchandising.

General Education	Credits
ENG 101 English Composition	3
*Humanities	3
*Mathematics-Natural Science (excluding MAT courses)	3
*Social Science	6
	<u>15</u>

Professional and Other Required Courses

AAC 160 General Accounting	3
APM 141 Business Mathematics	3
BUW 260 Business Law	3
FMC 173 Calculating Machines	2
GME 161 Salesmanship	3
GME 173 Retail Practicum	4
GME 174 Retail Practicum	4
GME 175 Sales Promotion	4
GME 176 Retail Merchandising	4
GME 274 Retail Practicum	4
GME 281 Marketing Practices	3
GME 283 Retail Practicum	4
MAG 162 Principles of Marketing	3
SAM 160 Introduction to Business	3
SAM 250 Principles of Management	3
	<u>50</u>
Total:	65

*Refer to General Education Requirements

SECRETARIAL SCIENCE

The two-year Secretarial Science Program is designed to fill the career 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.

Students are given classroom experiences to aid them 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 program equips the student with the fundamental requirements for a secretarial position without special emphasis on one facet of business.

General Education	Credits
ENG 101 English Composition	3
*Humanities	3
*Physical or Biological Science	3
*Social Science	6
	<hr/>
	15
Professional and Other Required Courses	
AAC 160, 161 General Accounting	6
APC 291 Business Communications	3
APM 141 Business Mathematics	3
BUW 260 Business Law	3
FMC 171 Office Applications	2
**FMC 173 Calculating Machines	2
SAM 160 Introduction to Business	3
***STS 171, 172, 291, 292 Shorthand	12
STS 290 Advanced Shorthand	3
OR SEE NOTE	
***TYG 161, 172, 173, 284 Typewriting	3
	<hr/>
	45
	<hr/>
Total:	60

*Refer to General Education Requirements

**Prerequisite APM 141 or equivalent

***Students will be placed in the proper level

NOTE: STS 295, Legal Shorthand, may be substituted for STS 290 with permission of instructor

TECHNICAL NURSING

The program is a combination of general education, including courses related to the nursing major. Nursing Education courses are based on the concept that the nursing process involves thinking as well as doing. This process is an orderly system devised to give patients excellent nursing care. The four basic steps of the nursing process are assessing, planning, implementing, and evaluating the effects of nursing care.

Both single and married men and women may be admitted to the program. There is no age limit. Applicants are required to have completed a course in Chemistry in High School or one of the following courses at Florida Junior College at Jacksonville: BIO 101, 102, or CHE 100. The applicant must contact the Nursing Department to arrange a personal interview with the Counselor for the Nursing Program or the Director of Nursing.

Nursing courses must be taken in sequence. Students must earn a minimum grade of "C" to be eligible to enroll in the next nursing course in the sequence. A cumulative G.P.A. of 2.00 must be achieved prior to scheduling NUR 293. One credit hour represents one hour of class or three hours of guided laboratory practice in giving nursing care to patients in community hospitals.

Graduates of the program are awarded the Associate in Science Degree in Technical Nursing. They are prepared to function with intellectual and technical competency in giving direct care to patients in hospitals and other health service agencies. Upon completion of the program graduates are eligible to write the State Board Test Pool Examination to qualify for licensure to practice as a Registered Nurse and to use the title of R.N.

General Education	Credit
ANA 215, 216 Anatomy and Physiology	6
BIO 241 Microbiology	4
ENG 101, 102 Communications	6
*Humanities	3
PSY 111, 241 Psychology	6
SOC 201 Introductory Sociology	3
**Social Science	3
	<u>31</u>

Professional and Other Required Courses

NUR 175, 176, 293, 294	<u>34</u>
Total:	65

*ART 110, LIT 240-241, MUY 101, PHI 201

**Refer to General Education Requirements

TRANSPORTATION

The purpose of the transportation program is to enable A.S. degree graduates to obtain a meaningful career, either in industrial traffic management or in the commercial carrier industry. The transportation program is additionally designed as a preparatory course of instruction for bar examinations as a practitioner before the Interstate Commerce Commission and the Florida Public Services Commission.

