CareerVision

A GUIDE TO CAREER AND TECHNICAL EDUCATION PROGRAMS
Associate of Science Degrees • Technical Certificates • Vocational Certificates

PENSACOLA STATE COLLEGE

2013 | 2015
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Welcome!

**CareerVision is your guide for planning a bright future.**

This publication provides information about the Career and Technical Education (CTE) programs offered at Pensacola State College. Because we strive to meet local workforce needs, we now offer over eighty CTE programs, including our Associate of Science degrees and Technical and Vocational certificates that can help you achieve your goals. In addition, many graduates of our Associate of Science programs improve their employability and increase their career opportunities by continuing their education at the College and earning a Bachelor of Applied Science or Bachelor of Science in Nursing degree.

This guide also contains information regarding workforce trends, academic advising, financial aid, estimated costs, and entrance requirements of the various programs. Departmental contact information is included so that you can get additional information about our programs. And because Pensacola State College is committed to student success, this guide provides information about the many free support services we offer students. All of these resources can help you make an informed career choice.

**Pensacola State College is glad you're here!**  
**We wish you much success in pursuit of your dreams.**

Daniel Busse  
*Dean, Workforce Education and Vocational Support*

www.pensacolastate.edu/careervision
# Contents

## Resources

<table>
<thead>
<tr>
<th>Category</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions and Information</td>
<td>4</td>
</tr>
<tr>
<td>Center for Advising &amp; Career Services</td>
<td>5</td>
</tr>
<tr>
<td>Student Job Services</td>
<td>6</td>
</tr>
<tr>
<td>Career Pathways</td>
<td>7</td>
</tr>
<tr>
<td>CTE Student Resources</td>
<td>8</td>
</tr>
<tr>
<td>Additional Support Services</td>
<td>9</td>
</tr>
</tbody>
</table>

## Programs

<table>
<thead>
<tr>
<th>Category</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>10</td>
</tr>
<tr>
<td>Accounting Technology</td>
<td></td>
</tr>
<tr>
<td>Accounting Technology Management</td>
<td>12</td>
</tr>
<tr>
<td>Building Construction</td>
<td>14</td>
</tr>
<tr>
<td>Architectural Design and Construction Technology</td>
<td>16</td>
</tr>
<tr>
<td>AutoCAD Foundations</td>
<td></td>
</tr>
<tr>
<td>Building Construction Specialist</td>
<td>18</td>
</tr>
<tr>
<td>Drafting</td>
<td>20</td>
</tr>
<tr>
<td>Carpentry</td>
<td>22</td>
</tr>
<tr>
<td>Electricity</td>
<td>24</td>
</tr>
<tr>
<td>Heating, Ventilation and Air Conditioning</td>
<td>26</td>
</tr>
<tr>
<td>Plumbing Technology</td>
<td>28</td>
</tr>
<tr>
<td>Business</td>
<td>30</td>
</tr>
<tr>
<td>Business Administration</td>
<td></td>
</tr>
<tr>
<td>Computer Programming</td>
<td>32</td>
</tr>
<tr>
<td>Computer Programming and Analysis</td>
<td>34</td>
</tr>
<tr>
<td>Computer Programming</td>
<td></td>
</tr>
<tr>
<td>Web Development Specialist</td>
<td>36</td>
</tr>
<tr>
<td>Culinary</td>
<td></td>
</tr>
<tr>
<td>Culinary Management</td>
<td>52</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>54</td>
</tr>
<tr>
<td>Dental</td>
<td></td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>56</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>58</td>
</tr>
<tr>
<td>Early Childhood Intervention</td>
<td>61</td>
</tr>
<tr>
<td>Early Childhood Teacher (Preschool)</td>
<td>61</td>
</tr>
<tr>
<td>Florida Child Care Professional Credential</td>
<td>63</td>
</tr>
<tr>
<td>Infant/Toddler Specialization</td>
<td></td>
</tr>
<tr>
<td>EKG Technician</td>
<td>64</td>
</tr>
<tr>
<td>Electronics Engineering</td>
<td></td>
</tr>
<tr>
<td>Electronics Engineering Technology</td>
<td>66</td>
</tr>
<tr>
<td>Electronics Aide</td>
<td>68</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td></td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>70</td>
</tr>
<tr>
<td>Emergency Medical Technician</td>
<td>72</td>
</tr>
<tr>
<td>Paramedic</td>
<td>74</td>
</tr>
<tr>
<td>Public Safety Telecommunicator</td>
<td>76</td>
</tr>
<tr>
<td>Graphic Design</td>
<td>78</td>
</tr>
<tr>
<td>Graphic Design Technology</td>
<td></td>
</tr>
<tr>
<td>Health Information</td>
<td></td>
</tr>
<tr>
<td>Health Information Technology</td>
<td>80</td>
</tr>
<tr>
<td>Medical Information Coder/Biller</td>
<td>82</td>
</tr>
<tr>
<td>Health Unit Coordinator</td>
<td>84</td>
</tr>
<tr>
<td>Health Unit Coordinator</td>
<td></td>
</tr>
<tr>
<td>Hospitality</td>
<td></td>
</tr>
<tr>
<td>Hospitality and Tourism Management</td>
<td>86</td>
</tr>
<tr>
<td>Food and Beverages Management</td>
<td>89</td>
</tr>
<tr>
<td>Event Planning Management</td>
<td>89</td>
</tr>
<tr>
<td>Rooms Division Management</td>
<td>89</td>
</tr>
<tr>
<td>Guest Services Specialist</td>
<td></td>
</tr>
<tr>
<td>Industrial Management</td>
<td>90</td>
</tr>
<tr>
<td>Industrial Management Technology</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Subfield</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Information Technology (IT) Security</td>
</tr>
<tr>
<td></td>
<td>Computer Information Technology</td>
</tr>
<tr>
<td></td>
<td>Cyber Forensics</td>
</tr>
<tr>
<td></td>
<td>Cable Technician</td>
</tr>
<tr>
<td></td>
<td>Information Technology</td>
</tr>
<tr>
<td></td>
<td>Network Communications</td>
</tr>
<tr>
<td></td>
<td>Wireless Communications</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscaping and Horticulture</td>
<td>Landscape and Horticulture Management</td>
</tr>
<tr>
<td></td>
<td>Landscape and Horticulture Professional</td>
</tr>
<tr>
<td></td>
<td>Landscape and Horticulture Specialist</td>
</tr>
<tr>
<td></td>
<td>Landscape and Horticulture Technician</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Massage Therapy</td>
<td>Massage Therapy</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Design and Fabrication</td>
<td>Mechanical Design and Fabrication</td>
</tr>
<tr>
<td></td>
<td>CNC Machinist</td>
</tr>
<tr>
<td></td>
<td>Computerized Woodworking</td>
</tr>
<tr>
<td></td>
<td>Mechanical Designer/Programmer</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Office</td>
<td>Medical Assisting</td>
</tr>
<tr>
<td></td>
<td>Health Services Management</td>
</tr>
<tr>
<td></td>
<td>Office Administration (Medical Office Administration)</td>
</tr>
<tr>
<td></td>
<td>Medical Records Transcribing</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td>Nursing, R.N.</td>
</tr>
<tr>
<td></td>
<td>Nursing Assistant</td>
</tr>
<tr>
<td></td>
<td>Practical Nursing</td>
</tr>
<tr>
<td></td>
<td>Surgical Technology</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>Office Administration</td>
</tr>
<tr>
<td></td>
<td>Office Management</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Paralegal/Legal</td>
<td>Paralegal Studies</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Pharmacy Management</td>
</tr>
<tr>
<td></td>
<td>Pharmacy Technician</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>Phlebotomy</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Photography</td>
<td>Photographic Technology</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>Physical Therapist Assistant</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatry</td>
<td>Psychiatric Technology</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiography</td>
<td>Radiography</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td>Recreation Technology</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Sonography</td>
<td>Sonography (Diagnostic Medical Sonography)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Veterinary</td>
<td>Veterinary Technology</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Appendix</td>
<td>Job Placement Levels</td>
</tr>
<tr>
<td></td>
<td>Program Award Listing</td>
</tr>
<tr>
<td></td>
<td>Index of Programs</td>
</tr>
</tbody>
</table>

For more information on our Baccalaureate Degree Programs visit
www.pensacolastate.edu/programs/bachelors.asp
Have Questions? We will help you.

- Sign up for campus tours.
- Complete your application properly.
- Get started on the financial aid process.
- Begin to prepare for testing, if necessary.
- Enroll in online or on-campus orientation.
- Receive the tools and resources you need to experience success!

Call: (850) 484-2544
Toll Free: (888) 897-3605

askus@pensacolastate.edu
The Center for Advising & Career Services is a career-planning, academic advising, and university-transfer service that helps individuals explore and identify careers for which they may be best suited.

The Center for Advising & Career Services enables individuals to make an informed decision about their career paths and education. You will find the services helpful, whether you are a college student trying to decide your career path, or an adult who has been working in a career, and needs to consider a career change.

**Student services include:**

- Career search – Search local and national databases.
- Career information – Find the right career for you.
- College search – Learn about colleges and transfer information.
- Advising and Career Resource library
- Academic Advising

http://www.pensacolastate.edu/services/careerConn.asp

Contact the Center for Advising & Career Services for more information, or to schedule an appointment

**Pensacola**
Building 5
Room 508
(850) 484-1630

**Milton**
Building 4200
Room 4204
(850) 484-4444

**Warrington**
Building 3600
Room 3624
(850) 484-2342

**South Santa Rosa**
Building 5
Room 5102
(850) 471-4630

**Century**
440 E. Heckler Rd.
(850) 471-4622
Student Job Services provides placement assistance to currently enrolled Pensacola State College students and alumni.

Call, click, or come in and receive personal advising for:

- Job search information
- Resume writing assistance
- Employment outlook information
- Part time jobs for students
- Full time career jobs for graduates
- Cooperative Education jobs
- Hosts Job/Career Fairs Fall, Spring, Summer
- Host hiring events with local employers
- Place work study students in on-campus jobs.

 accesses Pensacola State College Works Online

Your next job may be just a click away . . . get quick and easy job information. College Works Online is a free online job service for enrolled students and Alumni:

- Apply for jobs.
- Contact employers.
- Post resumes.
- Have employers contact you.
- 24-hour service.

Access Pensacola State College Works Online . . .

- From your home computer,
- On-campus in the Student Job Services centers,
- and anywhere there is access to the Internet.

www.pensacolastate.edu/sjs

www.pensacolastate.edu/sjs
Students begin on their “Career Pathway” while in high school by focusing on rigorous academics and technical skills and then link their high school studies with the similar associate degree program at Pensacola State College.

If you are a recent graduate from an Escambia or Santa Rosa County high school, and have completed a Career Tech program of study or an academy, you may be eligible to receive college credit in your major at Pensacola State College.

Goals of Career Pathways

• Support higher academic achievement
• Improve student transition to postsecondary education after high school—through articulation agreements
• Prepare students for rewarding careers in high demand fields
• Save students time and tuition

askCTE@pensacolastate.edu
Career and Technical Education (CTE) Student Resources offers free services designed to assist students in gaining marketable job skills in qualified career and technical education programs.

**Services**
- Textbooks
- Scholarships
- Skill Strengthening
- Employability Skills

**Employability Skills Services**
- Resumes
- Cover Letters
- Networking
- Addressing Barriers to Employment
- Job Seeking Skills
- Mock Interviews

**Workforce Education**
Our Workforce Education website provides information about career and technical programs available at Pensacola State College. It is designed to assist students in making an informed career choice by providing information related to workforce education and employability skills.

*Individualized Assistance and Classroom Workshops Available*

askcte@pensacolastate.edu
www.pensacolastate.edu/cte
workforce.pensacolastate.edu
Additional Support Services

Take advantage of FREE support services available to Pensacola State College students.

Career & Technical Education (CTE) Student Resources
Page 8

Educational Opportunity Center (EOC) – A TRIO Program
contacteoc@pensacolastate.edu
(850) 484-1961

• Admissions
• Financial Aid
• Educational/Career Choices
• Pensacola, Milton, and Warrington Campuses
• Several locations in Escambia County

Educational Talent Search (ETS) – A TRIO Program
(850) 484-1620

For middle school and high school students —
Understand your educational opportunities and options.
• Advising for academic, career, and vocational choices
• College preparation
• Tutoring
• ACT/SAT test preparation workshops
• College applications
• Assistance and workshops for Financial Aid and college preparation
• Pensacola Campus, Building 6

Student Resource Center for ADA Services
ADA-Services@pensacolastate.edu
(850) 484-1637

• Information about disabilities and advocacy
• Academic advising for students with disabilities
• Provides services and accommodations for students with disabilities
• Pensacola Campus, Building 6

Student Support Services – A TRIO Program
rburns@pensacolastate.edu
(850) 484-2028

For eligible students —
• Help to stay in college, graduate, or transfer
• Academic, transfer, career and financial aid counseling
• Tutoring for academic success
• Find grants to help pay for college
• Pensacola Campus, Building 6

Veterans Upward Bound – A TRIO Program
vetsupwardbound@pensacolastate.edu
(850) 484-1438

For eligible veterans —
• Free academic preparation for success in college
• Free skill assessment, advising, textbooks, supplies and a monthly stipend
• Free individualized tutoring, workshops, computer tutorials, and classroom instruction
• Pensacola Campus, Building 6

Writing and Math Labs

Writing Labs
Pensacola (850) 484-1451
Warrington (850) 484-2351
Milton (850) 484-4403
SSRC (850) 471-4651

Math Labs
Pensacola (850) 484-2003
Warrington (850) 484-2378
Milton (850) 484-4403
SSRC (850) 471-4651

• Individual assistance for all math courses in the Math Labs
• Individual assistance with writing and reading in the Writing Labs

To find out more, go to:
www.pensacolastate.edu

Click on: “Students” then review the variety of services you’ll find under “Student Services” and “Study Resources.”

Back to Table of Contents

2013-2015 CAREERVISION 9
Primary Employers and Occupations

Graduates from the Accounting Technology program support the complex financial information that business and industry require. All industries, businesses, and agencies that record their financial transactions are potential prospects for employment.

Accounting Technicians
Assist experienced accountants in preparing, analyzing and verifying financial reports such as balance sheets and income statements concerning a company’s assets, liabilities, operational costs, taxes and profits. Accounting assistants work in the accounting departments of businesses, manufacturers, and federal, state, and local government agencies, or may assist large accounting firms which hire staff accountants who work on the books of several clients.

Bookkeepers
Develop and maintain financial records. Bookkeepers verify and enter into ledgers the details of their accounts payable and receivable, billing vouchers, receipts, and loans, then balance these figures. In addition to keeping records, bookkeepers may prepare payrolls, tax reports, and customers’ monthly statements.

Other Occupations Include:
Accounting Assistant
Accounting Specialist
Accounts Payable/Receivable Clerk
Payroll Clerk
Tax Preparer

For more information, explore:
American Payroll Association: www.americanpayroll.org/

Beyond Graduation...
Changing laws and regulations, increased numbers of businesses, and greater scrutiny of company finances will drive faster than average growth of accountants and auditors.

Job Placement Levels are on page 156.
Accounting Technology

Certifications and Credentials for Employment
If you possess an industry certification in this career area, you may be eligible to receive college credit toward this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident
Additional expenses may apply

Work Experiences Related to Program
Course ACO 2943 Accounting Internship requires 120 hours with a participating employer (unpaid). Students may earn Cooperative Education credits that can be used to meet this requirement. Contact Student Job Services.

Foundation Courses
- ACG 2001 Accounting I 3
- ACG 2011** Accounting II 3
- CGS 1570† Computer Concepts and Applications 3
- GEB 1011 Introduction to Business 3
- ENC 1101 English Composition I (Category I) 3
- MAC 1105 College Algebra (Category IV) or higher 3
- Humanities/Fine Arts (Category II) 3
- Natural Science (Category V) 3

Intermediate Courses
- CGS 2510** Spreadsheet 3
- COM 2100***†† Business Communications 3
- ACO 1806** Payroll Accounting 3
- OST 1146 Basic Keyboarding 1
- ECO 2013 Macroeconomics (Category III) 3
- BUL 2241 Business Law 3
- FIN 2100 Personal Finance and Money Management 3
- GEB 2430 Business Ethics 3
- SPC 1608 ‡ Public Speaking 3

Advanced Courses
- ACG 2071** Introduction to Managerial Accounting 3
- ACG 2002** Computerized Accounting 3
- APA 2147 Accounting Software Applications 3
- TAX 2000** Income Tax Procedures 3
- ACO 2943 Accounting Internship or
  ACG 2949** Accounting Co-op or
  GEB 2112 Entrepreneurship 3

Total Program Credits 64

* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Program Contact
Ms. Jeanne Branch (850) 484-1742
jbranch@pensacolastate.edu

Department Head
Dr. Debra Kuhl (850) 484-2504
dkuhl@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then “Quick Link” to Financial Aid

Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.

For more information call the Program Contact or visit: workforce.pensacolastate.edu

This publication is to provide general career and program information and is not to be construed as a contract between the student and Pensacola State College. The student is encouraged to work closely with counselors and the department to verify the appropriateness of courses for registration.
Persons already employed within a government or non-profit agency are primary candidates for this program. People who have arithmetic ability, prefer working indoors, and like to organize things may be suited for a career in this field. If you are practical, careful, and persistent, this career may be for you.

Typical Tasks Include . . .

- Compute and record transactions and numerical data to keep financial records complete, current, and accurate.
- Compile reports that show all monies received and paid out by a firm.
- Use calculators and computers to compute interest, payroll, and totals.

Beyond Graduation . . .

Students wishing to continue their education may take additional courses to earn a two-year Associate of Science (A.S.) degree in Accounting Technology.

Job Placement Levels . . .
Page 156

Primary Employers and Occupations

Graduates from the Accounting Technology Management program support the complex financial information that business, government, non-profit organizations, and other agencies require.

Accounting Clerks

Perform any combination of calculating, posting and verification of financial data for the monitoring and maintaining of accounting records. From these reports are generated such as balance sheets and income statements concerning assets, liabilities, operational costs, taxes and profits.

Bookkeepers

Develop and maintain financial records. Bookkeepers verify and enter into ledgers the details of their accounts payable and receivable, billing vouchers, receipts, and loans, then balance these figures. In addition to keeping records, bookkeepers may prepare payrolls, tax reports, and customers’ monthly statements.

Other Occupations Include

Accounts Payable and/or Receivables Clerk
Bank Teller
Loan and Credit Clerk
Remittance Clerk
Tax Clerk

For more information, explore:

Institute of Management Accountants  www.imanet.org
The American Institute of Certified Public Accountants  www.aicpa.org/index.htm
American Payroll Association  www.americanpayroll.org/

Beyond Graduation . . .

Students wishing to continue their education may take additional courses to earn a two-year Associate of Science (A.S.) degree in Accounting Technology.

Job Placement Levels . . .
Page 156

The Center for Advising & Career Services  Go to: Page 5

TARGETED OCCUPATION
HIGH DEMAND,
HIGH SKILL OR HIGH WAGE

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookkeeping, Accounting, and Auditing Clerks</td>
<td>2,324</td>
<td>63</td>
<td>$14.88</td>
</tr>
</tbody>
</table>

Many jobs in this field are listed among the TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.
Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
# Accounting Technology Management

**Technical Certificate**

**ACCTG-CT**

## Certifications and Credentials for Employment

If you possess an industry certification in this career area, you may be eligible to receive college credit toward this program. For more information, see the program contact or the department head.

### Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost

**Per College Credit:**
- $104.58, Florida Resident
- $105.58, Alabama Resident

## Foundation Courses

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</tr>
</thead>
<tbody>
<tr>
<td>ACG 2001</td>
<td>3</td>
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<tr>
<td>ACG 2011**</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570</td>
<td>3</td>
</tr>
</tbody>
</table>

## Intermediate Courses

<table>
<thead>
<tr>
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<th>Credits</th>
</tr>
</thead>
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<td>ACO 1806**</td>
<td>3</td>
</tr>
<tr>
<td>APA 2147**</td>
<td>3</td>
</tr>
</tbody>
</table>

## Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAX 2000**</td>
<td>3</td>
</tr>
<tr>
<td>__ __ __†</td>
<td>9</td>
</tr>
</tbody>
</table>

### Total Program Credits

27

† Electives: any course with one of the following prefixes: ACG, ACO, FIN and TAX.  ** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

---

**Program Contact**

Ms. Jeanne Branch (850) 484-1742

[Jeanne.Branch@pensacolastate.edu](mailto:Jeanne.Branch@pensacolastate.edu)

**Department Head**

Dr. Debra Kuhl (850) 484-2504

[Debra.Kuhl@pensacolastate.edu](mailto:Debra.Kuhl@pensacolastate.edu)

---

**Financial Aid/Scholarships**

Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then “Quick Link” to Financial Aid.

**Need help with Admissions and Registration?**

Learn more about New Student Services on [Page 4](#).

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---

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Architectural Design and Construction Technology

People with strong reading comprehension skills and who enjoy solving problems do well in this program and career.

Typical Tasks Include . . .

- Inspect project site and evaluate contractor work to detect design malfunctions and ensure conformance to design specifications and applicable codes.
- Operate computer-aided drafting (CAD) equipment or conventional drafting station to produce designs, working drawings, charts, forms and records.
- Analyze building codes, by-laws, space and site requirements, and other technical documents and reports to determine their effect on architectural designs.

Beyond Graduation . . .

The Architectural Design and Construction Technology program requires students to specialize in one emphasis of study from building construction, drafting design or civil engineering.

Job Placement Levels . . .

Primary Employers and Occupations

Graduates of the Architectural Design and Construction Technology have the opportunity to work for companies such as engineering firms, contractors’ or architects’ offices, building construction administration, facilities planning and management, or self-employment in the construction industry.

Architectural Drafters

Prepare detailed drawings of architectural designs and plans for buildings and structures according to specifications provided by architect.

Civil Engineering Technicians

Apply theories and principles of civil engineering in planning, designing, and overseeing the construction and maintenance of structures and facilities, under the direction of engineering staff or physical scientists.

Other Occupations Include:

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural Drafters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural Drafters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Drafter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete Testing Specialist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Estimator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Estimators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drafter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drafting Designer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geotechnical Testing Specialist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIS Assistant, Specialist or Technician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials Testing Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey and Mapping Aide</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more information, explore:

Associated General Contractors of America  www.agc.org
American Institute of Constructors  www.aicnet.org
Construction Management Association of America  www.cmaanet.org

Workforce Development Trends Florida

Source: Florida Department of Economic Opportunity —  www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Architectural Design and Construction Technology

Certifications and Credentials for Employment
If you possess an industry certification in this career area, you may be eligible to receive college credit toward this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident
Additional expenses may apply

Work Experiences Related to Program
Students may earn Cooperative Education credits that can be used in this program. Work experience positions with various construction firms are listed with Student Job Services.

General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>ENC 1101</td>
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</tr>
<tr>
<td>_____*</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1105</td>
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</tr>
<tr>
<td>SPC1006C††</td>
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</table>

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCN 1001</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570</td>
<td>3</td>
</tr>
<tr>
<td>EGS 1111</td>
<td>3</td>
</tr>
<tr>
<td>ETC 1250</td>
<td>3</td>
</tr>
<tr>
<td>ETD 2397C</td>
<td>3</td>
</tr>
<tr>
<td>ETD 2340</td>
<td>3</td>
</tr>
<tr>
<td>CGS 2122</td>
<td>3</td>
</tr>
<tr>
<td>BCT 2405</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits 66

Emphasis Courses (Total of 24 credits)
(Students must complete one emphasis from below)

Drafting

- BCT 2706 Construction Documents 3
- ETD 1542 Structural Drafting 3
- ETD 2332 CAD Customization 2
- ETD 1399 Architectural Drafting 3
- ETD 2355 Advanced Computer Draft 3
- ETD 2550 Civil 3
- ETD 1931 Special Topics Draft/Design 1
- ETD 2551 Civil Engineering Drafting 3

Civil

- MAC 1114 Plane Trigonometry 3
- BCN 2440 Concrete Construction 3
- GIS 2040C Geographic Information Systems 3
- BCT 2770 Construction Estimating 3
- PHY 1053 General Physics I 3
- SUR 1100 Construction Surveying 3
- ETD 2550 Civil 3
- ETD 2551 Civil Engineering Drafting 3

Construction

- BCT 2706 Construction Documents 3
- BCN 2440 Concrete Construction 3
- BCT 2770 Construction Estimating 3
- ETD 1542 Structural Drafting 3
- BCT 2760 Building Codes 3
- ETD 1399 Architectural Drafting 3
- SUR 1100 Construction Surveying 3
- BCN 2721 Construction Management 3

Electives 2

* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Program Contact
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mhayse@pensacolastate.edu

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dsteele@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

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AutoCAD Foundations

Primary Employers and Occupations

Successful AutoCAD Foundations certificate holders may find employment as a drafts-person in an architect’s, engineer’s, or contractor’s office, governmental agencies, corporate planning departments, or other private industries.

Drafting and Design Technicians

Convert ideas for engineering or architectural designs into detailed drawings and precise working specifications from which products can be made. These technicians use computer-aided drafting (CAD) systems to prepare layouts, diagrams, and charts as plans for machines, electrical circuits, buildings, or other structures or mechanical devices. More than one-third of all drafters work in engineering and architectural services, one-third in manufacturing, and the remainder in construction and utilities.

Other Occupations Include:

- CAD Drafting Technician/Specialist
- CAD Operator
- Drafting Designer
- GIS Assistant, Specialist or Technician

For more information, explore:
American Design Drafting Association www.adda.org

Typical Tasks Include . . .

- Prepare plans and detailed drawings from rough or detailed sketches and notes for engineering or manufacturing purposes.
- Use computer-assisted drafting (CAD) equipment and software.

Beyond Graduation . . .

The AutoCAD Foundations technical certificate provides students with the practical skills necessary to accept the challenges of a construction drafting career. The program is designed to prepare students for an entry level professional position in a technical area that requires computer-aided drafting skills. Students wishing to continue their education may take additional courses to earn a two-year Associate of Science (A.S.) degree in Drafting and Design Technology at Pensacola State College.

Drafters may advance to senior drafter, designer, or supervisor with education and experience. Many employers pay for ongoing education, and with appropriate college degrees, drafters may become engineers or architects.

Job Placement Levels . . .
Page 156

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical and</td>
<td>26</td>
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<td>1</td>
<td>$20.27</td>
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<tr>
<td>Electronics Drafters</td>
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<td></td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services

Go to: Page 5
AutoCAD Foundations

Technical Certificate

Certifications and Credentials for Employment
If you possess an industry certification in this career area, you may be eligible to receive college credit toward this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

EGS 1111 Engineering Graphics 3
ETD 2340** Computer Drafting 3
ETD 1399** Architectural Drafting 3
ETD 1542** Structural Drafting 3
ETD 2551 Civil Engineering Drafting 3
or
ETD 2355** Advanced Computer Drafting 3

Total Program Credits 15

NOTE: This certificate assumes the student has a basic knowledge of computer operating systems, hardware and software.

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

Program Contact
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Department Head
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dsteele@pensacolastate.edu

Financial Aid/Scholarships
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Primary Employers and Occupations
Graduates from the Building Construction Specialist program support the construction industry. This industry builds homes, highways, bridges, commercial buildings, plants and more.

General Contractors
Perform specified construction work under contract in accordance with the architect's plans and specifications, and with the client's terms. Contractors estimate costs, subcontract specialized work, purchase materials, and supervise workers.

Construction and Building Inspectors
Inspect and oversee construction of buildings, highways, bridges, dams and sewer and water systems to ensure that the procedures and materials comply with building codes and contract specifications. Areas of specialization include: building, home, electrical, mechanical, plumbing, and public works.

Cost Estimators
Prepare cost estimates for construction projects in the fields of civil engineering, architectural drafting, and building construction. Estimators compile a list of materials and labor needed based on the blueprints of the type of construction project, and estimate the cost, which aids management in bidding on or determining a final price of the project.

Surveyors
Make exact measurements and determine property boundaries. Provide data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering, mapmaking, mining, land evaluation, construction, and other purposes.

Other Occupations Include:
Carpenter/Carpenters Helper  Code Enforcer  Construction Drafter
Materials Sales Person  Survey Tech

For more information, explore:
Associated General Contractors of America  www.agc.org
American Institute of Constructors  www.aicnet.org
Construction Management Association of America  www.cmaanet.org
National Center for Construction Education and Research  www.nccer.org/

The Center for Advising & Career Services  Go to: Page 5

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Building Construction Specialist

Certifications and Credentials for Employment
If you possess an industry certification in this career area, you may be eligible to receive college credit toward this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
Florida Resident: $104.58
Alabama Resident: $105.58
Additional expenses may apply.

Work Experiences Related to Program
Students may earn Cooperative Education credits that can be used in this program. Work experience positions with various construction firms are listed with Student Job Services.

Technical Certificate
BLDG-CT

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCN 1001</td>
<td>Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>ETC 1250</td>
<td>Properties of Materials</td>
<td>3</td>
</tr>
<tr>
<td>BCT 2770**</td>
<td>Construction Estimating</td>
<td>3</td>
</tr>
<tr>
<td>BCN 2721**</td>
<td>Construction Management</td>
<td>3</td>
</tr>
<tr>
<td>___ ___†‡</td>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Program Credits: 18

‡ Electives — Choose two for six credits.

Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

Program Contact
Mr. Tim Bone (850) 484-2164
tbone@pensacolastate.edu

Department Head
Mr. Danny Steele (850) 484-2522
dsteele@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid.

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Drafting

Primary Employers and Occupations

More than one-third of all drafters work in engineering and architectural services, one-third in manufacturing, and the remainder in construction and utilities.

Cost Estimators

Prepare cost estimates for construction projects in the fields of civil engineering, architectural drafting and building construction. Estimators compile a list of materials and labor needed based on the blueprints of the type of construction project, and estimate the cost, which aids management in bidding on or determining a final price of the project.

Drafting and Design Technicians

Convert ideas for engineering or architectural designs into detailed drawings and precise working specifications from which products can be made. These technicians use computer-aided drafting (CAD) systems to prepare layouts, diagrams, and charts as plans for machines, electrical circuits, buildings, or other structures or mechanical devices.

Other Occupations Include:
- CAD Drafting Technician/Specialist
- CAD Operator
- Drafting Designer
- GIS Assistant, Specialist or Technician
- Illustrator Assistant/Specialist

For more information, explore:
American Design Drafting Association www.adda.org

Typical Tasks Include . . .

- Prepare plans and detailed drawings from rough or detailed sketches and notes for engineering or manufacturing purposes.
- Use computer-assisted drafting (CAD) equipment and software.

Beyond Graduation . . .

Both the American Design Drafting Association and the American Institute of Building Design have established certification programs for drafters.

Drafters may advance to senior drafter, designer, or supervisor with education and experience.

Job Placement Levels . . .
Page 156

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural and Civil Drafters</td>
<td>233</td>
<td>232</td>
<td>4</td>
</tr>
<tr>
<td>Drafters, All Other</td>
<td>44</td>
<td>47</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Certifications and Credentials for Employment
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Entrance Requirements
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Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
Students may earn Cooperative Education credits that can be used in this program. Work experience positions with various engineering and architectural firms are listed with Student Job Services.

Drafting

Technical Certificate

DRAFT-CT

EGS 1111 Engineering Graphics 3
BCN 1001 Building Construction 3
CGS 1570 Computer Concepts and Applications 3
ETD 2340 Computer Drafting 3
ETC 1250** Properties of Materials 3
CGS 2122 Engineering Technology Spreadsheets 3
MAT 1033 Intermediate Algebra 3
Emphasis Elective 3

Total Program Credits 24

Emphasis Elective (choose one):

BCN 2405** Construction Mechanics 3
BCT 2770** Construction Estimating 3
BCT 2706** Construction Documents 3
ETD 1399** Architectural Drafting 3
ETD 1542** Structural Drafting 3
ETD 2551** Civil Engineering Drafting 3
ETD 2355** Advanced Computer Drafting 4
GIS 2040** Geographic Information systems 3

* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
†† Course meets Oral Communications Requirements.

For more information call the Program Contact or visit: workforce.pensacolastate.edu

Program Contact
Mr. Tim Bone (850) 484-2164
tbone@pensacolastate.edu

Department Head
Mr. Danny Steele (850) 484-2522
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Carpentry

People who enjoy working primarily outdoors, building structures, using tools and machines, have the potential ability to read and interpret blueprints, specifications, and diagrams, and can organize activities and meet deadlines, may be suited for this program.

Typical Tasks Include . . .
- Read, interpret blueprints.
- Construct buildings, highways, and bridges.
- Install doors, windows, cabinets, moldings.

Beyond Graduation . . .
This certificate is designed to prepare individuals for entry-level positions working for residential builders, building renovators, and commercial or specialty contractors. Students wishing to continue their education may take additional courses to earn a two-year Associate of Science (A.S.) degree in Building Construction Technology at Pensacola State College.

Job Placement Levels . . . Page 156

Primary Employers and Occupations
Graduates from the Carpentry program support the construction industry building homes, highways, bridges, commercial buildings, and more. Well equipped to safely operate hand and power tools, they prepare work sites, and are skilled in foundation formwork, wall, floor, and roof framing, as well as exterior trim.

Carpenters
Work from blueprints or instructions from supervisors to first do the layout — the measuring, marking, and arranging of materials in accordance with local building codes. Then construct, erect, install, and repair structures and fixtures made from wood, concrete, and other materials.

Carpenters who work for residential builders and building renovators are often required to be skilled in all phases of home building — site survey and layout, concrete form work, framing walls, installing doors, windows and fixtures, building stairs, cabinetry, trim, and many other tasks.

Carpenters who work for commercial contractors or specialty contractors are often required to complete only a few recurring duties, such as framing walls, building forms, or pouring concrete.

Other Occupations include
Building Maintenance Personnel
Furniture Maker
Prefabricator
Property Manager
Stage or Theater Set and Prop Builder

For more information, explore:
Associated General Contractors of America www.agc.org
National Association of Home Builders www.nahb.org
New England Regional Council of Carpenters www.necarpenters.org/
United Brotherhood of Carpenters and Joiners of America www.carpenters.org

TARGETED OCCUPATION
HIGH DEMAND, HIGH SKILL OR HIGH WAGE

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpenters</td>
<td>934</td>
<td>1,098</td>
<td>40</td>
<td>$18.27</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

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The Center for Advising & Career Services Go to: Page 5
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Electricity

People in this career like to work both indoors and out. They may work at construction sites, in homes, in businesses or factories. They must be prepared for work that may be strenuous at times and may include lifting heavy objects, and standing, stooping, and kneeling for long periods of time.

Typical Tasks Include . . .

- Install wiring into newly constructed structures.
- Rewire remodeled construction projects.
- Test, modify, or repair electrical and electronic equipment.

Electricians must follow strict safety procedures to avoid injuries.

Beyond Graduation . . .

Some graduates from the Electricity program may decide to join an apprenticeship. Apprenticeships are typically sponsored by joint training committees made up of unions, associations, and individual companies.

Experienced electricians can advance to jobs as supervisors. In construction, they also may become project managers or construction superintendents. Those with sufficient capital and management skills may start their own contracting business, although this may require an electrical contractor’s license. Many also become electrical inspectors.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Graduates from the Electricity program work in construction or electronic maintenance. Construction electricians install wiring in new homes, businesses, and factories, but also may rewire or upgrade existing electrical systems. Maintenance electricians maintain and upgrade or repair existing systems and equipment.

Construction Electricians

Work with blueprints to position circuits, outlets, load centers, panel boards, and other equipment. They fasten small boxes to walls to house switches and outlets. Then they run insulated wires or cables to complete circuits between the boxes. They connect the wires to circuit breakers, transformers, or other components. During installation, electricians use hand tools and power tools. After wiring is installed, they use special testing equipment to check the circuits for proper connections, ensure the electrical compatibility and safety of components.

Maintenance Electricians

Work in factories, hospitals, and other settings, repair electronic equipment when breakdowns occur. Sometimes they install new electrical equipment, but mostly they replace items such as circuit breakers, fuses, switches, other electrical components, or wiring. Maintenance electricians regularly inspect, locate, and correct problems before breakdowns occur to ensure machines continue proper operations.

Other Occupations Include:

Electrician’s Helpers
Electronics Aides
Electronics Specialists
Elevator Installers and Repairers
Line Installers

For more information, explore:

Elevator Escalator Safety Foundation www.eesf.org/
International Union of Elevator Constructors www.iuec.org/
National Association of Elevator Contractors www.naec.org/

TARGETED OCCUPATION
HIGH DEMAND, HIGH SKILL OR HIGH WAGE

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricians</td>
<td>940</td>
<td>1,155</td>
<td>52</td>
<td>$19.72</td>
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</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
**Electricity**

**Career and Technical Certificate**

**ELECT-VC**

---

**Entrance Requirements**
Consult Program Contact or Department Head for entrance requirements.

**Estimated Cost**

- **Per College Credit:**
  - $104.58, Florida Resident
  - $105.58, Alabama Resident
- **Per Vocational Credit:**
  - $85.80, Florida Resident
  - $86.80, Alabama Resident

Additional expenses may apply.

**Work Experience Related to Program**

BCV0949 Electrical Co-op provides in-field experience. Contact Student Job Services, Cooperative Education. Students under the age of 18 years are cautioned that the construction industry does not hire persons under 18 years of age.

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**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCV 0003C</td>
<td>Introductory Craft Skills</td>
<td>150</td>
</tr>
<tr>
<td>BCV 0670C</td>
<td>Introduction to Electricity Level 1</td>
<td>120</td>
</tr>
<tr>
<td>BCV 0671C</td>
<td>Intermediate Electricity Level 1</td>
<td>120</td>
</tr>
<tr>
<td>BCV 0672C</td>
<td>Introduction to Electricity Level 2</td>
<td>180</td>
</tr>
<tr>
<td>BCV 0673C</td>
<td>Intermediate Electricity Level 2</td>
<td>120</td>
</tr>
<tr>
<td>BCV 0674C</td>
<td>Introduction to Electricity Level 3</td>
<td>120</td>
</tr>
<tr>
<td>BCV 0675C</td>
<td>Intermediate Electricity Level 3</td>
<td>120</td>
</tr>
<tr>
<td>BCV 0676C</td>
<td>Introduction to Electricity Level 4</td>
<td>150</td>
</tr>
<tr>
<td>BCV 0677C</td>
<td>Intermediate Electricity Level 4</td>
<td>120</td>
</tr>
</tbody>
</table>

**Total Program Clock Hours**

**1200**

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**For more information call the Program Contact or visit:**

**Financial Aid/Scholarships**
Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then "Quick Link" to Financial Aid.

**Need help with Admissions and Registration?**
Learn more about New Student Services on Page 4.

---

**Department Head**
Mr. Danny Steele (850) 484-2522
dsteele@pensacolastate.edu

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Back to Table of Contents
Heating, Ventilation and Air Conditioning

Primary Employers and Occupations

Graduates from the Heating, Ventilation, and Air Conditioning program will be employed as HVAC mechanics, installers, and technicians. Building equipment contractors are the largest employers. HVAC technicians also may be self-employed.

Heating, Ventilation, and Air Conditioning (HVAC) Technicians

Often specialize in either installation or maintenance and repair. They may also categorize specializations by: heating, air-conditioning, or even refrigeration work. Some specialize in a particular brand or more specific types of systems such as heat pumps, solar and hydronics systems.

Installers

Following blueprints and specifications, installers put in oil, gas, electric, solid-fuel, multiple-fuel, or other heating and air conditioning systems. They install fuel and water supply lines, air ducts and vents, pumps, and other components. They connect electrical wiring and check for proper operation.

