

College Credit Programs of Study

The Associate in Arts Degree

University Parallel

The College offers a two-year program leading to the Associate in Arts (AA) degree. Usually referred to as the University Parallel, or Transfer 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 should be worked out individually between the student and the counselor soon after the student enrolls at Florida Junior College at Jacksonville. Earned credits in a University Parallel study are transferable to senior institutions and applicable 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 43.

Within these 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 institution from Florida Junior College at Jacksonville is advised to write the registrar of that university 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 the college.* To maximize transferability, the student is advised to choose a major as early as possible while at Florida Junior College at Jacksonville.

Any student transferring with the Associate in Arts degree is guaranteed the transferability of credits earned toward that degree and junior-level standing by the State Articulation Agreement (SBE Rule 6A-10.24, FAC). A student transferring prior to receipt of the AA degree is not assured of such status. A student transferring prior to receipt of the AA degree may not receive acceptance of credits earned in courses with less than a "C" grade.

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.

Fields of Study

A University Parallel program of study can be designed in the Associate in Arts degree to prepare for an upper-division university major in a variety of fields. A partial list is as follows:

*Accounting
Advertising
Agriculture
Anthropology
Architecture
Art/Art Education
Business Administration
Chemistry
Computer and Information Science
Criminal Justice
Drafting
Drama/Theatre Arts
Economics
Education
Engineering
English/Literature
Foreign Languages
Forestry
Geography
Health Education/Recreation
History
International Studies
Marine Science
Mass Communications/Journalism
Mathematics/Statistics
Music/Music Education
Natural Sciences
Philosophy
Physical Education
Physics
Political Science
Psychology
Public Administration
Religion
Social Sciences
Sociology
Speech Communication*

The foundation courses are available, through the Associate in Arts degree, for advanced degree programs in the following fields:

Dentistry
Law
Medical Science
Optometry
Pharmacy
Veterinary Medicine

Graduation Requirements

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

1. 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.
2. Earned an all-college cumulative grade point average of 2.00 (C) on courses, including transferred credits, which comprise the Associate in Arts degree program.
3. Earned at least a grade of "C" in each course used to satisfy the General Education Requirements Areas II Humanities, IV Mathematics, and V Communications.
4. 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.
5. Completed 62 semester hours of college credit work as follows:
 - a. Completed the General Education Requirements (36 semester hours) set forth on pages 38 through 41 of this catalog. (The assistant dean of instruction may, when appropriate, approve a course not listed under the General Education Requirements of the Associate in Arts degree to count towards that requirement.)
 - b. Completed the elective requirements (26 semester hours) set forth on page 41 of this catalog.
6. Completed requirements of the College-Level Academic Skills Test (CLAST), a college-level communication and computation skills test required by the state (refer to Testing Services section for details), including satisfactory scores as specified by the State Board of Education and the District Board of Trustees.

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 the following:

- a. A student's graduation date will be the date at the end of the college term in which the student

completes the academic requirements for the degree or certificate for which the student is an applicant. (The removal of an incomplete grade does not affect a student's graduation date, since the grade change is effective as of the end of the term in which the incomplete grade was assigned rather than the term in which the incomplete work was made up.)

- b. If a student expects to complete the course work under the terms of the catalog in effect during the term of the student's first registration, the student must graduate within four years after the year of first registration in a college credit program. *Accordingly, a student who enters under this catalog must graduate by the end of the Summer Term 1991, or the student will be expected to meet the requirements of subsequent years. Changes to requirements as may be mandated by law or by rule of the District Board of Trustees may supercede this provision.*
- c. Refer to the conditions on page 41 of this catalog concerning acceptable credits to meet degree requirements.
- d. Some of the courses listed in the options for the General Education Requirements are intended for students majoring or specializing in the discipline. Students are advised to review the course descriptions.
- e. Many courses in this catalog have prerequisite requirements and/or prerequisite courses listed in the course descriptions. Students are advised to be guided by these requirements.
- f. Students who fall below a designated entry-placement cutoff score for "reading" will be required to take REA 1105 (College Reading Techniques) as a college credit elective course.

General Education Requirements

General Education, as conceived at Florida Junior College at Jacksonville, is concerned with developing responsible citizenship in a democratic society. The General Education core is formulated to develop skills, attitudes, and understanding in broad discipline areas: the social sciences, humanities, natural sciences, mathematics, and communications.

1. The General Education core for the Associate in Arts degree consists of a minimum of 36 semester hours of course work. These 36 semester hours are part of the minimum of 62 semester hours required for the Associate in Arts degree.
2. The following subject areas shall be included in the program in the manner specified:

I. SOCIAL SCIENCE. . . . 6 semester hours

The social science courses lead to an understanding and appreciation of our cultural heritage, whether ancient or modern, Eastern or Western, humanistic or technological. These

courses of study seek to appreciate the values of civilization in its many parts. The courses in social sciences enable students to develop their creative and analytical powers and encourage flexible thinking necessary to live in a world of continuing change.

A. Three semester hours from any of the following:

AMH 2010 – UNITED STATES HISTORY TO 1865
 EUH 1001 – WESTERN CIVILIZATION FROM 1715 TO THE PRESENT
 POS 2041 – AMERICAN FEDERAL GOVERNMENT
 SSI 1120 – ORIGINS OF AMERICAN SOCIETY (ECONOMIC, POLITICAL AND INTERNATIONAL INSTITUTIONS)

B. Three semester hours from any of the following:

AMH 2020 – UNITED STATES HISTORY FROM 1865 TO PRESENT
 AMH 2420 – HISTORY OF FLORIDA
 AMH 2571 – AFRO-AMERICAN HISTORY AND CULTURE (FROM AFRICAN ORIGINS THROUGH RECONSTRUCTION)
 AMH 2572 – AFRO-AMERICAN HISTORY AND CULTURE (FROM WORLD WAR I TO THE PRESENT)
 ANT 2410 – CULTURAL ANTHROPOLOGY
 ANT 2511 – PHYSICAL ANTHROPOLOGY
 ASH 2005 – HISTORY OF THE FAR EAST
 CPO 2002 – INTRODUCTION TO COMPARATIVE GOVERNMENT
 DEP 2004 – HUMAN GROWTH AND 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 THROUGH 1715
 GEA 1000 – WORLD GEOGRAPHY
 GEO 2370 – CONSERVATION OF RESOURCES
 HSC 1100 – PERSONAL AND COMMUNITY HEALTH
 HIS 1907 – HONORS SURVEY OF HISTORY

INR 2002 – INTERNATIONAL RELATIONS
 LAH 2000 – HISTORY OF THE AMERICAS
 POS 2112 – STATE AND LOCAL GOVERNMENT
 PSY 1012 – GENERAL PSYCHOLOGY
 SOP 1002 – HUMAN RELATIONS
 SOP 1502 – DYNAMICS OF BEHAVIOR
 SSI 1110 – ORIGINS OF AMERICAN SOCIETY (CULTURE, PRIMARY INSTITUTIONS AND PERSONAL ADJUSTMENTS)
 SYG 2000 – INTRODUCTORY SOCIOLOGY
 SYG 2010 – SOCIAL PROBLEMS
 SYG 2430 – MARRIAGE AND FAMILY

II. HUMANITIES 6 semester hours

The humanities courses form a core of inter-related studies designed to help individuals make informed aesthetic and ethical judgments about creative contributions of diverse world cultures and to assure reading and writing competencies essential for an educated person in an increasingly specialized society. The courses are intended to provide individuals a contact with a breadth of ideas beyond the narrow confines of specialized training.

A. Six semester hours from the following courses will satisfy humanities requirements. The courses are broad in nature, enabling individuals to explore connections and relationships among various humanities disciplines and to provide a general overview for other humanities courses listed in Category B.

HUM 2211 – HUMANITIES: THE FOUNDATIONS
 HUM 2231 – HUMANITIES: RENAISSANCE TO THE ROMANTIC PERIOD or HUM 2478 – NORTHERN EUROPEAN HUMANITIES
 HUM 2250 – HUMANITIES: THE MODERN WORLD
 HUM 2410 – HUMANITIES OF ASIA
 HUM 2450 – HUMANITIES IN THE AMERICAS

OR

B. Three semester hours from the foregoing Category A and three semester hours from any of the following courses in this category which provide individuals contact with more specific topics of study in the humanities. However, like courses in Category A, these are broad rather than narrow in scope.

ARH 1000 – ART APPRECIATION
 ARH 2050 – ART HISTORY I
 ARH 2051 – ART HISTORY II

FIL 1505 – THE MOVIES AS ART
 HUM 2472 – INTERCULTURAL EX-
 PLORATIONS
 HUMA 1740 – OVERSEAS HUMANI-
 TIES
 LIT 2100 – GREAT IDEAS IN WORLD
 LITERATURE
 MUH 2211 – SURVEY OF MUSIC HIS-
 TORY
 MUL 1011 – MUSIC APPRECIATION
 PHI 2010 – INTRODUCTION TO PHI-
 LOSOPHY
 PHI 2600 – MORAL AND POLITICAL
 PHILOSOPHY
 REL 2300 – WORLD RELIGIONS
 THE 1000 – INTRODUCTION TO THE-
 ATRE

III. NATURAL SCIENCE . 6 semester hours

The natural science courses are intended to provide a basic knowledge of biological and physical science by offering students the opportunity to become acquainted with the basic concepts, language, and problem-solving skills necessary to scientific inquiry. The courses provide a fundamental basis for the developing relationship between the natural science and the other academic disciplines necessary for universal understanding and survival.

A minimum of six semester hours from the courses listed below:

*BIOLOGICAL SCIENCE

APB 1150 – LIFE IN ITS BIOLOGICAL
 ENVIRONMENT
 APB 2190C – HUMAN ANATOMY AND
 PHYSIOLOGY I
 APB 2191C – HUMAN ANATOMY AND
 PHYSIOLOGY II
 BOT 1010C – BOTANY
 BSC 2010C – PRINCIPLES OF BIOL-
 OGY I
 ISC 1000 – UNIFIED SCIENCE
 MCB 2013C – MICROBIOLOGY
 PCB 2030 – ECOLOGICAL CRISES
 ZOO 1010C – GENERAL ZOOLOGY
 ZOO 2713C – COMPARATIVE ANAT-
 OMY

*PHYSICAL SCIENCE:

AST 1002 – INTRODUCTION TO AS-
 TRONOMY
 CHM 1020 – CHEMISTRY FOR LIB-
 ERAL ARTS
 CHM 1040C – INTRODUCTORY
 CHEMISTRY I
 CHM 1041C – INTRODUCTORY
 CHEMISTRY II
 CHM 1045C – GENERAL CHEMISTRY
 AND QUALITATIVE ANALYSIS I
 CHM 1046C – GENERAL CHEMISTRY
 AND QUALITATIVE ANALYSIS II

GLY 1000 – EARTH AND SPACE SCI-
 ENCE
 GLY 1010 – PHYSICAL GEOLOGY
 GLY 1100 – HISTORICAL GEOLOGY
 ISC 1000 – UNIFIED SCIENCE
 MET 1001 – METEOROLOGY
 PHY 1020 – PHYSICS FOR LIBERAL
 ARTS
 PHY 2048C – PHYSICS I WITH CALCU-
 LUS
 PHY 2049C – PHYSICS II WITH CAL-
 CULUS
 PHY 2053C – GENERAL PHYSICS I
 PHY 2054C – GENERAL PHYSICS II
 PSC 1341 – PHYSICAL SCIENCE

*The letter "C" following the course number in the list of Natural Science courses distinguishes courses with a laboratory component.

IV. MATHEMATICS6 semester hours

The mathematics courses offered are designed to meet the needs of students who are planning to extend their knowledge in mathematics and science as well as those who are planning to seek advanced education in the humanities, social sciences or business. These courses also provide three options for students to achieve the basic competencies as defined by the State of Florida.

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 1202 – COLLEGE MATHEMATICS

OR

MAC 1104 – COLLEGE ALGEBRA
 MGF 1202 – COLLEGE MATHEMATICS

OR

MAC 1104 – COLLEGE ALGEBRA
 STA 1014 – ELEMENTARY STATISTICS

V. COMMUNICATIONS. . 9 semester hours

The communications courses are intended to enable students to achieve the basic competencies as defined by the State of Florida necessary for speaking, listening, and writing in an organized and critical manner at the college level.

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

VI. ADDITIONAL HOURS

The College recognizes individual needs and desires to maintain physical and mental health and therefore encourages the student to consider activity/leisure courses to fulfill Area VI.

If certain educational programs require additional credit(s) from Area I-V, excess hours from these areas can also fulfill Area VI. Additional hours may include excess hours from the above four areas and/or up to three one-hour physical education activity courses (DAA, PEL, PEM).

Total hours required from areas I-VI
 **36 semester hours**

VII. ELECTIVES 26 semester hours

TOTAL: 62 SEMESTER HOURS

* * *

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

(P) University Parallel . . . Any course identified by this symbol is intended to transfer to a university.

(D) Dual Purpose . . . Any course identified by this symbol is an occupational education course, eligible for transfer to a university under certain conditions – hence the course may serve both university parallel and occupational purposes.

Conditions:

- (1) Not more than four of the 26 semester hours for electives may consist of one-semester hour physical education activity courses less any used in Area VI.
- (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 1340, MUN 1380, MUN 1410, MUN 1450, MUN 1710, MUNA 1310, MUNB 1310, SPC 2594, THE 2925.
- (3) Not more than 48 semester hours of credit earned in courses offered via television may be applied towards the Associate in Arts degree.

The Associate in Science Degree

Preparation for a Career

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 career education needs of the community's citizens and employers.

The Career and Technical 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. The program may also transfer to a senior institution offering the baccalaureate degree in a related field of study based on completion of additional requirements as set forth in the section on University Transfer Requirements (page 37) and/or on specific program articulation agreements with state universities.

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 (AS) degree. For those persons desiring to spend less than two years in preparation, college credit Technical Certificate programs are available in several areas.

The program director, with the approval of the assistant dean of instruction, 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, with the approval of the assistant dean of instruction, 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.

Program Location

Not all of the career and technical education AS degree programs are available at each of the college's four campuses. However, the General Education courses and many of the elective and the Professional and other required courses are available at all campuses as well as at selected off-campus centers and sites.

Graduation Requirements

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

1. Earned a Florida Junior College at Jacksonville cumulative grade point average of 2.00 (C) on all courses attempted.
2. Earned an all-college cumulative grade point average of 2.00 (C) on all courses attempted, including transferred credits.
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 assistant dean of instruction. (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.

NOTE: Students are cautioned to pay particular attention to the following:

- a. A student's graduation date will be the date at the end of the college term in which the student completes the academic requirements for the degree or certificate for which the student is an applicant. (The removal of an incomplete grade does not affect a student's graduation date, since the grade change is effective as of the end of the term in which the incomplete grade was assigned rather than the term in which the incomplete work was made up.)
- b. If a student expects to complete the course work under the terms of the catalog in effect during the term of the student's first registration, the student must graduate within four years after the year of first registration in a college credit program. *Accordingly, a student who enters under this catalog must graduate by the end of the Summer Term 1991, or the student will be expected to meet the requirements of subsequent years.* Changes to requirements as may be mandated by law or by rule of the District Board of Trustees may supercede this provision.
- c. Not more than 24 semester hours of credit earned in courses offered via television may be applied towards the Associate in Science degree.
- d. The General Education requirements are to be taken in sequence according to the particular program of study, but the course work may be taken on any Florida Junior College at Jacksonville campus.

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

General Education Requirements

1. A minimum of 15 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:

I. SOCIAL SCIENCE. . . . 3 semester hours

Any one of the following 3 semester hour courses:

- AMH 2010 – UNITED STATES HISTORY TO 1865
- EUH 1001 – WESTERN CIVILIZATION FROM 1715 TO THE PRESENT
- POS 2041 – AMERICAN FEDERAL GOVERNMENT
- SSI 1120 – ORIGINS OF AMERICAN SOCIETY (ECONOMIC, POLITICAL AND INTERNATIONAL INSTITUTIONS)

II. HUMANITIES 3 semester hours

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

III. MATHEMATICS – NATURAL SCIENCE. 3 semester hours

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

- 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 1202 – 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 five 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. Most 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.

Selective Access Programs

Dental Assisting, Dental Hygiene, Medical Laboratory Technology, Nursing and Respiratory Therapy programs are selective access programs and have special selection and admission criteria and procedures which may be obtained from the program contact office as listed in this catalog.

Prior to formal admission to other Associate in Science (AS) and Associate in Applied Science (AAS) programs, students will complete a pre-curriculum program consisting of 15 semester hours of professional and general education courses.

Lists of pre-curriculum courses for each program will be distributed during registration, or a copy may be obtained from your counselor/advisor or program director.

University Transfer Requirements

A student who intends to transfer to a state university upper division upon receipt of the Associate in Science degree must satisfy certain additional General Educational Requirements before being accepted for transfer. These requirements do *not* affect the award of the Associate in Science (AS) degree by Florida Junior College at Jacksonville, but do affect the ability of the senior institution to accept the student with the AS degree.

The student with the AS degree who intends to transfer *must* complete requirements of the College-Level Academic Skills Test (CLAST), a college-level communication and computation skills test required by the state (refer to Testing Services section for details on test administration). The requirements include satisfactory scores on the four subtests of the CLAST as specified by the State Board of Education and the District Board of Trustees.

In addition, the student transferring with the AS degree to a state university must have earned a "C" grade on all courses used to meet the General Education Requirements in Communications, Mathematics, and Humanities. Courses with the "D" grade in these general education disciplines will not be accepted by the transfer universities for General Education, according to rules set by the State Board of Education (SBE).

AS degree students who intend to transfer are required to take the respective Florida Junior College

courses wherein the 112 college-level academic skills are taught. *Students are to take the appropriate Florida Junior College communications and mathematics courses prior to taking the CLAST.*

Transferring students will also be obligated to complete the coursework requirements of SBE Rule 6A-10.30 including ENC 1101 (English Composition I), ENC 1102 (English Composition II), SPC 1010 (Fundamentals of Speech Communication), and two Humanities courses from the General Education Requirements, Associate in Arts degree. Such students will be required by the same rule to complete two Mathematics courses from General Education Requirements, Associate in Arts degree.

Specifically the following courses are needed for the Associate in Science degree study in order to transfer to a state university and to achieve junior status. Such courses will enable the student to be exposed to instruction of the 112 college-level academic skills which are measured by the College-Level Academic Skills Test (CLAST). In addition, the coursework will fulfill requirements of State Board of Education rules for additional writing courses.

NOTE: *All of these courses are not required for the Associate in Science degree, but are necessary for the Associate in Science degree-seeking student who intends to transfer.*

Course Number and Title	Credits
ENC 1101 English Composition I	3
ENC 1102 English Composition II	3
SPC 1010 Fundamentals of Speech Communication	3
*Humanities	6
**Mathematics	6
***Natural Science	3
****Social Sciences	3
Credit hours earned	27

- NOTES: *Any two courses from Area II (Humanities) of the AA degree General Education Requirements
 **Refer to Area IV (Mathematics) of the AA degree General Education Requirements
 ***Refer to Area III (Mathematics-Natural Science) of the AS degree General Education Requirements
 ****Refer to Area I (Social Science) of the AS degree General Education Requirements

Associate in Science Degree Transfer Option Programs

The University of North Florida and Florida Junior College at Jacksonville have a cooperative, articulated Associate in Science Degree Transfer Option for specific programs. Florida Junior College students who complete these transfer options will be admitted to the University of North Florida with full junior level status in the area of pursuit. Currently, the following University of North Florida Transfer Option Programs are available:

Computer and Information Systems
 Insurance
 Nursing
 Real Estate
 Transportation

Airways Science
 Banking

The Associate in Applied Science Degree

Preparation for an Occupation

The objective of the Associate in Applied Science (AAS) degree is to provide a more comprehensive and higher level of training in engineering and industrial related fields than can be offered by the Continuing Education occupational preparatory programs of study.

The General Education Requirements and the Graduation Requirements for the Associate in Ap-

plied Science degree are the same as those for the Associate in Science degree.

Except for the General Education component, courses taken in Associate in Applied Science degree programs are usually not transferrable to the upper division of a state university. The Associate in Applied Science is considered a non-transferrable degree.



College Credit Technical Certificate

Preparation for Specialized Employment

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 program completion.

In some cases, the Technical Certificate can be an intermediate step toward the associate degree in the particular area of study. The student can then build upon that Technical Certificate to accomplish the Associate in Science degree.

Graduation Requirements

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

1. Earned a Florida Junior College at Jacksonville grade point average of 2.00 (C) on all courses attempted.
2. Completed the required courses as set forth in the college catalog or as approved by the assistant dean of the area.
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.