Admission requirements for the A.S. Degree Program are either a high school diploma or GED equivalency examination. A G.P.A. of 2.00 must be achieved prior to scheduling TRA 265. Sixty semester

hours of college credit courses are required prior to taking the ICC practitioners examination. Students who complete the A.S. degree program may plan on additional semi-professional courses at FJC or desire further matriculation at a four-year university.

Employment opportunities in transportation and traffic management appear excellent in the foreseeable future. Transportation is second only to agriculture regarding the total number of persons employed and contribution of gross national product. The Transportation Advisory Committee continually keeps the faculty abreast of industrial needs, job opportunities, changes in transportation technology, and placement services. Transportation curricula are continually updated, and new courses devised to meet community requirements. The courses provide students with ample specialized backgrounds and sufficient skills to enter employment in the highly technical fields of transportation and traffic management.

General Education	Credits
*Communications	6
ECO 210 Principles of Economics	3
*Humanities	6
*Mathematics-Natural Science, except MAT 119.....	3
*Social Science	3
SPE 110 Fundamentals of Speech	3
	<u>24</u>
 Professional and Other Required Courses	
AAC 160 General Accounting	3
**APM 141 Business Mathematics	3
BUW 260 Business Law	3
FCR 260 Principles of Finance	3
**SAM 160 Introduction to Business	3
SAM 250 Principles of Management	3
TRA 161, 162, 263, 264 Transportation	12
TRA Electives	6
	<u>36</u>
Total:	60

*Refer to General Education Requirements

**Another course may be selected upon approval by Program Director

NOTE: TRA electives may be selected from any of the TRA courses shown in the course description section of the catalog. AAC 161, SAM 251 may also be selected.

X-RAY ENGINEERING TECHNOLOGY

A program of study to prepare the student for work in the medical and industrial field. The approach is toward a broad coverage of the existing specialties which together form the requisite skills, techniques and knowledge that are involved in this profession. The curriculum includes the basic courses in applied mathematics, science, graphics, communications, and radiation physics to produce a graduate who can readily take his part in the industry. The program is specifically designed

to surfeit a need for qualified personnel in this field with special emphasis given to solutions of actual field service problems.

General Education	Credit:
*Communications	3
*Humanities	3
*Mathematics-Natural Science	3
PHY 100 Introduction to Physics	3
POS 204 American Federal Government	3
SPE 110 Fundamentals of Speech	3
	<u>18</u>

Professional and Other Required Courses

APM 160, 161 Technical Math	6
APM 164 Engineering Calculations	3
DTG 160 Mechanical/Electrical Drafting	3
ELS 270 Computer Concepts	3
IAE 101, 202, 203, 204, 205 X-Ray Technology	15
IEL 164, 165, 285, 286, 287 Electronics	15
ISA 170 Industrial Safety	3
TER 281 Technical Report Writing	3
	<u>49</u>
Total:	67

*See General Education Requirements



COLLEGE CREDIT CERTIFICATE PROGRAMS

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 certificates are awarded upon satisfactory completion.

COLLEGE CREDIT CERTIFICATE PROGRAMS	Cumberland Campus	North Campus	South Campus	Downtown Campus
Clerical	X	X	X	
Computer Operations		X		
Criminal Justice Education—Law Enforcement			X	
Dental Assisting		X		
Drafting		X	X	
Fire Science and Prevention			X	
Food Service Technology	X			
Medical Laboratory Technology		X		
Stenography	X	X	X	

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

COLLEGE CREDIT CERTIFICATE PROGRAMS

CLERICAL

The one-year clerical program is designed to prepare the student for immediate employment as general office employee and typist. The student receives instruction which will provide him/her with the basic clerical skills necessary for satisfactory performance on the job and to develop an understanding of desirable work habits and social attitudes.

General Education	Credit
ECO 220 Foundations of the American Economy	3
ENG 101 English Composition	3
SOP 110 Human Relations	<u>3</u>
	9
 Professional and Other Required Courses	
AAC 160, 161 General Accounting	6
APC 291 Business Communications	3
APM 141 Business Mathematics	3
BUW 260 Business Law	3
FMC 171 Office Applications	2
*FMC 173 Calculating Machines	2
SAM 160, 250 Introduction to Business, Principles of Management	6
TYG 173, 284 Typewriting	<u>4</u>
	29
Total:	38

*Prerequisite of APM 141 or equivalent

COMPUTER OPERATIONS

This one-year program is designed to prepare the student for immediate employment as a computer system operator. It combines the essentials of data processing education with introductory business courses and a work shop program where the student actually works within the Florida Junior College Data Center.

