INFORMATION TECHNOLOGY, BIT

Program Learning Outcomes

Graduates of this program will be able to:

a. Use and apply current IT discipline-related concepts and practices

b. Identify and analyze problems or opportunities in the IT realm and define requirements for addressing them when an IT solution is appropriate

c. Design and develop effective IT-based solutions and integrate them into the user environment

d. Create and implement effective project plans

e. Identify and investigate current and emerging technologies and assess their applicability to address individual and organizational needs

f. Analyze the impact of technology on individuals, organizations, and society

g. Collaborate in teams to accomplish common goals

h. Communicate effectively and efficiently

i. Recognize the qualities necessary to succeed in a professional environment

Program Requirements

Code	Title	Credit Hours
Core IMPACTS		**42**
All core curriculum recommendations are shown under the Core IMPACTS section of the Undergraduate Graduation Requirements. (https://catalog.clayton.edu/graduation-requirements/undergraduate-graduation-requirements/core-curriculum/#nonsciencemajorstext)		
Field of Study - Information Technology		**18**
ITFN 1101	Foundations-Information Technology	3
ITFN 1201	Foundations of Database Design	3
CSCI 1301	Computer Science I [1]	3
CSCI 1302	Computer Science II [1]	3
ITFN 2214	Web Application Development	3
Choose one from the following:		3
MATH 1401	Elementary Statistics	
MATH 2020	Introductory Discrete Math	
MATH 2502	Calculus II	
WBIT 2300		
Lower Division Major Requirements (IT Foundations)		**9**
ITFN 1401	Foundations of Webmaster	3
ITFN 1502	Fnds. of Networking & Security	3
ITFN 2512	Interm. Networking & Security	3
Upper Division Major Requirements		**27**
ITFN 3003	Professional Dev. and Ethics	3
ITFN 3103	Human-Computer Interaction	3
ITFN 3112	System Analysis and Design	3
ITFN 3144	Informatics Project Management	3
ITFN 3314	Testing and Quality Assurance	3
or ITFN 3316	SW Security, Testing, and QA	
ITFN 3601	Operating Systems	3
ITFN 4014	Internship Cooperative	3
ITFN 4154	Informatics Integration	3
ITFN 4433	Web Integration	3
Upper Division Information Technology Electives		**3**
Choose three hours of electives.		
Major Concentration		**9**
Choose one emphasis from the following:		
Computer Engineering Technology Concentration (p. 1)		
Database Administration Concentration (p. 1)		
Networking and Security Concentration (p. 1)		
Security for Financial Technology Concentration (p. 1)		
Informatics Concentration (p. 1)		
Free Electives		**12**
Choose 12 hours of free electives. [2]		
Total Credit Hours		**120**

Major Concentration Requirements

Computer Engineering Technology Concentration

Code	Title	Credit Hours
ENGR 3020	Electronics	3
ENGR 3040	Digital Circuits and Computer Design	3
ENGR 4120	Embedded Systems	4
Total Credit Hours		**10**

Database Administration Concentration

Code	Title	Credit Hours
ITDB 4201	Advanced Database Modeling	3
ITDB 4202	Database Applications	3
ITDB 4203	Database Admin & Architecture	3
Total Credit Hours		**9**

Networking and Security Concentration

Code	Title	Credit Hours
ITNW 4501	Network Planning and Design	3
ITNW 4502	Secure Networks & Comm. Protoc	3
ITMM 4423	Security for E-Commerce	3
Total Credit Hours		**9**

Security for Financial Technology Concentration [3]

Code	Title	Credit Hours
FTA 4001	Foundations of Fintech	3
FTA 4002	Financial Technologies	3
FTA 4100	Introduction to Information Security for FinTech	3
Total Credit Hours		**9**

Informatics Concentration

Choose nine hours of upper division courses in a single discipline or in a recognized minor program at Clayton State. Students should use Free

Electives to satisfy any prerequisites for upper division coursework in an Informatics Concentration. See additional information below.

Additional Information about Informatics Concentrations

BIT students are encouraged to apply information technology skills to solve real world problems by taking coursework in another discipline. The BIT program provides flexibility for students to complete a minor in another discipline at Clayton State. An example for an informatics concentration is Health Informatics. The coursework that constitutes the Health Informatics Concentration are:

Code	Title	Credit Hours
HCMG 3101	Intro to Health Systems Mgmt.	3
HCMG 3340	Healthcare Information Tech.	3
HCMG 3501	Health Care Systems/TQM	3
Total Credit Hours		**9**

Students pursuing the Health Informatics Concentration should take HSCI 2111 Intro to Health Care Environ. as a Free Elective.

Students should consult with their academic advisor to explore other areas for a concentration in Informatics.

Other Program-Specific Graduation Requirements

BIT students must earn a grade of C or better (or K) in the following courses:

- All IT courses (i.e., courses with ITDB, ITFN, ITNW, and ITMM, and WBIT prefixes)
- All CS courses (i.e., courses with CSCI prefix)
- ENGL 1101 English Composition I & ENGL 1102 English Composition II; CRIT 1101 Critical Thinking
- All MATH courses applied toward graduation.
- All upper division courses applied toward graduation.

[1] Programming options are CSCI 1301 Computer Science I/CSCI 1302 Computer Science II

[2] Students pursuing Informatics Concentration should choose courses in the free electives to satisfy prerequisites of the required upper division courses from the selected area of concentration.

[3] All courses with FTA prefix are offered via eCampus through the USG FinTech Academy collaborative.

Suggested Course Sequence

Please Note: This is a suggested course sequence and assumes a starting freshman with no prior college credit who intends to complete their degree in four years. Students should consult with their academic advisor and review the course prerequisites and minimum grade requirements as seen in the Academic Catalog.

Course	Title	Credit Hours
First Year		
First Semester		
ENGL 1101	English Composition I	3
	Credit Hours	**3**
	Total Credit Hours	**3**