Refrigeration Mechanics

Install, service, and repair refrigerating systems and equipment. They follow blueprints, design specifications, and manufacturers’ instructions. These mechanics connect equipment to ductwork, refrigerant lines, and electrical power source. After making the connections, they charge the system, check for proper operation, and program control systems.

For more information, explore:

Air Conditioning Contractors of America  www.acca.org
Air Conditioning and Refrigeration Institute  www.ari.org/
HVAC Excellence  www.hvacexcellence.org
Mechanical Contractors Association of America  www.mcaa.org/
Plumbing-Heating-Cooling Contractors Association  www.phccweb.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOUROLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating, A.C. and Refrigeration</td>
<td>820</td>
<td>1,097</td>
<td>$16.04</td>
</tr>
<tr>
<td>Mechanics and Installers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

Beyond Graduation . . .

After completion of post-secondary programs, new technicians often need at least six-months experience before being considered competent.

Graduates may start in entry-level jobs assisting more experienced technicians. Some graduates will advance to supervisor or service manager. Others may move into sales or marketing. Still others may become building superintendents, cost estimators, or possibly even teachers. Those with sufficient funds and managerial skill may open their own contracting business.

Job Placement Levels . . .

Page 156

Persons entering this career enjoy working with tools and are good at working with their hands. They have good spatial and form perception and organizational skills.

Typical Tasks Include . . .

- Conserve, recover, and recycle refrigerants.
- Install and test mechanical and electronic components.

HVAC technicians often work in confined and cramped positions, and uncomfortable situations including high places and outdoors.
# Heating, Ventilation and Air Conditioning

**Career and Technical Certificate**

**HVAC-VC**

## Certifications and Credentials for Employment

Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

## Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

## Estimated Cost

**Per College Credit:**
- $104.58, Florida Resident
- $105.58, Alabama Resident

**Per Vocational Credit:**
- $85.80, Florida Resident
- $86.80, Alabama Resident

Additional expenses may apply.

## Financial Aid/Scholarships

Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then "Quick Link" to Financial Aid.

## Need help with Admissions and Registration?

Learn more about New Student Services on Page 4.

## For more information call the Program Contact or visit:

[workforce.pensacolastate.edu](http://workforce.pensacolastate.edu)

---

### Clock Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCV 0003C</td>
<td>Introductory Craft Skills</td>
<td>150</td>
</tr>
<tr>
<td>ACR 0640C</td>
<td>Introduction to HVAC Level 1</td>
<td>150</td>
</tr>
<tr>
<td>ACR 0641C</td>
<td>Intermediate HVAC Level 1</td>
<td>150</td>
</tr>
<tr>
<td>ACR 0642C</td>
<td>Introduction to HVAC Level 2</td>
<td>150</td>
</tr>
<tr>
<td>ACR 0643C</td>
<td>Intermediate HVAC Level 2</td>
<td>150</td>
</tr>
<tr>
<td>ACR 0644C</td>
<td>Introduction to HVAC Level 3</td>
<td>150</td>
</tr>
<tr>
<td>ACR 0645C</td>
<td>Intermediate HVAC Level 3</td>
<td>150</td>
</tr>
<tr>
<td>ACR 0646C</td>
<td>Introduction to HVAC Level 4</td>
<td>150</td>
</tr>
<tr>
<td>ACR 0647C</td>
<td>Intermediate HVAC Level 4</td>
<td>150</td>
</tr>
</tbody>
</table>

**Total Program Clock Hours**: 1350

---

**Department Head**

Mr. Danny Steele (850) 484-2522
dsteel@pensacolastate.edu

---

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People in this profession need physical strength as well as stamina. They may lift heavy pipes, stand for long periods, and work in uncomfortable or cramped positions. They may also work outdoors.

**Typical Tasks Include . . .**

- Follow blueprints and instructions.
- Lay out jobs and work efficiently with tools.
- Use saws, pipe cutters, and pipe-bending machines.
- Use pressure gauges to test and ensure systems work properly.

**Beyond Graduation . . .**

With additional training, Plumbing Technology graduates may become supervisors for mechanical and plumbing contractors. Some may go into business for themselves. Others may move into closely related areas such as construction management or building inspection.

Licensing requirements vary from area to area, but most localities require workers to pass an examination that tests their knowledge of the trade and of local plumbing codes.

**Job Placement Levels . . .**

Page 156

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**Primary Employers and Occupations**

Graduates from the Plumbing Technology program become pipelayers, plumbers, pipefitters, sprinklerfitters, and steamfitters. Combined, these occupations are often lumped into the category of plumber — one of the largest construction occupations. Graduates will install, maintain, and repair many different types of pipe systems.

**Pipelayers**

Prepare and grade trenches either manually or with machines. Within the trenches, they lay clay, concrete, plastic, or cast-iron pipe for drains, sewers, water mains, and oil or gas lines.

**Plumbers**

Install and repair water intake, waste disposal, drainage, and gas systems in homes and commercial buildings. They also install plumbing fixtures and appliances such as sinks, bathtubs, showers, toilets, water heaters, dishwashers, and ice makers.

**Pipefitters**

Install and repair both high- and low-pressure pipes systems used in manufacturing, in the generation of electricity, and in the heating and cooling of buildings. They also install automatic controls that are increasingly being used to regulate these systems.

**Other occupations include**

Sprinklerfitters
Steamfitters

For more information, explore:
Plumbing-Heating-Cooling Contractors Association [www.phccweb.org](http://www.phccweb.org)

---

**Workforce Development Trends Escambia and Santa Rosa Counties**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plumbers, Pipefitters and Steamfitters</td>
<td>453</td>
<td>570</td>
<td>28</td>
<td>$19.32</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the [fastest growing occupations](http://www.floridajobs.org) and [TOP 50 occupations gaining the most new jobs](http://www.floridajobs.org) in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — [www.floridajobs.org](http://www.floridajobs.org)

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---

**The Center for Advising & Career Services**

Go to: Page 5
Plumbing Technology

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Per Vocational Credit:
$85.80, Florida Resident
$86.80, Alabama Resident
Additional expenses may apply

Required Courses
![Course Table]

Clock Hours
150
90
120
120
120
120
120
120
120
120

Total Program Clock Hours
960

For more information call the Program Contact or visit: workforce.pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend at: www.pensacolastate.edu, then “Quick Link” to Financial Aid

Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.

Department Head
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dsteele@pensacolastate.edu

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People who prefer working primarily indoors, like to work with people and ideas rather than things, and have leadership skills, will enjoy working in this career.

Typical Tasks Include . . .

- Manage various business operations.
- Hire, train and supervise workers.
- Analyze customers’ requests and complaints.
- Order supplies and merchandise.
- Control financial accounts and budgets.
- Manage microcomputer systems to carry out various related administrative and business activities.

Beyond Graduation . . .

The two-year A.S. degree program at Pensacola State prepares graduates to be Business Managers.

Managers advance through the ranks in an organization, acquiring several years’ work experience in various administrative positions before assuming general managerial duties. For managers of highly complex services, a bachelor’s degree, preferably in Business Administration, is usually required. A bachelor’s degree enhances a first-level manager’s opportunities to advance to a mid-level management position.

Many students will continue their education and training by enrolling in Pensacola State College’s Baccalaureate Degree of Applied Science with an emphasis in Organizational Administration.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Graduates from the Business Administration Program support a variety of industries. These industries may include wholesale and retail stores and services, financial agencies, banks and large businesses, government agencies, and educational systems.

Business Managers

Oversee all the activities of an agency or business. They supervise, schedule workers, hire employees, keep records, complete reports, market products or services, carry out company policy, and maintain facilities and security.

Administrative Assistants/Office Managers

Coordinate and organize business/office activities such as the flow of correspondence, preparation of payrolls, record keeping, and report preparation, by utilizing various microcomputer systems and software programs. May supervise, hire personnel and ensure that company policies are carried out.

Bank, Loan, Finance Managers/Specialists

Assist customers in completing financial transactions to include loans, deposits, and investment activities. With experience, will manage the various financial activities of banks, credit unions, mortgage companies, or finance companies.

Customer Service Representatives

Work in all businesses and industries. Respond to customer inquiries, handle customer complaints, coordinate and organize customer orders and requests.

Other Occupations Include:

- Adjustment Clerk
- Assistant/Coordinator
- Customer Representative
- Employment Interviewer
- Human Resources Manager Trainee
- Marketing Representative
- Public Relations Specialist
- Records Specialist

For more information, explore:

International Association of Administrative Professionals www.iaap-hq.org

International Virtual Assistants Association www.ivaa.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Service Representatives</td>
<td>3,526</td>
<td>4,154</td>
<td>177</td>
<td>$12.67</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

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Business Administration

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2001</td>
<td>Accounting I</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra or</td>
</tr>
<tr>
<td>STA 2023</td>
<td>Elementary Statistics (Category IV)</td>
</tr>
<tr>
<td>CGS 1570†</td>
<td>Computer Concepts and Applications (Category V)</td>
</tr>
<tr>
<td>SPC 1608†</td>
<td>Public Speaking</td>
</tr>
</tbody>
</table>

Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2011**</td>
<td>Accounting II</td>
</tr>
<tr>
<td>MAN 2021</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>FIN 2100</td>
<td>Personal Finance and Money Management or</td>
</tr>
<tr>
<td>GEB 2139</td>
<td>E-Business Management</td>
</tr>
<tr>
<td>MAR 2011</td>
<td>Marketing</td>
</tr>
<tr>
<td>_______</td>
<td>Business Elective (BUL 2241, GEB 2430, MNA 1161 or MNA 1300)</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Macroeconomics (Category III)</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 2510</td>
<td>Spreadsheet</td>
</tr>
<tr>
<td>ACG 2071</td>
<td>Introduction to Managerial Accounting</td>
</tr>
<tr>
<td>_______</td>
<td>Emphasis Area Courses</td>
</tr>
</tbody>
</table>

Total Program Credits 60

+xEmphasis Courses

Management and Marketing (BUS-AS)
Choose any four courses (total of 12 credits):
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEB 2112</td>
<td>Entrepreneurship</td>
</tr>
<tr>
<td>MKA 2511</td>
<td>Advertising</td>
</tr>
<tr>
<td>MNA 1161</td>
<td>Customer Service</td>
</tr>
<tr>
<td>MNA 1300</td>
<td>Human Resource Management or</td>
</tr>
<tr>
<td>MNA 2100</td>
<td>Human Relations</td>
</tr>
<tr>
<td>SLS 1353</td>
<td>Generations at Work</td>
</tr>
</tbody>
</table>

Entrepreneurship/Small Business Management (ENTR-AS)
Choose any four courses (total of 12 credits):
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEB 2112</td>
<td>Entrepreneurship/Small Business Management</td>
</tr>
<tr>
<td>ACO 1806</td>
<td>Payroll Accounting</td>
</tr>
<tr>
<td>SLS 1353</td>
<td>Generations at Work</td>
</tr>
<tr>
<td>MNA 2100</td>
<td>Human Relations</td>
</tr>
</tbody>
</table>

Microcomputer Systems (MICRO-AS)
Choose any four courses (total of 12 credits):
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1713**</td>
<td>Word Processing I</td>
</tr>
<tr>
<td>OST 1821</td>
<td>Business Applications for Desktop Publishing</td>
</tr>
<tr>
<td>CGS 1584</td>
<td>PowerPoint Presentations</td>
</tr>
<tr>
<td>_______</td>
<td>Business or Computer Science Elective (three credits from ACG, CGS, GEB, MAN, MNA, or OST prefix courses)</td>
</tr>
</tbody>
</table>

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Financial Aid/Scholarships
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* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.
People in this career usually prefer to work indoors and organize things. They like to work with words, numbers, and ideas rather than with things. People in this career are sometimes described as being careful, orderly, and persistent.

Typical Tasks Include . . .
- Monitor and control electronic computers to process business, scientific, engineering, and other data according to operating instructions.
- Convert project specifications and statements of problems and procedures to detailed logical reports.

Beyond Graduation . . .
Prospects likely will be best for graduates with knowledge of a variety of programming languages and tools.

Entry-level or State programmers may work alone on simple assignments after some initial instruction, or they may be assigned to work on a team with more experienced programmers. Either way, beginning programmers generally must work under close supervision.

Certification is a way to demonstrate a level of competence, and may provide job seekers with a competitive advantage. In addition to language-specific certificates that a programmer can obtain, product vendors or software firms also offer certification and may require professionals who work with their products to be certified. Voluntary certification also is available through various other organizations.

Job Placement Levels . . .
Page 156

The Center for Advising & Career Services
Go to: Page 5

For more information, explore:
Association for Computing Machinery  www.acm.org
Computing Technology Industry Association (CompTIA)  www.comptia.org/
IEEE Computer Society  www.computer.org
Institute for Certification of Computing Professionals (ICCP)  www.iccp.org

Some Primary Employers and Occupations
Graduates from the Computer Programming and Analysis program are employed in most industries including firms that write and sell software, provide engineering and business services, and manufacture computer and office equipment, financial and educational institutions, and insurance and governmental systems.

Computer Operators
Operate central control units or the console of the computer required to run a particular program. Computer operators monitor the computer console and respond to operating and computer messages.

Computer Programmers
Analyze business situations to design and develop a specific program for each assignment, breaking down each step into a logical series of instructions the computer can execute to process information. Program instructions are then coded into computer language traditionally used for business applications, or C++, the current standard for other applications. Programmers test, monitor, debug, document, update, and maintain their programs. Job titles include: programmer trainee, chief business programmer, information systems programmer, electronic data processing manager, programmer/analyst.

Computer Sales Representatives
Assist potential clients in the selection of appropriate hardware and software. Computer sales representatives are problem solvers. They must have thorough knowledge of the products so they can develop computer systems and applications to solve a customer’s business management problems.

Other Occupations include:
- CICIS Programmer
- Entry Programmer
- Game Designer
- Internet Programmer
- Main Frame Programmer
- Microcomputer Applications Programmer
- Programmer Analyst
- Programmer Specialist

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Systems Analyst</td>
<td>380</td>
<td>426</td>
<td>13</td>
<td>$33.54</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

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# Computer Programming and Analysis

## General Education Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101 English Composition I (Category I)</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1102 Humanities/Fine Arts (Category II)</td>
<td>3</td>
</tr>
<tr>
<td>ECO 2013 Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1105 College Algebra (or higher)</td>
<td>3</td>
</tr>
<tr>
<td>SLS 1353 Generations at Work</td>
<td>3</td>
</tr>
</tbody>
</table>

## Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 1510 Programming Concepts or COP 1000 Introduction to Gaming</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570 Computer Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1700 Introduction to Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1350 Security Awareness</td>
<td>3</td>
</tr>
<tr>
<td>CGS 2820 Introduction to HTML</td>
<td>3</td>
</tr>
<tr>
<td>COP 2800 Programming in Java</td>
<td>3</td>
</tr>
</tbody>
</table>

## Estimated Cost

- **Per College Credit:**
  - $104.58, Florida Resident
  - $105.58, Alabama Resident
- Additional expenses may apply

## Work Experience Related to Program

Students may earn credits through the Cooperative Education program. Contact Student Job Services.

## Emphasis Courses

**Programming Support**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021 Financial Accounting Principles</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2071 Introduction to Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>STA 2023 Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>CTS 2104 Windows</td>
<td>3</td>
</tr>
<tr>
<td>CTS 2433 Database Development and Management Technical Electives from any CAP, CET, CIS, OP or CTS prefix</td>
<td>3</td>
</tr>
</tbody>
</table>

**Simulation and Game Design**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 2051 Game Level Design</td>
<td>3</td>
</tr>
<tr>
<td>CAP 2050 XBOX Game Programming</td>
<td>3</td>
</tr>
<tr>
<td>COP 2650 Mobile Applications Programming</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1140 Pre-calculus Algebra</td>
<td>3</td>
</tr>
<tr>
<td>CTS 2433 Database Development and Management Technical Electives from any CAP, CET, CIS, COP or CTS prefix</td>
<td>3</td>
</tr>
</tbody>
</table>

**Software Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 1147 Pre-calculus Algebra/Trig</td>
<td>3</td>
</tr>
<tr>
<td>MAC 2311 Analytic Geometry &amp; Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MAC 2312 Analytic Geometry &amp; Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>CTS 2433 Database Development and Management Technical Electives from any CAP, CET, CIS, COP or CTS prefix</td>
<td>3</td>
</tr>
</tbody>
</table>

**Web Development**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRA 2151C Computer Graphics I</td>
<td>3</td>
</tr>
<tr>
<td>ACC 2021 Financial Accounting Principles</td>
<td>3</td>
</tr>
<tr>
<td>CTS 2433 Database Development and Management</td>
<td>3</td>
</tr>
<tr>
<td>CGS 2822 Web Scripting</td>
<td>3</td>
</tr>
<tr>
<td>Technical Electives from any ART, GRA, CAP, CET, CIS, COP or CTS prefix</td>
<td>6</td>
</tr>
</tbody>
</table>

## Total Program Credits 63

+ **Programming Elective**—Choose any COP course.
+ **Technical Electives**—Choose any CGS or COP course.
+ See General Education Course Requirements of current college catalog for options.
+** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
+† Course meets Computer Competence Requirement.
+†† Course meets Oral Communications Requirements.

## Certifications and Credentials for Employment

If you possess an industry certification in this career area, you may be eligible to receive college credit toward this program. For more information, see the program contact or the department head.

## Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

## Financial Aid/Scholarships

Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then “Quick Link” to Financial Aid.

## Need help with Admissions and Registration?

Learn more about New Student Services on Page 4.

For more information call the Program Contact or visit: [workforce.pensacolastate.edu](http://workforce.pensacolastate.edu)

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Computer Programming

People in this career usually prefer to work indoors and organize things. They like to work with words, numbers, and ideas rather than with things. People in this career are sometimes described as being careful, orderly, and persistent.

Typical Tasks Include . . .

- Monitor and control electronic computers to process business, scientific, engineering, and other data according to operating instructions.

- Convert project specifications and statements of problems and procedures to detailed logical reports.

- Develop and write computer programs to store, locate, and process specific documents, data, and information.

Beyond Graduation . . .

Changes in the field of computer programming are ongoing. Graduates will need to stay current with these changes to remain employable in the field.

All courses in the certificate program apply to the Computer Programming and Analysis A.S. degree, completion of which will provide a spring board to higher levels of study (see Computer Programming and Analysis, page 32.)

Some Primary Employers and Occupations

The Computer Programming program prepares students for employment as computer programmer trainee, microcomputer specialist, and software application technician. Graduates are employed in most industries including firms that write and sell software, provide engineering and business services, and manufacture computer and office equipment; financial and educational institutions; and insurance and governmental systems.

Computer Operators

Operate central control units or the console of the computer required to run a particular program. Computer operators monitor the computer console and respond to operating and computer messages.

Computer Programmers

Analyze business situations to design and develop a specific program for each assignment, breaking down each step into a logical series of instructions the computer can execute to process information. Program instructions are then coded into computer language such as COBOL, traditionally used for business applications, or C++, the current standard for other applications. Programmers test, monitor, debug, document, update, and maintain their programs. Job titles include: programmer trainee, chief business programmer, information systems programmer, electronic data processing manager, programmer/analyst.

Computer Sales Representatives

Assist potential clients in the selection of appropriate hardware and software. Computer sales representatives are problem solvers. They must have thorough knowledge of the products so they can develop computer systems and applications to solve a customer’s business management problems.

Beyond Graduation . . .

Changes in the field of computer programming are ongoing. Graduates will need to stay current with these changes to remain employable in the field.

All courses in the certificate program apply to the Computer Programming and Analysis A.S. degree, completion of which will provide a spring board to higher levels of study (see Computer Programming and Analysis, page 32.)

Job Placement Levels . . .

Page 156

For more information, explore:

Association for Computing Machinery www.acm.org
Computing Technology Industry Association (CompTIA) www.comptia.org/
IEEE Computer Society www.computer.org
Institute for Certification of Computing Professionals (ICCP) www.iccp.org

TARGETED OCCUPATION
HIGH DEMAND, HIGH SKILL OR HIGH WAGE

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Programmers</td>
<td>215</td>
<td>220</td>
<td>6</td>
<td>$28.03</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services Go to: Page 5
### Computer Programming

#### Technical Certificate

**COMP-CT**

### Certifications and Credentials for Employment

If you possess an industry certification in this career area, you may be eligible to receive college credit toward this program. For more information, see the program contact or the department head.

### Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost

**Per College Credit:**
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply.

### Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1570</td>
<td>Computer Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

### Intermediate Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1700**</td>
<td>Introduction to Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>COP 1510**</td>
<td>Programming Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CTS 2104**</td>
<td>Windows</td>
<td>3</td>
</tr>
<tr>
<td>CTS 2433**</td>
<td>Database Development and Management</td>
<td>3</td>
</tr>
</tbody>
</table>

### Advanced Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 2224**</td>
<td>C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>COP 2332**</td>
<td>Visual Basic</td>
<td>3</td>
</tr>
<tr>
<td>COP 2511**</td>
<td>Programming Concepts II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Technical Elective</td>
<td>3</td>
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<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Program Credits

33

† **Technical Elective**—Choose any CGS, COP or CTS course.

** Course has pre- or co-requirements. See Course Descriptions Section of current college catalog.

### Program Contact

Mr. Richard Cacace (850) 484-2052
rcacace@pensacolastate.edu

### Department Head

Mr. Danny Steele (850) 484-2522
dsteele@pensacolastate.edu

### Financial Aid/Scholarships

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### Need help with Admissions and Registration?

Learn more about New Student Services on Page 4.

### For more information call the Program Contact or visit: workforce.pensacolastate.edu

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Web Development Specialist

People in this career enjoy creating original work. They have artistic skills, and a good imagination.

Typical Tasks Include . . .

- Designs, builds, or maintains websites, using authoring or scripting languages, content creation tools, management tools, and digital media.
- Develops or validates test routines and schedules to ensure that test cases mimic external interfaces and address all browser and device types.
- Evaluates code to ensure that it meets industry standards and is valid, properly structured, and compatible with browsers, devices or operating systems.

Beyond Graduation . . .

Internet technologies are in a constant state of change. Graduates will need to stay current with these changes to remain employable in the field.

Job Placement Levels . . .

Page 156

Some Primary Employers and Occupations

Graduates from the Web Development Specialist program will find employment in Web design companies, business, schools, colleges, not-for-profit organizations, and government agencies.

Web Developers

Design, create, and modify Web sites. Analyze user needs to implement Web site content, graphics, performance, and capacity. May integrate Web sites with other computer applications. May convert written, graphic, audio, and video components to compatible Web formats by using software designed to facilitate the creation of Web and multimedia content.

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Security Analysts and Web Developers</td>
<td>221 252</td>
<td>7</td>
<td>$28.32</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
# Web Development Specialist

## Technical Certificate

**WEB-CT**

<table>
<thead>
<tr>
<th><strong>Certifications and Credentials for Employment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>If you possess an industry certification in this career area, you may be eligible to receive college credit toward this program. For more information, see the program contact or the department head.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Entrance Requirements</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consult Program Contact or Department Head for entrance requirements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Estimated Cost</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Per College Credit:</td>
</tr>
<tr>
<td>$104.58, Florida Resident</td>
</tr>
<tr>
<td>$105.58, Alabama Resident</td>
</tr>
<tr>
<td>Additional expenses may apply</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Work Experience Related to Program</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students may earn credits through the Cooperative Education program. Contact Student Job Services.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Intermediate Courses</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 1510** Programming Concepts 3</td>
</tr>
<tr>
<td>CGS 2069** Fundamentals of Electronic Commerce 3</td>
</tr>
<tr>
<td>CGS 2874** Web Design with Adobe Software 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Advanced Courses</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 2822** Scripting for the Web 3</td>
</tr>
<tr>
<td>CGS 2821** Web Site Theory and Project 3</td>
</tr>
<tr>
<td>______† Technical Electives 3</td>
</tr>
<tr>
<td>______ Electives 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Total Program Credits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
</tr>
</tbody>
</table>

† **Technical Elective**—Choose any course with CGS, COP, CET, GRA or GEB 2139.

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

## Program Contact

Mr. Richard Cacace (850) 484-2052
rcacace@pensacolastate.edu

Mr. Danny Steele (850) 484-2522
dsteele@pensacolastate.edu

## Financial Aid/Scholarships

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Advanced Esthetics

People in this career enjoy working more with people than things. They are dependable, cooperative, and display a concern for others. They should have a good imagination, initiative, social skills, tact, patience, and skills of persuasion. It is very important their work allow them to use the best of their abilities and result in a sense of accomplishment.

Typical Tasks Include . . .

- Apply spa-quality facial therapies
- Use microderm-abrasion machines
- Use communication and business skills to establish and grow a client base

Beyond Graduation . . .

Advanced Estheticians must constantly update knowledge of techniques and products to meet consumer demands.

Graduates may also choose to obtain a Cosmetology certificate and/or further specialize in the Nails Specialty at Pensacola State to qualify for work in hair and nails as well as skin care.

Communications and business skills are important to establish a client base. Advancement usually is in the form of higher earnings in direct proportion to a strong client base.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Graduates from the Advanced Esthetics program are part of the personal service industry, working in spa and salon settings. Employers also include plastic and reconstructive surgeons as well as dermatologists and the growing medi-spa industry. A large number of estheticians are self-employed.

Advanced Estheticians

Highly skilled licensed skin care professionals who have added advanced training to update their skills to become current with new trends in the field of esthetics. These specialists provide spa-quality facial therapies, including chemical peels and exfoliations, and apply advanced European Treatments to meet rising consumer demand for personalized care and therapeutic treatment.

For more information, explore:

National Cosmetology Association  www.ncacares.org

Workforce Development Trends Florida

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Appearance Workers</td>
<td>594</td>
<td>671</td>
<td>21</td>
<td>NA</td>
</tr>
</tbody>
</table>

*Statewide

Source: Florida Department of Economic Opportunity —  www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Advanced Esthetics

Career and Technical Certificate

ESTHE-VC

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident

Per Vocational Credit:
$85.80, Florida Resident
$86.80, Alabama Resident

Additional expenses may apply

Required Courses
Clock Hours
CSP 0105C  Advanced Skin Care I  150
CSP 0106C  Advanced Skin Care II  150
CSP 0264C  Facial Treatments  150
CSP 0931  Specialty Topics  60
CSP 0505  Ethical Business Practices  30
CSP 0940L  Internship  60

Total Program Clock Hours  600

Program Contact
Ms. Sonja McCall-Strehlow (850) 484-1642
smccall-strehlow@pensacolastate.edu

Department Head
Mr. Roy Bracken (850) 484-1013
rbracken@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

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Barbering

People who enjoy working in this career usually have good personal communication skills and are interested in human relationships. They may be described as friendly, practical, creative, and sociable. They must have good eye and hand coordination with the ability to work with small hand instruments.

Typical Tasks Include . . .
- Cut, shape, and shampoo hair.
- Shave and trim beards and mustaches.
- Clean and maintain cutting instruments.

Beyond Graduation . . .
Graduates of the Barbering program may continue their training and education by completing specialized programs at Pensacola State College such as Facials Specialty and Nails Specialty or may complete the Cosmetology program, consequently enhancing opportunities for advancement and higher paying jobs.

Job Placement Levels . . .
Page 156

Primary Employers and Occupations
Graduates from the Barbering program will work in barber shops, styling shops, or may be self-employed. Persons may work in special areas such as prisons, hospitals, or nursing homes.

Barbers
Cut, trim, shampoo, and style hair. It is common for trained barbers to color or perm a customer’s hair and perhaps give scalp treatments. In addition, barbers may fit hairpieces and provide customers with information beneficial to the care and good health of the scalp and hair.

For more information, explore:
National Cosmetology Association www.ncacares.org

Workforce Development Trends Florida

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Appearance Workers</td>
<td>594</td>
<td>671</td>
<td>21</td>
<td>$8.10</td>
</tr>
</tbody>
</table>

Statewide (Average entry level for Florida)
Source: Statewide wage info — flchoices.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services
Go to: Page 5
Barbering

Career and Technical Certificate

BARB-VC

Code
BARB-VC

Program Length
40 Credits

Certifications
and Credentials
for Employment
Courses in this program prepare
the student to take industry
recognized certification exam(s).
For more information, see
the program contact or the
department head.

Entrance
Requirements
Consult Program Contact
or Department Head for
entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Per Vocational Credit:
$85.80, Florida Resident
$86.80, Alabama Resident
Additional expenses may apply

Semester I
COS 0421C Barbering I
Clock Hours
240

Semester II
COS 0422C Barbering II
240

Semester III
COS 0423C Barbering III
240

Semester IV
COS 0424C Barbering IV
240

Semester V
COS 0425 L Barbering V
COS 0920 Barbering State Board Preparation
210
30

Total Program Clock Hours
1200

Program Contact
Ms. Ann Coon (850) 471-4676
acoon@pensacolastate.edu

Department Head
Mr. Roy Bracken (850) 484-1013
rbracken@pensacolastate.edu

Financial Aid/Scholarships
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then "Quick Link" to Financial Aid

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Cosmetology

People considering this career should enjoy working more with people than things. They enjoy being creative, should have a good imagination, and are sometimes described as sociable, tactful, and patient.

**Typical Tasks Include . . .**

- Provide beauty services such as suggesting hair styles, cutting and treating hair and scalp, and sometimes dressing wigs.

Good eye and hand coordination is necessary. Standing for extended periods of time may be required with overtime necessary occasionally.

**Beyond Graduation . . .**

Graduates of the Cosmetology program at Pensacola State College are qualified to work in hair, nail, and skin care.

Because hairstyles are constantly changing, cosmetologists must keep abreast of the latest fashions and beauty techniques. Business skills are important for those who plan to operate their own salons.

Advancement usually is in the form of higher earnings. Some cosmetologists manage large salons or open their own after several years of experience. Some teach in barber or cosmetology schools. Others become sales representatives for cosmetics firms, open businesses as beauty or fashion consultants, or work as examiners for State licensing boards.

Students may also choose to obtain the Nails Specialty and Facials Specialty certificates which qualify them to work in manicure, pedicure, nail extension, and skin care services.

**Primary Employers and Occupations**

Graduates from the Cosmetology program support the personal services industries, working in large and small salons or with experience owning and managing their own business.

**Cosmetologists/Hairdressers**

Combine technology and people skills to provide hair care services in the beauty culture industry.

Cosmetologists shampoo, cut, style, permanent wave, relax and color hair, and advise patrons on how to care for their hair, skin, and nails. Most cosmetologists work on commission or booth rental in a salon, both full or part time, or operate their own business.

*For more information, explore:*

National Cosmetology Association [www.ncacares.org](http://www.ncacares.org)

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**Workforce Development Trends Escambia and Santa Rosa County**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hairdressers, Hairstylists, and Cosmetologists</td>
<td>520</td>
<td>583</td>
<td>18</td>
<td>$12.47</td>
</tr>
</tbody>
</table>

Source: Wage info — [floridajobs.org](http://floridajobs.org)

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---

**The Center for Advising & Career Services**
Cosmetology

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Per Vocational Credit:
$85.80, Florida Resident
$86.80, Alabama Resident
Additional expenses may apply

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Clock Hours</th>
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</thead>
<tbody>
<tr>
<td>COS 0010</td>
<td>Cosmetology I</td>
</tr>
<tr>
<td>COS 0010L</td>
<td>Cosmetology I Lab</td>
</tr>
<tr>
<td>Semester II</td>
<td></td>
</tr>
<tr>
<td>COS 0088</td>
<td>Cosmetology II</td>
</tr>
<tr>
<td>COS 0088L</td>
<td>Cosmetology II Lab</td>
</tr>
<tr>
<td>Semester III</td>
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</tr>
<tr>
<td>COS 0089</td>
<td>Cosmetology III</td>
</tr>
<tr>
<td>COS 0089L</td>
<td>Cosmetology III Lab</td>
</tr>
</tbody>
</table>

Total Program Clock Hours 1200

NOTE: Courses must be taken in the sequence outlined above. Students must complete the program as a whole, and may not enroll for single, individual courses.

Program Contact
Ms. Ann Coon (850) 471-4676 acoon@pensacolastate.edu

Department Head
Mr. Roy Bracken (850) 484-1013 rbracken@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

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Facials Specialty

Primary Employers and Occupations

Graduates from the Facials Specialty program support the personal services industries, primarily working in large and small full service beauty salons or within specialty service salons. With experience graduates can open and manage their own businesses.

Facial Specialists
Licensed professionals who combine artistic, technical, and communication skills to provide skin care services in the cosmetic industry. They enhance the esthetic quality of the face through the use of make-up applications which enhance the appearance of the skin and facial features as well as camouflage irregularities of the face.

Estheticians are skin care specialists who cleanse and tone the face through therapeutic manipulations that stimulate circulation and enhance muscle tone.

Many facial specialists work on commission in conjunction with cosmetologists or own their own business.

For more information, explore:
National Cosmetology Association [www.ncacares.org](http://www.ncacares.org)

Typical Tasks Include . . .

- Analyze skin type.
- Apply the proper cleanser and toner.
- Administer facial manipulations.
- Perform make-up artistry.

A person must be willing to work overtime and sometimes be on their feet for extended periods of time.

Beyond Graduation . . .

Graduates of the Facials Specialty program at Pensacola State College are qualified to work within esthetics, skin care, and make-up applications. Students may also choose to further skills through completion of the Advanced Esthetics, Cosmetology, and/or Nails Specialty program(s) to qualify for work in hair, nail, and skin care.

Job Placement Levels . . .
Page 156

Workforce Development Trends Florida

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Appearance Workers</td>
<td>594</td>
<td>671</td>
<td>21</td>
</tr>
</tbody>
</table>

Statewide (Average entry level for Florida – $9.36/hr)
Source: Statewide wage info — [flchoices.org](http://flchoices.org)

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Facials Specialty

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Per Vocational Credit:
$85.80, Florida Resident
$86.80, Alabama Resident
Additional expenses may apply

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP 0005</td>
<td>Introduction to Facials</td>
<td>30</td>
</tr>
<tr>
<td>CSP 0263</td>
<td>Specialty Services</td>
<td>60</td>
</tr>
<tr>
<td>CSP 0201</td>
<td>Introduction to Skin Care</td>
<td>30</td>
</tr>
<tr>
<td>CSP 0300L</td>
<td>Facials/Make-up Clinic</td>
<td>90</td>
</tr>
<tr>
<td>CSP 0331</td>
<td>Make-up/Salon Management</td>
<td>30</td>
</tr>
<tr>
<td>CSP 0370</td>
<td>Professional Practices in Esthetics</td>
<td>30</td>
</tr>
<tr>
<td>CSP 0031</td>
<td>Anatomy &amp; Physiology for Facial Specialty</td>
<td>30</td>
</tr>
</tbody>
</table>

Total Program Clock Hours 1200

Program Contact
Ms. Sonja McCall-Strehlow (850) 484-1642 smcall-strehlow@pensacolastate.edu

Department Head
Mr. Roy Bracken (850) 484-1013 rbracken@pensacolastate.edu

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Nails Specialty

People considering Nails Specialty should enjoy working primarily with people but must also have good eye and hand coordination to work with small instruments. People in this career prefer to work indoors and must be creative. They are sometimes called extroverted, sociable, and confident.

Typical Tasks Include . . .

- Analyze nail shapes and irregularities.
- Apply the proper products to promote healthy skin on hands and feet.
- Administer hand and foot manipulations.
- Perform polishing and buffing artistry.

Beyond Graduation . . .

With experience, graduates of the Nails Specialty program at Pensacola State are qualified to work in advanced manicure, pedicure, and nail extension services. Students may also choose to obtain the Cosmetology certificate and/or further specialize in the Facials Specialty program at Pensacola State College which qualify them to work in hair, nail, and skin care.

Job Placement Levels . . . Page 156

Primary Employers and Occupations

Graduates from the Nails Specialty program support the personal services industries, primarily working in large and small full service beauty salons or within specialty nail service salons. With experience graduates can open and manage their own businesses.

Manicurists/Nail Specialists
Licensed professionals who combine artistic, technical, and communication skills to provide proper care of the hands and feet.

Manicurists enhance the appearance of the nails with proper care or with the application of sculpted artificial nails. They also administer hand and foot manipulations to the client to enhance muscle tone and to promote better circulation to these areas, and apply products to promote healthy skin.

Many manicurists and nail technicians work on commission in conjunction with cosmetologists or own their own business.

For more information, explore:
National Cosmetology Association  www.ncacares.org

Workforce Development Trends Florida

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Appearance Workers</td>
<td>594</td>
<td>671</td>
<td>21</td>
<td>$8.47</td>
</tr>
</tbody>
</table>

Average entry level for Northwest Florida region (Average entry level for Florida – $8.21/hr)

Source: Statewide wage info — flchoices.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services  Go to: Page 5
Nails Specialty

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost of Program
Per Vocational Credit:
$85.50, Florida resident
$86.80, Alabama Resident
Additional expenses may apply

Required Course
CSP 0015C Nail Technology

Clock Hours
240

Total Program Clock Hours
240

For more information call the Program Contact or visit: workforce.pensacolastate.edu

Program Contact
Ms. Ann Coon (850) 471-4676
acoon@pensacolastate.edu

Department Head
Mr. Roy Bracken (850) 484-1013
rbracken@pensacolastate.edu

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Criminal Justice Technology

People who enjoy working in this field usually have leadership skills, and are interested in working with people rather than things. They are sometimes described as practical, sociable, extroverted, and self-confident.

Typical Tasks Include . . .

- Investigate complaints, respond to traffic emergencies, drive patrol vehicles, detect crimes, arrest violators, and issue citations.
- Oversee individuals in jails and prisons.
- Use computers to search for information on suspected criminals.

A person can expect to work irregular hours and may experience various stress related activities.

Beyond Graduation . . .

The Criminal Justice Technology program at Pensacola State prepares students to enter a career in law enforcement or corrections.

Police officers usually become eligible for promotion after a probationary period ranging from six months to three years. In a large department, promotion may enable an officer to become a detective or to specialize in one type of police work, such as working with juveniles.

Many students will continue their education and training by enrolling in Pensacola State College’s Baccalaureate Degree of Applied Science with an emphasis in Public Safety/Public Service.

Job Placement Levels . . .

Page 156

Some Primary Employers and Occupations

Graduates from the Criminal Justice Technology program, with appropriate certifications, support state, county, city, and private law enforcement and incarceration systems.

Corrections Officers

Supervise inmates by maintaining order within the institution, and enforcing rules and regulations. Officers increasingly supplement the counseling that inmates receive from psychologists, social workers, and other mental health professionals. Most corrections officers work at state correctional institutions such as prisons, prison camps, and reformatories. Others work at city and county jails or other institutions run by local governments, and at federal correctional institutions.

Highway Patrol Officers

Patrol highways and enforce laws and regulations that govern their use, and provide traffic assistance during road repairs, emergencies and special events. In most states, state police also enforce criminal laws and may help city or county police catch lawbreakers and control civil disturbances.

Law Enforcement Officers

Perform duties that range from traffic control to crime prevention and investigation. Police in small communities and rural areas perform a variety of duties. In larger police departments where the type of duty is more specific, most officers are detailed either to patrol or to traffic duty, while other officers may be assigned to special duties such as accident prevention, chemical and microscopic analysis, firearms identification, and handwriting and fingerprint identification.

Security Guards/Officers

Patrol and inspect public and private property to protect against fire, theft and vandalism and illegal entry. Many guards are employed during normal working hours in public and commercial buildings and other areas where there is a good deal of pedestrian traffic and public contact. Others patrol buildings and grounds during nights and weekends.