General Education	Credits
*Communications	3
*General Education	3
PSY 111 General Psychology	3
SSS 101, 102 Origins of American Society	<u>6</u>
	15
 Professional and Other Required Courses	
AAC 260 Principles of Accounting I	3

BDP 170, 171, 172, 173, 174, 175 Data Processing	15
SAM 160 Introduction to Business	3
TER 281 Technical Report Writing	3
	<u>24</u>
Total:	39

*Refer to General Education Requirements

CRIMINAL JUSTICE EDUCATION—LAW ENFORCEMENT

The Certificate in Criminal Justice Education—Law Enforcement may be awarded to a candidate after the completion of twelve courses.

The student wishing to enroll in the Certificate Program will so indicate at the time of registration so that special designation can be made on the class rolls.

The credits earned in the Certificate Program will not be transferable.

The standards of academic excellence needed for successful completion of the Certificate Program will be set by the Department of Criminal Justice Education.

Curriculum for the certificate in Criminal Justice Education—Law Enforcement:

Professional and Other Required Courses	Credits
LAE 160 Introduction to Criminal Justice	3
LAE 161 Police Organization and Administration	3
LAE 162 Police Operations	3
LAE 163 Introduction to Criminal Behavior	3
LAE 260 Constitutional Law—Criminal Law I	3
LAE 262 Introduction to Criminalistics	3
LAE 264 Police Supervision	3
LAE 265 Seminar in Police Problems	3
LAE 266 Evidence	3
LAE 267 Juvenile Delinquency	3
LAE 280 State and Local Law-Criminal Law II	3
LAE 281 Criminal Investigation	3
	<u>36</u>
Total:	36

DENTAL ASSISTING

This is a one-year certificate program that will enable the student to demonstrate skills in dental assisting procedures, such as: x-ray technique, dental material manipulation and identification, and use and sterilization of dental instruments. Chairside assisting, application and use of medicaments, and assisting in the care of the dental patient are also included. This program will qualify the graduate for the Certified Dental Assistant certificate. A background in science and good manual dexterity is recommended. Admission requisites for the D.A. program can be obtained from the Director of the Dental Programs or Office of Student Development.

General Education	Credit
ANA 215 Human Anatomy and Physiology	3
BIO 241 Microbiology	4
ENG 105 Communication for Today's World	3
PSY 111 General Psychology	3
SPE 110 Fundamentals of Speech	<u>3</u>
	16

Professional and Other Required Courses

APC 291 Business Communications	3
DEA 170 Preclinical Orientation	2
DEA 171 Introduction to Practice	1
DEA 174 Dental Materials and Laboratory	2
DEA 176 Science for Dental Assistants	2
DEA 195 Dental Radiology	2
DEA 290 Clinical Practice I	2
DEA 291 Clinical Practice II	2
DEA 295 Office Management	2
DEA 296 Clinical Practice III	2
DEA 297 Clinical Practice IV	3
FSM 162 Basic Nutrition	3
HEN 107 Personal and Community Health	<u>3</u>
	<u>29</u>
Total:	45

DRAFTING

The one-year program is designed to prepare the student for employment as a draftsman. It combines the essentials of engineering graphics with related courses in the engineering technologies to develop competence in a specialized skill. Upon completion of the curricula, the student is awarded a Certificate in Drafting Technology. The graduate may elect to continue a program leading to an Associate in Science degree in Architectural and Building Construction Technology.

General Education	Credits
ENG 101 English Composition	3
SOP 110 Human Relations	<u>3</u>
	6

Professional and Other Required Courses

APM 160 Technical Math I	3
APM 164 Engineering Calculations	1
DTG 160 Mechanical and Electrical Drafting	3
DTG 170 Engineering Drawing	3
DTG 171 Descriptive Geometry	3
DTG 280 Architectural Drafting	3
DTG 281 Civil Drafting	3

MEY 160 Engineering Materials & Processes	4
TER 281 Technical Report Writing	3
	<u>26</u>
Total:	32

FIRE SCIENCE AND PREVENTION

The certificate in Fire Science and Prevention may be awarded to a candidate after the completion of eleven courses of Fire Science and Prevention.