NOTE: Students are cautioned to pay particular attention to the following:

- a. A student's graduation date will be the date at the end of the college term in which the student completes the academic requirements for the degree or certificate for which the student is an applicant. (The removal of an incomplete grade does not affect a student's graduation date, since the grade change is effective as of the end of the term in which the incomplete grade was assigned rather than the term in which the incomplete work was made up.)
- b. If a student expects to complete the course work under the terms of the catalog in effect during the term of the student's first registration, the student must graduate within four years after the year of first registration in a college credit program. *Accordingly, a student who enters under this catalog must graduate by the end of the Summer Term 1991, or the student will be expected to meet the requirements of subsequent years. Changes to requirements as may be mandated by law or by rule of the District Board of Trustees may supercede this provision.*

Program Areas

Each Associate in Science degree, Associate in Applied Science degree and Technical Certificate program listed in the following pages has a group of initial (pre-program) courses listed for it. These are foundation courses for the program, and they are the

ones that should be taken first. When a student has successfully completed these courses, the student should contact the advisor/counselor to complete the process to be admitted officially to the intended program of study.

The Associate in Science Degree and Technical Certificate

The objective of the Associate in Science (AS) degree is to provide a two-year study in a specialized field leading directly into skilled employment without further college work. Students who later decide to go on to a four-year degree may do so by satisfying certain requirements.

The student who chooses this occupational study but later decides to consider university transfer for a four-year degree, will have to make up the requirements in

General Education as noted on Page 43 of this catalog, and before being admitted to upper division study as per State Board of Education rules.

The objective of the Technical Certificate is to provide basic professional courses to meet the minimum requirements of a particular occupation. Students who later decide to pursue the Associate in Science degree may do so by satisfying certain course requirements in general education and the occupational area.

The Associate in Applied Science Degree and Technical Certificate

The objective of the Associate in Applied Science (AAS) degree is to provide a more comprehensive and higher level of training than can be offered by the Continuing Education 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 Technical Certificate option is also available to provide the basic professional courses of the occupation.

Associate in Applied Science degree General Education Requirements and Graduation Requirements are the same as those for the Associate in Science degree.

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



Programs of Study

NOTE: The type of program is designated as follows:

- AS – Associate in Science Degree
- AAS – Associate in Applied Science Degree
- ASDO – Associate in Science Degree
Option
- ASTO – Associate in Science Transfer
Option
- TC – Technical Certificate

Consumer and Human Services

- Child Care Services (AS,TC)
- Infant and Toddler Services (TC)
- Residential Child Care Services (TC)
- Fashion Merchandising (AS)
- Food Service Technology (AS,TC)
- Dietetic Technician (ASDO)
- Interior Design Technology (AS)
- Revitalization of Homes and Businesses (TC)

General Business and Information Services

- Accounting (AS)
- Computer and Information Systems (AS,ASTO)
- Computer Business Applications (TC)
- Computer Operations (TC)
- Computer Programming (TC)
- General Business (AS)
- Office Systems Technology (AS,TC)

Health Services

- Dental Assisting (AS,TC)
- Dental Hygiene (AS)
- Emergency Medical Technology (AS,TC)
- Medical Lab Technology (AS)
- Nursing (AS,ASTO)
- Bridge Option for Licensed Practical Nurses
 (ASDO)
- Respiratory Therapy (AS)

Public and Financial Services

- Banking (AS,ASTO)
- Criminal Justice Education – Corrections (AS)
- Criminal Justice Education – Law Enforcement
(AS,TC)
- Fire Science and Prevention (AS,TC)
- Hospitality Management (AS)
- Insurance (AS,ASTO)
- Real Estate (AS,ASTO)
- Sales-Marketing-Retailing (AS)
- Transportation (AS,ASTO)
- Air Traffic Management (AS)
- Airways Science (ASTO)

Technical and Industrial Services

- Architectural Engineering Technology (AS,TC)
- Automotive/Light Truck Technology (AAS,TC)
- Building Construction Technology (AAS,TC)
- Civil Engineering Technology (AS,TC)
- Drafting and Design Technology (AS)
- Drafting (TC)
- Electronics Engineering Technology (AS,TC)
- Electrical/Electronics Technology (AAS,TC)
- Mechanical Engineering Technology (AS,TC)
- Metal Trades Technology (AAS,TC)
- Printing/Graphic Arts (AS)
- Television Production (AS)

Consumer and Human Services

Associate In Science

Child Care Services

Students completing the AS 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 assistant dean, will be scheduled into additional appropriate courses for correction of these deficiencies. This assessment may occur either prior to or during the program.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Child Care Services

- ENC 1101 - English Composition I
- CHD 1220 - Child Growth and Development I
- CHD 1230 - Child Growth and Development II
- EEC 1001 - Introduction to Early Childhood Education

Course Number and Title	Credits
General Education	
*Humanities	3
**Mathematics	3
**Social Sciences	3
BSC 2010C Principles of Biology I	4
DEP 2004 Human Growth and Development	3
DEP 2102 Child Psychology	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
SPC 1010 Fundamentals of Speech Communications	3
	credit hours 37
Professional and Other Required Courses	
CHD 1220 Child Growth and Development I	3
CHD 1230 Child Growth and Development II	3
EDG 2940 Observing and Recording Child Behavior	6
EDG 2941 Supervised Student Participation	6
EEC 1001 Introduction to Early Childhood Education	3
***EEC 1201 Overview of Early Childhood Curriculum I	3
***EEC 1202 Overview of Early Childhood Curriculum II	3
	credit hours 27
	=
	Total credit hours 64

*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.



Technical Certificate

Child Care Services

Students completing the Technical Certificate 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 assistant dean, will be scheduled into additional appropriate courses for correction of these deficiencies. This assessment may occur either prior to or during the program.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate – Child Care Services

ENC 1101 – English Composition I
 CHD 1220 – Child Growth and Development I
 CHD 1230 – Child Growth and Development II
 EEC 1001 – Introduction to Early Childhood Education

Course Number and Title	Credits
General Education	
ENC 1101 English Composition I	3
	credit hours 3
Professional and Other Required Courses	
CHD 1220 Child Growth and Development I	3
CHD 1230 Child Growth and Development II	3
EDG 2940 Observing and Recording Child Behavior	6
EDG 2941 Supervised Student Participation	6
EEC 1001 Introduction to Early Childhood Education	3
EEC 1201 Overview of Early Childhood Curriculum I	3
EEC 1202 Overview of Early Childhood Curriculum II	3
	credit hours 27
	=
	Total credit hours 30

Technical Certificate

Infant and Toddler Care Services

Students completing the Technical Certificate 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 assistant dean, will be scheduled into additional appropriate courses for correction of these deficiencies. This assessment may occur either prior to or during the program.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Infant and Toddler Care Services

ENC 1101 - English Composition I
 CHD 1220 - Child Growth and Development I
 CHD 1230 - Child Growth and Development II
 EEC 1001 - Introduction to Early Childhood Education

Course Number and Title		Credits
General Education		
ENC 1101	English Composition I	3
		credit hours 3
Professional and Other Required Courses		
CHD 1220	Child Growth and Development I	3
CHD 1230	Child Growth and Development II	3
EDG 2940	Observing and Recording Child Behavior	6
EDG 2941	Supervised Student Participation	6
EEC 1001	Introduction to Early Childhood Education	3
CHD 1110	Infant and Toddler Care I (Development)	3
CHD 2120	Infant and Toddler Care II (Education)	3
		credit hours 27
		Total credit hours 30

Technical Certificate

Residential Child Care Services

Students completing the Technical Certificate 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 assistant dean. 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.

Course Number and Title	Credits
General Education	
DEP 2102 Child Psychology	3
ENC 1101 English Composition I	3
	—
	credit hours 6
Professional and Other Required Courses	
CHD 1220 Child Growth and Development I	3
CHD 1230 Child Growth and Development II	3
CHD 1850 Training of Residential Child Care Workers I	3
CHD 1861 Training of Residential Child Care Workers II	3
EDG 2940 Observing and Recording Child Behavior	6
EDG 2941 Supervised Student Participation	6
	—
	credit hours 24
	—
	Total credit hours 30

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Residential Child Care Services

ENC 1101 - English Composition I

CHD 1220 - Child Growth and Development I

CHD 1230 - Child Growth and Development II

Associate in Science

Fashion Merchandising

This AS program is 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 and General Education.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Fashion Merchandising

- ENC 1101 - English Composition I
- CTE 1401C - Basic Textiles
- CTE 1812 - Introduction to Fashion Merchandising
- CTE 1825 - Merchandising Mathematics and Buying Procedures, or a professional elective
- CTE 2851 - Fashion Sales Promotion

Course Number and Title	Credits
General Education	
*Humanities	3
*Mathematics-Natural Science	3
*Social Science	3
PSY 1012 General Psychology	3
ENC 1101 English Composition I	3
	credit hours 15
Professional and Other Required Courses	
CTE 1310C Basic Clothing Construction	3
CTE 1401C Basic Textiles	3
CTE 1812 Introduction to Fashion Merchandising	3
CTE 1825 Merchandising Mathematics and Buying Procedures	3
CTE 1840 Fashion Merchandising Product Information	3
CTE 2263 Fashion Merchandising Computer Applications	3
CTE 2851 Fashion Sales Promotion	3
CTE 2880 Fashion Merchandising Internship	5
CTE 2892 Fashion Merchandising Management Seminar	3
**Approved Electives	15
	credit hours 47
	Total credit hours 62
*Refer to AS degree General Education Requirements	
**Approved Electives: credit hours	
ACG 1003, 1004 General Accounting I and II	6
or	
ACG 2001 Principles of Accounting I	3
BUL 2111 Business Law I	3
CAP 1820 Microcomputer Application Software	3
COA 1100 Consumer Decisions	3
COC 1300 Introductory Computer Concepts	3
COP 2110 FORTRAN Programming	3
COP 2170 Programming in BASIC	3
CTE 2200 Wardrobe Planning and Updating	3
FAD 1230 Dynamics of Modern Living	3
GFB 1011 Introduction to Business	3
HME 1200 Home Management	3
MAN 2021 Principles of Management	3
MAN 2300 Personnel Management	3
MAR 1101 Salesmanship	3
SPC 1010 Fundamentals of Speech Communication	3
OST 1324 Business Mathematics Using Calculators	3

PROGRAMS OF STUDY

Associate in Science

Food Service Technology

This competency-based AS 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 program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Food Service Technology

ENC 1101 - English Composition I

FOS 1201 - Sanitation and Safety

FSS 1004 - Orientation to Food Service Technology

FSS 1202C - Basic Food Preparation

HUN 1201 - Principles of Nutrition, or professional elective

Course Number and Title	Credits
General Education	
*Humanities	3
*Mathematics-Natural Science	3
*Social Science	3
*General Education Elective	3
ENC 1101 English Composition I	3
	credit hours 15
Professional and Other Required Courses	
FOS 1201 Sanitation and Safety	3
FSS 1004 Orientation to Food Service Technology	3
FSS 1100 Menu Design and Food Merchandising	3
FSS 1120 Food and Beverage Purchasing	3
FSS 1202C Basic Food Preparation	3
FSS 1221C Quantity Food Production	3
FSS 1410 Food Service Equipment/Facility Planning	3
FSS 2300 Supervision and Personnel Management	3
FSS 2501 Food and Beverage Control	3
FSS 2945 Food Service Internship	9
HUN 1201 Principles of Nutrition	3
**Approved Electives	6
	credit hours 45
	=
	Total credit hours 60

*Refer to AS degree General Education Requirements

**Approved Electives:	credit hours
ACG 1003 General Accounting I	3
CAP 1820 Microcomputer Application Software	3
COA 1100 Consumer Decisions	3
COC 1300 Introductory Computer Concepts	3
COC 2001 Computer Concepts	3
COP 2110 FORTRAN Programming	3
COP 2170 Programming in BASIC	3
DIE 1201 Therapeutic Nutrition	3
FAD 1230 Dynamics of Modern Living	3
FSS 1245C Baking	3
FSS 1248C Guide Manager	3
FSS 1250 Food and Beverage Service	3
HME 1200 Home Management	3
OST 1324 Business Mathematics Using Calculators	3

Technical Certificate

Food Service Technology

This competency-based Technical Certificate 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 program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Food Service Technology

ENC 1101 - English Composition I
 FOS 1201 - Sanitation and Safety
 FSS 1004 - Orientation to Food Service Technology
 FSS 1202C - Basic Food Preparation
 HUN 1201 - Principles of Nutrition, or a professional elective

Course Number and Title	Credits
General Education	
ENC 1101 English Composition I	3
	credit hours 3
Professional and Other Required Courses	
FOS 1201 Sanitation and Safety	3
FSS 1004 Orientation to Food Service Technology	3
FSS 1100 Menu Design and Food Merchandising	3
FSS 1120 Food and Beverage Purchasing	3
FSS 1202C Basic Food Preparation	3
FSS 1221C Quantity Food Production	3
FSS 1410 Food Service Equipment/Facility Planning	3
FSS 2300 Supervision and Personnel Management	3
FSS 2501 Food and Beverage Control	3
HUN 1201 Principles of Nutrition	3
*Approved Electives	6
	credit hours 36
	=
	Total credit hours 39
*Approved Electives:	
	credit hours
ACG 1003 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 1246C Baking	3
FSS 1248C Garde-Manger	3
FSS 1250 Food and Beverage Service	3
HME 1200 Home Management	3
OST 1324 Business Mathematics Using Calculators	3

AS Degree Option

Dietetic Technician

The Dietetic Technician AS degree 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-2915.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Option - Dietetic Technician

ENC 1101 - English Composition I
 FOS 1201 - Sanitation and Safety
 FSS 1004 - Orientation to Food Service Technology
 FSS 1202C - Basic Food Preparation
 HUN 1201 - Principles of Nutrition

Course Number and Title	Credits
General Education	
*Humanities	3
*Mathematics - Natural Science	3
*Social Science	3
ENC 1101 English Composition I	3
SYG 2000 Introductory Sociology	3
**Communications Elective	3
	credit hours 18
Professional and Other Required Courses	
FOS 1201 Sanitation and Safety	3
FSS 1004 Orientation to Food Service Technology	3
FSS 1100 Menu Design and Food Merchandising	3
FSS 1120 Food and Beverage Purchasing	3
FSS 1202C Basic Food Preparation	3
FSS 1221C Quantity Food Production	3
FSS 1410 Food Service Equipment/Facility Planning	3
FSS 2300 Supervision and Personnel Management	3
FSS 2501 Food and Beverage Control	3
HUN 1201 Principles of Nutrition	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
DIE 1201 Therapeutic Nutrition	3
	credit hours 47
	Total credit hours 65
*Refer to AS degree General Education Requirements	
**ENC 1102 or SPC 1010	

Associate in Science

Interior Design Technology

The AS 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, space planning, materials and sources, graphic presentation and architectural design, history of interiors, and business aspects.

The Associate in Science degree program will also include management, safety, free enterprise, consumer and economic education; communication, computation and human relations skills; and instruction related to rules, regulations and legislation.

Graduates secure entry level positions with architectural firms, interior design studios or with related businesses specializing in interior furnishings. Types of employment include interior designer, design assistant, sales representatives, interior decorator and salesperson.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Interior Design Technology

- ENC 1101 - English Composition I
- IHD 1001C - Principles of Interior Design
- HHD 1232C - Functions and Psychology of Space
- IND 1100 - History of Interiors I
- IND 1420 - Materials and Sources or a professional elective

Course Number and Title	Credits
General Education	
General Education Elective	3
*Humanities	3
*Mathematics - Natural Science	3
*Social Science	3
ENC 1101 English Composition I	3
	credit hours 15
Professional and Other Required Courses	
GTE 1401C Basic Textiles	3
HHD 1001C Principles of Interior Design	3
HHD 1232C Functions and Psychology of Space	3
HHD 2234C Residential and Commercial Design	3
HHD 2323C Perspective Renderings - Housing	3
HHD 2810 Marketing Techniques for the Interior Designer	3
HHD 2324C Graphic Presentation Techniques	3
IND 1100 History of Interiors I	3
IND 1130 History of Interiors II	3
IND 1420 Materials and Sources	3
IND 2940 Interior Design Internship and Seminar	6
**Approved Professional Electives	12
	credit hours 48
	Total credit hours 63
*Refer to AS degree General Education Requirements	
**Approved Professional Electives credit hours	
ARC 2120C Architectural Drafting	3
CAP 1820 Microcomputer Application Software	3
COC 1300 Introductory Computer Concepts	3
COP 2110 FORTRAN Programming	3
COP 2170 Programming in BASIC	3
ETD 1100C Engineering Drawing	3
HHD 1365C Home Accessories Construction	3
HHD 1360C Construction of Window Treatments and Draperies	3
HHD 1362 Window Treatment Design	3
HHD 1450C Fundamentals of Restoration and Preservation	3
HHD 1452 Home Maintenance and Repair	3
HHD 1510C Introduction to Upholstery	3
HHD 1511C Advanced Upholstery	3
HHD 2240 Why Preservation?	3
HHD 2600 Architectural Styles: Exteriors and Interiors	3
IHD 2805 Professional Practices in Home Economics	3
HME 1200 Home Management	3
HME 1312 Home Equipment - Selection, Use, and Care	3
OST 1324 Business Mathematics Using Calculators	3
SOP 1002 Human Relations	3

PROGRAMS OF STUDY

Technical Certificate

Revitalization of Homes and Businesses

The Technical Certificate program addresses trends and issues in housing: factors affecting selection, legal, and financial responsibilities in establishing a home; relocation of residence, energy conservation, housing alternatives, home construction, renovation and preservation features, furnishings and equipment, and exterior design.

This program provides the individual or family the opportunity to educate themselves: 1) concerning the feasibility of structural renovation of dwellings for homes or business; 2) concerning application of skills and knowledge necessary for maintenance and repair of home or business dwellings.

Certificate content deals with housing alternatives, architectural styles, functions of space, energy factors in household equipment and in the renovation process, economics of preservation, and techniques of home repair and renovation.

Course Number and Title	Credits
Professional and Other Required Courses	
HHHD 1122 Housing Alternatives	3
HHD 1232C Functions and Psychology of Space	3
HHD 1450C Fundamentals of Restoration and Preservation	3
HHD 1452 Home Maintenance and Repair	3
HHD 2240 Why Preservation?	3
HHD 2600 Architectural Style: Exteriors and Interiors	3
HHD 2943 Practicum in Economic Revitalization of Home and Business Dwellings	6
HME 1232 Economic Home Energy Sources	3
IND 1420 Materials and Sources	3
**Approved Electives	6
Total credit hours 36	
**Approved Electives: credit hours	
HHD 1365C Home Accessories Construction	3
HHD 1362 Window Treatment Design	3
HHD 1360C Construction of Window Treatments and Draperies	3
HHD 1510C Introduction to Upholstery	3
HHD 1511C Advanced Upholstery	3
HME 1200 Home Management	3
IIME 1312 Home Equipment - Selection, Use, and Care	3
HHHD 2805 Professional Practices in Home Economics	3

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Revitalization of Homes and Businesses

- HHD 1122 - Housing Alternatives
- HHD 1232C - Functions and Psychology of Space
- HHD 2240 - Why Preservation?
- HME 1232 - Economic Home Energy Sources
- IND 1420 - Materials and Sources or an approved elective

General Business and Information Services

Associate in Science

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 AS 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.

The Accounting 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.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Accounting

ENC 1101 - English Composition I

ACG 2001 - Principles of Accounting I

OST 1324 - Business Mathematics Using Calculators

Any two required professional or approved courses

Course Number and Title	Credits
General Education	
*Humanities	3
*Mathematics-Natural Science	3
*Social Science	3
ECO 2013 Principles of Economics I	3
ENC 1101 English Composition I	3
	-
	credit hours 15
Professional and Other Required Courses	
ACG 2001 Principles of Accounting I	3
ACG 2011 Principles of Accounting II	3
ACG 2100 Intermediate Accounting I	3
ACG 2110 Intermediate Accounting II	3
**ACG 2360 Cost Accounting	3
**ACG 2500 Fund Accounting	3
OST 1324 Business Mathematics Using Calculators	3
OST 2335 Business Communications	3
**TAX 2000 Individual Taxes	3
***Approved Electives	21
	-
	credit hours 45
	-
	Total credit hours 60
*Refer to AS degree General Education Requirements	
**Students are required to take any two of the three courses.	
***Approved Electives:	credit hours
ACG 2360 Cost Accounting	3
ACG 2500 Fund Accounting	3
BUL 2111 Business Law I	3
BUL 2112 Business Law II	3
CAP 1820 Microcomputer Application Software	3
COC 1300 Introductory Computer Concepts	3
COP 2110 FORTRAN Programming	3
COP 2170 Programming in BASIC	3
COC 2001 Computer Concepts	3
COE 1000 Cooperative Education Seminar	1
-- 1949 Cooperative Education Work Experience I (with program director's prior consent)	3
--2949 Cooperative Education Work Experience II (with program director's prior consent)	3
FIN 2000 Principles of Finance	3
GEB 1011 Introduction to Business	3
MAN 2021 Principles of Management	3
MAN 2300 Personnel Management	3
MAN 2800 Small Business Management	3
MAR 1011 Principles of Marketing	3
RMI 1030 Principles of Insurance	3
OST 1100 Beginning Typewriting	3
TAX 2000 Individual Taxes	3
TAX 2010 Corporate, Estate, and Trust Taxes	3

Associate in Science

Computer and Information Systems

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 toward a baccalaureate.

