

ASSOCIATE IN SCIENCE/ASSOCIATE IN APPLIED SCIENCE DEGREES & CERTIFICATE PROGRAMS

ACCOUNTING TECHNOLOGY

Certificate in
Accounting Applications

AGRICULTURAL PRODUCTION TECHNOLOGY

Certificate in
Aquaculture Technology

AIR CONDITIONING, REFRIGERATION & HEATING SYSTEMS TECHNOLOGY

Certificate in
A/C, Refrigeration & Heating
Systems Technology

ARCHITECTURAL DESIGN & CONSTRUCTION TECHNOLOGY

AUTOMOTIVE SERVICE MANAGEMENT TECHNOLOGY

BUILDING CONSTRUCTION TECHNOLOGY

BUSINESS ADMINISTRATION

Certificate in
Business Management

CIVIL ENGINEERING TECHNOLOGY

COMPUTER INFORMATION TECHNOLOGY

Certificate in
- Cisco Certified
Network Associate

- Information Technology Support Specialist
- Computer Programming Specialist
- Web Production
- Office Specialist

CRIMINAL JUSTICE TECHNOLOGY A.S. CRIMINAL JUSTICE TECHNOLOGY A.A.S.

DENTAL ASSISTING TECHNOLOGY & MANAGEMENT

Applied Technology Diploma in
Dental Assisting Technology & Mgmt

DENTAL HYGIENE

DENTAL LABORATORY TECHNOLOGY & MANAGEMENT

DIGITAL MEDIA TECHNOLOGY

Certificate in
- Digital Media Production
- Digital Media Support

DRAFTING & DESIGN TECHNOLOGY

Certificate in
- AutoCad Foundations
- Drafting

EARLY CHILDHOOD EDUCATION

Certificate in
Child Development & Early Intervention

ELECTRICAL POWER TECHNOLOGY

ELECTRONICS ENGINEERING

TECHNOLOGY

Certificate in
- Lasers & Photonics
- Basic Electronics
- Electronic Technology

A.S. & A.A.S. DEGREES

Technical Certificate Programs

EMERGENCY ADMINISTRATION & MANAGEMENT

Certificate in

- Emergency Management
- Homeland Security

Emergency Manager

EMERGENCY MEDICAL SERVICES

Applied Technology Diploma in

Emergency Medical Technology

Certificate in Paramedic

FIRE SCIENCE TECHNOLOGY

GOLF COURSE OPERATIONS

Applied Technology Diploma in

- Turf Equipment

- Pest Control Operations

GRAPHICS TECHNOLOGY

Certificate in

- Graphic Design Support
- Graphic Design Production

HEALTH INFORMATION

MANAGEMENT

HEALTH SERVICES MANAGEMENT

HUMAN SERVICES

INTERIOR DESIGN TECHNOLOGY

Certificate in

Kitchen & Bath Design

LANDSCAPE & HORTICULTURE

TECHNOLOGY

Certificate in

- Landscape & Horticulture

Specialist

- Landscape & Horticulture Professional

- Landscape & Horticulture Technician

MARKETING MANAGEMENT

Certificate in

Marketing Operations

MEDICAL LABORATORY TECHNOLOGY

NUCLEAR MEDICINE TECHNOLOGY

NURSING, A.S. DEGREE - R.N.

Advanced Technical Certificate in

Perioperative Nursing

PARALEGAL STUDIES/LEGAL

ASSISTING

PHYSICAL THERAPIST ASSISTANT

Advanced Technical Certificate in

Manual Techniques for the PTA

RADIOGRAPHY

Certificate in

Nuclear Medicine Technology

Specialist

Advanced Technical Certificate in

PET/CT

RESPIRATORY CARE

Advanced Technical Certificate in

Advanced Respiratory Care Practice

RESTAURANT MANAGEMENT

THEATRE & ENTERTAINMENT

TECHNOLOGY

A.S. & A.A.S. DEGREES
Technical Certificate Programs

ASSOCIATE IN SCIENCE/ASSOCIATE IN APPLIED SCIENCE DEGREES and Technical Certificate Programs

The **Associate in Science** and **Associate in Applied Science** Degree programs are designed for students wishing to develop technical skills with emphasis on 21st Century employment opportunities. This two-year college degree program focuses on high technology careers, prepares students to compete effectively in the contemporary job market and transfers into the IRSC Baccalaureate Degree programs.

The **Technical Certificate** is awarded to a student who has completed the required number of college credit hours that are part of the two-year A.S. or A.A.S. Degree program. Students must complete at least twenty-five (25%) of the certificate course requirements at IRSC with a cumulative GPA of 2.0 or higher in the coursework for the Certificate.

The **Applied Technology Diploma (ATD)** consists of a course of study that is part of an Associate in Science (A.S.) or an Associate in Applied Science (A.A.S.) Degree and leads to employment. Student must have a high school diploma, submit required placement scores on the TABE test, and complete at least twenty-five (25%) of the ATD requirements at IRSC with a cumulative GPA of 2.0 or higher.

The Applied Technology Diploma and the Technical Certificate are designed to prepare the student to obtain employment as a skilled/paraprofessional worker. Students may then complete the remaining requirements for the Associate in Science or Associate in Applied Science Degree programs while employed.

The A.S. and A.A.S. Degrees include a cluster of General Education courses in the areas of Humanities/Fine Arts, Natural Science/Mathematics, and Social/Behavioral Science. Students also complete credits in an area of specialty, and additional credits are earned in technical support classes.

The **Advanced Technical Certificate (ATC)** is a specialized certification in a technical area beyond the award of the A.S./A.A.S. Degrees.

Effective Fall Term 2000, a statewide articulation agreement between the State University System and the Community Colleges of Florida provides for the articulation of selected Associate in Science Degrees to selected Baccalaureate Degrees (State Board of Education Rule 6A-10.024). The programs available at IRSC are Nursing-Associate Degree, Radiography and Criminal Justice. Consult Educational Services to determine specific requirements.

Other A.S. Degree programs not included in this agreement may also be accepted by public and private upper division institutions. This determination is made by the receiving university or college and not by IRSC. Consult Educational Services to determine specific requirements.

ASSOCIATE IN SCIENCE/ASSOCIATE IN APPLIED SCIENCE DEGREE REQUIREMENTS

To meet the requirements for the Associate in Science and Associate in Applied Science Degrees, the student must complete the required General Education courses and program specialty requirements as specified in this catalog. In addition, the student must:

1. Submit the required placement scores (ACTE, SATR, Florida Entry Level Placement Test) to IRSC. Students who test into college preparatory instruction must successfully complete the required college preparatory courses in English, math, and reading.
2. Achieve a cumulative grade point average of not less than 2.0 in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses taken at Indian River State College.
3. Demonstrate competency in the basic use of computers by passing a computer competency examination, by successfully completing an approved computer course (grade of "S" or "C" or better), or by completing an approved program of study that includes the basic use of computers.
 - A. The computer competency examination may be taken at any of the IRSC Assessment Services Department.

Demonstration of competency in the basic use of computers includes:

 - 1) running a Windows-based (or equivalent) program;
 - 2) using a word processing program to create, save, retrieve, edit, and print a file;
 - 3) using the Internet to send e-mail and to locate and to print specific reference materials.
 - B. Courses approved to meet the computer competency requirement for the Associate in Science or Associate in Applied Science Degree are: CGS 1060; CGS 1100; CIS 1000; EME 2040; OST 1713.
 - C. Completion of the Information Systems & Computer Applications CLEP examination with a minimum score of 50.
 - D. Programs approved to meet the computer competency requirement for the Associate in Science/Associate in Applied Science Degree are:
 - Accounting Technology
 - Agricultural Production Technology
 - Architectural Design and Construction Technology
 - Business Administration
 - Civil Engineering Technology
 - Computer Information Technology
 - Digital Media/Multimedia Technology
 - Drafting and Design Technology
 - Electronics Engineering Technology
 - Golf Course Operations
 - Graphics Technology
 - Health Information Management
 - Health Services Management

- Interior Design Technology
 - Landscape and Horticulture Technology
 - Marketing Management
 - Office Administration
 - Physical Therapist Assistant
 - Radiography
 - Theatre and Entertainment Technology
4. Students must complete at least twenty-five (25%) of the total program credits at IRSC.
 5. Students earning the Associate in Science Degree must earn a grade of “C” or higher in math and English courses selected that are designated as Gordon Rule courses.
 6. Apply for graduation by the published deadline date of the semester in which the student plans to graduate. See Academic Calendars near the front of this catalog for deadline dates.
 7. Pay the Commencement fee to participate in the appropriate Commencement Ceremony. For Spring graduates, the ceremony is in May and for Fall/Summer I & II graduates, the ceremony is in December.
 8. Be recommended by the faculty to the President of the College for the confirmation of the degree.

It is the responsibility of the student, not the College, to check his or her records to be sure that all of the above graduation requirements are met. An Educational Services Advisor/Counselor will assist at any time with course selections and in determining status toward meeting the graduation requirements.

SPECIAL REQUIREMENTS

Applicants to the Health Science programs at IRSC are subject to special admission requirements and dates. Therefore, it is imperative that applicants who wish to enroll in the Associate Degree Nursing, Dental Lab Technology, Dental Hygiene, Emergency Medical Services Technology, Medical Lab Technology, Physical Therapist Assistant, Radiography, and Respiratory Care Programs consult with an IRSC advisor/counselor well before the term of enrollment. Special application deadlines are noted in the Academic Calendar near the front of this catalog. Additional General Education credits may be required for specialized programs.

ASSOCIATE IN SCIENCE/ASSOCIATE IN APPLIED SCIENCE DEGREE COURSES REQUIRED FOR GRADUATION

GENERAL EDUCATION - A minimum of 15 credits of General Education courses are required. See Program Guides for specific requirements. At least one course from each of the following areas must be included:

HUMANITIES/FINE ARTS

*AML 2010, *AML 2020, *ARH 1000, *ARH 2050, *ARH 2051, ART 1300C, ART 1301C, ART 2500C, CHI 1120, CHI 1121, CHI 2220, CHI 2221, CRW 2001, CRW 2002, *ENC 1101, *ENC 1102, *ENC 1107, *ENC 2210, *ENC 2133, *ENG 1123, *ENG 1124, *ENL 2012, *ENL 2022, FRE 1120, FRE 1121, FRE 2220, FRE 2221, GER 1120, GER 1121, *HUM 1233, *HUM 1533, *HUM 1541, *HUM 2512, *IDS 1110, *IDS 1955,

*ISC 2133, *LIN 2670, *LIT 2030, *LIT 2110, *LIT 2120, LIT 2330, *MUL 2010, *MUL 2012, *MUY 2100, *ORI 1001, *PHH 2060, *PHH 2403, *PHH 2603, *PHI 1002, *PHI 1010, *PHI 1103, PHI 1450, *PHI 1112, *PHI 1635, *PHI 1801, *PHI 2620, *PHI 2623, *PHI 2630, REA 1205, *REL 1300, SPC 1300, *SPC 1608, SPN 1120, SPN 1121, SPN 2220, SPN 2221, *THE 1000, *THE 2300, *TPP 1110

*Gordon Rule Course

NATURAL SCIENCE/MATHEMATICS

Natural Science: AST 1002, AST 1002L, BOT 2010, BOT 2010L, BSC 1005, BSC 1005L, BSC 1009, BSC 1084, BSC 1254, BSC 1254L, BSC 1421, BSC 1421L, BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, BSC 2093, BSC 2093L, BSC 2094, BSC 2094L, CHM 1020, CHM 1045, CHM 1045L, CHM 1046, CHM 1046L, CHM 1083, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L, CHS 1510, ESC 1000, GLY 1010, MCB 2010, MCB 2010L, MET 1001, OCB 1000, OCB 1000L, OCB 1630, OCB 1630L, OCE 2001, OCE 2001L, OCE 2013, PCB 1030, PHY 1020, PHY 2048, PHY 2048L, PHY 2049, PHY 2049L, PHY 2053, PHY 2053L, PHY 2054, PHY 2054L, PSC 1341, PSC 1341L

*Mathematics: MAC 1105, MAC 1140, MGF 2106, MGF 2107, MAC 1114, MAC 2311, MAC 2312, MAC 2313, MAC 2233, MAC 2234, MAD 2104, MAP 2302, MAS 2103, MTG 2204, STA 2023, PHI 2100, (MAT 1033 and MTB 1321 may be used for A.A.S. programs, not Gordon Rule)

*Gordon Rule – must achieve a grade of “C” or higher for the Associate in Science Degree.

Regardless of degree requirements, a series of college preparatory math courses will be required of all students who test into college preparatory level math.

SOCIAL/BEHAVIORAL SCIENCE

AFH 1000, AMH 2010, AMH 2020, ANT 1000, ANT 2010, ANT 2140, ANT 2402, ANT 2410, ASN 1010, CPO 2002, DEP 2004, ECO 2000, ECO 2013, ECO 2023, EUH 2000, EUH 2001, EUH 2002, GEA 2000, INR 2002, INR 2500, POS 1041, POS 2112, PSY 2012, SYG 2000, SYG 2010, WOH 2012, WOH 2022, WOH 2040

When college level exams are successfully passed for Advanced Placement (AP), International Baccalaureate (IB), and the College Level Examination Program (CLEP), the following courses can be awarded for General Education Requirements:

HUMANITIES – AML X000 (CLEP), ENL X000 (CLEP)

MATHEMATICS - STA 2014 (AP), MAC X147 (CLEP), MHF X202 (IB), MHF X209 (IB)

SCIENCE – CHM X020 (AP and CLEP), ISC X050 (IB), ISC X051 (AP), PHY X020 (IB)

SOCIAL SCIENCE – EUH X009 (AP), GEO X400 (AP), AMH X000 (AP)

ADDITIONAL REQUIREMENTS

READING

Regardless of degree requirements, a series of college preparatory reading courses will be required of all students who test into college preparatory level reading.

ELECTIVES

Additional credits may be required in specific technical fields to complete the degree program. Refer to Program Guides on the following pages for specific program requirements.

COMPUTER COMPETENCY – see page 144.

PROGRAM GUIDES

To earn the Associate in Science or Associate in Applied Science Degree, certain General Education requirements and courses for the major must be satisfactorily completed. The following programs meet the requirements for the Associate in Science or Associate in Applied Science Degree and include the required and elective courses generally recommended for job preparedness.

In planning a program of study at Indian River State College, the student is urged to consult an Educational Services Advisor/Counselor. The student is advised to review the overall requirements of the degree program before making course selections.

Final responsibility for choice of program and courses selected rests with the student. Please note, the Planned Major required for the IRSC Application for Admission is the five digit number following the Program Title.

PRACTICAL TRAINING

An important component of many of the Associate in Science and Associate in Applied Science Degree programs is the practical training experience. This experience is designed to complement and enhance the theoretical program requirements and is closely supervised by IRSC instructors. Specific training activities and assignments are included in course requirements and students in these classes meet at least weekly with instructors to discuss progress, goals, and activities. The credit-hour assignment and grading systems used for these classes is consistent with all other resident college courses. Specific descriptions for these courses are included in the Course Description section of this catalog. Students are encouraged to contact the department chairperson if they have questions regarding any of these classes.

ACCOUNTING TECHNOLOGY

20450 - 64 CREDITS

ACCOUNTING APPLICATIONS CERTIFICATE - 60010

This degree program prepares graduates for intermediate-level accounting positions within the wide range of industries prominent on the Research Coast. While providing a strong theoretical foundation, this program emphasizes the development of marketable skills required to succeed in today's highly competitive business world. Traditional classroom instruction is supplemented by "hands-on" micro-computer programming experience to mirror today's accounting services climate.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 and ENC 1102 or SPC 1608..... 6 credits

Natural Science/Mathematics

STA 2023..... 3 credits

Social/Behavioral Science

ECO 2013, ECO 2023 6 credits

MAJOR FIELD REQUIRED COURSES - 33 credits

CGS 1060 College Computing..... 3 credits
or

CGS 1100 Intro to Computer Applications for Business..... 3 credits

ENC	2200	Business Communications	3 credits
or			
ENC	2210	Technical Communications.....	3 credits
MNA	2100	Interpersonal Relations in Business	3 credits
or			
SLS	1261	Essentials of Contemporary Leadership.....	3 credits
ACG	2001	Financial Accounting I	3 credits
ACG	2011	Financial Accounting II	3 credits
ACG	2071	Managerial Accounting	3 credits
ACG	2100	Intermediate Accounting.....	3 credits
BUL	2241	Business Law I	3 credits
CTS	1205	Excel I	3 credits
MAT	1033	Intermediate Algebra.....	3 credits
TAX	2000	Income Tax.....	3 credits

MAJOR FIELD ELECTIVES - Select 16 credits

GEB	1011	Introduction to Business.....	3 credits
or			
GEB	1931	Introduction to Business Technology	3 credits
APA	1152	Orientation to QuickBooks.....	1 credit
APA	1153	QuickBooks II.....	1 credit
BUL	2242	Business Law II.....	3 credits
CGS	1555	Orientation to Internet.....	1 credit
CIS	1000	Introduction to Information Technology	3 credits
COP	2700	Database Programming	3 credits
ETI	1932	Introduction to Technology.....	3 credits
FIN	2001	Introduction to Finance	3 credits
MAN	2021	Principles of Management.....	3 credits
MAR	2011	Principles of Marketing	3 credits
PSY	2012	Introduction to Psychology.....	3 credits

Students may enhance their career success by first completing the 27 credits outlined below which comprise the **Accounting Applications** certificate. Attaining the A.S. Degree is then simply a matter of completing the General Education required courses and the remaining credits of **Major Field** and **Elective** courses.

