



BS in Information & Computer Technology

Department of Industrial Technology

East Carolina University



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 that 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. Students are not required to take calculus.
- 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.

Required Coursework

Information & Computer Technology Core (48 hrs):

- ICTN 1500 PC Hardware with Lab
- ITEC 2000 Ind. Tech. Applications of Computer Systems
- ICTN 2000 Intro to Telecommunications
- ICTN 2732 Scripting for Information Technology
- ICTN 2154 Digital Communication Systems (CCNA) with Lab
- ICTN 2158 Computer Network Technology (CCNA) with Lab
- ICTN 2510 Network Environ I (MCP) with Lab
- ICNT 2530 Network Environ II (RHCT) with Lab
- ICTN 2900 Intro to Network Security with Lab
- ITEC 3290 Technical Writing
- ITEC 3300 Technology Project Management
- ICTN 3540 Network Environ III (RHCE) with Lab
- IDIS 3790 Technical Presentations
- ICTN 4000 Network Internship
- ICTN 4020 & 4022 Senior Capstone Design Project I & II
- ICTN 4040 Communication Security

Concentrations Areas – choose one (12 hrs):

Computer Networking Concentration:

- ICTN 3250 Inter-network Routing Tech (CCNP) with Lab
- ICTN 4150 Switching Network Tech (CCNP) with Lab
- ICTN 4250 Enterprise Network Tech (CCNP) with Lab
- ICTN 4592 Optimizing Converged Networks (CCNP) with Lab

Information Security Concentration:

- ICTN 4064 Regulations and Policies
- ICTN 4200 Intrusion Detection Technologies with Lab
- ICTN 4600 Enterprise Information Technology Mgmt with Lab
- ICTN 4800 Information Assurance Technologies with Lab

Information Technology Concentration:

- ICTN 3900 Web Services Management with Lab
- ICTN 4010 User Application Mgmt & Emerging Tech with Lab
- ICTN 4064 Regulations and Policies
- ICTN 4600 Enterprise Information Technology Mgmt with Lab

General Education and Cognates (69 semester hours):

English (6 hrs)

- ENGL 1100, 1200 Composition

Social Science (12 hrs)

- ECON 2113 Prin. of Microeconomics
- PSYC 1000 Introductory Psychology
- PSYC 3241 Industrial Psychology
- Social Science Elective

Humanities & Fine Arts (10 hrs)

- At least one in Humanities
- COMM 2410 or 2420 Speech
- Hum/Fine Arts to total 10 hrs

Health & Exercise (3 hrs)

Math (6 hrs)

- MATH 1065 College Algebra
- ITEC 3200 or MATH 2283 Statistics

Science (8 hrs)

- PHYS 1250/51 General Physics I
- PHYS 1260/61 General Physics II

Cognates (9 hrs)

- ITEC 3800 or ACCT 2101
- ITEC 4293 or MGMT 3202
- FINA 2244 Legal Envir of Business

Approved Electives (12 hrs)

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