The student wishing to enroll in the Certificate Program will so indicate at the time of registration so that special designation can be made on the class rolls.

The credits earned in the Certificate Program will not be transferable.

The standards of academic excellence needed for successful completion of the Certificate Program will be set by the Department of Fire Science and Prevention.

Curriculum for the certificate in Fire Science and Prevention is as follows:

Professional and Other Required Courses	Credits
FIF 160 Introduction to Fire Science	3
FIF 161 Fire Company Organization and Procedure	3
FIF 162 Fire Operations	3
FIF 163 Fundamentals of Fire Prevention	3
FIF 260 Fire Investigation	3
FIF 261 Fire Codes and Building Construction	3
FIF 263 Explosive and Toxic Hazardous Materials	3
FIF 264 Fire Fighting Equipment and Apparatus	3
FIF 265 Rescue Practices	3
FIF 266 Flammable Hazardous Materials	3
FIF 267 Fire Fighting Tactics and Strategy	3
Total:	<u>33</u>

FOOD SERVICE TECHNOLOGY

A Certificate in Food Service Technology may be awarded to a candidate after completion of twelve courses in Food Service. These courses are especially beneficial to persons employed in Food Service positions who desire to improve their skills leading to advancement within the food industry.

Professional and Other Required Courses	Credits
FSM 161 Orientation to Food Service	3
FSM 162 Nutrition I	3
FSM 163 Nutrition II	3
FSM 164 Equipment	3
FSM 165 Food Accounting and Cost Control	3
FSM 171 Basic Food Preparation	3

FSM 281 Sanitation and Safety	3
FSM 282 Supervision and Management	3
FSM 283 Food Purchasing and Storage	3
FSM 284 Food Merchandising	3
FSM 291 Quantity Food	3
*FSM 292 Areas of Specialization	3
Total:	<u>36</u>

- *Restaurant Management
- Cafeteria Management
- Nursing Home Supervision
- School Food Service Admin.
- Hospital Supervision
- Private Club Management

MEDICAL LABORATORY TECHNOLOGY

The Certificate Program for Medical Laboratory Technology is available only through the Florida Junior College at Jacksonville's Department of Medical Laboratory Technology in conjunction with St. Luke's Hospital. The curriculum is designed to provide entry level skills in Medical Laboratory Technology; program graduates are required to sit for the Florida State Medical Technician Examination.

The Certificate may be awarded to a candidate after successful completion of the courses. The credits earned are transferable fully to the Associate in Science Degree program in Medical Laboratory Technology.

Professional and Other Required Courses	Credits
MLT 172 Immunology	3
MLT 173 Hematology	6
MLT 174 Medical Microbiology	6
MLT 293 Clinical Chemistry	6
MLT 295 Clinical Practicum I	9
Total:	<u>30</u>

STENOGRAPHY

The one-year stenography program is designed to train the student to perform the necessary tasks for immediate employment. The student receives instruction which will prepare him/her to take and transcribe dictation, to type with speed and accuracy, and to cope with the ever-changing demands of office employment.

General Education	Credits
**ECO 220 Foundations of the American Economy	3
**ENG 101 English Composition	3
**SOP 110 Human Relations	3
	<u>6</u>

Professional and Other Required Courses

AAC 160, 161 General Accounting	6
---------------------------------------	---

APC 291 Business Communications	3
APM 141 Business Mathematics	3
FMC 171 Office Applications	2
SAM 160 Introduction to Business	3
STS 172, 290, 292 Shorthand, Secretarial Practice	9
TYG 173, 284 Typewriting	4
***Approved Electives	5 or 6
	<u>35-36</u>
Total:	41-42

*Prerequisite of APM 141 or equivalent

**Students are required to take any two (2) of these courses.

***Approved Electives (Students are required to take any two (2) of these courses.):

BUW 260 Business Law	3
*FMC 173 Calculating Machines	2
STS 291 Dictation and Transcriptions.....	3

NON-COLLEGE CREDIT CAREER EDUCATION PROGRAMS

Non-college credit programs and courses are offered throughout the junior college district wherever the need and adequate facilities are located. Courses are taught in public school facilities during evening hours, in industrial plants, in commercial office buildings, on campuses and centers of Florida Junior College at Jacksonville, and other suitable locations. The length and frequency of meetings for courses differ and are determined by the type and objectives of the course.