Other Occupations include:

- Crime Analyst
- Intake Specialist
- Juvenile Intake or Case Worker
- Loss Prevention Specialist
- Private Investigator
- Process Server
- Probation Officer Assistant

For more information, explore:

American Correctional Association [www.aca.org/certification1/]
American Jail Association [www.corrections.com/aja/]

Workforce Development Trends Florida

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law Enforcement Workers</td>
<td>76,881</td>
<td>80,900</td>
<td>2.273</td>
<td>$23.99</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — [www.floridajobs.org]

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Criminal Justice Technology

Associate of Science Degree

LAW-AS

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
Students may earn credits through the Cooperative Education program. Contact Student Job Services.

Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ 1020</td>
<td>Introduction to Criminal Justice (Category III)</td>
<td>3</td>
</tr>
<tr>
<td>____</td>
<td>Natural Sciences/Mathematics (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td>CJE 1640</td>
<td>Introduction to Criminalistics</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 1452</td>
<td>Criminal Justice Administration</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570†</td>
<td>Computer Concepts and Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLP 1081</td>
<td>Concepts of Life Fitness</td>
<td>3</td>
</tr>
<tr>
<td>CJE 2000</td>
<td>Introduction to Sociology (Category V)</td>
<td>3</td>
</tr>
<tr>
<td>CJE 2062</td>
<td>Constitutional Law for Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJC 2162</td>
<td>Probation and Parole</td>
<td>3</td>
</tr>
<tr>
<td>CJC 1000</td>
<td>Theory and Practice of Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJE 1500</td>
<td>Police Operations</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2241</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1006C††</td>
<td>Basic Speaking and Listening Skills</td>
<td>1</td>
</tr>
<tr>
<td>CCJ 2687</td>
<td>Victimology</td>
<td>3</td>
</tr>
<tr>
<td>PHI 2600*</td>
<td>Ethics (Category II)</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJI 2002</td>
<td>Juvenile Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJE 1600</td>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 2010</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 2949</td>
<td>Criminal Justice Co-op or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Criminal Justice Elective</td>
<td></td>
</tr>
</tbody>
</table>

Total Program Credits 64

* See General Education Course Requirements of current college catalog for options.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Program Contact
Mr. Daniel Ward (850)484-2575
dmward@pensacolastate.edu

Department Head
Dr. Debra Kuhl (850) 484-2504
dkuhl@pensacolastate.edu

Financial Aid/Scholarships
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Crime Scene Technician

People entering this career need to have good eyesight and the ability to lift as much as 50 pounds. They are good at problem solving and critical thinking, in searching for facts. They also are good with practical, hands-on problems and solutions. Employment prospects for persons with a criminal record are unlikely.

Typical Tasks Include . . .

- Collect evidence from crime scenes, and store it in conditions that preserve its integrity.
- Keep records and prepare reports detailing findings, investigative methods, and laboratory techniques.
- Take photographs of evidence.
- Operate and maintain laboratory equipment and apparatus.

Individuals often work overtime, rotating shifts, and weekends.

Beyond Graduation . . .

This certificate is designed to prepare individuals for an entry-level position, working in the law enforcement field. New entrants to this career field will work under the supervision of other professionals in the career field. Graduates who wish to continue their education may take additional courses to earn a two-year Associate of Applied Science (A.A.S) Degree in Criminal Justice Technology.

Some Primary Employers and Occupations

Graduates from the Crime Scene Technician program will seek employment with state, county, city or private law enforcement systems. Anyone with a criminal record would not likely be hired by any agency based on their liability as a witness; therefore, completing this program is not recommended for individuals with a criminal record.

Crime Scene Technicians

Collect, identify, classify, and analyze physical evidence related to criminal investigations. They examine crime scenes to obtain clues and evidence, such as weapons, documents, clothing and fibers. They perform tests on weapons or substances such as fiber, hair, and tissue to determine their significance to an investigation. Technicians collect impressions of dust from surfaces to obtain and identify fingerprints, use chemicals and other substances to examine latent fingerprint evidence, and compare developed prints to those of known persons in databases. They work both indoors and outdoors.

Other Occupations Include:
Evidence Technician
Forensic Specialist
Latent Fingerprint Examiner

Job Placement Levels . . .
Page 156

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective Service Workers and All Other</td>
<td>118</td>
<td>123</td>
<td>10</td>
<td>$14.92</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

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Crime Scene Technician

Technical Certificate

CST-CT

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJE 1600</td>
<td>3</td>
</tr>
<tr>
<td>CJE 1640</td>
<td>3</td>
</tr>
</tbody>
</table>

Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJE 2644**</td>
<td>2</td>
</tr>
<tr>
<td>CJE 1642**</td>
<td>3</td>
</tr>
<tr>
<td>CJE 1673**</td>
<td>3</td>
</tr>
<tr>
<td>CJE 2686</td>
<td>3</td>
</tr>
<tr>
<td>CJE 2676**</td>
<td>2</td>
</tr>
<tr>
<td>CJL 1130</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJE 1772**</td>
<td>3</td>
</tr>
<tr>
<td>CJE 2671**</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits 28

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

Program Contact
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Culinary Management

People who enjoy working indoors, with food, serving others, and being part of a team, may be interested in culinary management as a career. If you are energetic, self-confident, creative, and persistent, you have the personal traits needed to be successful in this career.

Typical Tasks Include . . .

- Cook, supervise cooks and kitchen personnel.
- Plan menus, estimate food needs, order foods accordingly, and develop budgets.
- Create recipes for preparation of special meals.

Working hours may be irregular and work environments include extreme heat.

Beyond Graduation . . .

To advance in their career, students can obtain certification by the American Culinary Federation at a level commensurate with any previous experience. Restaurant and food service managers can obtain the Food Service Management Professional certification which is a measure of their professional achievement.

Executive chefs need extensive experience working as line cooks and sous chefs and general managers need experience working as assistant managers. Willingness to relocate often is essential for advancement to positions with greater responsibility. Managers advance to larger establishments, or regional management positions within restaurant chains.

Job Placement Levels . . .

Page 156

Some Primary Employers and Occupations

Graduates from the Culinary Management program will provide food services within a large variety of industries including restaurants and other retail eating and drinking establishments, and institutions such as schools, colleges, hospitals, and nursing homes. Other employers include grocery stores, hotels, and private catering services.

Culinary Managers

Involves the production of food, and the management of food production and services. A wide range of opportunities exists for culinary artists with experience and formal training as cooks, chefs, maitre d’s, managers, and health inspectors, in restaurants, schools, supermarket delis and bakeries, health care facilities, and government agencies. Employment opportunities are also found in the sale of food supplies and services, and in catering, food design, and edible product development.

Other Occupations Include:

Baker
Culinary Manager
Kitchen Manager or Assistant
Kitchen Supervisor
Prep, Lead, or Pantry Cook or Chef

For more information, explore:

American Culinary Federation  www.acfchefs.org
American Hotel and Lodging Educational Institute  www.ahlei.org
International Association of Culinary Professionals  www.iacp.com/
National Restaurant Association  www.restaurant.org/
National Restaurant Association Educational Foundation  www.nraef.org/
Society for Foodservice Management  www.sfm-online.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Line Supervisor of Food Preparation &amp; Serving Workers</td>
<td>1,291</td>
<td>1,437</td>
<td>45</td>
<td>$15.45</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

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Culinary Management

Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFT 2212</td>
<td>Food Service Sanitation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>FSS 1220C**</td>
<td>Culinary Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FSS 1063C**</td>
<td>Professional Baking</td>
<td>3</td>
</tr>
<tr>
<td>HFT 1000++</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>FSS 2284C**</td>
<td>Catering, Banquet, and Event Management</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1006†</td>
<td>Basic Speaking and Listening Skills</td>
<td>1</td>
</tr>
<tr>
<td>SLS 1122†</td>
<td>Computer Skills for Academic Success</td>
<td>1</td>
</tr>
<tr>
<td>— — — *</td>
<td>General (Category V)</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SLS 1353*</td>
<td>Generations at Work</td>
<td>3</td>
</tr>
<tr>
<td>FSS 1308C**</td>
<td>Dining Room Management Banquet and</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Russian Service</td>
<td></td>
</tr>
</tbody>
</table>

Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>— — — *</td>
<td>Social/Behavioral Sciences (Category III)</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2451</td>
<td>Cost Control and Purchasing</td>
<td>3</td>
</tr>
<tr>
<td>FSS 1222L**</td>
<td>Culinary Production</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2841C**</td>
<td>Intermediate Dining Room Management</td>
<td>3</td>
</tr>
<tr>
<td>HUN 1201</td>
<td>Elements of Nutrition (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td>HFT 1860</td>
<td>Bar and Beverage Management</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101*</td>
<td>English Composition I (Category I)</td>
<td>3</td>
</tr>
<tr>
<td>— — — *</td>
<td>Humanities/Fine Arts (Category II)</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2211</td>
<td>Hospitality Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>FSS 2242L**</td>
<td>International/Regional Cuisine</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 2248C**</td>
<td>Garde Manger</td>
<td>3</td>
</tr>
<tr>
<td>FSS 2224L**</td>
<td>Classical Cuisine</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2840C**</td>
<td>Dining Room Management French Service</td>
<td>3</td>
</tr>
<tr>
<td>FSS 2247C**</td>
<td>Advanced Baking</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits: 64

Certifications and Credentials for Employment

Courses in this program prepare the student to take industry recognized certification exam(s). If you possess an industry certification in this career area, you may be eligible to receive college credit towards this program. For more information, see the program contact or the department head.

Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

Estimated Cost of Program

Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply.

Work Experience Related to Program

The program requires 45 hours of work experience. Students may earn credit through the Cooperative Education program. Contact Student Job Services.

Program Contact

Mr. Jimmie Langham (850) 484-1422
jdlangham@pensacolastate.edu

Department Head

Mr. Roy Bracken (850) 484-1013
rbracken@pensacolastate.edu

Financial Aid/Scholarships

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People who enter the culinary profession enjoy practical, hands-on activities and are creative and comfortable with decision making and problem solving. They are skilled in interpersonal relations, and coordinating the work and activities of others. Good communications skills are important. Near vision and arm-hand steadiness are essential.

Typical Tasks Include . . .

- Check the quality of food products to ensure that standards are met
- Monitor sanitation practices
- Check the quality and quantity of supplies; order food and other supplies
- Inspect supplies, equipment and work areas
- Determine what food should be presented

Working hours may be irregular, and work environments include extremes in temperatures.

Beyond Graduation . . .

With additional coursework, graduates from the Culinary Arts certificate program may complete the Associate of Applied Science (A.A.S.) degree in Culinary Management at Pensacola State College.

Job Placement Levels . . . Page 156

Primary Employers and Occupations

Graduates from the Culinary Arts program will provide food services within a large variety of industries including restaurants and other retail eating and drinking establishments, and institutions such as schools, colleges, hospitals, and nursing homes. Other employers include grocery stores, hotels, and private catering services.

Culinary Arts

Involves the production of food, and the management of food production and services. A wide range of opportunities exists for culinary artists with experience and formal training as cooks, chefs, maitre d’s, managers, and health inspectors, in restaurants, schools, supermarket delis and bakeries, health care facilities, and government agencies. Employment opportunities are also found in the sale of food supplies and services, and in catering, food design, and edible product development.

Other Occupations Include:

Baker
Kitchen Assistant
Line Cook
Prep, Lead, or Pantry Cook
Sous Chef

For more information, explore:

American Culinary Federation  www.acfchefs.org
American Hotel and Lodging Educational Institute  www.ahlei.org
International Association of Culinary Professionals  www.iacp.com/
National Restaurant Association  www.restaurant.org/
National Restaurant Association Educational Foundation  www.nraef.org/
Society for Foodservice Management  www.sfm-online.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Preparation &amp; Serving Workers, Including Fast Food</td>
<td>4,640</td>
<td>5,417</td>
<td>232</td>
<td>$8.44</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the Top 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Culinary Arts

Technical Certificate
CHEF-CT

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFT 2212</td>
<td>Sanitation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>FSS 1220C**</td>
<td>Culinary Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FSS 1063C**</td>
<td>Professional Baking</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2840C**</td>
<td>Dining Room Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(French Service)</td>
<td></td>
</tr>
<tr>
<td>FSS 1308C**</td>
<td>Dining Room Management Banquet and Russian Service</td>
<td>3</td>
</tr>
</tbody>
</table>

Intermediate Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 2224L**</td>
<td>Classical Cuisine</td>
<td>3</td>
</tr>
<tr>
<td>FSS 2242L**</td>
<td>International/Regional Cuisine</td>
<td>3</td>
</tr>
<tr>
<td>FSS 2247C**</td>
<td>Advanced Baking</td>
<td>3</td>
</tr>
<tr>
<td>FSS 1222L**</td>
<td>Culinary Production</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 2224L**</td>
<td>Classical Cuisine</td>
<td>3</td>
</tr>
<tr>
<td>FSS 2242L**</td>
<td>International/Regional Cuisine</td>
<td>3</td>
</tr>
<tr>
<td>FSS 2247C**</td>
<td>Advanced Baking</td>
<td>3</td>
</tr>
<tr>
<td>FSS 1222L**</td>
<td>Culinary Production</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits 35

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

Program Contact
Mr. Jimmie Langham (850) 484-1422
jdlangham@pensacolastate.edu

Department Head
Mr. Roy Bracken (850) 484-1013
rbracken@pensacolastate.edu

Financial Aid/Scholarships
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Dental Hygiene

People in this career like to work with people, on a one-on-one basis, more than with things or ideas. They usually have mathematical and scientific abilities and need good eye and hand coordination and an ability to work with small instruments. They may be described as practical, curious, and sociable.

Typical Tasks Include . . .
- Examine teeth and records for diagnosis and treatment by the dentist.
- Perform dental protective and preventative treatments relating to oral hygiene.
- Expose, develop, and mount x-rays of teeth and gums.
- Make impressions of teeth.
- Clean patients’ teeth using scaling and polishing equipment.

Beyond Graduation . . .
Dental Hygienists are required to sit for a written national board and also a clinical state board, and must be licensed by the state in which they practice. Graduates of the Dental Hygiene program at Pensacola State College are eligible to sit for the state board examination in any state in which they desire to practice.

Job Placement Levels . . .
Page 156

Primary Employers and Occupations
Graduates from the Dental Hygiene program work mainly in private dental offices. Others work in public health agencies, school systems, hospitals, armed forces, and clinics.

Dental Hygienists
Licensed professionals who provide preventive dental care and instruct patients how to practice good oral hygiene. Depending on state legal requirements, they provide a wide range of services. Hygienists perform patient health screenings, clean teeth, apply fluoride and sealants, expose and develop dental radiographs, provide nutritional counseling and preventive health education. Dental hygienists use a variety of methods in the course of their work such as hand, rotary and ultrasonic instruments. Models of teeth are used to explain oral hygiene procedures to patients. Many dental hygienists work part-time and hold multiple jobs.

For more information, explore:
American Dental Association  www.ada.org
American Dental Hygienists’ Association  www.adha.org/

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Hygienists</td>
<td>320</td>
<td>350</td>
<td>10</td>
<td>$22.58</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org
## Accreditation Status
Commission on Dental Accreditation (CODA)
American Dental Association (www.ada.org)

## Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s).
If you possess an industry certification in this career area, you may be eligible to receive college credit towards this program. For more information, see the program contact or the department head.

## Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

## Estimated Cost
Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply

## Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>BSC 1093**</td>
<td>Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>BSC 1093L**</td>
<td>Anatomy and Physiology I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MCB 1000**</td>
<td>Applied Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>MCB 1000L</td>
<td>Applied Microbiology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHM 1045</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHM 1045C</td>
<td>General Chemistry I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra or higher</td>
<td>3</td>
</tr>
</tbody>
</table>

### Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1094**</td>
<td>Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>BSC 1094L**</td>
<td>Anatomy and Physiology II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>DES 1000</td>
<td>Dental Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>SPC 1006CT†</td>
<td>Basic Speaking &amp; Listening Skills</td>
<td>1</td>
</tr>
<tr>
<td>DEP 2004</td>
<td>Human Growth and Development (Category III)</td>
<td>3</td>
</tr>
<tr>
<td>W 00753</td>
<td>CPR*</td>
<td></td>
</tr>
</tbody>
</table>

(Students must possess a Healthcare Providers CPR card which is valid through graduation of the dental hygiene program, American Heart or Red Cross only.)

### Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES 1010**</td>
<td>Dental Head and Neck Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>DEH 1130**</td>
<td>Oral Embryology and Histology</td>
<td>1</td>
</tr>
<tr>
<td>DEH 1002**</td>
<td>Fundamentals of Dental Hygiene</td>
<td>3</td>
</tr>
<tr>
<td>DEH 1002L**</td>
<td>Dental Hygiene Pre-Clinic</td>
<td>3</td>
</tr>
<tr>
<td>DES 1200C**</td>
<td>Dental Hygiene Radiology I</td>
<td>3</td>
</tr>
<tr>
<td>DEH 1720</td>
<td>Preventive Dentistry</td>
<td>2</td>
</tr>
</tbody>
</table>

### Semester III

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEH 1811**</td>
<td>Dental Ethics and Jurisprudence</td>
<td>1</td>
</tr>
<tr>
<td>DEH 1800**</td>
<td>Dental Hygiene I</td>
<td>2</td>
</tr>
<tr>
<td>DEH 1800L**</td>
<td>Dental Hygiene Clinic I</td>
<td>4</td>
</tr>
<tr>
<td>DEH 1400**</td>
<td>Oral Pathology</td>
<td>2</td>
</tr>
<tr>
<td>DEH 2602**</td>
<td>Periodontics</td>
<td>2</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

### Semester IV

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEH 1802**</td>
<td>Dental Hygiene II</td>
<td>1</td>
</tr>
<tr>
<td>DEH 1802L**</td>
<td>Dental Hygiene Clinic II</td>
<td>3</td>
</tr>
<tr>
<td>DEH 2202</td>
<td>Nutrition and Dental Health</td>
<td>2</td>
</tr>
<tr>
<td>DES 1100C</td>
<td>Dental Materials</td>
<td>3</td>
</tr>
<tr>
<td>DES 1051C</td>
<td>Pain Management</td>
<td>1</td>
</tr>
</tbody>
</table>

### Semester V

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEH 2300**</td>
<td>Pharmacology/Dental Office Emergencies</td>
<td></td>
</tr>
<tr>
<td>DEH 2804**</td>
<td>Dental Hygiene III</td>
<td>2</td>
</tr>
<tr>
<td>DEH 2804L**</td>
<td>Dental Hygiene Clinic III</td>
<td>5</td>
</tr>
<tr>
<td>DEH 2702</td>
<td>Dental Public Health</td>
<td>2</td>
</tr>
<tr>
<td>______*</td>
<td>Humanities/Fine Arts (Category II)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Semester VI

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEH 2806**</td>
<td>Dental Hygiene IV</td>
<td>2</td>
</tr>
<tr>
<td>DEH 2806L**</td>
<td>Dental Hygiene Clinic IV</td>
<td>5</td>
</tr>
<tr>
<td>DEH 2702L</td>
<td>Dental Public Health Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

### Total Program Credits
88

* See General Education Course Requirements of current college catalog for options.

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

† Course meets Computer Competence Requirement.

†† Course meets Oral Communications Requirements.

## Program Contact
Ms. Linda Lambert (850) 484-2242
llambert@pensacolastate.edu

## Department Head
Dr. Christa Ruber (850) 484-2308
cruber@pensacolastate.edu

## Financial Aid/Scholarships
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Early Childhood Education  
(Associate of Science Degree)

Professionals in this career must possess good communication and social skills and also have a genuine interest in adult/child relationships. Friendly, understanding, sympathetic, and empathetic describe the attributes of an Early Childhood professional.

Typical Tasks Include . . .
- Plan and implement appropriate programs for young children.
- Assist the teacher in planning and implementing programs.
- Supervise a group of children in a school, private home setting, or on a field trip.
- Operate audiovisual equipment, recording grades, or preparing materials for an activity.

Beyond Graduation . . .
By gaining experience in a child development center or a public or private school, students may advance to supervisory or administrative positions. The Associate of Science (A.S.) degree in Early Childhood Education at Pensacola State College is equivalent to or greater than the FCCPC—Florida Child Care Professional Credential — required by the State of Florida. With additional coursework, students may obtain their Associate in Arts (A.A.) degree, or a bachelor’s degree, and earn state teacher certification to be eligible to work in a public school.

Job Placement Levels . . .
Page 156

Some Primary Employers and Occupations

Employers of graduates from the Early Childhood Education (Associate of Science Degree) program include public and private schools, child development centers, family-home daycares, religious organizations, and self-employment.

Child Development Educators
Concerned with the education, guidance, and daily care of young children. Early childhood professionals plan and implement activities that stimulate children’s intellectual, social, emotional and physical development.

Preschool Teachers
Work in public or private schools, or child development centers, where they plan and implement activities for young children which promote: intellectual, social, emotional, and physical growth and development needed to be successful as they enter primary school. Preschool teachers also teach in infant or toddler programs.

Child Development Center Curriculum Coordinators
May be involved in long range planning of child development programs.

Family Day Care Providers
Care for a few children in their own homes. These workers are generally self-employed and are responsible for all aspects of running a small business. Child development and education graduates also are employed at centers serving children with special needs or children who are school age, or as child development nannies. Graduates may also own or operate a child care or preschool center.

Teacher Aides
Assist classroom teachers in elementary schools. Aides often apply training in child development and typing skills to perform a combination of instructional and clerical duties. (See also Teacher Aides, Early Childhood Education (Technical Certificate Programs), page 66.)

Other Occupations include:
Early Childhood Teacher/Assistant
Early Intervention Teacher/Assistant

For more information, explore:
Association for Childhood Education International  www.acei.org
National Association for the Education of Young Children  www.naeyc.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Care Workers</td>
<td>1,836</td>
<td>2,076</td>
<td>88</td>
<td>$9.22</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Early Childhood Education

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). If you possess an industry certification in this career area, you may be eligible to receive college credit towards this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
Course CHD 2440C Early Childhood Practicum is an internship. Students may earn Cooperative Education credits that can be used in this program. Contact Student Job Services.

Foundation Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
<td>3</td>
</tr>
<tr>
<td>____ ____*</td>
<td>Humanities/Fine Arts (Category II)</td>
<td>3</td>
</tr>
<tr>
<td>____ ____*</td>
<td>Social/Behavioral Sciences (Category III)</td>
<td>3</td>
</tr>
<tr>
<td>____ ____*</td>
<td>Natural Sciences/Mathematics (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td>____ ____*</td>
<td>General (Category V)</td>
<td>3</td>
</tr>
<tr>
<td>CHD 1104+</td>
<td>Introduction to Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>EDF 1005++</td>
<td>Introduction to the Teaching Profession</td>
<td>3</td>
</tr>
</tbody>
</table>

Intermediate Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 2085++</td>
<td>Introduction to Diversity for Educators</td>
<td>3</td>
</tr>
<tr>
<td>EME 2040+</td>
<td>Introduction to Educational Technology</td>
<td>3</td>
</tr>
<tr>
<td>DEP 2001+</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>HSC 2400</td>
<td>First Aid &amp; Injuries</td>
<td>3</td>
</tr>
<tr>
<td>SLS 1353++</td>
<td>Generations at Work</td>
<td>3</td>
</tr>
<tr>
<td>CHD 2620</td>
<td>Home, School and Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>CHD 2120</td>
<td>Infants and Toddlers</td>
<td>3</td>
</tr>
<tr>
<td>____ ____++</td>
<td>Electives (See Suggested Electives)</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 1332</td>
<td>Creative Experiences for Children</td>
<td>3</td>
</tr>
<tr>
<td>CHD 1800+</td>
<td>Management in Child Care</td>
<td>3</td>
</tr>
<tr>
<td>CHD 2380</td>
<td>Teaching Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CHD 2440C++</td>
<td>Early Childhood Practicum</td>
<td>3</td>
</tr>
<tr>
<td>EEX 2010</td>
<td>Introduction to Exceptional Children</td>
<td>3</td>
</tr>
<tr>
<td>EEX 1600</td>
<td>Behavior Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits 63

Suggested Electives:

For more information call the Program Contact or visit: workforce.pensacolastate.edu

Go to: Page 7

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid.

Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.

Back to Table of Contents
Professionals in this career must possess good communication and social skills and also have a genuine interest in adult/child relationships. Friendly, understanding, sympathetic, and empathetic describe the attributes of an Early Childhood professional.

Typical Tasks Include . . .

- Plan and implement appropriate programs for young children.
- Assist the teacher in planning and implementing programs.
- Supervise a group of children in a school, private home setting, or on a field trip.

Beyond Graduation . . .

By gaining experience in a child development center or a public or private school, students may advance to supervisory or administrative positions.

The courses in these programs can be transferred to the Associate of Science (A.S.) degree in Early Childhood Education program at Pensacola State College.

Some Primary Employers and Occupations

Graduates from the Early Childhood Education (Technical Certificate) programs work as child care workers or preschool teachers or teacher aides in pre-schools, child-care centers, child care homes, or other child development centers in the public or private sector. Employers include child care centers, school systems, religious organizations, private households and family-home child-care programs.

Child Care Workers

Concerned with the education, guidance, and daily care of young children. They plan and implement activities that stimulate children’s: intellectual, social, emotional, and physical development.

Preschool Teachers

Work in public or private schools, or child development centers, where they plan and implement activities for young children which promote: intellectual, social, emotional, and physical growth and development needed to be successful as they enter primary school.

Family Child Care Providers

Care for a few children in their own homes. These workers are generally self-employed and are responsible for all aspects of running a small business.

Teacher Aides

Assist classroom teachers in elementary schools. Aides often apply training in child development and typing skills to perform a combination of instructional and clerical duties. [See also Teacher Aides, Early Childhood Education (Associate of Science Degree Program), page 56.]

For more information, explore:

National Association for the Education of Young Children www.naeyc.org
National Child Care Association www.nccanet.org
National Child Care Information Center www.nccic.org
Association for Childhood Education International www.acei.org

Job Placement Levels . . .

Page 156
Early Childhood Education

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
This program includes practicum classes.

Early Childhood Intervention
(Child Development and Early Intervention) (CHD-CT)
The CHD-CT Early Childhood Intervention Technical Certificate is a 36 college credit program designed to prepare students as entry level teachers in a child care or pre-school program.
Upon completion of this program, students will have earned their FCCPC along with Pre-K and Infant/Toddler specialization certificates. This program is composed of selected college credit courses offered within the AS and/or AA Early Childhood degree programs and will count toward those degrees.

Required Courses
Credits
DEP 2001 Child Development 3
CHD 1104 Introduction to Early Childhood 3
CHD 2440C Early Childhood Practicum 3
CHD 1800 Management in Child Care 3
CHD 2380 Teaching Young Children 3
CHD 1332 Creative Experiences for Children 3
EEX 1600 Behavior Management 3
EEX 2010 Introduction to Exceptional Children 3
CHD 2120 Infants and Toddlers 3
CHD 2620 Home, School and Community Relations 3
Approved Electives 6
Total Program Credits 36

Early Childhood Teacher
(Preschool) (PREK-CT)
The Pre-K College Technical Certificate is a 12 college-credit program designed to provide students with the skills needed to design developmentally appropriate curriculum for young children and enable them to begin careers as early childhood education caregivers with a preschool specialization.
Additionally, the courses can be transferred into appropriate technical certificates programs within Early Childhood or can be used in either the AS/AA Early Childhood degree programs.

Required Courses
Credits
DEP 2001 Child Development 3
CHD 1104 Introduction to Early Childhood 3
CHD 2380 Teaching Young Children 3
CHD 1332 Creative Experiences 3
Total Program Credits 12

Approved Elective—Choose from the following courses:
EDF 2085, EME 2040, EDF 1005, HSC 2400, HSC 2100, HSC 2402.

Program Contact
Ms. Betty Persons (850) 484-2534
bpersons@pensacolastate.edu

Department Head
Ms. Susan Morgan (850) 484-2137
smorgan@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

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Professionals in this career must possess good communication and social skills and also have a genuine interest in adult/child relationships. Friendly, understanding, sympathetic, and empathetic describe the attributes of an Early Childhood professional.

Typical Tasks Include . . .
- Plan and implement appropriate programs for young children.
- Assist the teacher in planning and implementing programs.
- Supervise a group of children in a school, private home setting, or on a field trip.

Beyond Graduation . . .
By gaining experience in a child development center or a public or private school, students may advance to supervisory or administrative positions.

Job Placement Levels . . .
Page 156

Some Primary Employers and Occupations
Graduates from the Early Childhood Education (Technical Certificate) programs work as child care workers or preschool teachers or teacher aides in pre-schools, child-care centers, child care homes, or other child development centers in the public or private sector. Employers include child care centers, school systems, religious organizations, private households and family-home child-care programs.

Child Care Workers
Concerned with the education, guidance, and daily care of young children. They plan and implement activities that stimulate children’s: intellectual, social, emotional, and physical development.

Preschool Teachers
Work in public or private schools, or child development centers, where they plan and implement activities for young children which promote: intellectual, social, emotional, and physical growth and development needed to be successful as they enter primary school.

Family Child Care Providers
Care for a few children in their own homes. These workers are generally self-employed and are responsible for all aspects of running a small business.

Teacher Aides
Assist classroom teachers in elementary schools. Aides often apply training in child development and typing skills to perform a combination of instructional and clerical duties. [See also Teacher Aides, Early Childhood Education (Associate of Science Degree Program), page 56.]

For more information, explore:
National Association for the Education of Young Children www.naeyc.org
National Child Care Association www.nccanet.org
National Child Care Information Center www.nccic.org
Association for Childhood Education International www.acei.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Care Workers</td>
<td>1,836</td>
<td>2,076</td>
<td>88</td>
<td>$9.22</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Early Childhood Education

Technical Certificates

CDA-CT, BABY-CT

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
Early Childhood Intervention, Early Childhood Teacher (CDA/CDAE), and Infant/Toddler Certificate students complete the course CHD2440C Practicum.

Florida Child Care Professional Credential (FCCPC) (Child Care Center Management) (CDA-CT)
The Florida Child Care Professional Credential College Technical Certificate is a 12 college-credit program designed to prepare students as entry level child care workers and teachers with the knowledge and skills necessary to provide quality childcare programs.

The completion of these courses coupled with 480 hours work experience qualifies the student for their FCCPC or National CDA certificate. Additionally, the courses can be transferred into appropriate technical certificates programs within Early Childhood or can be used in either the AS/AA Early Childhood degree programs.

Required Courses
DEP 2001 Child Development 3
CHD 1104 Introduction to Early Childhood 3
CHD 2440C Early Childhood Practicum 3
CHD 1800 Management of Child Care 3

Total Program Credits 12

Infant/Toddler Specialization (BABY-CT)
The Baby-CT College Technical Certificate is a 12 college-credit program designed to provide students with the skills and information needed to design a developmentally appropriate environment and curriculum for infants and toddlers.

This program is composed of selected college-credit courses offered within the AS and/or AA Early Childhood degree programs and will count toward those degrees.

Required Courses
DEP 2001 Child Development 3
CHD 1104 Introduction to Early Childhood 3
CHD 2440C Early Childhood Practicum 3
CHD 2120 Infants and Toddlers 3

Total Program Credits 12

Approved Elective—Choose from the following courses:
EDF 2085, EME 2040, EDF 1005, HSC 2400, HSC 2100, HSC 2402.

For more information call the Program Contact or visit: workforce.pensacolastate.edu

Program Contact
Ms. Betty Persons (850) 484-2534
bpersons@pensacolastate.edu

Department Head
Ms. Susan Morgan (850) 484-2137
smorgan@pensacolastate.edu

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EKG Technician

Primary Employers and Occupations

Graduates from the EKG Technician program will find the largest concentration of employment in hospitals. A few EKG technicians are employed in the offices of physicians. A smaller percentage work for insurance companies.

EKG Technicians

Conduct tests and evaluations of patients for diagnostic purposes that aid in the detection, diagnosis and treatment of diseases, injuries or other physical conditions.

EKG Technicians explain testing procedures to patients and obtain and record patient identification, medical history or test results. They prepare and position patients for testing: attach electrodes to the patients’ chests, arms, and legs; connect electrodes to leads from the electrocardiogram (EKG) machine; and operate the EKG machine to obtain a reading. During testing, they monitor patients’ blood pressure, heart rate, comfort and safety, alerting physicians to abnormalities or changes in patient responses. Technicians adjust equipment and controls according to physicians’ orders or established protocol.

Other Occupations Include:

Electrocardiograph Aide
Patient Care Technician
ER Technician

For more information, explore:
American Heart Association  www.americanheart.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular Technologists and Technicians</td>
<td>203</td>
<td>234</td>
<td>7</td>
<td>$20.90</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity —  www.floridajobs.org

Workforce Development Trends Escambia and Santa Rosa Counties

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
EKG Technician

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident

Per Vocational Credit:
$85.80, Florida Resident
$86.80, Alabama Resident
Additional expenses may apply

Required Courses

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 0003C Basic Healthcare Worker</td>
<td>90</td>
</tr>
<tr>
<td>MEA 0540C EKG Aide</td>
<td>75</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MEA 0541C EKG Technician</td>
<td>300</td>
</tr>
</tbody>
</table>

Total Program Clock Hours 465

Program Contact
Ms. Wilma Duncans-Burnett (850) 484-2216
wduncans-burnett@pensacolastate.edu

Department Head
Dr. Christa Ruber (850) 484-2308
cruber@pensacolastate.edu

Financial Aid/Scholarships
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People in this career like to work with tools and machines and have mathematical and mechanical abilities. They must meet strict standards, have good eye and hand coordination with above average finger and hand dexterity.

Typical Tasks Include . . .

- Build, test, modify, or repair electrical and electronic equipment.
- May work with experimental electronic equipment or industrial production equipment or instruments.

Beyond Graduation . . .

Technicians usually begin by performing routine duties under the close supervision of an experienced technician, technologist, engineer, or scientist. As they gain experience, they are given more difficult assignments with only general supervision. Some engineering technicians eventually become supervisors.

As technology becomes more sophisticated, employers will continue to look for technicians who are skilled in new technology and require a minimum of additional job training. An increase in the number of jobs related to public health and safety should create job opportunities for technicians.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Graduates from the Electronics Engineering Technology program support manufacturing, utilities, business/computer services, home electronic repair, and medical equipment repair services.

Biomedical Equipment Technicians
Inspect, calibrate, maintain, repair, and install complex medical equipment and instrumentation used in medical therapy and diagnosis. These technicians may specialize in equipment used in health care areas such as radiology, nuclear medicine, laser technology or patient monitoring.

Electronics Engineering Technicians
Help develop, manufacture, and service electronic equipment such as radios, radar, sonar, television, industrial and medical measuring or control devices, navigational equipment, and computers, often using measuring and diagnostic devices to test, adjust, and repair equipment.

Instrumentation Technicians
Test, inspect, maintain, and help to develop complex instruments, such as strain gauges and pressure gauges, that sense, measure, and record changes in industrial environments. Some instrumentation technicians operate laboratory equipment to test instruments on performance, while others design and build new apparatus or modify old designs.

Telecommunications Technicians
Install and repair a wide variety of telecommunication equipment, including telephones, satellite hook-ups, telegraph transmitters and receivers, private branch exchanges, and microwave communications systems. Technicians adjust transmitters, electronically test hook-ups, and design and test communications systems.

Other Occupations Include:
Computer Service Technician Electronic Aides System Technician Digital/Analog Electronics Tester Electronics Specialist Telecommunications Specialist

For more information, explore:
International Society of Certified Electronics Technicians www.iscet.org/
SEMATECH www.sematech.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecommunications Equipment Installers and Repairers</td>
<td>296</td>
<td>374</td>
<td>15</td>
<td>$22.92</td>
</tr>
</tbody>
</table>

Many jobs in this field are listed among the fastest growing occupations in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
# Electronics Engineering Technology

## General Education Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101**</td>
<td>English Composition (Category I)</td>
<td>3</td>
</tr>
<tr>
<td>_____________</td>
<td><strong>Humanities/Fine Arts (Category II)</strong></td>
<td>3</td>
</tr>
<tr>
<td>_____________</td>
<td><strong>Social/Behavioral Sciences (Category III)</strong></td>
<td>3</td>
</tr>
<tr>
<td>MAC 1105*</td>
<td>College Algebra (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td>_____________</td>
<td><strong>General (Category V)</strong></td>
<td>3</td>
</tr>
<tr>
<td>SPC 1006C†</td>
<td>Basic Speaking and Listening Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

## Foundation Courses

(Students should take their foundation courses as early as possible)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1061C†</td>
<td>Introduction to Computers in Technology</td>
<td>3</td>
</tr>
<tr>
<td>ETI 1701</td>
<td>Industrial Safety</td>
<td>3</td>
</tr>
<tr>
<td>EET 1015C**</td>
<td>Direct Current Circuits</td>
<td>3</td>
</tr>
<tr>
<td>CET 1112C**</td>
<td>Digital Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EET 1025C**</td>
<td>Alternating Current Circuits</td>
<td>3</td>
</tr>
</tbody>
</table>

## Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 1141C**</td>
<td>Electronic Devices and Integrated Circuits I</td>
<td>3</td>
</tr>
<tr>
<td>_____________</td>
<td><strong>Programming Language</strong></td>
<td>3</td>
</tr>
</tbody>
</table>

## Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 2142C**</td>
<td>Linear Circuits</td>
<td>3</td>
</tr>
<tr>
<td>CET 2113C**</td>
<td>Digital Circuits</td>
<td>3</td>
</tr>
<tr>
<td>_____________</td>
<td><strong>Emphasis Courses</strong></td>
<td>25</td>
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</table>

## Total Program Credits

<table>
<thead>
<tr>
<th>Credits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>68</td>
</tr>
</tbody>
</table>

## Cooperative Education Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 2947</td>
<td>Electronic Technology Co-op</td>
<td>1</td>
</tr>
<tr>
<td>EET 2948</td>
<td>Electronic Technology Co-op</td>
<td>2</td>
</tr>
<tr>
<td>EET 2949</td>
<td>Electronic Technology Co-op</td>
<td>3</td>
</tr>
</tbody>
</table>

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### Certifications and Credentials for Employment

Courses in this program prepare the student to take industry-recognized certification exam(s). If you possess an industry certification in this career area, you may be eligible to receive college credit towards this program. For more information, see the program contact or the department head.

### Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost Per College Credit

- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply.

### Work Experience Related to Program

Students may earn Cooperative Education credits that can be used in this program. Work experience positions with various companies are listed with Student Job Services.

### General Education Courses

- ENC 1101**: English Composition (Category I)
- **Humanities/Fine Arts (Category II)
- **Social/Behavioral Sciences (Category III)
- MAC 1105*: College Algebra (Category IV)
- **General (Category V)
- SPC 1006C†: Basic Speaking and Listening Skills

### Foundation Courses

- CGS 1061C†: Introduction to Computers in Technology
- ETI 1701: Industrial Safety
- EET 1015C**: Direct Current Circuits
- CET 1112C**: Digital Fundamentals
- EET 1025C**: Alternating Current Circuits

### Intermediate Courses

- EET 1141C**: Electronic Devices and Integrated Circuits I
- **Programming Language

### Advanced Courses

- EET 2142C**: Linear Circuits
- CET 2113C**: Digital Circuits
- **Emphasis Courses

### Total Program Credits

- 68

### Cooperative Education Courses

- EET 2947: Electronic Technology Co-op
- EET 2948: Electronic Technology Co-op
- EET 2949: Electronic Technology Co-op

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### Financial Aid/Scholarships

Learn about financial aid, scholarships, and total cost to attend at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then "Quick Link" to Financial Aid.

### Need help with Admissions and Registration?

Learn more about New Student Services on Page 4.

