

# BACHELOR OF SCIENCE IN COMPUTER & INFORMATION TECHNOLOGY



## MAKING TECHNOLOGY WORK FOR YOU.

The Computer and Information Technology (CIT) program prepares technical professionals for applications of computer and information technology. Those professionals find careers in Information Technology (IT) or Information Systems (IS) in manufacturing, service, healthcare, education and government organizations.

This well-rounded degree can prepare you for jobs such as:

- Network system engineer
- Administrator of architect
- Information security analyst
- System administrator or programmer
- Database administrator
- Web designer or developer
- Computer programmer
- Software developer
- Mobile app developer
- Computer user support specialist
- and many more...

+ WELL-ROUNDED CURRICULUM

+ DEDICATED AND HIGH QUALITY FACULTY

+ EXTENSIVE ENGAGEMENT OPPORTUNITIES

+ ACCELERATED MASTERS OPPORTUNITY

The Computer and Information Technology (CIT) program is designed with a healthy balance of technical, managerial and organizational content to equip students with knowledge, skills, and teamwork ability to succeed in various organizations.

Faculty in Computer Information Technology (CIT) are highly qualified with degrees from Computer Science, Computer Engineering, Systems Engineering and other related Engineering and Technology disciplines. They are actively engaged in professional development and research in their respective specialized areas.

Student engagement in their career field is a cornerstone that differentiates programs in the School of Technology at EIU, and CIT is no exception. Students participate in national competitions, attend trade shows, complete industry relevant projects, network with CIT professionals and have opportunities to earn academic credit for internships in CIT.

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**CIT PROGRAM COORDINATOR**

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IT'S ALL ABOUT YOU. APPLY TODAY AT [MY.EIU.EDU](http://MY.EIU.EDU).

[eiu.edu/cit](http://eiu.edu/cit)

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## TOTAL MAJOR COURSEWORK: 86-89 HRS

### 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: 61 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 2170** Computer Science I  
**CSM 2670** Object Oriented Programming (Java)  
**DGT 3813** Web Development  
**DGT 4814** Digital Media Strategy  
**EGT 1323** Computers for Applied Eng. and Tech.  
**EGT 2324** Electricity and Electronic Controls  
**MIS 4700** Advanced Networking  
<sup>1</sup>**MIS 4850** Systems Security

### MANAGEMENT: 7 HRS

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

### ELECTIVES: 12 HRS

- CSM 3070** Competitive Programming  
**CSM 3870** Data Structures  
**CSM 4170** Programming for Mobile Devices  
**DGT 1363** Introduction to Graphics Technology  
**DGT 2123** 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  
<sup>1</sup>**EGT 4823** Facility Security  
**MIS 4420** Advanced VB .NET Business Programming  
**MIS 4530** Web & Mobile Application Development  
<sup>1</sup>**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

## ACCELERATED GRADUATE PROGRAM OPTIONS

EIU undergraduate students with at least 60 hours of undergraduate credit and a 3.25 GPA can apply to an accelerated graduate program. An accelerated graduate program allows you to start taking your graduate coursework as an undergraduate and then count it both for your undergraduate degree and your graduate degree, saving you time and money.

### M.S. IN CYBERSECURITY:

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

### M.S. IN TECHNOLOGY:

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

Contact the Graduate School for more information:  
[graduate@eiu.edu](mailto:graduate@eiu.edu) or 217-581-2220

## SUGGESTED 4-YEAR SCHEDULE

- Consult catalog for specific course prerequisites
- Consult program checklist for focus area of study course offerings

FALL		YEAR 1		SPRING	
CIT 1001	1	CIT 1813	3		
CMN 1310G	3	ENG 1002G	3		
EGT 1323	3	Humanities	3		
ENG 1001G	3	Humanities/Fine Arts	3		
Fine Arts	3	MAT 2120G	3		
Social & Behavioral	3	<b>OR</b> MAT 2110G	3		
		<b>OR</b> MAT 1441G	5		
Total	16	Total	15-17		
FALL		YEAR 2		SPRING	
BUS 2810	3	CIT 2803	3		
<b>OR</b> MAT 2250G	4	CIT 2853	3		
CIT 2523	3	CSM 2670	4		
CIT 2773	3	PHY/BIO Science	4		
CSM 2170	4	Social & Behavioral	3		
EGT 2324	4				
Total	17-18	Total	17		
FALL		YEAR 3		SPRING	
CIT 4770	3	CIT 4760	3		
DGT 4814	3	DGT 3813	3		
CIT Elective Course	3	CIT Elective Course	3		
MIS 4700	3	CIT Elective Course	3		
PHY/BIO Science	3	Social & Behavioral	3		
Total	15	Total	15		
FALL		YEAR 4		SPRING	
CIT 4663	3	CIT 4749	3		
CIT 4823	3	CIT Elective Course	3		
CIT 4843	3	EIU 4__G Senior Sem.	3		
EGT 3414	4	<sup>1</sup> MIS 4850	3		
		ODL 4835	3		
Total	13	Total	15		

<sup>1</sup> "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.