ACCOUNTING APPLICATIONS CERTIFICATE - 60010 - 27 CREDITS

MAJOR FIELD REQUIRED COURSES - 18 credits

CGS	1100	Intro to Computer Applications for Business.....	3 credits
or			
CTS	1205	Excel I	3 credits
ACG	2001	Financial Accounting I	3 credits
ACG	2011	Financial Accounting II	3 credits
ACG	2071	Managerial Accounting	3 credits
ACG	2100	Intermediate Accounting.....	3 credits
TAX	2000	Income Tax.....	3 credits

MAJOR FIELD ELECTIVES - Select 9 credits

ECO	2013	Principles of Economics Macro	3 credits
or			
ECO	2023	Principles of Economics Micro	3 credits
ENC	2200	Business Communications	3 credits
or			
ENC	2210	Technical Communications.....	3 credits
MNA	2100	Interpersonal Relations in Business	3 credits
or			
SLS	1261	Essentials of Contemporary Leadership.....	3 credits
APA	1152	Orientation to QuickBooks.....	1 credit
BUL	2241	Business Law I.....	3 credits
CGS	1060	College Computing	3 credits
COP	2700	Database Programming.....	3 credits

AGRICULTURAL PRODUCTION TECHNOLOGY**A0010 - 60 CREDITS****ASSOCIATE IN APPLIED SCIENCE DEGREE****AQUACULTURE TECHNOLOGY CERTIFICATE - 60170**

Agriculture, one of the Research Coast's leading industries, offers unmatched career opportunities. Today, all phases of agriculture, from research to production to marketing, demand skilled employees who have the educational background and technical training to develop and apply new technological advances in the field. The A.A.S. Degree in Agricultural Production Technology is designed for students who wish to enter the industry at a mid-management level after two years of college. The Degree offers two areas of specialization: Aquaculture, and Environmental Horticulture.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101..... 3 credits

Natural Science/Mathematics

see page 146..... 3 credits

Social/Behavioral Science

see page 146..... 3 credits

Humanities/Fine Arts or Natural Science/Mathematics

or Social/Behavioral Science

OCE 2001, OCB 1000 or CHM 1020 recommended 6 credits

MAJOR FIELD REQUIRED COURSES - 19 credits

AEB	1132	Farm Management.....	3 credits
AEB	2104	Principles of Agricultural Economics.....	4 credits
CGS	1060	College Computing	3 credits
MAN	2021	Principles of Management.....	3 credits
MAR	2011	Principles of Marketing	3 credits
SBM	1000	Entrepreneurship	3 credits

SUGGESTED SPECIALIZATION ELECTIVES – Select 26 credits**AQUACULTURE**

FAS	1010	Introduction to Aquaculture	3 credits
FAS	2020	Principles of Fish Aquaculture.....	4 credits
FAS	2150	Principles of Crustacean Aquaculture.....	4 credits
FAS	2151	Principles of Molluscan Aquaculture	4 credits
FAS	2252	Aquatic Animal Health Management	4 credits
FAS	2412	Water Quality, Systems & Operations	4 credits

ENVIRONMENTAL HORTICULTURE

HOS	1010	Fundamentals of Horticulture	4 credits
HOS	1060	Compost & Recycling	3 credits
ORH	1231	Lawn Care Maintenance	3 credits
ORH	1510	Plant Identification	3 credits
ORH	2841	Landscape Installation.....	3 credits
ORH	2859	Landscape Design & Maintenance	3 credits
PMA	2211	Insects & Diseases of Ornamental Plants	3 credits
SWS	2104	Soils & Fertilizers.....	3 credits

MAJOR FIELD ELECTIVES

AEB	1943	Agribusiness Work Experience	1 - 3 credits
AGR	1540C	Fundamental Principles of Arboriculture	3 credits
AGR	1930	Special Topics in Arboriculture	1 credit
BUL	2241	Business Law I.....	3 credits
BUL	2242	Business Law II.....	3 credits
CGS	1000	Introduction to Computer Usage	3 credits
CGS	1100	Intro to Computer Applications for Business	3 credits
DIM	1001	Introduction to Diesel Engines	4 credits
ENY	1002	Fundamentals of Entomology.....	3 credits
ETD	1320	Introduction to AutoCAD.....	3 credits
ETD	2568C	CAD-Landscape	3 credits
ETI	1932	Introduction to Technology.....	3 credits
FAS	2930	Special Topics in Aquaculture.....	1 - 4 credits
HOS	1930	Special Topics in Horticulture.....	1 - 4 credits
MAN	2300	Introduction to Human Resource Management.....	3 credits
MAR	2011	Principles of Marketing.....	3 credits
ORH	1511	Plant Identification II	3 credits
ORH	1710	Environmental Landscape Management.....	1 credit
ORH	2601	Retail Nursery Operations.....	3 credits
PMT	1100	Welding Certification Prep	½ credit
PMT	1120	Electrical Welding I.....	4 credits
PMT	1125	Electrical Welding II.....	4 credits
PMT	1128	Combination Welding.....	4 credits
PMT	2930	Welding Fabrication Techniques	3 credits
PMT	2931	Welding Design & Fabrication	4 credits
SWS	1102	Irrigation Systems I.....	3 credits
SWS	2304	Irrigation Systems II.....	3 credits
SPN	1000	Spanish for Daily Use I.....	2 credits

AQUACULTURE TECHNOLOGY CERTIFICATE - 60170 - 26 credits**Select 26 credits from the following:**

FAS	1010	Introduction to Aquaculture	3 credits
FAS	2020	Principles of Fish Aquaculture	4 credits
FAS	2150	Principles of Crustacean Aquaculture.....	4 credits
FAS	2151	Principles of Molluscan Aquaculture	4 credits
FAS	2252	Aquatic Animal Health Management	4 credits
FAS	2412	Water Quality, Systems & Operations	4 credits
FAS	2930	Special Topics in Aquaculture.....	1 - 4 credits
AEB	1943	Agribusiness Work Experience	1 - 3 credits
AEB	1132	Farm Management.....	3 credits
SBM	1000	Entrepreneurship	3 credits

**AIR CONDITIONING, REFRIGERATION, &
HEATING SYSTEMS TECHNOLOGY****A0020 - 64 CREDITS****ASSOCIATE IN APPLIED SCIENCE DEGREE****AIR CONDITIONING, REFRIGERATION, & HEATING SYSTEMS TECHNOLOGY
CERTIFICATE - 60250**

As a result of the warm weather, South Florida has one of the nation's most active air conditioning industries. Today, all phases of the air conditioning, heating, and refrigeration industry require skilled employees who have the educational background and technical training to develop and apply new technological advances in the field. At the completion of the Associate in Applied Science Degree in Air Conditioning, Refrigeration, and Heating Systems Technology, graduates are prepared for employment opportunities in residential, commercial, and industrial air conditioning, and refrigeration.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101..... 3 credits

Natural Science/Mathematics

MAT 1033 or higher..... 3 credits

Social/Behavioral Science

see page 146..... 3 credits

Humanities/Fine Arts or Natural Science/Mathematics

or Social/Behavioral Science

see pages 145 - 146..... 6 credits

MAJOR FIELD REQUIRED COURSES - 37 credits

ACR	1008	Principles of A/C & Refrigeration	3 credits
ACR	1112	Basic Electricity for A/C & Refrigeration	3 credits
ACR	1101	Applied Electricity I	3 credits
ACR	1113	Applied Electricity II	3 credits
ACR	1103	HVAC Control Systems.....	3 credits
ACR	1208	Refrigerant Recovery & Reclaim	1 credit

ACR	1611	Heat.....	3 credits
ACR	1612	Heat Pump Systems.....	3 credits
ACR	1740	Components of Refrigeration	3 credits
ACR	2067	Heating & Cooling Load Calculations.....	3 credits
ACR	2071	A/C & Heating Service Management.....	3 credits
ACR	2421	Duct Systems.....	3 credits
ACR	2745	Light Commercial Refrigeration & A/C.....	3 credits

MAJOR FIELD ELECTIVES - Select 12 credits

ACR	1931	Special Topics in HVAC.....	½ - 4 credits
ACR	1730	R-410A Certification	1 credit
ACR	1731	Green Mechanical Awareness Certification.....	1 credit
ACR	1946	A/C Cooperative Work Experience I	4 credits
ACR	1947	A/C Cooperative Work Experience II	4 credits
ACR	1948	A/C Cooperative Work Experience III	4 credits
ACR	1949	A/C Cooperative Work Experience IV	4 credits
AER	2758	Automotive A/C & Heating.....	4 credits
ETI	1932	Introduction to Technology.....	3 credits
ETM	1111	Energy in Building Design	3 credits
GEB	1931	Introduction to Business Technology	3 credits
PMT	1128	Combination Welding I.....	4 credits

**AIR CONDITIONING, REFRIGERATION, & HEATING SYSTEMS TECHNOLOGY
CERTIFICATE - 60250 - 25 CREDITS**

ACR	1008	Principles of A/C & Refrigeration	3 credits
ACR	1112	Basic Electricity for A/C & Refrigeration	3 credits
ACR	1101	Applied Electricity I	3 credits
ACR	1113	Applied Electricity II	3 credits
ACR	1208	Refrigerant Recovery & Reclaim	1 credit
ACR	1611	Heat.....	3 credits
ACR	1612	Heat Pump Systems.....	3 credits
ACR	2067	Heating & Cooling Load Calculations.....	3 credits
ACR	2071	A/C & Heating Service Management.....	3 credits

**ARCHITECTURAL DESIGN & CONSTRUCTION TECHNOLOGY
20460 - 66 CREDITS**

This degree trains students in the latest methods of producing drawings for a variety of business applications. Most courses combine classroom instruction with lab practice, where real life activities are emphasized. The professional architectural draftsman prepares construction plans for projects related to the building construction industry. Architectural offices, design/development firms, general contractors, and truss manufacturing plants are just a few of the businesses that engage architectural drafting services.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101.....	3 credits
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Natural Science/Mathematics		
PHY 1020		3 credits
Social/Behavioral Science		
see page 146		3 credits
Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science		
see pages 145 - 146		6 credits

MAJOR FIELD REQUIRED COURSES - 33 credits

BCN	1214	Materials & Methods-Basic Structure.....	3 credits
BCN	1215	Materials & Methods-Finishes & Systems.....	3 credits
BCN	1250	Architectural Drafting Principles.....	3 credits
BCN	2251	Architectural Drafting-Residential	3 credits
BCT	1760	Building Codes & Specifications.....	3 credits
ETD	1320	Introduction to AutoCAD.....	3 credits
ETD	1842	3D Visualization with AutoCAD	3 credits
ETD	2340	AutoCAD Level 2	3 credits
ETD	2395	CAD - Architectural	3 credits
ETM	1111	Energy in Building Design	3 credits
IND	1019	Commercial Interior Design II	3 credits

MAJOR FIELD ELECTIVES -Select 18 credits

BCT	1940	Professional Practice	3 credits
BCT	2770	Construction Est.-Foundation to Structure	3 credits
BCT	2772	Construction Est.-Finishes & Systems	3 credits
ETD	2568C	CAD – Landscape.....	3 credits
DIG	2302	3D Digital Animation I	3 credits
DIG	2303	3D Digital Animation 2.....	3 credits
ETD	2551	CAD - Civil.....	3 credits
ETI	1932	Introduction to Technology.....	3 credits
GIS	1060	Introduction to GIS with ArcGIS	3 credits
IND	1462	Introduction to Architectural CAD.....	3 credits
ORH	2859	Landscape Design & Maintenance	3 credits

AUTOMOTIVE SERVICE MANAGEMENT TECHNOLOGY

A0030 - 68 CREDITS

ASSOCIATE IN APPLIED SCIENCE DEGREE

In the Automotive Service Technology Program students receive a thorough foundation in all aspects of automotive services and maintenance. IRSC’s program is certified in all eight categories by the National Institute of Automotive Service Excellence (ASE), and provides essential training in both the theory and service of today’s automotive systems and components.

GENERAL EDUCATION

Humanities/Fine Arts		
ENC 1101		3 credits
Natural Science/Mathematics		
see page 146 (Recommend PHY 1020)		3 credits

Social/Behavioral Science

see page 146 (Recommend PSY 2012)..... 3 credits

Humanities/Fine Arts or Natural Science/Mathematics
or Social/Behavioral Science

see pages 145 - 146 (Recommend SPC 1300) 6 credits

MAJOR FIELD REQUIRED COURSES - 46 credits

AER	1081C	Introduction to Automotive Technology.....	3 credits
AER	1198	Engine Overhaul, Repair & Testing.....	4 credits
AER	1498	Suspension, Steering & Alignment.....	4 credits
AER	1598	Automotive Brake Systems.....	4 credits
AER	1694C	Introduction to Automotive Electrical Systems.....	3 credits
AER	2298	Automatic Transmissions & Transaxles.....	4 credits
AER	2398	Manual Drive Train & Axles.....	4 credits
AER	2895C	Advanced Engine Performance.....	4 credits
AER	2898C	Engine Performance.....	4 credits
AER	2695C	Advanced Automotive Electrical Systems.....	4 credits
AER	2758	Automotive A/C & Heating.....	4 credits
DIM	1001	Introduction to Diesel Engines.....	4 credits

MAJOR FIELD ELECTIVES - Select 7 credits

AER	1020C	Orientation to Vehicle Maintenance.....	1 - 3 credits
AER	1810	Automotive Work Experience.....	1 - 4 credits
AER	1937	Special Topics in Automotive.....	1/2 - 4 credits
ARR	1002	Automotive Body I.....	3 credits
CGS	1060	College Computing.....	3 credits
CGS	1100	Intro to Computer Applications for Business.....	3 credits
EGS	1110	Engineering Graphics.....	3 credits
GEB	1011	Introduction to Business.....	3 credits
MNA	2100	Interpersonal Relations in Business.....	3 credits
PMT	1128	Combination Welding I.....	4 credits
SBM	1000	Entrepreneurship.....	3 credits

**BUILDING CONSTRUCTION TECHNOLOGY
20470 - 64 CREDITS**

One of the prominent areas in the United States for new homes and commercial building construction, Florida provides many promising career opportunities for students involved in the building construction field. The Building Construction Technology program emphasizes practical application of management competencies needed by estimators, construction planners, field supervisors, project managers, sales managers, facility directors and managers, builders, and various entrepreneurs.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 and ENC 1102 or ENC 1107 or ENC 2210 6 credits

Natural Science/Mathematics

PHY 1020 or higher, MAC 1105 or higher 6 credits

Social/Behavioral Science

ECO 2000, ECO 2013, ECO 2023 3 credits

MAJOR FIELD REQUIRED COURSES - 45 credits

BCN	1214	Materials & Methods of Construction -Basic Structure	3 credits
BCN	1215	Materials & Methods of Construction -Finishes & Systems	3 credits
BCN	1272	Plans Interpretation - Residential.....	3 credits
BCN	1721	Construction Accounting & Cost Control.....	3 credits
BCN	1765	Codes & Regulations.....	3 credits
BCN	2040	Zero Energy Building Design and Construction.....	3 credits
BCN	2440	Concrete Construction Methods.....	3 credits
BCN	2592	Residential Energy Fundamentals	3 credits
BCT	1562	Plumbing & Electrical Systems.....	3 credits
BCT	1700	Construction Office Practices	3 credits
BCT	1760	Building Codes & Specifications.....	3 credits
BCT	2705	Construction Supervision.....	3 credits
BCT	2770	Construction Estimating -Foundation through Basic Structure.....	3 credits
BCT	2772	Construction Estimating- Finishes & Systems.....	3 credits
ETM	1111	Energy in Building Design	3 credits

MAJOR FIELD ELECTIVES - Select 4 credits

ACR	1008	Principles of A/C & Refrigeration	3 credits
BCN	1250	Architectural Drafting Principles.....	3 credits
BCN	1779	Construction Process & Procurement.....	1 credit
BCN	2275	Plans Interpretation - Commercial	3 credits
BCN	2599	Green Building and Energy Efficiency	3 credits
BCN	2598	Sustainable Building Systems	3 credits
BCN	2614	Computer Estimating of Construction Costs	3 credits
BCT	1703	Principles of Construction Management	3 credits
BCT	1931	Special Topics in Building Construction.....	1/2 - 3 credits
BCT	1940	Professional Practice	3 credits
ETD	1842	3D Visualization with AutoCAD	3 credits

Any **EET** or **EST** Solar Energy related courses.**BUSINESS ADMINISTRATION****20780 - 64 CREDITS****BUSINESS MANAGEMENT CERTIFICATE - 60030**

This degree prepares students for careers as supervisors and middle managers within both profit-making and governmental sector organizations. Specialized areas include Retail Marketing, Hospitality Management, Insurance, Real Estate and Customer Service, as well as others. While providing students with a sound theoretical foundation, this degree program emphasizes the development of marketable skills in planning, organizing, interpersonal dynamics, and technology.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 3 credits

Natural Science/Mathematics

see page 146 3 credits

Social/Behavioral Science

ECO 2000, ECO 2013 or ECO 2023 3 credits

Humanities/Fine Arts or Natural Science/Mathematics

or Social/Behavioral Science

see pages 145 - 146 6 credits

MAJOR FIELD REQUIRED COURSES - 33 creditsAPA 1111 Introduction to Accounting 3 credits
or

ACG 2001 Financial Accounting I 3 credits

CGS 1060 College Computing 3 credits
orCGS 1100 Intro to Computer Applications for Business 3 credits
or

CIS 1000 Introduction to Information Technology 3 credits

ENC 2200 Business Communications 3 credits
or

ENC 2210 Technical Communications 3 credits

MAN 2021 Principles of Management 3 credits
or

MNA 2345 Supervision 3 credits

MNA 2100 Interpersonal Relations in Business 3 credits
or

SLS 1261 Essentials of Contemporary Leadership 3 credits

QMB 1001 Mathematics of Business 3 credits
or

ACG 2011 Financial Accounting II 3 credits

BUL 2241 Business Law I 3 credits

FIN 2001 Introduction to Finance 3 credits

GEB 1011 Introduction to Business 3 credits

MAR 2011 Principles of Marketing 3 credits

SBM 1000 Entrepreneurship 3 credits

SUGGESTED SPECIALIZATION ELECTIVES - Select 16 credits**RETAIL MARKETING**

MKA 2041 Retail Management 3 credits

MKA 2104 Principles of Visual Merchandising 3 credits

HOSPITALITY MANAGEMENT

FOS 2201 Sanitation & Safety 3 credits

FSS 2263 Food Merchandising & Service 3 credits

HFT 1000 Introduction to Hospitality & Tourism 3 credits

HFT 2002 Management of the Hospitality Industry 3 credits

MKA 2323 Mid-Management Seminar & Supervised Exp. III 4 credits

INSURANCE MARKETING

RMI	1090	Customer Service Representative.....	3 credits
RMI	2500	Individual Life & Health Insurance.....	3 credits
RMI	2600	Property & Casualty Insurance.....	12 credits

REAL ESTATE MARKETING

REE	1040	Real Estate Principles & Practices I.....	4 credits
REE	1180	Real Estate Residential Appraisal ABI.....	6½ credits
REE	1271	Mortgage Broker License Course.....	2 credits
REE	2041	Real Estate Principles & Practices II.....	5 credits
REE	2080	Real Estate Sales Review.....	1 credit
REE	2541	Community Association Management.....	1 credit

CUSTOMER SERVICE

MKA	2021	Salesmanship.....	3 credits
MKA	2161	Customer Relations.....	1 credit
MKA	2323	Mid-Management Seminar III.....	4 credits
MNA	1162	Customer Service Technology.....	3 credits

FINANCE

FIN	1100	Personal Finance.....	3 credits
MKA	2021	Salesmanship.....	3 credits
MKA	2161	Customer Relations.....	1 credit
MNA	1162	Customer Service Technology.....	3 credits
MNA	2761	Strategic Planning.....	1 - 3 credits
MNA	2772	Human Relations in the Workplace.....	1 credit
MNA	2781	Communications in the Workplace.....	1 - 3 credits

GOLF SHOP AND GOLF SERVICES MANAGEMENT

GCO	2632	Golf Course Organization & Administration.....	3 credits
MKA	2041	Retail Management.....	3 credits
MKA	2323	Mid-Management Seminar III.....	4 credits

GOLF FACILITIES ADMINISTRATION AND MANAGEMENT

GCO	1402	Turfgrass Science.....	3 credits
GCO	1930	Special Topics in Golf Course Operations.....	1 credit
GCO	1947	Golf Course Design Concepts.....	3 credits
GCO	2632	Golf Course Organization & Administration.....	3 credits
HFT	1000	Introduction to Hospitality/Tourism.....	3 credits
PET	1121	Fundamentals of Golf.....	1 credit
PEL	1301	Introduction to Golf Management.....	3 credits
PEL	2121	Player Development.....	1 credit

GOLF FACILITIES FOOD AND BEVERAGE MANAGEMENT

GCO	2632	Golf Course Organization & Administration.....	3 credits
FOS	2201	Sanitation & Safety.....	3 credits
FSS	2263	Food Merchandising & Service.....	3 credits
MKA	2161	Customer Relations.....	1 credit
MKA	2323	Mid-Management Seminar III.....	4 credits

AVIATION

ATT	1941	Professional Development in Aviation I	3 - 6 credits
ATF	1941	Professional Development in Aviation II	2 - 9 credits

MAJOR FIELD ELECTIVES

AMH	2010	American History Discovery-Reconstruction.....	3 credits
AMH	2020	American History Reconstruction-Present.....	3 credits
BUL	2242	Business Law II.....	3 credits
ECO	2023	Principles of Economics Micro	3 credits
ETI	1091	Introduction to Emerging Technologies	3 credits
FIN	1100	Personal Finance.....	3 credits
GEB	1350	Introduction to International Business	3 credits
GEB	1931	Introduction to Business Technology	3 credits
MAN	2300	Introduction to Human Resource Management.....	3 credits
MKA	1303	Mid-Management Seminar I.....	4 credits
MKA	1313	Mid-Management Seminar II.....	4 credits
MKA	2323	Mid-Management Seminar III.....	4 credits
MNA	1821	Electronic Commerce.....	3 credits
MNA	2761	Strategic Planning.....	1 - 3 credits
MNA	2781	Communication in the Workplace.....	1 - 3 credits
MNA	2932	Professional Development.....	4 credits
RMI	1631	Accredited Claims Adjuster (ACA).....	3 credits
RMI	1930	4-40 to 2-20 Conversion Course.....	3 credits

Maximum of three courses with CGS, MAN, MKA, MNA, or SLS Prefix

Any one course from the following areas: courses with FRE, GER, ASL, or SPN Prefix

Students may enhance their career success by first attaining a **Certificate in Business Management (60030)** by completing 24 credits from the **Major Field Required** or the **Major Field Electives** sections listed in the degree. Attaining the A.S. Degree is then simply a matter of completing the General Education required courses and the remaining 25 credits of major field and elective courses.

**BUSINESS MANAGEMENT CERTIFICATE - 60190 - 24 CREDITS
(CAREER DEVELOPMENT PROGRAM)**

The Professional Career Program is a joint effort of the Career Development Program and the Business Management Department of IRSC. It is designed to enhance the job skills and education of women and men, in order to improve their potential for job satisfaction and promotion. Participants completing the 24 college credit hour curriculum are awarded a Technical Certificate in Business Management which may transfer toward the A.A.S. Degree in Business. Three sections of a Management Seminar permit participants to achieve 12 credits for work experience during their course of study.

