Description of the Program

The information & computer technology curriculum prepares students for a career in electronics, computer networking, information technology, and technical management. Coursework provides a sound base of information technology fundamentals and advanced work in internetworking and client-server information systems. Under the Microsoft Academic Alliance and the Red Hat Academy, all students gain in-depth experience in configuring and maintaining operating systems and server applications. Under the Cisco Networking Academy, students gain an in-depth understanding of inter-network technology and experience hands-on practice with Cisco routers and switches. During the program, all students are required to sit for CCNA certification.

For specialization, students choose between three concentrations, Computer Networking, Information Security, and Information Technology. Students who choose the Computer Networking concentration are prepared for the CCNP certification. Students that choose the Information Security concentration learn in-depth procedures to ensure the secure storage and transmission of information. Students who choose the Information Technology concentration take a wider, but less in-depth, base of courses relating to the Information Technology industry.

In addition to the ICT technical courses, the curriculum provides a solid management background. Students take courses in finance, supervision, finance law, technical writing, public speaking, industrial psychology and more. This foundation will provide the needed skills to advance in a technology based career.

This program is for you if you want to:
- Set up and configure computers and systems that allow computers to communicate both locally and over long distances.
- Learn the fundamentals of information technology and technical management. Students develop the background to rise to management positions.
- Pursue a technical career that builds on college algebra and statistics. Calculus not required.
- Begin a computer systems career that does not require multiple courses on computer theory and languages.
- Learn how to use routers, switches, and computers to set up, configure and use information networks.

For more information on the ICT program, please visit our website at www.tecs.ecu.edu/tsys. For more information about ECU admission, tuition, financial aid, housing, and campus tours, please visit ECU’s website at www.ecu.edu.

Bachelor of Science

Information & Computer Technology

Department of Technology Systems

Required Coursework

Information & Computer Technology Core:
- Information & Computer Technology Fundamentals with Lab
- Industrial Technology Applications of Computer Systems
- Network Fundamentals (CCNA) with Lab
- Digital Communication Systems (CCNA) with Lab
- Computer Network Technology (CCNA) with Lab
- Network Environment I (MCP) with Lab
- Network Environment II (RHCSA) with Lab
- Scripting for Information Technology
- Fundamental Network Security with Lab
- Network Environ III (RHCE) with Lab
- Network Internship
- Senior Capstone Design Project I & II
- Enterprise Information Security
- Technical Writing
- Technology Project Management
- Technology Presentations

Concentrations Areas – choose one:

Computer Networking Concentration:
- Internetwork Routing Technology (CCNP) with Lab
- Switching Network Technology (CCNP) with Lab
- Enterprise Network Security (CCNA Security) with Lab
- Network Maintenance, & Troubleshooting (CCNP) with Lab

Information Security Concentration:
- Regulations and Policies
- Intrusion Detection Technologies with Lab
- Enterprise Information Technology Management with Lab
- Information Assurance Technologies with Lab

Information Technology Concentration:
- Web Services Management with Lab
- Regulations and Policies
- Wireless Communication with Lab
- Enterprise Information Technology Management with Lab

General Education and Cognates (69 semester hours):

<table>
<thead>
<tr>
<th>English (6 hrs)</th>
<th>Math (6 hrs)</th>
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<tbody>
<tr>
<td>Composition I &amp; II</td>
<td>College Algebra</td>
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<tr>
<td>Social Science (12 hrs)</td>
<td>Statistics</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>Science (8 hrs)</td>
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<tr>
<td>Introductory Psychology</td>
<td>General Physics I</td>
</tr>
<tr>
<td>Personnel and Industrial Psychology</td>
<td>General Physics II</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td>Cognates (9 hrs)</td>
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<tr>
<td>Humanities &amp; Fine Arts (10 hrs)</td>
<td>Cost &amp; Capital Project Analysis</td>
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<tr>
<td>At least one in Humanities</td>
<td>Industrial Supervision</td>
</tr>
<tr>
<td>Public Speaking/Business Comm</td>
<td>Legal Environmental of Business</td>
</tr>
<tr>
<td>Hum/Fine Arts to total 10 hrs</td>
<td>Approved Electives (12 hrs)</td>
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