INFORMATION TECHNOLOGY MAJOR

The Department offers a BS in Information Technology program which prepares students for professional careers or advanced degree programs in the field of information technology with emphasis on database management, internet application development, software engineering and web technologies.

Learning Goals and Outcomes

Goal 1: Students will learn how to perform the requirements of a practicing informational technologists.

Outcome 1: Students will be able to solve technical problems and implement their solutions in an appropriate technological environment.

Goal 2: Students will study the foundations of scientific and mathematical principles that support the IT discipline.

Outcome 2: Students will be able to design systems, components, or processes to meet specified requirements of IT.

Goal 3: Students will be prepared to utilize what they have leaned and communicate it to others.

Outcome 3: Students will be able to analyze and communicate contemporary issues related to the IT field orally and in written form.

Goal 4: Students will understand how to adapt an evolve in complex technological environments.

Outcome 4: Students will be able to work in teams to create various software systems within IT environments.

Requirements

Cornerstone Core Curriculum Requirements

Consist of 14 core and 2 overlay requirements. See below for additional detailed information on each of these requirements.

Code	Title	Hours
First Year Course Requirements		
ENG 101	Craft of Language	3
World History Course Area		3
Philosophy Requirements		
Either Level One or Level Two (but not both) -- must be Ethics designated. If approved, philosophy courses may count for a student's Writing Intensive overlay. Students may not double-count the same course as Philosophy Level Two and as a Mission Overlay course.		
Philosophy Level One		3
Philosophy Level Two		3
Theology & Religious Studies Requirements		
If approved, Theology & Religious Studies courses may count for a student's Writing Intensive overlay. Students may not double-count the same course as CCC Theology and as a Mission Overlay course.		
Theology		3
Religious Studies		3
Diversity & INT 151 Requirements		
A student's Diversity course may not count for any other CCC course area requirement or as their Mission Overlay course. If approved, Diversity courses may count for a student's Writing Intensive Overlay requirement. INT 151 may not count for any other CCC requirements. This course must be taken in the first two years		
Diversity		3
INT 151	Inequality in American Society	1
Math & Natural Science Requirements		
If approved, Math & Natural Science Requirements may count toward overlay requirements.		
Mathematics		3-4
Natural Science		4
Social Science Requirement		**3**
If approved, such Social Science Requirement may count toward a student's overlay requirements.		
Non-Native Language Requirement		**3-4**
A single Non-Native Language course may not count as an overlay course but a second language course fulfills a student's Mission Overlay requirement.		
Literature Requirement		**3**
If approved, Literature courses may count toward a student's overlay requirements.		
Fine and Performing Arts, Creativity, and Design Requirement		**3**
If approved, Fine and Performing Arts, Creativity, and Design courses may count toward a student's overlay requirements.		
Overlay Requirements		
Writing-Intensive		3
If approved, Writing-Intensive courses may double count as major courses, minor courses, electives, or as any CCC course area requirement except for the first-year courses (World History and Rhetoric and Composition).		
Mission-Overlay		3
Mission Overlay courses may double count as major courses, minor courses, elective courses, or any of the following CCC course areas: Fine and Performing Arts, Creativity, and Design, Literature, Mathematics, Natural Science, or Social Science.		
Total Hours		**47-49**

Recommended CCC Courses

Code	Title	Hours
Social Science		
ECN 101	Introductory Economics Micro	

Major Requirements

Code	Title	Hours
Required Core Courses		
ACC 101	Concepts of Financial Acct	3
ACC 102	Managerial Accounting	3
CSC 120	Computer Science I	4
CSC 121	Computer Science II	4
CSC 201	Data Structures	4

CSC 202	Computer Architecture	3
CSC 240	Discrete Structures	3
CSC 261	Principles of Programming Lang	3
CSC 310	Computer Systems	3
CSC 315	Software Engineering	3
CSC 495	Senior Project	3
ECN 102	Introductory Economics Macro	3
Mathematics (will count as CCC: Mathematics)		**3-4**
MAT 155	Fundamentals of Calculus	
MAT 161	Calculus I	
Select five additional courses [1]		**15**
Total Hours		**57-58**

[1] Any ACC, CSC, DSS, ECN, or FIN courses with advisor approval.

Free Electives

Six courses. Graduation requires 120 credits. Any credits necessary to reach that number outside of the CCC and major requirements are considered free electives.

Areas of Interest

Students interested in **Artificial Intelligence** can take three electives from the following list:

Code	Title	Hours
CSC 330	Generative AI	3
CSC 349	Machine Learning	3
CSC 362	Artificial Intelligence	3
CSC 372	Game AI	3

Students interested in **Cybersecurity** can take three electives from the following list:

Code	Title	Hours
CSC 340	Intro to Cybercrime	3
CSC 364	Network Forensics	3
CSC 366	Intro to Ethical Hacking	3

Typical Course Sequence

Course	Title	Hours
First Year		
Fall		
CSC 120	Computer Science I	4
INT 151	Inequality in American Society	1
Philosophy Level One or Theology		3
World History		3
Mathematics		3-4
Hours		**14-15**
Spring		
CSC 121	Computer Science II	4
MAT 155	Fundamentals of Calculus	3-4
or MAT 161	or Calculus I	
or ECN 101	or Introductory Economics Micro	
Non-Native Language		3-4
Social Science		3
ENG 101	Craft of Language	3
Hours		**16-18**

Sophomore		
Fall		
CSC 201	Data Structures	4
CSC 240	Discrete Structures	3
ACC 101	Concepts of Financial Acct	3
ECN 101	Introductory Economics Micro	3
or ECN 102	or Introductory Economics Macro	
PHL Level I or Theology		3
Hours		**16**
Spring		
CSC 261	Principles of Programming Lang	3
ACC 102	Managerial Accounting	3
ECN 101	Introductory Economics Micro	3
or ECN 102	or Introductory Economics Macro	
PHL Level Two		3
Free Elective		3
Hours		**15**
Junior		
Fall		
CSC 202	Computer Architecture	3
CSC 351	Database Management Systems	3
Diversity		3
Natural Science		3-4
Free Elective		3
Hours		**15-16**
Spring		
CSC 310	Computer Systems	3
CSC 357	Internet of Things	3
or CSC 360	or Intro to Cloud Computing	
Literature		3
Elective or Writing Intensive overlay		3
Free Elective		3
Hours		**15**
Senior		
Fall		
CSC 315	Software Engineering	3
CSC 353	Internet Application Develpmnt	3
ACC, CSC, DSS, ECN or FIN elective		3
Fine & Performing Arts, Design, & Creativity		3
Elective or Mission Overlay		3
Hours		**15**
Spring		
CSC 495	Senior Project	3
ACC, CSC, DSS, ECN or FIN elective		3
Religious Studies		3
Free Electives		6
Hours		**15**
Total Hours		**121-125**