CGS	1060	College Computing.....	3 credits
or			
CGS	1100	Intro to Computer Applications for Business.....	3 credits
GEB	1011	Introduction to Business.....	3 credits
MKA	1303	Mid-Management Seminar & Work Experience I	4 credits

MKA	1313	Mid-Management Seminar & Work Experience II	4 credits
MNA or	2100	Interpersonal Relations in Business	3 credits
MAR	2011	Principles of Marketing	3 credits
SLS	1261	Essentials of Contemporary Leadership.....	3 credits
QMB	1001	Mathematics of Business	3 credits
MKA	2161	Customer Relations.....	1 credit

CIVIL ENGINEERING TECHNOLOGY 20490 - 63 CREDITS

Civil Engineering Technology is devoted to the application of engineering principles and the implementation of technological advances in the civil engineering design process. The program provides students with the skills necessary to enter the field as a technician. After the student obtains a sound foundation in fundamentals through general and technical core courses, the individual may pursue studies in a variety of special engineering and scientific courses according to the individual's interests and educational objectives. This degree can also be a basis for the B.A.S. in Organizational Management at Indian River State College.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 and ENC 1102 or ENC 1107 or ENC 2210 6 credits

Natural Science/Mathematics

MAC 1105 or higher and PHY 1020 or higher..... 6 credits

Social/Behavioral Science

ECO 2000, ECO 2013, or ECO 2023..... 3 credits

MAJOR FIELD REQUIRED COURSES - 27 credits

EGS	1001	Introduction to Engineering	3 credits
EGS	1110	Engineering Graphics.....	3 credits
ETC	2521	Hydraulics & Hydrology	3 credits
ETD	1320	Introduction to AutoCAD.....	3 credits
ETD	2340	AutoCAD Level 2	3 credits
ETD	2551	CAD-Civil	3 credits
GIS	1060	Introduction to GIS with ArcGIS	3 credits
STA	2023	Elementary Statistics I	3 credits
SUR	1101	Basic Surveying & Mapping.....	3 credits

CORE SPECIALIZATION ELECTIVES – Select 21 credits

GEOGRAPHIC INFORMATION SYSTEM (GIS) CORE COURSES

GIS	1041	Introduction to GIS & GPS Application	3 credits
GIS	2080	AutoCAD Mapping and GIS	3 credits
GIS	2350	GIS & Wetlands/Water Resources	3 credits
GIS	2410	GIS & Land Planning.....	3 credits
GIS	2500	GIS & Business Planning	3 credits

SURVEYING CORE COURSES

ETD	2554C	CAD Surveying	3 credits
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SUR	2400	Legal Aspects of Land Surveying.....	3 credits
SUR	2402	Legal Descriptions.....	3 credits
SUR	2500	GPS, Electronic, & Geodetic Surveying.....	4 credits
SUR	2600	Intermediate Surveying.....	3 credits

MAJOR FIELD ELECTIVES

BCN	1250	Architectural Drafting Principles.....	3 credits
BCN	1272	Plans Interpretation - Residential.....	3 credits
BCN	1721	Construction Accounting & Cost Control.....	3 credits
BCT	1703	Principles of Construction Management.....	3 credits
BCT	1760	Building Codes and Specifications.....	3 credits
BCT	1940	Professional Practice.....	3 credits
ETD	1842	3D Visualization with AutoCAD.....	3 credits
ETD	2350C	AutoCAD Level 3.....	3 credits
DIG	2302	3D Digital Animation I.....	3 credits
DIG	2303	3D Digital Animation 2.....	3 credits
ETD	2395	CAD - Architectural.....	3 credits
ETD	2568C	CAD - Landscape.....	3 credits
OCB	1630	Marine Ecology.....	3 credits
OCE	2001	Introduction to Oceanography.....	3 credits
PCB	1030	Introduction to Ecology.....	3 credits

COMPUTER INFORMATION TECHNOLOGY

20500 - 63 CREDITS

CERTIFIED NETWORK ASSOCIATE CERTIFICATE - 60380

INFORMATION TECHNOLOGY SUPPORT SPECIALIST CERTIFICATE - 60390

COMPUTER PROGRAMMING SPECIALIST CERTIFICATE - 60400

WEB PRODUCTION CERTIFICATE - 60410

OFFICE SPECIALIST CERTIFICATE - 60420

This degree provides excellent preparation for a career in computer information technology including but not limited to: applications specialist, programmer, network specialist, and Internet developer. The curriculum provides the conceptual and technological skills required to analyze business situations and to design and develop computer and network hardware and software.

Students are encouraged to consider an area of specialization to enhance their employability. To see recommended curriculum frameworks focused toward such specializations, refer to the semester-by-semester diagrams posted on the IRSC website under Programs and Careers and follow the links under Advanced Technology.

GENERAL EDUCATION

Humanities/Fine Arts	
ENC 1101.....	3 credits
Natural Science/Mathematics	
PHI 2100 or STA 2023; and MAC 1105 or higher.....	6 credits
Social/Behavioral Science	
see page 146.....	3 credits

Humanities/Fine Arts or Natural Science/Mathematics
or Social/Behavioral Science

see pages 145 - 146 3 credits

MAJOR FIELD REQUIRED COURSES - 30 credits

CET	1178	A+ Certification Training I.....	3 credits
CTS	1650	CCNA1: Networking Basics.....	3 credits
CGS	1700	Introduction to Operating Systems.....	3 credits
CTS	2106	Advanced Operating Systems UNIX/Linux.....	3 credits
CIS	1000	Introduction to Information Technology.....	3 credits
CIS	2321	Computer Systems Design.....	3 credits
COP	1830	Web Programming.....	3 credits
COP	2000	Introduction to Computer Programming I.....	3 credits
CTS	1104	Windows Professional.....	3 credits
COP	1332	Visual Basic Programming.....	3 credits
or			
COP	2334	C++ Programming.....	3 credits

MAJOR FIELD ELECTIVES - Select 18 credits with at least 12 credits from the list below and a maximum of 6 credits from any course with CEN, CGS, CIS, CTS, or COP prefixes.

ACG	2001	Financial Accounting I.....	3 credits
CET	1854	Introduction to Wireless Technology.....	3 credits
CTS	2304	Windows Network Infrastructure.....	3 credits
CTS	2651	CCNA2: Router Technology.....	3 credits
CTS	2652	CCNA3: Advanced Routers.....	3 credits
CTS	2653	CCNA4: WAN Technologies.....	3 credits
CGS	1522	Microsoft PowerPoint.....	3 credits
CGS	1540	Introduction to Access.....	3 credits
CGS	1821	Website Development.....	3 credits
CGS	1843	Introduction to E-Commerce.....	3 credits
CGS	1876	Web Animation.....	3 credits
CGS	2172	E-Commerce Design.....	3 credits
CGS	2878	Multimedia Programming.....	3 credits
CIS	2350	Computer Security Policies & Disaster Preparedness.....	3 credits
CIS	2381	Computer Forensics.....	3 credits
COP	1800	Java Programming.....	3 credits
COP	2001	Computer Programming II.....	3 credits
COP	1332	Visual Basic Programming.....	3 credits
or			
COP	2334	C++ Programming.....	3 credits
COP	2360	C# Programming.....	3 credits
COP	2700	Database Programming.....	3 credits
COP	2841	Advanced Web Programming CGI/Perl.....	3 credits
COP	2842	Developing Web Sites Using PHP/Mysql.....	3 credits
CTS	1155	Introduction to Help Desk Concepts.....	3 credits
CTS	1205	Excel I.....	3 credits
CTS	1225	Advanced Excel.....	3 credits

CTS	1330	Implementation & Supporting MS-Exchange	3 credits
CTS	1334	Windows Server.....	3 credits
CTS	1347C	Server 2008 Network Infrastructure Configuration	3 credits
CTS	2303	Planning Implementing, and Maintaining a Windows Server Active Directory Infrastructure.....	3 credits
CTS	2306	Planning and Maintaining a Windows Server Network.....	3 credits
CTS	2310	Network Security	3 credits
CTS	2339C	Exchange Server 2007 Configuration	3 credits
CTS	2342C	Server 2008 Enterprise Administration.....	3 credits
CTS	2343C	Server 2008 Application Infrastructure Configuration	3 credits
CTS	2346C	Server 2008 Administration	3 credits
CTS	2437	Administering MS SQL Server.....	3 credits
ETI	1091	Introduction to Emerging Technologies	3 credits
GRA or	1121	Publication Design (QuarkXpress).....	3 credits
OST	2821	Desktop Publishing	3 credits
OST	1713	Microsoft Word	3 credits
OST	2601	Transcription Technologies	3 credits

CISCO CERTIFIED NETWORK ASSOCIATE CERTIFICATE - 60380 - 12 CREDITS

MAJOR FIELD ELECTIVES - 12 credits

CTS	1650	CCNA1: Networking Basics	3 credits
CTS	2651	CCNA2: Router Technology	3 credits
CTS	2652	CCNA3: Advanced Routers.....	3 credits
CTS	2653	CCNA4: WAN Technologies	3 credits

INFORMATION TECHNOLOGY SUPPORT SPECIALIST CERTIFICATE - 60390 - 18 CREDITS

MAJOR FIELD ELECTIVES - Select 18 credits

CET	1178	A+ Certification Training I.....	3 credits
CET	1179C	A+ Certification Training II.....	3 credits
CGS	1100	Computer Applications for Business.....	3 credits
CTS	1650	CCNA1: Networking Basics.....	3 credits
CTS	1104	Windows Professional	3 credits
CTS	1334	Windows Server.....	3 credits
CTS	1155	Introduction to Help Desk Concepts	3 credits

COMPUTER PROGRAMMING SPECIALIST CERTIFICATE - 60400 - 18 CREDITS

MAJOR FIELD ELECTIVES - Select 18 credits

COP	1332	Visual Basic Programming.....	3 credits
COP	1800	Java Programming.....	3 credits
COP	1830	Web Programming.....	3 credits
COP	2000	Introduction to Computer Programming I	3 credits
COP	2001	Computer Programming II.....	3 credits
COP	2334	C++ Programming	3 credits
COP	2360	C# Programming.....	3 credits
COP	2700	Database Programming.....	3 credits

COP	2841	Advanced Web Programming CGS/Perl.....	3 credits
CTS	2245	Visual Basic for Applications	3 credits

WEB PRODUCTION CERTIFICATE - 60410 - 15 CREDITS

MAJOR FIELD ELECTIVES - Select 15 credits

CGS	1821	Website Development.....	3 credits
CGS	1843	Introduction to E-Commerce.....	3 credits
CGS	1876	Web Animation	3 credits
CGS	2172	E-Commerce Design.....	3 credits
CGS	2878	Multimedia Programming.....	3 credits
COP	1800	Java Programming.....	3 credits
COP	1830	Web Programming.....	3 credits
COP	2000	Introduction to Computer Programming I.....	3 credits
COP	2841	Advanced Web Programming CGS/Perl.....	3 credits

OFFICE SPECIALIST CERTIFICATE - 60420 - 18 CREDITS

MAJOR FIELD REQUIRED COURSES - 18 credits

OST	1713	Microsoft Word	3 credits
CTS	1205	Excel 1.....	3 credits
CGS	1540	Introduction to Access.....	3 credits
CGS	1522	Microsoft PowerPoint	3 credits
ENC	2200	Business Communications	3 credits
or			
ENC	2210	Technical Communications.....	3 credits
APA	1111	Introduction to Accounting.....	3 credits

**CRIMINAL JUSTICE TECHNOLOGY
20520 - 64 CREDITS**

This degree offers the student a broad background in the history, philosophy, organization, management, and operation of the criminal justice system. In law enforcement, an emphasis is placed on the role of the police in the process of social control and in the legal and philosophical issues involved. In corrections, emphasis is placed on the supervision, protection, care, custody, and control of offenders. Opportunities for employment are available in law enforcement agencies, correctional institutions, juvenile courts, social service agencies, crime laboratories, and security agencies.

GENERAL EDUCATION

Humanities/Fine Arts			
	ENC 1101, ENC 1102.....		6 credits
Natural Science/Mathematics			
	see page 146.....		3 credits
Social/Behavioral Science			
	see page 113 in A.A. section of catalog.....		3 credits
Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science			
	see pages 113 - 114 in A.A. section of catalog.....		6 credits

MAJOR FIELD REQUIRED COURSES - 18 credits

CCJ	2020	Introduction to Criminal Justice.....	3 credits
CJC	2000	Introduction to Corrections.....	3 credits
CJL	2500	Introduction to the Courts.....	3 credits
CJL	2062	Constitutional Law.....	3 credits
CJL	2100	Criminal Law.....	3 credits
CCJ	1600	Deviant Behavior.....	3 credits

MAJOR FIELD ELECTIVES - Select 28 credits

CGS	1100	Intro to Computer Applications-Business.....	3 credits
or			
CGS	1060	College Computing.....	3 credits
ECO	2000	Introduction to Economics.....	3 credits
or			
ECO	2013	Principles of Economics Macro.....	3 credits
CJC	2162	Probation & Parole.....	3 credits
CJD	1940	Internship in Criminal Justice.....	3 - 4 credits
CJE	1000	Introduction to Law Enforcement.....	3 credits
CJE	1002	Police Procedures.....	3 credits
CJE	1325	Foundations of Law Enforcement Leadership.....	3 credits
CJE	2300	Police Organization and Administration.....	3 credits
CJE	2580	Investigative Interviews.....	3 credits
CJE	2600	Criminal Investigation.....	3 credits
CJE	2640	Introduction to Criminalistics.....	3 credits
CJJ	2002	The Juvenile & the Law.....	3 credits
CJL	1000	Fundamentals of Law.....	3 credits
CJL	2130	Rules of Evidence.....	3 credits
CJL	2403	Criminal Procedure.....	3 credits
DSC	1002	Terrorism & U.S. Security.....	3 credits
ECO	2023	Principles of Economics Micro.....	3 credits
POS	1041	American Government.....	3 credits
SYG	2010	Social Problems.....	3 credits

CRIMINAL JUSTICE TECHNOLOGY

A0100 - 64 CREDITS

ASSOCIATE IN APPLIED SCIENCE DEGREE

This program is designed to enhance the practical skills of the criminal justice professional by offering the student a broad background in the history, philosophy, organization, management, and operation of the criminal justice system. In law enforcement, an emphasis is placed on the role of the police in the process of social control and in the legal and philosophical issues involved. In corrections, emphasis is placed on the supervision, protection, care, custody, and control of offenders. Opportunities for employment are available in law enforcement agencies, correctional institutions, juvenile courts, social service agencies, crime laboratories, and security agencies.

GENERAL EDUCATION

Humanities/Fine Arts
 ENC 1101 3 credits

Natural Science/Mathematics
 see page 146 3 credits

Social/Behavioral Science
 see page 146 3 credits

Humanities/Fine Arts or Natural Science/Mathematics
 or Social/Behavioral Science
 see pages 145 - 146 6 credits

MAJOR FIELD REQUIRED COURSES - 18 credits

CCJ 2020 Introduction to Criminal Justice..... 3 credits

CJC 2000 Introduction to Corrections 3 credits

CJL 2500 Introduction to the Courts..... 3 credits

CJL 2062 Constitutional Law..... 3 credits

CJL 2100 Criminal Law 3 credits

CCJ 1600 Deviant Behavior 3 credits

***MAJOR FIELD ELECTIVES - Select 31 credits**

Select any Criminal Justice college credit course with the following prefixes: CJD, CCJ, CJT, CJL, CJE, CJC, CJJ, CJK

or any of the other following suggested courses:

CGS 1100 Intro to Computer Applications-Business 3 credits

or

CGS 1060 College Computing 3 credits

ECO 2000 Introduction to Economics 3 credits

or

ECO 2013 Principles of Economics Macro 3 credits

DSC 1002 Terrorism & U.S. Security 3 credits

DSC 1860 Introduction to Public Safety Careers 3 credits

DSC 1930 Current Topics in Public Safety 3 credits

DSC 1557 Florida Personal Radiation Detector 1 credit

DSC 1558 Detection Equipment for Law Enforcement..... 1 credit

ECO 2023 Principles of Economics Micro 3 credits

POS 1041 American Government 3 credits

SYG 2010 Social Problems..... 3 credits

Certain Criminal Justice courses have a prerequisite of Law Enforcement, Corrections, or Correctional Probation Florida Certification. For additional information, contact (772) 462-7676.

SUGGESTED ELECTIVES FOR SPECIALIZED TRAINING FOR PRIVATE INVESTIGATORS

CJE 1330 Ethics for the Justice System..... 3 credits

CJD 1940 Internship in Criminal Justice 3 - 4 credits

CJE 2580 Investigative Interviews..... 3 credits

CJE 2635 Injury & Death Investigations 3 credits

CJL 1000 Fundamentals of Law..... 3 credits

*Certified Officers may substitute a maximum of 20 credits of Basic or Advanced Training Courses for Major Field Electives. Contact the Criminal Justice Department for details regarding articulation of Academy training to the A.A.S. Degree.

DENTAL ASSISTING TECHNOLOGY AND MANAGEMENT
20750 - 70 CREDITS (SELECTIVE ADMISSION)
DENTAL ASSISTING TECHNOLOGY AND MANAGEMENT
APPLIED TECHNOLOGY DIPLOMA - B0050 (SELECTIVE ADMISSION)

This program prepares graduates for a professional career as a Dental Assistant as well as related dental fields such as marketing, management, and education. Students receive a well rounded general education along with online instruction and traditional labs with clinical experience specific to Dental Assisting Technology and Management.

GENERAL EDUCATION – *may be taken prior to acceptance into the program or must be completed while enrolled in the program.

*Humanities/Fine Arts

ENC 1101 3 credits

*Natural Science/Mathematics

see page 146 3 credits

*Social/Behavioral Science

see page 146 3 credits

*Humanities/Fine Arts or Natural Science/Mathematics

or Social/Behavioral Science

see pages 145 - 146 6 credits

MAJOR FIELD REQUIRED COURSES - 50 credits

DEA	1028	Preclinical Orientation.....	6 credits
DEA	1028L	Preclinical Orientation Lab	2 credits
DES	1800	Introduction to Clinical Procedures.....	2 credits
DES	1800L	Introduction to Clinical Procedures Lab.....	2 credits
DES	1100	Elements of Dental Materials.....	2 credits
DES	1100L	Elements of Dental Materials Lab.....	1 credit
DES	1840	Preventive Dentistry	1 credit
DES	1840L	Preventive Dentistry Lab.....	1 credit
DES	1200L	Dental Radiography Lab	1 credit
DES	1020	Head Neck and Dental Anatomy	3 credits
DEA	1805	Clinical Practice I.....	2 credits
DEA	1805L	Clinical Practice I Lab.....	4 credits
DES	1832	Expanded Functions I.....	2 credits
DES	1832L	Expanded Functions I Lab	1 credit
DES	1833	Expanded Functions II.....	2 credits
DES	1833L	Expanded Functions II Lab	1 credit
DES	2502	Dental Office Management.....	1 credit
DES	2502L	Dental Office Management Lab	1 credit
DEA	1136	Related Dental Theory	4 credits
DEA	1931	Orthodontics Expanded Functions	1 credit
DES	1051	Nitrous Oxide Monitoring.....	1 credit
DES	1600	Office Emergencies	2 credits
DES	1200	Dental Radiography.....	2 credits

DEA	1855	Clinical Practice II.....	1 credit
DEA	1855L	Clinical Practice II Lab.....	4 credits

SPECIALIZATION ELECTIVES - 5 credits****EDUCATIONAL METHODOLOGIES AND STRATEGIES**

EDF	1081	Introduction to Multicultural Education.....	½ - 3 credits
SLS	1101	Student Success.....	3 credits
EME	2040	Introduction to Technology for Educators.....	3 credits
EDF	2085	Introduction to Diversity & Exceptionalities for Educators ...	3 credits
HSC	1242	Instructing Health Professionals.....	1 - 3 credits
CGS	1060	College Computing.....	3 credits
or			
CGS	1100	Introduction to Computer Application for Business.....	3 credits

MARKETING

GEB	1011	Introduction to Business.....	3 credits
ECO	2013	Principles of Economics (Macro).....	3 credits
ECO	2023	Principles of Economics (Micro).....	3 credits
MAR	2011	Principles of Marketing.....	3 credits
MKA	2021	Salesmanship.....	3 credits
MKA	1303	Mid-Management Seminar I.....	4 credits
CGS	1060	College Computing.....	3 credits
or			
CGS	1100	Introduction to Computer Application for Business.....	3 credits

PRACTICE MANAGEMENT

APA	1111	Introduction to Accounting.....	3 credits
MAN	2021	Principles of Management.....	3 credits
MAN	2300	Introduction to Human Resource Management.....	3 credits
MKA	2161	Customer Relations.....	1 credit
MNA	2100	Interpersonal Relations in Business.....	3 credits
MNA	2345	Supervision.....	3 credits
HSC	2632	Overview of Health Care Delivery.....	4 credits
HSA	2182	Health Services Management Concepts.....	4 credits
CGS	1060	College Computing.....	3 credits
or			
CGS	1100	Introduction to Computer Application for Business.....	3 credits

All core curriculum courses require a grade of "C" or higher.