Students who desire to major in Computer Science are advised to elect the AA degree which should include the calculus sequence as part of the program requirements.

Full-time students wishing to complete the above AS degree program must be enrolled in two Computer and Information Systems 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.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

This is a SOCNAV Network Program.
Refer to SOCNAV description on page 28.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Computer and Information Systems

- ENC 1101 - English Composition I
- CIS 2100 - Data Management and Utility Program
- COC 1300 - Introductory Computer Concepts
- COP 1000 - Introduction to Programming and Algorithm Design
- Any computer language

Course Number and Title	Credits
General Education	
****Natural Science	6
*Humanities	3
*Social Science	3
ENC 1101 English Composition I	3
****Mathematics Elective	3
	-
	credit hours 18

*Refer to AS degree General Education Requirements.
****Prefer MAC 1104 College Algebra or above.
****Any two courses from the Area (III) AA degree General Education Requirements listing.

Course Number and Title	Credits
Professional and Other Required Courses	
**ACG 2001 Principles of Accounting I	3
+CIS 2100 Data Management and Utility Programs	3
++CIS 2301 Information Systems	3
CNM 1005 Data Processing Mathematics	3
COC 1300 Introductory Computer Concepts	3
COP 1000 Introduction to Programming and Algorithm Design	3
COP 2120 Basic COBOL Programming	3
COP 2610 Advanced Computing and Programming Systems	3
GE 1011 Introduction to Business	3
MAN 2021 Principles of Management	3
***OST 1100 Beginning Typewriting	3
OST 2335 Business Communications	3
Professional Elective	3
Professional or General Business Elective	3
	-
	credit hours 42
	=
	Total credit hours 60

**ACG 2003 and ACG 2004 may be used in place of ACG 2001. This will increase the total hours in program

***Students with touch typing skills may elect to substitute a Data Processing or General Business Elective course for OST 1101.

*Students may substitute CIS 2116 Data Base Management Concepts and Practices - 3 cr; or CIS 1101 Introduction to dBASE III - 1 cr; plus CIS 1115 Advanced dBASE III - 2 cr. for CIS 2100.

†Students may substitute CIS 2325 Computer Systems Development With High Level Tools - 3 cr. for CIS 2301.

Professional Electives:	credit hours
CAP 1820 Microcomputer Application Software	3
COP 1160 RPG Programming	3
COP 2400 Basic Assembly Language Programming	3
COP 2110 FORTRAN Programming	3
COP 2121 Advanced COBOL Programming	3
COP 2130 PL/I Programming	3
COP 2170 Programming in BASIC	3
CRM 1039 Data Processing Workshop	3
CAP 1802 Microcomputers in Business: A Survey	3
COP 2612 Microcomputer Operating Systems Concepts	3
CIS 2325 Computer Systems Development (With High Level Tools)	3
CIS 2116 Data Base Management Concepts and Practices	3
CAP 2632 Advanced Microcomputer Business Applications	3
CAP 1801 Introduction to Lotus 1-2-3	1
CAP 1803 Advanced Lotus 1-2-3	1
CAP 2630 Management Overview of Microcomputer Software	1
COP 1618 Introduction to IBM Personal Computers and DOS	1
COP 1270 Introduction to UNIX Operating System	2
CIS 1101 Introduction to dBASE III	1
CIS 1115 Advanced dBASE III	2

AS Degree Option UNF Transfer

Computer and Information Systems

The following sequence of courses is designed for FJC students planning to transfer to the University of North Florida with an Associate in Science degree in Computer and Information Systems. These students are eligible to pursue a B.S. in Computer and Information Sciences with a track in Information Systems. Completion of this program will qualify the FJC Computer and Information Systems student for the Associate in Science degree in Computer and Information Systems. Upon transfer to U.N.F. the Computer and Information Systems graduate will begin the junior year of U.N.F.'s Computer and Information Science program. Any variation in this program of study may result in additional required coursework.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - UNF Transfer Option Computer and Information Systems

- ENC 1101 - English Composition I
- CIS 2100 - Data Management and Utility Program
- COC 1300 - Introductory Computer Concepts
- COP 1000 - Introduction to Programming and Algorithm Design
- Any computer Language

Course Number and Title		Credits
General Education		
ENC 1101	English Composition I	3
ENC 1102	English Composition II	3
SPC 1010	Fundamentals of Speech Communication	3
*Humanities		6
*Natural Science		6
MAC 1104	College Algebra	4
STA 1014	Elementary Statistics	3
*Social Science (Area A)		3
ECO 2013	Principles of Economics I	3
ECO 2023	Principles of Economics II	3
		credit hours 37
Professional and Other Required Courses		
ACG 2001	Principles of Accounting I	3
ACG 2011	Principles of Accounting II	3
COC 1300	Introduction to Computer Concepts	3
COP 1000	Introduction to Programming and Algorithm Design	3
**CIS 2100	Data Management and Utility Programs	3
COP 2120	Basic COBOL Programming	3
COP 2121	Advanced COBOL Programming	3
***CIS 2301	Information Systems	3
COP 2610	Advanced Computing and Programming Systems	3
GEB 1011	Introduction to Business	3
MAN 2021	Principles of Management	3
		credit hours 33
		=
		Total credit hours 70
NOTES:		
MAC 2233 Calculus for Business and Social Science I is a pre-requisite for the Information Systems program at UNF. It may be taken at FJC or after transfer to UNF.		
Based on placement test results students may be required to take additional courses in the areas of reading, writing, and mathematics.		
*Refer to AA Degree General Education Requirements.		
**Students may substitute CIS 2116 Data Base Management Concepts and Practices (3 cr.); or CIS 1101 Introduction to dBASE III (1 cr.) plus CIS 1115 Advanced dBASE III (2 cr.) for CIS 2100.		
***Students may substitute CIS 2325 Computer Systems Development With High Level Tools (3 cr.) for CIS 2301.		

PROGRAMS OF STUDY



Technical Certificate

Computer Business Applications

The new Technical Certificate in Computer Business Applications is a one-year program which prepares students for positions involving direct use of microcomputers for business administration, decision support, and financial applications. Students who complete this sequence will be qualified to enter careers in which they function as end users or application developers for microcomputer systems. This is a growing field that should see thousands of new job opportunities created every year. In a sense, persons who operate microcomputers for the processing of business transactions and financial reporting applications are successors to traditional bookkeepers. For many decades, bookkeepers who posted and accumulated business transactions and status data through manual entries represented a kind of labor elite. Now, microcomputers and standard application packages are eclipsing and obsoleting the earlier techniques. In turn, new jobs are being generated at a rapid pace. Workers in this field are trained to identify and implement use of application packages for business and managerial functions. Substantial "hands-on" work with microcomputers is essential for all courses within this sequence.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Computer Business Applications

ENC 1101 - English Composition I
 CAP 1820 - Microcomputer Application Software
 CIS 2116 - Data Base Management Concepts and Practices
 COP 2612 - Microcomputer Operating Systems Concepts

Course Number and Title	Credits
General Education	
ENC 1101 English Composition I	3
	credit hours 3
Professional and Other Required Courses	
*OST 1100 Beginning Typewriting	3
ACG 2001 Principles of Accounting I	3
COC 1300 Introductory Computer Concepts	3
**CAP 1820 Microcomputer Application Software	3
CAP 1802 Microcomputers in Business: A Survey	3
***COP 2612 Microcomputer Operating Systems Concepts	3
CIS 2325 Computer Systems Development with High Level Tools	3
COP 1000 Introduction to Programming and Algorithmic Design	3
****CIS 2116 Data Base Management Concepts and Practices	3
CAP 2882 Advanced Microcomputer Business Applications	3
Programming Language Elective	3
	credit hours 33
	Total credit hours 36
Programming Language Electives	
	credit hours
COP 1160 RPG Programming	3
COP 2110 FORTRAN Programming	3
COP 2120 Basic COBOL Programming	3
COP 2121 Advanced COBOL Programming	3
COP 2171 Advanced Programming in BASIC	3
COP 2400 Basic Assembly Language Programming	3

*Students with touch typing skills may elect to substitute three credits of Computer and Information Systems or General Business elective courses for OST 1100.

**Students may substitute CAP 1801 Introduction to Lotus 1-2-3 (1 cr.), plus CAP 1803 Advanced Lotus 1-2-3 (1 cr.) plus CAP 2830 Management Overview of Microcomputer Software (1 cr.) for CAP 1820 Microcomputer Application Software.

***Students may substitute COP 1618 Introduction to IBM Personal Computers and DOS (1 cr.) plus COP 1619 Introduction to UNIX Operating System (2 cr.) for COP 2612 Microcomputer Operating System Concepts.

****Students may substitute CIS 1101 Introduction to dBASE III (1 cr.) plus CIS 1115 Advanced dBASE III (2 cr.) for CIS 2116 Data Base Management Concepts and Practices.

Technical Certificate

Computer Operations

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

A limited number of laboratory assistantships are available for students to gain valuable experience with the operation of the IBM Computer System and the Prime 400 minicomputer system.

Full-time students wishing to complete the above program must be enrolled in two Computer and Information Systems 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:

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Computer Operations

- ENC 1101 - English Composition I
- CIS 2100 - Data Management and Utility Programs
- COC 1300 - Introductory Computer Concepts
- GEB 1011 - Introduction to Business
- OST 1100 - Beginning Typewriting

Course Number and Title		Credits
General Education		
ENC 1101	English Composition I	3
		credit hours 3
Professional and Other Required Courses		
*ACG 2001	Principles of Accounting I	3
CIS 2100	Data Management and Utility Programs	3
CIS 2301	Information Systems	3
CNM 1005	Data Processing Mathematics	3
COC 1300	Introductory Computer Concepts	3
**CRM 1039	Data Processing Workshop	3
GEB 1011	Introduction to Business	3
MAN 2021	Principles of Management	3
**OST 1100	Beginning Typewriting	3
OST 2335	Business Communications	3
		30
		-
	Total credit hours	33

*ACG 1003 and ACG 1004 may be used in place of ACG 2001.
 **Students with touch typing skills may elect to substitute a Data Processing or General Business elective course for OST 1100.
 ***In lieu of CRM 1039, verifiable data processing experience may be approved by the appropriate dean.

PROGRAMS OF STUDY

Technical Certificate

Computer Programming

The Technical 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 the above program must be enrolled in two Computer and Information Systems 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.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate – Computer Programming

CIS 2100 – Data Management and Utility Programs
 COC 1300 – Introductory Computer Concepts
 COP 1000 – Introduction to Programming and Algorithm Design
 GEB 1011 – Introduction to Business
 OST 1100 – Beginning Typewriting

Course Number and Title	Credits
Professional and Other Required Courses	
*ACG 2001 Principles of Accounting I	3
CIS 2100 Data Management and Utility Programs	3
CIS 2301 Information Systems	3
CNM 1005 Data Processing Mathematics	3
COC 1300 Introductory Computer Concepts	3
COP 1000 Introduction to Programming and Algorithm Design	3
COP 2120 Basic COBOL Programming	3
GEB 1011 Introduction to Business	3
**OST 1100 Beginning Typewriting	3
OST 2335 Business Communications	3
Professional Elective	3
Programming Elective	3
	—
	credit hours 36
	Total credit hours 36

Professional Electives:

credit hours

COP 1160 RPG Programming	3
COP 2400 Basic Assembly Language Programming	3
COP 2110 FORTRAN Programming	3
COP 2121 Advanced COBOL Programming	3
COP 2130 PL/I Programming	3
COP 2170 Programming in BASIC	3
CRM 1039 Data Processing Workshop	3

Programming Electives:

COP 1160 RPG Programming	3
COP 2400 Basic Assembly Language Programming	3
COP 2110 FORTRAN Programming	3
COP 2121 Advanced COBOL Programming	3
COP 2130 PL/I Programming	3
COP 2170 Programming in BASIC	3
COP 2610 Advanced Computing and Programming Systems	3

*ACG 1003 and ACG 1004 may be used in place of ACG 2001.

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

Associate In Science

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, with five General Education courses required. It is important to note that this program is not intended to be a substitute for the four-year Business Administration program.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - General Business

- ENC 1101 - English Composition I
- OST 1324 - Business Mathematics Using Calculators
- Any three required professional or approved courses

Course Number and Title	Credits
General Education	
*Humanities	3
*Mathematics - Natural Science	3
*Social Science	3
ECO 2013 Principles of Economics I	3
ENC 1101 English Composition I	3
	credit hours 15
Professional and Other Required Courses	
ACG 1003, 1004 General Accounting I and II or	6
ACG 2001 Principles of Accounting I	3
OST 1324 Business Mathematics Using Calculators	3
OST 2335 Business Communications	3
**Approved Electives	33-36
	credit hours 45
	Total credit hours 60
*Refer to AS degree General Education Requirements.	
**Approved Electives:	credit hours
ACG 2011 Principles of Accounting II	3
ADV 2000 Advertising	3
BUL 2111 Business Law I	3
RUL 2112 Business Law II	3
CAP 1820 Microcomputer Application Software	3
COC 1300 Introductory Computer Concepts	3
COE 1000 Cooperative Education Seminar	1
-- 1949 Cooperative Education Work Experience I (with program director's prior consent)	3
-- 2949 Cooperative Education Work Experience II (with program director's prior consent)	3
COP 2110 FORTRAN Programming	3
COP 2170 Programming in BASIC	3
FIN 2000 Principles of Finance	3
FIN 2100 Personal Finance	3
GEB 1011 Introduction to Business	3
MAN 2021 Principles of Management	3
MAN 2300 Personnel Management	3
MAN 2800 Small Business Management	3
MAR 1011 Principles of Marketing	3
MAR 1101 Salesmanship	3
MAR 1151 Retail Merchandising	3
MAR 1301 Sales Promotion	3
MAR 2401 Sales Management	3
RMI 1030 Principles of Insurance	3
OST 1100 Beginning Typewriting	3
OST 1110 Intermediate Typewriting	3
OST 1701 Introduction to Word Processing	3
OST 1601 Machine Transcription	3
OST 1711 Word Processing - Magnetic Typewriting	3

PROGRAMS OF STUDY

Associate In Science

Office Systems Technology

The Associate in Science program in Office Systems Technology integrates modern office procedures with technological advances in information processing. Courses emphasize a systems approach to managing people, procedures, and equipment, preparing students to enter an evolving job market. Dynamic opportunities for career advancement in office support, administrative support, and word processing are provided through specialty options.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Office Systems Technology

ENC 1101 - English Composition I

OST 1324 - Business Mathematics Using Calculators

One typing course at appropriate level

Two professional core, specialty, or professional electives

Course Number and Title	Credits
-------------------------	---------

General Education

*Social Science	6
*Humanities	3
*Mathematics - Natural Science	3
ENC 1101 English Composition I	3

credit hours 15

Professional Core Courses

CAP 1820 Microcomputer Applications	3
OST 1100 Beginning Typewriting	3
OST 1110 Intermediate Typewriting	3
OST 1324 Business Mathematics Using Calculators	3
OST 1401 Office Systems I	3
OST 1601 Machine Transcription I	3
OST 1711 Word Processing I	3

credit hours 21

Specialty Courses

INFORMATION PROCESSING SPECIALTY

OST 2120 Advanced Typewriting	3
OST 2335 Business Communications	3
OST 2402 Office Systems II	3
OST 2602 Machine Transcription II	3
OST 2712 Word Processing II	3
**Approved Professional Electives	9

credit hours 24

INFORMATION PROCESSING/SHORTHAND SPECIALTY

OST 1211 Beginning Shorthand	3
OST 1212 Intermediate Shorthand	3
OST 2213 Advanced Shorthand	3
OST 2120 Advanced Typewriting	3
OST 2335 Business Communications	3
OST 2402 Office Systems II	3
**Approved Professional Electives	6

credit hours 24

Total credit hours 60

*Refer to AS degree General Education Requirements.

**Approved Professional Electives

ACG 1003 General Accounting I	3
ACG 1004 General Accounting II	3
ACG 2001 Principles of Accounting I	3
ACG 2011 Principles of Accounting II	3
ADV 2000 Advertising	3
BUL 2111 Business Law	2
BUL 2112 Business Law	3
COC 1300 Introductory Computer Concepts	3
COP 2110 FORTRAN Programming	3
COP 2120 Basic COBOL Programming	3
COP 2170 Programming in BASIC	3
GEB 1011 Introduction to Business	3
FIN 2000 Principles of Finance	3
FIN 2100 Personal Finance	3
MAN 2021 Principles of Management	3
MAN 2300 Personnel Management	3
MAR 1011 Principles of Marketing	3
OST 1211 Beginning Shorthand	3
OST 1212 Intermediate Shorthand	3
OST 2131 Advanced Typewriting - Legal	3
OST 2135 Advanced Typewriting - Medical	3
OST 2213 Advanced Shorthand	3
OST 2404 Office Systems Management	3
OST 2602 Machine Transcription II	3
OST 2712 Word Processing II	3
REE 1000 Real Estate Principles and Practices	3
REE 1400 Real Estate License Law	3

Technical Certificate

Office Systems Technology

The Technical Certificate program in Office Systems Technology is designed to prepare students to enter the job market with professional training in word processing, computer applications, office procedures, and human relations.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Office System Technology

ENC 1101 - English Composition I

One typing course at appropriate level

Any three professional core or approved professional elective courses

Course Number and Title	Credits
General Education	
ENC 1101 English Composition I	3
	credit hours 3
Professional Core Courses	
CAP 1820 Microcomputer Applications	3
OST 1100 Beginning Typewriting	3
OST 1110 Intermediate Typewriting	3
OST 1324 Business Mathematics Using Calculators	3
OST 1401 Office Systems I	3
OST 1601 Machine Transcription I	3
OST 1711 Word Processing I	3
*Approved Professional Electives	6
	credit hours 27
	=
	Total credit hours 30
*Approved Professional Electives	
ACG 1003 General Accounting I	3
ACG 1004 General Accounting II	3
ACG 2001 Principles of Accounting I	3
COC 1300 Introductory Computer Concepts	3
GEB 1011 Introduction to Business	3
OST 1211 Beginning Shorthand	3
OST 1212 Intermediate Shorthand	3
OST 2120 Advanced Typewriting	3
OST 2213 Advanced Shorthand	3
OST 2335 Business Communications	3
OST 2402 Office Systems II	3
OST 2602 Machine Transcription II	3
OST 2712 Word Processing II	3

Health Services

Associate in Science

Dental Assisting

The object of this AS program is to prepare the student for a career in the field of dental assisting. The 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 and General Education are also included. This program will qualify the graduate to take the national examination to become a Certified Dental Assistant and to be awarded an Associate in Science degree in Dental Assisting. A background in science and good manual dexterity are recommended.

Application:

Applicants must show evidence of good health and have an earned high school diploma or GED Certificate.

Dental Assisting is a selective access 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. Official copy of program admission 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.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Dental Assisting

Submission of program application and supporting documentation by deadline date

Selective Access Program

Course Number and Title	Credits
General Education	
*Humanities	3
ENC 1101 English Composition I	3
SFC 1010 Fundamentals of Speech Communication	3
HSC 1100 Personal and Community Health	3
PSY 1012 General Psychology	3
APB 1150 Life In Its Biological Environment	3
SSI 1120 Origins of American Society (Economic, Political and International Institutions)	3
	—
	credit hours 21
Professional and Other Required Courses	
APB 1220C Dental Assisting Anatomy and Physiology	4
HUN 1201 Principles of Nutrition	3
DES 1110C Dental Materials and Laboratory	3
DES 1220C Dental Radiology (Dental Assisting/ Dental Hygiene)	3
DEA 2800C Clinical Practice I	5
DEA 2801C Clinical Practice II	6
DEA 2802C Clinical Practice III	3
DEA 2850C Clinical Practice IV	5
DEA 2200 Office Management	3
DEA 1120 Science for Dental Assistants	3
DEA 1000 History and Jurisprudence of Dentistry	1
DEA 1820C Dental Assisting Expanded Duties	2
DES 1020C Oral Development	3
	—
	credit hours 44
	=
	Total credit hours 65

*Refer to AS degree General Education Requirements.

Technical Certificate

Dental Assisting

The object of this Technical Certificate 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.

Application:

Applicants must show evidence of good health and have an earned high school diploma or GED Certificate.

Dental Assisting is a selective access 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. Official copy of program admission 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.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Dental Assisting

Submission of program application and supporting documentation by deadline date as indicated in "application" section above
Selective Access Program

Course Number and Title	Credits
General Education	
ENC 1101 English Composition I	3
SPC 1010 Fundamentals of Speech Communication	3
HSC 1100 Personal and Community Health	3
PSY 1012 General Psychology	3
	credit hours 12
Professional and Other Required Courses	
APB 1220C Dental Assisting Anatomy and Physiology	4
HUN 1201 Principles of Nutrition	3
DES 1110C Dental Materials and Laboratory	3
DES 1220C Dental Radiology (Dental Assisting Dental Hygiene)	3
DEA 2800C Clinical Practice I	5
DEA 2801C Clinical Practice II	6
DEA 2802C Clinical Practice III	3
DEA 2850C Clinical Practice IV	5
DES 1020C Oral Development	3
DEA 2200 Office Management	3
DEA 1120 Science for Dental Assistants	3
DEA 1000 History and Jurisprudence of Dentistry	1
DEA 1320C Dental Assisting Expanded Duties	2
	credit hours 44
	=
	Total credit hours 56



Associate in Science

Dental Hygiene

The AS program in Dental Hygiene offers the student an opportunity to learn the technical and clinical skills of dental hygiene. The curriculum includes General Education, 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.