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For more information call the Program Contact or visit: [workforce.pensacolastate.edu](http://workforce.pensacolastate.edu)

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Electronics Aide

People in this career work mostly indoors. They must be prepared for work that may be strenuous at times and may include lifting heavy objects, and standing, stooping, bending, and kneeling for long periods of time.

Typical Tasks Include . . .
- Inspect and test electrical or electronic systems to locate and diagnose malfunctions, using visual inspections and testing instruments.
- Replace and clean electrical or electronic components.
- Splice wires and solder connections to fixtures and equipment.
- Install equipment and accessories such as stereos, navigation equipment, communication equipment, and security systems.
- Confer with customers to determine the nature of malfunctions. Estimate costs of repairs based on parts and labor charges.

Beyond Graduation . . .

The credits in this certificate may be applied toward the Electronics Engineering Technology A.S. degree program offered at Pensacola State College. This degree offers on-the-job experience through the Cooperative Education Program.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Graduates from the Electronics Aide program typically work in manufacturing, electric maintenance, or the installation and repair of electronic equipment. They may be employed at the entry level at industrial/manufacturing sites, in homes, in businesses, or even in the automotive industry.

Electronic Equipment Assemblers
Assemble and modify electronic equipment such as control systems, radio equipment, test instruments, computers, numerical control machine tools, radar, telemetering systems, and appliances.

Electronic Equipment Repairers
Adjust and repair radio and television receivers, stereo systems, tape recorders, video systems, and other electronic home entertainment equipment.

Electronic Repairers
Install, maintain, and repair electronic equipment, such as biomedical equipment, industrial controls, telemetering and missile control systems, radar systems, transmitters and antennae.

Electromechanical Equipment Assemblers
Assemble electromechanical equipment or devices, such as gear trains, gyros, dynamometers, wave guides, magnetic drums, tape drives, actuators, and gearbox mechanisms, according to specifications.

For more information, explore:
Electronics Technicians Association International www.eta-i.org
International Society of Certified Electronics Technicians www.iscet.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics Repairers, Commercial and Industrial Equipment</td>
<td>79</td>
<td>79</td>
<td>2</td>
<td>$25.43</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Electronics Aide

Technical Certificate

ELEC-CT

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
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<td>EET 1141C**</td>
<td>3</td>
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<tr>
<td>CET 2113C**</td>
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</table>

Total Program Credits 12

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

NOTE: This certificate assumes the student has a basic knowledge of digital principles. If not, the student may need to take CET 1112C prior to taking CET 2113C.

Program Contact
Mr. Larry Ball (850) 484-2577
lbhall@pensacolastate.edu

Department Head
Mr. Danny Steele (850) 484-2522
dsteele@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

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People who prefer this career usually have mathematical and scientific abilities, like to work as a team member, have good leadership skills, and can physically and mentally cope with high levels of stress. They are described as optimistic, extroverted, and self-confident.

Typical Tasks Include . . .
- Handle business and administrative affairs.
- Oversee and carry out policies and procedures.
- Maintain and develop budgets.
- Supervise managers and conduct community outreach and educational activities.

Beyond Graduation . . .
This program teaches current EMTs/Paramedics managerial skills. An EMT/Paramedic can become a supervisor, operations manager, administrative director, or executive director of emergency services.

Many students will continue their education and training by enrolling in Pensacola State College’s Baccalaureate Degree of Applied Science with an emphasis in Public Safety/Public Service.

Job Placement Levels . . .
Page 156

Primary Employers and Occupations
Graduates from the Emergency Medical Services program work for hospitals, private ambulance services, and municipal fire, police, or rescue squad departments.

Emergency Medical Services
Involves planning, organizing, coordinating and supervising a medical emergency service program. Graduates coordinate the activities of persons involved in the rescue, transportation, and care of accident or catastrophe victims, and others requiring emergency medical assistance. They manage administrative requirements such as staffing, maintaining records of facilities and personnel and periodically inspecting facilities. They develop, plan, and participate in training programs for ambulance and rescue personnel.

Other Occupations Include:
Emergency Medical Services Coordinator
Emergency Medical Technician
Paramedic

For more information, explore:
American Ambulance Association  www.the-aaa.org
International Association of Flight Paramedics  www.flightparamedic.org/
National Association of Emergency Medical Technicians  www.naemt.org
National Registry of Emergency Medical Technicians  www.nremt.org

TARGETED OCCUPATION
HIGH DEMAND, HIGH SKILL OR HIGH WAGE

Job Placement Levels . . .
Page 156

The Center for Advising & Career Services
Go to: Page 5
Emergency Medical Services

Associate of Science Degree
EMS-AS

Accreditation Status
Committee on Educational Programs for the EMS (www.coaemsp.org)

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

General Education Courses
<table>
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<th>Course</th>
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Semester I – Fall
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<td>EMS 2682</td>
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<td>EMS 2236L</td>
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<td>EMS 2460C</td>
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Total Program Credits: 73

* Closed Program. See catalog for entry requirements.
** BSC1093 and BSC1094 (and the companion laboratories) may substitute for the BSC1080, BSC1080L and the 4 hours of elective.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Program Contact
Mr. Don Lee (850) 484-2225
dlee@pensacolastate.edu

Department Head
Dr. Christa Ruber (850) 484-2308
cruber@pensacolastate.edu

Financial Aid/Scholarships
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Emergency Medical Technician

People who prefer this career like to work as a team member and can physically and mentally cope with high levels of stress.

Typical Tasks Include . . .

- Coordinates with treatment center staff to obtain patients' vital statistics and medical history, to determine the circumstances of the emergency, and to administer emergency treatment.
- Administers first aid treatment and life support care to sick and injured persons.
- Communicates with dispatchers and treatment center staff to arrange reception of victims and to get instructions for further treatment.

Beyond Graduation . . .

Primary Employers and Occupations

Graduates from the Emergency Medical Technician program work for hospitals, private ambulance services, and municipal fire, police, or rescue squad departments.

Emergency Medical Technicians

Assess injuries, administer emergency medical care, and extricate trapped individuals. Transport injured or sick persons to medical facilities.

For more information, explore:

American Ambulance Association  www.the-aaa.org
International Association of Flight Paramedics  www.flightparamedic.org/
National Association of Emergency Medical Technicians  www.naemt.org
National Registry of Emergency Medical Technicians  www.nremt.org

Job Placement Levels . . .
Page 156

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
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<tr>
<td>Emergency Medical Technicians</td>
<td>327</td>
<td>390</td>
<td>14</td>
<td>$15.24</td>
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<tr>
<td>and Paramedics</td>
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Many occupations in this field are listed among the fastest growing occupations in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

The Center for Advising & Career Services

Go to: Page 5
Emergency Medical Technician

Accreditation Status
Commission on Accreditation of Allied Health Education Programs (www.caahep.org) and American Medical Association (www.ama-assn.org).

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s).

Entrance Requirements
This program is a selected admission, limited access program. Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Required Course       Clock Hours
EMS 1119  Emergency Medical Technician  7
EMS 1119L  EMT Lab  2
EMS 1411L  EMT Clinical Internship  2
Total Program Clock Hours  240

Advanced Technical Diploma
EMT-ATD

Program Contact
Mr. Steve White (850) 484-2217
swhite@pensacolastate.edu

Department Head
Dr. Christa Ruber (850) 484-2308
cruber@pensacolastate.edu

Financial Aid/Scholarships
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Back to Table of Contents

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People who prefer this career have mathematical and scientific abilities, like to work as a team member, and can physically and mentally cope with high levels of stress. They are described as curious, sympathetic, and energetic.

Typical Tasks Include . . .
- Respond to medical emergencies.
- Determine the nature of the injury.
- Administer first aid treatment.
- Transport persons to medical facilities.
- Administer medication or intravenous treatment.
- Work as a team member.

Beyond Graduation . . .
This program teaches advanced life support measures to EMTs. The next step would be to pursue the Emergency Medical Services A.S. degree at Pensacola State College in order to advance in their field into management positions.

An EMT/Paramedic can become a supervisor, operations manager, administrative director, or executive director of emergency services.

Paramedics may also consider completing the A.S. degree program in Registered Nursing at Pensacola State.

Job Placement Levels . . .
Page 156

Primary Employers and Occupations
Graduates from the Paramedic program work for hospitals, private ambulance services, and municipal fire, police, or rescue squad departments. In many smaller cities, there are no paid Paramedic jobs; there, all services are provided by volunteers.

Paramedics
A special grade of EMT who provide the most extensive prehospital care. Working with close radio contact under the direction of a hospital emergency room physician, paramedics treat acutely ill or injured patients using basic and advanced life saving techniques. Paramedics may administer drugs orally and intravenously, interpret EKGs, and use cardiac monitors, defibrillators, and other complex medical equipment.

For more information, explore:
American Ambulance Association www.the-aaa.org
International Association of Flight Paramedics www.flightparamedic.org/
National Association of Emergency Medical Technicians www.naemt.org
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Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>ESTIMATED 2020 ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
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<td>390</td>
<td>14</td>
</tr>
</tbody>
</table>

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Source: Florida Department of Economic Opportunity — www.floridajobs.org

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Accreditation Status
Committee on Accreditation of Educational Programs for the EMS Professions (www.coaemsp.org)

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Fall
- BSC 1080** Essentials of Anatomy & Physiology 3
- BSC 1080L** Essentials of Anatomy & Physiology Lab 1
- EMS 2613** Patient Assessment 1
- EMS 2614** Airway Management/Respiratory Emergencies 3
- EMS 1601** Introduction to Advanced Prehospital Care 1
- EMS 2231L Paramedic Lab I 3

Spring
- EMS 1683** Fundamentals of Advanced Prehospital Care 1
- EMS 1654** Paramedic Field/Clinical Experience I 3
- EMS 2627**++ Medical Emergencies 4
- EMS 1612** Cardiovascular Emergencies 2
- EMS 2232L Paramedic Lab II 2

Summer
- EMS 2681** Special Considerations in Prehospital Care 1
- EMS 2680** Behavioral Emergencies 1
- EMS 2628** OB/GYN/Neonatal/Pediatric Emergencies 2
- EMS 2655** Paramedic Field/Clinical Experience II 3
- EMS 2682** Advanced Prehospital Trauma Management 2
- EMS 2236L Paramedic Lab III 3

Total Program Credits 42

NOTE: The majority of students work full-time and should know that classes meet 20 hours each week.

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Program Contact
Mr. Don Lee (850) 484-2225
dlee@pensacolastate.edu

Department Head
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Public Safety Telecommunicator

People entering this career like things neat and orderly and enjoy finding answers to problems by doing hands-on work instead of talking about solutions.

Typical Tasks Include . . .

- Receives telephone or alarm system calls for emergency and non-emergency police, ambulance and fire service.
- Determines response requirements and relative priorities of situations, and dispatches units using established procedures.
- Operates telecommunication equipment to relay information to and from emergency sites.

A person can expect to work rotating shifts and weekends.

Beyond Graduation . . .

Graduates of the Public Safety Telecommunication program at Pensacola State College are qualified to work as emergency dispatchers. Students may also choose to seek additional training through completion of the Crime Scene Technician, and/or Criminal Justice Technology program(s).

Job Placement Levels . . .

Primary Employers and Occupations

Graduates from the Public Safety Telecommunicator program seek employment as dispatcher for police, fire, and ambulance agencies.

Public Safety Telecommunicators

Receive calls from the public concerning emergencies or crimes, and broadcasts orders to police patrol units in the vicinity to investigate. Operates radio and telephone equipment to receive reports of fires and medical emergencies, and relays information or orders to appropriate response units.

Other Occupations Include:

911 Operator
Forest Fire Fighters Dispatcher
Radio Dispatcher
Police Dispatcher
Law Enforcement Technician

For more information, explore:

American Ambulance Association  www.the-aaa.org
International Association of Flight Paramedics  www.flightparamedic.org/
National Association of Emergency Medical Technicians  www.naemt.org
National Registry of Emergency Medical Technicians  www.nremt.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
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<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
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</thead>
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<tr>
<td>Police, Fire and Ambulance Dispatchers</td>
<td>6,197</td>
<td>6,934</td>
<td>205</td>
<td>$18.76</td>
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</table>

Source: Florida Department of Economic Opportunity —  www.floridajobs.org

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The Center for Advising & Career Services

Go to: Page 5

Back to Table of Contents
## Public Safety Telecommunicator

### Required Course

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Clock Hours</th>
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<tbody>
<tr>
<td>EMS 0000C</td>
<td>Public Safety Telecommunication</td>
<td>240</td>
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### Total Program Clock Hours

- **240**

### Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost

- **Per College Credit:**
  - $104.58, Florida Resident
  - $105.58, Alabama Resident

- **Per Vocational Credit:**
  - $85.80, Florida Resident
  - $86.80, Alabama Resident

Additional expenses may apply.

### Certifications and Credentials for Employment

Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

### Financial Aid/Scholarships

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### Need help with Admissions and Registration?

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### Program Contact

- **Mr. Steve White** (850) 484-2217
  - swhite@pensacolastate.edu

### Department Head

- **Dr. Christa Ruber** (850) 484-2308
  - cruber@pensacolastate.edu

### For more information call the Program Contact or visit: [workforce.pensacolastate.edu](http://workforce.pensacolastate.edu)
Persons entering this career need to have artistic skills, enjoy creating original work, and have a good imagination. They must like to work with people and ideas more than things and have a high degree of organizational skills. They may be described as sociable, imaginative, and idealistic.

Typical Tasks Include . . .

- Design and arrange art and type in advertisements, books, magazines, and newspapers.
- Create drawings, photos, text, and visual resources to be used in the layout.
- Use computer software programs to design the work and prepare it for printing manually and on computer disk.

Beyond Graduation . . .

Graphic artists may advance to assistant art director, art director, design director, and in some companies, creative director of an art or design department. Some may gain enough skill to succeed as a freelancer or may prefer to specialize in a particular area. Others decide to open their own businesses.

Many students will continue their education and training by enrolling in Pensacola State College’s Baccalaureate Degree of Applied Science with an emphasis in Graphic Design.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Graduates from the Graphic Design Technology program support advertising agencies, publishing firms and the printing industry or may be self-employed.

**Graphic Artists**

Use an almost limitless variety of methods and materials such as print and film media, photography, computers, digital scanning, type, or any other media including oils, acrylics, watercolors, pastels, pencils, magic markers, pen and ink, silkscreen and clay to create images of persuasive and original power. They design according to specifications and guidelines set for the project. Graphic artists integrate findings with personal interests and knowledge of design methods and materials. Their specialties may include illustration, type design, layout, computer, photography, and copywriting.

**Graphic Designers**

May create packaging and promotional displays for a new product, the visual design of an annual report or brochure, or a distinctive logo for a product or business. They also help with the layout and design of magazines, newspapers, journals, and other publications, and create graphics for television. In advertising, graphic designers develop the illustrative material for persuasive, eye-catching advertisements based on the advertising strategy and the copy supplied by the copywriter. Graphic designers may function as art directors who help to manage design, art, and copy to create a unified graphic image for a client.

**Illustrators**

Paint or draw pictures for books, magazines, and other publications, films, and paper products, including greeting cards, calendars, wrapping paper, and stationery. Many create a variety of illustrations, while others specialize in a particular field.

**Fashion artists** draw illustrations of women’s, men’s, and children’s clothing and accessories for newspapers, magazines, and other media.

**Cartoonists** draw political, advertising, social, and sports cartoons. While some cartoonists illustrate the ideas created by others, most cartoonists have humorous, critical, or dramatic talents in addition to drawing skills.

**Animators** who work in the motion picture and television industries draw the large series of pictures which, when transferred to film or tape, form animated cartoons.

Other Occupations Include:

- Assistant Graphic Design Developer
- Book Designer
- Calligrapher
- Courtroom Artist
- Design Artist
- Digital Pre-Publisher
- Technician/Specialist
- Display Artist
- Junior Graphic Designer
- Sign Designer
- Technical Illustrator

For more information, explore:

American Institute of Graphic Arts [www.aiga.org](http://www.aiga.org)

Graphic Artists Guild [www.gag.org](http://www.gag.org)

Graphic Arts Technical Foundation [www.gain.net](http://www.gain.net)

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
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<tbody>
<tr>
<td>Graphic Designers</td>
<td>301</td>
<td>322</td>
<td>12</td>
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Source: Florida Department of Economic Opportunity — [www.floridajobs.org](http://www.floridajobs.org)

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

Back to Table of Contents
Graphic Design Technology
(Graphics Technology)

Certifications and Credentials for Employment
If you possess an industry certification in this career area, you may be eligible to receive college credit toward this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
For advanced students, internships are available on a competitive basis. Students may earn credit through the Cooperative Education Program. Contact Student Job Services.

Foundation Courses
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Advanced Courses
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<tr>
<td>GRA 2721C**</td>
<td>3</td>
</tr>
<tr>
<td>PPG 2221C**</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2191C**</td>
<td>3</td>
</tr>
<tr>
<td>ART 2905</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits: 64

NOTE: Majors should register in the Visual Arts Department and work out their personal schedules with the department head.

* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Program Coordinator
Mr. Mark Hopkins (850) 484-2550
mhopkins@pensacolastate.edu

Department Head
Mr. Krist Lien (850) 484-2554
klien@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.

For more information call the Program Contact or visit: workforce.pensacolastate.edu

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People in this career usually have clerical and arithmetic abilities, prefer to work indoors, and like to organize things. They may be described as curious, cooperative, and efficient. If you are organized, and enjoy working with data, numbers, and people, in the health care industry, this career may suit you.

Typical Tasks Include . . .
- Keep permanent medical records of patients in a health care delivery system.
- Assign a code number to all medical procedures (such as X-ray and testing) as related to patients’ condition and treatment.
- Compile statistics and records.

Beyond Graduation . . .
Graduates of an accredited associate degree program are eligible to take the national examination, offered by the American Health Information Management Association (AHIMA), for certification as a Registered Health Information Technician (RHIT). Most employers prefer to hire RHITs. After gaining 2 or 3 years work experience, a medical coder may take the national examination to become a Certified Coding Specialist.

Many students will continue their education and training by enrolling in Pensacola State College’s Baccalaureate Degree of Applied Science with an emphasis in Health Care Management.

Job Placement Levels . . . Page 156

Primary Employers and Occupations
Graduates from the Health Information Management program work in hospitals, outpatient care facilities, psychiatric facilities, doctors’ offices, insurance companies, and law offices.

Health Information Technicians
Use office and management skills to assemble and maintain complete and accurate hospital reports on patients. They review records, then code all patient data into computers. Technicians may aid in medical research, compile health statistics, release health information to insurance companies or attorneys, and supervise the Medical Record Department.

Medical Record Technicians
Are employed in hospitals, medical group practices, health maintenance organizations, nursing homes, clinics, and other facilities, by insurance firms, accounting firms, and law firms that specialize in health matters, and by public health departments to assist in research.

Other Occupations Include:
- Health Information Analyst
- Health Information Coder
- Health Information Coordinator/Abstractor
- Health Information Technician
- HIM Supervisor
- Information Release Clerk
- Medical Records Clerk
- Medical Records Data Entry Clerk
- Release of Information Specialist

For more information, explore:
American Health Information Management Association  www.ahima.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Records and Health Information Technicians</td>
<td>226</td>
<td>250</td>
<td>7</td>
<td>$15.94</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity  —  www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
# Health Information Technology

**Associate of Science Degree**

## HIT-AS

### Accreditation Status

Commission on Accreditation of Health Informatics and Information Management (www.cahiim.org) in collaboration with the Council on Accreditation (COA) and the American Health Information Management Association (www.ahima.org).

### Certifications and Credentials for Employment

Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

### Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost

**Per College Credit:**
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply

### Estimated Cost Per College Credit:
- Florida Resident: $104.58
- Alabama Resident: $105.58

### Financial Aid/Scholarships

Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then “Quick Link” to Financial Aid.

### Need help with Admissions and Registration?

Learn more about New Student Services on Page 4.

### Program Contact

Ms. Donna Shumway (850) 484-2213
dshumway@pensacolastate.edu

### Department Head

Dr. Christa Ruber (850) 484-2321
cruber@pensacolastate.edu

### For more information call the Program Contact or visit: workforce.pensacolastate.edu

This publication is to provide general career and program information and is not to be construed as a contract between the student and Pensacola State College. The student is encouraged to work closely with counselors and the department to verify the appropriateness of courses for registration.

### Health Information Technology Credits

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - Fall</td>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CGS 1570</td>
<td>Computer Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAT 1105</td>
<td>College Algebra or higher (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td>II - Spring</td>
<td>HSC 2550</td>
<td>Pathophysiology...</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIM 2214C***</td>
<td>Introduction to Health Information Management/Content and Structure</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIM 2620***</td>
<td>Medical Statistics and Financial Applications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIM 2512***</td>
<td>Healthcare Management and Supervision</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIM 2810***</td>
<td>Health Information Technology Professional Practice II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHI 2600*</td>
<td>Ethics (Category VI)</td>
<td>3</td>
</tr>
<tr>
<td>III - Summer</td>
<td>HSC 2641</td>
<td>Health Care Law</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIM 1442</td>
<td>Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social/Behavior Sciences (Category III)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPC 1006C††</td>
<td>Basic Speaking and Listening</td>
<td>1</td>
</tr>
<tr>
<td>I - Fall</td>
<td>HIM 1800***</td>
<td>Health Information Technology Professional Practice I</td>
<td>2</td>
</tr>
<tr>
<td>II - Spring</td>
<td>HIM 2229C</td>
<td>Introduction to Coding and Classification Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIM 2653C***</td>
<td>Medical Informatics and Health Information Technologies</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIM 2500C***</td>
<td>Performance Improvement in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIM 2284C</td>
<td>Intermediate Coding and Classification Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIM 2820L***</td>
<td>Health Information Technology Professional Practice III</td>
<td>2</td>
</tr>
<tr>
<td>III - Summer</td>
<td>HIM 2932</td>
<td>Special Topics in Health Information Technology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>HIM 2285C</td>
<td>Advanced Coding and Classifications Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Program Credits:** 70

*See General Education Course Requirements of current college catalog for options.

**Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

† Course meets Computer Competence Requirement.

†† Course meets Oral Communications Requirements.

The courses with identified categories meet general education requirements.

* Electives based on general education distribution requirements.

*** Certain courses are offered only once a year, therefore it is important that you work with your advisor to determine the most effective course plan and sequencing for graduation from the program.

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[Back to Table of Contents]

2013-2015 CAREERVISION 81
Medical Information Coder/Biller

People in this career usually have clerical and arithmetic abilities, prefer to work indoors, and like to organize things. They may be described as curious, cooperative, and efficient. If you are organized, and enjoy working with data, numbers, and people, in the health care industry, this career may suit you.

Typical Tasks Include . . .

• Keep permanent medical records of patients in a health care delivery system.

• Assign a code number to all medical procedures (such as X-ray and testing) as related to patients’ condition and treatment.

• Compile statistics and records

• Use a computer to store and retrieve patients’ records.

Beyond Graduation . . .

Upon completion of the program the student will be eligible to sit for the national credentialing examination for the Certified Coding Assistant (CCA) credential offered through the American Health Information Management Association (AHIMA).

Upon completion of the program the student will have the option to progress towards a two-year Associate of Science (A.S.) degree in Health Information Management at Pensacola State College to become a Registered Health Information Technician (RHIT).

Job Placement Levels . . .

Page 156

Primary Employers and Occurrences

Graduates from the Medical Information Coder/Biller program work in hospitals, outpatient care facilities, psychiatric facilities, doctors’ offices, insurance companies, and surgery centers.

Medical Information Coders/Billers

The Medical Information Coder/Biller program provides the student with the technical skills necessary to code medical diagnosis, procedures, and services provided for reimbursement in a wide variety of settings including hospital outpatient, ambulatory surgery centers, clinics and physician offices.

Other Occupations Include:

Health Information Coder
Health Record File Clerk
Information Release Clerk
Medical Records Clerk
Medical Records Data Entry Clerk

For more information, explore:
American Health Information Management Association  www.ahima.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Records and Health</td>
<td>226</td>
<td>250</td>
<td>7</td>
<td>$15.94</td>
</tr>
<tr>
<td>Information Technicians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services  Go to: Page 5
Medical Information Coder/Biller

<table>
<thead>
<tr>
<th>Term I – Fall</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology 3</td>
</tr>
<tr>
<td>HIM 1000C**</td>
<td>Introduction to Health Information Management 3</td>
</tr>
<tr>
<td>BSC 1080</td>
<td>Essentials of Anatomy and Physiology 3</td>
</tr>
<tr>
<td>BSC 1080L</td>
<td>Essentials of Anatomy and Physiology Lab 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term II – Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 2550</td>
<td>Pathophysiology 3</td>
</tr>
<tr>
<td>HSA 1172</td>
<td>Medical Billing and Third Party Payers 2</td>
</tr>
<tr>
<td>HIM 1442</td>
<td>Pharmacology 2</td>
</tr>
<tr>
<td>HSC 229C</td>
<td>Introduction to Coding and Classification Systems 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term III – Summer</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIM 2284C</td>
<td>Intermediate Coding and Classification Systems 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term IV – Fall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIM 2253C**</td>
<td>Outpatient Reimbursement Methodologies and Third-Party Payer 4</td>
</tr>
<tr>
<td>HIM 2285C</td>
<td>Advanced Coding and Classification Systems 3</td>
</tr>
<tr>
<td>HSC 2641</td>
<td>Health Care Law 3</td>
</tr>
<tr>
<td>HIM 2931***</td>
<td>Special Topics in Heath Information Technology 1</td>
</tr>
<tr>
<td>HIM 2933</td>
<td>Coding Professional Practice 1</td>
</tr>
</tbody>
</table>

Total Program Credits: 34

Upon completion, students enrolled in the Health Information Coder Certificate program will have the option to transfer into Health Information Technology A.S. degree program.

* CGS 1570 is a pre-requisite to HIM 1000C Introduction to Health Information Management.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Program Contact
Ms. Donna Shumway (850) 484-2213
dshumway@pensacolastate.edu

Department Head
Dr. Christa Ruber (850) 484-2321
cruber@pensacolastate.edu

Financial Aid/Scholarships
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For more information call the Program Contact or visit: workforce.pensacolastate.edu

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Health Unit Coordinator

People in this career prefer to work indoors, have clerical abilities, and have good social skills. They are sometimes described as sociable, efficient, and cooperative. If you like to work with people, do clerical tasks, work with data, organize things, and work in the health care field, this career may suit you.

Typical Tasks Include . . .

• Manage the non-clinical functions of a nursing unit.

• Transcribe doctors’ orders, order supplies, diagnostic studies, and other hospital services.

• Prepare and maintain patients’ charts.

• Perform receptionist role, interacting with medical staff, patients, and visitors.

Beyond Graduation . . .

Graduates from the Health Unit Coordinator program may advance in their field by continuing their education in other health related areas such as the Health Information Management or Medical Office Administration two-year degree programs at Pensacola State College.

Primary Employers and Occupations

Graduates from the Health Unit Coordinator program work in hospitals, nursing homes, and specialty care clinics or agencies.

Health Unit Coordinators

Work under the direction of a designated nursing unit staff member. Duties include specified nursing station tasks as well as clerical, communication and organizational tasks common to a patient care unit in general, and to the nursing station in particular. Health unit coordinators process incoming patients and update all new medical information needed. They prepare notice of patients’ discharges to inform the business office, obtain needed supplies for the unit, answer the telephone, and relay messages to other staff and patients. Other job titles: health unit clerk, ward clerk.

Job Placement Levels . . .

Page 156

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Support Workers</td>
<td>367</td>
<td>381</td>
<td>8</td>
<td>$13.75</td>
</tr>
<tr>
<td>and All Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Health Unit Coordinator  
Career and Technical Certificate  
HUC-VC

Certifications and Credentials for Employment  
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements  
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost  
Per College Credit:  
$104.58, Florida Resident  
$105.58, Alabama Resident  
Per Vocational Credit:  
$85.80, Florida Resident  
$86.80, Alabama Resident  
Additional expenses may apply

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester I</strong></td>
<td></td>
</tr>
<tr>
<td>HSC 0003C Basic Healthcare Worker</td>
<td>90</td>
</tr>
<tr>
<td>HIM 0076 Health Unit Clerk</td>
<td>240</td>
</tr>
<tr>
<td><strong>Semester II</strong></td>
<td></td>
</tr>
<tr>
<td>HIM 0076L* Health Unit Clerk Clinical</td>
<td>180</td>
</tr>
<tr>
<td><strong>Total Program Clock Hours</strong></td>
<td><strong>510</strong></td>
</tr>
</tbody>
</table>

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

Financial Aid/Scholarships  
Learn about financial aid, scholarships, and total cost to attend at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then "Quick Link" to Financial Aid

Need help with Admissions and Registration?  
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Hospitality and Tourism Management (Associate of Science Degree)

People who prefer this career like to work indoors. This type of person enjoys working with people more than ideas and things. Those who are ambitious, sociable, friendly, and have leadership skills may be interested in this program.

Typical Tasks Include . . .

- Plan, organize, and direct the operations of restaurants, hotels, motels, and other eating and lodging facilities.
- Hire and train personnel.
- Determine schedules.
- Handle workers' and customer complaints.

Hours may include rotating shifts and weekend work.

Beyond Graduation . . .

Experience working in the hospitality industry (hotel, restaurant, food service, travel, etc.) part-time or full-time while in school is an asset to anyone seeking a career in the industry.

With additional coursework, graduates may choose to obtain a bachelor's degree from a university in Hospitality Management, Hotel and Restaurant Administration, Recreation Management, Business Management or Business Administration. Most hotels and restaurants as well as other businesses promote employees who have proven their ability. Larger establishments and chains may offer more opportunities for advancement than small, independently owned operations.

The ability to relocate will increase your potential for promotions and may be necessary for advancement in some companies.

Primary Employers and Occupations

Graduates from the Hospitality and Tourism Management (Associate of Science Degree) program support the hotel, motel, and restaurant industry. Both large chains and smaller businesses are available for employment. In addition, some may seek to be self-employed and own their own restaurant, motel, or hotel.

Hospitality Managers

Includes the areas of lodging, restaurants, travel, tourism, food service. A wide variety of occupations exists with businesses that provide accommodations, meals, and personal services for both the traveling public and local resident. Hospitality management is oriented toward serving the guest while maintaining an efficient and profitable establishment.

Other Occupations Include:

- Assistant Hospitality Manager
- Catering/Sales Service Representative
- Food and Beverage Specialist
- Guest Services Representative
- Hospitality Manager
- Motel/Hotel Manager
- Resort Manager
- Room Division Service Representative

For more information, explore:

- American Culinary Federation  [www.acfchefs.org](http://www.acfchefs.org)
- American Personal & Private Chef Association  [www.personalchef.com](http://www.personalchef.com)
- International Association of Culinary Professionals  [www.iacp.com/](http://www.iacp.com/)
- National Restaurant Association Educational Foundation  [www.nraef.org/](http://www.nraef.org/)
- United States Personal Chef Association  [www.uspca.com](http://www.uspca.com)

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lodging Managers</td>
<td>60</td>
<td>68</td>
<td>3</td>
<td>$30.24</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity  [www.floridajobs.org](http://www.floridajobs.org)

Job Placement Levels . . .

Page 156

The Center for Advising & Career Services

Go to: Page 5
## Hospitality and Tourism Management

### Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HFT 1000</td>
<td>Introduction to the Hospitality Industry</td>
</tr>
<tr>
<td>HFT 2212</td>
<td>Food Service Sanitation and Safety</td>
</tr>
<tr>
<td>HFT 1313+</td>
<td>Hospitality Property Management</td>
</tr>
<tr>
<td>HFT 1410+</td>
<td>Hospitality Industry Accounting</td>
</tr>
<tr>
<td>HFT 1254</td>
<td>Lodging Operations</td>
</tr>
<tr>
<td>_______++</td>
<td>Approved Hospitality Management Elective</td>
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</tbody>
</table>

### Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
</tr>
<tr>
<td>FSS 2284C+</td>
<td>Catering, Banquet and Event Management</td>
</tr>
<tr>
<td>HFT 1860+</td>
<td>Bar and Beverage Management</td>
</tr>
<tr>
<td>FSS 1221C**</td>
<td>Introduction to Culinary Production</td>
</tr>
<tr>
<td>HFT 2850C</td>
<td>Management of Dining</td>
</tr>
<tr>
<td>HFT 2211+</td>
<td>Hospitality Resource Management</td>
</tr>
<tr>
<td>HFT 2500+</td>
<td>Marketing in Hospitality Industry</td>
</tr>
</tbody>
</table>

### Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1102</td>
<td>English Composition II</td>
</tr>
<tr>
<td>HFT 2451</td>
<td>Cost Control and Purchasing</td>
</tr>
<tr>
<td>_______++</td>
<td>Approved Hospitality Management Elective</td>
</tr>
<tr>
<td>HFT 2600+</td>
<td>Concepts of Hospitality Law</td>
</tr>
<tr>
<td>HFT 1867+</td>
<td>Wine Technology and Merchandising or</td>
</tr>
<tr>
<td>_______++</td>
<td>Approved Hospitality Management Elective</td>
</tr>
<tr>
<td>_______++</td>
<td>Approved Hospitality Management Elective</td>
</tr>
</tbody>
</table>

### Total Program Credits

| Credits | 64 |

### Work Experience Related to Program

The program includes internship classes. Students may also earn the same credit through the Cooperative Education program. Contact Student Job Services.

### Accreditation Status

Certification and diplomas are available from the National Restaurant Association (N.R.A.) and the American Hotel and Motel Association (AH&MA).

### Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost

<table>
<thead>
<tr>
<th>Per College Credit:</th>
</tr>
</thead>
<tbody>
<tr>
<td>$104.58, Florida Resident</td>
</tr>
<tr>
<td>$105.58, Alabama Resident</td>
</tr>
</tbody>
</table>

Additional expenses may apply.

### Need help with Admissions and Registration?

Learn more about New Student Services on Page 4.

### Program Contact

Mr. Sandy Southerland (850) 484-1159
ssoutherland@pensacolastate.edu

### Department Head

Mr. Roy Bracken (850) 484-1013
rbracken@pensacolastate.edu

### Financial Aid/Scholarships

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### Back to Table of Contents

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Students planning to transfer to The University of West Florida to complete a bachelor’s degree should take the following courses as part of their hospitality and tourism management associates of science degree from Pensacola State College: ECO 2013, MAC 1105, LIS 1004, SPC 1608, STA 2023, 3 credits of a literature class, 3 credits of a biological science class, and 1 credit of a biological science lab class.

+ These courses have limited offerings. Students should check the course description in planning their course of study.
++ See Program Contact for approval of Hospitality Management electives.
* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
‡ Course meets Oral Communications Requirements.
Hospitality and Tourism Management (Technical Certificates)

People who prefer this career like to work indoors. This type of person enjoys working with people more than ideas and things. Those who are ambitious, sociable, friendly, and have leadership skills may be interested in this program.

Typical Tasks Include . . .
- Plan, organize, and direct the operations of restaurants, hotels, motels, and other eating and lodging facilities.
- Ensure compliance with health and fire regulations.
- Investigate and resolve complaints regarding food quality, service, or accommodations.

Hours may include rotating shifts and weekend work.

Beyond Graduation . . .
Experience working in the hospitality industry (hotel, restaurant, food service, travel, etc.) part-time or full-time while in school, is an asset to anyone seeking a career in the industry. Students wishing to continue their education may take additional courses to earn a two-year Associate in Science (A.S.) degree in Hospitality and Tourism Management at Pensacola State College.

Larger hotels and restaurants may offer more opportunities for advancement than smaller operations. The large chains have more extensive career ladders and/or may have management training programs.

The ability to relocate will increase your potential for promotions and may be necessary for advancement.

Job Placement Levels . . .
Page 156

Primary Employers and Occupations
Graduates from the Hospitality and Tourism Management Technical Certificate programs support the hotel, motel, and restaurant industry. Both large chains and smaller businesses are available for employment. In addition, some may seek to be self-employed and own their own restaurant, motel, or hotel.

Food and Beverage Specialists
May apply skills related to customer service and human relations, hotel staffing operations, legal issues affecting the hospitality industry, liability and risk management, the set up and control of maintenance, energy consumption management, the planning and maintaining of purchasing and receiving procedures.

Rooms Division Specialists
May apply skills in effective selling techniques, customer service, communication, and human relations, as well as an understanding of marketing and business fundamentals, to perform general hotel, front office management and property management duties.

Event Planners or Coordinators
Are prepared for planning, coordinating, catering, and providing services, at special events, conferences, seminars, hotels, motels, and restaurants.

Guest Services Specialists
Are skilled in customer service, hospitality attitude, guest experience, communications, human relations, security issues, and front office operations.

Other Occupations Include:
- Assistant Hospitality Manager
- Assistant Sales Manager or Coordinator
- Catering Coordinator or Salesperson
- Food and Beverage Specialist
- Food Service Assistant Manager
- Front Office Representative
- Guest Services Representative
- Hospitality Manager
- Lodging Assistant Manager
- Motel/Hotel Manager
- Resort Manager
- Room Division Service Representative

For more information, explore:
National Restaurant Association www.restaurant.org/
National Restaurant Association Educational Foundation www.nraef.org/
Society for Foodservice Management www.sfm-online.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation, Tourism and Lodging Attendants</td>
<td>24</td>
<td>27</td>
<td>1</td>
<td>$12.52</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services
Go to: Page 5
Hospitality and Tourism Management

Accreditation Status
Certification and diplomas are available from the National Restaurant Association (N.R.A.) and the American Hotel and Motel Association (AH&MA).

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
The program includes internship classes. Students may also earn the same credit through the Cooperative Education program. Contact Student Job Services.

Food and Beverages Management (FBMGT-CT)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFT 1410 Hospitality Industry Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HFT 1860+ Bar and Beverage Management</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2211 Managing Hospitality Resources</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2212 Food Service Sanitation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>FSS 2284C** Catering, Banquet, and Event Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits 30

Event Planning Management (EVENT-CT)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 1221C** Introduction to Culinary Production</td>
<td>3</td>
</tr>
<tr>
<td>HFT 1860+ Bar and Beverage Management</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2850C Management of Dining</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2212 Food Service Sanitation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>HFT 2451 Cost Control and Purchasing</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2500 Hospitality Marketing</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2600 Hospitality Law</td>
<td>3</td>
</tr>
<tr>
<td>FSS 2284C** Catering, Banquet and Event Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits 24

Rooms Division Management (ROOMS-CT)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFT 1000 Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HFT 1254 Lodging Operations</td>
<td>3</td>
</tr>
<tr>
<td>HFT 1410 Hospitality Industry Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2211 Managing Hospitality Resources</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2250 Lodging Systems and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2451 Cost Control and Purchasing</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2500 Marketing in the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2600 Hospitality Law</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2850C Management of Dining</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2212 Food Service Sanitation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>HFT 2947 Hospitality Management Co-op</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Program Credits 30

Guest Services Specialist (GUEST-CT)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFT 1254 Lodging Operations</td>
<td>3</td>
</tr>
<tr>
<td>HFT 1313+ Hospitality Property Management</td>
<td>3</td>
</tr>
<tr>
<td>HFT 1410 Hospitality Industry Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2211 Managing Hospitality Resources</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2600 Concepts of Hospitality Law</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits 15

+$ These courses have limited offerings. Students should check the course description in planning their course of study.
++ Approved Hospitality Management Elective—See Program Contact for approval of electives.
* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

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People in this career have leadership skills, and usually like to work with machines and tools. They are tactful and friendly, and may be described as confident and practical.

**Typical Tasks Include . . .**

- Plan and direct activities associated with the assembly and production of materials and products.
- Determine work procedures, schedule workers and the number of workers needed.
- Oversee quality control and inventory control.
- Coordinate activities with other departments such as purchasing, engineering, or sales.