These courses and programs offer individuals an opportunity to learn new skills leading directly to employment or to upgrade and broaden present skills to enhance occupational proficiency and opportunity for advancement.

In the area of Career Education, the College maintains close liaison with and is assisted by program advisory committees, professional, civic, and church organizations, governmental agencies, business and industry, and other groups in determining needs and providing occupational education for the community.

NON-COLLEGE CREDIT CERTIFICATE PROGRAMS

	Cumberland Campus	North Campus	South Campus	Downtown Campus
Business Education				
Certified Professional Secretary (CPS)			X	
Office Occupations (includes: Typing, Shorthand, Business English, and Office Machines)	X	X		
Shorthand	X			
Distributive Education				
Apartment Management	X			
Banking	X			
Executive Housekeeping	X			
Export-Import Programs	X			
Hotel-Motel Front Office Procedure			X	
Hotel-Motel Training	X			
Income Tax	X			
Insurance	X			
Real Estate	X			
Savings and Loan Courses	X			
Supervisory Training	X			
Transportation	X			
Warehouse Clerk				X
Health Related Education				
Medical Assisting		X		
Nurse Assistant		X		
Practical Nursing		X		
Surgical Technician		X		
Unit Clerk		X		
Home Economics Education				
Advanced Floral Design	X			
Advanced Furniture Re-Upholstery	X			
Advanced Tailoring	X			
Alterations	X			
Cake Decoration	X			
Catering	X			
Custom Dressmaker	X			
Drapery Construction	X			
Equipment Use and Care	X			
Floral Design	X			
Food Service Supervisor	X			
Furniture Re-Upholstery	X			
Supervised Food Service Worker	X			
Quantity Cookery	X			

**NON-COLLEGE CREDIT
CERTIFICATE PROGRAMS
(Continued)**

	Cumberland Campus	North Campus	South Campus	Downtown Campus
Industrial Education				
Air Conditioning, Refrigeration, and Heating		X		X
Auto Body Repair		X		X
Auto Mechanics		X		X
Auto Trim & Upholstery				X
Brick and Blocklaying				X
Building Maintenance Mechanic				X
Cabinet Making		X		X
Carpentry				X
Commercial Art		X		
Commercial Pilot, Ground School	X			
Cosmetology	X			
Diesel Mechanics		X		
Drafting		X		X
Electricity (Construction)		X		X
Electronics, Radio & T.V.		X		
Garment Making—Commercial		X		
Gasoline Engine Mechanics				X
Instrument Rating— Aviation Ground School	X			
Machine Shop		X		X
Meat Cutting		X		
Operating Engineers				X
Painting and Decorating				X
Photography and Photo-Finishing		X		
Plumbing and Pipefitting	X			X
Printing/Graphic Arts		X		
Private Pilot, Ground School	X			
Refresher Engineer Course			X	
Roofing				X
Sheet Metal Worker				X
Shoe Repair		X		
Steel Fabrication				X
Tailoring		X		
Upholstery				X
Water-Sewage Plant, Chemistry		X		
Water-Sewage Plant, Math		X		
Welding		X		X

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

ADULT AND CONTINUING EDUCATION PROGRAMS

In the area of Adult and Continuing Education, the College cooperates with the public schools, community schools, health and welfare groups, civic and community clubs, business and industry, and other adult agencies to provide educational services.

Adults in the community have the opportunity to grow in basic knowledge, improve in home and community life, develop leadership and civic responsibilities, expand in knowledge in general education and develop creativity in the fine arts.

Adult and Continuing Education Programs are offered where there is community need and interest. Florida Junior College at Jacksonville is offering Adult Education Programs and courses in more than 100 different locations throughout Duval County. Many programs, courses and services are offered on a continuing basis. Short courses, in-service training programs, and courses of specific interest may be initiated by request from individuals and groups in the community.

ADULT BASIC EDUCATION

The Adult Basic Education Program of Florida Junior College at Jacksonville is designed to provide basic instruction in the fundamental academic areas of reading, writing, arithmetic, and consumer education for all adults of this community with less than an eighth grade education, and who desire this type of educational training.