Application:

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 selective access program. One class is admitted annually to this two-year AS degree 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 program admission 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 hygiene course.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Dental Hygiene

Submission of program application and supporting documentation by deadline dates as indicated in "application" section above

Selective Access Program

Course Number and Title	Credits
-------------------------	---------

General Education

APB 2190C	Human Anatomy and Physiology I	3
APB 2191C	Human Anatomy and Physiology II	3
CHM 1040C	Introductory Chemistry I	4
ENC 1101	English Composition I	3
MCB 2013C	Microbiology	4
PSY 1012	General Psychology	3
SFC 1010	Fundamentals of Speech Communication	3
SSI 1120	Origins of American Society (Economics, Political and International Institutions)	3
*Humanities		3
MGF 1202	College Mathematics	3
	credit hours	32

Professional and Other Required Courses

BCH 2010C	Bioorganic Chemistry for Allied Health Students	4
DEH 1003C	Principles of Dental Hygiene	5
DEH 1800C	Clinical Dental Hygiene I	8
DEH 1802L	Clinical Dental Hygiene II	8
DES 2050	Pharmacology	2
DES 2042	Oral Pathology	2
DEH 2507C	Dental Hygienists Expanded Duties	2
DEH 2602	Periodontics	2
DEH 2701	Community and Preventive Dentistry	3
DEH 2804L	Clinical Dental Hygiene III	8
DEH 2806L	Clinical Dental Hygiene IV	8
DEH 2930	Dental Hygiene Seminar I	2
DEH 2931	Dental Hygiene Seminar II	2
DES 1220C	Dental Radiology (Dental Assisting Dental Hygiene)	3
HUN 1201	Principles of Nutrition	3
DES 1110C	Dental Materials and Laboratory	3
DES 1020C	Oral Development	3
	credit hours	66
		=
	Total credit hours	98

*Refer to AS degree General Education Requirements

Associate in Science

Emergency Medical Technology

The program in Emergency Medical Technology offers the student an opportunity to learn the technical and clinical skills of emergency medical technical and clinical courses.

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 and Physiology, Microbiology and Chemistry.

Application:

All applicants for admission to this program must be at least eighteen years of age, have an earned high school diploma or G.E.D. certificate, and submit evidence of completion of at least one of the following:

- A. A first responder training course.
- B. A letter of verification from an employer documenting at least six months of work experience as a registered nurse, licensed practical nurse, radiologic technologist, medical lab technician, respiratory therapist, or hospital corpsman.

Additionally, program applicants must submit all the following to the Emergency Medical Technology Program Office, North Campus, at least one month prior to the beginning date of the term in which they wish to be admitted to the program:

1. Application to Florida Junior College at Jacksonville (if not a current or previous FJC student)
2. Application to the Emergency Medical Technology program
3. Proof of current Basic Life Support (cardiopulmonary resuscitation) certificate issued within six months prior to the date of proposed entry into the program.

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

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Emergency Medical Technology

- APB 2190C - Human Anatomy and Physiology I
Minimum grade of "C"
- EMS 1119 - Fundamentals of Emergency Medical Care
Minimum grade of "C"
- EMS 1119L - Fundamentals of Emergency Medical Care
Clinical Experience - Minimum grade of "C"

Submission of program application and supporting documentation by deadline date as indicated in the "application" section above
Selective Access Program

Course Number and Title	Credits
General Education	
*Humanities	3
**AMH 2010 United States History to 1865	3
**EUH 1002 Western Civilization from 1715 to the present	3
**POS 2041 American Federal Government	3
**SSI 1120 Origins of American Society (Economic, Political and International Institutions)	3
APB 2190C Human Anatomy and Physiology I	3
APB 2191C Human Anatomy and Physiology II	3
CHM 1020 Chemistry for Liberal Arts	3
or	
CHM 1040C Introductory Chemistry I	4
ENC 1101 English Composition I	3
MCB 2013C Microbiology	4
	credit hours 22
Professional and Other Required Courses	
FMS 1119 Fundamentals of Emergency Medical Care	6
FMS 1119L Fundamentals of Emergency Medical Care Clinical Experience	2
EMS 2231 EMT-Paramedic Phase I	6
EMS 2231L EMT-Paramedic Phase I - Lab/Clinical	3
EMS 2232 EMT-Paramedic Phase II	5
EMS 2232L EMT-Paramedic Phase II - Lab/Clinical	3
EMS 2233 EMT-Paramedic Phase III	4
EMS 2233L EMT-Paramedic Phase III - Lab/Clinical	6
***Approved Electives	6
	credit hours 41
	Total credit hours 63

*Refer to AS degree General Education Requirements

**Students may take any one of these courses

***Approved Electives:

- SYG 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

Technical Certificate

Emergency Medical Technology

The Emergency Medical Technology Certificate program is designed to prepare the student for employment in an advance life-support ambulance, in hospital emergency departments and in intensive care units. Graduates of the one-year Technical Certificate program may elect to continue for the Associate in Science degree in Emergency Medical Technology.

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 and Human Anatomy and Physiology.

Application:

All applicants for admission to this program must be at least eighteen years of age, have an earned high school diploma or G.E.D. certificate, and submit evidence of completion of at least one of the following:

- A. A first responder training course.
- B. A letter of verification from an employer documenting at least six months of work experience as a registered nurse, licensed practical nurse, radiologic technologist, medical lab technician, respiratory therapist, or hospital corpsman.

Additionally, program applicants must submit all the following to the Emergency Medical Technology Program Office, North Campus, at least one month prior to the beginning date of the term in which they wish to be admitted to the program:

1. Application to Florida Junior College at Jacksonville (if not a current or previous FJC student)
2. Application to the Emergency Medical Technology program
3. Proof of current Basic Life Support (cardiopulmonary resuscitation) certificate issued within six months prior to the date of proposed entry into the program.

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

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate – Emergency Medical Technology

- APB 2190C – Human Anatomy and Physiology I
Minimum grade of "C"
- EMS 1119 – Fundamentals of Emergency Medical Care
Minimum grade of "C"
- EMS 1119L – Fundamentals of Emergency Medical Care
Clinical Experience – Minimum grade of "C"

Submission of program application and supporting documentation by deadline date as indicated in the "application" section above
Selective Access Program

Course Number and Title	Credits
General Education	
APB 2190C Human Anatomy and Physiology I	3
APB 2191C Human Anatomy and Physiology II	3
	—
	credit hours 6
Professional and Other Required Courses	
EMS 1119 Fundamentals of Emergency Medical Care	6
EMS 1119L Fundamentals of Emergency Medical Care Clinical Experience	2
EMS 2231 EMT-Paramedic Phase I	6
EMS 2231L EMT-Paramedic Phase I – Lab/ Clinical	3
EMS 2232 EMT-Paramedic Phase II	5
EMS 2232L EMT-Paramedic Phase II – Lab/ Clinical	3
EMS 2233 EMT-Paramedic Phase III	4
EMS 2233L EMT-Paramedic Phase III – Lab/ Clinical	6
	—
	credit hours 35
	=
	Total credit hours 41

Associate in Science

Medical Laboratory Technology

The Medical Laboratory Technology program offers the student opportunities to learn the technical skills of medical laboratory science. The curriculum includes general education, technical, and clinical education.

Application:

Medical Laboratory Technology is a selective access program and admission to the program 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 the program director advises students.

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. The program conforms to 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.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Course Number and Title	Credits
General Education	
*Humanities	3
**Social Science	3
**CHM 1040C Introductory Chemistry I	4
**CHM 1041C Introductory Chemistry II	4
ENC 1101 English Composition I	3
MAC 1104 College Algebra	4
or	
MAT 1033 Intermediate Algebra	3
MCB 2013C Microbiology	4
***Science Elective	4
	credit hours 28
Professional and Other Required Courses	
MLS 1010C Hematology	6
MLS 1400C Medical Microbiology	6
MLS 2530C Serology and Blood Banking	6
MLS 2600C Principles of Clinical Instrumentation	5
MLS 2610C Clinical Chemistry	6
MLS 2802 Clinical Practicum I	12
MLS 2803 Clinical Diagnosis	5
MLS 2804 Clinical Practicum II	12
	credit hours 58
	Total credit hours 86
*Refer to AS degree General Education Requirements	
**Students who qualify may substitute CHM 1045C and CHM 1046C	
***Choose either	
BSC 2010C Principles of Biology	4
or both	
APB 2190C Anatomy and Physiology I	3
APB 2191C Anatomy and Physiology II	3

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Medical Laboratory Technology

Submission of program application and supporting documentation by deadline date as indicated in "application" section above

Selective Access Program

Associate in Science

Nursing

The AS 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 apply to write the National Council Licensure Examination to qualify for licensure to practice as registered nurses.

Application:

Nursing is a selective access program, and admission to the program is limited. Applicants are admitted into the program two times a year: Fall Term and Winter 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 status. Both single and married men and women may be admitted to the program. There is no age limit.

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 at the time of application for program admission a course in chemistry with a minimum grade of C in high school or college.
4. Have completed at the time of application for program admission APB 2190C, Human Anatomy and Physiology I, earning a minimum grade of C. APB 2191C, Human Anatomy and Physiology II, must be completed prior to beginning NUR 1021C, Nursing Process I.
5. Submit evidence of current Basic Life Support (CPR) Certification.
6. Submit official copy of program admission test score.

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

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Nursing

One year of high school chemistry

APB 2190C - Human Anatomy and Physiology I
Minimum grade of "C"

APB 2191C - Human Anatomy and Physiology II
Minimum grade of "C"

ENC 1101 - English Composition I

Submission of program application and supporting documentation as indicated in "application" section above

Selective Access Program

Course Number and Title

Credits

General Education

*Humanities	3
*Social Science	3
APB 2190C Human Anatomy and Physiology I	3
APB 2191C Human Anatomy and Physiology II	3
DEP 2004 Human Growth and Development	3
ENC 1101 English Composition I	3
ENC 1102 English Composition II	3
MCB 2013C Microbiology	4
PSY 1012 General Psychology	3
SYG 2000 Introductory Sociology	3
	—
	credit hours 31

Professional and Other Required Courses

NUR 1021C Nursing Process I - Fundamentals of Nursing	10
NUR 1212C Nursing Process II - Medical Surgical Nursing	10
NUR 2420C Nursing Process IIIA - Nursing Care of the Childbearing Family	6
NUR 2310C Nursing Process IIIB - Nursing Care of Children	6
NUR 2731C Nursing Process IVA - Medical-Surgical Nursing Care of the Adult Patient	9
NUR 2521C Nursing Process IVB - Psychiatric Nursing	3
	—
	credit hours 44
	—
	Total credit hours 75

*Refer to AS degree General Education Requirements

A.S. Degree Option UNF Transfer

Nursing

An optional transfer program is available to students under a special articulation agreement. Students electing this option are accepted as third-year students at UNF upon program completion. Students electing this transfer nursing program to the University of North Florida must complete the transfer program and graduation requirements.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study

AS-UNF Transfer Option Nursing

One year of high school chemistry

APB 2190C - Human Anatomy and Physiology I
Minimum grade of "C"

APB 2191C - Human Anatomy and Physiology II
Minimum grade of "C"

ENC 1101 - English Composition I

Submission of program application and supporting documentation as indicated in "application" section above

Selective Access Program.

Course Number and Title

Credits

General Education

*Humanities	6
**Social Science	3
APB 2190C Human Anatomy and Physiology I	3
APB 2191C Human Anatomy and Physiology II	3
DEP 2004 Human Growth and Development	3
ENC 1101 English Composition I	3
ENC 1102 English Composition II	3
MCB 2013C Microbiology	4
PSY 1012 General Psychology	3
SYG 2000 Introductory Sociology	3
CIHM 1040C Introductory Chemistry	4
HUN 1201 Principles of Nutrition	3
MAC 1104 College Algebra	4
STA 1014 Elementary Statistics	3
SPC 1010 Fundamentals of Speech Communication	3

credit hours 51

Professional and Other Required Courses

NUR 1021C Nursing Process I - Fundamentals of Nursing	10
NUR 1212C Nursing Process II - Medical-Surgical Nursing	10
NUR 2420C Nursing Process IIIA - Nursing Care of the Childbearing Family	6
NUR 2313C Nursing Process IIIB - Nursing Care of Children	6
NUR 2731C Nursing Process IVA - Medical-Surgical Nursing Care of the Adult Patient	9
NUR 2521C Nursing Process IVB - Psychiatric Nursing	3

credit hours 44

Total credit hours 95

*Refer to AS degree General Education Requirement

**Any three credits from: AA degree General Education Requirements Social Science, Area A



Associate in Science

Bridge Option for Licensed Practical Nurses

The Bridge Option of the Associate in Science degree Nursing Program is designed for and limited to persons who are currently Florida licensed practical nurses. Through the use of this option licensed practical nurses may take specified nursing courses from a modified program of study designed to meet the needs of the L.P.N. enrolled in the Associate Degree Nursing program.

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. Graduates 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 National Council Licensure Examination to qualify for licensure to practice as registered nurses.

Application:

The Associate in Science Degree Nursing Program Bridge Option is a selective access program, and admission is limited. The Summer Term (May) is designated as the entry point for licensed practical nurses who wish to enter the Associate in Science degree Nursing program through the Bridge Option. A brochure outlining costs, admission requirements, cut-off dates, and procedures is available from the Nursing Counselor, North Campus, and from the Student Development office at North, South, Kent, or the Downtown Campuses. Approximately three weeks prior to the beginning of Summer Term (May), letters are sent to each applicant indicating admission status. Both single and married men and women may be admitted to the program. There is no age limit.

Deadline date for application: Completed applications for LPN's electing to use the Bridge Option of the Associate degree Nursing program must be received by February 28th for admission during Summer Term (May).

Application Prerequisites:

Applicants who elect to use the Bridge Option must:

1. Submit evidence of current Florida Licensed Practical Nurse Licensure.
2. Submit documentation of a minimum of 6 months of work experience as a licensed practical nurse within the last two years.
3. Have completed a course in chemistry with a minimum grade of C in high school or college.
4. Have completed the following FJC courses with a cumulative grade point average of at least 2.0:
 - *APB 2190C Human Anatomy and Physiology I
 - *APB 2191C Human Anatomy and Physiology II
 - *MCB 2013C Microbiology
 - DEP 2004 Human Growth and Development
 - ENC 1101 English Composition I
 - ENC 1102 English Composition II
 - PSY 1012 General Psychology

Any one of the following courses:

- **Humanities
 - **Social Science
 - SYG 2000 Introductory Sociology
5. Submit evidence of current Basic Life Support (CPR) certification
 6. Official copy of Program admission test score.

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

Bridge Option for Licensed Practical Nurses (Cont.)

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS – Bridge Option for Licensed Practical Nurses

- APB 2190C – Human Anatomy and Physiology I
Minimum grade of "C"
 - APB 2191C – Human Anatomy and Physiology II
Minimum grade of "C"
 - DEP 2004 – Human Growth and Development
 - ENC 1101 – English Composition I
 - ENC 1102 – English Composition II
 - MCB 2013C – Microbiology
Minimum grade of "C"
 - PSY 1012 – General Psychology
- One of the following – Humanities, Social Science or SYG 2000 – Introductory Sociology
- Submission of program application and supporting documentation as indicated in "application" section above
- Selective Access Program

Course Number and Title	Credits
General Education	
**Humanities	3
**Social Science	3
APB 2190C Human Anatomy and Physiology I	3
APB 2191C Human Anatomy and Physiology II	3
DEP 2004 Human Growth and Development	3
ENC 1101 English Composition I	3
ENC 1102 English Composition II	3
MCB 2013C Microbiology	4
PSY 1012 General Psychology	3
SYG 2000 Introductory Sociology	3
	-
	credit hours 31
Professional and Other Required Courses	
Advanced Placement (Validated)	14
NUR 1000C Transitional Nursing Process I	12
NUR 1703C Transitional Nursing Process II	6
NUR 2731C Nursing Process IVA – Medical- Surgical Nursing Care of the Adult Patient	9
NUR 2521C Nursing Process IVB – Psychiatric Nursing	3
	-
	credit hours 44
	-
	Total credit hours 75
*Minimum grade of C required in science courses	
**Refer to AS degree General Education Requirements	

PROGRAMS OF STUDY

Associate in Science

Respiratory Therapy

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

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

Application:

Respiratory Therapy is a selective access program, and admission to this two-year AS degree program is limited. Applicants must have an earned high school diploma or GED Certificate. A background in science and mathematics is strongly recommended. The program admits students one time per year: Fall Term.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Respiratory Therapy

Submission of program application and supporting documentation as indicated in "application" section above

Selective Access Program

Course Number and Title	Credits
General Education	
*Humanities	3
*Social Science	3
APB 2190C Human Anatomy and Physiology I	3
APB 2191C Human Anatomy and Physiology II	3
CHM 1040C Introductory Chemistry I	4
ENC 1101 English Composition I	3
MAT 1033 Intermediate Algebra	3
MCB 2013C Microbiology	4
PHY 1020 Physics for Liberal Arts	3
PSY 1012 General Psychology	3
	credit hours 32
Professional and Other Required Courses	
APB 1260 Cardiopulmonary Anatomy and Physiology	4
APB 1650 Pharmacology for the Respiratory Therapist	4
APB 2293 Pulmonary Pathology	4
RET 1024 Fundamentals of Respiratory Therapy	4
RET 1278 Clinical Skills for the Respiratory Therapist	4
RET 1624 Orientation to the Hospital Environment	4
RET 2264 Ventilatory Management	4
RET 2272L Respiratory Therapy Clinical Applications	6
RET 2273L Clinical Seminar in Intensive Respiratory Care I	1
RET 2274L Respiratory Intensive Care Practicum I	12
RET 2284C Clinical Seminar in Intensive Respiratory Care II	1
RET 2285L Respiratory Intensive Care Practicum II	12
RET 2414 Pulmonary Function Studies	2
RET 2434 Arterial Blood Gases and Critical Care Monitoring	2
RET 2714 Neonatal and Pediatric Respiratory Care	3
	credit hours 67
	=
	Total credit hours 99
*Refer to AS degree General Education Requirements	

Public and Financial Services

Associate In Science

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, the completed banking courses could count toward the American Institute of Banking certificate programs. Such an arrangement must be approved by the local AIB chapter.

Those desiring credit union education should select two specialized credit union courses, which possibly could replace bank-oriented courses.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue a baccalaureate degree. The student who does desire to pursue a baccalaureate degree in Banking at the University of North Florida (UNF) must pass the CLAST and should pursue the AS degree UNF Option Program in Banking set forth on the next page. The student who desires to pursue a baccalaureate degree in Banking at another state university should refer to University Transfer Requirements on page 37 of the Catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Banking

- | | | |
|----------|---|--|
| GEB 1011 | - | Introduction to Business or General Education Elective |
| ENC 1101 | - | English Composition I |
| BAN 1110 | - | Principles of Bank Operations |
| OST 1324 | - | Business Mathematics Using Calculators |
| FIN 2100 | - | Personal Finance |

Course Number and Title	Credits
General Education	
*Mathematics - Natural Science	3
*Social Science	3
*Social Science or Humanities	3
ECO 2013 Principles of Economics I	3
ENC 1101 English Composition I	3
HUM 2211 Humanities: The Foundations	3
PSY 1012 General Psychology	3
SPC 1010 Fundamentals of Speech Communication	3
	credit hours 24
Professional and Other Required Courses	
ACG 1003 General Accounting I	3
**BAN 1110 Principles of Bank Operation	3
**BAN 1700 Financing Business Enterprise	3
BAN 2303 Savings and Time Deposits	3
BUL 2111 Business Law I	3
FIN 2000 Principles of Finance	3
FIN 2230 Money and Banking	3
**GEB 1012 Introduction to Business	3
MAN 2021 Principles of Management	3
OST 1324 Business Mathematics Using Calculators	3
***Approved Electives	6
	credit hours 36
	=
	Total credit hours 60
*Refer to AS degree 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 the assistant dean.	
****Approved Credit Union Electives: credit hours	
FIN 2360 Foundation and Structure of Credit Unions	3
APA 2361 Credit Union Accounting	3
****Approved Banking Electives: credit hours	
BAN 1100 The Banking Starter Series	3
BAN 1160 Bank Letters and Reports	3
BAN 1210 Analyzing Financial Statements	3
BAN 2150 Bank Public Relations and Marketing	3
BAN 2200 Credit Administration	3
FIN 2100 Personal Finance	3
BAN 2720 Bank Management	3
MAN 2300 Small Business Management	3
****Other Approved Electives:	
CAP 1820 Microcomputer Application Software	3
COC 1300 Introductory Computer Concepts	3
COP 2110 FORTRAN Programming	3
COP 2170 Programming in BASIC	3

AS Degree Option UNF Transfer

Banking

An option transfer program is available to students for admittance to the University of North Florida under a special articulation agreement. Students electing this option are accepted as third-year students at UNF upon program completion and passage of the CLAST. Students electing this transfer Banking program to the University of North Florida must complete the transfer program and graduation requirements.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS – UNF Transfer Option – Banking

- ENC 1101 – English Composition I
- PSY 1012 – General Psychology
- BAN 1110 – Principles of Bank Operations
- GEB 1011 – Introduction to Business

Course Number and Title

Credits

General Education

ENC 1101	English Composition I	3
ENC 1102	English Composition II	3
SPC 1010	Fundamentals of Speech Communication	3
*Humanities Electives		6
*Natural Science Electives		6
MAC 1104	College Algebra	4
STA 1014	Elementary Statistics	3
*Social Science Elective (Area A)		3
ECO 2013	Principles of Economics I	3
ECO 2023	Principles of Economics II	3
		=
		credit hours 37

Professional and Other Required Courses

ACG 2001	Principles of Accounting I	3
ACG 2011	Principles of Accounting II	3
BAN 1110	Principles of Bank Operations	3
BAN 2303	Savings and Time Deposits	3
BUL 2111	Business Law I	3
FIN 2009	Principles of Finance	3
FIN 2230	Money and Banking	3
GEB 1011	Introduction to Business	3
MAN 2021	Principles of Management	3
		=
		credit hours 27
		=
		Total credit hours 64

*Refer to AA degree General Education Requirements.