Students may choose to specialize in an area for career opportunities by taking five credits from one of the **Specialization Electives listed above and on the previous page.

DENTAL ASSISTING TECHNOLOGY AND MANAGEMENT**APPLIED TECHNOLOGY DIPLOMA B0050 - 50 CREDITS (SELECTIVE ADMISSION)**

Students may enhance their career success by first completing the 50 credit hour Applied Technology Diploma which is designed to prepare students for a career as an Expanded Functions Dental Assistant. Attaining the A.S. Degree is then simply a matter of completing the General Education required courses and specialty elective courses.

MAJOR FIELD REQUIRED COURSES - 50 credits

DEA	1028	Preclinical Orientation.....	6 credits
DEA	1028L	Preclinical Orientation Lab	2 credits
DES	1800	Introduction to Clinical Procedures.....	2 credits
DES	1800L	Introduction to Clinical Procedures Lab.....	2 credits
DES	1100	Elements of Dental Materials.....	2 credits
DES	1100L	Elements of Dental Materials Lab.....	1 credit
DES	1840	Preventive Dentistry.....	1 credit
DES	1840L	Preventive Dentistry Lab.....	1 credit
DES	1200L	Dental Radiography Lab	1 credit
DES	1020	Head Neck and Dental Anatomy	3 credits
DEA	1805	Clinical Practice I.....	2 credits
DEA	1805L	Clinical Practice I Lab.....	4 credits
DES	1832	Expanded Functions I.....	2 credits
DES	1832L	Expanded Functions I Lab	1 credit
DES	1833	Expanded Functions II.....	2 credits
DES	1833L	Expanded Functions II Lab	1 credit
DES	2502	Dental Office Management.....	1 credit
DES	2502L	Dental Office Management Lab	1 credit
DEA	1136	Related Dental Theory	4 credits
DEA	1931	Orthodontics Expanded Functions.....	1 credit
DES	1051	Nitrous Oxide Monitoring.....	1 credit
DES	1600	Office Emergencies	2 credits
DES	1200	Dental Radiography.....	2 credits
DEA	1855	Clinical Practice II.....	1 credit
DEA	1855L	Clinical Practice II Lab.....	4 credits

All core curriculum courses require a grade of “C” or higher.

**DENTAL HYGIENE
20530 - 88 CREDITS (SELECTIVE ADMISSION)**

IRSC’s Dental Hygiene Program prepares students to take the Dental Hygiene National and State Licensure Board examinations. Students accepted into the program receive a well-rounded General Education with a strong emphasis on dental hygiene skills.

GENERAL EDUCATION – *may be taken prior to acceptance into the program or must be completed while enrolled in the program.

*Humanities/Fine Arts	
ENC 1101, SPC 1608.....	6 credits
*Natural Science/Mathematics	
CHM 1020, BSC 2093, BSC 2093L, BSC 2094, BSC 2094L, MCB 2010, MCB 2010L.....	15 credits
*Social/Behavioral Science	
PSY 2012, SYG 2000	6 credits

MAJOR FIELD REQUIRED COURSES - 61 credits

DEH	1003	Pre-Clinical Dental Hygiene	1 credit
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DEH	1003L	Pre-Clinical Dental Hygiene Lab	2 credits
DEH	1130	Oral Embryology & Histology.....	2 credits
DEH	1300	Pharmacology.....	2 credits
DEH	1800	Clinical Dental Hygiene I.....	2 credits
DEH	1800L	Clinical Dental Hygiene I Lab.....	3 credits
DEH	1802	Clinical Dental Hygiene II.....	2 credits
DEH	1802L	Clinical Dental Hygiene II Lab.....	2 credits
DEH	2602	Periodontology.....	2 credits
DEH	2602L	Periodontology Lab.....	1 credit
DEH	2702	Community Dental Health.....	2 credits
DEH	2702L	Community Dental Health Lab	1 credit
DEH	2804	Clinical Dental Hygiene III.....	2 credits
DEH	2804L	Clinical Dental Hygiene III Lab.....	4 credits
DEH	2806	Clinical Dental Hygiene IV.....	2 credits
DEH	2806L	Clinical Dental Hygiene IV Lab.....	5 credits
DEH	2400	General Oral Pathology.....	2 credits
DES	1020	Head, Neck & Dental Anatomy.....	3 credits
DES	1100	Elements of Dental Materials.....	2 credits
DES	1100L	Elements of Dental Materials Lab.....	1 credit
DES	1600	Health Office Emergencies	2 credits
DES	1800	Introduction to Clinical Procedures.....	2 credits
DES	1800L	Introduction to Clinical Procedures Lab.....	1 credit
DES	1840	Preventive Dentistry.....	1 credit
DES	1840L	Preventive Dentistry Lab.....	1 credit
DES	2530C	Expanded Functions for Dental Hygienists.....	2 credits
DES	1200	Dental Radiography.....	2 credits
DES	1200L	Dental Radiography Lab	1 credit
DES	2502	Dental Office Management.....	1 credit
DES	1051	Nitrous Oxide Monitoring.....	1 credit
DES	2051	Pain Control & Anesthesia	1 credit
HUN	1201	Nutrition	3 credits

All core curriculum and natural science courses require a grade of "C" or higher. Anatomy and Physiology I and corequisite lab must be completed prior to taking DEH courses. Dental Hygiene applicants are required to take BSC 2010, General Biology I, as a prerequisite for Anatomy and Physiology I. Introduction to Chemistry and Anatomy and Physiology II and corequisite lab must be completed by the end of the Fall semester, first year. Microbiology and corequisite lab must be completed by the end of the Spring semester, first year.

DENTAL LABORATORY TECHNOLOGY AND MANAGEMENT

A0050 - 68 CREDITS (SELECTIVE ADMISSION)

ASSOCIATE IN APPLIED SCIENCE DEGREE

The Dental Lab Technology (DLT) Program leads to eligibility to take the National Certification Exam for Dental Lab Technologists. Students accepted into the program receive a strong General Education with an emphasis on dental lab skills which enables them to construct dentures, crowns, bridges, and orthodontic appliances from dentists' prescriptions. The program consists of one-third classroom instruction and two-thirds "hands-on" lab practice.

GENERAL EDUCATION – *may be taken prior to acceptance into the program or must be completed while enrolled in the program.

*Humanities/Fine Arts

ENC 1101 3 credits

*Natural Science/Mathematics

CHM 1020 or higher, PHY 1020 or higher 6 credits

*Social/Behavioral Science

see page 146 3 credits

*Humanities/Fine Arts or Natural Science/Mathematics

or Social/Behavioral Science

see pages 145 - 146 3 credits

MAJOR FIELD REQUIRED COURSES - 53 credits

DTE	1050	Dental Materials I.....	2 credits
DTE	1010	Oral Anatomy	2 credits
DTE	1020	Tooth Physiology & Anatomy Theory.....	2 credits
DTE	1020L	Tooth Physiology & Anatomy Lab.....	3 credits
DTE	1103	Complete Denture Theory.....	2 credits
DTE	1103L	Complete Denture Lab.....	4 credits
DTE	1132	Orthodontic & Pedodontic Theory.....	1 credit
DTE	1132L	Orthodontic & Pedodontic Lab	2 credits
DTE	2030	Occlusal Topography Theory.....	1 credit
DTE	2030L	Occlusal Topography Lab	2 credits
DTE	2107	Partial Denture Theory.....	2 credits
DTE	2107L	Partial Denture Lab	4 credits
DTE	2141	Ceramic Theory.....	2 credits
DTE	2141L	Ceramic Lab.....	4 credits
DTE	2150	Crown & Bridge Theory	2 credits
DTE	2150L	Crown & Bridge Lab.....	4 credits
DTE	2151	Advanced Prosthodontics Theory.....	2 credits
DTE	2151L	Advanced Prosthodontics Lab	4 credits
DTE	2180	Dental Laboratory Operations	2 credits
DTE	2191	Assimilation of Dental Technology	2 credits
DTE	2200	Ethics & Jurisprudence	1 credit
SBM	1000	Entrepreneurship	3 credits

DIGITAL MEDIA TECHNOLOGY

20760 - 64 CREDITS

DIGITAL MEDIA SUPPORT CERTIFICATE – 60360

DIGITAL MEDIA PRODUCTION CERTIFICATE – 60370

This program prepares students for careers in the rapidly emerging digital media, modeling, simulation, and gaming industries. Specializations within this degree include computer graphic design, animation, modeling, and entry-level game development. This degree requires the integration of art principles, design concepts, communication skills, and computer fluency to enter the field of digital media technology as a technical specialist. Students obtain a solid foundation in digital media through a core of

required courses and continue their education and training in their preferred area of specialization. This degree can also be a basis for the B.A.S. in Digital Media at Indian River State College.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 and ENC 1102, SPC 1608, or PHI 1801..... 6 credits

Natural Science/Mathematics

PHY 1020 or higher, MAC 1105 or higher 6 credits

Social/Behavioral Science

see page 146 3 credits

MAJOR FIELD REQUIRED COURSES - 33 credits

DIG	1000	Digital Media Principles	3 credits
DIG	1115	Digital Imaging Fundamentals.....	3 credits
DIG	2030	Digital Video Fundamentals.....	3 credits
DIG	2251	Digital Audio Fundamentals.....	3 credits
DIG	2430	Digital Story Development for Film and Gaming.....	3 credits
DIG	2581	Digital Media Portfolio Fundamentals	3 credits
DIG	2302	3D Digital Animation I	3 credits
DIG	2303	3D Digital Animation 2.....	3 credits
GRA	1129	Visualization Basics	3 credits
GRA	2160	Digital Animation I	3 credits
GRA	2161	Digital Animation 2.....	3 credits

SUGGESTED SPECIALIZATION ELECTIVES - Select 16 credits

MODELING AND SIMULATION

DIG	2341	Introduction to Motion Graphics.....	3 credits
DIG	2500	Fundamentals of Interactive Design	3 credits
DIG	2370	Advanced 3D Animation - Character/Rigging.....	3 credits
DIG	2322	Modeling for Real Time Systems.....	3 credits
ETD	2364	3D Modeling with Solidworks	3 credits

GAMING AND VIDEO PRODUCTION

CGS	2878	Multimedia Programming.....	3 credits
COP	1800	Java Programming.....	3 credits
COP	2000	Introduction to Computer Programming.....	3 credits
COP	2360	C# Programming.....	3 credits
DIG	2203	Digital Video 2 Production	3 credits

MAJOR FIELD ELECTIVES

ART	1201C	Color and Design I.....	3 credits
ART	1203C	Color and Design 2.....	3 credits
ART	1300C	Drawing I.....	3 credits
CGS	1821	Website Development	3 credits
CGS	1876	Web Animation	3 credits
DIG	1930	Special Topics in Digital Media.....	1/2 - 3 credits
GRA	1121	Publication Design (QuarkXpress).....	3 credits
GRA	1151	Illustrator Fundamentals.....	3 credits

PGY	1801	Introduction to Digital Photography.....	1 credit
DIG	2292	Digital Video 3 - Post Production.....	3 credits
DIG	2116	Photoshop Level 2.....	3 credits
GRA	2152	Illustrator Level 2.....	3 credits
GRA	1206	Typography.....	3 credits
FIL	1030	History of Film.....	3 credits
TPA	1200	Beginning Stagecraft	3 credits

Up to two courses with PGY prefix

DIGITAL MEDIA SUPPORT CERTIFICATE – 60360 - 15 CREDITS

The Digital Media Support Certificate offers basic preparation for a career as a Digital Media Support Technician or developer. Students are trained in video creation and 2D/3D animation production techniques as well as basic graphic design, photo enhancement, illustrations, layout, and non-linear video editing techniques.

MAJOR FIELD REQUIRED COURSES – 15 credits

DIG	1115	Digital Imaging Fundamentals.....	3 credits
DIG	2030	Digital Video Fundamentals.....	3 credits
DIG	2203	Digital Video 2 Production	3 credits
GRA	2160	Digital Animation I.....	3 credits
GRA	2161	Digital Animation 2.....	3 credits
or			
CGS	1876	Web Animation	3 credits

DIGITAL MEDIA PRODUCTION CERTIFICATE – 60370 - 24 CREDITS

The Digital Media Production Certificate offers advanced preparation for a career as a Digital Media Production Creator or Web Production Assistant. Students are trained in the advanced operations of digital media creation, Web content design, and animation development as well as complex graphic design, photo enhancement, illustrations, layout, and non-linear video editing and production techniques.

MAJOR FIELD REQUIRED COURSES – 24 credits

DIG	1115	Digital Imaging Fundamentals.....	3 credits
GRA	1151	Illustrator Fundamentals.....	3 credits
DIG	2302	3D Digital Animation I.....	3 credits
CGS	1821	Website Development	3 credits
GRA	2161	Digital Animation 2.....	3 credits
DIG	2030	Digital Video Fundamentals.....	3 credits
DIG	2203	Digital Video 2 Production	3 credits
GRA	2160	Digital Animation I.....	3 credits
or			
CGS	1876	Web Animation	3 credits

DRAFTING AND DESIGN TECHNOLOGY
20540 - 62 CREDITS
AUTOCAD FOUNDATIONS CERTIFICATE – 60320
DRAFTING CERTIFICATE – 60330

This program prepares students for a career as a professional CAD technician. The disciplines covered include architecture, civil engineering, surveying, mechanical engineering, and landscape design, with emphasis in the latest technologies used for rendering, architectural “walk-through,” three-dimensional computer animation, and solid and surface modeling. Surveying, architectural, civil and mechanical engineering firms, as well as county offices and manufacturing plants are among the potential employers of this program’s graduates. This degree can also be a basis for the B.A.S. in Organizational Management at Indian River State College.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 and ENC 1102 or ENC 1107 or ENC 2210 6 credits

Natural Science/Mathematics

PHY 1020 and MAC 1105..... 6 credits

Social/Behavioral Science

ECO 2000, ECO 2013, or ECO 2023..... 3 credits

MAJOR FIELD REQUIRED COURSES - 15 credits

DIG 1115 Digital Imaging Fundamentals..... 3 credits

EGS 1001 Introduction to Engineering 3 credits

ETD 1320 Introduction to AutoCAD..... 3 credits

ETD 1842 3D Visualization with AutoCAD 3 credits

ETD 2340 AutoCAD Level 2 3 credits

SUGGESTED SPECIALIZATION ELECTIVES - Select 32 credits

ARCHITECTURAL CORE COURSES

BCN 1250 Architectural Drafting Principles..... 3 credits

BCN 1272 Plans Interpretation - Residential..... 3 credits

BCN 2275 Plans Interpretation - Commercial 3 credits

BCT 1703 Principles of Construction Management 3 credits

BCT 1760 Building Codes & Specifications..... 3 credits

ETD 2395 CAD – Architectural 3 credits

CIVIL ENGINEERING CORE COURSES

EGS 1110 Engineering Graphics..... 3 credits

ETD 2551 CAD – Civil 3 credits

ETD 2554C CAD – Surveying 3 credits

ETD 2568C CAD – Landscape..... 3 credits

GIS 1060 Introduction to GIS with ArcGIS 3 credits

GIS 2080 AutoCAD Mapping and GIS 3 credits

MECHANICAL ENGINEERING/MANUFACTURING CORE COURSES

EGS 1110 Engineering Graphics..... 3 credits

ETD 2364 3D Modeling with Solidworks 3 credits

ETD 2365 CAD – Mechanical..... 3 credits

ETD	2371	Introduction to Prototyping	3 credits
ETI	2110	Introduction to Quality Control.....	3 credits
ETI	2414	Introduction to CNC Machining	3 credits

MAJOR FIELD ELECTIVES

BCN	2251	Architectural Drafting-Residential	3 credits
BCN	2614	Computer Estimating of Construction Costs	3 credits
BCT	1700	Construction Office Practices	3 credits
BCT	1940	Professional Practice	3 credits
BCT	2770	Construction Est.-Foundations through Basic Structure	3 credits
BCT	2772	Construction Est.-Finishes & Systems	3 credits
ETD	1315	Orientation to AutoCAD	3 credits
ETD	1316	Orientation to AutoCAD Applications.....	½ credit
PGY	1801	Introduction to Digital Photography.....	1 credit
ETD	2350C	AutoCAD Level 3	3 credits
DIG	2302	3D Digital Animation I	3 credits
DIG	2303	3D Digital Animation 2.....	3 credits
ETD	2930	Special Topics in Drafting	1 - 3 credits
ETM	1111	Energy in Building Design	3 credits

AUTOCAD FOUNDATIONS CERTIFICATE – 60320 - 15 CREDITS

The AutoCAD Foundations Certificate offers excellent preparation for a career as an entry-level CAD technician. Students are trained in the basic operations in AutoCAD’s two major disciplines as well as technical drawing, dimensioning, and sketching techniques.

MAJOR FIELD REQUIRED COURSES – 15 credits

BCN	1250	Architectural Drafting Principles.....	3 credits
or			
EGS	1110	Engineering Graphics.....	3 credits
ETD	1320	Introduction to AutoCAD.....	3 credits
ETD	2340	AutoCAD Level 2	3 credits
ETD	2365	CAD – Mechanical	3 credits
ETD	2395	CAD – Architectural	3 credits
or			
ETD	2551	CAD – Civil	3 credits

DRAFTING CERTIFICATE – 60330 - 24 CREDITS

The Drafting Certificate offers outstanding preparation for a career as a superior CAD technician. Students are trained in the advanced operations in AutoCAD’s three major disciplines as well as technical drawing, dimensioning, sketching, and advanced 3D modeling techniques.

MAJOR FIELD REQUIRED COURSES – 24 credits

BCN	1250	Architectural Drafting Principles.....	3 credits
EGS	1110	Engineering Graphics.....	3 credits
ETD	1320	Introduction to AutoCAD.....	3 credits
ETD	2340	AutoCAD Level 2	3 credits
ETD	2364	3D Modeling with Solidworks	3 credits

ETD	2365	CAD – Mechanical.....	3 credits
ETD	2395	CAD – Architectural.....	3 credits
ETD	2551	CAD – Civil.....	3 credits

**EARLY CHILDHOOD EDUCATION
20480 - 63 CREDITS**

CHILD DEVELOPMENT & EARLY INTERVENTION CERTIFICATE - 60040

This program is designed for students pursuing a career in the child care industry. Career goals include teaching in the private sector or teacher’s aide in public and private programs.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101.....	3 credits
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Natural Science/Mathematics

see page 146 (BSC 1005).....	3 credits
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Social/Behavioral Science

see page 146 (PSY 2012).....	3 credits
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Humanities/Fine Arts or Natural Science/Mathematics

or Social/Behavioral Science

see pages 145 - 146 (SYG 2000, PHI 1103).....	6 credits
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MAJOR FIELD REQUIRED COURSES - 33 credits

CHD	1104	Introduction to Early Childhood Education.....	2 credits
CHD	1220	Introduction to Child Development.....	3 credits
CHD	1332	Creative Experiences for Children.....	3 credits
CHD	2800	Administering a Child Care Center.....	3 credits
EDF	1021	Social Elements in Early Childhood Education.....	3 credits
EEC	1202	Principles of Early Childhood Curriculum.....	3 credits
EEC	1601	Observing & Recording Behavior.....	3 credits
EEC	1946	Early Childhood Practicum I.....	4 credits
EEX	1013	Special Needs in Early Childhood Education.....	3 credits
HUN	1410	Basic Childhood Nutrition.....	3 credits
SLS	1421	Personal & Career Development.....	3 credits

MAJOR FIELD ELECTIVES - Select 15 credits

CGS	1060	College Computing.....	3 credits
CHD	2334	Early Childhood Language Arts & Reading.....	3 credits
EEC	1520	Early Childhood Organizational Leadership & Mgmt.	3 credits
EEC	1947	Early Childhood Practicum II.....	4 credits
EEC	2948	Early Childhood Practicum III.....	4 credits
EEC	2949	Early Childhood Practicum IV.....	4 credits
ENC	1102	English Composition II.....	3 credits
ETI	1932	Introduction to Technology.....	3 credits
GEB	1931	Introduction to Business Technology.....	3 credits
MGF	2106	Mathematics for Liberals Arts, or higher.....	3 credits
PPE	2001	Person & Personality Development.....	3 credits
SYG	1430	Family Relations.....	3 credits

Students may enhance their career success by first attaining a **Certificate in Child Development and Early Intervention (60040)** by completing 36 credits from the **Major Field Required** and **Major Field Electives** sections above. Attaining the A.S. Degree is then simply a matter of completing the General Education required courses and the remaining 12 credits of major field and elective courses.