General instruction in the above academic areas attempts to develop basic learning skills for the adult which should enable him to continue his education at the secondary level if he desires to do so.

The over-all curriculum of the Adult Basic Education Program of instruction includes arithmetic, reading, spelling, social studies, science, health, and functional citizenship education.

The Adult Basic Education Program provides supportive services for its students in the areas of guidance and counseling, testing, and specialized reading needs. Enrollment in the Adult Basic Education classes is available to all adults who are sixteen (16) years of age or older and who have less than an eighth grade education.

Adult Basic Education classes are offered in more than seventy-five (75) Adult Centers which are located in schools, churches, and other available community facilities.

ADULT HIGH SCHOOL COMPLETION

Adults, sixteen (16) years of age or older, officially withdrawn from regular school, may choose to earn an Adult High School Diploma by taking appropriate course work.

There is no set required amount of time necessary to earn an Adult High School Diploma. The Florida State Department of Education has established that an adult can progress at his own rate of speed and achieve credit by subject examination whenever he judges he is prepared. Thus, an adult can complete credit requirements as rapidly as he is able to prove his knowledge and skills. An adult under the age of eighteen (18) may not complete an Adult High School Diploma by credit any earlier than he would normally have completed a regular high school program.

A minimum of sixteen (16) units of credits, grades 9 through 12, excluding credit in physical education, shall be required for an Adult High School Diploma. Two (2) of these credits must be earned at Florida Junior College at Jacksonville. Two (2) credits of these sixteen (16) credits must be earned in each of the following areas:

1. English (2)
2. Mathematics (2)
3. Natural Science (2)
4. Social Studies (2) (must include a course in Americanism vs. Communism)

An additional eight (8) credits may be accumulated from electives, service experience, and work experience. Individual evaluation of a student's academic background and experience is required.

Adult High School Diploma Credit Programs may emphasize any of the following:

Vocational Business

Bookkeeping
Business Machines
General Business Education
Secretarial Science

Vocational-Technical

Air Conditioning, Refrigeration, and Heating
Auto Body Repair
Auto Mechanics
Auto Trim and Upholstery
Building Maintenance Mechanic
Brick and Block Laying
Carpentry
Construction Electricity
Drafting
Gasoline Engine Mechanics
Home Economics
Machine Shop
Painting and Decorating
Plumbing and Pipefitting
Radio and Television Repair
Sheet Metal
Tailoring
Upholstery
Welding

General Education

HIGH SCHOOL EQUIVALENCY

This program is an intensive course of review including the five (5) major areas covered in the G.E.D. Examination and American History and Civics requirements. Consult current term course schedule for the most convenient time and location of course offerings.

Florida Junior College at Jacksonville is the designated official testing agent for the State of Florida G.E.D. Examination. Contact the Adult Center of your choice or the Dean of Adult Education on any FJC campus.

The G.E.D. Examination (General Education Development) consists of a battery of five tests:

Test 1 — Correctness and Effectiveness of Expression.

Test 2 — Interpretation of Reading Materials in the Social Studies.

Test 3 — Interpretation of Reading Materials in Natural Sciences.

Test 4 — Interpretation of Literary Materials.

Test 5 — General Mathematical Ability.

Requirements

1. A candidate must be eighteen (18) years of age. (No candidate under the age of twenty (20) shall qualify for a high school equivalency diploma at a date earlier than six (6) months following the end of the school year in which he last attended the regular day school program.)
2. Any candidate who has reached the age of twenty (20) is qualified by age to apply for the high school equivalency diploma.
3. A candidate must be a resident of the State of Florida. He is considered a resident of the State when he meets one or more of the following conditions:
 - (a) Has maintained a continuous residence in the State of Florida for a period of at least one (1) year.
 - (b) Owns a home or business in Florida at the time of application for the G.E.D. Tests.
 - (c) Has filed a manifestation of domicile with the Clerk of Circuit Court of his Florida County of residence.
4. Credit is required in both American History and American Government or Civics. This requirement may be met by High School transcript showing courses completed in both subjects or by demonstrating competency in these subjects by examination.
5. A candidate must make application in person.
6. A candidate must attain minimum test scores of forty (40) or above on each of five (5) G.E.D. Tests, and an average standard score of forty-five (45) or above on all five of the tests.