Associate in Science

Criminal Justice Education – Corrections

This AS 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.

Corrections and General Education courses are offered on a day and evening interchangeable basis.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS – Criminal Justice Education – Corrections

- ENC 1101 – English Composition I
- POS 2041 – American Federal Government
- CCJ 1010 – Introduction to Criminology
- CCJ 1020 – Introduction to Criminal Justice

Course Number and Title	Credits
General Education	
APB 1150 Life In Its Biological Environment	3
ENC 1101 English Composition I	3
HUM 2450 Humanities in the Americas	3
POS 2041 American Federal Government	3
POS 2112 State and Local Government	3
PSY 1012 General Psychology	3
SOP 1002 Human Relations	3
SYG 2000 Introductory Sociology	3
SYG 2010 Social Problems	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 Introduction to Special Problems in Corrections	3
CJD 2310 Police Supervision	3
	credit hours 36
	=
	Total credit hours 63

PROGRAMS OF STUDY

Associate in Science

Criminal Justice Education - Law Enforcement

This AS 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 and General Education courses are offered on a day and evening interchangeable basis.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Course Number and Title	Credits
General Education	
APB 1150 Life In Its Biological Environment	3
ENC 1101 English Composition I	3
HUM 2450 Humanities in the Americas	3
POS 2041 American Federal Government	3
POS 2112 State and Local Government	3
PSY 1012 General Psychology	3
SOP 1002 Human Relations	3
SYG 2000 Introductory Sociology	3
	=
	credit hours 24
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 1400 Police Organization and Administration	3
CCJ 1420 Police Operations	3
CCJ 1220 Criminal Law	3
CCJ 2230 Criminal Evidence and Procedure	3
CCJ 2250 Constitutional Law	3
CCJ 2500 Juvenile Delinquency	3
CCJ 2930 Seminar in Police Problems	3
CJD 2310 Police Supervision	3
CJT 2100 Criminal Investigation	3
CJT 2110 Introduction to Criminalistics	3
	=
	credit hours 39
	=
	Total credit hours 63

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Criminal Justice Education - Law Enforcement

ENC 1101	- English Composition I
POS 2041	- American Federal Government
CCJ 1010	Introduction to Criminology
CCJ 1020	- Introduction to Criminal Justice

Technical Certificate

Criminal Justice – Law Enforcement

A student may apply for and obtain a Technical 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.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate – Criminal Justice – Law Enforcement

- CCJ 1020 – Introduction to Criminal Justice
- CCJ 1030 – Introduction to Criminal Behavior

Course Number and Title	Credits
Professional and Other Required Courses	
CCJ 1020 Introduction to Criminal Justice	3
CCJ 1030 Introduction to Criminal Behavior	3
CCJ 1400 Police Organization and Administration	3
CCJ 1420 Police Operations	3
CCJ 1220 Criminal Law	3
CCJ 2230 Criminal Evidence and Procedure	3
CCJ 2260 Constitutional Law	3
CCJ 2500 Juvenile Delinquency	3
CCJ 2980 Seminar in Police Problems	3
CJD 2310 Police Supervision	3
CJT 2100 Criminal Investigation	3
CJT 2110 Introduction to Criminalistics	3
	credit hours 36
	=
	Total credit hours 36

PROGRAMS OF STUDY

Associate in Science

Fire Science and Prevention

The Fire Science and Prevention AS program is designed to provide training for persons who desire to enter the fire service; who seek employment in industrial fire protection, with insurance companies or with fire protection equipment companies; or, 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 courses are offered on a primary night and alternate night or day basis.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Fire Science and Prevention

- ENC 1101 - English Composition I
- POS 2041 - American Federal Government
- FFP 1000 - Introduction to Fire Protection
- FFP 1100 - Fire Service Organization

Course Number and Title

Credits

General Education

ENC 1101	English Composition I	3
HUM 2450	Humanities in the Americas	3
POS 2041	American Federal Government	3
POS 2112	State and Local Government	3
PSC 1341	Physical Science	3
PSY 1012	General Psychology	3
SOP 1002	Human Relations	3
	or	
SYG 2000	Introductory Sociology	3
SPC 1010	Fundamentals of Speech Communication	3
	credit hours	24

Professional and Other Required Courses

FFP 1000	Introduction to Fire Protection	3
FFP 1100	Fire Service Organization	3
FFP 1110	Fire Company Supervision and Management	3
FFP 1203	Fundamentals of Fire Prevention	3
FFP 2240	Fire Investigation	3
FFP 2310	Fire Codes and Building Construction	3
FFP 2400	Fire Fighting Tactics and Strategy	3
FFP 2500	Flammable Hazardous Materials	3
FFP 2524	Explosive and Toxic Hazardous Materials	3
FFP 2600	Fire Fighting Equipment and Apparatus	3
FFP 2660	Rescue Practices	3
**Mathematics Elective		3
	*credit hours	36
	=	
	Total credit hours	60

*For the Associate in Science degree only, EMS 1119 - Fundamentals of Emergency Medical Care 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.

**Mathematics Electives:

MAT 1033	Intermediate Algebra	3
MGF 1202	College Mathematics	3
MAC 1104	College Algebra	4
STA 1014	Elementary Statistics	3

Technical Certificate

Fire Science and Prevention

A student may apply for and obtain a Technical Certificate in Fire Science and Prevention by completing the 11 fire science courses specified for that purpose listed hereafter under Professional and Other Required Courses.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate – Fire Science and Prevention

- FFP 1000 – Introduction to Fire Protection
- FFP 1100 – Fire Service Organization

Course Number and Title	Credits
Professional and Other Required Courses	
FFP 1000 Introduction to Fire Protection	3
FFP 1100 Fire Service Organization	3
FFP 1110 Fire Company Supervision and Management	3
FFP 1203 Fundamentals of Fire Prevention	3
FFP 2240 Fire Investigation	3
FFP 2310 Fire Codes and Building Construction	3
FFP 2400 Fire Fighting Tactics and Strategy	3
FFP 2500 Flammable Hazardous Materials	3
FFP 2524 Explosive and Toxic Hazardous Materials	3
FFP 2600 Fire Fighting Equipment and Apparatus	3
FFP 2660 Rescue Practices	3
	credit hours 33
	=
	Total credit hours 33

Associate In Science

Hospitality Management

This AS 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's Hospitality Management Advisory Committee.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Course Number and Title

Credits

General Education

***Social Science	6
*Humanities	3
*Mathematics - Natural Science	3
ECO 2013 Principles of Economics I	3
ENC 1101 English Composition I	3
	-
	credit hours 18

Professional and Other Required Courses

APA 2321 Hotel/Motel Accounting	3
BUL 2111 Business Law I	3
FIN 2100 Personal Finance	2
FSS 1251 Restaurant Operation	3
FSS 2501 Food and Beverage Control	3
HFT 1000 Introduction to Hospitality Management	3
HFT 1250 Hotel/Motel Operation	3
HFT 1270 Apartment Management	3
HFT 2221 Customer/Personnel Relations	3
HFT 2700 Tourism	3
**HFT 2941 Internship	3
**HFT 2942 Internship	3
HFT 1410 Front Office Management Hotel/Motel	3
MAR 1101 Salesmanship	5
OST 1324 Business Mathematics Using Calculators	3
	-
	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 instruction 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.

***Two courses from Area I AA degree General Education Requirements listing, one of which must be from Area IA.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Hospitality Management

ENC 1101	- English Composition I
HFT 1000	- Introduction to Hospitality Management
FIN 2100	- Personal Finance or other professional level elective

Associate In Science

Insurance

This AS 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.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue a baccalaureate degree. The student who does desire to pursue a baccalaureate degree in Insurance at the University of North Florida (UNF) must pass the CLAST and should pursue the AS degree UNF Option Program in Insurance set forth on the next page. The student who desires to pursue a baccalaureate degree in Insurance at another state university should refer to University Transfer Requirements on page 37 of the Catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Insurance

- ENC 1101 - English Composition I
- COC 1300 - Introductory Computer Concepts or other Data Processing elective
- GEB 1011 - Introduction to Business
- RMI 1030 - Principles of Insurance
- OST 1324 - Business Mathematics Using Calculators

Course Number and Title	Credits
General Education	
*Humanities	3
*Mathematics - Natural Science	3
***Social Science	6
ENC 1101 English Composition I	3
PSY 1012 General Psychology	3
	credit hours 18
Professional and Other Required Courses	
ACG 1003 General Accounting I	3
ACG 1004 General Accounting II	3
BUL 2111 Business Law I	3
FIN 2000 Principles of Finance	3
GEB 1011 Introduction to Business	3
MAN 2021 Principles of Management	3
MAR 1101 Salesmanship	3
OST 1324 Business Mathematics	
Using Calculators	3
RMI 1030 Principles of Insurance	3
RMI 1200 Principles of Casualty Insurance	
and Surety Bonding	3
RMI 1210 Principles of Fire and Allied Lines	3
**Approved Electives	9
	credit hours 42
	Total credit hours 60
*Refer to AS degree General Education Requirements.	
***Two courses from Area I AA degree General Education Requirements listing, one of which must be from Area IA.	
**Approved Electives:	credit hours
CAP 1820 Microcomputer Application Software	3
COC 1300 Introductory Computer Concepts	3
COP 2110 FORTRAN Programming	3
COP 2170 Programming in BASIC	3
MAN 2800 Small Business Management	3
RMI 1110 Principles of Life Insurance I	3
RMI 1120 Principles of Health Insurance	3
RMI 1160 Marketing Principles of Life and Health Insurance	3
RMI 1260 Principles of Insurance and Liability Claim Adjusting	3
RMI 1280 Principles of Property Insurance Adjusting	3
RMI 1430 Legal Aspects of Life Insurance	3
RMI 1432 Life Company Operations	3
RMI 2270 Liability Insurance Adjusting	3
RMI 2281 Property Insurance Adjusting	3
RMI 2750 Life Insurance Accounting	3

AS Degree Option UNF Transfer

Insurance

An option transfer program is available to students for admittance to the University of North Florida under a special articulation agreement. Students electing this option are accepted as third year students at UNF upon program completion and passage of the CLAST. Students electing this transfer insurance program to the University of North Florida must complete the transfer program and graduation requirements.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - UNF Transfer Option - Insurance

- ENC 1101 - English Composition I
- PSY 1012 - General Psychology
- GEB 1011 - Introduction to Business
- RMI 1030 - Principles of Insurance

Course Number and Title	Credits
General Education	
ENC 1101 English Composition I	3
ENC 1102 English Composition II	3
SPC 1010 Fundamentals of Speech Communication	3
*Humanities Electives	6
*Natural Science Electives	6
MAC 1104 College Algebra	4
STA 1014 Elementary Statistics	3
*Social Science Elective (Area A)	3
ECO 2013 Principles of Economics I	3
ECO 2023 Principles of Economics II	3
	=
	credit hours 37
Professional and Other Required Courses	
ACG 2001 Principles of Accounting I	3
ACG 2011 Principles of Accounting II	3
BUL 2111 Business Law I	3
FIN 2000 Principles of Finance	3
GEB 1011 Introduction to Business	3
MAN 2021 Principles of Management	3
**MAR 1011 Principles of Marketing	3
RMI 1030 Principles of Insurance	3
***RMI 1110 Principles of Life Insurance I	3
***RMI 1200 Principles of Casualty Insurance and Surety Bonding	3
***RMI 1210 Principles of Fire and Allied Lines	3
	=
	credit hours 30
	=
	Total credit hours 67

*Refer to AA degree General Education Requirements.

**Required course in UNF Transfer Option.

***Any two of these courses.

Associate in Science

Real Estate

This AS 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 and brokers 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.

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue a baccalaureate degree. The student who does desire to pursue a baccalaureate degree in Real Estate at the University of North Florida (UNF) must pass the CLAST and should pursue the AS degree UNF Option Program in Real Estate set forth on the next page. The student who desires to pursue a baccalaureate degree in Real Estate at another state university should refer to University Transfer Requirements on page 37 of the Catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Real Estate

ENC 1101 - English Composition I
 GER 1011 - Introduction to Business
 OST 1324 - Business Mathematics Using Calculators
 REE 1000 - Real Estate Principles and Practices

One professional elective

Course Number and Title	Credits
General Education	
****Humanities	6
*Mathematics-Natural Science	3
*Social Science	3
ECO 2018 Principles of Economics I	3
ENC 1101 English Composition I	3
SPC 1010 Fundamentals of Speech Communication	3
	-
	credit hours 21

Professional and Other Required Courses

ACG 1003 General Accounting I	3
BUL 2111 Business Law I	3
FIN 2000 Principles of Finance	3
**GER 1011 Introduction to Business	3
MAN 2021 Principles of Management	3
MAN 2300 Personnel Management	3
OST 1324 Business Mathematics Using Calculators	3
REE 1000 Real Estate Principles and Practices	3
REE 1100 Real Estate Appraisal	3
REE 1400 Real Estate License Law	3
***REE 1810 Real Estate Sales	3
***REE 2200 Real Estate Finance	3
***REE 2270 Mortgage Broker in Mortgage Lending	3
***REE 2300 Real Estate Investment	3
***REE 2430 Real Estate Law	3
***REE 2500 Real Estate Management	3
****Approved Electives:	3
	-
	Credit hours 42
	-
	Total credit hours 63

*Refer to AS degree General Education Requirements.

**Another course may be selected upon approval of the assistant dean.

***Any three of these six courses.

****Any two courses from Area II AA degree General Education Requirement listing.

****Approved Electives:	credit hours
MAN 2800 Small Business Management	3
REE 1810 Real Estate Sales	3
REE 2200 Real Estate Finance	3
REE 2220 Home Mortgage Lending	3
REE 2270 Mortgage Broker in Mortgage Lending	3
REE 2300 Real Estate Investment	3
REE 2430 Real Estate Law	3
REE 2500 Real Estate Management	3

AS Degree Option UNF Transfer

Real Estate

An option transfer program is available to students for admittance to the University of North Florida under a special articulation agreement. Students electing this option are accepted as third-year students at UNF upon program completion and passage of the CLAST. Students electing this transfer real estate program to the University of North Florida must complete the transfer program and graduation requirements.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - UNF Transfer Option - Real Estate

ENC 1101	- English Composition I
PSY 1012	- General Psychology
GER 1011	- Introduction to Business
REE 1000	- Real Estate Principles and Practices

Course Number and Title	Credits
General Education	
ENC 1101 English Composition I	3
ENC 1102 English Composition II	3
SPC 1010 Fundamentals of Speech Communication	3
*Humanities Electives	6
*Natural Science Electives	6
MAC 1104 College Algebra	4
STA 1014 Elementary Statistics	3
*Social Science Elective (Area A)	3
ECO 2013 Principles of Economics I	3
ECO 2023 Principles of Economics II	3
	credit hours 37
Professional and Other Required Courses	
ACG 2001 Principles of Accounting I	3
ACG 2011 Principles of Accounting II	3
BUL 2111 Business Law I	3
FIN 2000 Principles of Finance	3
GER 1011 Introduction to Business	3
MAN 2021 Principles of Management	3
**MAR 1011 Principles of Marketing	3
REE 1000 Real Estate Principles and Practice	3
REE 1400 Real Estate License Law	3
***REE 2270 Mortgage Broker in Mortgage Lending	3
***REE 2430 Real Estate Law	3
	credit hours 30
	Total credit hours 67
*Refer to AA General Education Requirements.	
**Required course in UNF Transfer Option.	
***Any one of these courses.	

Associate in Science

Sales-Marketing-Retailing

The Sales-Marketing-Retailing AS program provides the student with a background that will assist in preparation 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 program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Sales-Marketing-Retailing

ENC 1101 - English Composition I
MAR 1011 - Principles of Marketing
OST 1324 - Business Mathematics Using Calculators
Any two required professional or approved courses

Course Number and Title	Credits
General Education	
*Humanities	3
*Mathematics-Natural Science	3
*Social Science	3
ECO 2013 Principles of Economics I	3
ENC 1101 English Composition I	3
	credit hours 15
Professional and Other Required Courses	
ACG 1003, 1004 General Accounting I and II	6
or	
ACG 2001 Principles of Accounting I	3
ADV 2000 Advertising	3
MAR 1011 Principles of Marketing	3
MAR 1101 Salesmanship	3
OST 1324 Business Mathematics Using Calculators	3
OST 2335 Business Communications	3
**Approved Electives	24-27
	credit hours 45
	=
	Total credit hours 60
*Refer to AS degree General Education Requirements	
**Approved Electives:	credit hours
ACG 2011 Principles of Accounting II	3
BUL 2111 Business Law I	3
BUL 2112 Business Law II	3
CAP 1820 Microcomputer Application Software	3
COC 1300 Introductory Computer Concepts	3
COE 1000 Cooperative Education Seminar	1
--1949 Cooperative Education Work Experience I (with program director's prior consent)	3
--2949 Cooperative Education Work Experience II (with program director's prior consent)	3
COP 2110 FORTRAN Programming	3
COP 2170 Programming in Basic	3
FIN 2000 Principles of Finance	3
GEB 1011 Introduction to Business	3
MAN 2021 Principles of Management	3
MAN 2300 Personnel Management	3
MAN 2800 Small Business Management	3
MAR 1151 Retail Merchandising	3
MAR 1301 Sales Promotion	3
MAR 2221 Principles of Wholesale Distribution	3
MAR 2240 Principles of International Trade: Export-Import	3
MAR 2401 Sales Management	3
RMI 1030 Principles of Insurance	3
OST 1100 Beginning Typewriting	3
OST 1110 Intermediate Typewriting	3

AS Degree Option UNF Transfer

Transportation

An option transfer program is available to students for admittance to the University of North Florida under a special articulation agreement. Students electing this option are accepted as third-year students at UNF upon program completion and passage of the CLAST. Students electing this transfer transportation program to the University of North Florida must complete the transfer program and graduation requirements.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - UNF Transfer Option Transportation

ENC 1101 - English Composition I
 GEB 1011 - Introduction to Business
 TRA 1010 - Principles of Transportation
 One course from Social Science (Area A)

Course Number and Title	Credits
General Education	
ENC 1101 English Composition I	3
ENC 1102 English Composition II	3
SPC 1010 Fundamentals of Speech Communication	3
*Humanities Electives	6
*Natural Science Electives	6
MAC 1104 College Algebra	4
STA 1014 Elementary Statistics	3
*Social Science Elective (Area A)	3
ECO 2013 Principles of Economics I	3
ECO 2023 Principles of Economics II	3
	credit hours 37
Professional and Other Required Courses	
ACG 2001 Principles of Accounting I	3
ACG 2011 Principles of Accounting II	3
BUL 2111 Business Law I	3
FIN 2000 Principles of Finance	3
GEB 1011 Introduction to Business	3
**MAN 2021 Principles of Management	3
TRA 2020 Economics of Transportation	3
***Approved Transportation/Aviation Electives	9
	credit hours 39
	=
	Total credit hours 67
*Refer to AA degree General Education Requirements.	
**For AS degree students wishing to specialize in the field of Aviation, Aviation courses from the list of approved electives may be substituted for this course.	
***Approved Electives for UNF Transfer Option:	
	credit hours
ATF 1000 Basic Flight I	3
ATT 1100 Private Pilot Ground School	3
ATF 1100 Basic Flight II	3
ATF 2201C Instrument Flight	3
ATF 2300 Advanced Flight	3
ATT 1110 Commercial Pilot Ground School	3
ATT 1120 Instrument Rating Ground School	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 II	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

Associate in Science

Air Traffic Management

The Air Traffic Management AS program provides the student with the background to assist in preparing for aviation related operations. This AS degree program is intended primarily for students who desire to complete an associate degree and pursue a career in aviation rather than continue on toward a baccalaureate or bachelor degree.