**Beyond Graduation . . .**

Graduates who enter the field directly from college may spend their first few months in the company’s training program. These programs familiarize trainees with the production process, company policies, and the requirements of the job. Sometimes, they expand their skills by taking company-sponsored management and communication courses.

On their own, graduates often take courses related to decision sciences, which provide them with techniques and statistical formulas to maximize efficiency and improve quality. Some take courses to become certified in various quality and management systems.

**Job Placement Levels . . .**

Page 156

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**Primary Employers and Occupations**

Graduates from the Industrial Management Technology program support the large field of manufacturing. About one half of these workers are in plants which deal with machinery and equipment, electronics and electrical equipment, fabricated metal products, food and chemical products.

**Production Supervisors**

Apply experience, business training and leadership skills in order to direct production workers in the making or assembling of manufactured goods. Responsible to both management and workers, they provide an important link between the two. Supervisors schedule or perform repairs and maintenance work on machinery, instruct employees in safe work practices, and enforce safety regulations. Many supervisors use computers to schedule workflow in their unit, keep track of materials used and update their inventory control system. Production supervisors can advance to a position as shop superintendent or general supervisor. In some cases supervisors move into higher-level management jobs such as production manager.

**Industrial Engineering Technicians**

Record test data, applying statistical quality control procedures to establish standard production rate and improve efficiency. They evaluate data and write reports to validate or indicate deviations from existing standards, and recommend modifications to existing quality or production standards to achieve optimum quality within limits of equipment capability.

**Other Occupations Include**

Foreman/Forewomen
Industrial Assistant
Industrial Planner
Management Assistant
Operations Coordinator
Quality Control Inspector
Superintendent

For more information, explore:  
American Management Association  www.amanet.org

---

**Workforce Development Trends Escambia and Santa Rosa Counties**

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Line Supervisors of Production and Operating Workers</td>
<td>370</td>
<td>392</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

---

The Center for Advising & Career Services  Go to: Page 5
Industrial Management Technology

**Entrance Requirements**
Consult Program Contact or Department Head for entrance requirements.

**Estimated Cost of Program**
Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident
Additional expenses may apply

**Work Experience Related to Program**
Students may earn Cooperative Education credits that can be used in this program. Contact Student Job Services.

**General Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101*</td>
<td>3</td>
</tr>
<tr>
<td>____ ____*</td>
<td></td>
</tr>
<tr>
<td>ECO 2013</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1105*</td>
<td>3</td>
</tr>
<tr>
<td>____ ____*</td>
<td></td>
</tr>
<tr>
<td>CGS 1061C†</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1006††</td>
<td>1</td>
</tr>
<tr>
<td>____ ____+</td>
<td></td>
</tr>
</tbody>
</table>

**Foundation Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETI 1701</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1584**</td>
<td>3</td>
</tr>
<tr>
<td>____ ____+</td>
<td></td>
</tr>
</tbody>
</table>

**Advanced Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEB 2112</td>
<td>3</td>
</tr>
<tr>
<td>MAN 2021</td>
<td>3</td>
</tr>
<tr>
<td>COM 2100**</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1210**</td>
<td>3</td>
</tr>
<tr>
<td>GEB 2430</td>
<td>3</td>
</tr>
<tr>
<td>MAR 2011</td>
<td>3</td>
</tr>
<tr>
<td>____ ____+</td>
<td></td>
</tr>
</tbody>
</table>

**Total Program Credits**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
</tr>
</tbody>
</table>

+ Area Elective: Any college credit course from one of the following prefix areas. (Some may have prerequisites. Check the course Descriptions.)

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCN</td>
<td></td>
</tr>
<tr>
<td>CCI</td>
<td></td>
</tr>
<tr>
<td>CET</td>
<td></td>
</tr>
<tr>
<td>CGS</td>
<td></td>
</tr>
<tr>
<td>CIS</td>
<td></td>
</tr>
<tr>
<td>CJS</td>
<td></td>
</tr>
<tr>
<td>CTD</td>
<td></td>
</tr>
<tr>
<td>ETM</td>
<td></td>
</tr>
<tr>
<td>EVS</td>
<td></td>
</tr>
<tr>
<td>EGS</td>
<td></td>
</tr>
<tr>
<td>EST</td>
<td></td>
</tr>
<tr>
<td>ETC</td>
<td></td>
</tr>
<tr>
<td>ETD</td>
<td></td>
</tr>
<tr>
<td>ETS</td>
<td></td>
</tr>
<tr>
<td>ETC</td>
<td></td>
</tr>
<tr>
<td>ETD</td>
<td></td>
</tr>
<tr>
<td>ETS</td>
<td></td>
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<tr>
<td>FFP</td>
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<td>FIN</td>
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<tr>
<td>FSS</td>
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<tr>
<td>GEB</td>
<td></td>
</tr>
<tr>
<td>MAN</td>
<td></td>
</tr>
<tr>
<td>MNA</td>
<td></td>
</tr>
<tr>
<td>OST</td>
<td></td>
</tr>
<tr>
<td>SUR</td>
<td></td>
</tr>
</tbody>
</table>

*See General Education Course Requirements page for options.

**Financial Aid/Scholarships**
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Information Technology (IT) Security

Primary Employers and Occupations

Graduates from the Information Technology (IT) Security program will work in business, finance, insurance and industrial firms; federal, state, and local governments; and education and health care sectors.

Computer Security Specialists
Plan, coordinate, and implement the employer’s information security in order to protect the organization’s data and infrastructure. They educate users about computer security, install security software, monitor networks for security breaches, respond to cyber attacks, and in some cases, gather data and evidence used in prosecuting cyber crime.

Security Analysts
Review and analyze computer data and documents for performance indicators to locate code problems, and correct errors by correcting codes. They consult with management to ensure agreement on system principles. They may also develop, document and revise system design procedures, test procedures, and quality standards.

Other Occupations Include:
- Data Recovery Planner
- Network Designer
- Security Administrator
- Software Quality Assurance Tester
- Web Administrator

For more information, explore:
Computing Technology Industry Association (CompTIA)  [www.comptia.org/](http://www.comptia.org/)
IEEE Computer Society  [www.computer.org](http://www.computer.org)

Beyond Graduation . . .

There is a demand for qualified security professionals in all businesses that use computers as part of the normal course of business, as employers continue to invest in cyber security to protect their information and infrastructure. Many new and emerging careers in the Information Technology (IT) field are in the area of data and information security.

Job Placement Levels . . .
Page 156

Typical Tasks Include . . .
- Develop plans and procedures to safeguard data from unauthorized access
- Test systems to ensure proper function
- Confer with others about data access, security violations, updates, upgrades, and modifications

Targets Occupation
High Demand, High Skill or High Wage

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Security Analysts and Web Developers</td>
<td>221</td>
<td>252</td>
<td>7</td>
<td>$28.31</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — [www.floridajobs.org](http://www.floridajobs.org)

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The Center for Advising & Career Services  Go to: Page 5
## Information Technology (IT) Security

### Associate of Science Degree

**ITSEC-AS**

### Certifications and Credentials for Employment

Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

### Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost

**Per College Credit:**
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply.

### General Education Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 1105</td>
<td>College Algebra (Category IV)</td>
</tr>
<tr>
<td>PHI 2600</td>
<td>Ethics (Category II)</td>
</tr>
<tr>
<td>HLP 1081</td>
<td>Concepts of Life Fitness (Category V)</td>
</tr>
<tr>
<td>CCJ 1020</td>
<td>Intro to Criminal Justice (Category III)</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
</tr>
</tbody>
</table>

**Course Descriptions Section of current college catalog.**

### Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1061C†</td>
<td>Introduction to Computers in Technology</td>
</tr>
<tr>
<td>CTS 2149</td>
<td>Fundamentals of Project Management</td>
</tr>
<tr>
<td>CIS 1350</td>
<td>Security Awareness</td>
</tr>
<tr>
<td>COP 1510</td>
<td>Programming Concepts</td>
</tr>
</tbody>
</table>

**† Course meets Computer Competence Requirement.**

### Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTS 1300C</td>
<td>Administering Microsoft Windows Workstation</td>
</tr>
<tr>
<td>CET 1730C</td>
<td>Windows Server 2008 Active Directory</td>
</tr>
<tr>
<td>CET 1600C</td>
<td>Network Fundamentals</td>
</tr>
<tr>
<td>CET 1610C</td>
<td>Router Protocols &amp; Concepts</td>
</tr>
<tr>
<td>CET 2615C</td>
<td>LAN Switches &amp; Wireless</td>
</tr>
<tr>
<td>CET 2620C</td>
<td>Accessing the WAN</td>
</tr>
<tr>
<td>CTS 2120C</td>
<td>Security+</td>
</tr>
<tr>
<td>CET 2890C</td>
<td>Network Defenses and Countermeasures</td>
</tr>
</tbody>
</table>

**‡ Course meets Oral Communications Requirements.**

### Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTS 2125C</td>
<td>Hardening the Infrastructure</td>
</tr>
<tr>
<td>CET 2614C</td>
<td>Cisco CCNA Security</td>
</tr>
<tr>
<td>CTS 2318</td>
<td>Information Security Management</td>
</tr>
<tr>
<td>CET 2934††</td>
<td>Professional Project</td>
</tr>
</tbody>
</table>

**"Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.**

### Total Program Credits

63

### Course Contact

**Program Contact**
Mr. James Drennen (850) 484-2592
jdrennen@pensacolastate.edu

**Department Head**
Mr. Danny Steele (850) 484-2522
dsteele@pensacolastate.edu

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Computer Information Technology

Primary Employers and Occupations

Graduates from the Computer Information Technology program are employed by industries which have local area computer networks: manufacturing, retail and wholesale businesses, financial and educational institutions, and insurance and governmental systems.

Network/User Support Technicians
Help computer users purchase, install, operate, and maintain micro computers, Local Area Networks (LAN), and communications equipment. These personnel must have detailed knowledge of micro-computer hardware and software and a working knowledge of networking and communications.

Network Administrators
Develop, test, and coordinate changes to computer systems applying knowledge of database management systems. They may plan, coordinate, and implement security measures to safeguard computer databases.

Telecommunications Equipment Mechanics, Installers, and Repairers
Install and maintain the array of increasingly complicated and sophisticated communications equipment. They set up, rearrange, and remove switching and dialing equipment. They may also solve network-related problems and program equipment to provide special features.

Telecommunications Specialists
Design voice and data communications systems, helping to integrate communications equipment with computer networks. They work closely with clients to design systems to meet their needs. These systems may include laser and fiber optic technology.

Other Occupations Include:
- Field Service Technician
- Help Desk Specialist
- Network Control Operator
- Network Engineer
- Network Security Specialist
- Telecommunications Engineering Technician

For more information, explore:
- Association for Computing Machinery www.acm.org
- Association of Support Professionals www.asponline.com/

Job Placement Levels . . .
Page 156

The Center for Advising & Career Services    Go to: Page 5
Certifications and Credentials for Employment

Courses in this program prepare the student to take industry recognized certification exam(s). If you possess an industry certification in this career area, you may be eligible to receive college credit towards this program. For more information, see the program contact or the department head.

Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

Estimated Cost

Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply.

Work Experience Related to Program

Students may earn credits through the Cooperative Education program. Contact Student Job Services.

General Education Courses (15 credits required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101*</td>
<td>English Composition I (Category I)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities/Fine Arts (Category II)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social/Behavioral Sciences (Category III)</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1105*</td>
<td>College Algebra (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General (Category V)</td>
<td>3</td>
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</tbody>
</table>

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1061C***</td>
<td>Introduction to Computers in Technology</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1350*</td>
<td>Security Awareness</td>
<td>3</td>
</tr>
<tr>
<td>CTS 1155*</td>
<td>Help Desk Technician</td>
<td>3</td>
</tr>
<tr>
<td>CTS 2149**</td>
<td>Fundamentals of Project Management</td>
<td>3</td>
</tr>
<tr>
<td>CET 2934**</td>
<td>CIT Professional Project</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1006C††</td>
<td>Basic Speaking and Listening Skills</td>
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</tr>
<tr>
<td></td>
<td>Emphasis Courses</td>
<td>32</td>
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Total Program Credits 63

Emphasis Courses (Total of 33 Credits)

General

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Programming Language Course</td>
<td>3</td>
</tr>
<tr>
<td>CET 2854C**</td>
<td>Wireless LANs</td>
<td>3</td>
</tr>
<tr>
<td>CTS 2106C**</td>
<td>LINUX+</td>
<td>3</td>
</tr>
<tr>
<td>CET 1588C**</td>
<td>Network +</td>
<td>3</td>
</tr>
</tbody>
</table>

Computer Technician:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1178C**</td>
<td>PC Hardware A+</td>
<td>3</td>
</tr>
<tr>
<td>CET 1179C**</td>
<td>PC Operating Systems A+</td>
<td>3</td>
</tr>
<tr>
<td>CTS 2172C**</td>
<td>PC Maintenance, Upgrade and Support</td>
<td>3</td>
</tr>
<tr>
<td>CET 1634C**</td>
<td>Telecommunications Distribution Systems</td>
<td>3</td>
</tr>
<tr>
<td>EET 2084C**</td>
<td>Introduction to Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>

Systems Administrator:

Microsoft Certified Systems Administrator (M.C.S.A.):

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTS 1131C**</td>
<td>IT Essentials</td>
<td>3</td>
</tr>
<tr>
<td>CTS 1300C**</td>
<td>Administering Microsoft Windows Workstation</td>
<td>3</td>
</tr>
<tr>
<td>CET 1730C**</td>
<td>Windows Server 2008 Active Directory</td>
<td>3</td>
</tr>
<tr>
<td>CET 2731C**</td>
<td>Windows Server 2008 Network Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>CET 2732C**</td>
<td>Administer Windows Server 2008</td>
<td>3</td>
</tr>
</tbody>
</table>

Network Administrator:

Cisco Certified Network Associate (C.C.N.A.):

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1112C</td>
<td>Digital Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CET 1600C</td>
<td>Network Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CET 1610C**</td>
<td>Router Protocols and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CET 2615C**</td>
<td>LAN Switching and Wireless</td>
<td>3</td>
</tr>
<tr>
<td>CET 2620C**</td>
<td>Accessing the WAN</td>
<td>3</td>
</tr>
<tr>
<td>CET 1634C</td>
<td>Telecommunications Distribution Systems</td>
<td>3</td>
</tr>
<tr>
<td>EET 2084C**</td>
<td>Introduction to Electronics</td>
<td>3</td>
</tr>
<tr>
<td>CET 1605C**</td>
<td>Introduction to Cisco Internetworking</td>
<td>3</td>
</tr>
</tbody>
</table>

Security Administrator:

CTS 2318** | Information Security Management                | 3       |
| CTS 2120C** | Security +                                       | 3       |
| CIS 2120C** | Principles of Information Assurance             | 3       |

Telecommunications: NCTI/VoIP/Cabling

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 2071**</td>
<td>Convergence Communications: Voice, Video, and Data</td>
<td>3</td>
</tr>
<tr>
<td>CET 1634C</td>
<td>Telecommunications Distribution Systems</td>
<td>3</td>
</tr>
<tr>
<td>EET 2084C**</td>
<td>Introductions to Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>

NCTI Master Cable Technician (Closed Admission)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1630C</td>
<td>Network Cable Installation</td>
<td>2</td>
</tr>
<tr>
<td>CET 1632C</td>
<td>Fiber Optic Installation and Activation</td>
<td>2</td>
</tr>
<tr>
<td>EET 1033C</td>
<td>DC/AC Installer Technician</td>
<td>2</td>
</tr>
<tr>
<td>EET 1324C</td>
<td>Communications Systems Technician</td>
<td>2</td>
</tr>
<tr>
<td>EET 1325C</td>
<td>Communications Systems Advanced Technician</td>
<td>2</td>
</tr>
<tr>
<td>EET 1330C</td>
<td>Transmission Lines Service Technician</td>
<td>2</td>
</tr>
<tr>
<td>EET 1371C</td>
<td>Telecommunications Fiber Testing and Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>CET 2947**</td>
<td>Networking/Telecommunications Co-op</td>
<td>1</td>
</tr>
<tr>
<td>CET 2948**</td>
<td>Networking/Telecommunications Co-op</td>
<td>2</td>
</tr>
<tr>
<td>CET 2949**</td>
<td>Networking/Telecommunications Co-op</td>
<td>3</td>
</tr>
</tbody>
</table>

* See General Education Course Requirements page for options.
** The course has pre- or co-requisites: check course description section.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

For more information call the Program Contact or visit: workforce.pensacolastate.edu

Financial Aid/Scholarships

Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid.

Need help with Admissions and Registration?

Learn more about New Student Services on Page 4.
People entering this career need to be able to see details at close range. Students will be required to complete a background check and drug screen during the program. These will be paid for by lab fees. Veterans must hold an honorable discharge.

Typical Tasks Include . . .

• Develop plans to safeguard computer files against accidental or unauthorized modification, destruction, or disclosure and to meet emergency data processing needs.

• Review violations of computer security procedures and discusses procedures with violators to ensure violations are not repeated.

• Perform risk assessments and executes tests of data processing system to ensure functioning of data processing activities and security measures.

A person can expect to work regular hours with limited travel.

Beyond Graduation . . .

The Cyber Forensics Associate of Science program will assist the student in development of skills required to identify, obtain and move forward needed electronic evidence through the evidence chain of command.

Job Placement Levels . . .

The Center for Advising & Career Services

Primary Employers and Occupations

Careers in the field of cyber forensics are found in working for federal, state, county, city, or private law enforcement agencies.

Information Security Analysts

Plan, coordinate and implement security measures for information systems to regulate access to computer data files and prevent unauthorized modification, destruction or disclosure of information.

For more information, explore:

Electronics Technicians Association International  www.eta-i.org
International Brotherhood of Electrical Workers  www.ibew.org
Society of Cable Telecommunications Engineers  www.scte.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Security Analyst</td>
<td>24,336</td>
<td>27,961</td>
<td>800</td>
<td></td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity —  www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Semester I Credits
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition (Category I)</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td>CJL 1130</td>
<td>Rules of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1350</td>
<td>Security Awareness</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1061C</td>
<td>Introduction to Computers in Technology</td>
<td>3</td>
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</table>

Semester II Credits
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1588C</td>
<td>Network +</td>
<td>3</td>
</tr>
<tr>
<td>CET 1178C</td>
<td>PC Hardware (A+)</td>
<td>3</td>
</tr>
<tr>
<td>CET 1179C</td>
<td>PC Operating Systems (A+)</td>
<td>3</td>
</tr>
<tr>
<td>CJL 1100</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 1020</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
</tbody>
</table>

Semester III Credits
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTS 1300C</td>
<td>Administering Windows Workstation</td>
<td>3</td>
</tr>
<tr>
<td>CJE 1600</td>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>CET 2732C</td>
<td>Administer Windows Server 2008</td>
<td>3</td>
</tr>
<tr>
<td>CAP 2140C</td>
<td>Digital Forensics I</td>
<td>3</td>
</tr>
<tr>
<td>CTS 2106C</td>
<td>Linux+</td>
<td>3</td>
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</tbody>
</table>

Semester IV Credits
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJE 2686</td>
<td>Forensic Cyber Investigations</td>
<td>3</td>
</tr>
<tr>
<td>CAP 2141C</td>
<td>Digital Forensics II</td>
<td>3</td>
</tr>
<tr>
<td>SLS 1353++</td>
<td>Generations at Work (Category V)</td>
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</tr>
<tr>
<td>CTS 2120C</td>
<td>Security +</td>
<td>3</td>
</tr>
</tbody>
</table>

Semester V Credits
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ 2940c</td>
<td>Cyber Forensics Capstone (internship)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits 63

NOTE: This program assumes the student has a basic knowledge of computer operating systems, hardware, and software.

* See General Education Course Requirements page for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.

Program Contact
Mr. James Drennen (850) 484-2592
jdrennen@pensacolastate.edu

Department Head
Mr. Danny Steele (850) 484-2522
dsteenle@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then “Quick Link” to Financial Aid

Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.

For more information call the Program Contact or visit: workforce.pensacolastate.edu

This publication is to provide general career and program information and is not to be construed as a contract between the student and Pensacola State College. The student is encouraged to work closely with counselors and the department to verify the appropriateness of courses for registration.
Cable Technician

Primary Employers and Occupations
Graduates from the Cable Technician Technical Certificate program are employed as cable installers, cable testers, or cable technicians by industries which have local and wide area computer networks: manufacturing, retail and wholesale businesses, financial and educational institutions, and insurance and government systems.

Telecommunications Line Installers and Repairers
String and repair telephone and television cable, including fiber optics and other equipment for transmitting messages or television programming. These technicians may access specific areas to string lines and install terminal boxes, auxiliary equipment, and appliances, using bucket trucks, by climbing poles and ladders, or entering tunnels, trenches, or crawl spaces.

Other Occupations Include:
Cabling Specialist
Help Desk Specialist

For more information, explore:
Electronics Technicians Association International  www.eta-i.org
International Brotherhood of Electrical Workers  www.ibew.org
Society of Cable Telecommunications Engineers  www.scte.org/

People in this career usually prefer to work outdoors and be physically active. They like to work with things and to problem solve. People in this career are sometimes described as being precise, orderly, and persistent.

Typical Tasks Include . . .
- Inspect and test lines and cables, recording and analyzing test results, to assess transmission characteristics and locate faults and malfunctions.
- Set up service for customers, install, connect, test, and adjust equipment.
- Splice cables, using hand tools, epoxy, or mechanical equipment.
- String cables between structures and lines from poles, tower, or trenches, and pulling lines to proper tension.

Beyond Graduation . . .
The program prepares the student with a basic knowledge of voice and data cabling and prepares them for BICSI Level I Installer Certification.

It is composed of selected college credit courses offered within the Telecommunications Engineering Technology A.S. degree at Pensacola State. If desired, successfully completed coursework within the technical certificate can be transferred into an appropriate Pensacola State College A.S. degree program in Electronics Engineering Technology, Networking Services Technology, or Telecommunications Engineering Technology.

Job Placement Levels . . .
Page 156

The Center for Advising & Career Services  Go to: Page 5
Cable Technician  
(Voice and Data Cabling)

**Certifications and Credentials for Employment**

Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

**Entrance Requirements**

Consult Program Contact or Department Head for entrance requirements.

**Estimated Cost**

Per College Credit:  
$104.58, Florida Resident  
$105.58, Alabama Resident  
Additional expenses may apply

---

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 2071**</td>
<td>Convergence Communications: Voice, Video, and Data</td>
<td>3</td>
</tr>
<tr>
<td>CET 1600C**</td>
<td>Networking Fundamentals or</td>
<td>3</td>
</tr>
<tr>
<td>CET 1588C**</td>
<td>Network +</td>
<td>3</td>
</tr>
<tr>
<td>EET 2084C**</td>
<td>Introduction to Electronics</td>
<td>3</td>
</tr>
<tr>
<td>CET 1634C</td>
<td>Telecommunications Distribution Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Program Credits**: 12

**Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.**

---

**NOTE**: This program assumes the student has a basic knowledge of computer operating systems, hardware, and software.

---

**Program Contact**

Mr. James Drennen (850) 484-2592  
drennen@pensacolastate.edu

**Department Head**

Mr. Danny Steele (850) 484-2522  
dsteele@pensacolastate.edu

**Financial Aid/Scholarships**

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**Need help with Admissions and Registration?**

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---

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Information Technology
(Technical Certificates)

People in this career usually like solving problems and working with tools and instruments indoors. They most often like to work alone but must like to work with people in a problem solving environment. They are sometimes described as persistent, patient, and analytical.

Typical Tasks Include . . .
- Install and maintain communications systems.
- Design and configure communications cabling systems.
- Provide research support of communications equipment.

Beyond Graduation . . .
The communications industry is in a constant state of change. Graduates will need to stay current with these changes to remain employable in the field.

Opportunities for continuing training and professional development are planned to be offered at Pensacola State College once a person finishes the degree and enters their career. Most employers recognize the need for continuing education by the technical staff and will encourage these employees to continue their technical training by means of paid tuition and/or release time.

These credits may be applied towards the Electronics Engineering Technology, Networking Services Technology, or Telecommunications Engineering Technology A.S. degree programs at Pensacola State.

Job Placement Levels . . . Page 156

Primary Employers and Occupations
Graduates from the Information Technology Certificate programs support the communications industry, telephone companies, internet service providers, cable and wireless communications and communications equipment manufacturers. These companies provide networks to retail and wholesale businesses which may include telemarketing centers, customer service call centers and e-commerce centers.

Network and Computer Systems Administrators
Design, install, and support an organization’s local-area network (LAN), wide-area network (WAN), Internet, or intranet system, provide day-to-day support for software users, maintain network hardware and software, and ensure network availability to users.

Network Systems and Data Communications Analysts
Design, test, and evaluate (LANs), (WANs), and other data communications systems ranging from a connection between two offices in the same building to globally distributed networks, voice mail, and e-mail systems of a multinational organization.

Telecommunications Specialists
Focus on the interaction between computer and communications equipment. These workers design voice and data communication systems, supervise the installation of the systems, and provide maintenance and other services after systems are installed.

Other Occupations include
Electronics Aide
Field Service Technician
Telecommunications Engineering Technician

For more information, explore:
Network Communications (LAN)
Systems Administrators Guild www.sage.org
Wireless Communications
Computing Technology Industry Association (CompTIA) www.comptia.org/
Electronics Technicians Association International www.eta-i.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Support Specialists</td>
<td>645</td>
<td>705</td>
<td>25</td>
<td>$19.40</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services Go to: Page 5
## Wireless Communications (WIFI-CT)

This program is an 18 college credit hour certificate designed to provide students with a basic knowledge of wireless networking and to prepare students to work in this field. These credits may be applied towards the Electronics Engineering Technology, or Computer Information Technology AS degree programs.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1600C** Network Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CET 1610C** Network Protocols &amp; Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CET 1634C Telecommunications Distribution Systems</td>
<td>3</td>
</tr>
<tr>
<td>EET 2084C** Introduction to Electronics</td>
<td>3</td>
</tr>
<tr>
<td>CET 2615C** LAN Switching &amp; Wireless</td>
<td>3</td>
</tr>
<tr>
<td>CET 2620C** Accessing the WAN</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Program Credits** 18

## Network Communications (LAN)

Network Communications (LAN) program is an 18 college credit hour certificate designed to provide students with a basic knowledge of local area networks (LAN) and prepare them for the Cisco Certified Network Associate (CCNA) certification. These credits may be applied towards the Electronics Engineering Technology, or Computer Information Technology AS degree programs.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1600C** Network Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CET 1610C** Router Protocols &amp; Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CET 1634C Telecommunications Distribution Systems</td>
<td>3</td>
</tr>
<tr>
<td>EET 2084C** Introduction to Electronics</td>
<td>3</td>
</tr>
<tr>
<td>CET 2615C** LAN Switching &amp; Wireless</td>
<td>3</td>
</tr>
<tr>
<td>CET 2620C** Accessing the WAN</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Program Credits** 18

### Certifications and Credentials for Employment

**LAN-CT** - Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

### Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost

Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply.

### Program Contact

Mr. James Drennen (850) 484-2592
jdrennen@pensacolastate.edu

### Department Head

Mr. Danny Steele (850) 484-2522
dsteele@pensacolastate.edu

### Financial Aid/Scholarships

Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

### Need help with Admissions and Registration?

Learn more about New Student Services on Page 4.

For more information call the Program Contact or visit: workforce.pensacolastate.edu

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Landscape and Horticulture Management

People who enjoy working outdoors and like to work with tools and machines are successful within this career. Some abilities in leadership and business may be required for upward mobility. People in this career are sometimes described as persistent, creative, and sociable.

Typical Tasks Include . . .
- Prepare and grading terrains.
- Apply fertilizers and seeds, sodding lawns.
- Grow and transplant shrubs and plants.
- Use implements and power operated equipment.
- Prune and treat plants and trees.

Beyond Graduation . . .
Graduates from this program most often begin their careers working with established lawncare/landscape firms or departments. After several years of experience, some workers may start their own businesses.

The Professional Grounds Management Society, www.pgms.org/, offers certification to grounds managers who have a combination of eight years experience and formal education beyond high school and who pass an examination covering subjects such as equipment management, personnel management, environmental issues, turf care, ornamentals, and circulatory systems.

Job Placement Levels . . .
Page 156

Primary Employers and Occupations
Graduates from the Landscape and Horticulture Management program support lawn and garden service companies, and firms which build or operate real estate and amusement or recreation facilities such as golf courses and race tracks. Parks, schools, hospitals, and cemeteries hold additional opportunities for employment.

Landscape Specialists
Maintain grounds and areas along highways, within parks and business grounds, and on residential sites. They cultivate and care for plants, trees, and shrubs. In both greenhouses and outdoor display areas, specialists condition and prepare soils and plants, seeds, seedlings, or bulbs, and mix and apply pesticides to maintain the health of plants. Jobs in this field may include maintaining and repairing gardening hand tools, equipment, and structures such as greenhouses and hot beds, using maintenance and carpentry tools. Landscape specialists may mow and do any other duties to improve the appearance of grounds.

Other Occupations include
- Gardener Specialist
- Greenskeeper/Groundskeeper/Landscape Gardener
- Horticulture Specialist
- Landscape Design
- Landscape Irrigation Specialist
- Landscape Manager
- Landscape Pest Management Technologist
- Landscape Planner
- Landscape Technologist
- Nursery Management
- Horticulture Specialist
- Landscape Pest Management Technologist

For more information, explore:
American Society for Horticultural Science  www.ashs.org
Professional Grounds Management Society  www.pgms.org/

TARGETED OCCUPATION
HIGH DEMAND,
HIGH SKILL OR HIGH WAGE

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Line Supervisor of Landscaping and Groundskeeping</td>
<td>236</td>
<td>271</td>
<td>7</td>
</tr>
</tbody>
</table>

Many jobs in this field are listed among the fastest growing occupations in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Certifications and Credentials for Employment
If you possess an industry certification in this career area, you may be eligible to receive college credit toward this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
Students may earn credits through the Cooperative Education program. Contact Student Job Services.

General Education Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
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<td></td>
<td>Humanities/Fine Arts (Category II)</td>
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<tr>
<td>MAC 1105</td>
<td>College Algebra (Category IV)</td>
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<tr>
<td>BOT 2010</td>
<td>General Botany (Category V)</td>
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<tr>
<td>BOT 2010L</td>
<td>General Botany Lab</td>
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Foundation Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOS 1010</td>
<td>Introduction to Horticultural Science</td>
<td>3</td>
</tr>
<tr>
<td>ORH 2220</td>
<td>Turfgrass Management</td>
<td>2</td>
</tr>
<tr>
<td>ORH 2220L</td>
<td>Turfgrass Management Laboratory</td>
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</tr>
<tr>
<td>ORH 1511</td>
<td>Plant Materials for Landscape Use</td>
<td>2</td>
</tr>
<tr>
<td>ORH 1511L</td>
<td>Plant Materials for Landscape Use Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>IPM 1011</td>
<td>Pests and Pest Control</td>
<td>2</td>
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<tr>
<td>IPM 1011L</td>
<td>Pests and Pest Control Laboratory</td>
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</table>

Intermediate Courses
<table>
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<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>LDE 2000C</td>
<td>Landscape Design</td>
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<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ORH 2866</td>
<td>Landscape Project Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORH 2820C</td>
<td>Landscape Irrigation</td>
<td>3</td>
</tr>
<tr>
<td>GLY 1010</td>
<td>Physical Geology</td>
<td>3</td>
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<td>GLY 1010L</td>
<td>Physical Geology Laboratory</td>
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<td>ORH 1260</td>
<td>Greenhouse Crop Management</td>
<td>3</td>
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<td>ORH 1260L</td>
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<td>ORH 2859</td>
<td>Landscape Management</td>
<td>3</td>
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<tr>
<td>ORH 2859L</td>
<td>Landscape Management Laboratory</td>
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<tr>
<td>BUL 2241</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>PCB 2030</td>
<td>Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>HOS 1014</td>
<td>Introduction to Organic Production Systems and Farming</td>
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</tr>
<tr>
<td>AEB 2949</td>
<td>Agriculture Co-op</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1006C†</td>
<td>Basic Speaking and Listening Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Program Credits 64

* See General Education Course Requirements of current college catalog for options.
** LAWN-AS students are exempt from BOT 2010 prerequisites
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirement.

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.

For more information call the Program Contact or visit: workforce.pensacolastate.edu
Landscape and Horticulture (Technical Certificates)

People who enjoy working outdoors and like to work with tools and machines are successful within this career. Some abilities in leadership and business may be required for upward mobility. People in this career are sometimes described as persistent, creative, and sociable.

Typical Tasks Include . . .
- Prepare and grade terrains.
- Apply fertilizers and seeds, sodding lawns.
- Grow and transplant shrubs and plants.
- Use implements and power operated equipment.
- Prune and treat plants and trees.

Beyond Graduation . . .
With additional coursework, graduates from the Landscape and Horticulture Certificate programs may complete the Associate of Science (A.S.) degree program in Landscape and Horticulture Management at Pensacola State College.

Primary Employers and Occupations
Graduates from the Landscape and Horticulture Technical Certificate programs support lawn and garden service companies, and firms which build or operate real estate and amusement or recreation facilities such as golf courses and race tracks. Parks, schools, hospitals, and cemeteries hold additional opportunities for employment.

Landscape Specialists and Professionals
Maintain grounds and areas along highways, within parks and business grounds, and on residential sites. They cultivate and care for plants, trees, and shrubs. In both greenhouses and outdoor display areas, they condition and prepare soils and plants, seeds, seedlings, or bulbs, and mix and apply pesticides to maintain the health of plants. Jobs in this field may include maintaining and repairing gardening hand tools, equipment, and structures such as greenhouses and hot beds, using maintenance and carpentry tools. Landscape certificate holders may mow and do any other duties to improve the appearance of grounds.

Other Occupations include
Gardener Specialist
Greenskeeper/Groundskeeper/
Landscape Gardener
Horticulture Specialist
Landscape Design
Landscape Irrigation Specialist
Landscape Manager
Landscape Pest Management
Technologist
Landscape Planner
Landscape Technologist
Nursery Management

For more information, explore:
American Society for Horticultural Science www.ashs.org

| Workforce Development Trends Escambia and Santa Rosa Counties |
|-----------------------------|------------------|----------------|----------------|
| OCCUPATION                  | EMPLOYMENT 2012  | ESTIMATED ANNUAL OPENINGS | AVERAGE ENTRY LEVEL HOURLY SALARY |
| Landscaping and Groundskeeping Workers | 929 | 1,113 | 39 | $11.06 |

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services Go to: Page 5
Landscape and Horticulture

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
Students in the Landscape and Horticulture Technician (LTECH-CT) program may earn credit through the Cooperative Education program. Contact Student Job Services.

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

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Landscape and Horticulture Professional (LPROF-CT)

Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPM 1011**</td>
<td>Pest and Pest Control</td>
<td>2</td>
</tr>
<tr>
<td>IPM 1011L**</td>
<td>Pest and Pest Control Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>HOS 1010</td>
<td>Introduction to Horticultural Sciences</td>
<td>3</td>
</tr>
<tr>
<td>ORH 1511**</td>
<td>Plant Materials for Landscape Use</td>
<td>2</td>
</tr>
<tr>
<td>ORH 1511L**</td>
<td>Plant Materials for Landscape Use Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ORH 2220**</td>
<td>Turfgrass Management</td>
<td>2</td>
</tr>
<tr>
<td>ORH 2220L**</td>
<td>Turfgrass Management Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Program Credits: 12

Advanced Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORH 2866</td>
<td>Landscape Project Management</td>
</tr>
<tr>
<td>LDE 2000C</td>
<td>Landscape Design</td>
</tr>
</tbody>
</table>

Total Program Credits: 18

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

Landscape and Horticulture Specialist (LSPEC-CT)

Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPM 1011**</td>
<td>Pests and Pest Control</td>
<td>2</td>
</tr>
<tr>
<td>IPM 1011L**</td>
<td>Pests and Pest Control Laboratory</td>
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<tr>
<td>HOS 1010</td>
<td>Introduction to Horticultural Science</td>
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<tr>
<td>ORH 1511**</td>
<td>Plant Materials for Landscape Use</td>
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<tr>
<td>ORH 2220**</td>
<td>Turfgrass Management</td>
<td>2</td>
</tr>
<tr>
<td>ORH 2220L**</td>
<td>Turfgrass Management Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Program Credits: 12

Technical Certificates

LPROF-CT, LSPEC-CT

Program Contact
Ms. Amy Horner (850) 484-4433
ahorner@pensacolastate.edu

Department Head
Dr. Matthew Drum (850)484-1167
mdrum@pensacolastate.edu

Back to Table of Contents
Landscape and Horticulture (Technical Certificates)

People who enjoy working outdoors and like to work with tools and machines are successful within this career. Some abilities in leadership and business may be required for upward mobility. People in this career are sometimes described as persistent, creative, and sociable.

Typical Tasks Include . . .

• Prepare and grade terrains.
• Apply fertilizers and seeds, sodding lawns.
• Grow and transplant shrubs and plants.
• Use implements and power operated equipment.
• Prune and treat plants and trees.

Beyond Graduation . . .

With additional coursework, graduates from the Landscape and Horticulture Certificate programs may complete the Associate of Science (A.S.) degree program in Landscape and Horticulture Management at Pensacola State College.

Primary Employers and Occupations

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Other Occupations include

Gardener Specialist  Landscape Design
Greenskeeper/Groundskeeper/ Landscape Irrigation Specialist
Landscape Gardener Landscape Manager
Horticulture Specialist Landscape Pest Management

For more information, explore:
American Society for Horticultural Science www.ashs.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscaping and Groundskeeping Workers</td>
<td>929</td>
<td>1,113</td>
<td>39</td>
<td>$11.06</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

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The Center for Advising & Career Services

Go to: Page 5
## Landscape and Horticulture Technician (LTECH-CT)

<table>
<thead>
<tr>
<th>Foundation Courses</th>
<th>Credits</th>
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<tbody>
<tr>
<td>IPM 1011 Pests and Pest Control</td>
<td>2</td>
</tr>
<tr>
<td>IPM 1011L Pests and Pest Control Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>HOS 1010 Introduction to Horticultural Science</td>
<td>3</td>
</tr>
<tr>
<td>ORH 1511 Plant Materials for Landscape Use</td>
<td>2</td>
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<tr>
<td>ORH 1511L Plant Materials for Landscape Use Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ORH 2220 Turfgrass Management</td>
<td>2</td>
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<tr>
<td>ORH 2220L Turfgrass Management Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CGS 1050 Electronic Access to Information</td>
<td>1</td>
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</tbody>
</table>

** Advanced Courses**  
| ORH 2820C Landscape Irrigation                           | 3       |
| ORH 2866 Landscape Project Management                    | 3       |
| ORH 1260 Greenhouse Crop Management                      | 3       |
| ORH 1260L Greenhouse Crop Management Laboratory          | 1       |
| ORH 2859 Landscape Management                            | 3       |
| ORH 2859L Landscape Management Laboratory                | 1       |
| LDE 2000C Landscape Design                               | 3       |

** Total Program Credits ** 30

---

**Entrance Requirements**  
Consult Program Contact or Department Head for entrance requirements.

**Estimated Cost**  
Per College Credit:  
$104.58, Florida Resident  
$105.58, Alabama Resident  
Additional expenses may apply.

**Work Experience Related to Program**  
Students in the Landscape and Horticulture Technician (LTECH-CT) program may earn credit through the Cooperative Education program. Contact Student Job Services.