**ELECTRICAL POWER TECHNOLOGY
20850 - 68 CREDITS (SELECTIVE ADMISSION)**

The nuclear power industry is experiencing a period of unprecedented need for power plant technicians both nationally and within the state of Florida. The Nuclear Regulatory Commission (NRC) estimates that more than 41,000 new technicians will be needed over the next 20 years and the starting salaries for these technicians are above the national average throughout the country. The Electrical Power Technology program has the following options: instrumentation and control, electrical, mechanical, and radiation protection. In addition to an admissions application, candidates must successfully pass a series of tests prescribed by our industrial partner, Florida Power and Light. Attendance at an Information Session is required.

GENERAL EDUCATION

- Humanities/Fine Arts
 - ENC 1101 3 credits
- Natural Science/Mathematics
 - MAC 1105, PHY 1020 6 credits
- Social/Behavioral Science
 - see page 146 (POS 1041 recommended) 3 credits
- Humanities/Fine Arts or Natural Science/Mathematics
or Social/Behavioral Science
 - see pages 145 - 146 (SPC 1300 recommended) 3 credits

MAJOR FIELD REQUIRED COURSES - 30 credits

- EET 1724C Electronic Design Software Tools 3 credits
- EET 1215C Introduction to Electronics 3 credits
- EET 1015C DC Circuits 3 credits
- EET 1025C AC Circuits 3 credits
- MTB 1322 Technical Mathematics II 3 credits
- ETP 1230 Power Plant Systems 3 credits
- ETP 1200 Power Plant Science 3 credits
- ETP 1220 Power Plant Fundamentals 3 credits
- ETI 1000 Industrial Plant Tools & Equipment 3 credits
- ETI 1701 Industrial Safety 3 credits

SUGGESTED SPECIALIZATION ELECTIVES - Select 23 credits

INSTRUMENTATION AND CONTROL (I & C)

- EST 2520 Process Measurement Fundamentals 3 credits
- EST 2530 Process Control Technology 3 credits
- ETM 2315C Pneumatics and Hydraulics 3 credits
- EET 2141C Electronic Devices I 3 credits

EST	2542	Programmable Logic Controllers I.....	3 credits
EST	2544	Programmable Logic Controllers II.....	3 credits
ETP	2941	Professional Internship for Maintenance Technicians.....	2 credits

ELECTRICAL

EET	2515C	Motors and Generators.....	3 credits
EET	2527C	Motor, Starter, Controllers & Breakers.....	3 credits
EET	2547C	Transformers & Power Distribution	3 credits
EET	2141C	Electronic Devices I.....	3 credits
EST	2542	Programmable Logic Controllers I.....	3 credits
EST	2544	Programmable Logic Controllers II.....	3 credits
ETP	2941	Professional Internship for Maintenance Technicians.....	2 credits

MECHANICAL

ETI	1805C	Rigging & Lifting	3 credits
ETI	2315C	Fluid and Pneumatic Instrumentation	3 credits
ETI	2408C	Welding Processes	3 credits
ETP	2231C	Power Plant Machines & Components I	3 credits
ETP	2232C	Power Plant Machines & Components II	3 credits
ETI	2425C	Metallurgical Properties & Dynamics.....	3 credits
ETI	2451C	Mechanical Maintenance for Power Plants.....	3 credits
ETP	2941	Professional Internship for Maintenance Technicians.....	2 credits

RADIATION PROTECTION

CHM	1045	General Chemistry I.....	3 credits
CHM	1045L	General Chemistry Lab	1 credit
CHM	1046	General Chemistry II.....	3 credits
CHM	1046L	General Chemistry Lab	1 credit
ETP	2210	Radiation Fundamentals	3 credits
ETP	2211	Radiation Instrumentation.....	3 credits
ETP	2212	Radiation Detection Principles	3 credits
ETP	2213	Radiological Safety and Protection	3 credits
ETP	2219	Radiation Protection/Capstone Project	3 credits

NON-LICENSED OPERATOR

EST	2520	Process Measurement Fundamentals.....	3 credits
EST	2530	Process Control Technology.....	3 credits
ETP	2201	Reactor Theory for Nuclear Systems Operations	2 credits
ETM	2315C	Pneumatics and Hydraulics.....	3 credits
ETM	2310	Fluid Mechanics	3 credits
ETP	2202	Fundamentals of Reactor Energy Principles.....	3 credits
ETP	2233	Power Plant Components for Operations I.....	3 credits
ETP	2234	Power Plant Components for Operations II.....	3 credits

MAJOR FIELD ELECTIVE

ETP	2942	Professional Internship for Radiation Protection	5 credits
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ELECTRONICS ENGINEERING TECHNOLOGY
A0060 - 68 CREDITS
ASSOCIATE IN APPLIED SCIENCE DEGREE
LASERS AND PHOTONICS CERTIFICATE - 60290
BASIC ELECTRONICS CERTIFICATE - 60300
ELECTRONIC TECHNOLOGY CERTIFICATE - 60310

Lasers, fiber-optics, robotics, automation, wireless networks, biomedical equipment, space exploration, and modern electric power generation are cutting-edge technologies made possible by electronic engineering. The demand for technicians in these fields is at an all time high. Starting salaries for entry-level technicians in any of these fields are higher than the national average. The Electronics Engineering Technology degree offers specialization options in lasers and photonics, robotics and industrial automation, power plant technology, computer technology, and telecommunications.

GENERAL EDUCATION

Humanities/Fine Arts	
ENC 1101	3 credits
Natural Science/Mathematics	
MTB 1321, PHY 1020	6 credits
Social/Behavioral Science	
see page 146 (ECO 2000 recommended).....	3 credits
Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science	
see pages 145 – 146 (POS 1041 recommended).....	3 credits

MAJOR FIELD REQUIRED COURSES - 39 credits

CET	1112C	Logic Circuits I	3 credits
CET	1113C	Logic Circuits II	3 credits
EET	1724C	Electronic Design Software Tools	3 credits
EET	1015C	DC Circuits	3 credits
EET	1025C	AC Circuits	3 credits
EET	1180C	Troubleshooting & Repair Techniques	3 credits
EET	1215C	Introduction to Electronics.....	3 credits
EET	2141C	Electronic Devices I	3 credits
EET	2142C	Electronic Devices II	3 credits
EET	2325C	Communication Circuits I.....	3 credits
EST	2542	Programmable Logic Controllers I	3 credits
EST	2544	Programmable Logic Controllers II	3 credits
MTB	1322	Technical Mathematics II.....	3 credits

SUGGESTED SPECIALIZATION ELECTIVES - Select 14 credits

BIOMEDICAL ELECTRONICS

EST	2424	Biomedical Electronics.....	3 credits
HSC	2531	Medical Terminology I	3 credits

COMPUTER TECHNOLOGY

CET	1178	A+ Certification Training I.....	3 credits
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CET	1179C	A+ Certification Training II.....	3 credits
CET	1588	Network + Certification	3 credits
CET	1854	Introduction to Wireless Technology	3 credits
CET	2891	Wireless Network Security Certification.....	3 credits

LASER-PHOTONICS

EST	2210	Introduction to Photonics.....	3 credits
EST	2215	Geometrical Optics.....	3 credits
EST	2220	Fiber Optics & Data Communications.....	3 credits
EST	2230	Laser Technologies.....	3 credits

ROBOTICS-MANUFACTURING

EST	2630	Manufacturing Processes.....	3 credits
EST	2676	Introduction to Robotics.....	3 credits

TELECOMMUNICATIONS

CET	1854	Introduction to Wireless Technologies	3 credits
EET	2335C	Telecommunication Circuits II	3 credits
EST	2220	Fiber Optics & Data Communications.....	3 credits

SOLAR ENERGY

ETP	2410	Solar Photovoltaic Systems	3 credits
ETP	1420	Solar Thermal Systems	3 credits

MAJOR FIELD ELECTIVES

CET	1178	A+ Certification Training I.....	3 credits
CET	1179C	A+ Certification Training II.....	3 credits
CET	1588	Network + Certification	3 credits
CET	1854	Introduction to Wireless Technology.....	3 credits
CET	2123C	Microprocessors I.....	3 credits
CET	2127C	Microprocessors II	3 credits
CET	2891	Wireless Network Security Certification.....	3 credits
EET	1181C	Electronic Engineering Technology.....	3 credits
EET	2930	Special Topics in Electronic Engineering	1/2 - 3 credits
EST	1041C	HTI+ Certification.....	3 credits
EST	1931	Special Topics in Manufacturing	1/2 - 3 credits
EST	2210	Introduction to Photonics.....	3 credits
EST	2215	Geometrical Optics.....	3 credits
EST	2220	Fiber Optics & Data Communications.....	3 credits
EST	2230	Laser Technologies.....	3 credits
EST	2424	Biomedical Electronics.....	3 credits
EST	2630	Manufacturing Processes.....	3 credits
EST	2676	Introduction to Robotics.....	3 credits
EST	2930	Electronic Project Engineering.....	3 credits
EST	2941	Electronics Internship I	1 - 2 credits
EST	2942	Electronics Internship II	4 credits
HSC	2531	Medical Terminology I	3 credits

LASERS AND PHOTONICS CERTIFICATE - 60290 - 12 CREDITS

MAJOR FIELD REQUIRED COURSES – 12 credits

EET	1015C	DC Circuits	3 credits
EET	1025C	AC Circuits.....	3 credits
EST	2210	Introduction to Photonics.....	3 credits
EST	2215	Geometrical Optics.....	3 credits

BASIC ELECTRONICS CERTIFICATE - 60300 - 14 CREDITS

MAJOR FIELD REQUIRED COURSES – 14 credits

EET	1724C	Electronic Design Software Tools	3 credits
EET	1015C	DC Circuits.....	3 credits
EET	1025C	AC Circuits	3 credits
EET	1215C	Introduction to Electronics	3 credits

Select any one of the following courses:

EET	2930	Special Topics in Electronic Engineering	1/2 - 3 credits
CET	1112C	Logic Circuits I	3 credits
EET	2141C	Electronic Devices I	3 credits

ELECTRONIC TECHNOLOGY CERTIFICATE - 60310 - 31 CREDITS

MAJOR FIELD REQUIRED COURSES – 31 credits

CET	1112C	Logic Circuits I	3 credits
CET	1113C	Logic Circuits II	3 credits
EET	1724C	Electronic Design Software Tools.....	3 credits
EET	1015C	DC Circuits	3 credits
EET	1025C	AC Circuits.....	3 credits
EET	1215C	Introduction to Electronics.....	3 credits
EET	2141C	Electronic Devices I	3 credits
EET	2142C	Electronic Devices II	3 credits
EST	2542	Programmable Logic Controllers I.....	3 credits
EST	2544	Programmable Logic Controllers II.....	3 credits

Select any one of the following courses:

EET	2930	Special Topics in Electronic Engineering	1/2 - 3 credits
EET	1180C	Troubleshooting & Repair Techniques	3 credits
EET	2325C	Communication Circuits I.....	3 credits

**EMERGENCY ADMINISTRATION AND MANAGEMENT
20730 - 60 CREDITS**

EMERGENCY MANAGEMENT CERTIFICATE - 60260

HOMELAND SECURITY EMERGENCY MANAGER CERTIFICATE - 60270

This degree prepares students for careers in Emergency Management and Homeland Security. The degree is also for all professional or volunteer agency personnel interested in enhancing technical competencies and preparing themselves for advanced work in disaster relief and humanitarian operations. The curriculum is based on an all-hazards approach to emergency management and emphasizes effective operating procedures

under all emergency conditions. Graduates of the program typically find employment as aid agency operators, emergency managers and planners, and homeland security specialists.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101..... 3 credits

Natural Science/Mathematics

see page 146..... 3 credits

Social/Behavioral Science

see page 146..... 3 credits

Humanities/Fine Arts or Natural Science/Mathematics

or Social/Behavioral Science

see pages 145 - 146..... 6 credits

MAJOR FIELD REQUIRED COURSES - 18 credits

FFP 2820 Principles of Emergency Management..... 3 credits

FFP 2801 Incident Command System..... 3 credits

FFP 2840 Disaster Operations 3 credits

DSC 1222 Psychological Management of Disasters..... 3 credits

DSC 1641 Exercise Design & Evaluation..... 3 credits

DSC 2949 Internship in Emergency Management..... 3 credits

MAJOR FIELD ELECTIVES - Select 27 credits

CGS 1060 College Computing..... 3 credits

or

CGS 1100 Intro to Computer Applications in Business 3 credits

AER 1020C Orientation to Vehicle Maintenance..... 1 - 3 credits

DSC 1002 Terrorism & U.S. Security 3 credits

DSC 1033 Weapons of Mass Destruction 3 credits

DSC 1041 CERT: Basic Training..... 1 credit

DSC 1080 CERT: Refresher Training $\frac{1}{2}$ - 1 credit

DSC 1081 CERT: Advanced Training..... $\frac{1}{2}$ - 1 credit

DSC 1552 Critical Infrastructure & Disaster Engineering..... 3 credits

DSC 1557 Florida Personal Radiation Detector 1 credit

DSC 1558 Detection Equipment for Law Enforcement..... 1 credit

DSC 1632 Summer Institute in International Disaster Relief..... 3 credits

DSC 1642 Field Training Exercise..... 1 - 3 credits

DSC 1930 Current Topics in Public Safety..... 3 credits

FSS 2206 Quantity Food Production 3 credits

GIS 1060 Introduction to GIS with ArcGIS 3 credits

GIS 1041 Introduction to GIS & GPS Applications 3 credits

HUN 1201 Nutrition 3 credits

MAN 2021 Principles of Management..... 3 credits

MAN 2300 Introduction to Human Resource Management..... 3 credits

EMERGENCY MANAGEMENT CERTIFICATE - 60260 - 24 CREDITS

MAJOR FIELD REQUIRED COURSES – 12 credits

DSC	1641	Exercise Design & Evaluation	3 credits
DSC	1930	Current Topics in Public Safety	3 credits
FFP	2820	Principles of Emergency Management	3 credits
FFP	2840	Disaster Operations	3 credits

MAJOR FIELD ELECTIVES – Select 12 credits

AER	1020C	Orientation to Vehicle Maintenance.....	3 credits
DSC	1002	Terrorism & U.S. Security	3 credits
DSC	1033	Weapons of Mass Destruction	3 credits
DSC	1222	Psychological Management of Disasters.....	3 credits
DSC	1552	Critical Infrastructure	3 credits
DSC	1632	Summer Institute.....	3 credits
DSC	1642	Field Training Exercise.....	1 - 3 credits
DSC	2949	Internship In Emergency Management.....	3 credits
FSS	2206	Quantity Food Production	3 credits
GIS	1041	Introduction to GIS & GPS Applications	3 credits
GIS	1060	Introduction to GIS with ArcGIS	3 credits
HUN	1201	Nutrition	3 credits

HOMELAND SECURITY CERTIFICATE - 60270 - 24 CREDITS

MAJOR FIELD REQUIRED COURSES – 12 credits

DSC	1002	Terrorism & U.S. Security	3 credits
DSC	1033	Weapons of Mass Destruction	3 credits
DSC	1641	Exercise Design & Evaluation	3 credits
FFP	2820	Principles of Emergency Management	3 credits

MAJOR FIELD ELECTIVES – Select 12 credits

FFP	2840	Disaster Operations	3 credits
FFP	2801	Incident Command System.....	3 credits
GIS	1041	Introduction to GIS & GPS Applications	3 credits
GIS	1060	Introduction to GIS with ArcGIS	3 credits
DSC	1552	Critical Infrastructure	3 credits
DSC	1632	Summer Institute.....	3 credits
DSC	1642	Field Training Exercise.....	1 - 3 credits
DSC	1930	Current Topics I Public Safety.....	3 credits
DSC	2949	Internship I Emergency Management.....	3 credits

EMERGENCY MEDICAL SERVICES

20550 - 73 CREDITS (SELECTIVE ADMISSION)

EMERGENCY MEDICAL TECHNOLOGY - APPLIED TECHNOLOGY DIPLOMA

B0010 (SELECTIVE ADMISSION)

PARAMEDIC CERTIFICATE - 60130 (SELECTIVE ADMISSION)

The Paramedic Certificate program uses the 1998 National Standard Curriculum from the Department of Transportation, National Highway Safety Administration, to fulfill requirements to practice, under medical direction, the art and science of out-

of-hospital medicine. The goal of the program is to provide the graduate with the knowledge, skill, and professional attributes associated with an entry-level Paramedic. Paramedic graduates will be trained to prevent and reduce mortality and morbidity due to illness and injury.

The Emergency Medical Technician Applied Technology Diploma and Paramedic Certificate programs lead to an A.S. Degree in Emergency Medical Services Technology. The A.S. Degree in Emergency Medical Services provides the graduate with a strong general education and science background to enhance and expand the technical knowledge in the EMT and Paramedic Certificate programs.

GENERAL EDUCATION – *may be taken prior to acceptance into the program or must be completed while enrolled in the program.

*Humanities/Fine Arts

ENC 1101 and ENC 1102 or ENC 2210..... 6 credits

*Natural Science/Mathematics

BSC 1084 or BSC 2094 and BSC 2094L

and

Select any 8 credits from Natural Science/Mathematics

see page 146..... 12 credits

*Social/Behavioral Science

PSY 2012 or SYG 2000 3 credits

MAJOR FIELD REQUIRED COURSES - 49 credits

EMS 1119C Emergency Medical Technology 8 credits

EMS 1431 EMT Clinical/Field Experience..... 3 credits

EMS 2601C Paramedic I..... 11 credits

EMS 2602C Paramedic II..... 11 credits

EMS 2664 Paramedic Clinical/Field Experience I 6 credits

EMS 2665 Paramedic Clinical/Field Experience II 6 credits

EMS 2659 Paramedic Field Internship..... 4 credits

MAJOR FIELD ELECTIVES - Select 3 credits

any EMS course(s) 3 credits

EMERGENCY MEDICAL TECHNOLOGY – APPLIED TECHNOLOGY DIPLOMA

B0010 - 11 CREDITS (SELECTIVE ADMISSION)

EMS 1119C Emergency Medical Technology 8 credits

EMS 1431 EMT Clinical/Field Experience..... 3 credits

PARAMEDIC CERTIFICATE - 60130 - 42 CREDITS (SELECTIVE ADMISSION)

BSC 1084 Survey of Human Body..... 4 credits
or

BSC 2094 Anatomy & Physiology II..... 3 credits
and

BSC 2094L Anatomy & Physiology II Lab..... 1 credit

EMS 2601C Paramedic I..... 11 credits

EMS 2664 Paramedic Clinical/Field Experience I 6 credits

EMS 2602C Paramedic II..... 11 credits

EMS	2665	Paramedic Clinical/Field Experience II.....	6 credits
EMS	2659	Paramedic Field Internship.....	4 credits

All core curriculum and natural science courses require a grade of "C" or higher.

**FIRE SCIENCE TECHNOLOGY
20570 - 60 CREDITS**

This degree prepares students for careers in the Fire Services and for the fire service or fire protection related professional to enhance technical competencies, and prepare them for career advancement. While providing a scientific understanding of fire hazards and their control, this degree will place emphasis on effective operating procedures at fires and other emergencies. Graduates of the program typically find employment as firefighters, investigators, fire protection and detection specialists, fire engineers, and safety inspectors.