The student who does decide to pursue a university transfer study must meet additional course and test requirements. (See college credit programs of study—The Associate in Arts degree—University Parallel section of this catalog.)

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Air Traffic Management

- | | |
|----------|---|
| ENC 1101 | - English Composition I |
| SSI 1120 | - Origins of American Society (Economic, Political, and International Institutions) |
| SPC 1010 | - Fundamentals of Speech Communication |
| ATT 1810 | - Environment of the Air Traffic Controller |

Course Number and Title	Credits
General Education	
HUM 2211 Humanities: The Foundations	3
ENC 1101 English Composition I	3
ENC 1102 English Composition II	3
MGF 1202 College Mathematics	3
SPC 1010 Fundamentals of Speech Communication	3
SSI 1120 Origins of American Society (Economic, Political and International Institutions)	3
*General Education Electives	3
	credit hours 21
Professional and Other Required Courses	
ASC 1005 History of Air Transportation	3
ASC 1210 Aviation Weather	3
ASC 1310 Federal Air Regulations	3
ASC 1690 Environment of the Air Traffic Controller	3
AVM 2431 The Flight Service Station	3
ATT 1820 The Air Traffic Control Tower	3
ATT 1815 Approach Control	3
ATT 1816 Air Route Traffic Control Center	3
ATT 1814 Radar/Computer Interface	3
ATT 2941 Facility Internship	4
**COC 1300 Introductory Computer Concepts	3
**Approved Electives	6
	credit hours 40
	=
	Total credit hours 61

*Refer to AS degree General Education Requirements

**Approved Electives:	credit hours
ATF 1000 Basic Flight I	3
ATF 1100 Private Pilot Ground School	3
ATF 1100 Basic Flight II	5
ATF 2201C Instrument Flight	3
ATF 2300 Advanced Flight	3
ATT 1110 Commercial Pilot Ground School	3
ATT 1120 Instrument Rating Ground School	3
ATM 1300 Aircraft Airframe Mechanic	3
ATM 1500 Aircraft Powerplants Mechanics	3
ATM 1700 Aircraft Technology Maintenance	3
ATM 1800 Aircraft Powerplants Mechanic Practicum	2
ATM 1810 Aircraft Airframe Mechanic Practicum	2
ECO 2000 Foundations of the American Economy	3
ENC 2210 Technical Report Writing	3
MAN 2050 Transportation Management and Theory	3
MAN 2300 Personnel Management	3
OST 1100 Beginning Typewriting	3
SOP 1002 Human Relations	3
TRA 1010 Principles of Transportation	3
***Students with adequate training or experience in data processing may substitute:	
CAP 1620 Microcomputer Application Software	3
COP 2110 FORTRAN Programming	3
COP 2170 Programming in BASIC	3

AS Degree Option UNF Transfer

Airways Science

The Airways Science AS degree UNF Transfer Option of the Transportation program provides the student with a basic foundation in the general elements of aviation in preparation for a career with the FAA in air traffic control and air traffic facilities.

The curriculum includes the study necessary to prepare for orientation into the FAA Air Traffic Control System.

Upon completion of this program the student will be awarded an Associate in Science degree. The student will then be able to continue on to a baccalaureate degree providing opportunities for the graduate to qualify for the more keenly competitive positions in the FAA. Students electing this transfer transportation program to the University of North Florida must complete the transfer program requirements and passage of the CLAST.

Pre-program Courses
 During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - UNF Transfer Option Airways Science

ECO 2013	- Principles of Economics I
ENC 1101	- English Composition I
MAC 1104	- College Algebra
ASC 1310	- Federal Air Regulations
ATT 1810	- Environment of the Air Traffic Controller

Course Number and Title	Credits
General Education	
ENC 1101 English Composition I	3
ENC 1102 English Composition II	3
SPC 1010 Fundamentals of Speech Communication	3
HUM 2211 Humanities: The Foundations	3
**Humanities	3
***PHY 2053C General Physics I	4
***PHY 2054C General Physics II	4
MAC 1104 College Algebra	4
STA 1014 Elementary Statistics	3
POS 2041 American Federal Government	3
PSY 1012 General Psychology	3
ECO 2013 Principles of Economics I	3
ECO 2023 Principles of Economics II	3
*General Education Electives	6
	credit hours 48
Professional and Other Required Courses	
ACG 2001 Principles of Accounting I	3
ACG 2011 Principles of Accounting II	3
ASC 1210 Aviation Weather	3
ASC 1310 Federal Air Regulations	3
****Approved Professional Electives	9
(See listing next page)	
	credit hours 21
Students are required to take four of the following courses:	
ATT 1810 Environment of the Air Traffic Controller	3
ATT 1812 The Flight Service Station	3
ATT 1814 Radar/Computer Interface	3
ATT 1816 Air Route Traffic Control Center	3
ATT 1818 Approach Control	3
ATT 1820 The Air Traffic Control Tower	3
ATT 2941 Facility Internship	4
	credit hours 12
	Total credit hours 81
*Any two courses from AA General Education Requirements listing.	
**Refer to AA degree General Education Requirements.	
***PHY 2048C and PHY 2049C may be substituted.	

Airways Science (Cont.)

Course Number and Title	Credits
****Approved Professional Electives	credit hours
AMH 2010 United States History to 1865	3
AMH 2020 United States History from 1865 to present	8
ASC 1005 History of Air Transportation	3
ATF 1000 Basic Flight I	3
ATT 1100 Private Pilot Ground School	3
ATF 1100 Basic Flight II	3
ATF 2201C Instrument Flight	3
ATF 2300 Advanced Flight	3
ATT 1110 Commercial Pilot Ground School	3
ATT 1120 Instrument Rating Ground School	3
BUL 2111 Business Law	3
CHM 1020 Chemistry for Liberal Arts	3
CHM 1040C Introductory Chemistry I	4
CHM 1041C Introductory Chemistry II	4
CHM 1045C General Chemistry and Qualitative Analysis I	4
CHM 1046C General Chemistry and Qualitative Analysis II	4
COC 1300 Introductory Computer Concepts	3
COC 2001 Computer Concepts	3
COP 1160 RPG Programming	3
COP 2400 Basic Assembly Language Programming	3
COP 2110 FORTRAN Programming	3
COP 2120 Basic COBOL Programming	3
COP 2121 Advanced COBOL Programming	3
COP 2170 Programming in BASIC	3
COP 2610 Advanced Computing and Programming Systems	3
ENC 2210 Technical Report Writing	3
MAC 1114 College Trigonometry	3
MAC 1311 Calculus with Analytic Geometry I	4
MAC 2312 Calculus with Analytic Geometry II	4
MAC 2313 Calculus with Analytic Geometry III	4
MAN 2021 Principles of Management	3
MAN 2050 Transportation Management and Theory	3
MAN 2300 Personnel Management	3
MAN 2600 Small Business Management	3
MET 1001 Meteorology	3
PHY 1020 Physics for Liberal Arts	3
SPC 1010 Fundamentals of Speech Communication	3
TRA 1010 Principles of Transportation	3

Technical and Industrial Services

Associate in Science

Architectural Engineering Technology

Architectural Engineering Technology is a program designed to prepare the student for a career 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 AS/AAS/Technical Certificate Graduation Status Sheet File Maintenance Form, signed by the student and program director, on file.

Students with an inadequate basic skills background will be required to enroll in the level of mathematics and/or English necessary to acquire program entry skills. The student's score on the entry test given during the orientation process will be used to determine readiness for program entry.

Graduates of the Architectural Engineering Technology degree program may expect to be employed locally as associates or assistants to architects, engineers, designers or engineering consultant firms.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Recommended Course Sequence	Course Number and Title	Credits
General Education		
22	*Humanities	3
8	*Social Science	3
2	ENC 1101 English Composition I	3
1	MAC 1104 College Algebra	4
6	MAC 1114 College Trigonometry	3
10	PHY 2059C General Physics I	4
13	PHY 2054C General Physics II	4
		-
		credit hours 24
Core Courses		
11	ARC 2120C Architectural Drafting	3
12	BCN 1001C Building Construction	3
18	BCN 2614C Planning and Estimating	3
20	CDA 2172 Computer Aided Drafting and Design	3
*6	COC 2001 Computer Concepts	3
7	ENC 2210 Technical Report Writing	3
18	ETC 2410C Structural Drafting	3
19	ETC 2450C Concrete	3
4	ETD 1100C Engineering Drawing	3
14	ETG 2504C Engineering Mechanics	4
17	ETG 2535C Testing and Strength of Materials	4
3	ETI 1421C Engineering Materials and Processes	3
21	ETM 2610C Air Conditioning and Heating	3
9	SUR 1101C Surveying I	3
15	SUR 2140C Surveying II	3
		-
		credit hours 47
		=
		Total credit hours 71
*Refer to AS degree General Education Requirements.		
**With program director's approval one of the following courses may be substituted:		
	CAP 1820 Microcomputer Application Software	3
	COC 1300 Introductory Computer Concepts	3
	COP 2110 FORTRAN Programming	3
	COP 2170 Programming in BASIC	3

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Architectural Engineering Technology

- ENC 1101 - English Composition I
- MAC 1104 - College Algebra
- BCN 1001C - Building Construction
- ETD 1100C - Engineering Drawing

Technical Certificate

Architectural Engineering Technology

Architectural Engineering Technology is a program designed to prepare the student for a career 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 AS/AAS/Technical Certificate Graduation Status Sheet File Maintenance Form, signed by the student and program director, on file.

Students with an inadequate basic skills background will be required to enroll in the level of mathematics and/or English necessary to acquire program entry skills. The student's score on the entry test given during the orientation process will be used to determine readiness for program entry.

Graduates of the Architectural Engineering Technical certificate program may expect to be employed locally by a surveying company as a field party member or an office drafting person. Other job opportunities may include working as a testing technician for an engineering testing company or in an architect's office as a helper or job inspector.

Recommended Course Sequence	Course Number and Title	Credits
General Education		
11	*Humanities	3
4	ENC 1101 English Composition I	3
1	MAC 1104 College Algebra	4
5	MAC 1114 College Trigonometry	3
		—
		credit hours 13
Core Courses		
7	ARC 2120C Architectural Drafting	3
8	BCN 1001C Building Construction	3
10	BCN 2614C Planning and Estimating	3
12	CDA 2172 Computer Aided Drafting and Design	3
2	ETD 1100C Engineering Drawing	3
3	ETI 1421C Engineering Materials and Processes	3
13	ETM 2610C Air Conditioning and Heating	3
6	SUR 1101C Surveying I	3
9	SUR 2140C Surveying II	3
		—
		credit hours 27
		Total credit hours 40
*Refer to AS degree General Education Requirements.		

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Architectural Engineering Technology

- ENC 1101 - English Composition I
- MAC 1104 - College Algebra
- BCN 1001C - Building Construction
- ETD 1100C - Engineering Drawing

Associate in Applied Science

Automotive/Light Truck Technology

Automotive/Light Truck Technology is a two-year, AAS degree program offering specialty tracks in Vehicle Mechanics, Vehicle Machinist, and Vehicle Body. The objective of this program is to prepare the student for a career in the automotive/light truck field. The program is designed to provide General Education, a series of core courses, and specialized courses which meet the knowledge and skill requirements of the occupational/technical trade area. Core courses provide theory and hands-on experience which relate to all of the specialty tracks. Additionally, specialized courses provide theory and hands-on training to meet individual employment requirements in the particular field of specialization.

Students seeking the AAS degree in Automotive/Light Truck Technology are required to complete all General Education courses, all core courses, and all courses listed in one of the special tracks for graduation.

Completion of the Automotive/Light Truck Technology program may lead to employment with new vehicle dealerships, independent repair companies, mass merchandisers, or parts sales companies.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AAS - Automotive/Light Truck Technology

Vehicle Mechanics Specialty

- ENC 1101 - English Composition I
- MGF 1202 - College Mathematics
- AER 1100 - Vehicle Electrical and Support System
- AER 2169 - Automotive/Light Truck Career Preparation
- AER 1120 - Steering and Suspension Systems

Vehicle Body Specialty

- ENC 1101 - English Composition I
- MGF 1202 - College Mathematics
- AER 1000 - Basic Technician Skills
- AER 1221 - Paint Formulas and Application
- AER 2210 - Body Damage Analysis and Repair

Vehicle Machinist Specialty

- ENC 1101 - English Composition I
- MGF 1202 - College Mathematics
- AER 1000 - Basic Technician Skills
- AER 1114 - Basic Vehicle Machinist
- AER 2004 - Internal Combustion Engines

Course Number and Title	Credits
General Education	
ENC 1101 English Composition I	3
*Social Science	3
*Humanities	3
MGF 1202 College Mathematics	3
SPC 1010 Fundamentals of Speech Communication	3
	credit hours 15

*Refer to AS degree General Education Requirements.

Core Courses:

AER 1000 Basic Technician Skills	1
AER 1100 Vehicle Electrical and Support Systems	4
AER 1131 Transmission and Drive Systems	4
AER 2169 Automotive/Light Truck Career Preparation	3
AER 2171 Heating and Air Conditioning	4
COC 2001 Computer Concepts	3
ETI 1700 Industrial Safety	3
IEA 1305 Industrial Survival Procedures	3
	credit hours 25

Specialty Courses

Vehicle Mechanics Specialty

AER 1120 Steering and Suspension Systems	4
AER 1121 Braking Systems	4
AER 1160 Introduction to Vehicle Service/Parts Supervision	3
AER 1180 Integrated Automotive Systems	4
AER 2004 Internal Combustion Engines	4
AER 2112 Advanced Engine Diagnosis	4
	credit hours 23
	Total credit hours 63

Vehicle Body Specialty

AER 1120 Steering and Suspension Systems	4
AER 1221 Paint Formulas and Application	4
AER 1271 Introduction to Body Shop Supervision	3
AER 2210 Body Damage Analysis and Repair	4
AER 2214 Body Panels and Frames	4
AER 2272 Advanced Body Repair and Appraising	4
	credit hours 23
	Total credit hours 63

Vehicle Machinist Specialty

AER 1114 Basic Vehicle Machinist	4
AER 1160 Introduction to Vehicle Service/Parts Supervision	3
AER 1180 Integrated Vehicle Systems	4
AER 2004 Internal Combustion Engines	4
AER 2115 Advanced Vehicle Machinist	4
AER 2941 Vehicle Machinist Practicum	3
	credit hours 22
	Total credit hours 62

Technical Certificate

Automotive/Light Truck Technology

The Automotive/Light Truck Technology one-year certificate program is designed to prepare students for employment in the automotive/light truck field as working technicians. Successful completion of this one-year program will provide the student with the knowledge and skill required to meet the industry employability demands of the working automotive/light truck technicians. General Education, core courses, and selected specialized trade courses provide the theory and hands-on experience required.

Completion of these Automotive/Light Truck Technology Certificate programs may lead to employment with new vehicle dealers, independent repair companies, mass merchandisers, body repair shops, automotive repair shops, or parts sales companies.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate – Automotive/Light Truck Technology

Vehicle Mechanics Specialty

AER 1000	Basic Technician Skills
AER 1100	– Vehicle Electrical and Support Systems
AER 2171	– Heating and Air Conditioning
AER 1120	– Steering and Suspension Systems
AER 1121	– Braking Systems

Vehicle Body Specialty

AER 1000	Basic Technician Skills
AER 1100	– Vehicle Electrical and Support Systems
AER 2171	– Heating and Air Conditioning
AER 1120	– Steering and Suspension Systems

Vehicle Machinist Specialty

AER 1000	– Basic Technician Skills
AER 1100	– Vehicle Electrical and Support Systems
AER 2171	– Heating and Air Conditioning
AER 1114	– Basic Vehicle Machinist
AER 2004	– Internal Combustion Engines

Course Number and Title

Credits

General Education

ENC 1101	English Composition I	3
MGF 1202	College Mathematics	3
		credit hours 6

Core Courses:

AER 1000	Basic Technician Skills	1
AER 1100	Vehicle Electrical and Support Systems	4
AER 1131	Transmission and Drive Systems	4
IEA 1305	Industrial Survival Procedures	3
AER 2171	Heating and Air Conditioning	4
AER 2169	Automotive/Light Truck Career Preparation	3
		credit hours 19

Specialty Courses

Vehicle Mechanics Specialty

AER 1120	Steering and Suspension Systems	4
AER 1121	Braking Systems	4
AER 1180	Integrated Automotive Systems	4
AER 2004	Internal Combustion Engines	4
		credit hours 16
		Total credit hours 41

Vehicle Body Specialty

AER 1120	Steering and Suspension Systems	4
AER 1221	Paint Formulas and Applications	4
AER 2210	Body Damage Analysis and Repair	4
AER 2214	Body Panels and Frames	4
		credit hours 16
		Total credit hours 41

Vehicle Machinist Specialty

AER 1114	Basic Vehicle Machinist	4
AER 1180	Integrated Vehicle Systems	4
AER 2004	Internal Combustion Engines	4
AER 2115	Advanced Vehicle Machinist	4
		credit hours 16
		Total credit hours 41



Associate in Applied Science

Building Construction Technology

The objective of this AAS 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 a broad-based overview of the building construction trades with a focus on concrete, steel and wood joinery techniques practiced in the industry. This includes the theory, basic skills, safety and first aid training common to all building trades.

An AAS degree will be awarded upon completion of the General Education Requirements and all of the technical courses listed.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AAS – Building Construction Technology

- ENC 1101 – English Composition I
- BCT 1113 – Blueprint Reading for Building Trades
- BCT 1114 – Concrete Form Construction
- BCT 1501 – Introduction to Plumbing
- PHY 1020 – Physics for Liberal Arts
- or
- MGF 1202 – College Mathematics

Recommended Course Sequence	Course Number and Title	Credits
General Education		
4	*Social Science	3
17	*Humanities	3
24	PHY 1020 Physics for Liberal Arts	3
13	MGF 1202 College Mathematics	3
9	ENC 1101 English Composition I	3
		credit hours 15
Professional and Other Required Courses		
1	BCT 1081 Construction Methods & Materials	3
2	IEA 1305 Industrial Survival Procedures	3
3	BCT 1113 Blueprint Reading I	3
8	BCT 1043 Blueprint Reading II	2
5	BCT 1132 Construction I	3
10	BCT 1134 Construction II	3
14	BCT 2152 Construction III	3
18	BCT 2153 Construction IV	3
6	BCT 1805 Construction Scheduling	2
7	BCT 1001 Quantitative Methods for Building Trades	2
11	SCR 1101C Surveying	3
12	BCT 1042 Construction Cost Estimating	3
15	BCT 1114 Concrete Form Construction	3
16	BCT 1710 Energy Efficient Construction	3
18	BCT 2604 Construction Contracting	2
20	ACR 1060 Introduction to Air-Conditioning and Refrigeration	4
21	MTR 1100 Welding for Related Trades	4
22	BCT 1501 Introduction to Plumbing	3
23	EER 1067 Mechanical Devices for Electricians	3
		credit hours 55
		Total credit hours 70

*Refer to AS degree General Education Requirements.

PROGRAMS OF STUDY

Technical Certificate

Building Construction Technology

The objective of this Technical Certificate program is to prepare the student for a career in the fields related to construction technology.

The certificate year program in construction technology is designed to provide the student with an overview of the building construction trades with a focus on concrete, steel and wood joinery techniques practiced in the industry.

This includes the theory, basic skills, safety and first aid training common to all building trades.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Building Construction Technology

- BCT 1081 - Construction Methods and Materials
- BCT 1710 - Energy Efficient Construction
- BCT 1114 - Concrete Form Construction
- BCT 1001 - Quantitative Methods for Building Trades
- BCT 1113 - Blueprint Reading I

Course Number and Title	Credits
General Education	
MGF 1202 College Mathematics	3
	credit hours 3
Professional and Other Required Courses	
BCT 1081 Construction Methods and Materials	3
BCT 1132 Construction I	3
BCT 1134 Construction II	3
BCT 2162 Construction III	3
BCT 2153 Construction IV	3
IEA 1305 Industrial Survival Procedures	3
BCT 1114 Concrete Form Construction	3
BCT 1113 Blueprint Reading I	3
BCT 1001 Quantitative Methods for Building Trades	2
SUR 1101C Surveying	3
BCT 1710 Energy Efficient Construction	3
	credit hours 32
	=
	Total credit hours 35

Associate in Science

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, highways, structures, water resources, hydraulics, hydrology, soils and foundations.

A student will be considered as selected for this program when the student has an AS/AAS/Technical Certificate Graduation Status Sheet File Maintenance Form, signed by the student and program director, on file.

Students with an inadequate basic skills background will be required to enroll in the level of mathematics and/or English necessary to acquire program entry skills. The student's score on the entry test given during the orientation process will be used to determine readiness for program entry.