**Landscape and Horticulture Technician (LTECH-CT)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>IPM 1011</td>
<td>Pests and Pest Control</td>
<td>2</td>
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<td>IPM 1011L</td>
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<td>ORH 2820C</td>
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<td>Greenhouse Crop Management Laboratory</td>
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<td>ORH 2859</td>
<td>Landscape Management</td>
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<td>Landscape Design</td>
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</tr>
</tbody>
</table>

**Total Program Credits** 30

---

**Financial Aid/Scholarships**  
Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then "Quick Link" to Financial Aid.

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Massage Therapy

People who enjoy working within this career usually have social and/or athletic skills. They are interested in human wellness more than working with things or ideas. People in this career are sometimes described as sociable, persistent, and patient.

Typical Tasks Include . . .

- Use a variety of massaging techniques.
- Use special massage related equipment.
- Provide health related counseling.
- Keep appropriate records.

Beyond Graduation . . .

Graduates of the Massage Therapy program may choose to continue their education within the health care field, such as obtaining an Associate of Science (A.S.) college degree in the Physical Therapist Assistant program at Pensacola State College.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Graduates from the Massage Therapy program will support special health, beauty, and massage salons, health clubs, chiropractic and sports rehabilitation clinics, and may be self-employed.

Massage Therapists

Work to produce physical, mental, and emotional benefits through the manipulation of soft tissue. Auxiliary methods such as the movement of joints and the application of dry and steam heat are used. Various types of massage techniques are used to affect different body problems. Techniques include: kneading (using light or hard rhythmic stroking, pressing, and lifting the muscle), tapotement (tapping), and rolfing (involving deep massage with intense pressure). Trigger point therapy focuses on a painful area in a muscle and reflexology is applied to specific points on the feet and hands thought to correspond to particular parts of the body. Massage therapists may use rollers, vibrators, and heat and cold applications to produce desired results. Other job titles may include: masotherapists, masseuse/masseurs, or bodyworkers.

For more information, explore:

American Massage Therapy Association www.amtamassage.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massage Therapists</td>
<td>283</td>
<td>319</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$13.75</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

The Center for Advising & Career Services

Go to: Page 5
Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Per Vocational Credit:
$85.80, Florida Resident
$86.80, Alabama Resident
Additional expenses may apply

FULL-TIME DAY TRACK

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 0003C Basic Healthcare Worker</td>
<td>90</td>
</tr>
<tr>
<td>MSS 0205C Massage Therapy I</td>
<td>285</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSS 0206C Massage Therapy II</td>
<td>375</td>
</tr>
</tbody>
</table>

Total Program Clock Hours 750

PART-TIME EVENING TRACK

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 0003C Basic Healthcare Worker</td>
<td>90</td>
</tr>
<tr>
<td>MSS 0207C Massage Therapy A</td>
<td>180</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSS 0262C Massage Therapy B</td>
<td>210</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester III</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSS 0263C Massage Therapy C</td>
<td>270</td>
</tr>
</tbody>
</table>

Total Program Clock Hours 750

Program Contact
Ms. Sonja McCall-Strehlow (850) 484-1642
smccall-strehlow@pensacolastate.edu

Department Head
Mr. Roy Bracken (850) 484-1013
rbracken@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.

For more information call the Program Contact or visit: workforce.pensacolastate.edu

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People considering a career in manufacturing technology should have mechanical and mathematical abilities. Working with tools and machinery is normally required. People in this field are described as being conforming, analytical, and having above average eye and hand coordination.

Typical Tasks Include . . .

- Vary from one industry to another and from one job to another within the manufacturing process.

Graduates work in jobs related to production, maintenance, research and development, and engineering.

Beyond Graduation . . .

As new automation is introduced, computer control programmers and operators and persons in related careers normally receive additional training to update their skills. This training usually is provided by a representative of the equipment manufacturer. Many employers offer tuition reimbursement for job-related courses.

Computer control programmers and operators can advance in several ways. Experienced CNC operators may become CNC programmers, and some are promoted to supervisory or administrative positions in their firms. A few open their own shops.

Primary Employers and Occupations

Graduates from the Mechanical Design and Fabrication program are prepared for careers in the industrial automated environment, and support large and small manufacturing industries and businesses. Chemicals, textile mill products, fabricated metal products, home building materials, and appliances are but a few examples. Students of this program, which includes a Haas Educational Training Center, specialize in the operations and programming of Haas machining centers.

Automated Mechanical Design and Fabrication Technicians include:

CNC (Computer Numerical Control) Operators
Maintain, set-up, and operate automated machining centers. They set-up and configure the CNC machining centers to run CNC programs generated by the CAD/CAM technicians. CNC operators write CNC programs at the controller, and edit and revise CNC programs used to manufacture machined parts.

CAD/CAM (Computer-Aided Drafting/Computer-Aided Manufacturing) Technicians
Are responsible for drawing computer-aided designs and incorporating the CAD drawing file into a CAM program. Technicians assign the tool path used to perform the assigned machining operations and generate the NC program used on a specific machining center used to generate the automated machining parts.

Other Occupations Include:

Assistant Engineer
CNC Operator
Machining Technician
CAD/CAM Designer
CNC Plasma Cutting Operator
Manufacturing Assembler
CAD/CAM Programmer
CNC Programmer
Metal Fabricator
Welding Technician

For more information, explore:
American Design Drafting Association www.adda.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Engineering Technicians</td>
<td>48</td>
<td>49</td>
<td>1</td>
<td>$26.12</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
# Mechanical Design and Fabrication
(Engineering Technology)

## Associate of Science Degree

**MECH-AS**

### Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost
Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply.

### Work Experience Related to Program
Students may earn Cooperative Education credits that can be used in this program. Work experience positions with various manufacturing firms are listed with Student Job Services.

### General Education (15 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities/Fine Arts (Category II)</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General (Category V)</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1006C††</td>
<td>Basic Speaking and Listening Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

### Engineering Technology Core (12 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1061C†</td>
<td>Introduction to Computers in Technology</td>
<td>3</td>
</tr>
<tr>
<td>EGS 1111</td>
<td>Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>EET 2084C++</td>
<td>Introduction to Electronics</td>
<td>3</td>
</tr>
<tr>
<td>GEB 2112</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

### Technical Core (33 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETI 2415</td>
<td>Woodworking Processes (MASTERCAM Router)</td>
<td>4</td>
</tr>
<tr>
<td>ETI 2416</td>
<td>Metal Working Processes (Welding &amp; Fabrication)</td>
<td>4</td>
</tr>
<tr>
<td>ETI 2411**</td>
<td>Manufacturing Processes CNC Machining/MASTERCAM-Lathe</td>
<td>4</td>
</tr>
<tr>
<td>ETI 2412**</td>
<td>Fabrication Processes (MASTERCAM Art)</td>
<td>4</td>
</tr>
<tr>
<td>ETI 2414**</td>
<td>Computer-Aided Manufacturing MASTERCAM-Mill 2-D &amp; Solidworks</td>
<td>4</td>
</tr>
<tr>
<td>ETD 2364</td>
<td>Computer-Aided Design 3-D (MASTERCAM-Mill 3-D &amp; SolidWorks)</td>
<td>4</td>
</tr>
<tr>
<td>ETI 1933</td>
<td>Special Topics in Mechanical Design</td>
<td>3</td>
</tr>
</tbody>
</table>

### Electives (5 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Electives</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Program Credits: 60 credits

### Suggested Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ETI 2949</td>
<td>Manufacturing Technology Co-op</td>
<td>3</td>
</tr>
<tr>
<td>ETI 2947</td>
<td>Manufacturing Technology Co-op</td>
<td>1</td>
</tr>
<tr>
<td>ETI 1701</td>
<td>Industrial Safety</td>
<td>3</td>
</tr>
<tr>
<td>ETI 1931</td>
<td>Special Topics in Mechanical Design</td>
<td>13</td>
</tr>
</tbody>
</table>

++ See General Education Course Requirements page of options.
* See General Education Course Requirements page of options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

### Program Contact

- Mr. Michael Cannon (850) 484-2524
  mcannon@pensacolastate.edu

### Department Head

- Mr. Danny Steele (850) 484-2522
  dsteele@pensacolastate.edu

### Financial Aid/Scholarships

Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then “Quick Link” to Financial Aid

### Need help with Admissions and Registration?

Learn more about New Student Services on Page 4.

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People in this career like physical activities and like to find answers to problems by doing hands-on work. They often prefer to work alone and like to stay busy with a variety of work tasks. These workers need good eye-hand coordination, spacial thinking, form perception, and finger and manual dexterity. They may be described as doers.

Typical Tasks Include . . .

- Calculate and adjust machine feed and speed, cutting tools, coolant systems and machine controls.
- Input initial part dimensions into machine control panels; monitor machines during operation.
- Communicate with supervisors or programmers to resolve machine malfunctions and/or production errors.

Lifting, pulling, pushing, and carrying are often-performed tasks.

Beyond Graduation . . .

This technical certificate comprises four essential core courses that can count toward the completion of an Associate of Science (A.S.) degree in Mechanical Design and Fabrication at Pensacola State College. The A.S. degree at Pensacola State offers on-the-job experience through the Cooperative Education Program.

Job Placement Levels . . .
Page 156

Primary Employers and Occupations

Graduates from the CNC Machinist program are prepared for entry level employment in the manufacture of fabricated metal products, machinery, transportation equipment, and plastic products.

CNC Operators
Set up and operate numerical control machine tools that automatically mill, drill, broach, bore and ream metal and plastic parts.

Robotic Machine Operators
Set up and operate industrial robots to drill, countersink and counter-bore workpieces.

CNC Router Set-Up Operators
Set up and operate multi-axis numerically controlled routing machines.

For more information, explore:
International Association of Machinists and Aerospace Workers www.iamaw.org/
National Tooling and Machining Association www.ntma.org
Precision Machined Products Association www.pmpa.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinists</td>
<td>142</td>
<td>156</td>
<td>5</td>
<td>$16.36</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services  Go to: Page 5
# CNC Machinist /Fabricator

## Technical Certificate

**CNC-CT**

### Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost
**Per College Credit:**
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply.

### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGS 1111</td>
<td>Engineering Graphics</td>
</tr>
<tr>
<td>ETI 2416</td>
<td>Metal Working Processes (Welding &amp; Fabrication)</td>
</tr>
<tr>
<td>ETI 2411**</td>
<td>Manufacturing Processes (CNC Machining/ MasterCam -Lathe)</td>
</tr>
<tr>
<td>ETI 1931</td>
<td>Special Topics in Mechanical Design</td>
</tr>
</tbody>
</table>

**Total Program Credits** | **12**

**Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.**

### Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then "Quick Link" to [Financial Aid](http://www.pensacolastate.edu).

### Need help with Admissions and Registration?
Learn more about New Student Services on [Page 4](#).

---

### Program Contact
Mr. Michael Cannon (850) 484-2524
mcannon@pensacolastate.edu

### Department Head
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dsteele@pensacolastate.edu

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For more information call the Program Contact or visit: [workforce.pensacolastate.edu](http://workforce.pensacolastate.edu)

---

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People in this career like physical activities and like to find answers to problems by doing hands-on work. They often prefer to work alone and like to stay busy with a variety of work tasks. These workers need good eye-hand coordination, spatial thinking, form perception, finger and manual dexterity. They may be described as doers.

Typical Tasks Include . . .

• Start machines and adjust settings and controls
• Adjust machine tables or cutting devices
• Set controls to produce specific cuts or operations
• Monitor dials, gauges and other indicators to ensure machines are working properly and materials conform to specifications

Beyond Graduation . . .

The Computerized Woodworking technical certificate comprises four essential core courses that can count toward the completion of an Associate of Science (A.S.) degree in Mechanical Design and Fabrication at Pensacola State College. The A.S. degree at Pensacola State offers on-the-job experience through the Cooperative Education Program.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Graduates from the Computerized Woodworking program are prepared for entry level employment in sawmills and wood preservation businesses, and the manufacture of household, institutional cabinets/countertops, and office furniture. Opportunities also exist in other wood product manufacturing companies.

Woodworking Machine Workers/Operators

Set up, operate and tend to woodworking machines, such as drill presses, lathes, shapers, routers, sanders, planers and wood-nailing machines. They ensure quality, examine finished workpieces and monitor the operation of machines, while making adjustments to correct any problems. These workers may set up programs and operate computerized woodworking machines such as a CNC gantry mill router. Other skills used in this field are graphic arts as applied to sign making, 3-D designs for the CNC router and computerized drafting with AutoCAD.

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodworking Machine Setters and Operators (Excluding Sawing)</td>
<td>45</td>
<td>33</td>
<td>0</td>
<td>$19.38</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
### Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost
Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident
Additional expenses may apply

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGS 1111</td>
<td>Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ETI 2415</td>
<td>Woodworking Processes (MASTERCAM Router)</td>
<td>4</td>
</tr>
<tr>
<td>ETI 2412**</td>
<td>Fabrication Processes (MASTERCAM ART)</td>
<td>4</td>
</tr>
<tr>
<td>ETI 1931</td>
<td>Special Topics in Mechanical Design</td>
<td>1</td>
</tr>
</tbody>
</table>

**Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

**Total Program Credits** 12

### Estimated Cost

- **Per College Credit:**
  - $104.58, Florida Resident
  - $105.58, Alabama Resident
  - Additional expenses may apply

### Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then "Quick Link" to [Financial Aid](http://www.pensacolastate.edu)

### Need help with Admissions and Registration?
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### Program Contact
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mcannon@pensacolastate.edu

### Department Head
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Back to Table of Contents
People in this career like to find answers to problems by doing hands-on work. They like to stay busy with a variety of work tasks. These workers need good eye-hand coordination, spacial thinking, form perception, and finger and manual dexterity. They may be described as doers.

**Typical Tasks Include . . .**

- Develop detailed 2-D and 3-D designs, using Solidworks design program.
- Generate CNC programs for 2-D and 3-D processes using MASTERCAM.
- Set-up and process products designed on a CNC machining center.

Lifting, pulling, pushing, and carrying are often-performed tasks.

**Beyond Graduation . . .**

This technical certificate comprises four essential core courses that can count toward the completion of an Associate of Applied Science (A.A.S.) degree in Mechanical Design and Fabrication at Pensacola State College. The A.A.S. degree at Pensacola State offers on-the-job experience through the Cooperative Education Program.

**Primary Employers and Occupations**

Graduates from the Mechanical Designer/Programmer program are prepared for entry level employment as a Solidworks designer and MASTERCAM CNC programmer in any manufacturing environment.

**Die Designers**
Develop die plans for stamping, forming, forging, or extrusion presses.

**Drafters**
Make detailed drawings for the manufacture of structural, mechanical, and ornamental parts.

**Controls Designers**
Assist engineers in designing and drafting control systems for machines and equipment.

For more information, explore:
- International Association of Machinists and Aerospace Workers [www.iamaw.org/](http://www.iamaw.org/)
- National Tooling and Machining Association [www.ntma.org](http://www.ntma.org)
- Precision Machined Products Association [www.pmpa.org](http://www.pmpa.org)

**Job Placement Levels . . . Page 156**

**Mechanical Drafters**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Drafters</td>
<td>1,625</td>
<td>1,777</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$24.67</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — [www.floridajobs.org](http://www.floridajobs.org)

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Entrance Requirements
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Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGS 1111</td>
<td>Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ETI 2414</td>
<td>Computer Aided Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>ETD 2364</td>
<td>Computer Aided Design 3-D</td>
<td>4</td>
</tr>
<tr>
<td>ETI 1931</td>
<td>Special Topics in Mechanical Design</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total Program Credits 12</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.**

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then "Quick Link" to Financial Aid

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Medical Assisting

Primary Employers and Occupations

Graduates from the Medical Assisting program work in physicians’ offices, clinics, offices of other health practitioners, and hospitals. The program is designed to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Medical Assistants

Are multi-skilled persons who assist in many aspects of medical practice under the direction of a physician. Medical office assistants execute administrative and clinical procedures, often perform managerial and supervisory functions and assist with patient care management. Administrative duties may include processing insurance claims, typing medical documents, processing incoming/outgoing patients (scheduling, collecting fees or arranging for payment), performing recordkeeping functions related to patient accounts, managing medical records, and using a computer for practice management.

Clinical duties may include taking and recording vital signs and blood pressure, giving injections, drawing blood for laboratory analysis (venipuncture), assisting the physician with physical examinations and minor surgical and medical procedures, and teaching patients with regard to treatment regimens.

Medical assistants are employed in the offices of physicians and other health practitioners such as optometrists, podiatrists, and chiropractors.

Other Occupations Include

EKG Aide
Medical Office Receptionist
Medical Specialist
Patient Care Attendant
Pharmacy Technician
Phlebotomist

For more information, explore:
American Association of Medical Assistants  www.aama-ntl.org
American Society of Podiatric Medical Assistants  www.aspma.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Assistants</td>
<td>998</td>
<td>1,138</td>
<td>33</td>
</tr>
</tbody>
</table>

Medical Assisting is listed among the TOP 50 fastest growing jobs in Florida and in Escambia plus Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Medical Assisting

Career and Technical Certificate

MEDAS-VC

Accreditation Status
Accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) follows the guidelines and standards of the American Association of Medical Assistants (www.aama-ntl.org).

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s).

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per Vocational Credit:
$85.80, Florida Resident
$86.80, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
The six-week preceptorship prior to graduation provides an avenue to possible employment.

Required Courses

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 0003C Basic Healthcare Worker 90</td>
<td></td>
</tr>
<tr>
<td>MEA 0500 Medical Office Receptionist 100</td>
<td></td>
</tr>
<tr>
<td>MEA 0521C Phlebotomist, MA 75</td>
<td></td>
</tr>
<tr>
<td>MEA 0543C EKG Aide, MA 75</td>
<td></td>
</tr>
<tr>
<td>MEA 0550 Medical Assistant I 110</td>
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</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEA 0551C Medical Assisting II 450</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester III</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEA 0552C Medical Assisting III 420</td>
<td></td>
</tr>
</tbody>
</table>

Total Program Clock Hours 1320

SPECIAL REQUIREMENTS
All program requirements must be met before a student is eligible for admission. One class of 25 students per year is accepted. Seats are allotted to qualified students on a first qualified/first served basis.

NOTE: Students are encouraged to apply early for the program. It is the responsibility of the applicant to make sure all requirements are on file by the deadline date. It is to the student’s advantage to contact the department periodically about his/her file.

For more information call the Program Contact or visit: workforce.pensacolastate.edu

This publication is to provide general career and program information and is not to be construed as a contract between the student and Pensacola State College. The student is encouraged to work closely with counselors and the department to verify the appropriateness of courses for registration.
People who have leadership ability, good communication skills, organizational skills, and like working with other people will find this career suitable. Persons who enter this field are described as sociable, sympathetic, and practical.

Typical Tasks Include . . .

- Direct clerical functions such as typing, filing, bookkeeping, and other office procedures.
- Organize the activities of the workers in the office.
- Develop ways to improve efficiency.
- Review work records.
- Help to prepare budgets.
- Coordinate physicians’ schedules.
- Maintain office policies and procedures.
- Serve as Human Resources Manager.

Beyond Graduation . . .

This program is designed for established medical office employees to advance into office manager, administrative assistant, or management positions. Formal education is usually necessary for advancement.

Many students will continue their education and training by enrolling in Pensacola State College’s Baccalaureate Degree of Applied Science with an emphasis in Health Care Management.

Job Placement Levels . . .

Primary Employers and Occupations

Graduates from the Health Services Management program work in hospitals, clinics, outpatient care facilities, doctors’ offices, insurance companies, and pharmaceutical firms.

Health Care Office Managers

Combine business and management skills with knowledge of the health care industry, in administrative support areas of the health field. Positions include professional duties in hospitals, clinics, insurance companies, pharmaceutical firms, and offices of physicians specializing in areas such as cardiology, dermatology, family practice, general surgery, OB/GYN, ophthalmology, pediatrics, and urology, for example.

In facilities such as hospitals and clinics, these professionals may have little or no direct patient contact. Here they may manage or work within individual functions such as insurance, payroll, patient admissions, billing, regulatory reports, marketing, or auxiliary services.

In the offices of small, medical or dental, group or solo, practices, health care office managers often have direct patient contact and may be responsible for all managerial, administrative, and supervisory functions. Other job title: practice administrator.

Other Occupations Include:

Activities Assistant
Department Assistant
Health Service Supervisor
Health Service Technician
Medical Coordinator
Office Manager

For more information, explore:
American College of Healthcare Executives www.ache.org
Institute for Diversity in Health Management www.diversityconnection.org/

The Center for Advising & Career Services

Go to: Page 5

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical and Health Services Managers</td>
<td>149</td>
<td>168</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
## Health Services Management

### Associate of Science Degree

**HSM-AS**

### Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost

Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply.

### Financial Aid/Scholarships

Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then “Quick Link” to Financial Aid.

### Need help with Admissions and Registration?

Learn more about New Student Services on Page 4.

### Electives based on general education requirements.

* Electives based on general education requirements.

Certain course are offered only once a year, therefore it is important that you work with your advisor to determine the most effective course sequence.

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

† Course meets Computer Competence Requirement.

†† Course meets Oral Communications Requirements.

### Course Credit and Sequence

#### Semester I – Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition (Category I)</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570†</td>
<td>Computer Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BSC 1080</td>
<td>Essentials of Anatomy &amp; Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BSC 1080L</td>
<td>Essentials of Anatomy &amp; Physiology Lab</td>
<td>1</td>
</tr>
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</table>

#### Semester II – Spring

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2001</td>
<td>Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>HSA 1172</td>
<td>Medical Billing and Third Party Payers</td>
<td>2</td>
</tr>
<tr>
<td>COM 2100***††</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1590</td>
<td>AIDS/OSHA for Health Professionals</td>
<td>1</td>
</tr>
<tr>
<td>HSC 2550**</td>
<td>Pathophysiology</td>
<td>3</td>
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</table>

#### Semester III – Summer

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 1105*</td>
<td>College Algebra (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td>HIM 1442</td>
<td>Pharmacology</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ ___*</td>
<td>Humanities/Fine Arts (Category II)</td>
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#### Semester IV – Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1464</td>
<td>Computerized Medical Office Systems</td>
<td>3</td>
</tr>
<tr>
<td>HIM 2229C**</td>
<td>Intro to Coding and Classification Systems</td>
<td>3</td>
</tr>
<tr>
<td>HIM 2620**</td>
<td>Medical Statistics and Financial Applications</td>
<td>3</td>
</tr>
<tr>
<td>HIM 2512</td>
<td>Health Information Management &amp; Supervision</td>
<td>3</td>
</tr>
<tr>
<td>HSC 2641</td>
<td>Health Care Law</td>
<td>3</td>
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</tbody>
</table>

#### Semester V – Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIM 2500C</td>
<td>Performance Improvement in Healthcare</td>
<td>2</td>
</tr>
<tr>
<td>OST 1461**</td>
<td>Medical Practice</td>
<td>3</td>
</tr>
<tr>
<td>HIM 2253C**</td>
<td>Outpatient Reimbursement Methodologies</td>
<td>3</td>
</tr>
<tr>
<td>SLS 1353††</td>
<td>Generations at Work (Category V)</td>
<td>3</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Macroeconomics (Category III)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Program Credits

**62**

**Program Contact**

Ms. Donna Flynn (850) 484-2223
dflynn@pensacolastate.edu

**Department Head**

Dr. Christa Ruber (850) 484-2308
cruber@pensacolastate.edu

For more information call the Program Contact or visit: workforce.pensacolastate.edu

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Office Administration
(Medical Office Administration)

Primary Employers and Occupations
Graduates from the Medical Office Administration program are employed in health care organizations. Most work in services such as education, health, legal, and business. Banks, insurance and real estate firms, and governmental systems are also important employers.

Medical Office Administrators
Transcribe dictation, prepare correspondence, and assist physicians with reports, speeches, articles, and conference proceedings. Medical office workers may record simple medical histories, arrange for patients to be hospitalized, or order supplies. Medical office workers may also need to know insurance rules, billing practices, and be familiar with hospital or laboratory procedures. Other occupations include: admitting officers, insurance clerks, medical administrative assistants, medical record clerks.

Office Administrators
Perform a variety of administrative, clerical and interactive duties that are necessary to run and maintain organizations efficiently. They schedule appointments and conferences, receive clients, transmit staff instructions, give information to callers, organize and maintain files, take and transcribe dictation, and type correspondence, reports, and memos.

Administrative Assistants
Work for managers and executives performing duties similar to those of high-level office workers but may include more long-range assignments. They may help prepare reports, attend meetings, collect and research documents, and may do much of the writing themselves. Administrative assistants often need computer skills to deal with budgets, word processing, and desktop publishing.

For more information, explore:
International Association of Administrative Professionals www.iaap-hq.org
International Virtual Assistants Association www.ivaa.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Secretaries</td>
<td>483</td>
<td>581</td>
<td>18</td>
<td>$13.85</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

Beyond Graduation . . .
Advancement for medical office administrative assistants generally comes about by promotion to a position with more responsibilities.

Qualified office personnel who broaden their knowledge of the company’s operations and enhance their skills may be promoted to other positions such as senior or executive office administrator, clerical supervisor, or office manager. As office personnel gain experience, they can earn the title of Certified Professional Secretary after they have passed a stringent test proving their knowledge and skills.

Many students will continue their education and training by enrolling in Pensacola State College’s Baccalaureate Degree of Applied Science with an emphasis in Health Care Management.

Job Placement Levels . . .
Page 156
## Office Administration
(Medical Office Administration)

### Associate of Science Degree
MDSC-AS

#### Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

#### Estimated Cost
Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident
Additional expenses may apply

#### Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then "Quick Link" to **Financial Aid**

#### Need help with Admissions and Registration?
Learn more about New Student Services on **Page 4**.

#### For more information call the Program Contact or visit: [workforce.pensacolastate.edu](http://workforce.pensacolastate.edu)

### Estimated Cost
Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident
Additional expenses may apply

### Office Administration
(Medical Office Administration)

#### FIRST YEAR

<table>
<thead>
<tr>
<th>Semester I – Fall</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition (Category I)</td>
</tr>
<tr>
<td>CGS 1570†</td>
<td>Computer Concepts and Applications</td>
</tr>
<tr>
<td>OST 1713</td>
<td>Word Processing</td>
</tr>
<tr>
<td>HIM 1442</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II – Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 2100**†</td>
<td>Business Communications</td>
</tr>
<tr>
<td>HSC 2641</td>
<td>Health Care Law</td>
</tr>
<tr>
<td>_____*</td>
<td>Humanities (Category II)</td>
</tr>
<tr>
<td>BSC 1080</td>
<td>Essentials of Anatomy and Physiology</td>
</tr>
<tr>
<td>BSC 1080L</td>
<td>Essentials of Anatomy and Physiology Lab</td>
</tr>
</tbody>
</table>

Note: Check the college catalog for details.
Certain course are offered only once a year, therefore it is important that you work with your advisor to determine the most effective course sequence.

* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

#### SECOND YEAR

<table>
<thead>
<tr>
<th>Semester I – Fall</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIM 2253*</td>
<td>Outpatient Reimbursement and Methodologies</td>
</tr>
<tr>
<td>_____*</td>
<td>Natural Science/Math (Category IV)</td>
</tr>
<tr>
<td>HSC 1590</td>
<td>AIDS/OSHA for Health Professionals</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Macroeconomics (Category III)</td>
</tr>
<tr>
<td>OST 1464</td>
<td>Computerized Medical Office Systems</td>
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</table>

<table>
<thead>
<tr>
<th>Semester II – Spring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>SLS 1333*</td>
<td>Generations at Work (Category V)</td>
</tr>
<tr>
<td>OST 1461**</td>
<td>Medical Office Practice</td>
</tr>
<tr>
<td>OST 1135</td>
<td>Medical Documents</td>
</tr>
<tr>
<td>OST 1611**</td>
<td>Medical Transcription I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester III – Summer</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1612**</td>
<td>Medical Transcription II</td>
</tr>
<tr>
<td>OST 1613**</td>
<td>Medical Transcription III</td>
</tr>
<tr>
<td>OST 1614</td>
<td>Medical Transcription IV</td>
</tr>
</tbody>
</table>

Total Program Credits: **63**

---

Program Contact
Ms. Donna Flynn (850) 484-2223
dflynn@pensacolastate.edu

Department Head
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cruber@pensacolastate.edu

Back to Table of Contents
People in this career usually have clerical abilities, good English grammar skills, and a good eye for detail. They prefer to work indoors, and like to organize things.

**Typical Tasks include . . .**

- Transcribe dictation for a variety of medical reports, such as patient histories, physical examinations, emergency room visits, operations, chart reviews, consultation, or discharge summaries.

- Sets up and maintain medical files and databases, including records such as x-ray, lab, and procedure reports, medical histories, diagnostic workups, admission and discharge summaries, and clinical resumes.

**Beyond Graduation . . .**

This year-long certificate, college-credit program is designed to prepare students for employment as medical transcribers. Students wishing to continue their education may take additional courses to earn a two-year Associate of Science (A.S.) degree in Health Services Management or Medical Office Administration at Pensacola State College.

**Job Placement Levels . . .**

*Page 156*

### Medical Records Transcribing

**Primary Employers and Occupations**

Graduates from the Medical Records Transcribing program work in hospitals, physicians’ offices, transcription service offices, clinics, laboratories, medical libraries, government medical facilities, or at home. Many medical transcriptions telecommute from home-based offices as employees or subcontractors for hospitals and transcription services or as self-employed, independent contractors.

**Medical Transcriptionists**

Transcribe medical reports recorded by physicians and other healthcare practitioners using various electronic devices, covering office visits, emergency room visits, diagnostic imaging studies, operations, chart reviews, and final summaries. Transcribe dictated reports and translate abbreviations into fully understandable form. Edit as necessary and returns reports in either printed or electronic form for review and signature, or correction.

**For more information, explore:**

- International Association of Administrative Professionals  [www.iaap-hq.org](http://www.iaap-hq.org)
- International Virtual Assistants Association [www.ivaa.org/](http://www.ivaa.org/)

### Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Transcriptionist</td>
<td>192</td>
<td>201</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>$16.00</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the **fastest growing occupations** and **TOP 50 occupations gaining the most new jobs** in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — [www.floridajobs.org](http://www.floridajobs.org)

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Medical Records Transcribing

Applied Technical Diploma

MDTR-ATD

Entrance Requirements
Class size is limited.
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Semester I – Fall
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIN 1670C</td>
<td>Traditional English Grammar or higher</td>
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<tr>
<td>CGS 1570</td>
<td>Computer Concepts and Applications or</td>
</tr>
<tr>
<td>OST 1713</td>
<td>Word Processing I</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
</tr>
<tr>
<td>BSC 1080</td>
<td>Essentials of Anatomy &amp; Physiology</td>
</tr>
<tr>
<td>BSC 1080L</td>
<td>Essentials of Anatomy &amp; Physiology Lab</td>
</tr>
</tbody>
</table>

Semester II – Spring
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1611**</td>
<td>Medical Transcription I</td>
</tr>
<tr>
<td>OST 1461**</td>
<td>Medical Office Practice</td>
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<tr>
<td>OST 1135</td>
<td>Medical Documents</td>
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<tr>
<td>HSC 1590</td>
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<tr>
<td>HIM 1442</td>
<td>Pharmacology</td>
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</table>

Semester III – Summer
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1612**</td>
<td>Medical Transcription II</td>
</tr>
<tr>
<td>OST 1613**</td>
<td>Medical Transcription III</td>
</tr>
<tr>
<td>OST 1614</td>
<td>Medical Transcription IV</td>
</tr>
</tbody>
</table>

Total Program Credits 33

NOTE: Check the college catalog for details. Certain course are offered only once a year, therefore it is important that you work with your advisor to determine the most effective course sequence.

* See General Education Course Requirements of current college catalog for options.

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

† Course meets Computer Competence Requirement.

†† Course meets Oral Communications Requirements.

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Nursing, R.N.

Primary Employers and Occupations

Graduates from the Nursing (Associate Degree) R.N. program work in hospitals, offices and clinics of medical doctors, nursing homes, schools, and home health care services.

Registered Nurses/Associate Degree Nurses (A.D.N.)

Provide care to individual patients experiencing acute or chronic health problems. Nursing practice includes utilizing communication skills, acting as a health teacher, directing other health workers in selected aspects of care and providing direct patient care. R.N.s are typically concerned with the “whole person” providing for the physical, mental, and emotional needs of their patients. They advise patients, help in rehabilitation, promote good health, and prevent illnesses. Graduates of A.D.N. programs qualify for entry level positions as staff nurses and may advance in management to assistant head nurse or head nurse. Usually the work setting determines day to day job duties.

Hospital Nurses

Form the largest group of nurses. Most are staff nurses who provide bedside nursing care and carry out the medical regimen prescribed by physicians. They may also supervise licensed practical nurses and aides. Hospital nurses usually are assigned to one area such as surgery, maternity, pediatrics, emergency room, intensive care, or treatment of cancer patients or may rotate among departments.

Private Duty Nurses

Care for patients needing constant attention. They work directly for families on a contract basis or for a nursing or temporary help agency which assigns them to patients. Private duty nurses provide services in homes, hospitals, nursing homes, and rehabilitation centers.

Head Nurses or Nurse Supervisors

Direct nursing activities. They plan work schedules and assign duties to nurses and aides, provide or arrange for training, and visit patients and observe nurses to insure that care is properly carried out. Head nurses may also insure that records are maintained and that equipment and supplies are ordered.

For more information, explore:
American Nurses Association  www.ana.org
National League for Nursing  www.nln.org

Beyond Graduation . . .

Pensacola State College offers an Advanced Technical Certificate in Perioperative Nursing. For details, contact the Nursing Department.

Graduates of Associate Degree Nursing (ADN) programs, who hold a Registered Nursing (RN) license, may continue their education and training through the college’s B.S.N. Degree (Bachelor of Science in Nursing) with additional skills in management, leadership, theory, and research to succeed and be promoted within the nursing profession.

Job Placement Levels . . .

Page 156

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Nurses</td>
<td>4,919</td>
<td>5,674</td>
<td>180</td>
<td>$26.89</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Nursing, R.N.

Associate of Science Degree
RN-AS

Accreditation Status
Fully accredited by the National League for Nursing and Accrediting Commission Florida Board of Nursing

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). If you possess an industry certification in this career area, you may be eligible to receive college credit towards this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Program Contact
Ms. Angela Sanders (850) 484-2255
asanders@pensacolastate.edu

Department Head
Ms. Dusti Sluder (850) 484-2341
dsluder@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

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<table>
<thead>
<tr>
<th>Semester I</th>
<th>Credits</th>
<th>Semester II</th>
<th>Credits</th>
<th>Semester III</th>
<th>Credits</th>
<th>Semester IV</th>
<th>Credits</th>
<th>Semester V</th>
<th>Credits</th>
</tr>
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<tr>
<td>ENC 1101</td>
<td>3</td>
<td>NUR 1211C</td>
<td>8</td>
<td>NUR 2212C</td>
<td>6</td>
<td>NUR 2440C</td>
<td>6</td>
<td>NUR 2213C</td>
<td>6</td>
</tr>
<tr>
<td>DEP 2004</td>
<td>3</td>
<td>MCB 1000</td>
<td>3</td>
<td>Maternal-Child Health Nursing</td>
<td>6</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BSC 1093</td>
<td>3</td>
<td>MCB 1000L</td>
<td>1</td>
<td>Adult Health Nursing II</td>
<td>6</td>
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<td></td>
<td></td>
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<tr>
<td>BSC 1093L</td>
<td>1</td>
<td></td>
<td></td>
<td>Adult Health Nursing III</td>
<td>6</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>BSC 1094</td>
<td>3</td>
<td></td>
<td></td>
<td>Mental Health II</td>
<td>3</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>BSC 1094L</td>
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<td></td>
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<td>Mental Health II</td>
<td>3</td>
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<td></td>
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<tr>
<td>MAC 1105</td>
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<td></td>
<td>Humanities (Category II)</td>
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<td></td>
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<tr>
<td>STA 2023</td>
<td>3</td>
<td></td>
<td></td>
<td>Transitional Practice/Preceptorship</td>
<td>4</td>
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<td></td>
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</tr>
</tbody>
</table>

Total Program Credits 72

Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Go to: Page 7

Back to Table of Contents
People who enjoy working with people, are understanding and sympathetic, cooperate with others, and are able to work in duties that often change, may be suited to this career.

**Typical Tasks Include . . .**

- Assist the nursing staff in caring for patients.
- Instruct dysfunctional patients trying to regain basic living skills such as dressing, personal hygiene and communicating.
- Assist in examinations, treatments, and giving patient care.
- Lift and carry patients.

**Beyond Graduation . . .**

Graduates from the Nursing Assistant program are eligible to take the certification examination for nursing assisting. Opportunities for advancement within these occupations are limited. To enter other health occupations, aides generally need additional formal training. Graduates may choose to go on to obtain their certificate in Practical Nursing, then an Associate in Science for Registered Nursing. Graduates of these programs are eligible to sit for the appropriate licensing exam.

**Primary Employers and Occupations**

Graduates from the Nursing Assistant program work in nursing homes or residential care facilities, mental health settings, and hospitals.

**Nursing Assistants/Nursing Aides**

Work under the supervision of nursing and medical staff, assisting in the general overall care of patients. They help care for physically or mentally ill, injured, disabled, or infirm individuals confined to hospitals, nursing or residential care facilities, and mental health settings. Nursing aides answer patients’ call bells, deliver messages, serve meals, make beds, and feed, dress, and bathe patients. Aides may also give massages, provide skin care to patients who cannot move, take temperatures, pulse, respiration, and blood pressure, and help patients get in and out of bed and walk. They may also escort patients to operating and examining rooms, keep patients’ rooms neat, set up equipment, or store and move supplies. Aides observe patients’ physical, mental, and emotional conditions and report any change to the nursing or medical staff.

Nursing aides employed in nursing homes are sometimes called geriatric aides. They are often the principal caregivers in nursing homes and have a great deal of contact with the residents. Since residents may stay in a nursing home for months or even years, aides are expected to develop ongoing relationships with them and respond to them in a positive, caring way.

For more information, explore:
National Association for Home Care and Hospice  www.nahc.org
National Council of State Boards of Nursing Inc.  www.ncsbn.org

**Workforce Development Trends Escambia and Santa Rosa Counties**

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Aides, Orderlies and Attendants</td>
<td>2,108</td>
<td>2,497</td>
<td>75</td>
<td>$11.16</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
### Certifications and Credentials for Employment
Certification examination, State of Florida

### Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost

<table>
<thead>
<tr>
<th>Per College Credit:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Florida Resident</td>
</tr>
<tr>
<td>$104.58</td>
<td>$105.58</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Per Vocational Credit:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$85.80</td>
<td>$86.80</td>
</tr>
</tbody>
</table>

Additional expenses may apply

### Required Courses and Clock Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 0003C</td>
<td>Basic Healthcare Worker</td>
<td>90</td>
</tr>
<tr>
<td>HCP 0121C</td>
<td>Nursing Assistant</td>
<td>75</td>
</tr>
</tbody>
</table>

**Total Program Clock Hours:** 165

**Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.**

### Nursing Assistant

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 0003C</td>
<td>90</td>
</tr>
<tr>
<td>HCP 0121C</td>
<td>75</td>
</tr>
<tr>
<td><strong>Total Program Clock Hours</strong></td>
<td>165</td>
</tr>
</tbody>
</table>

### Program Contact
Ms. Anna Mae Maano (850) 484-2203
amaano@pensacolastate.edu

### Department Head
Ms. Dusti Sluder (850) 484-2341
dsluder@pensacolastate.edu

### Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then "Quick Link" to Financial Aid

### Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.