GENERAL EDUCATION

Humanities/Fine Arts			
	ENC 1101.....		3 credits
Natural Science/Mathematics			
	see page 146.....		3 credits
Social/Behavioral Science			
	see page 146.....		3 credits
Humanities/Fine Arts or Natural Science/Mathematics or Social/Behavioral Science			
	see pages 145 - 146.....		6 credits

MAJOR FIELD REQUIRED COURSES - 15 credits

FFP	1000	Introduction & Orientation to Firefighting.....	3 credits
FFP	1505	Fire Inspection Practices.....	3 credits
FFP	1812	Engine & Truck Company Fireground Operations.....	3 credits
FFP	2810	Firefighting Tactics & Strategy I.....	3 credits
FFP	2820	Principles of Emergency Management.....	3 credits

MAJOR FIELD ELECTIVES - Select 30 credits

CGS	1000	Introduction to Computer Usage.....	3 credits
or			
CGS	1060	College Computing.....	3 credits
CJE	2600	Criminal Investigation.....	3 credits
DSC	1860	Introduction to Public Safety Careers.....	3 credits
DSC	1930	Current Topics in Public Safety.....	3 credits
EMS	1119C	Emergency Medical Technology.....	8 credits
EMS	1431	EMT Clinical/Field Experience.....	3 credits
EMS	1335	Ambulance Emergency Vehicle Operator Course.....	1 credit
FFP	1040	Private Fire Brigade.....	3 credits
FFP	1102	Physical Conditioning for Firefighters.....	1 credit
FFP	1106	Multiple Alarm Operations.....	3 credits
FFP	1109	Occupational Safety & Health for the Fire Service.....	3 credits
FFP	1120	Characteristics of Building Construction.....	3 credits
FFP	1212	Confined Space Rescue I.....	3 credits

FFP	1302	Fire Department Pumping Apparatus	3 credits
FFP	1521	Plans Examination & Blueprint Reading.....	3 credits
FFP	1540	Fire Protection & Detection Systems	3 credits
FFP	1610	Fire Behavior & Combustion.....	3 credits
FFP	1793	Fire & Life Safety Educator I	3 credits
FFP	1930	Contemporary Issues in the Fire Service.....	3 credits
FFP	2111	Fire Chemistry	3 credits
FFP	2201	Rope Rescue Practices I	3 credits
FFP	2301	Fire Hydraulics.....	3 credits
FFP	2401	Hazardous Materials Technician Module I	3 credits
FFP	2402	Hazardous Materials Technician Module II	3 credits
FFP	2421	Hazardous Materials Technician Module III	3 credits
FFP	2510	Building & Fire Codes I.....	3 credits
FFP	2541	Private Fire Protection Systems II.....	3 credits
FFP	2604	Fire & Arson Investigation.....	3 credits
FFP	2706	Public Information Officer (PIO).....	3 credits
FFP	2720	Company Officer Leadership	3 credits
FFP	2740	Fire Service Course Delivery.....	3 credits
FFP	2741	Fire Service Course Design.....	3 credits
FFP	2770	Legal Issues for the Fire Service	3 credits
FFP	2781	Fire Department Organization & Administration.....	3 credits
FFP	2801	Incident Command System.....	3 credits
FFP	2811	Firefighting Tactics & Strategy II	3 credits
FFP	2840	Disaster Operations	3 credits
FFP	2949	Internship in Fire Science	1 - 4 credits

Successful completion of the state certification exam (license) for this program may entitle a student to receive credit towards the A.S. Degree based on demonstrated competencies.

The following courses satisfy the curriculum required for the Bureau of Fire Standards and Training for the Fire Officer I Certificate Examination: FFP 1120, FFP 1505, FFP 1540, FFP 2720, FFP 2740, FFP 2801, and FFP 2810, FFP 2811.

The following courses satisfy the curriculum required by the Bureau of Fire Standards and Training for the Fire Safety Inspector I Certification Examination: FFP 1540, FFP 1505, FFP 1120, FFP 1521, and FFP 2510.

GOLF COURSE OPERATIONS

A0070 - 69 CREDITS

ASSOCIATE IN APPLIED SCIENCE

TURF EQUIPMENT - APPLIED TECHNOLOGY DIPLOMA - B0030

PEST CONTROL OPERATIONS - APPLIED TECHNOLOGY DIPLOMA - B0020

Golf Course and Recreational Turf Operations expands and enhances job opportunities for students in one of the fastest growing job markets on the Research Coast. The degree and/or applied technology diplomas prepares students for employment and licensure in the areas of installation, design and maintenance of irrigation systems, application and calibration of pesticides for pest prevention, and landscape design and maintenance.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 and see pages 145 6 credits

Natural Science/Mathematics

see page 146..... 3 credits

Social/Behavioral Science

see page 146..... 6 credits

MAJOR FIELD REQUIRED COURSES - 25 credits

CGS	1100	Intro to Computer Applications for Business.....	3 credits
GCO	1400	Turfgrass for Golf & Landscaping.....	3 credits
GCO	1402	Turfgrass Science.....	3 credits
GCO	2632	Golf Course Organization/Administration.....	3 credits
HOS	1010	Fundamentals of Horticulture.....	4 credits
MNA	2932	Professional Development.....	3 credits
PMA	2211	Insects & Diseases of Ornamental Plants.....	3 credits
or			
GCO	1450	Integrated Pest Management for Golf Courses.....	3 credits
SWS	2104	Soils & Fertilizers.....	3 credits

MAJOR FIELD ELECTIVES - Select 29 credits

DIM	1001	Introduction to Diesel Engines.....	4 credits
ENC	2200	Business Communications.....	3 credits
ENY	1002	Fundamentals of Entomology.....	3 credits
ETD	1320	Introduction to AutoCAD.....	3 credits
ETD	2568C	CAD-Landscape.....	3 credits
GCO	1214	Preventative Maintenance.....	3 credits
GCO	1930	Special Topics in Golf Course Operations.....	½ - 3 credits
GCO	1942	Field Training in Turf Equipment Management.....	3 credits
GCO	1947	Golf Course Design Concepts.....	3 credits
GCO	1611	Golf Course Shop Management.....	3 credits
GCO	2601	Materials Calculations.....	3 credits
GCO	2944	Golf Course Internship.....	3 - 6 credits
GCO	2945	Supervised Work Experience.....	1 - 4 credits
GIS	1931	Orientation to GIS Applications.....	½ - 3 credits
IPM	1323	Application of Pesticides.....	3 credits
ORH	1510	Plant Identification.....	3 credits
ORH	2859	Landscape Design & Maintenance.....	3 credits
PMT	1120	Electric Welding I.....	4 credits
PMT	1128	Combination Welding I.....	4 credits
SWS	1102	Irrigation System I.....	3 credits
SWS	2304	Irrigation System II.....	3 credits
SPN	1000	Spanish for Daily Use.....	2 credits

TURF EQUIPMENT – APPLIED TECHNOLOGY DIPLOMA

B0030 - 38 CREDITS

The Applied Technology Diploma in Turf Equipment Management provides excellent preparation for a career dedicated to the repair and maintenance of highly specialized

equipment. Students are trained to repair and maintain all types of equipment and to organize and manage maintenance facilities.

Select 38 credits from the following:

CGS	1100	Intro to Computer Applications for Business	3 credits
DIM	1001	Introduction to Diesel Engine	4 credits
GCO	1214	Preventive Maintenance	3 credits
GCO	1400	Turfgrass for Golf & Landscaping.....	3 credits
GCO	1942	Field Training in Turf Equipment Management.....	3 credits
GCO	2632	Golf Course Organization/Administration.....	3 credits
GCO	2945	Supervised Work Experience.....	1 - 4 credits
MNA	2932	Professional Development Seminar I.....	3 credits
PMT	1120	Electric Welding I.....	4 credits
PMT	1128	Combination Welding I.....	4 credits
SPN	1000	Spanish for Daily Use	1 credit

**PEST CONTROL OPERATIONS - APPLIED TECHNOLOGY DIPLOMA
B0020 - 24 CREDITS**

Students may increase their opportunities for employment by completing the 24 credit Pest Control Operations Applied Technology Diploma. These courses will prepare the student for the licensure exam in *Restricted Pesticides Applications.

Select 24 credits from the following:

ENY	1002	Fundamentals of Entomology.....	3 credits
GCO	1400	Turfgrass for Golf & Landscaping.....	3 credits
GCO	1402	Turfgrass Science.....	3 credits
GCO	1450	Integrated Pest Management for Golf Courses.....	3 credits
GCO	2601	Materials Calculations	3 credits
HOS	1010	Fundamentals of Horticulture	4 credits
IPM	1323	Application of Pesticides.....	3 credits
ORH	1510	Plant Identification	3 credits
ORH	1511	Plant Identification II	2 credits
PMA	2211	Insects & Diseases of Ornamental Plants.....	3 credits
SWS	2104	Soils & Fertilizers.....	3 credits

*One year of documented experience in Pest Control is required for those seeking licensure in Restricted Pesticides Application.

**GRAPHICS TECHNOLOGY
20580 - 64 CREDITS**

**GRAPHIC DESIGN SUPPORT CERTIFICATE – 60340
GRAPHIC DESIGN PRODUCTION CERTIFICATE – 60350**

By providing students with theoretical and classroom experience which closely parallels on-the-job activities, this program prepares students for careers in the graphics, printing, and advertising industries. Graphics Design Technology prepares students for employment as designers, commercial artists, computer graphic designers, layout production, and entry-level multimedia graphics. It requires knowledge of art, communication, and computer skills to be applied with design techniques and

knowledge required to enter the field of graphic design as a technical specialist. The structure of the degree program requires the student to obtain a solid foundation in the fundamentals through general education and technical core courses. The specialization can be used to further enhance the expertise. This degree can also be a basis for the B.A.S. in Digital Media at Indian River State College.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 and ENC 1102 or ENC 1107 or ENC 2210 6 credits

Natural Science/Mathematics

PHY 1020 or higher and MAC 1105 or higher 6 credits

Social/Behavioral Science

see page 146 3 credits

MAJOR FIELD REQUIRED COURSES - 21 credits

DIG	1000	Digital Media Principles	3 credits
DIG	1115	Digital Imaging Fundamentals.....	3 credits
DIG	2030	Digital Video Fundamentals.....	3 credits
DIG	2581	Digital Media Portfolio Fundamentals	3 credits
DIG	2302	3D Digital Animation I	3 credits
GRA	1129	Visualization Basics	3 credits
PGY	1800	Principles of Digital Photography	3 credits

CORE SPECIALIZATION ELECTIVES - Select 28 credits

GRAPHIC DESIGN CORE COURSES

GRA	1121	Publication Design (QuarkXpress).....	3 credits
GRA	1151	Illustrator Fundamentals.....	3 credits
DIG	2116	PhotoShop Level II.....	3 credits
GRA	1206	Typography	3 credits
GRA	2170	Introduction to Advertising Design and Graphics.....	3 credits
GRA	2130	Presentation Technology.....	3 credits

WEB DESIGN CORE COURSES

CGS	1821	Website Development	3 credits
CGS	2878	Multimedia Programming	3 credits
CGS	2874	Advanced Multimedia	3 credits
DIG	2251	Digital Audio Fundamentals.....	3 credits
GRA	2160	Digital Animation I	3 credits
GRA	2161	Digital Animation 2.....	3 credits

MAJOR FIELD ELECTIVES

ART	1201C	Color & Design I	3 credits
ART	1203C	Color & Design II.....	3 credits
ART	1300C	Drawing I	3 credits
FIL	1030	History of Film.....	3 credits
DIG	1930	Special Topics in Digital Media.....	1/2 - 3 credits
DIG	2203	Digital Video 2 Production	3 credits
DIG	2303	3D Digital Animation 2.....	3 credits
DIG	2292	Digital Video 3 - Post Production.....	3 credits

GRA	2152	Illustrator Level 2.....	3 credits
GRA	2124	Publication Production and Prepress.....	3 credits
PGY	1801	Introduction to Digital Photography.....	1 credit
TPA	1200	Beginning Stagecraft	3 credits

Up to two courses with PGY prefix

GRAPHIC DESIGN SUPPORT CERTIFICATE – 60340 - 15 CREDITS

This Graphic Design Support Certificate offers basic preparation for a career as an Assistant Graphic Designer. Students are trained in image editing and graphic layout, basic graphic design, photo enhancement, illustrations and publishing techniques.

MAJOR FIELD REQUIRED COURSES – 15 credits

DIG	1000	Digital Media Principles.....	3 credits
DIG	1115	Digital Imaging Fundamentals.....	3 credits
GRA	1151	Illustrator Fundamentals.....	3 credits
DIG	2116	PhotoShop Level II.....	3 credits
PGY	1800	Principles of Digital Photography	3 credits

GRAPHIC DESIGN PRODUCTION CERTIFICATE – 60350 - 24 CREDITS

This Graphic Design Production Certificate offers advanced preparation for a career as a Graphic Production Artist or assistant. Students are trained in graphic design techniques, image editing and enhancement, layout, Web design, typography, illustrations and publishing techniques.

MAJOR FIELD REQUIRED COURSES – 24 credits

CGS	1821	Website Development.....	3 credits
DIG	1000	Digital Media Principles.....	3 credits
DIG	1115	Digital Imaging Fundamentals.....	3 credits
GRA	1129	Visualization Basics	3 credits
GRA	1121	Publication Design (QuarkXpress).....	3 credits
GRA	1151	Illustrator Fundamentals.....	3 credits
DIG	2116	Photoshop Level II	3 credits
GRA	1206	Typography.....	3 credits

HEALTH INFORMATION MANAGEMENT

20590 - 67 CREDITS (SELECTIVE ADMISSION)

This degree program prepares the student for employment as a Health Information Technician (HIT). Responsibilities include coding of diagnoses and procedures; and processing, confidentiality, storage and retrieval of health information. Lectures, activities and student projects focus on medical-legal aspects, quality improvement, health care data analysis, and supervision of health information employees. Students benefit from classroom lecture, computer laboratory preparation, and internship experience in local health care facilities.

Graduates are eligible to take the Registered Health Information Technician (RHIT) examination. The American Health Information Management Association (AHIMA) awards the RHIT credential to successful candidates. The Health Information Management program at IRSC is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

GENERAL EDUCATION

Humanities/Fine Arts	
ENC 1101, SPC 1608	6 credits
Natural Science/Mathematics	
BSC 1084; or BSC 2093, BSC 2093L, BSC 2094 and BSC 2094L...	4 credits
Any 3 credits from Mathematics, see page 146	3 credits
Social/Behavioral Science	
PSY 2012 or SYG 2000	3 credits

MAJOR FIELD REQUIRED COURSES - 51 credits

HSC	2531	Medical Terminology I	3 credits
CGS	1100	Intro to Computer Applications for Business	3 credits
HIM	1000	Intro to Health Information Management	3 credits
HIM	1012	Legal Aspects of Health Information	3 credits
HIM	1222	Basic ICD-9 Coding	3 credits
HIM	1282	Basic CPT Coding	3 credits
HSC	2532	Medical Terminology II	2 credits
HIM	1510C	Health Care Data Analysis	3 credits
HIM	1442	Pharmacology for HIM	2 credits
HIM	1273C	Billing & Reimbursement Methods	3 credits
HIM	2433	Pathophysiology	3 credits
HIM	2232	Intermediate ICD-9 Coding	2 credits
HIM	2254	Intermediate CPT Coding	2 credits
HIM	2112	Electronic Health Record and Technology	3 credits
HIM	2211	Health Information System	3 credits
HIM	2512	HIM Supervision & Organizational Life	2 credits
HIM	2825	Health Office Internship	3 credits
HIM	2506	Quality Assessment	2 credits
HIM	2826	Health Office Externship	3 credits

All natural science, math and HIM prefix courses require a grade of "C" or higher.

**HEALTH SERVICES MANAGEMENT
20740 - 62 CREDITS (SELECTIVE ADMISSION)**

This degree prepares students for management roles in a health care environment. The program is intended for individuals interested in entering the health care field and health care personnel who have completed a post secondary adult vocational or college certificate from an accredited certificate program in a health science area and have successfully completed licensure/certification exams.

GENERAL EDUCATION – *may be taken prior to acceptance into the program or must be completed while enrolled in the program.

*Humanities/Fine Arts	
ENC 1101 and PHI 1635	6 credits
*Natural Science	
BSC 1084	4 credits
*Mathematics	
see page 146	3 credits

*Social/Behavioral Science

PSY 2012; and ECO 2013 or ECO 2023 6 credits

MAJOR FIELD REQUIRED COURSES - 43 credits

APA	1111	Introduction to Accounting.....	3 credits
CGS	1060	College Computing	3 credits
GEB	1011	Introduction to Business.....	3 credits
HIM	1012	Legal Aspects of Health Information.....	3 credits
HSA	2182	Health Services Management Concepts	4 credits
HSC	1001	Introduction to Health Professions.....	3 credits
HSC	1802	Health Science Seminar/Work Experience	4 credits
HSC	2531	Medical Terminology I	3 credits
HSC	2632	Overview of Health Care Delivery	4 credits
HSC	2810	Health Service Management Practicum.....	4 credits
MAN	2300	Introduction to Human Resource Management.....	3 credits
MNA	2345	Supervision	3 credits
MAR	2011	Principles of Marketing	3 credits

COMPETENCY VALIDATION ELIGIBLE COURSES:

Students who have completed a post secondary adult vocational or college certificate in an Allied Health area from an accredited program and have passed the licensing exam can receive a maximum of 18 competency credits. Before competency validation of credits can occur, the student must submit their state or national license in the respective field to the Health Science Division.

HSC	1001	Introduction to Health Professions.....	3 credits
HSC	1802	Health Science Seminar/Work Experience	4 credits
HSC	2531	Medical Terminology I	3 credits
HSC	2632	Overview of Health Care Delivery	4 credits
HSC	2810	Health Service Management Practicum.....	4 credits

**HUMAN SERVICES
20600 - 65 CREDITS**

This program prepares beginning Human Services Workers for careers in a wide variety of human services settings including children’s service agencies, state attorneys’ offices, substance abuse facilities, domestic abuse shelters, juvenile intervention programs, social service agencies, and mental health facilities. Students learn techniques and strategies to assist clients in identifying problematic behavior and promoting positive personal growth. Students will acquire both theoretical as well as practical expertise in the Human Services field.