Graduates of the Civil Engineering Technology degree program may elect to continue studies for the Bachelor's in Technology degree at an upper level institution.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Civil Engineering Technology

- ENC 1101 - English Composition I
- MAC 1104 - College Algebra
- ETD 1100C - Engineering Drawing
- ETI 1421C - Engineering Materials and Processes
- SUR 1101C - Surveying I

Recommended Course Sequence	Course Number and Title	Credits
General Education		
11	*Humanities	3
22	*Social Science	3
4	ENC 1101 English Composition I	3
1	MAC 1104 College Algebra	4
6	MAC 1114 College Trigonometry	3
9	PHY 2058C General Physics I	4
13	PHY 2054C General Physics II	4
		Credit hours 24
Core Courses		
2	ETD 1100C Engineering Drawing	3
12	BCN 1001C Building Construction	3
10	ARC 2120C Architectural Drafting	3
3	ETI 1421C Engineering Materials and Process	3
19	ETC 2410C Structural Drafting	3
15	ETG 2504C Engineering Mechanics	4
8	SUR 1101C Surveying I	3
17	ETG 2535C Testing and Strength of Materials	4
21	ETC 2500C Highway Drafting and Route Design	3
19	BCN 2614C Planning and Estimating	3
20	ETC 2220C Soils and Foundations	3
18	ETC 2521C Hydrology and Hydraulics	3
7	ENC 2210 Technical Report Writing	3
*15	COC 2001 Computer Concepts	3
14	SUR 2140C Surveying II	3
16	ETC 2450C Concrete	3
		credit hours 50
		=
		Total credit hours 74
*Refer to AS degree General Education Requirements.		
**With program director's approval one of the following courses may be substituted:		
	CAP 1820 Microcomputer Application Software	3
	COC 1300 Introductory Computer Concepts	3
	COP 2110 FORTRAN Programming	3
	COP 2170 Programming in BASIC	3



Technical Certificate

Civil Engineering Technology

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. 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.

A student will be considered as selected for this program when the student has an AS/AAS/Technical Certificate Graduation Status Sheet File Maintenance Form, signed by the student and program director, on file.

Students with an inadequate basic skills background will be required to enroll in the level of mathematics and/or English necessary to acquire program entry skills. The student's score on the entry test given during the orientation process will be used to determine program entry.

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

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Civil Engineering Technology

- ENC 1101 - English Composition I
- MAC 1104 - College Algebra
- ETD 1100C - Engineering Drawing
- ETI 1421C - Engineering Materials and Processes

Recommended Course Sequence	Course Number and Title	Credits
General Education		
1	MAC 1104	College Algebra 4
6	MAC 1114	College Trigonometry 3
4	ENC 1101	English Composition I 3
		credit hours 10
Professional and other Required Courses		
2	ETD 1100C	Engineering Drawing 3
9	BCN 1001C	Building Construction 3
8	ARC 2120C	Architectural Drafting 3
10	ETD 2121C	Civil Drafting 3
3	ETI 1421C	Engineering Materials and Processes 3
12	ETC 2410C	Structural Drafting 3
7	SUR 1101C	Surveying I 3
11	BCN 2614C	Planning and Estimating 3
5	ENC 2210	Technical Report Writing 3
		credit hours 27
		Total credit hours 37

Associate in Science

Drafting and Design Technology

The objective of this AS 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 AS/AAS/Technical Certificate Graduation Status Sheet File Maintenance Form, signed by the student and the program director, on file.

Students with an inadequate basic skills background will be required to enroll in the level of mathematics and/or English necessary to acquire program entry skills. The student's score on the entry test given during the orientation process will be used to determine readiness for program entry.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Drafting and Design Technology

- ENC 1101 - English Composition I
- MAC 1104 - College Algebra
- ETD 1100C - Engineering Drawing
- ETI 1421C - Engineering Materials and Processes
- BCN 1001C - Building Construction

Recommended Course Sequence	Course Number and Title	Credits
General Education		
22	*Humanities	3
19	*Social Science	3
10	MAC 1104 College Algebra	4
14	MAC 1114 College Trigonometry	3
6	PHY 2053C General Physics I	4
3	PHY 2054C General Physics II	4
2	ENC 1101 English Composition I	3
		-
		credit hours 24
Professional and Other Required Courses		
12	ARC 2120C Architectural Drafting	3
17	BCN 2614C Planning and Estimating	3
13	BCN 1001C Building Construction	3
21	CDA 2172 Computer Aided Drafting and Design	3
**11	COC 2001 Computer Concepts	3
7	EGB 1130C Descriptive Geometry	3
5	ENC 2210 Technical Report Writing	3
4	ETD 1100C Engineering Drawing	3
8	ETD 1645C Mechanical and Electrical Drafting	3
16	ETD 2121C Civil Drafting	3
15	ETG 2504C Engineering Mechanics	4
18	ETG 2535C Testing and Strength of Materials	4
1	ETI 1421C Engineering Materials and Processes	3
20	ETI 1700 Industrial Safety	3
9	SUR 1101C Surveying I	3
		-
		credit hours 47
		=
		Total credit hours 71
*Refer to AS degree General Education Requirements		
**With program director's approval one of the following courses may be substituted:		
	CAP 1820 Microcomputer Application Software	3
	COC 1300 Introductory Computer Concepts	3
	COP 2110 FORTRAN Programming	3
	COP 2170 Programming in BASIC	3



Technical Certificate

Drafting

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

A student will be considered as selected for this program when the student has an AS/AAS/Technical Certificate Graduation Status Sheet File Maintenance Form, signed by the student and the program director, on file.

Students with an inadequate basic skills background will be required to enroll in the level of mathematics and/or English necessary to acquire program entry skills. The student's score on the entry test given during the orientation process will be used to determine readiness for program entry.

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

Recommended Course Sequence	Course Number and Title	Credits
General Education		
3	ENC 1101 English Composition I	3
1	MAC 1104 College Algebra	4
		=
		credit hours 7
Professional and Other Required Courses		
8	ARC 2120C Architectural Drafting	3
10	CDA 2172 Computer Aided Drafting and Design	3
6	EGN 1130C Descriptive Geometry	3
5	ENC 2210 Technical Report Writing	3
2	ETD 1100C Engineering Drawing	3
7	ETD 1645C Mechanical and Electrical Drafting	3
9	ETD 2121C Civil Drafting	3
4	ETI 1421C Engineering Materials and Processes	3
		=
		credit hours 24
		=
		Total credit hours 31

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Drafting

ENC 1101 - English Composition I
 MAC 1104 - College Algebra
 ETD 1100C - Engineering Drawing
 ETI 1421C - Engineering Materials and Processes

Associate in Science

Electronics Engineering Technology

Electronics Engineering Technology is a two-year AS degree program offering optional tracks in Digital Electronics, Communications Electronics, X-Ray Engineering Technology, Biomedical Instrumentation Technology and Robotics Technology.

The program is designed to provide the student with the skills needed to enter a career in the field of electronics as a technician, engineering assistant, or an assistant to scientific personnel working with systems or processes which depend principally upon electronics equipment.

A student will be considered as selected for this program when the student has an AS/AAS/Technical Certificate Graduation Status Sheet File Maintenance Form, signed by the student and program director, on file.

Students with an inadequate basic skills background will be required to enroll in the level of mathematics and/or English necessary to acquire program entry skills. The student's score on the entry test given during the orientation process will be used to determine readiness for program entry.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Specialty Tracks follow:

Electronics Engineering Technology

Biomedical Specialty

Completion of the Biomedical Instrumentation Technology specialization may lead to employment in hospitals and companies supplying equipment and/or service to hospitals and physicians'/dentists' offices related to biomedical instrumentation equipment.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Electronics Engineering Technology (Biomedical Specialty)

- ENC 1101 - English Composition I
- APB 2190C - Human Anatomy and Physiology I
- MAC 1104 - College Algebra
- EET 1015C - DC Theory and Circuits
- ETI 1725 - Biomedical Safety and Terminology

Recommended Course Sequence	Course Number and Title	Credits
General Education		
22	*Humanities	3
12	*Social Science	3
3	APB 2190C Human Anatomy and Physiology I	3
2	ENC 1101 English Composition I	3
1	MAC 1104 College Algebra	4
7	MAC 1114 College Trigonometry	3
10	PHY 2053C General Physics I	4
14	PHY 2054C General Physics II	4
		-
		credit hours 27
Core Courses		
8	ENC 2210 Technical Report Writing	3
4	EET 1015C DC Theory and Circuits	3
9	EET 1025C AC Theory and Circuits	3
5	EET 2121C Introduction to Solid State Electronics	3
13	EET 2119C Amplifier Circuits	3
17	EET 2142C Linear Semiconductor Analysis	3
18	EST 2112 Electrical-Electronics Control Systems	3
6	CET 2112C Introduction to Digital Electronics	3
11	CET 2113C Computer Logic Circuits	3
16	CET 2143C Microprocessors	3
21	MAC 1311 Calculus with Analytic Geometry I	4
	or	
	MTB 2323 Technical Calculus	3
		-
		credit hours 33
Biomedical Specialty		
15	ETI 1725 Biomedical Safety and Terminology	2
19	EST 2436C Biomedical Instrumentation I	3
20	EST 1412 Biomedical Technology and Techniques	2
23	EST 2438C Biomedical Instrumentation II	3
24	EET 2940 Biomedical Practicum	3
		-
		credit hours 13
		-
		Total credit hours 73
*Refer to AS degree General Education Requirements.		

Associate in Science

Electronics Engineering Technology

Communications Specialty

Completion of the Communications Electronics specialization may lead to employment in industries where communications electronics equipment such as communication satellite, broadcasting, television, telephone, mobile radio and paging systems are used.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Electronics Engineering Technology (Communications Specialty)

ENC 1101	- English Composition I
MAC 1104	- College Algebra
EET 1015C	- DC Theory and Circuits
COC 2001	- Computer Concepts
ETD 1100C	Engineering Drawing

Recommended Course Sequence	Course Number and Title	Credits
General Education		
19	*Humanities	3
16	*Social Science	3
5	RNC 1101 English Composition I	3
2	MAC 1104 College Algebra	4
7	MAC 1114 College Trigonometry	3
9	PHY 2053C General Physics I	4
13	PHY 2054C General Physics II	4
		—
		credit hours 24
Core Courses		
12	ENC 2210 Technical Report Writing	3
4	EET 1015C DC Theory and Circuits	3
10	EET 1025C AC Theory and Circuits	3
8	EET 2121C Introduction to Solid State Electronics	3
14	EET 2119C Amplifier Circuits	3
18	EET 2142C Linear Semiconductor Analysis	3
19	EET 2112 Electrical-Electronic Control Systems	3
6	CET 2112C Introduction to Digital Electronics	3
11	CET 2113C Computer Logic Circuits	3
15	CET 2143C Microprocessors	3
21	MAC 1311 Calculus with Analytic Geometry I	4
	or	
	MTB 2323 Technical Calculus	3
		—
		credit hours 33
Communications Specialty		
**2	COC 2001 Computer Concepts	3
3	ETD 1100C Engineering Drawing	3
20	EET 2324C Communications Electronics I	3
23	EET 2335C Communications Electronics II	3
22	ETI 1700 Industrial Safety	3
		—
		credit hours 15
		—
		Total credit hours 72
*Refer to AS degree General Education Requirements		
**With program director's approval, one of the following courses may be substituted:		
	CAP 1810 Microcomputer Application Software	3
	COC 1300 Introductory Computer Concepts	3
	COP 2110 FORTRAN Programming	3
	COP 2170 Programming in BASIC	3

Associate in Science

Electronics Engineering Technology

Digital Specialty

Completion of the Digital Electronics specialization may lead to employment in industries where computerized electronics equipment is installed, calibrated, serviced, repaired and maintained.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Electronics Engineering Technology (Digital Specialty)

ENC 1101	- English Composition I
MAC 1104	- College Algebra
EET 1015C	- DC Theory and Circuits
COC 2001	- Computer Concepts
ETD 1100C	- Engineering Drawing

Recommended Course Sequence	Course Number and Title	Credits
General Education		
18	*Humanities	3
16	*Social Science	3
5	ENC 1101 English Composition I	3
1	MAC 1104 College Algebra	4
6	MAC 1114 College Trigonometry	3
10	PHY 2053C General Physics I	4
14	PHY 2054C General Physics II	4
		credit hours 24
Core Courses		
12	ENC 2210 Technical Report Writing	3
4	EET 1015C DC Theory and Circuits	3
9	EET 1025C AC Theory and Circuits	3
7	EET 2121C Introduction to Solid State Electronics	3
13	EET 2119C Amplifier Circuits	3
17	EET 2142C Linear Semiconductor Analysis	3
19	EST 2112 Electrical-Electronic Control Systems	3
8	CET 2112C Introduction to Digital Electronics	3
11	CET 2113C Computer Logic Circuits	3
15	CET 2143C Microprocessors	3
20	MAC 1311 Calculus with Analytic Geometry I	4
	or	
	MTR 2323 Technical Calculus	3
		credit hours 33
Digital Specialty:		
**2	COC 2001 Computer Concepts	3
3	ETD 1100C Engineering Drawing	3
22	CET 2186C Computer Peripherals and Interfacing	3
21	ETI 1700 Industrial Safety	3
		credit hours 12
		=
		Total credit hours 69
*Refer to AS degree General Education Requirements		
**With program director's approval, one of the following courses may be substituted:		
	CAP 1820 Microcomputer Application Software	3
	COC 1306 Introductory Computer Concepts	3
	COP 2110 FORTRAN Programming	3
	COP 2170 Programming in BASIC	3

Associate in Science

Electronics Engineering Technology

Robotics Specialty

Completion of the Robotics Technology specialization may lead to employment in industrial settings where automated equipment is used, such as production line manufacturing, hazardous industries (radiation, welding, chemicals), in domestic uses, or in companies manufacturing robots.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Electronics Engineering Technology (Robotics Specialty)

- ENC 1101 - English Composition I
- MAC 1104 - College Algebra
- EET 1015C - DC Theory and Circuits

Recommended Course Sequence	Course Number and Title	Credits
General Education		
16	*Humanities	3
12	*Social Science	3
4	ENC 1101 English Composition I	3
1	MAC 1104 College Algebra	4
6	MAC 1114 College Trigonometry	3
10	PHY 2053C General Physics I	4
13	PHY 2054C General Physics II	4
		credit hours 24
Core Courses		
8	ENC 2210 Technical Report Writing	3
3	EET 1015C DC Theory and Circuits	3
9	EET 1025C AC Theory and Circuits	3
5	EET 2121C Introduction to Solid State Electronics	3
14	EET 2119C Amplifier Circuits	3
18	EET 2142C Linear Semiconductor Analysis	3
20	EST 2112 Electrical-Electronic Control Systems	3
7	CET 2112C Introduction to Digital Electronics	3
11	CET 2113C Computer Logic Circuits	3
16	CET 2143C Microprocessors	3
21	MAC 1311 Calculus with Analytic Geometry I	4
	or	
	MTB 2323 Technical Calculus	3
		credit hours 33
Robotics Specialty:		
2	ETD 1100C Engineering Drawing	3
23	EST 2603C Robotics	3
15	ETG 2504C Engineering Mechanics	4
22	ETI 1700 Industrial Safety	3
17	ETM 2310C Fluid Mechanics	3
		credit hours 16
		=
		Total credit hours 73
*Refer to AS degree General Education Requirements		

Associate in Science

Electronics Engineering Technology

X-Ray Specialty

Completion of the X-Ray Engineering Technology specialization may lead to employment as a service technician in the medical x-ray equipment field.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Electronics Engineering Technology (X-Ray Specialty)

- ENC 1101 - English Composition I
- MAC 1104 - College Algebra
- EET 1015C - DC Theory and Circuits
- ETD 1100C - Engineering Drawing

Recommended Course Sequence	Course Number and Title	Credits
General Education		
20	*Humanities	3
12	*Social Science	3
2	ENC 1101 English Composition I	3
1	MAC 1104 College Algebra	4
7	MAC 1114 College Trigonometry	3
10	PHY 2053C General Physics I	4
15	PHY 2054C General Physics II	4
		-
		credit hours 24
Core Courses		
8	ENC 2210 Technical Report Writing	3
4	EET 1015C DC Theory and Circuits	3
9	EET 1025C AC Theory and Circuits	3
5	EET 2121C Introduction to Solid State Electronics	3
14	EET 2119C Amplifier Circuits	3
18	EET 2142C Linear Semiconductor Analysis	3
19	EST 2112 Electrical-Electronics Control Systems	3
6	CET 2112C Introduction to Digital Electronics	3
11	CET 2113C Computer Logic Circuits	3
16	CET 2143C Microprocessors	3
23	MAC 1311 Calculus with Analytic Geometry I	4
	or	
	MTB 2323 Technical Calculus	3
		-
		credit hours 33
X-Ray Specialty:		
3	ETD 1100C Engineering Drawing	3
13	ETG 1201C X-Ray Physics	3
17	ETG 2202C X-Ray Systems	3
21	ETG 2204C X-Ray Practicum	3
22	ETG 2205C X-Ray Imaging Systems	3
		-
		credit hours 15
		=
		Total credit hours 72
*Refer to AS degree General Education Requirements		

PROGRAMS OF STUDY

Technical Certificate

Electronics Engineering Technology

The Electronics Engineering Technology Certificate program is a one-year program designed to provide the student with the skills needed to enter a career in the field of electronics as a technician, engineering assistant, or an assistant to scientific personnel working with systems or processes which depend principally upon electronics equipment.

A student will be considered as selected for this program when the student has an AS/AAS/Technical Certificate Graduation Status Sheet File Maintenance Form, signed by the student and program director, on file.

Students with an inadequate basic skills background will be required to enroll in the level of mathematics and/or English necessary to acquire program entry skills. The student's score on the entry test given during the orientation process will be used to determine readiness for program entry.

The student completing the one-year certificate for Electronics Engineering Technology program may expect to develop general entry level skills for employment in local industries where service of basic electronic equipment is required.

Recommended Course Sequence	Course Number and Title	Credits
General Education		
3	ENC 1101 English Composition I	3
1	MAC 1104 College Algebra	4
5	MAC 1114 College Trigonometry	3
		credit hours 10
Professional and Other Required Courses		
4	EET 1015C DC Theory and Circuits	3
8	EET 1025C AC Theory and Circuits	3
6	EET 2121C Introduction to Solid State Electronics	3
10	EET 2119C Amplifier Circuits	3
11	EET 2142C Linear Semiconductor Analysis	3
12	EST 2112 Electrical-Electronic Control Systems	3
7	CET 2112C Introduction to Digital Electronics	3
9	CET 2113C Computer Logic Circuits	3
2	COC 2001 Computer Concepts	3
		credit hours 27
		Total credit hours 37

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Electronics Engineering Technology

- ENC 1101 - English Composition I
- MAC 1104 - College Algebra
- EET 1015C - DC Theory and Circuits
- COC 2001 - Computer Concepts

Associate in Applied Science

Electrical/Electronics Technology

The objective of this AAS program is to prepare the student for a career in the fields related to Electrical/Electronics Technology. This two-year program is designed with core courses to meet the requirements necessary for each specialized area by providing theory, skills development, safety and first aid training. Specialty courses provide knowledge and work tasks directed to special technical areas.

Theory and "hands-on" laboratory experiences are provided to train the students to keep pace with, and display competence in, sophisticated and complex electrical/electronics equipment, instruments, and technical information which are being developed continuously by the various industries.

Students enrolled in this program of study are required to complete the General Education Requirements, core courses, and one of the specialty tracks listed. Courses not indicated for prerequisites are designed for entry at any time, irrespective of skill level. Further, it is not required that core courses be completed prior to registration for specialty courses.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AAS - Electrical/Electronics Technology (Air Conditioning and Appliance Specialty)

ENC 1101	- English Composition I
MGF 1202	- College Mathematics
EER 1100	- Electric Theory I
ACR 1000	- Introduction to Air Conditioning and Refrigeration
ACR 2170	- Air Conditioning and Refrigeration Wiring Diagrams and Schematics

Course Number and Title	Credits
General Education	
ENC 1101 English Composition I	3
*Humanities	3
MGF 1202 College Mathematics	3
PHY 1020 Physics for Liberal Arts	3
*Social Science	3
	credit hours 15
*Refer to AS degree General Education Requirements.	
Core Courses:	
COC 2001 Computer Concepts	3
EER 1004 Blueprint and Schematic Reading	3
EER 1030 Safety in Electrical Trades	3
EER 1067 Mechanical Devices for Electricians	3
EER 1100 Electrical Theory I	3
EER 1210 Electrical Theory II	3
EER 1291 Semiconductor Devices	4
EER 2261 AC/DC Machinery and Transformers	3
	credit hours 25
Specialty Courses	
Air Conditioning and Appliance Specialty	
ACR 1000 Introduction to Air Conditioning and Refrigeration	4
ACR 2170 Air Conditioning and Refrigeration Wiring Diagrams and Schematics	4
ACR 2060 Psychrometrics and Heat Load Calculations	4
ACR 2601 Air Conditioning: Commercial and Residential	4
ACR 2811 Basic Air Conditioning Troubleshooting	4
EER 2311 Home Appliance Maintenance and Service I	4
EER 2312 Home Appliance Maintenance and Service II	4
	credit hours 28
	=
	Total credit hours 68

Electrical/Electronics Technology (Cont.)