### For more information call the Program Contact or visit: workforce.pensacolastate.edu

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Practical Nursing

People who enjoy working with people, are cooperative and patient, and like to work in duties that often change will be suited to this career. Persons in this occupation usually have social skills and are interested in human relationships.

Typical Tasks Include . . .

- Care for sick, injured, convalescing, or disabled people under the direction of a physician or registered nurse.
- Take temperatures, blood pressure, pulse, and respiration.
- Keep records on the condition of the patient.

L.P.N.s may also help patients with dressing, bathing, and personal hygiene. Health hazards may be involved with nursing including exposure to infectious diseases, lifting and carrying patients, and working shifts and weekends.

Beyond Graduation . . .

Graduates from the Practical Nursing program are eligible to take the State Board Licensure examination. Graduates may choose to continue their education to obtain the Associate degree in Registered Nursing at Pensacola State College.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Graduates from the Practical Nursing program work in hospitals, nursing and personal care facilities, and offices and clinics of doctors of medicine.

Licensed Practical Nurses

Care for the sick, injured, convalescing, and handicapped, under the direction of physicians and registered nurses. Most L.P.N.s provide basic bedside care. They take patients' vital signs, help patients with bathing, dressing, and personal hygiene, and care for their emotional needs. Some experienced L.P.N.s supervise nursing assistants and aides. In nursing homes, L.P.N.s may help evaluate residents' needs, develop care plans, and supervise nursing aides in addition to providing routine bedside care. In doctors' offices and clinics, including health maintenance organizations, they may also make appointments, keep records, and perform other clerical duties. L.P.N.s who work in home health may also prepare meals and teach family members simple nursing tasks.

For more information, explore:

American Nurses Association  www.ana.org
National League for Nursing  www.nln.org

Targeted Occupation

High Demand, High Skill or High Wage

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed Practical and L.V. Nurses</td>
<td>1,070</td>
<td>1,266</td>
<td>52</td>
<td>$18.70</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services  Go to: Page 5
Practical Nursing

Accreditation Status
Florida Board of Nursing

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Per Vocational Credit:
$85.80, Florida Resident
$86.80, Alabama Resident
Additional expenses may apply

Semester I
HSC 0003C Basic Health Care Worker 90
HCP 0121C Nursing Assistant 75
PRN 0091C Practical Nursing I 285

Semester II
PRN 0092C Practical Nursing II 450

Semester III
PRN 0096C Practical Nursing III 450

Total Program Clock Hours 1350

NOTE: Students whose career goal is to become an RN, should contact an academic advisor for assistance with appropriate general education course selections.

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

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Surgical Technology

Persons who enjoy working with a team, are cooperative and efficient, and like to work in a constantly challenging environment will be suited for this career. If you are organized and efficient, enjoy working with your hands, and are motivated to help people, this career field would be very rewarding for you.

Typical Tasks Include . . .

- Complete pre-operative activities in the operating room.
- Position, transfer patients onto operating table.
- Prepare patients for surgery.
- Provide surgeons with instruments needed during surgery.
- Work in a sterile environment.

Health hazards include standing for long periods of time, lifting and moving patients, working long shifts, and being on call.

Beyond Graduation . . .

Certifications within the field are available and are required by some employers. Higher level health care programs, such as an Associate degree in Registered Nursing, are available at Pensacola State College.

Job Placement Levels . . . Page 156

Primary Employers and Occupations

Careers in the field of surgical technology are found in hospital operating rooms, emergency rooms, ambulatory surgery suites, cast rooms, delivery rooms and surgi-centers. Private scrub technologists are also employed by surgeons in surgical clinics, ophthalmology offices and dental offices.

Surgical Technologists

Are members of the surgical team who work closely with surgeons, anesthesiologists, registered nurses, and other surgical personnel in delivering patient care and assuming appropriate responsibilities before, during, and after surgery.

The role of the Certified Surgical Technologist (CST) includes such preoperative duties as preparing the operating room (OR) by supplying it with the appropriate supplies and instruments, adjusting and testing equipment, preparing the patient for surgery, and helping to connect surgical equipment and monitoring devices. The CST, usually the first member of the OR team to “scrub” and put on gown and gloves, prepares the sterile setup for the appropriate procedure and assists other members of the team with gowning and gloving. During the operation, CSTs have primary responsibility for maintaining the sterile field. In order that surgery may proceed smoothly, CSTs anticipate the needs of surgeons, passing instruments and providing sterile items in an efficient manner. As directed by the surgeon, technicians may sponge or suction the operative site, prepare suture material, dispense appropriate fluids and drugs, and prepare specimens for subsequent pathologic analysis. After the operation, CSTs are responsible for applying dressings and preparing the OR for the next case.

Certified Surgical Technologists (CST) may also function in the nonsterile role of circulator. This can involve keeping a written account of the surgical procedure, assisting the anesthesiologist, and helping account for sponges, needles, and instruments before, during, and after surgery.

For more information, explore:
Association of Surgical Technologists www.ast.org
Commission on Accreditation of Allied Health Education Programs (CAAHEP) www.caahep.org/
National Board of Surgical Technology and Surgical Assisting www.lcc-st.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical Technologists</td>
<td>147</td>
<td>160</td>
<td>4</td>
<td>$18.17</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Surgical Technology

Career and Technical Certificate

SURG-VC

Accreditation Status
Accredited by the Commission on Accreditation of Allied Health Education Programs (www.cahep.org).

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s).

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per Vocational Credit:
$85.80, Florida Resident
$86.80, Alabama Resident
Additional expenses may apply

Semester I
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STS 0003C</td>
<td>Basic Health Care Worker</td>
<td>90</td>
</tr>
<tr>
<td>STS 0015C</td>
<td>Central Supply Technician</td>
<td>210</td>
</tr>
<tr>
<td>STS 0010</td>
<td>Surgical Technology I</td>
<td>150</td>
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</tbody>
</table>

Semester II
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STS 0011C</td>
<td>Surgical Technology II</td>
<td>450</td>
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</tbody>
</table>

Semester III
<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>STS 0012C</td>
<td>Surgical Technology III</td>
<td>435</td>
</tr>
</tbody>
</table>

Total Program Clock Hours 1335

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

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This publication is to provide general career and program information and is not to be construed as a contract between the student and Pensacola State College. The student is encouraged to work closely with counselors and the department to verify the appropriateness of courses for registration.
People who prefer to work indoors and like to organize things, are sociable, friendly, and self-confident are good candidates for this program. Enjoying working with words, numbers, and people are required within this career.

**Typical Tasks include . . .**

- Compose, type, and file information for managers or other professional staff.
- Transcribe and maintain proficiency in microcomputers and various software programs.
- Answer phones and work as a team member assisting with administrative and clerical work as required.

**Beyond Graduation . . .**

Those who broaden their knowledge of company operations and enhance their skills may be promoted to other positions such as a senior or executive office administrator, clerical supervisor, or office manager. As office personnel gain experience, they can earn the title of Certified Professional Secretary after they have passed a stringent test proving their knowledge and skills.

Office personnel can also specialize in Legal Administration, or Administrative Assistant. With additional training, legal office personnel can be certified as an Accredited Legal Secretary or as a Professional Legal Secretary.

Many students will continue their education and training by enrolling in Pensacola State College’s Baccalaureate Degree of Applied Science with an emphasis in Organizational Administration.

**Job Placement Levels . . .**

**Primary Employers and Occupations**

Graduates from the Office Administration program are employed in organizations of every description. Most work in services such as education, health, legal, and business. Banks, insurance and real estate firms, and governmental systems are also important employers. Legal office administrators work primarily for law firms.

**Administrative Assistants**

Work for managers and executives performing duties similar to those of high-level office workers but may include more long-range assignments. They may help prepare reports, attend meetings, collect and research documents, and may do much of the writing themselves. Administrative assistants often need computer skills to deal with budgets, word processing, and desktop publishing.

**Legal Office Administrators**

Work under the supervision of an attorney to prepare legal documents and correspondence such as subpoenas and summonses. They also assist in legal research by reviewing law journals or taking notes on other related cases.

**Office Managers, Clerical Supervisors**

Coordinate the activities of clerical personnel in a business office. They analyze and plan office operations and procedures, allocate work assignments, and evaluate office production and personnel performance. They also review office records and files for accuracy and completeness.

**Office Administrators**

Perform a variety of administrative, clerical and interactive duties that are necessary to run and maintain organizations efficiently. They schedule appointments and conferences, receive clients, transmit staff instructions, give information to callers, organize and maintain files, take and transcribe dictation, and type correspondence, reports, and memos.

For more information, explore:

International Association of Administrative Professionals  [www.iaap-hq.org](http://www.iaap-hq.org)

International Virtual Assistants Association  [www.ivaa.org/](http://www.ivaa.org/)

**Workforce Development Trends Escambia and Santa Rosa Counties**

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Secretaries and Administrative Assistants</td>
<td>1,144</td>
<td>1,283</td>
<td>32</td>
<td>$20.08</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the **TOP 50 occupations gaining the most new jobs** in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — [www.floridajobs.org](http://www.floridajobs.org)

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Office Administration

Associate of Science Degree

OFIS-AS

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). If you possess an industry certification in this career area, you may be eligible to receive college credit towards this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
Program includes an internship. Students may earn credits through the Cooperative Education program. Contact Student Job Services.

Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1570†</td>
<td>Computer Concepts and Application (Category V)</td>
<td>3</td>
</tr>
<tr>
<td>OST 1100**</td>
<td>Keyboarding I</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition (Category I)</td>
<td>3</td>
</tr>
<tr>
<td>______*</td>
<td>Humanities/Fine Arts (Category II)</td>
<td>3</td>
</tr>
<tr>
<td>______*</td>
<td>Natural Sciences/Mathematics (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td>(Prefixes: AST, BSC, ESC, OCB, PCB or CHM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>______*</td>
<td>Mathematics (Category V)</td>
<td>3</td>
</tr>
<tr>
<td>(Prefixes: MAC, MGF, or STA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPC 1608††</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>SLS 1353</td>
<td>Generations at Work</td>
<td>3</td>
</tr>
</tbody>
</table>

Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1110**</td>
<td>Keyboarding II</td>
<td>3</td>
</tr>
<tr>
<td>COM 2100††</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>OST 1713**</td>
<td>Word Processing I</td>
<td>3</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Macroeconomics (Category III)</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2001</td>
<td>Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>CGS 2510**</td>
<td>Spreadsheet</td>
<td>3</td>
</tr>
<tr>
<td>OST 1355</td>
<td>Records Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1821</td>
<td>Business Applications for Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 2241</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>OST 2717**</td>
<td>Word Processing II</td>
<td>3</td>
</tr>
<tr>
<td>OST 2402**</td>
<td>Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1584**</td>
<td>PowerPoint Presentations for Business</td>
<td>3</td>
</tr>
<tr>
<td>OST 2943</td>
<td>Office Systems Internship or Co-op</td>
<td>3</td>
</tr>
<tr>
<td>OST 2949</td>
<td>Office Systems Co-op</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits 63

+ Business Elective — Choose any OST or CGS prefix course.
* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Office Administration

For more information call the Program Contact or visit: workforce.pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then “Quick Link” to Financial Aid

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Office Management

People who prefer to work indoors and like to organize things, are sociable, friendly, and self-confident are good candidates for this program. Enjoying working with words, numbers, and people are required within this career.

Typical Tasks Include . . .

• Compose, type, and file information for managers or other professional staff.

• Maintain proficiency in microcomputers and various software programs.

• Answer phones and work as a team member assisting with administrative and clerical work as required.

Hours are normally regular except when overtime is required.

Beyond Graduation . . .

General office clerks who exhibit strong communication, interpersonal, and analytical skills may be promoted to supervisory positions. Advancement to professional occupations within an establishment usually requires more formal education including a college degree.

Graduates from this program may choose to obtain their Associate of Science (A.S.) degree in Office Administration at Pensacola State College and transfer into jobs with higher pay and greater potential.

Job Placement Levels . . .

Primary Employers and Occupations

Graduates from the Office Management program are employed in organizations of every description. Most work in services such as education, health, legal, and business. Banks, insurance and real estate firms, and governmental systems are also important employers.

Office Systems Specialists

Produce neat, typed copies of reports, memorandums, or letters written by other workers. Other general office duties include filing, sorting mail, using calculators, and answering phones.

Other Occupations Include

Clerk Typist
Data Entry Clerk
Information Clerk
Receptionist
Secretary
Software Applications Specialist

For more information, explore:

International Association of Administrative Professionals  www.iaap-hq.org
National Association of Legal Secretaries  www.nals.org
International Virtual Assistants Association  www.ivaa.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Clerks, General</td>
<td>2,683</td>
<td>3,117</td>
<td>101</td>
<td>$12.05</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity —  www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Office Management

Technical Certificate
CLERK-CT

Certifications and Credentials for Employment
If you possess an industry certification in this career area, you may be eligible to receive college credit toward this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Foundation Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1570</td>
<td>Computer Concepts and Applications</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I or</td>
<td></td>
</tr>
<tr>
<td>LIN 1670C</td>
<td>Traditional English Grammar</td>
<td>3</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Keyboarding I</td>
<td>3</td>
</tr>
</tbody>
</table>

Intermediate Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 2100</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>OST 1713</td>
<td>Word Processing I</td>
<td>3</td>
</tr>
<tr>
<td>OST 1110**</td>
<td>Keyboarding II</td>
<td>3</td>
</tr>
<tr>
<td>CGS 2510**</td>
<td>Spreadsheet</td>
<td>3</td>
</tr>
<tr>
<td>OST 1355</td>
<td>Records Management or</td>
<td></td>
</tr>
<tr>
<td>CTS 1401**</td>
<td>Database with Microsoft Access</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1821</td>
<td>Business Applications for Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>OST 2402</td>
<td>Office Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits 30

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

Department Head
Dr. Debra Kuhl (850) 484-2504
dkuhl@pensacolastate.edu

Financial Aid/Scholarships
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Paralegal Studies  
(Legal Assisting)

Persons who may enjoy the legal environment, and would rather work with people than things, may be interested in this program. If you are sociable, tactful, extroverted, efficient, and conscientious you have the personal characteristics needed to be successful in this career.

Typical Tasks Include . . .

- Draft court pleadings and related documents.
- Perform legal research and investigations.

Duties may be specialized and change often depending on the areas of law. Hours may include overtime often.

Beyond Graduation . . .

With additional coursework, graduates from the Paralegal Studies Associate of Science (A.S.) degree program at Pensacola State College can choose to transfer to a four-year institution. This degree prepares students to assume administrative responsibilities in the paralegal field.

Paralegals do not need to be certified, but the National Association of Legal Assistants has established standards for voluntary certification as a Certified Legal Assistant. This designation is a sign of competence in the field and may enhance employment and advancement opportunities.

Many students will continue their education and training by enrolling in Pensacola State College’s Baccalaureate Degree of Applied Science with an emphasis in Organizational Administration.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Graduates from the Paralegal Studies program support the legal services industry which may include attorneys, governmental systems, insurance, banks, and freelancing.

Legal Assistants/Paralegals

Work directly under the supervision of a lawyer, performing many of the same legal tasks as lawyers. They investigate the facts and research the law involved in a case. Specializations include litigation, corporate law, criminal law, real estate, probate, and family law. Legal assistants work for private law firms, corporations, government agencies, and in community legal service projects.

Other Occupations include

Banking Trust Assistant  
Deputy/Assistant Clerk of Courts  
Human Resources Assistant  
Investigation Specialist  
Legal Document Clerk  
Legal Research Assistant  
Litigation Specialist  
Real Estate Closing Specialist  
Title Clerk

For more information, explore:
American Association for Paralegal Education  www.aafpe.org/  
National Association of Legal Assistants  www.nala.org  
National Federation of Paralegal Associations  www.paralegals.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paralegals and Legal Assistants</td>
<td>414</td>
<td>518</td>
<td>19</td>
<td>$19.74</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Paralegal Studies
(Legal Assisting)

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
Internships may be available for students’ last term. Students may also earn credit through the Cooperative Education program.
Contact Student Job Services.

Foundation Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1570†</td>
<td>Computer Concepts &amp; Applications 3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I (Category I) 3</td>
</tr>
<tr>
<td>PLA 1003</td>
<td>The Legal Profession 3</td>
</tr>
<tr>
<td>______*</td>
<td>Social/Behavioral Sciences (Category III) 3</td>
</tr>
<tr>
<td>______*</td>
<td>Natural Sciences/Mathematics (Category IV) 3</td>
</tr>
<tr>
<td>______*</td>
<td>Humanities/Fine Arts (Category II) 3</td>
</tr>
<tr>
<td>SPC 1006C††</td>
<td>Basic Speaking and Listening Skills 1</td>
</tr>
<tr>
<td>PLA 1104**</td>
<td>Legal Research and Writing I 3</td>
</tr>
<tr>
<td>PLA 1273**</td>
<td>Torts I 3</td>
</tr>
</tbody>
</table>

Intermediate Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLA 1303**</td>
<td>Criminal Law and Procedure 3</td>
</tr>
<tr>
<td>PLA 1700</td>
<td>Legal Ethics 3</td>
</tr>
<tr>
<td>PLA 2423**</td>
<td>Contracts 3</td>
</tr>
<tr>
<td>PLA 2601**</td>
<td>Probate 3</td>
</tr>
<tr>
<td>PLA 2880**</td>
<td>Constitutional Law 3</td>
</tr>
<tr>
<td>PLA 1203**</td>
<td>Civil Litigation I 3</td>
</tr>
</tbody>
</table>

Advanced Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLA 2114A**</td>
<td>Legal Research and Writing II 3</td>
</tr>
<tr>
<td>PLA 2610**</td>
<td>Real Estate Law 3</td>
</tr>
<tr>
<td>PLA 2800**</td>
<td>Domestic Relations 3</td>
</tr>
<tr>
<td>PLA 2730**†</td>
<td>Computers in Legal Drafting and Research 3</td>
</tr>
<tr>
<td>PLA _____</td>
<td>Electives 6</td>
</tr>
</tbody>
</table>

Total Program Credits 64
Courses may be offered more often than stated above. Summer offerings vary year to year.

Electives
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CJJ 2002</td>
<td>Juvenile Justice 3</td>
</tr>
<tr>
<td>CJJ 2002</td>
<td>Juvenile Justice 3</td>
</tr>
<tr>
<td>PLA 2276</td>
<td>Torts II 3</td>
</tr>
<tr>
<td>PLA 2260</td>
<td>Evidence 3</td>
</tr>
<tr>
<td>PLA 2433</td>
<td>Business Organizations 3</td>
</tr>
<tr>
<td>PLA 2364</td>
<td>Forensic Science Survey 3</td>
</tr>
<tr>
<td>PLA 2943***</td>
<td>Law Office Internship or 3</td>
</tr>
<tr>
<td>PLA 2949***</td>
<td>Legal Assisting Co-op 3</td>
</tr>
</tbody>
</table>

++ Permission required
* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
*** Permission Required. Only one may be taken for credit.
† Course meets Computer Competence Requirement.
++ Course meets Oral Communications Requirements.

Paralegal Studies
(Legal Assisting)

Program Contact
Dr. Jimmy Hightower (850) 484-2504
jhightower@pensacolastate.edu

Department Head
Dr. Debra Kuhl (850) 484-2504
dkuhl@pensacolastate.edu

Associate of Science Degree
LEGAL-AS

Financial Aid/Scholarships
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Pharmacy Management

People who enter this career are very organized and enjoyed hands-on work. They also enjoy working as a part of a team.

Typical Tasks Include . . .

- Receives written prescription or refill requests and verifies that information is complete and accurate.
- Establishes and maintains patient profiles, including lists of medications taken by individual patients.
- Maintains proper storage and security conditions for drugs.

Beyond Graduation . . .

Pharmacy Management graduates work as a Pharmacy Technician and assume entry-level management responsibilities in a pharmacy.

Job Placement Levels . . .
Page 156

Primary Employers and Occupations

Graduates of the Pharmacy Management program work as Lead Pharmacy Technicians in hospitals, clinics, pharmacies, and grocery stores.

Pharmacy Technicians

Work under the supervision and direction of a registered pharmacist. They must maintain good organizational skills in a field and environment where keeping things neat and organized is essential. Technicians receive and store incoming supplies, and maintain proper storage and security conditions for drugs. They answer telephones, responding to questions or requests and help customers by answering simple questions or referring them to the pharmacist. They receive written prescription or refill requests and verify the information. They file prescriptions that have been filled and establish and maintain patient profiles, including lists of medications taken by individual patients.

Medical and Health Services Manager

Plans, directs or coordinates medicine and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations.

For more information, explore:
National Pharmacy Technician Association www.pharmacytechnician.org
American Association of Pharmacy Technicians www.pharmacytechnician.com/

Targeted Occupation
High Demand, High Skill or High Wage

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy Technicians</td>
<td>398</td>
<td>439</td>
<td>12</td>
<td>$13.36</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

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The Center for Advising & Career Services
Go to: Page 5
Pharmacy Management

Associate of Science Degree

PHRM-AS

Certifications and Credentials for Employment

Courses in this program prepare the student to take state and industry recognized licensure and certification exam(s). For more information, contact the program contact or the department head.

Entrance Requirements

Consult Program Contact or Department Head for entrance requirements.

Estimated Cost

Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident

Per Vocational Credit:
- $85.80, Florida Resident
- $86.80, Alabama Resident

Additional expenses may apply

Work Experience Related to Program

Required practicum coursework in the program will take place in regional clinical settings.

Semester I – Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 1025</td>
<td>Intro to College Chemistry (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td>CHM 1025L</td>
<td>Intro to College Chemistry Lab (Category IV)</td>
<td>1</td>
</tr>
<tr>
<td>SPC 2300†</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td>PHI 2600</td>
<td>Ethics (Category II)</td>
<td>3</td>
</tr>
<tr>
<td>SLS 1353</td>
<td>Generations at Work (Category V)</td>
<td>3</td>
</tr>
</tbody>
</table>

Semester II – Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BSC 1080</td>
<td>Essentials of Anatomy &amp; Physiology (Category V)</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition (Category I)</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570†</td>
<td>Computer Concepts &amp; Applications</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
</tbody>
</table>

Semester III – Summer

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 2033</td>
<td>Ethical Issues in Biology</td>
<td>2</td>
</tr>
<tr>
<td>PTN 1001</td>
<td>Introduction to Pharmacy</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1017</td>
<td>Pharmacy Tech Math</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1121</td>
<td>Therapeutic Agents I</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1132C</td>
<td>Basic Business Skills for the Pharmacy Technician</td>
<td>1</td>
</tr>
</tbody>
</table>

Semester IV – Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTN 1122C</td>
<td>Therapeutic Agents II</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1131</td>
<td>Applied Pharmacy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1131L</td>
<td>Applied Pharmacy Practice Lab</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1930</td>
<td>Pharmacy Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PTN 1940L</td>
<td>Pharmacy Practicum I</td>
<td>2</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology (Category III)</td>
<td>3</td>
</tr>
</tbody>
</table>

Semester V – Spring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAN 2021</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2001</td>
<td>Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1941L</td>
<td>Pharmacy Practicum II</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1942L</td>
<td>Pharmacy Practicum I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credits 70

† Course meets Computer Competence Requirement.

‡ Course meets Oral Communications Requirements.

Program Contact
Ms. Jennifer Moore (850) 484-2346
jmoore@pensacolastate.edu

Department Head
Dr. Christa Ruber (850) 484-2308
cruber@pensacolastate.edu

Financial Aid/Scholarships

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Work under the supervision and direction of a registered pharmacist. They must maintain good organizational skills in a field and environment where keeping things neat and organized is essential. Technicians receive and store incoming supplies, and maintain proper storage and security conditions for drugs. They answer telephones, responding to questions or requests and help customers by answering simple questions or referring them to the pharmacist. They receive written prescription or refill requests and verify the information. They file prescriptions that have been filled and establish and maintain patient profiles, including lists of medications taken by individual patients.

For more information, explore:

- American Association of Pharmacy Technicians [www.pharmacytechnician.com/](http://www.pharmacytechnician.com/)
- American Society of Health System Pharmacists [www.ashp.org/](http://www.ashp.org/)
- National Pharmacy Technician Association [www.pharmacytechnician.org](http://www.pharmacytechnician.org)
- Pharmacy Technician Certification Board (PTCB) [https://www.ptcb.org](https://www.ptcb.org)

Typical Tasks Include . . .

- Fill orders for unit doses and prepackaged pharmaceuticals.
- Fill bottles according to prescriptions and enter date for labeling of prescribed medicine.
- Clean equipment and sterilizing glassware according to prescribed methods
- Count stock and entering data in a computer to maintain inventory records

Beyond Graduation . . .

Pharmacy Technicians are required to pass a state board licensing exam. Licensing requirements vary from state.

Job Placement Levels . . .

Page 156

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy Technicians</td>
<td>398</td>
<td>439</td>
<td>12</td>
<td>$13.36</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — [www.floridajobs.org](http://www.floridajobs.org)

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
### Certifications and Credentials for Employment
Courses in this program prepare the student to take state and industry recognized licensure and certification exam(s). For more information, contact the program contact or the department head.

### Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident

### Work Experience Related to Program
Required practicum coursework in the program will take place in regional clinical settings.

### Term I
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1080</td>
<td>Essentials of Anatomy &amp; Physiology</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570</td>
<td>Computer Concepts &amp; Applications</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
</tbody>
</table>

### Term II
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTN 1001</td>
<td>Introduction to Pharmacy</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1017</td>
<td>Pharmacy Technician Math</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1121</td>
<td>Therapeutic Agents I</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1132C</td>
<td>Basic Business Skills for Pharmacy Tech</td>
<td>1</td>
</tr>
</tbody>
</table>

### Term III
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTN 1122C</td>
<td>Therapeutic Agents II</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1131</td>
<td>Applied Pharmacy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1131L</td>
<td>Applied Pharmacy Practice Lab</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1930</td>
<td>Pharmacy Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PTN 1940L</td>
<td>Pharmacy Practicum I</td>
<td>2</td>
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</tbody>
</table>

### Term IV
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTN 1941L</td>
<td>Pharmacy Practicum II</td>
<td>3</td>
</tr>
<tr>
<td>PTN 1942L</td>
<td>Pharmacy Practicum III</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Program Credits
40

### Program Contact
Ms. Jennifer Moore (850) 484-2346
jmoore@pensacolastate.edu

### Department Head
Dr. Christa Ruber (850) 484-2308
cruber@pensacolastate.edu

### Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

### Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.

### For more information call the Program Contact or visit: workforce.pensacolastate.edu

This publication is to provide general career and program information and is not to be construed as a contract between the student and Pensacola State College. The student is encouraged to work closely with counselors and the department to verify the appropriateness of courses for registration.
People in this career prefer to work indoors, enjoy the human relationship, and have good eye and hand coordination. They must be sociable and cooperative. People in this career are sometimes described as analytic, patient, tactful.

Typical Tasks Include . . .
- Draw blood.
- Assemble the equipment to draw blood.
- Verify and record data.
- Sometimes interview patients.

Beyond Graduation . . .
Graduates from the Phlebotomy program may advance in career by earning certification from the American Society of Clinical Pathologists (ASCP). They may also pursue an associate degree in a medical technology or nursing program at Pensacola State College.

Job Placement Levels . . .
Page 156

Primary Employers and Occupations
Graduates from the Phlebotomy program support the health industry in hospitals, nursing and convalescent homes, blood centers, and offices and clinics of physicians.

Phlebotomists/Phlebotomy Technicians
Duties of the phlebotomist include drawing blood by applying a tourniquet to the arm, locating the accessible vein, swabbing the puncture area with antiseptic, and inserting the needle to draw the blood. After withdrawal, the blood is labeled, stored, or forwarded to laboratories for analysis. The phlebotomist may also prick fingers to draw blood, take vital signs, and screen patients for various conditions and information.

Other Occupations include
Hemodialysis Technician
Home Health Phlebotomist

For more information, explore:
American Society for Clinical Laboratory Science  www.ascls.org
American Society for Clinical Pathology  www.ascp.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 2012</th>
<th>Employment 2020</th>
<th>Estimated Annual Openings</th>
<th>Average Entry Level Hourly Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare Support Workers and All Other</td>
<td>367</td>
<td>381</td>
<td>8</td>
<td>$13.75</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity —  www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
## Phlebotomy

### Advanced Technical Diploma

**PHLEB-VC**

<table>
<thead>
<tr>
<th>Entrance Requirements</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consult Program Contact or Department Head for entrance requirements.</td>
<td>Per College Credit:</td>
</tr>
<tr>
<td></td>
<td>$104.58, Florida Resident</td>
</tr>
<tr>
<td></td>
<td>$105.58, Alabama Resident</td>
</tr>
<tr>
<td></td>
<td>Per Vocational Credit:</td>
</tr>
<tr>
<td></td>
<td>$85.80, Florida Resident</td>
</tr>
<tr>
<td></td>
<td>$86.80, Alabama Resident</td>
</tr>
<tr>
<td></td>
<td>Additional expenses may apply</td>
</tr>
</tbody>
</table>

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 0003C</td>
<td>Basic Healthcare Worker</td>
<td>90</td>
</tr>
<tr>
<td>MEA 0520C</td>
<td>Phlebotomy</td>
<td>75</td>
</tr>
<tr>
<td>MEA 0522L</td>
<td>Phlebotomy Clinical</td>
<td>120</td>
</tr>
</tbody>
</table>

### Total Program Clock Hours

285

### Program Contact

Ms. Wilma Duncans-Burnett (850) 484-2216  
wduncans-burnett@pensacolastate.edu

### Financial Aid/Scholarships

Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then "Quick Link" to [Financial Aid](http://www.pensacolastate.edu).

### Need help with Admissions and Registration?

Learn more about New Student Services on [Page 4](#).

### For more information call the Program Contact or visit:

[workforce.pensacolastate.edu](http://workforce.pensacolastate.edu)

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Photographic Technology

People in this career usually have artistic skill, enjoy creating original work and have a good imagination. They generally have social skills as well as good eye/hand coordination. They have been described as impulsive, ambitious, imaginative, intuitive, and patient.

Typical Tasks Include . . .

- Take original photographs for artistic, journalistic, commercial, or industrial use.
- Use computer software to create, alter, enhance, and restore photographs.
- Develop, print, and color-correct negatives for journalistic, commercial, or freelance uses.

Beyond Graduation . . .

Photographers may start out as assistants to experienced photographers. Assistants acquire the technical knowledge needed to be a successful photographer and also learn other skills necessary to run a portrait or commercial photography business. Freelance photographers should develop an individual style of photography to differentiate themselves from the competition. Some photographers enter the field by submitting an unsolicited portfolio of photographs to magazines and to art directors at advertising agencies; for freelance photographers, a good portfolio is critical.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Photography in all its forms has a tremendous impact in the creative, illustrative, and commercial fields and, consequently, is in great demand. Now, in addition to all the traditional uses of photography, digital imaging and the internet have added another fast-growing dimension to this field. Graduates from the Photographic Technology program may be employed by newspapers, magazines, advertising agencies, photo labs, public relations offices, realtors, printers, publishers, museums, and graphic designers.

Photojournalists

Work for publications such as magazines, newspapers and other print and electronic media. Their focus is generally on the documentation of events in a clear, illustrative way that speaks for itself as well as enhancing text. A Photojournalist’s work takes them into the field to cover news events, sports, and human interest stories, among others. Photojournalists may also work as freelancers.

Creative Photographers

Are artist/photographers whose work is directed at personal artistic expression and is often shown in art galleries, museums, and competitions.

Photo Restorers

Take old or damaged photos and restore them by using digital scanning and Adobe Photoshop.

Portrait Photographers

Are skilled at the studio techniques of lighting and backdrops to produce a variety of portraits of lasting interest in black/white and color.

Freelance Photographers

Are in business for themselves and are employed, usually on short assignments, by many different clients and might entail any type of photographic situation. While a freelancer has considerable leeway in managing their own schedule, being successful means building a group of clients, having a knowledge of business practices, understanding effective advertising, and knowing how to promote themselves.

Other Occupations Include

Commercial Photographer
Photo Conservator
Photo Illustrator

Photo preparer (in prepress companies)
Sports Photographer

or the printing industry)

For more information, explore:
American Society of Media Photographers www.asmp.org/
National Press Photographers Association www.nppa.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photographers</td>
<td>228</td>
<td>3</td>
<td>$14.91</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services

Go to: Page 5
Photographic Technology

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience
A limited number of internships are available on a competitive basis. Students may earn credits through the Cooperative Education Program. Contact Student Job Services.

Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1201C</td>
<td>3</td>
<td>Two Dimensional Design</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>3</td>
<td>English Composition I (Category I)</td>
</tr>
<tr>
<td>PGY 2401C</td>
<td>3</td>
<td>Photography I</td>
</tr>
<tr>
<td>GRA 2151C†</td>
<td>3</td>
<td>Computer Graphics I</td>
</tr>
<tr>
<td>ART 1300C</td>
<td>3</td>
<td>Drawing I</td>
</tr>
<tr>
<td>___ ___*</td>
<td></td>
<td>General (Category V)</td>
</tr>
</tbody>
</table>

Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGY 1000</td>
<td>3</td>
<td>History of Photography (Category II)</td>
</tr>
<tr>
<td>PGY 1110C**</td>
<td>3</td>
<td>Color, Materials and Methods</td>
</tr>
<tr>
<td>PGY 2404C**</td>
<td>3</td>
<td>Photography II</td>
</tr>
<tr>
<td>PGY 2220C**</td>
<td>3</td>
<td>Commercial Photography I</td>
</tr>
<tr>
<td>PGY 2801C**</td>
<td>3</td>
<td>Digital Photography I</td>
</tr>
<tr>
<td>___ ___*</td>
<td></td>
<td>Natural Sciences/Mathematics (Category III)</td>
</tr>
<tr>
<td>GRA 2770C**</td>
<td>3</td>
<td>Creative Design and Communication</td>
</tr>
<tr>
<td>ARH 2000*</td>
<td>3</td>
<td>Humanities Art (Category II)</td>
</tr>
<tr>
<td>SPC 1608††</td>
<td>3</td>
<td>Public Speaking or</td>
</tr>
<tr>
<td>SPC 2300</td>
<td>3</td>
<td>Interpersonal Communication</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGY 2802C**</td>
<td>3</td>
<td>Digital Photography II</td>
</tr>
<tr>
<td>PGY 2107C**</td>
<td>3</td>
<td>Large Format Camera</td>
</tr>
<tr>
<td>PGY 2221C**</td>
<td>3</td>
<td>Commercial Photography II</td>
</tr>
<tr>
<td>PGY 2272C**</td>
<td>3</td>
<td>Photography Seminar</td>
</tr>
<tr>
<td>ART 2905</td>
<td>3</td>
<td>Portfolio</td>
</tr>
<tr>
<td>___ ___*</td>
<td></td>
<td>Art Electives (PGY, ART, GRA)</td>
</tr>
</tbody>
</table>

Total Program Credits 64

+ Art Elective—Choose any PGY, ART, or GRA course.
* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.

Program Contact
Mr. Mark Francis (850) 484-2552
mfrancis@pensacolastate.edu

Department Head
Mr. Krist Lien (850) 484-2554
klien@pensacolastate.edu

Pensacola State College

For more information call the Program Contact or visit: workforce.pensacolastate.edu

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Physical Therapist Assistant

People who enjoy this career prefer working with people rather than data and things. They normally have leadership and good interpersonal communication skills. People in this career are sometimes described as energetic, patient, and understanding.

Typical Tasks Include . . .

- Help with therapeutic exercises.
- Administer ultrasound, electrical stimulation, ultraviolet, infrared, and hot and cold pack treatments.
- Give instructions to patients in usage of equipment.

Because this work requires hands-on assistance with people, lifting, pulling, and pushing are physical job requirements.

Beyond Graduation . . .

With the increasing number of individuals with disabilities or limited function, the demand for services of physical therapy assistants will tend to rise. The large baby-boom generation is entering the prime age for age-related infirmities, heart attacks and strokes, further increasing the demand for physical therapy and rehabilitation. In addition, future medical developments will require that PTAs stay current with these advancements in care. Most employers recognize this need for continuing education and offer opportunities for continued professional development.

Job Placement Levels . . . Page 156

Primary Employers and Occupations

Graduates from the Physical Therapist Assistant program work in chiropractors’ and physical therapists’ offices, offices and clinics of medical doctors, hospitals, nursing homes, rehabilitation centers, and home health care services.

Physical Therapist Assistants

Carry out planned physical therapy programs under the direction and supervision of a licensed physical therapist. Using techniques such as therapeutic exercise, therapeutic massage, and treatments involving heat, cold, water, light, electricity, traction, sound, or ultra sound, physical therapy assistants help restore physical functions to patients with impaired use of their muscles, nerves, joints, and bones. They instruct, motivate, and assist patients with functional activities, and assist physical therapists with patient evaluation. Physical therapy assistants are employed in a variety of health care settings.

For more information, explore:
American Physical Therapy Association www.apta.org

TARGETED OCCUPATION
HIGH DEMAND, HIGH SKILL OR HIGH WAGE

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Therapist Assistants</td>
<td>112</td>
<td>134</td>
<td>5</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
This publication is to provide general career and program information and is not to be construed as a contract between the student and Pensacola State College. The student is encouraged to work closely with counselors and the department to verify the appropriateness of courses for registration.

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s).
For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Preliminary Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1093</td>
<td>Anatomy &amp; Physiology I (Category V)</td>
</tr>
<tr>
<td>BSC 1093L</td>
<td>Anatomy &amp; Physiology I Lab (Category V)</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra (Category IV)</td>
</tr>
<tr>
<td>HLP 1081</td>
<td>Concepts of Life Fitness</td>
</tr>
<tr>
<td>HLP 1081L</td>
<td>Humanities/Fine Arts (Category II)</td>
</tr>
<tr>
<td>SPC 1006C††</td>
<td>Public Speaking and Listening Skills</td>
</tr>
</tbody>
</table>

Semester I – Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHT 1000</td>
<td>Introduction to Physical Therapy</td>
</tr>
<tr>
<td>PHT 1120</td>
<td>Functional Anatomy &amp; Kinesiology</td>
</tr>
<tr>
<td>PHT 1120L</td>
<td>Functional Anatomy &amp; Kinesiology Lab</td>
</tr>
<tr>
<td>PHT 1251</td>
<td>Basic Skills in Patient Care</td>
</tr>
<tr>
<td>PHT 1251L</td>
<td>Basic Skills in Patient Care Lab</td>
</tr>
<tr>
<td>LIS 1004†</td>
<td>Introduction to Internet Research</td>
</tr>
<tr>
<td>DEP 2004</td>
<td>Human Growth &amp; Development (Category III)</td>
</tr>
</tbody>
</table>

* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Semester II – Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHT 1210C</td>
<td>Therapeutic Modalities</td>
</tr>
<tr>
<td>PHT 1253</td>
<td>Neumromuscular Therapeutic Techniques I</td>
</tr>
<tr>
<td>PHT 1253L</td>
<td>Neumromuscular Therapeutic Techniques I Lab</td>
</tr>
<tr>
<td>PHT 1224</td>
<td>Musculoskeletal Therapeutic Techniques I</td>
</tr>
<tr>
<td>PHT 1224L</td>
<td>Musculoskeletal Therapeutic Techniques I Lab</td>
</tr>
<tr>
<td>PHT 1801</td>
<td>PTA Clinic I</td>
</tr>
<tr>
<td>HSC 1590</td>
<td>AIDS/OSHA/ME/DV</td>
</tr>
<tr>
<td>BSC 1094</td>
<td>Anatomy &amp; Physiology II</td>
</tr>
<tr>
<td>BSC 1094L</td>
<td>Anatomy &amp; Physiology II Lab</td>
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<tr>
<td>CPR (CEU)</td>
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Semester III – Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHT 2162</td>
<td>Neuromuscular Therapeutic Techniques II</td>
</tr>
<tr>
<td>PHT 2162L</td>
<td>Neuromuscular Therapeutic Techniques II Lab</td>
</tr>
<tr>
<td>PHT 2933C</td>
<td>Special Topics in Rehabilitation I</td>
</tr>
<tr>
<td>PHT 2227C</td>
<td>Musculoskeletal Therapeutic Techniques II</td>
</tr>
<tr>
<td>PHT 2810</td>
<td>PTA Clinic II</td>
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</tbody>
</table>

Semester IV – Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHT 2932</td>
<td>Transition Seminar</td>
</tr>
<tr>
<td>PHT 2401</td>
<td>Psychosocial Issues of the Disabled</td>
</tr>
<tr>
<td>PHT 2934C</td>
<td>Special Topics in Rehabilitation II</td>
</tr>
<tr>
<td>PHT 2820</td>
<td>Clinic III</td>
</tr>
</tbody>
</table>

Total Program Credits: 74

Accreditation Status

For more information call the Program Contact or visit: workforce.pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.
Psychiatric Technology

People who enjoy working in this field enjoy helping others and like physical activities.