Courses marked with an asterisk (*) are recommended for students planning to pursue a Bachelor of Science Degree in Human Services at Indian River State College.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 3 credits

Natural Science/Mathematics

see page 146 or BSC 2010 or *BSC 1005 3 credits

Social/Behavioral Science

see page 146 or *PSY 2012, *SYG 2000 6 credits

Humanities/Fine Arts or Natural Science/Mathematics
or Social/Behavioral Science

see pages 145 - 146 or *PHI 1103 3 credits

MAJOR FIELD REQUIRED COURSES - 31 credits

CLP	2140	Abnormal Psychology	3 credits
HUS	1001	Introduction to Human Services.....	3 credits
HUS	1200	Group Dynamics	3 credits
HUS	1400	Introduction to Drugs of Abuse.....	3 credits
HUS	2301	Counseling Techniques	3 credits
HUS	2302	Techniques of Interviewing & Intervention	3 credits
HUS	2401	Substance Abuse & Treatment.....	3 credits
HUS	2500	Introduction to Ethics in Human Services	3 credits
HUS	2820	Internship in Human Services	4 credits
SYG	1430	Family Relations	3 credits

MAJOR FIELD ELECTIVES - Select 19 credits

CGS	1000	Introduction to Computer Usage	3 credits
		or	
*CGS	1060	College Computing	3 credits
BSC	2010L	General Biology I Lab	1 credit
		or	
BSC	1005L	Life Science Lab	1 credit
CCJ	1600	Deviant Behavior	3 credits
CGS	1061	Orientation to the Computer.....	1 credit
DEP	1002	Child & Adolescent Psychology.....	3 credits
*ENC	1102	English Composition II.....	3 credits
HSC	2400	First Aid & Safety	3 credits
HUS	2111	Introduction to Interpersonal Behavior	3 credits
*MGF	2106	Mathematics for Liberal Arts I or higher	3 credits
PHI	1450	Philosophy of Psychology	3 credits
PPE	2001	Person & Personality Development.....	3 credits
SYG	2010	Social Problems.....	3 credits

INTERIOR DESIGN TECHNOLOGY

20620 - 75 CREDITS

KITCHEN & BATH DESIGN CERTIFICATE - 60280

A professional interior designer is qualified by education and experience to identify, research, and creatively solve problems relating to the function and quality of man's interior environment. The interior designer is a licensed professional in Florida. Education and work experience along with passage of the state examination (NCIDQ) are the requirements to become a licensed interior designer in Florida.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 3 credits

Natural Science/Mathematics

see page 146 3 credits

Social/Behavioral Science

see page 146 3 credits

Humanities/Fine Arts or Natural Science/Mathematics

or Social/Behavioral Science

see pages 145 - 146 6 credits

MAJOR FIELD REQUIRED COURSES - 55 credits

CTE 1401 Introduction to Textiles 3 credits

ETD 1320 Introduction to AutoCAD 3 credits

IND 1015 Residential Interior Design 3 credits

IND 1020 Principles of Interior Design 3 credits

IND 1301 Interior Design Graphics 3 credits

IND 1401 Technical Design I 2 credits

IND 1423 Survey of Materials & Resources 1 credit

IND 1432 Lighting for Interior Design 2 credits

IND 1935 Building & Barrier Free Codes 3 credits

IND 2016 Commercial Interior Design I 3 credits

IND 2100 History of Interiors I 3 credits

IND 1134 History of Interiors II 3 credits

IND 1019 Commercial Interior Design II 3 credits

IND 2209 Designing for the Aging Client 1 credit

IND 2420 Materials & Sources of Interior Design 3 credits

IND 2500 Interior Design Business Practices 3 credits

IND 2608 Sustainable Design for Interiors 2 credits

IND 2910 Kitchen & Bath Design I 3 credits

IND 2940 Interior Design Practicum I 4 credits

IND 2941 Interior Design Practicum II 4 credits

MAJOR FIELD ELECTIVES - Select 5 credits

BCN 1250 Architectural Drafting Principles 3 credits

or

BCN 2251 Architectural Drafting-Residential 3 credits

IND 1462 Introduction to Architectural CAD 3 credits

IND 2911 Kitchen & Bath Design II 2 credits

IND 2931 Special Topics in Interior Design ½ - 5 credits

IND 2942 Interior Design Practicum III 4 credits

KITCHEN & BATH DESIGN CERTIFICATE - 60280 - 39 CREDITS**MAJOR FIELD REQUIRED COURSES - 34 credits**

ETD 1320 Introduction to AutoCAD 3 credits

IND 1020 Principles of Interior Design 3 credits

IND 1301 Interior Design Graphics 3 credits

IND 1401 Technical Design 2 credits

IND	1432	Lighting for Interior Design	2 credits
IND	1935	Building & Barrier Free Codes	3 credits
IND	2209	Designing for the Aging Client	1 credit
IND	2420	Materials & Sources of Interior Design.....	3 credits
IND	2500	Interior Design Business Practices	3 credits
IND	2608	Sustainable Design for Interiors.....	2 credits
IND	2910	Kitchen & Bath Design I.....	3 credits
IND	2911	Kitchen & Bath Design II.....	2 credits
IND	2940	Interior Design Practicum I	4 credits

MAJOR FIELD ELECTIVES - Select 5 credits

BCN	1250	Architectural Drafting Principles.....	3 credits
or			
BCN	2251	Architectural Drafting-Residential	3 credits
IND	1423	Survey of Materials & Resources	1 credit
IND	1462	Introduction to Architectural CAD.....	3 credits
IND	2931	Special Topics in Interior Design	½ - 5 credits
IND	2941	Interior Design Practicum II	4 credits

**LANDSCAPE AND HORTICULTURE TECHNOLOGY
A0080 - 64 CREDITS**

ASSOCIATE IN APPLIED SCIENCE DEGREE

- LANDSCAPE & HORTICULTURE SPECIALIST CERTIFICATE - 60220**
- LANDSCAPE & HORTICULTURE PROFESSIONAL CERTIFICATE - 60230**
- LANDSCAPE & HORTICULTURE TECHNICIAN CERTIFICATE - 60240**

Horticultural Landscape Design classes are designed to expand and enhance job opportunities for students already in the landscape business. The courses prepare students for employment in the areas of landscape design and maintenance, application of pesticides for pest control and prevention, installation, design and maintenance of irrigation systems, and turf equipment repair and maintenance.

GENERAL EDUCATION

Humanities/Fine Arts			
	ENC 1101	and see page 145 - 146	6 credits
Natural Science/Mathematics			
		see pages 146	3 credits
Social/Behavioral Science			
		see page 146	6 credits

MAJOR FIELD REQUIRED COURSES - 28 credits

CGS	1060	College Computing	3 credits
HOS	1010	Fundamentals of Horticulture	4 credits
SBM	1000	Entrepreneurship	3 credits
ORH	1231	Lawn Care Maintenance	3 credits
ORH	1510	Plant Identification	3 credits
ORH	2859	Landscape Design & Maintenance	3 credits
PMA	2211	Insects & Diseases of Ornamental Plants	3 credits

SWS	1102	Irrigation Systems I.....	3 credits
SWS	2104	Soils & Fertilizers.....	3 credits

MAJOR FIELD ELECTIVES - Select 21 credits

AEB	1132	Farm Management.....	3 credits
AEB	1943	Agribusiness Work Experience	1 - 3 credits
AGR	1540C	Fundamental Principles of Arboriculture	3 credits
AGR	1930	Special Topics in Arboriculture	1 credit
BCN	1250	Architectural Drafting Principles.....	3 credits
ENY	1002	Fundamentals of Entomology.....	3 credits
ETD	1320	Introduction to AutoCAD.....	3 credits
ETD	2568C	CAD - Landscape	3 credits
GCO	1214	Preventative Maintenance.....	3 credits
GCO	1400	Turfgrass for Golf & Landscaping.....	3 credits
GCO	1402	Turfgrass Science.....	3 credits
GCO	2601	Materials Calculations	3 credits
GEB	1011	Introduction to Business.....	3 credits
HOS	1060	Compost & Recycling	3 credits
HOS	1930	Special Topics in Horticulture.....	1 - 4 credits
IPM	1323	Application of Pesticides.....	3 credits
LDE	2403	Advanced Landscape Design	3 credits
MKA	1303	Mid-Management Seminar & Work Experience I	4 credits
MNA	2932	Professional Development.....	½ - 5 credits
ORH	1010	Sustainable Landscape Practices.....	3 credits
ORH	1511	Plant Identification II	3 credits
ORH	1710	Environmental Landscape Management.....	1 credit
ORH	2601	Retail Nursery Operations.....	3 credits
ORH	2841	Landscape Installation.....	3 credits
ORH	2941	Landscape Field Training.....	3 - 6 credits
SWS	2304	Irrigation Systems II.....	3 credits
SPN	1000	Spanish for Daily Use I	2 credits

LANDSCAPE & HORTICULTURE SPECIALIST CERTIFICATE

60220 - 12 CREDITS

HOS	1010	Fundamentals of Horticulture	4 credits
ORH	1510	Plant Identification	3 credits
ORH	1511	Plant Identification II	2 credits
ORH	2859	Landscape Design & Maintenance.....	3 credits

LANDSCAPE & HORTICULTURE PROFESSIONAL CERTIFICATE

60230 - 18 CREDITS

HOS	1010	Fundamentals of Horticulture	4 credits
ORH	1510	Plant Identification	3 credits
ORH	2859	Landscape Design & Maintenance	3 credits
SPN	1000	Spanish for Daily Use I	2 credits
SWS	2104	Soils & Fertilizers.....	3 credits
Any HOS, LDE, ORH, PMA, SOS courses			3 credits

**LANDSCAPE & HORTICULTURE TECHNICIAN CERTIFICATE
60240 - 30 CREDITS**

MAJOR FIELD REQUIRED COURSES - 15 credits

HOS	1010	Fundamentals of Horticulture	4 credits
ORH	1510	Plant Identification	3 credits
ORH	2859	Landscape Design & Maintenance	3 credits
SWS	2104	Soils & Fertilizers.....	3 credits
SPN	1000	Spanish for Daily Use I.....	2 credits

With specialization in Horticulture

ORH	2601	Retail Nursery Operations.....	3 credits
Any HOS, LDE, ORH, PMA, SOS courses			12 credits

With specialization in Landscape Maintenance

IPM	1323	Application of Pesticides.....	3 credits
ORH	1231	Lawn Care Maintenance	3 credits
ORH	2841	Landscape Installation.....	3 credits
PMA	2211	Insects & Diseases of Ornamental Plants.....	3 credits
SWS	1102	Irrigation Systems I.....	3 credits

With specialization in Landscape Design

BCN	1250	Architectural Drafting Principles.....	3 credits
CGS	1060	College Computing	3 credits
ETD	1320	Introduction to AutoCAD.....	3 credits
ETD	2568C	CAD – Landscape.....	3 credits
LDE	2403	Advanced Landscape Design	3 credits

MARKETING MANAGEMENT

20650 - 64 CREDITS

MARKETING OPERATIONS CERTIFICATE - 60070

This degree provides excellent preparation for students pursuing careers in sales and marketing within a number of industries prominent on the Research Coast. While providing a sound theoretical foundation, courses within this degree program emphasize the development of marketable skills essential to career success, including sales techniques, promotional strategies, and prudent management practices.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101.....	3 credits
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Natural Science/Mathematics

see page 146.....	3 credits
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Social/Behavioral Science

ECO 2000, ECO 2013 or ECO 2023.....	3 credits
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Humanities/Fine Arts or Natural Science/Mathematics

or Social/Behavioral Science

see pages 145 - 146	6 credits
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MAJOR FIELD REQUIRED COURSES - 35 credits

APA	1111	Introduction to Accounting.....	3 credits
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or			
ACG	2001	Financial Accounting I	3 credits
CGS	1060	College Computing	3 credits
or			
CGS	1100	Intro to Computer Applications for Business	3 credits
or			
CIS	1000	Introduction to Information Technology	3 credits
GEB	1011	Introduction to Business	3 credits
or			
GEB	1931	Introduction to Business Technology	3 credits
MNA	2100	Interpersonal Relations in Business	3 credits
or			
SLS	1261	Essentials of Contemporary Leadership.....	3 credits
MAN	2021	Principles of Management.....	3 credits
or			
MNA	2345	Supervision	3 credits
ADV	2000	Advertising & Sales Promotion	3 credits
MAR	2011	Principles of Marketing	3 credits
MKA	1303	Mid-Management Seminar & Supervised Exp. I	4 credits
MKA	1313	Mid-Management Seminar & Supervised Exp. II	4 credits
MKA	2021	Salesmanship.....	3 credits
QMB	1001	Mathematics of Business	3 credits

MAJOR FIELD ELECTIVES - Select 14 credits

BUL	2241	Business Law I.....	3 credits
MAN	2300	Introducion to Human Resource Management.....	3 credits
MKA	2323	Mid-Management Seminar & Supervised Exp. III	4 credits
MNA	1821	Electronic Commerce	3 credits

Maximum of two courses with CGS, MAN, MKA, MNA, HFT, or SLS prefix

Students may enhance their career success by first attaining a **Certificate in Marketing Operations (60070)** by completing 24 credits from the **Major Field Required** courses and **Major Field Electives** sections above. Attaining the A.S. Degree is then simply a matter of completing the General Education required courses and the remaining 25 credits of Major Field Required and Elective courses.

MEDICAL LABORATORY TECHNOLOGY - 20660
76 CREDITS (SELECTIVE ADMISSION)

Students in the Medical Lab Technology (MLT) program pursue an A.S. Degree and upon completion will be eligible to take the American Society of Clinical Pathologist Medical Laboratory Technician, and American Association of Bioanalysts Medical Technologist certification examinations. Students accepted into the MLT program receive a strong general education with a foundation in medical technology. The program consists of classroom instruction, lab practice, clinical time in a hospital lab, and culminates in a 12-week clinical practicum at a local hospital.

GENERAL EDUCATION – *may be taken prior to acceptance into the program or must be completed while enrolled in the program.

*Humanities/Fine Arts

ENC 1101 3 credits

*Natural Science/Mathematics

Any 8 credits of Biological Science with lab: BSC 1421 and BSC 1421L;
BSC 2010 and BSC 2010L; BSC 2011 and BSC 2011L; BSC 2093 and
BSC 2093L; BSC 2094 and BSC 2094L; MCB 2010 and MCB 2010L

Any 8 credits of Chemistry: CHM 1020, CHM 1032,
CHM 1045 and CHM 1045L, CHM 1046 and CHM 1046L..... 16 credits

*Social/Behavioral Science

PSY 2012 or SYG 2000 3 credits

MAJOR FIELD REQUIRED COURSES - 54 credits

*MLT	1000C	Introduction to Biomedical Technology.....	3 credits
MLT	1040C	Introduction to Specimen Processing.....	2 credits
MLT	1230	Urinalysis & Body Fluids.....	2 credits
MLT	1230L	Urinalysis & Body Fluids Laboratory.....	1 credit
MLT	1362	Hematology & Coagulation.....	4 credits
MLT	1362L	Hematology & Coagulation Lab.....	1 credit
MLT	1440C	Parasitology & Mycology.....	2 credits
MLT	1500C	Immunology & Serology.....	4 credits
MLT	1525	Immunohematology (Blood Bank).....	4 credits
MLT	1525L	Immunohematology Lab.....	1 credit
MLT	2033	Medical Lab Career Orientation.....	1 credit
MLT	1199	Introduction to Molecular Diagnostics.....	1 credit
MLT	2400	Medical Microbiology.....	4 credits
MLT	2400L	Medical Microbiology Lab.....	1 credit
MLT	2625	Clinical Chemistry.....	5 credits
MLT	2625L	Clinical Chemistry Lab.....	1 credit
MLT	2807L	Immunohematology Clinical Practicum.....	3 credits
MLT	2809L	Hematology Clinical Practicum.....	3 credits
MLT	2810L	Clinical Chemistry Practicum.....	3 credits
MLT	2811L	Microbiology Clinical Practicum.....	3 credits
MLT	2931	MLT Review for the State Exam.....	2 credits
*MAT	1033	Intermediate Algebra.....	3 credits

All core curriculum and natural science courses require a grade of "C" or higher.

NUCLEAR MEDICINE TECHNOLOGY
20770 - 75 CREDITS (SELECTIVE ADMISSION)

Nuclear medicine technologists operate cameras that detect and map the radioactive drug in a patient's body to create diagnostic images. Graduates of this program are eligible to sit for the national certifying examination given by the American Registry of Radiologic Technologists (A.R.R.T.) and the national board exam given by the Nuclear Medicine Technology Certification Board (NMTCB). The curriculum includes General Education requirements as well as in-depth instruction in nuclear medicine procedures,

pathology, patient care, nuclear medicine radiobiology and physics. A competency-based clinical education component is conducted at hospitals.

GENERAL EDUCATION – *may be taken prior to acceptance into the program or must be completed while enrolled in the program.

*Humanities/Fine Arts

ENC 1101, and select one from the following:

- AML 2010, AML 2020, ARH 1000, ARH 2050, ARH 2051, ENC 1102, ENC 1107, ENC 2133, ENC 2210, ENG 1123, ENG 1124, ENL 2012, ENL 2022, HUM 1233, HUM 1533, HUM 1541, HUM 2512, IDS 1110, IDS 1955, ISC 2133, LIN 2670, LIT 2110, LIT 2120, MUL 2010, MUL 2012, MUY 2100, ORI 1001, PHH 2060, PHH 2403, PHH 2603, PHI 1002, PHI 1010, PHI 1103, PHI 1112, PHI 1635, PHI 1801, PHI 2620, PHI 2630, REL 1300, SPC 1608, THE 1000 THE 2300, TPP 1110..... 6 credits

*Natural Science/Mathematics

- MAC 1105, CHM 1020..... 6 credits

*Social/Behavioral Science

- PSY 2012 3 credits

MAJOR FIELD REQUIRED COURSES - 60 credits

NMT	1002	Introduction to Nuclear Medicine.....	3 credits
NMT	1002L	Introduction to Nuclear Medicine Lab	1 credit
HSC	2632	Overview of Healthcare Delivery	4 credits
HSC	2531	Medical Terminology I	3 credits
BSC	2093	Anatomy & Physiology I	3 credits
BSC	2093L	Anatomy & Physiology I Lab.....	1 credit
BSC	2094	Anatomy & Physiology II	3 credits
BSC	2094L	Anatomy & Physiology II Lab.....	1 credit
CGS	1060	College Computing	3 credits
NMT	1804	Nuclear Medicine Clinical Education I	1 credit
NMT	1814	Nuclear Medicine Clinical Education II	2 credits
NMT	1713	Nuclear Medicine Methodology I.....	4 credits
NMT	1430	Nuclear Radiobiology & Physics	3 credits
NMT	1534	Nuclear Medicine Instrumentation	3 credits
NMT	1824	Nuclear Medicine Clinical Education III	3 credits
NMT	1723	Nuclear Medicine Methodology II.....	4 credits
NMT	1130	Nuclear Medicine Radiopharmacy.....	3 credits
NMT	2710	Introduction to PET/CT.....	3 credits
NMT	1312	Nuclear Medicine Radiation Safety.....	3 credits
NMT	2834	Nuclear Medicine Clinical Education IV	3 credits
NMT	1932	Nuclear Medicine Seminar	3 credits
NMT	2844	Nuclear Medicine Clinical Education V	3 credits

All core curriculum (NMT & HSC prefix) and English, and natural science courses require a grade of “C” or higher.

**NURSING ASSOCIATE DEGREE – R.N.
20670 - 72 CREDITS (SELECTIVE ADMISSION)**

Students accepted into the A.S. Degree Nursing program receive a solid general education as well as a strong foundation in nursing. Students are advised to take as many of the required General Education courses as possible before entering the program. Upon completion of the program, nursing students will be granted an A.S. Degree and will be eligible to apply for National Council Licensure Examinations for Registered Nurses (NCLEX-RN). An advanced placement option is available for qualified Licensed Practical Nurses, Paramedics, and Registered Respiratory Therapists.

GENERAL EDUCATION – *may be taken prior to acceptance into the program or must be completed while enrolled in the program.

*Humanities/Fine Arts

ENC 1101 and ENC 1102 or ENC 1107 6 credits

*Natural Science/Mathematics

BSC 2093 and BSC 2093L, BSC 2094 and BSC 2094L,
CHM 1020, MCB 2010 and MCB 2010L 15 credits

*Social/Behavioral Science

PSY 2012 or SYG 2000 3 credits

MAJOR FIELD REQUIRED COURSES - 48 credits

NUR 1020C Nursing Fundamentals 8 credits

NUR 2264C Adult Nursing GI & Respiratory..... 4 credits

NUR 2217C Adult Nursing GU & Endocrine 5 credits

NUR 2310C Pediatric Nursing with Lab..... 5 credits

NUR 2420C Maternity Nursing with Lab..... 4 credits

or

***NUR1404 Transition Maternity 2 credits

and

***NUR1404L Transition Maternity Lab 2 credits

NUR 2242 Advanced Adult Nursing..... 5 credits

NUR 2520C Psychiatric Mental Health Nursing with Lab..... 5 credits

NUR 1142 Selected Topics in Medication Administration 1 credit

NUR 2811L Nursing Practicum..... 5 credits

**DEP 2004 Human Development 3 credits

**HUN 1201 Nutrition 3 credits

Upon acceptance, a complete health screen, drug screen and Florida Department of Law Enforcement check are required. All core curriculum (NUR prefix) and English, and natural science courses require a grade of "C" or higher. Priority consideration for admission to the program will be given to those who have completed Anatomy and Physiology I and corequisite lab prior to application deadline. Anatomy and Physiology I and corequisite lab must be completed prior to NUR 1020C. Anatomy and Physiology II and corequisite lab must be completed by the end of the first semester, first year. Microbiology and corequisite lab must be completed by the end of the second semester, first year.

*General Education classes may be taken prior to acceptance into the program or they must be completed while enrolled in the program. All nursing and General Education courses must be completed prior to the beginning of Nursing Practicum (NUR 2811L).

**These classes may be taken prior to acceptance into the program. DEP 2004 must be completed prior to the beginning of Pediatric Nursing (NUR 2310C). HUN 1201 must be completed prior to the beginning of Maternity Nursing (NUR 2420C).

***These courses are Selective Admission only. Students are required to obtain permission from the Nursing Department to register.

ADVANCED TECHNICAL CERTIFICATES

The State of Florida has established the Advanced Technical Certificate program. This program of instruction consists of college level courses which may be awarded to students who have already received an Associate in Science Degree and are seeking an advanced specialized planned program of study to supplement their A. S. Degree.

PERIOPERATIVE NURSING

40080 - 9 CREDITS

These courses in the Advanced Technical Certificate option provide the registered nurse with current information regarding the role of the perioperative nurse. Clinical experiences utilizing updated equipment and medications in the perioperative setting are included. A minimum of two years working as an R.N. is recommended.