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Industrial Electronics Specialty

EER 1100	- Electrical Theory I
EER 1210	- Electrical Theory II
EER 1291	- Semiconductor Devices
EER 2411	- Digital Electronics
EER 2139	- Sinusoidal Electronics

Industrial Electricity Specialty

ENC 1001	- English Composition I
MGF 1202	College Mathematics
EER 1100	- Electrical Theory I
EER 1210	- Electrical Theory II
EER 1291	- Semiconductor Devices

Course Number and Title	Credits
-------------------------	---------

Industrial Electronics Specialty

EER 1211	Introduction to Circuit Analysis	3
EER 2351	Test Equipment Maintenance and Service	4
EER 2352	Advanced Electrical/Electronic Systems	3
EER 2360	Basic Circuit Diagnosis and Repair	4
EER 2411	Digital Electronics	4
EET 2139	Sinusoidal Electronics	3
EER 2821	Non-Sinusoidal Electronics	4
CET 2141C	Computer Circuit Analysis	4
	credit hours	29
	Total credit hours	69

Industrial Electricity Specialty

EER 2068	Mechanical Skills for Electricians	3
EER 2131	Control of DC Machines	3
EER 2223	Control of AC Machines	3
EST 2110	Industrial Applications of Solid State Devices	4
EER 2451	Heating and Air Conditioning for Electricians	3
EER 2401	Industrial Electrical Installations	3
MTR 1100	Welding for Related Trades	4
**Approved Professional Electives		6
	credit hours	29
	Total credit hours	69

**Approved Professional Electives:

ENC 2210	Technical Report Writing	3
ETI 1700	Industrial Safety	3
ETI 2681	Industrial Supervision	3
IEA 1305	Industrial Survival Procedures	3
MAN 2800	Small Business Management	3

Technical Certificate

Electrical/Electronics Technology

The objective of this Technical Certificate program is to prepare the student for entry into a career in the fields related to electrical/electronics technology. The program is designed to provide the student with the requirements of the electrical/electronics trades by offering courses in the basic skills, safety, first aid training, and specialty courses depending upon the student's particular interests.

Students enrolled in this program of study are required to complete the General Education, core courses, and courses in one of the specialty tracks listed.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate – Electrical/Electronics Technology

Air Conditioning Specialty

- MGF 1202 – College Mathematics
- EER 1100 – Electrical Theory I
- EER 1210 – Electrical Theory II
- ACR 1000 – Introduction to Air Conditioning and Refrigeration
- ACR 2170 – Air Conditioning and Refrigeration Wiring Diagrams and Schematics

Industrial Electronics Specialty

- MGF 1202 – College Mathematics
- EER 1100 – Electrical Theory I
- EER 1210 – Electrical Theory II
- EER 1211 – Introduction to Circuit Analysis
- EET 2139 – Sinusoidal Electronics

Industrial Electricity Specialty

- MGF 1202 – College Mathematics
- EER 1100 – Electrical Theory I
- EER 1210 – Electrical Theory II
- EER 2131 – Control of DC Machines
- EER 2222 – Control of AC Machines

Course Number and Title	Credits
General Education	
FNC 1101 English Composition I	3
MGF 1202 College Mathematics	3
	credit hours 6
Core Courses:	
EER 1004 Blueprint and Schematic Reading	3
EER 1067 Mechanical Devices for Electricians	3
EER 1100 Electrical Theory I	3
EER 1210 Electrical Theory II	3
EER 1291 Semiconductor Devices	4
EER 2261 AC/DC Machinery and Transformers	3
	credit hours 19

Specialty Courses

Air Conditioning and Appliance Specialty

ACR 1000 Introduction to Air Conditioning and Refrigeration	4
ACR 2170 Air Conditioning and Refrigeration Wiring Diagrams and Schematics	4
EER 2311 Home Appliance Maintenance and Service I	4
	credit hours 12
	Total credit hours 37

Industrial Electronics Specialty

EER 1211 Introduction to Circuit Analysis	3
EER 2360 Basic Circuit Diagnosis and Repair	4
EET 2139 Sinusoidal Electronics	3
	credit hours 10
	Total credit hours 35

Industrial Electricity Specialty

EER 2068 Mechanical Skills for Electricians	3
EER 2131 Control of DC Machines	3
EER 2222 Control of AC Machines	3
EER 2401 Installations	3
	credit hours 12
	Total credit hours 37

Associate in Science

Mechanical Engineering Technology

Mechanical Engineering Technology is a two-year AS degree program designed to provide the student with the needed skills to enter a career in the field of mechanical engineering as a technician, engineering assistant or an assistant to scientific personnel working with systems or processes which depend principally upon mechanical equipment.

A student will be considered as selected for this program when the student has an AS/AAS/Technical Certificate Graduation Status Sheet File Maintenance Form, signed by the student and program director, on file.

Students with an adequate basic skills background will be required to enroll in the level of mathematics and/or English necessary to acquire program entry skills. The student's score on the entry test given during the orientation process will be used to determine readiness for program entry.

Completion of the Mechanical Engineering Technology program may lead to employment as a technician working with manufacturers or vendors of mechanical equipment/systems including heat transfer equipment, systems of pneumatic and hydraulic drives, mechanical power systems and in other areas requiring the application of principles, methods and techniques appropriate to the particular branch of mechanical engineering in which the technical is employed.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Mechanical Engineering Technology

- ENC 1101 - English Composition I
- MAC 1104 - College Algebra
- ETD 1100C - Engineering Drawing
- EET 1015C - DC Theory and Circuit
- ETI 1421C - Engineering Materials & Processes

Recommended Course Sequence	Course Number and Title	Credits
General Education		
20	*Humanities	3
16	*Social Science	3
5	ENC 1101 English Composition I	3
1	MAC 1104 College Algebra	4
7	MAC 1114 College Trigonometry	3
11	PHY 2053C General Physics I	4
15	PHY 2054C General Physics II	4
		credit hours 24
Professional and Other Required Courses		
6	EGN 1130C Descriptive Geometry	3
9	ENC 2210 Technical Report Writing	3
2	ETD 1100C Engineering Drawing	3
8	ETD 1645C Mechanical and Electrical Drafting	3
4	EET 1015C DC Theory and Circuits	3
10	EET 1025C AC Theory and Circuits	3
14	ETG 2504C Engineering Mechanics	4
17	ETG 2535C Testing and Strength of Materials	4
3	ETI 1421C Engineering Materials and Processes	3
13	ETI 1700 Industrial Safety	3
19	ETI 2681 Industrial Supervision	3
12	ETM 2221 Elements of Applied Energy	3
18	ETM 2310C Fluid Mechanics	3
21	ETM 2610C Air Conditioning and Heating	3
		credit hours 44
		=
		Total credit hours 68
*Refer to AS degree General Education Requirements		

Technical Certificate

Mechanical Engineering Technology

The Mechanical Engineering Technology 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, the safety department, or in the maintenance department of a manufacturing or industrial organization.

A student will be considered selected for this program when the student has an AS/AAS/Technical Certificate Graduation Status Sheet File Maintenance Form, signed by the student and program director, on file.

Students with an inadequate basic skills background will be required to enroll in the level of mathematics and/or English necessary to acquire program entry skills. The student's score on the entry test given during the orientation process will be used to determine readiness for program entry.

Graduates of this certificate program may opt to continue studies for the Associate in Science degree in Mechanical Engineering Technology.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate - Mechanical Engineering Technology

- ENC 1101 - English Composition I
- MAC 1104 - College Algebra
- ETD 1100C - Engineering Drawing
- ETI 1421C - Engineering Materials & Processes

Recommended Course Sequence	Course Number and Title	Credits
General Education		
12	*Humanities	3
5	ENC 1101 English Composition I	3
1	MAC 1104 College Algebra	4
6	MAC 1114 College Trigonometry	3
		credit hours 13
Professional and Other Required Courses		
8	ENC 2210 Technical Report Writing	3
3	ETD 1100C Engineering Drawing	3
7	ETD 1645C Mechanical and Electrical Drafting	3
2	EET 1026C DC Theory and Circuits	3
9	EET 1015C AC Theory and Circuits	3
11	ETC 2504C Engineering Mechanics	4
4	ETI 1421C Engineering Materials and Processes	3
10	ETI 1700 Industrial Safety	3
		credit hours 25
		=
		Total credit hours 38
*Refer to AS degree General Education Requirements		

Associate in Applied Science

Metal Trades Technology

The objective of this AAS 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 trade technologies.

Students enrolled in this AAS program of study are required to take the General Education Requirements and core courses listed, as well as specialty courses.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AAS - Metals Trades Technology

Industrial Machinist Specialty

- ENC 1101 - English Composition I
 * Mathematics/Natural Science
 ETI 1421C - Engineering Materials and Processes
 MTR 2484 - Machine Measurement
 MTR 1472 - Machine Lathe Work

Sheet Metal Specialty

- * - Mathematics/Natural Science
 MTR 1301 - Introduction to Sheet Metal Practices
 MTR 1311 - Basic Pattern Development and Fabrication
 MTR 1313 - Intermediate Pattern Development and Fabrication I
 MTR 1314 - Intermediate Pattern Development and Fabrication II

Course Number and Title

Credits

General Education

*General Education Elective	3
*Humanities	3
*Social Science	3
*Mathematics-Natural Science	3
ENC 1101 English Composition I	3
	credit hours 15

*Refer to AS Degree General Education Requirements.

Core Courses:

ETD 1100C	Engineering Drawing	3
IEA 1305	Industrial Survival Procedures	3
**MTR 1100	Welding for Related Trades	4
ETI 1421C	Engineering Materials and Processes	3
ETM 2800	Fundamentals of Metallurgy	3
MTR 1171	Introduction to Non-Destructive Testing for Welders	3
		***credit hours 19

Specialty Courses

Industrial Machinist Specialty

MTR 2484	Machine Measurement	3
MTR 1472	Machine Lathe Work	4
MTR 1004	Machine Bench Work	4
MTR 1474	Surface Grinder Methods and Procedures	4
MTR 2481	Vertical Milling Methods and Procedures	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
		Total credit hours 67

Sheet Metal Specialty

MTR 1301	Introduction to Sheet Metal Practices	3
MTR 1311	Basic Pattern Development and Fabrication	4
MTR 1313	Intermediate Pattern Development and Fabrication I	4
MTR 1314	Intermediate Pattern Development and Fabrication II	4
MTR 2316	Advanced Pattern Development and Fabrication I	4
MTR 2317	Advanced Pattern Development and Fabrication II	4
MTR 2345	Practicum in Sheet Metal	3
MTR 2123	Advanced Gas Metal Arc Welding	4
****Professional Elective		3
		credit hours 33
		Total credit hours 67

Metal Trades Technology (Cont.)

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Welding Specialty

ENC 1101	English Composition I
*	– Mathematics/Natural Science
ETI 1421C	– Engineering Materials and Processes
MTR 1120	– Basic Shielded Metal-Arc Welding



Course Number and Title	Credits
-------------------------	---------

Welding Specialty

MTR 1120	Basic Shielded Metal-Arc Welding	4
MTR 1121	Advanced Shielded Metal-Arc Welding	4
MTR 1122	Basic Gas Metal-Arc Welding	4
MTR 2123	Advanced Gas Metal Arc Welding	4
MTR 2126	Gas Tungsten Arc Welding Tubing and Pipe (T.L.G.)	4
MTR 2142	Shielded Metal Arc Welding of Pipe	4
MTR 2146	Gas Metal Arc Pipe Welding (M.I.G.)	4
MTR 2147	Basic Gas Tungsten Arc Welding (T.L.G.) Pipe and Tubing	4
	credit hours	32
	=	=
	Total credit hours	62

**Welding majors not required to take MTR 1100

**Sheet Metal substitute a math course to be approved by the assistant dean.

**For welding majors 16 credit hours of core courses required.

****Approved Professional Electives:

Any course from Metal Trades Technology Special Courses or:

	credit courses	
GEB 1011	Introduction to Business	3
BUL 2111	Business Law I	3
ACG 1003	General Accounting I	3
COC 2001	Computer Concepts	3
ETI 2681	Industrial Supervision	3
ACG 2001	Principles of Accounting I	3
ETD 1645C	Mechanical and Electrical Drafting	3
ETG 2504C	Engineering Mechanics	4
MAN 2800	Small Business Management	3

Technical Certificate

Metal Trades Technology

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

The Certificate in Metal Trades Technology is designed to provide the student with the knowledge/skill requirements necessary for metals trades by providing basic skills, safety, and first aid training common to metal trades. The specialty courses provide the knowledge/skills directed to specific metal trades technologies.

Students enrolled in this certificate program of study are required to take the General Education and core courses listed, as well as specialty courses.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

Technical Certificate – Metal Trades Technology

Industrial Machinist Specialty

- * – Mathematics/Natural Science
- ETD 1100C – Engineering Drawing
- ETI 1421C – Engineering Materials and Processes
- MTR 2484 – Machine Measurement
- MTR 1472 – Machine Lathe Work

Sheet Metal Specialty

- * – Mathematics/Natural Science
- MTR 1301 – Introduction to Sheet Metal Practices
- MTR 1311 – Basic Pattern Development and Fabrication
- MTR 1313 – Intermediate Pattern Development and Fabrication I
- MTR 1314 – Intermediate Pattern Development and Fabrication II

Welding Specialty

- * – Mathematics/Natural Science
- ETD 1100C – Engineering Drawing
- ETI 1421C – Engineering Materials and Processes
- MTR 1122 – Basic Gas Metal Arc Welding
- MTR 2126 – Gas Tungsten Arc Welding Tubing and Pipe (T.I.G.)

Course Number and Title	Credits
General Education	
*Mathematics/Natural Science	3
	—
	credit hours 3
*Refer to AS degree General Education requirements.	
Core Courses:	
ETD 1100C Engineering Drawing	3
IEA 1305 Industrial Survival Procedures	3
ETI 1421C Engineering Materials and Processes	3
	—
	credit hours 9
Specialty Courses	
Industrial Machinist Specialty	
MTR 2484 Machine Measurement	3
MTR 1472 Machine Lathe Work	4
MTR 1004 Machine Bench Work	4
MTR 1474 Surface Grinder-Methods and Procedures	4
MTR 2481 Vertical Milling Methods and Procedures	4
	—
	credit hours 19
	—
	Total credit hours 31
Sheet Metal Specialty	
MTR 1301 Introduction to Sheet Metal Practices	3
MTR 1311 Basic Pattern Development and Fabrication	4
MTR 1313 Intermediate Pattern Development and Fabrication I	4
MTR 1314 Intermediate Pattern Development and Fabrication II	4
MTR 2316 Advanced Pattern Development and Fabrication I	4
MTR 2317 Advanced Pattern Development and Fabrication II	4
	—
	credit hours 23
	—
	Total credit hours 35
Welding Specialty	
MTR 1122 Basic Gas Metal-Arc Welding	4
MTR 2123 Advanced Gas Metal Arc Welding	4
MTR 2126 Gas Tungsten Arc Welding Tubing and Pipe (T.I.G.)	4
MTR 2142 Shielded Metal Arc Welding of Pipe	4
MTR 2147 Basic Gas Tungsten Arc Welding (T.I.G.) Pipe and Tubing	4
	—
	credit hours 20
	—
	Total credit hours 32

Associate in Science

Printing/Graphic Arts

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

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

The program director, with the approval of the assistant dean, may require additional courses or make substitutions required to meet the needs of students.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Course Number and Title	Credits
General Education	
*Social Science	3
*Humanities	3
*Mathematics - Natural Science	3
FNC 1101 English Composition I	3
****General Education Electives	3
	credit hours 15
Professional and Other Required Courses	
GRA 1500 Theory of Printing Processes	5
GRA 1502L Printing Processes Lab	4
GRA 1540 Layout and Design	3
GRA 1503 Theory of Lithographic Processes	5
GRA 1504L Lithographic Processes Lab	4
GRA 1706 Graphic Arts Estimating	3
**GRA 2537L Cold Type Typesetting and Pasteup	3
***GRA 2538L Advanced Cold Type Typesetting and Pasteup	5
**GRA 2532L Hand and Machine Composition and Form Makeup	3
***GRA 2533L Advanced Composition and Makeup	5
**GRA 2571L Camera Operation and Film Processing	3
***GRA 2573L Advanced Camera Operation and Film Processing	5
**GRA 2601L Negative Stripping and Offset Platemaking	3
***GRA 2602L Advanced Stripping and Offset Platemaking	5
**GRA 2635L Offset Press Operation	3
***GRA 2638L Advanced Offset Press Operation	5
**GRA 2630L Letterpress Press Operation and Lockup	3
***GRA 2632L Advanced Letterpress Press Operation and Lockup	5
GRA 2945 Practicum	6
OST 1324 Business Mathematics Using Calculators	3
†Business Electives (3 hours of typing preferred)	6
	credit hours 47
	=
	Total credit hours 62
*Refer to AS degree General Education Requirements	
**Students are required to select one of these courses for three credits.	
***Students are required to select one of these courses for five credits.	
****Any course from AA degree General Education listing	
†Approved Business Electives	
ACG 2001 Principles of Accounting I	3
ACG 2011 Principles of Accounting II	3
ADV 2000 Advertising	3
BUL 2111 Business Law I	3
BUL 2112 Business Law II	3
CAP 1820 Microcomputer Application Software	3
COC 1300 Introductory Computer Concepts	3
COP 2110 FORTRAN Programming	3
COP 2170 Programming in BASIC	3
FIN 2000 Principles of Finance	3
FIN 2100 Personal Finance	3
GEB 1011 Introduction to Business	3
MAN 2021 Principles of Management	3
MAN 2300 Personnel Management	3
MAN 2800 Small Business Management	3
MAR 1011 Principles of Marketing	3
MAR 1101 Salesmanship	3
MAR 1301 Sales Promotion	3
MAR 2401 Sales Management	3
OST 1100 Beginning Typewriting I	3
OST 1102 Beginning Typewriting II	3
OST 1110 Intermediate Typewriting	3
OST 1150 Introduction to Word Processing	3
OST 2336 Business Communications	3

PROGRAMS OF STUDY

Pre-program Courses
 During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.
AS - Printing/Graphic Arts
 ENC 1101 English Composition I
 Any four GRA Courses

Associate in Science

Television Production

This two-year program is designed to prepare students for a career as professional television production personnel.

The growth of the TV production industry in recent years has increased the demand for experienced professionals in private industry, public service, education, health services and cable TV, as well as a continuing need by networks, television stations and production companies. The professional TV production person has a broad range of interests, both artistic and technical. The professional has experience in many production facilities and with all the equipment normally associated with TV production. The professional can move easily from the production of commercials, to sports, to news and public affairs, to drama and game shows. Experience, versatility, and creativity place the professional far above the average production personnel and much in demand.

NOTE: This Associate in Science degree program is intended primarily for students who desire to complete an associate degree and become employed rather than pursue the baccalaureate or bachelor degree. The student who does decide to pursue university transfer study must meet certain course and test requirements. For details refer to University Transfer Requirements on page 37 of the catalog.

Pre-program Courses

During your beginning semesters at the college you should complete the following. Upon completion, see your counselor/advisor to complete your admission to this program of study.

AS - Television Production

- ENC 1101 - English Composition I
 MAT 1033 - Intermediate Algebra
 RTV 2001C - Introduction to Broadcasting
 JOU 1001 - Introduction to Journalism

Course Number and Title	Credits
General Education	
*Humanities	3
*Social Science	3
ENC 1101 English Composition I	3
MAT 1033 Intermediate Algebra	3
Science GLY 1000, PCB 2030 or PHY 1020	3
SPC 1010 Fundamentals of Speech Communication	3
THE 1000 Introduction to Theatre	3
	credit hours 21
Professional and Other Required Courses	
ADV 2009 Advertising	3
EET 1004 Fundamentals of General Electricity	3
JOU 1001 Introduction to Journalism	3
MAN 2021 Principles of Management	3
MAR 1011 Principles of Marketing	3
MMC 2100 Writing for Mass Communications	3
RTV 1949 Co-op Work Experience	3
RTV 2949 Co-op Work Experience	3
RTV 2001C Introduction to Broadcasting	3
RTV 2200C An Introduction to Television Production	3
RTV 2206C Broadcast Direction	3
**Approved Electives	6
	credit hours 39
	=
	Total credit hours 60
*Refer to AS degree General Education Requirements	
**Approved Electives: (Six semester hours from any of the following):	
	credit hours
ARH 1000 Art Appreciation	3
ART 1600C Photography I	2
CAP 1820 Microcomputer Application Software	3
COC 1300 Introductory Computer Concepts	2
COP 2110 FORTRAN Programming	3
COP 2170 Programming in BASIC	3
CRW 2000 Imaginative Writing	3
ENC 1102 English Composition II	3
ENC 2210 Technical Report Writing	3
FIL 1505 The Movies as Art	3
MAN 2300 Personal Management	3
MAR 1101 Salesmanship	3
OST 1100 Beginning Typewriting	3