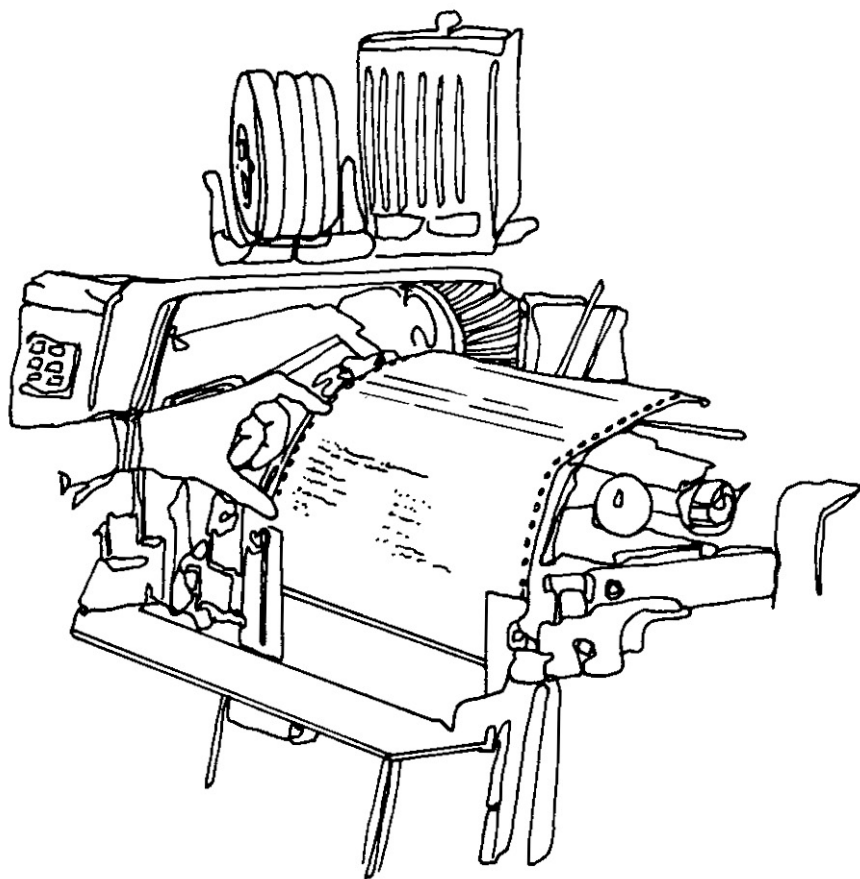
Testing Fees and Other Charges

1. A fee of \$7.50 is payable upon application for the G.E.D. Examination.

2. A fee of \$2.00 each is payable upon application for the American History Test and Civics Test for candidates lacking high school credit in these two subjects.

Application for the G.E.D. Examination, American History Examination, and Civics Examination shall be made at the Testing Center, Building 1, Cumberland Campus, Florida Junior College at Jacksonville.

Civics, History, and G.E.D. Examinations for the high school equivalency diploma are offered on various campuses on a regular schedule. For information regarding the scheduling of these examinations, contact the Registrar's Office on Cumberland Campus.



ADULT CONTINUING EDUCATION

The variety of general interest courses offered at each campus and part-time centers is designed to fulfill the continuing education desires and needs of the adult community.

COMMUNITY SERVICES

Through its program of community services, the College offers programs of study, institutes, short courses, seminars, workshops, clinics, and lectures to meet the educational needs of adult groups in the community.

Requests for such courses are encouraged by the College. Consideration for such courses is based upon the level of instruction, the number of persons interested, and the availability of qualified personnel for instruction.

Adults desiring to enter adult classes or programs should apply in person at the adult center or campus offering the subjects of their choice.

Any adult, sixteen (16) years of age or older, is eligible to apply for enrollment. Specific course requirements or limitations will be explained at the center of the individual's choice.

ADULT AND CONTINUING EDUCATION PROGRAMS	Cumberland Campus	North Campus	South Campus	Downtown Campus
Adult Basic Education				X
Adult Continuing Education	X	X	X	X
Adult High School Completion	X	X	X	X
Community Services	X	X	X	X
High School Equivalency	X	X	X	X

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