Typical Tasks Include . . .

- Monitor patients’ physical and emotional well-being and reports unusual behavior or physical ailments to medical staff.
- Provide nursing, psychiatric and personal care to mentally ill, emotionally disturbed or mentally retarded patients.
- Observe and influence patients’ behavior, communicating and interacting with them and teaching, counseling and befriending them.

A person can expect to work rotating shifts and weekends.

Beyond Graduation . . .

Graduates of the program are eligible to take an examination to qualify as a Nationally Certified Psychiatric Technician through the American Association of Psychiatric Technicians.

For more information, explore:
American Society of Radiologic Technologists  www.asrt.org
Radiological Society of North America  www.rsna.org/

Job Placement Levels . . .
Page 156

Primary Employers and Occupations

Graduates from the Psychiatric Technology program will seek employment at psychiatric treatment facilities, residential treatment program, and other similar programs.

Psychiatric Technicians

May care for mentally impaired or emotionally disturbed individuals, following physician instructions and hospital procedures. Monitors patients’ physical and emotional well-being, and reports to medical staff. May participate in rehabilitation and treatment programs, help with personal hygiene, and administer oral medications and hypodermic injections.

For more information, explore:
American Society of Radiologic Technologists  www.asrt.org
Radiological Society of North America  www.rsna.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatric Technicians</td>
<td>6,346</td>
<td>7,092</td>
<td>199</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$12.24</td>
</tr>
</tbody>
</table>

Many jobs in this field are listed among the fastest growing occupations in Escambia and Santa Rosa counties.
Source: Florida Department of Economic Opportunity  —— www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services  Go to: Page 5
Psychiatric Technology

Career and Technical Certificate

PSYT-VC

Accreditation Status
Joint Review Committee of Education in Radiologic Technology (www.jrcert.org)

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). If you possess an industry certification in this career area, you may be eligible to receive college credit towards this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Per Vocational Credit:
$85.80, Florida Resident
$86.80, Alabama Resident
Additional expenses may apply

Required Courses

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 003C</td>
<td>Basic Healthcare Worker 90</td>
</tr>
<tr>
<td>HCP 0852</td>
<td>Psychiatric Aide 180</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCP 0852L</td>
</tr>
</tbody>
</table>

Total Program Clock Hours 450

* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Department Head
Dr. Christa Ruber (850) 484-2308
cruber@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

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Radiography

If you have scientific abilities, like to solve problems, like working with people, and have the ability to work with equipment, this career may suit you. People in this career may be described as analytical, curious, tactful, and sympathetic.

Typical Tasks Include . . .

• Take x-rays for use in diagnosing and treating medical problems.

• Explain procedures and position patient’s body so that the correct areas can be radiographed.

• Shield exposed areas with a lead apron to prevent unnecessary exposure to radiation.

Beyond Graduation . . .

With experience and additional training, staff technologists may become specialists, performing CT scanning, ultrasound, angiography, and magnetic resonance imaging. Experienced technologists may also be promoted to supervisors, chief radiologic technologist, and, ultimately, department administrator or director.

With additional education, available at major cancer centers, radiation therapy technologists can specialize as medical radiation dosimetrists. Radiographers and radiation therapists are required to fulfill 24 hours of continuing education every other year and provide documentation to prove that they are complying with these requirements.

Job Placement Levels . . .

Primary Employers and Occupations

Graduates from the Radiography program work in hospitals, and physicians’ and radiological centers. Three out of five radiographers work in hospitals.

Radiographers

Produce X-ray images of parts of the human body for use in diagnosing medical problems. They prepare and place the patient in the correct position between the radiation source and the image receptor, protecting body areas not to be exposed to radiation. After making the exposure, they evaluate the image. Experienced radiographers may perform more complex imaging tests such as fluoroscopy, magnetic resonance imaging (MRI), computed tomography scans (CT) and special procedures.

For more information, explore:

American Society of Radiologic Technologists  www.asrt.org
Radiological Society of North America  www.rsna.org/
Joint Review Committee on Education in Radiologic Technology  www.jrcert.org

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRANCE LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiologic Technologists and Technicians</td>
<td>495</td>
<td>564</td>
<td>16</td>
<td>$24.15</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity —  www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Radiography

Associate of Science Degree
XRAY-AS

Accreditation Status
Joint Review Committee of Education in Radiologic Technology (www.jrcert.org)

Certifications and Credentials for Employment
Courses in this program prepare the student to take industry recognized certification exam(s). If you possess an industry certification in this career area, you may be eligible to receive college credit towards this program. For more information, see the program contact or the department head.

Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident
Additional expenses may apply

Estimated Cost
- $104.58, Florida Resident
- $105.58, Alabama Resident
Additional expenses may apply

SECOND YEAR

Fall
- RTE 2931†† Radiographic Critique I 2
- RTE 2722 Radiographic Anatomy and Physiology III 2
- RTE 2523 Radiographic Positioning III 2
- RTE 2563 Advanced Radiographic Procedures II 3
- RTE 2601** Radiographic Imaging I 2
- RTE 2844** Radiography Clinic V 4

Spring
- RTE 2572 Advanced Radiographic Procedures I 2
- RTE 2473 Introduction to Radiation Safety and Quality Assurance 1
- RTE 2602** Radiographic Imaging II 2
- RTE 2782 Applied Radiographic Pathophysiology 2
- RTE 2385 Radiation Biology 1
- RTE 2854 Radiography Clinic VI 4

Total Program Credits 77

* See General Education Course Requirements of current college catalog for options.
** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.
† Course meets Computer Competence Requirement.
†† Course meets Oral Communications Requirements.

Program Contact
Dr. Marilyn Coseo (850) 484-2305
cmposeo@pensacolastate.edu

Department Head
Dr. Christa Ruber (850) 484-2308
cruber@pensacolastate.edu

Financial Aid/Scholarships
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Recreation Technology

People considering this career should have good social skills and interest in human relationships. Individuals in this field may be described as energetic, extroverted, sociable and confident. This program would be beneficial, as well, for persons previously or currently employed in related occupations.

Typical Tasks Include . . .
- Organize and direct leisure and athletic programs.
- Provide arts and craft activities.
- Supervision of facilities and sites.
- Equipment maintenance.
- Teaching, directing, and instructing.

Beyond Graduation . . .
This degree prepares students for employment as recreation leaders, activity directors, group recreation workers, or recreation facility staff. The degree program would also be beneficial to persons who might desire to obtain a bachelor’s degree in a human performance or a recreational major at a later date.

Job Placement Levels . . .
Page 156

Primary Employers and Occupations
Graduates from the Recreation Technology program will find employment as workers, leaders, managers, and instructors, with parks and recreation departments of governmental systems, civic and social agencies, day care programs, hotels and resorts, health and athletic clubs, retirement communities, and apartment complexes.

Recreation Workers
Entry level workers may help people pursue their interests in crafts, the arts, or sports by leading activities. They organize teams and leagues and teach the correct use of equipment and facilities. They are often responsible for a program’s daily operations and organize and direct participants and other staff members. They may conduct classes, coach, or instruct in specialized activities such as art, music, drama, swimming, strength training, tennis, etc.

Position Titles may include
- Activities Director
- Arts Director
- Facilities Manager
- Recreation Director
- Recreation Leader
- Recreation Manager
- Recreation Supervisor
- Recreation Therapist
- Recreation Worker
- Sports Manager

For more information, explore:
National Recreation and Park Association  www.nrpa.org
World Leisure and Recreation Association  www.worldleisure.org/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>EMPLOYMENT 2020</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation Workers</td>
<td>425</td>
<td>443</td>
<td>9</td>
<td>$11.21</td>
</tr>
</tbody>
</table>

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.
Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

Estimated Cost
Per College Credit:
$104.58, Florida Resident
$105.58, Alabama Resident
Additional expenses may apply

Work Experience Related to Program
Students may earn credit through the Cooperative Education Program. Contact Student Job Services.

Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
</tr>
<tr>
<td>LEI 1141</td>
<td>Introduction to Recreation and Leisure Services</td>
</tr>
<tr>
<td>________</td>
<td>Natural Sciences/Mathematics (Category IV)</td>
</tr>
<tr>
<td>PEO 1011</td>
<td>Computer Competence Requirement</td>
</tr>
<tr>
<td>________</td>
<td>Team Sports</td>
</tr>
<tr>
<td>________</td>
<td>Humanities/Fine Arts (Category II)</td>
</tr>
<tr>
<td>HLP 1081</td>
<td>Concepts of Life Fitness</td>
</tr>
<tr>
<td>PEO 1031</td>
<td>Individual Sports</td>
</tr>
<tr>
<td>PEO 2013C</td>
<td>Sports Officiating</td>
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<tr>
<td>________</td>
<td>Recreation Technology Electives</td>
</tr>
<tr>
<td></td>
<td>(select from HLP, PEL, PEM, PEQ, PET, SLS)</td>
</tr>
</tbody>
</table>

Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>________</td>
<td>Social/Behavioral Sciences (Category III)</td>
</tr>
<tr>
<td>________</td>
<td>General (Category VI)</td>
</tr>
<tr>
<td>HSC 2400</td>
<td>First Aid and Injuries</td>
</tr>
<tr>
<td>LEI 1541</td>
<td>Outdoor Recreation Management</td>
</tr>
<tr>
<td>________</td>
<td>Recreation Technology Electives</td>
</tr>
<tr>
<td></td>
<td>(select from HLP, PEL, PEM, PEQ, PET, SLS)</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET 2604</td>
<td>Basic Care and Prevention of Athletic Injuries</td>
</tr>
<tr>
<td>LEI 2730</td>
<td>Adaptive/Therapeutic Recreation or Recreational Technology Elective</td>
</tr>
<tr>
<td>________</td>
<td>(select from HSC 2100, HUN, 1201, HUS 2400, MAR 2011, MNA 1161, OST 1821)</td>
</tr>
</tbody>
</table>

Total Program Credits

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>64</td>
</tr>
</tbody>
</table>

Recreation Technology Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLP 2947</td>
<td>HUS 2400</td>
</tr>
<tr>
<td>HLP 2948</td>
<td>MAR 2011</td>
</tr>
<tr>
<td>HLP 2949</td>
<td>MNA 1161</td>
</tr>
<tr>
<td>HSC 2100</td>
<td>PEL 1121</td>
</tr>
<tr>
<td>HUN 1201</td>
<td>PEL 2122</td>
</tr>
<tr>
<td>________</td>
<td>________</td>
</tr>
<tr>
<td>PET 2943</td>
<td>SLS 1101</td>
</tr>
</tbody>
</table>

NOTE: In addition to the Recreation Technology Electives listed above, other courses may be approved as electives. Students should consult program contact regarding elective choices.

* See General Education Course Requirements of current college catalog for options.
† Course meets Computer Competence Requirement.
‡ Course meets Oral Communications Requirement.

Program Contact
Mr. Doug Rogers (850) 484-1317
drogers@pensacolastate.edu

Department Head
Ms. Susan Morgan (850) 484-2137
smorgan@pensacolastate.edu

Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: www.pensacolastate.edu, then "Quick Link" to Financial Aid

Need help with Admissions and Registration?
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For more information call the Program Contact or visit: workforce.pensacolastate.edu

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Sonography
(Diagnostic Medical Sonography)

If you have scientific abilities, like solving problems and working with people, and have the ability to work with equipment, this career may suit you. People in this career maybe described as analytical, curious, tactful, and sympathetic.

Typical Tasks Include . . .

- Explain the procedures and position the patient’s body so that the correct areas can be seen on an ultrasound screen.
- Perform sonograms and record normal anatomy and pathologic data for interpretation by the physician.
- Analyze and present diagnostic data for use in interpretation and diagnosis by the physician.
- Provide patient education on the diagnostic use of medical ultrasound.

Beyond Graduation . . .

With additional training and experience, sonographers may become specialists in different areas of ultrasound. Experienced sonographers may also be promoted to supervisors, administrators or directors in departments or units. Some sonographers take jobs as sales representatives or instructors with equipment manufacturers.

Primary Employers and Occupations

Graduates from the Sonography (Diagnostic Medical Sonography) program may work in hospitals, physicians’ offices, diagnostic imaging centers, ambulatory care facilities, research facilities, and mobile units.

Sonographers

Also known as ultrasound technologists, use non-ionizing equipment to transmit high frequency sound waves into the patient’s body, then collect the reflected echoes to form an image. This image, which results from the reflection of sound from the body is viewed on a screen and may be recorded on film for permanent record and used in interpretation and diagnosis by physicians. Sonographers prepare and position the patient, obtain the images utilizing their skills and knowledge to collect the optimum diagnostic data, then present their study. Sonographers may specialize in abdomen and OB/GYN, echocardiography, or vascular technology.

Other Occupations include

Diagnostic Sonographer
Echocardiographer
General Sonographer
Vascular Technologist

For more information, explore:
Society of Diagnostic Medical Sonography www.sdms.org

Job Placement Levels . . .

Page 156

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostic Medical Sonographers</td>
<td>125</td>
<td>157</td>
<td>6</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations in Escambia and Santa Rosa counties.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services

Go to: Page 5
# Sonography
(Diagnostic Medical Sonography)

## Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

## Estimated Cost
### Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply.

## Estimated Cost
### Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply.

## Estimated Cost
### Per College Credit:
- $104.58, Florida Resident
- $105.58, Alabama Resident

Additional expenses may apply.

### Prerequisites

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Semester I</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1093**</td>
<td>Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>BSC 1093L**</td>
<td>Anatomy and Physiology I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MAC 1105***</td>
<td>College Algebra (Category IV)</td>
<td>3</td>
</tr>
<tr>
<td>PHY 1025**</td>
<td>Introduction to Fundamentals of Physics</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Estimated Cost

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>BSC 1094**</td>
<td>Anatomy and Physiology II</td>
</tr>
<tr>
<td></td>
<td>BSC 1094L**</td>
<td>Anatomy and Physiology II Laboratory</td>
</tr>
<tr>
<td></td>
<td>PHI 2600</td>
<td>Ethics (Category V)</td>
</tr>
<tr>
<td></td>
<td>PHI 2600</td>
<td>Ethics (Category V)</td>
</tr>
<tr>
<td></td>
<td>ENC 1101</td>
<td>English Composition I (Category I)</td>
</tr>
</tbody>
</table>

### Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SON 1004C**</td>
<td>Basic Procedures</td>
</tr>
</tbody>
</table>

### Semester III

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SON 1100C**</td>
<td>Principles and Protocols of Sonography</td>
</tr>
<tr>
<td>SON 1170**</td>
<td>Sonography of the Circulatory System</td>
</tr>
</tbody>
</table>

### Semester IV

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SON 1212**</td>
<td>Medical Sonography Physics II</td>
</tr>
<tr>
<td>SON 1112**</td>
<td>Abdominal Sonography II</td>
</tr>
<tr>
<td>SON 1122**</td>
<td>OB/GYN Sonography II</td>
</tr>
<tr>
<td>SON 1215***</td>
<td>Practical Aspects of Sonography II</td>
</tr>
<tr>
<td>SON 1814**</td>
<td>Sonography Clinic II</td>
</tr>
</tbody>
</table>

### Semester V

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SON 1144**</td>
<td>Superficial Structures</td>
</tr>
<tr>
<td>SON 1824L**</td>
<td>Sonography Clinic III</td>
</tr>
</tbody>
</table>

### Total Program Credits

- **Total Program Credits**: 72

---

**Program Contact**
Ms. Liesa Bromet (850) 484-2251
lbromet@pensacolastate.edu

**Department Head**
Dr. Christa Ruber (850) 484-2308
cruber@pensacolastate.edu

**Financial Aid/Scholarships**
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Veterinary Technology

People who enter this career are often described as “doers;” they like physical hands-on activities and projects. They are good “thinkers,” and like to analyze problems and look at different ways to solve them.

Typical Tasks Include . . .

- Assist veterinarians or other professional persons in the examination, treatment, and care of animals.
- Hold and restrain animals during treatment.
- Prepare examination and treatment rooms.

Persons in this field often work weekend and irregular hours.

Beyond Graduation . . .

Veterinary Technicians and Technologists usually begin work as trainees in routine positions under the direct supervision of a veterinarian or a Certified Veterinary Technician (CVT).

Entry-level workers whose training or educational background encompasses extensive hands-on experience with a variety of laboratory equipment, including diagnostic and medical equipment, usually require a shorter period of on-the-job training.

Job Placement Levels . . .

Page 156

Primary Employers and Occupations

Graduates from the Veterinary Technology program work in veterinary clinics, shelters or rescue organizations, medical and pharmaceutical research facilities, wildlife rehabilitation facilities, zoological parks and governmental agencies.

Veterinary Technicians

Care for clinical instruments and equipment, prepare animals for treatment or surgical procedures and fill prescriptions prescribed by the veterinarian. Veterinary Technicians complete routine laboratory tests, and record the results. They give medicines to animals, and perform post-operative medical treatment as needed.

Veterinary Technologists

Observe the behavior and condition of animals, and monitor their clinical symptoms. They maintain controlled drug inventory and related log books. They also perform laboratory tests on blood, urine, and feces, such as urinalyses and blood counts, to assist in the diagnosis and treatment of animal health problems. They collect, prepare, and label samples for laboratory testing, culture, or microscopic examination as well as assist professional staff with research projects in veterinary medicine, public health, or research laboratories.

Other Occupations Include:

Laboratory Animal Caretaker
Veterinary Assistant

For more information, explore:

National Association of Veterinary Technicians in America (NAVTA)  www.navta.net/
Professional Association for Veterinary Technicians  http://thefvta.net/
Alabama Veterinary Technician Association  www.alabamavettech.com/

Workforce Development Trends Escambia and Santa Rosa Counties

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>EMPLOYMENT 2012</th>
<th>ESTIMATED ANNUAL OPENINGS</th>
<th>AVERAGE ENTRY LEVEL HOURLY SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterinary Technologists and Technicians</td>
<td>6,770</td>
<td>8,996</td>
<td>390</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$14.30</td>
</tr>
</tbody>
</table>

Many occupations in this field are listed among the fastest growing occupations and TOP 50 occupations gaining the most new jobs in Florida.

Source: Florida Department of Economic Opportunity — www.floridajobs.org

Sources are listed to provide additional information on related jobs, specialties, and/or industries and are provided for your convenience. Their publication does not constitute an endorsement.

The Center for Advising & Career Services

Go to: Page 5
## Veterinary Technology

**Associate of Science Degree**  
VET-AS

### Accreditation Status
The college is pursuing accreditation from the American Veterinary Medical Association (AVMA) Committee on Veterinary Technician Education and Activities (CVTEA).

### Certifications and Credentials for Employment
Courses in this program prepare the student to take state and industry recognized licensure and certification exam(s). For more information, see the program contact or the department head.

### Entrance Requirements
Consult Program Contact or Department Head for entrance requirements.

### Estimated Cost
**Per College Credit:**  
$104.58, Florida Resident  
$105.58, Alabama Resident  
Additional expenses may apply

### Work Experience Related to Program
Required coursework in the program will take place in regional clinical settings.

### General Education Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 1105</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>3</td>
</tr>
<tr>
<td>BSC 1010</td>
<td>4</td>
</tr>
</tbody>
</table>

The following general education courses must be completed prior to graduation from the program with a "C" or better.

- Humanities/Fine Arts (Category II)  
  PHI 2600 recommended  
- Social/Behavioral Sciences (Category III)  
  (HSC 2100 or DEP 2004 or PSY 2012 recommended)

### Semester I

**ATE 1110**  Animal Anatomy and Physiology  
3 credits

**ATE 1110L**  Animal A&P Lab  
1 credit

**ATE 1650C**  Introduction to Clinical Procedures  
3 credits

**ATE 1311+**  Veterinary Office Procedures and Terminology  
3 credits

**ATE 1050++**  Canine and Feline Behavior  
2 credits

### Semester II

**ATE 1636**  Large Animal Clinical Procedures  
3 credits

**ATE 1636L**  Large Animal Clinical Procedures Lab  
1 credit

**ATE 2618**  Small Animal Diseases  
3 credits

**ATE 2632**  Small Animal Clinical Procedures II  
3 credits

**ATE 2632L**  Small Animal Clinical Procedures Lab II  
1 credit

**ATE 1612**  Large Animal Medicine  
3 credits

**ATE 1941L**  Clinical Work Experience I  
1 credit

### Semester III

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE 2722</td>
<td>Avian, Exotic, Small Mammals and Fish 2</td>
</tr>
<tr>
<td>ATE 2671</td>
<td>Laboratory Animal Medicine 2</td>
</tr>
<tr>
<td>ATE 1942L</td>
<td>Clinical Work Experience II 1</td>
</tr>
</tbody>
</table>

### Semester IV

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE 2634</td>
<td>Small Animal Clinical Procedures III 3</td>
</tr>
<tr>
<td>ATE 2634L</td>
<td>Small Animal Clinical Procedures Lab III 1</td>
</tr>
<tr>
<td>ATE 2630</td>
<td>Pharmacology 4</td>
</tr>
<tr>
<td>ATE 2710</td>
<td>Veterinary Emergency Medicine 3</td>
</tr>
<tr>
<td>ATE 2943L</td>
<td>Clinical Work Experience III 1</td>
</tr>
</tbody>
</table>

### Semester V

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ATE 2020</td>
<td>Contemporary Clinical Issues 3</td>
</tr>
<tr>
<td>ATE 2635</td>
<td>Small Animal Clinical Procedures IV 3</td>
</tr>
<tr>
<td>ATE 2635L</td>
<td>Small Animal Clinical Procedures Lab IV 1</td>
</tr>
<tr>
<td>ATE 2501</td>
<td>Professional Development Seminar 2</td>
</tr>
<tr>
<td>ATE 2511</td>
<td>The Human Animal Bond 2</td>
</tr>
<tr>
<td>ATE 2944L</td>
<td>Clinical Work Experience IV 1</td>
</tr>
</tbody>
</table>

### Total Program Credits
73 credits

* See General Education Course Requirements of current college catalog for options.

** Course has pre- or co-requisites. See Course Descriptions Section of current college catalog.

† Course meets Computer Competence Requirement.

†† Course meets Oral Communications Requirements.

Note: Clinical Work Experience will require that the student spend four hours per week at an approved clinical site each semester.

### Program Contact
Ms. Jeannie Peden (850) 471-4673  
jpeden@pensacolastate.edu

### Department Head
Dr. Matthew Drum (850) 484-1167  
mdrum@pensacolastate.edu

### Financial Aid/Scholarships
Learn about financial aid, scholarships, and total cost to attend, at: [www.pensacolastate.edu](http://www.pensacolastate.edu), then “Quick Link” to Financial Aid

### Need help with Admissions and Registration?
Learn more about New Student Services on Page 4.

For more information call the Program Contact or visit: workforce.pensacolastate.edu

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This publication is to provide general career and program information and is not to be construed as a contract between the student and Pensacola State College. The student is encouraged to work closely with counselors and the department to verify the appropriateness of courses for registration.
<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Technology (A.S.)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>The Accounting Technology A.S. degree is a new program. The above data is reflective of the Job Placement Levels for the Accounting Technology A.A.S.</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Accounting Technology Management</td>
<td>80%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Architectural Design and Construction Technology (A.S.)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Building Construction Technology</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Civil Engineering Technology</td>
<td>100%</td>
<td>N/A</td>
<td>100%</td>
</tr>
<tr>
<td>Drafting and Design Technology</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>The Architectural Design and Construction Technology A.S. degree is a new program. The above data is reflective of the Job Placement Levels for the Building Construction Technology, Civil Engineering Technology, and Draft and Design Technology A.A.S programs.</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>AutoCAD Foundations</td>
<td>100%</td>
<td>0%</td>
<td>75%</td>
</tr>
<tr>
<td>Building Construction Specialist</td>
<td>100%</td>
<td>100%</td>
<td>67%</td>
</tr>
<tr>
<td>Drafting</td>
<td>89%</td>
<td>100%</td>
<td>33%</td>
</tr>
<tr>
<td>Carpentry</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Electricity</td>
<td>50%</td>
<td>71%</td>
<td>100%</td>
</tr>
<tr>
<td>Heating, Ventilation and Air Conditioning</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Plumbing Technology</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Business Administration (A.S.)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Business Administration A.S.</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>Business Administration A.A.S.</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td><strong>The Business Administration A.S. degree has been merged with the Business Administration A.A.S. program to create a new program. The above data is reflective of the Job Placement Levels for the Business Administration A.A.S and Business Administration A.S. programs.</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Computer Programming and Analysis (A.S.)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Computer Programming and Analysis A.A.S.</td>
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<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Computer Programming and Analysis A.S.</td>
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<td><strong>The Computer Programming and Analysis A.S. degree has been merged with the Computer Programming and Analysis A.A.S. program to create a new program. The above data is reflective of the Job Placement Levels for the Computer Programming and Analysis A.A.S and Computer Program and Analysis A.S. programs.</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Computer Programming</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td><strong>The Computer Programming Technical Certificate is a new program and no placement data is available.</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Web Development Specialist</td>
<td>100%</td>
<td>N/A</td>
<td>100%</td>
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<tr>
<td>Advanced Aesthetics</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<td><strong>The Advanced Aesthetics Certificate is a new program and no placement data is available.</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Barbering</td>
<td>67%</td>
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<td>83%</td>
</tr>
<tr>
<td>Cosmetology</td>
<td>76%</td>
<td>83%</td>
<td>88%</td>
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</table>

<table>
<thead>
<tr>
<th>PROGRAM</th>
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<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facials Specialty</td>
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<td>89%</td>
<td>53%</td>
</tr>
<tr>
<td>Nails Specialty</td>
<td>67%</td>
<td>62%</td>
<td>53%</td>
</tr>
<tr>
<td>Criminal Justice Technology (A.S.)</td>
<td>100%</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td><strong>The Criminal Justice Technology A.S. degree is a new program. The above data is reflective of the Job Placement Levels for the Criminal Justice Technology A.A.S.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crime Scene Technician</td>
<td>N/A</td>
<td>100%</td>
<td>85%</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>The Culinary Arts Certificate is a new program and no placement data is available.</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Culinary Management (A.S.)</td>
<td>100%</td>
<td>100%</td>
<td>82%</td>
</tr>
<tr>
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<td>Dental Hygiene (A.S.)</td>
<td>88%</td>
<td>100%</td>
<td>93%</td>
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<tr>
<td>Early Childhood Education (A.S.)</td>
<td>100%</td>
<td>100%</td>
<td>82%</td>
</tr>
<tr>
<td>Florida Child Care Professional Credential (FCCPC)</td>
<td>100%</td>
<td>92%</td>
<td>100%</td>
</tr>
<tr>
<td>Early Childhood Teacher</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Early Childhood Intervention</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Infant/Toddler Specialization</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>EKG Technician</td>
<td>—</td>
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<tr>
<td><strong>The EKG Technician Certificate is a new program and no placement data is available.</strong></td>
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<tr>
<td>Electronics Engineering Technology (A.S.)</td>
<td>100%</td>
<td>67%</td>
<td>92%</td>
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<td><strong>The Electronics Engineering Technology A.S. degree is a new program. The above data is reflective of the Job Placement Levels for the Electronics Engineering Technology A.A.S.</strong></td>
<td></td>
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<tr>
<td>Electronics Aide</td>
<td>100%</td>
<td>88%</td>
<td>100%</td>
</tr>
<tr>
<td>Emergency Medical Services (A.S.)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>Emergency Medical Technician</td>
<td>79%</td>
<td>92%</td>
<td>84%</td>
</tr>
<tr>
<td>Paramedic</td>
<td>100%</td>
<td>100%</td>
<td>89%</td>
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<tr>
<td><strong>The Public Safety Telecommunication Certificate is a new program and no placement data is available.</strong></td>
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<td>Graphic Design Technology (A.S.)</td>
<td>90%</td>
<td>91%</td>
<td>100%</td>
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<td><strong>The Graphic Design Technology A.S. degree is a new program. The above data is reflective of the Job Placement Levels for the Graphic Design Technology A.A.S.</strong></td>
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<tr>
<td>Health Information Technology (A.S.)</td>
<td>100%</td>
<td>90%</td>
<td>60%</td>
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<tr>
<td><strong>The Health Information Technology A.S. degree is a new program. The above data is reflective of the Job Placement Levels for the Health Information Management A.A.S.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Information Coder/Biller</td>
<td>73%</td>
<td>82%</td>
<td>80%</td>
</tr>
<tr>
<td>Health Unit Coordinator</td>
<td>89%</td>
<td>90%</td>
<td>67%</td>
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</table>
### Job Placement Levels

#### Program 2009 2010 2011

<table>
<thead>
<tr>
<th>Program</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitality and Tourism Management (A.S.)</td>
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<td>—</td>
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<tr>
<td>Hospitality and Tourism Management A.A.S.</td>
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<td>100%</td>
<td>100%</td>
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<tr>
<td>Hospitality and Tourism Management A.S.</td>
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<td>100%</td>
<td>100%</td>
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<tr>
<td><strong>The Hospitality and Tourism Management A.S. degree has been merged with the Hospitality and Tourism Management A.A.S. program to create a new program. The above data is reflective of the Job Placement Levels for the Hospitality and Tourism Management A.A.S and Hospitality and Tourism Management A.S. programs.</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Event Planning Management</td>
<td>N/A</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Food and Beverages Management</td>
<td>N/A</td>
<td>100%</td>
<td>N/A</td>
</tr>
<tr>
<td>Guest Services Specialist</td>
<td>67%</td>
<td>0%</td>
<td>83%</td>
</tr>
<tr>
<td>Rooms Division Management</td>
<td>N/A</td>
<td>100%</td>
<td>N/A</td>
</tr>
<tr>
<td>Industrial Management Technology (A.S.)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Information Technology (IT) (A.S.)</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td><strong>The Information Technology Security Degree is a new program and no placement data is available.</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Computer Information Technology (A.S.)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td><strong>The Computer Information Technology A.S. degree is a new program. The above data is reflective of the Job Placement Levels for the Computer Information Management A.A.S.</strong></td>
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<td></td>
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<tr>
<td>Cyber Forensics (A.S.)</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<td><strong>The Cyber Forensics Degree is a new program and no placement data is available.</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cable Technician (Voice and Data Cabling)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Network Communications (LAN)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Wireless Communications</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Landscape and Horticulture Management (A.S.)</td>
<td>50%</td>
<td>100%</td>
<td>50%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Landscape and Horticulture Specialist</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Landscape and Horticulture Professional</td>
<td>100%</td>
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<td>100%</td>
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<tr>
<td>Landscape and Horticulture Technician</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Massage Therapy</td>
<td>62%</td>
<td>100%</td>
<td>78%</td>
</tr>
<tr>
<td>Mechanical Design and Fabrication (A.S.) (Engineering Technology)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>The Mechanical Design and Fabrication A.S. degree is a new program. The above data is reflective of the Job Placement Levels for the Engineering/Mechanical Design and Fabrication Technology A.A.S.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNC Machinist/Fabricator</td>
<td>75%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Computerized Woodworking</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Mechanical Designer/Programmer</td>
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<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>The Mechanical Designer/Programmer certificate is a new program and no placement data is available.</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Medical Assisting</td>
<td>83%</td>
<td>88%</td>
<td>85%</td>
</tr>
<tr>
<td>Health Services Management (A.S.)</td>
<td>33%</td>
<td>100%</td>
<td>89%</td>
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<tr>
<td><strong>The Health Services Management A.S. degree is a new program. The above data is reflective of the Job Placement Levels for the Health Services Management A.A.S.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Administration (A.S.)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Medical Records Transcribing</td>
<td>88%</td>
<td>75%</td>
<td>86%</td>
</tr>
<tr>
<td>Nursing, R.N. (A.S.)</td>
<td>99%</td>
<td>100%</td>
<td>97%</td>
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<tr>
<td><strong>The Nursing Assistant certificate is a new program and no placement data is available.</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Nursing Assistant</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Practical Nursing</td>
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Program Award Listing

**Associate of Science Degree (A.S.)**
- Accounting Technology
- Architectural Design and Construction Technology
- Business Administration
- Computer Information Technology
- Computer Programming and Analysis
- Criminal Justice Technology
- Culinary Management
- Cyber Forensics
- Dental Hygiene
- Early Childhood Education
- Electronics Engineering Technology
- Emergency Medical Services
- Graphic Design Technology
- Health Information Technology
- Health Services Management
- Hospitality and Tourism Management
- Industrial Management Technology
- Information Technology (IT) Security
- Landscape and Horticulture Management
- Mechanical Design and Fabrication
- Medical Office Administration
- Nursing, R.N.
- Office Administration
- Paralegal Studies
- Pharmacy Management
- Photographic Technology
- Physical Therapist Assistant
- Radiography
- Recreation Technology
- Sonography
- Veterinary Technology

**Technical Certificate (CT)**
- AutoCAD Foundations
- Building Construction Specialist
- Cable Technician (Voice and Data Cabling)
- CNC Machinist/Fabricator
- Computer Programming
- Computerized Woodworking
- Crime Scene Technician
- Culinary Arts
- Drafting
- Early Childhood Intervention
- Early Childhood Teacher
- Electronics Aide
- Event Planning Management
- Florida Child Care Professional Credential
- Food and Beverages Management
- Guest Services Specialist
- Infant/Toddler Specialization
- Landscape and Horticulture Professional
- Landscape and Horticulture Specialist
- Landscape and Horticulture Technician
- Mechanical Designer/Programmer
- Medical Information Coder/Biller
- Network Communications (LAN)
- Office Management
- Paramedic
- Rooms Division Management
- Web Development Specialist
- Wireless Communications

**Career and Technical Certificate (VC)**
- Advanced Aesthetics
- Barbering
- Carpentry
- Cosmetology
- EKG Technician
- Electricity
- Facials Specialty
- Health Unit Coordinator
- Heating, Ventilation and Air Conditioning
- Massage Therapy
- Medical Assisting
- Nails Specialty
- Nursing Assistant
- Phlebotomy
- Plumbing Technology
- Practical Nursing
- Psychiatric Technology
- Public Safety Telecommunicator
- Surgical Technology

**Advanced Technical Diploma (ATD)**
- Emergency Medical Technician
- Medical Records Transcribing
- Pharmacy Technician
# Index of Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Technology</td>
<td>10</td>
</tr>
<tr>
<td>Accounting Technology Management</td>
<td>12</td>
</tr>
<tr>
<td>Advanced Esthetics</td>
<td>38</td>
</tr>
<tr>
<td>Architectural Design and Construction Technology</td>
<td>14</td>
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<tr>
<td>AutoCAD Foundations</td>
<td>16</td>
</tr>
<tr>
<td>Barbering</td>
<td>40</td>
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<td>Building Construction Specialist</td>
<td>18</td>
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<td>Business Administration</td>
<td>30</td>
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<td>Cable Technician</td>
<td>98</td>
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<td>Carpentry</td>
<td>22</td>
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<td>112</td>
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<td>94</td>
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<td>Computer Programming and Analysis</td>
<td>32</td>
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<td>Cosmetology</td>
<td>42</td>
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<tr>
<td>Crime Scene Technician</td>
<td>50</td>
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<td>Criminal Justice Technology</td>
<td>48</td>
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<td>Culinary Arts</td>
<td>54</td>
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<tr>
<td>Culinary Management</td>
<td>52</td>
</tr>
<tr>
<td>Cyber Forensics</td>
<td>96</td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>56</td>
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<tr>
<td>Drafting</td>
<td>20</td>
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<tr>
<td>Early Childhood Education</td>
<td>58</td>
</tr>
<tr>
<td>Early Childhood Intervention</td>
<td>61</td>
</tr>
<tr>
<td>Early Childhood Teacher (Preschool)</td>
<td>61</td>
</tr>
<tr>
<td>EKG Technician</td>
<td>64</td>
</tr>
<tr>
<td>Electricity</td>
<td>24</td>
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<tr>
<td>Electronics Aide</td>
<td>68</td>
</tr>
<tr>
<td>Electronics Engineering Technology</td>
<td>66</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>70</td>
</tr>
<tr>
<td>Emergency Medical Technician</td>
<td>72</td>
</tr>
<tr>
<td>Event Planning Management</td>
<td>89</td>
</tr>
<tr>
<td>Facials Specialty</td>
<td>44</td>
</tr>
<tr>
<td>Florida Child Care Professional Credential</td>
<td>63</td>
</tr>
<tr>
<td>Food and Beverages Management</td>
<td>89</td>
</tr>
<tr>
<td>Graphic Design Technology</td>
<td>78</td>
</tr>
<tr>
<td>Guest Services Specialist</td>
<td>89</td>
</tr>
<tr>
<td>Health Information Technology</td>
<td>80</td>
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<td>120</td>
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<td>Health Unit Coordinator</td>
<td>84</td>
</tr>
<tr>
<td>Heating, Ventilation and Air Conditioning</td>
<td>26</td>
</tr>
<tr>
<td>Hospitality and Tourism Management</td>
<td>86</td>
</tr>
<tr>
<td>Industrial Management Technology</td>
<td>90</td>
</tr>
<tr>
<td>Infant/Toddler Specialization</td>
<td>63</td>
</tr>
<tr>
<td>Information Technology (IT) Security</td>
<td>92</td>
</tr>
<tr>
<td>Landscape and Horticulture Management</td>
<td>102</td>
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<td>105</td>
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<td>105</td>
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<td>107</td>
</tr>
<tr>
<td>Massage Therapy</td>
<td>108</td>
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<tr>
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<td>110</td>
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<td>116</td>
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<tr>
<td>Medical Assisting</td>
<td>118</td>
</tr>
<tr>
<td>Medical Information Coder/Biller</td>
<td>82</td>
</tr>
<tr>
<td>Medical Records Transcribing</td>
<td>124</td>
</tr>
<tr>
<td>Nails Specialty</td>
<td>46</td>
</tr>
<tr>
<td>Network Communications</td>
<td>101</td>
</tr>
<tr>
<td>Nursing Assistant</td>
<td>128</td>
</tr>
<tr>
<td>Nursing, R.N.</td>
<td>126</td>
</tr>
<tr>
<td>Office Administration</td>
<td>134</td>
</tr>
<tr>
<td>Office Administration (Medical Office Administration)</td>
<td>122</td>
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<tr>
<td>Office Management</td>
<td>136</td>
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<tr>
<td>Paralegal Studies</td>
<td>138</td>
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<td>Paramedic</td>
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<td>76</td>
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<tr>
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<td>152</td>
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<tr>
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<td>154</td>
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<td>89</td>
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<td>156</td>
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<td>132</td>
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<td>Veterinary Technology</td>
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