MAJOR FIELD REQUIRED COURSES - 9 credits

NSP	2290	Perioperative Nursing.....	6 credits
NSP	2290L	Perioperative Nursing Practicum.....	3 credits

PARALEGAL STUDIES/LEGAL ASSISTING

20640 - 64 CREDITS

This program is designed for students seeking a career in a law-related field as a paraprofessional and for legal secretaries presently employed who wish to advance in their work. Upon successful completion, a student will be prepared to work under the supervision of an attorney and perform many vital functions as a legal assistant. A legal assistant may not practice law, give advice, or collect fees. Legal assistants work in law firms, legal departments of major corporations, governmental agencies (local, state, and federal), real estate departments of large businesses, title companies, trust departments of banks, brokerage houses, and insurance companies. Students are eligible to take the National Association of Legal Assistants certification exam upon completion.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 and ENC 1102 or ENC 1107	6 credits
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Natural Science/Mathematics

see page 146	3 credits
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Social/Behavioral Science

see page 146	3 credits
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Humanities/Fine Arts, Natural Science/Mathematics

or Social/Behavioral Science

see pages 145 -146	3 credits
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MAJOR FIELD REQUIRED COURSES - 24 credits

PLA	1104	Legal Research & Writing I.....	3 credits
PLA	1610	Real Estate & Property Law	3 credits
PLA	2003	Introduction to Paralegal Studies.....	3 credits
PLA	2058	Survey of Law.....	3 credits

PLA	2114	Legal Research & Writing II.....	3 credits
PLA	2203	Civil Litigation I	3 credits
PLA	2223	Civil Litigation II	3 credits
PLA	2433	Corporate & Business Law.....	3 credits

MAJOR FIELD ELECTIVES - Select 25 credits

OST or	1713	Microsoft Word	3 credits
OST	1766	WordPerfect I	3 credits
ACG	2001	Financial Accounting I	3 credits
CJL	2062	Constitutional Law.....	3 credits
CJL	2100	Criminal Law	3 credits
CGS	1130	Electronic Access to Legal Resources.....	1 credit
CGS	1060	College Computing	3 credits
PLA	1763	Law Office Management	3 credits
PLA	1931	Special Topics in Law	1 credit
PLA	2273	Torts	3 credits
PLA	2423	Contracts.....	3 credits
PLA	2460	Bankruptcy Law	3 credits
PLA	2483	Administrative Law	3 credits
PLA	2600	Estate Planning & Probate Administration	3 credits
PLA	2661	Federal Estate & Gift Tax	3 credits
PLA	2800	Family Law	3 credits
PLA	2949	Internship in Paralegal Studies	4 credits
LIS	1002	Electronic Access to Information.....	1 credit
LIS	2004	Introduction to Internet Research	1 credit
LIS	2005	Advanced Electronic Access to Information	3 credits

PHYSICAL THERAPIST ASSISTANT - 20690
74 CREDITS (SELECTIVE ADMISSION)

The Physical Therapist Assistant (PTA) program is an integrated curriculum of class lecture, lab, and clinical education in a variety of health care settings. Completion of the A.S. Degree program prepares the PTA to perform physical therapy procedures and related tasks under the supervision of a Physical Therapist. Graduates are eligible to take the National Physical Therapist Assistant Examination and upon satisfactory achievement, become licensed Physical Therapist Assistants. The Physical Therapist Assistant program at IRSC is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association.

GENERAL EDUCATION – *may be taken prior to acceptance into the program or must be completed while enrolled in the program.

*Humanities/Fine Arts

ENC 1101.....	3 credits
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**Natural Science/Mathematics

PHY 1020, BSC 2093, BSC 2093L, BSC 2094, BSC 2094L.....	11 credits
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*Social/Behavioral Sciences

PSY 2012	3 credits
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MAJOR FIELD REQUIRED COURSES - 57 credits

PHT 1351	General Pharmacology-PTA.....	1 credit
*HSC 2531	Medical Terminology I	3 credits
*HUN 1201	Nutrition	3 credits
*CGS 1060	College Computing	3 credits
*MAT 1033	Intermediate Algebra.....	3 credits
PHT 1004	Introduction to Physical Therapy	2 credits
PHT 1004L	Introduction to Physical Therapy Lab	2 credits
PHT 1121	Functional Anatomy & Kinesiology	3 credits
PHT 1121L	Functional Anatomy & Kinesiology Lab.....	2 credits
PHT 1211	Disabilities & Therapeutic Procedures I.....	2 credits
PHT 1211L	Disabilities & Therapeutic Procedures I Lab	2 credits
PHT 1300	Survey of Pathological Deficits	3 credits
PHT 1801	Clinical Practice I	2 credits
PHT 2162	Survey of Neurological Deficits.....	3 credits
PHT 2224	Disabilities & Therapeutic Procedures II.....	2 credits
PHT 2224L	Disabilities & Therapeutic Procedures II Lab	1 credit
PHT 2703	Rehabilitative Procedures.....	2 credits
PHT 2703L	Rehabilitative Procedures Lab	1 credit
PHT 2810	Clinical Practice II	8 credits
PHT 2820	Clinical Practice III	7 credits
PHT 2931	Transition Seminar	2 credits

All core curriculum and natural science courses require a grade of "C" or higher. Anatomy and Physiology I and corequisite lab must be completed by the end of the Fall semester, first year. Anatomy and Physiology II and corequisite lab must be completed by the end of the Spring semester, first year.

**Students are encouraged to complete natural science and mathematics classes prior to acceptance into the program.

**ADVANCED TECHNICAL CERTIFICATE IN MANUAL TECHNIQUES
FOR THE PTA - 40050 - 10 CREDITS**

This program for licensed Physical Therapist Assistants is dedicated to advancing the science and art of soft tissue mobilization in an effort to enhance the quality of therapeutic treatment, promoting patient wellness.

Successful graduates of this curriculum are eligible to take the national certification examination through the National Certification Board for Therapeutic Massage and Bodywork, and upon satisfactory achievement, become licensed Massage Therapists (pending approval process).

The Massage Therapist is a highly trained health care provider who performs a variety of manual techniques designed to promote stress relief and relaxation, relieve pain and swelling to various structures, prevent deformity and promote functional activity in a person who has a specific health problem.

MAJOR FIELD REQUIRED COURSES – 10 credits

PHT 2203	Manual Techniques I.....	3 credits
PHT 2203L	Clinical Practicum in Manual Techniques I.....	2 credits

PHT	2204	Manual Techniques II.....	3 credits
PHT	2204L	Clinical Practicum in Manual Techniques II.....	2 credits

RADIOGRAPHY - 20700

77 CREDITS (SELECTIVE ADMISSION)

NUCLEAR MEDICINE TECHNOLOGY SPECIALIST CERTIFICATE – 60210

PET/CT ADVANCED TECHNICAL CERTIFICATE – 40100

Graduates of this program are eligible to sit for the national certifying examination given by the American Registry of Radiologic Technologists (A.R.R.T.). The program is accredited by the Joint Review Committee on Education in Radiologic Technology. The curriculum includes General Education requirements as well as in-depth instruction in radiographic procedures, pathology, patient care, and radiographic physics. A competency-based clinical education component is conducted at six local hospitals. Program graduates may choose to continue their education at the university level, or to specialize in other imaging modalities such as: Ultrasound, Nuclear Medicine, Radiation Therapy, or Magnetic Resonance Imaging.

GENERAL EDUCATION – *may be taken prior to acceptance into the program or must be completed while enrolled in the program.

***Humanities/Fine Arts**

ENC 1101, and select one from the following:

AML 2010, AML 2020, ARH 2050, ARH 2051, ENC 1102, ENC 1107,
ENL 2012, ENL 2022, HUM 1233, HUM 1533, HUM 1541,
HUM 2512, IDS 1110, IDS 1955, LIT 2110, LIT 2120, MUL 2010,
PHI 1002, PHI 1010, PHI 1103, PHI 1635, PHI 1801, PHI 2630,
REL 1300, SPC 1608 or THE 1000..... 6 credits

***Natural Science/Mathematics**

MAC 1105, BSC 2093, BSC 2093L, BSC 2094, BSC 2094L..... 11 credits

***Social/Behavioral Science**

PSY 2012 3 credits

MAJOR FIELD REQUIRED COURSES - 57 credits

*RTE	1000	Introduction to Radiologic Sciences.....	3 credits
RTE	1111	Patient Care for Radiologic Sciences.....	2 credits
RTE	1111L	Patient Care for Imaging Science Lab.....	1 credit
RTE	1418	Radiographic Imaging I.....	3 credits
RTE	1457	Radiographic Imaging II.....	3 credits
RTE	1457L	Radiographic Imaging II Lab.....	1 credit
RTE	1503	Radiographic Procedures I.....	3 credits
RTE	1513	Radiographic Procedures II.....	3 credits
RTE	1513L	Radiographic Procedures II Lab.....	1 credit
RTE	1523	Radiographic Procedures III.....	3 credits
RTE	1523L	Radiographic Procedures III Lab.....	1 credit
RTE	1804	Radiographic Clinical Education I.....	1 credit
RTE	1814	Radiographic Clinical Education II.....	1 credit
RTE	1824	Radiographic Clinical Education III.....	3 credits
RTE	1834	Radiographic Clinical Education IV.....	3 credits

RTE	2844	Radiographic Clinical Education V	1 credit
RTE	2061	Radiographic Seminar	3 credits
RTE	2385	Radiation Safety & Protection	2 credits
RTE	2533	Radiographic Procedures IV	2 credits
RTE	2533L	Radiographic Procedures IV Lab	1 credit
RTE	2553	Radiographic Procedures V	2 credits
RTE	2553L	Radiographic Procedures V Lab	1 credit
RTE	2571	Introduction to Computed Tomography	1 credit
RTE	2785	Radiographic Pathology	2 credits
RTE	2854	Radiographic Clinical Education VI	1 credit
RTE	2864	Radiographic Clinical Education VII	3 credits
RTE	2874	Radiographic Clinical Education VIII	3 credits
*CGS	1060	College Computing	3 credits
or			
*CGS	1100	Introduction to Computer Applications-Business	3 credits

Upon acceptance, a complete health screen, drug screen and Florida Department of Law Enforcement criminal background check are required. All core curriculum (RTE prefix), English, math, and natural science courses require a grade of "C" or higher. Priority consideration for admission to the program will be given to those who have completed Anatomy and Physiology I and corequisite lab, Introduction to Radiologic Sciences, and other General Education courses prior to the published application deadline. Anatomy and Physiology II and corequisite lab must be completed by the end of the Spring semester, first year.

NUCLEAR MEDICINE TECHNOLOGY SPECIALIST - 60210 49 CREDITS (SELECTIVE ADMISSION)

This advanced training program prepares individuals to become certified as Nuclear Medicine Technology Specialists. Program participants must have already earned an A.S. or higher degree in Radiography, Respiratory Therapy, or Nursing.

MAJOR FIELD REQUIRED COURSES – 49 credits

BSC	2093	Anatomy & Physiology I	3 credits
BSC	2093L	Anatomy & Physiology I Lab	1 credit
BSC	2094	Anatomy & Physiology II	3 credits
BSC	2094L	Anatomy & Physiology II Lab	1 credit
CHM	1020	Introduction to Chemistry	3 credits
NMT	1002	Introduction to Nuclear Medicine	3 credits
NMT	1130	Nuclear Medicine Radiopharmacy	3 credits
NMT	1312	Nuclear Medicine Radiation Safety	3 credits
NMT	1430	Nuclear Medicine Radiobiology & Physics	3 credits
NMT	1534	Nuclear Medicine Instrumentation	3 credits
NMT	1713	Nuclear Medicine Methodology I	4 credits
NMT	2710	Introduction to PET/CT	3 credits
NMT	1723	Nuclear Medicine Methodology II	4 credits
NMT	1824	Nuclear Medicine Clinical Education III	3 credits
NMT	2834	Nuclear Medicine Clinical Education IV	3 credits
NMT	2844	Nuclear Medicine Clinical Education V	3 credits
NMT	1932	Nuclear Medicine Seminar	3 credits

PET/CT ADVANCED TECHNICAL CERTIFICATE – 40100
12 CREDITS (SELECTIVE ADMISSION)

The PET/CT Advanced Technical Certificate program provides the Nuclear Medicine Technologist or Radiation Therapist online courses in cross-sectional anatomy, PET/CT procedures, (PET/CT) physics, instrumentation, quality control, radiopharmaceuticals, and radiation protection. Upon successful completion, students are eligible to take the Nuclear Medicine Technology Certification Board PET exam.

MAJOR FIELD REQUIRED COURSES - 12 credits

NMT	2710	PET/CT Procedures and Radiopharmaceuticals.....	3 credits
NMT	2573	PET/CT Physics and Instrumentation	3 credits
NMT	2310	PET/CT Quality Control and Radiation Safety.....	3 credits
RTE	2762	Cross-Sectional Anatomy	3 credits

RESPIRATORY CARE - 20710
76 CREDITS (SELECTIVE ADMISSION)

The A.S. Degree program in Respiratory Care trains students in the use of medical gases, medication, aerosols, chest physiotherapy, airway management, mechanical ventilation, and cardiopulmonary resuscitation. The program includes classroom lecture, lab experiences, and clinical experience at local hospitals. The Respiratory Care program at IRSC is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), in collaboration with the Committee on Accreditation for Respiratory Care (CoARC).

GENERAL EDUCATION – *may be taken prior to acceptance into the program or must be completed while enrolled in the program.

*Humanities/Fine Arts

ENC 1101.....	3 credits
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*Natural Science/Mathematics

BSC 2010, PHY 1020, BSC 2093, BSC 2093L, BSC 2094, BSC 2094L.....	14 credits
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*Social/Behavioral Science

PSY 2012	3 credits
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MAJOR FIELD REQUIRED COURSES - 56 credits

MAT	1033	Intermediate Algebra.....	3 credits
RET	1024	Introduction to Respiratory Care	3 credits
RET	1007	Cardiopulmonary Pharmacology	2 credits
RET	1274	Respiratory Therapy Theory I.....	3 credits
RET	1485	Cardiopulmonary Anatomy & Physiology	3 credits
RET	2275	Respiratory Therapy Theory II with Lab.....	3 credits
RET	2503	Cardiopulmonary Diseases.....	2 credits
RET	2832	Respiratory Therapy Clinic I	5 credits
RET	2442	Respiratory Therapy Theory III.....	3 credits
RET	2833	Respiratory Therapy Clinic II	2 credits
RET	2414C	Pulmonary Function Studies with Lab	3 credits
RET	2264	Mechanical Ventilation with Lab	3 credits

RET	2834	Respiratory Therapy Clinic III	5 credits
RET	2280	Critical Respiratory Care	3 credits
RET	2835	Respiratory Therapy Clinic IV	7 credits
RET	2714	Pediatric/Neonatal Respiratory Care	3 credits
RET	2934	Professional Development in Respiratory Care	2 credits
RET	2241	Introduction to ACLS for Respiratory Care	1 credit

All core curriculum and natural science courses require a grade of "C" or higher. Anatomy and Physiology I and corequisite lab must be completed by the end of the Fall semester, first year. MAT 1033, Anatomy and Physiology II and corequisite lab must be completed by the end of the Spring semester, first year.

ADVANCED RESPIRATORY CARE PRACTICE - 40090 - 9 CREDITS

This program of study assists the student in preparing for the application of advanced respiratory care procedures. Program participants must have already earned an A.S. or higher degree in Respiratory Therapy.

MAJOR FIELD REQUIRED COURSE – 3 credits

RET	2405	Diagnostic Procedures in Respiratory Care	3 credits
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MAJOR FIELD ELECTIVES – Select 6 credits

RET	2008	Gen. Pharmacology - Respiratory Care Practitioners.....	2 credits
RET	2225	Conscious Sedation	2 credits
RET	2418	Diagnostic Cardiopulmonary Pathophysiology	3 credits
RET	2490	I.V. Therapy	3 credits

RESTAURANT MANAGEMENT

A0090 - 64 CREDITS

ASSOCIATE IN APPLIED SCIENCE DEGREE

A strong foundation in the foods and nutrition field coupled with a broad base of general academics is provided by this program. This course of study offers students the opportunity to gain field experience and practical knowledge through “hands-on” activities. With this major, one can select many productive employment possibilities from a variety of career fields such as the food processing industry, institutional food service management, and restaurant management. In addition, the **Culinary Institute at Indian River State College** curriculum is found within this degree.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101	3 credits
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Natural Science/Mathematics

MAT 1033 or higher	3 credits
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Social/Behavioral Science

see page 146	3 credits
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Humanities/Fine Arts or Natural Science/Mathematics

or Social/Behavioral Science

see pages 145 - 146	6 credits
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MAJOR FIELD REQUIRED COURSES - 21 credits

FOS	2201	Sanitation & Safety	3 credits
FSS	2221C	Food Preparation I.....	3 credits

FSS	2222C	Food Preparation II.....	3 credits
FSS	2063C	Quantity Baking.....	3 credits
FSS	2300	Food Service Supervision & Management.....	3 credits
FSS	2401	Use & Care of Kitchen Equipment	3 credits
HUN	1203	Culinary Nutrition	3 credits

SUGGESTED SPECIALIZATION ELECTIVES – Select 28 credits

COMMERCIAL CULINARY ARTS

*FSS	2206	Quantity Food Production	4 credits
*FSS	2248C	Pantry & Garde-Manger I.....	4 credits
*FSS	2500	Food/Beverage Cost Control/Purchasing.....	4 credits

INSTITUTIONAL FOOD SERVICE

FSS	2303	Food Service Practicum I.....	4 credits
FSS	2304	Food Service Practicum II.....	4 credits
FSS	2305	Food Service Practicum III.....	4 credits

MAJOR FIELD ELECTIVES

APA	1111	Introduction to Accounting.....	3 credits
CGS	1000	Introduction to Computer Usage	3 credits
*CGS	1100	Introduction to Computer Applications-Business.....	3 credits
HUN	1203	Culinary Nutrition	3 credits
FSS	1930	Creative Culinary Cooking.....	½ - 3 credits
*FSS	2263	Food Merchandising & Service	3 credits
*FSS	2284C	Food Services Special.....	3 credits
*GEB	1011	Introduction to Business.....	3 credits
GEB	1931	Introduction to Business Technology	3 credits
HUN	1410	Basic Childhood Nutrition	3 credits
MAN	2021	Principles of Management.....	3 credits
MAR	2011	Principles of Marketing.....	3 credits
*MKA	1303	Mid-Mgmt Seminar & Supervised Exp I.....	4 credits
MNA	2100	Interpersonal Relations in Business	3 credits
MNA	2345	Supervision.....	3 credits
SLS	1421	Personal & Career Development.....	3 credits

*In addition to General Education and Major Field Required courses, suggested specialized electives with asterisks are required for the **Culinary Institute at Indian River State College**.

**THEATRE AND ENTERTAINMENT TECHNOLOGY
20720 - 64 CREDITS**

This degree prepares the student for a career in technical theatre and/or technical support for related live entertainment. The curriculum offers the conceptual and technological skills and experience required for jobs such as stage technician, sound technician, lighting technician, costume technician, stage manager, scenic carpenter, stage crew, and theatre maintenance technician. This degree also provides the entry-level skills and experience for technical support positions in the film/television/theme park industries.

GENERAL EDUCATION

Humanities/Fine Arts

ENC 1101 and THE 1000..... 6 credits

Natural Science/Mathematics

see page 146 3 credits

Social/Behavioral Science

see page 146 3 credits

Humanities/Fine Arts or Natural Science/Mathematics

or Social/Behavioral Science

ARH 2050, HUM 1533, HUM 2512 recommended 3 credits

MAJOR FIELD REQUIRED COURSES - 42 creditsCGS 1100 Intro to Computer Applications for Business 3 credits
or

CGS 1060 College Computing 3 credits

BCN 1250 Architectural Drafting Principles..... 3 credits

MNA 2345 Supervision 3 credits

TPA 1200 Beginning Stagecraft 3 credits

TPA 1208 Drafting for the Stage 3 credits

TPA 1211 Stagecraft II 3 credits

TPA 1230 Theatre Costuming I 3 credits

TPA 1248 Stage Makeup 3 credits

TPA 2220 Introduction to Stage Lighting 3 credits

TPA 2221 Advanced Stage Lighting 3 credits

TPA 2252 Introduction to Audio Visual Technology 3 credits

TPA 2260 Sound for the Stage 3 credits

TPA 2282 Theatre Equipment Maintenance 2 credits

TPA 2290 Technical Theatre 4 semesters x 1 credit

MAJOR FIELD ELECTIVES - 7 credits

ART 1201C Color & Design I 3 credits

DAA 1500 Jazz Dance 2 credits

EET 1215C Introduction to Electronics..... 3 credits

ETD 1320 Introduction to AutoCAD..... 3 credits

DIG 2302 3D Digital Animation I 3 credits

FIL 1030 History of Film..... 3 credits

TPA 1272 Beginning Rigging..... 1 credit

TPP 1110 Acting 3 credits

TPP 1190 Rehearsal & Performance Lab I 1 credit