



COMPUTER & INFORMATION TECHNOLOGY

SCHOOL OF TECHNOLOGY
AT EASTERN ILLINOIS UNIVERSITY

The Computer and Information Technology (CIT) program prepares technical professionals for applications of computer and information technology. Those professionals typically work in an information technology (IT) or information systems (IS) department in organizations ranging from manufacturing, service, and healthcare to education and government.

MATHEMATICS & STATISTICS: 6-9 HRS

- **MAT 2120G** Finite Mathematics
OR **MAT 2110G** Brief Calculus with Applications;
OR **MAT 1441G** Calculus and Analytic Geometry I
- **MAT 2250G** Elementary Statistics;
OR **BUS 2810** Business Statistics I

TECHNICAL: 60 HRS

- **CIT 1001** Introduction to CIT
- **CIT 1813** Introduction to Programming (C++)
- **CIT 2523** Data Communication Technology I
- **CIT 2773** Database Administration
- **CIT 2803** Operating Systems for Technology
- **CIT 2853** Cybersecurity Intr. Det. and Prev.
- **CIT 4663** System Administrator and Architecture
- **CIT 4749** Capstone Project
- **CIT 4760** Systems Analysis, Design & Dev
- **CIT 4770** Database & Data Mgmt
- **CIT 4823** Big Data and Cloud Computing
- **CIT 4843** Human Computer Interaction
- **CSM 2670** Object Oriented Programming (Java)
- **CSM 3870** Data Structures
- **DGT 4813** Web Development
- **DGT 4814** Digital Media Strategy
- **EGT 1323** Computers for Applied Eng. Tech.
- **EGT 2324** Electricity and Electronic Controls
- **MIS 4700** Advanced Networking
- ¹ **MIS 4850** Systems Security

MANAGEMENT: 7 HRS

- **EGT 3414** Engineering Tech. Project Management
- **OPD 4835** Supervision in Organizations

¹ "Z" sections of MIS 4850, MIS 4860 and EGT 4823 can only be taken by students who wish to pursue and are admitted to the Accelerated Graduate Program for the M.S. in Cybersecurity. Please see the Graduate Catalog for requirements

² Application and acceptance into Accelerated Graduate Program required. Please see the Graduate Catalog for requirements

ELECTIVES: 12 HRS

- **CSM 2170** Computer Science I
- **CSM 3070** Competitive Programming
- **CSM 4170** Programming for Mobile Devices
- **DGT 1363** Introduction to Graphics Technology
- **DGT 2123** Introduction to Digital Photography
- **DGT 3303** Introduction to Gaming, Anim. and Sim.
- **DGT 3313** 3D Modeling for Gaming, Anim. and Sim.
- **DGT 4753** Digital Video
- **EGT 3103** Robots and Control Systems
- **EGT 3763** Automation and Data Capture
- **EGT 4503** Engineering Technology Cost Analysis
- ¹ **EGT 4823** Facility Security
- **MIS 4420** Advanced VB .NET Business Programming
- **MIS 4530** Web & Mobile Application Development
- ¹ **MIS 4860** Eth. Hacking & Net. Defense
- **OSC 4820** Business Analytics and Data Mining
- **TEC 3920** Independent Study
- **TEC 4275** Industrial Internship
- **TEC 4970** Special Topics in Technology
- **TEC 4444** Honors Independent Study
- **TEC 4444A** Honors Independent Study I
- **TEC 4555** Honors Research
- **TEC 4644** Honors Thesis

² **Accelerated Graduate Program – M.S. in Cybersecurity:**

- ² **TEC 5313Z** Networking & Advanced Data Comm
- ² **TEC 5323Z** Advanced Database Technology

² **Accelerated Graduate Program – M.S. in Technology:**

- ² **TEC 5313Z** Networking & Advanced Data Comm
- ² **TEC 5323Z** Advanced Database Technology
- ² **TEC 5333Z** Management of Computer Technology
- ² **TEC 5343Z** Multimedia & Web Technology

TOTAL MAJOR HOURS: 85-88 HRS