

APPLIED COMPUTING MINOR

All disciplines can benefit from computing technology. This multidisciplinary minor is designed to provide the knowledge of modern computing technology you need to be more effective in your major area of interest.

Degree Requirements (18 Hours)

Foundation Courses (6 hours)

Course	Title	Credits
Select two of the following:		
CSCE 101	Introduction to Computer Concepts	6
CSCE 102	General Applications Programming	
ITEC 101	Thriving in the Tech Age	
GEOG 105	The Digital Earth	
Total Credit Hours		6

Note: If either or both CSCE 101 and CSCE 102 are used to satisfy the Analytical Reasoning and Problem Solving requirement of the Carolina Core then either GEOG 105, ITEC 101, and/or any Intermediate or Advanced course may be substituted in the minor.

Intermediate Courses (6 hours)

Course	Title	Credits
Select two of the following:		
CSCE 104	Program Design and Development	6
CSCE 201	Introduction to Computer Security	
GEOG 263	Geographic Information Systems	
GEOG 341	Cartography	
ITEC 233	Introduction to Computer Hardware and Software	
ITEC 245	Introduction to Networking	
ITEC 264	Computer Applications in Business I	
ITEC 265	Introduction to Databases	
MART 210	Digital Media Arts Fundamentals	
ISCI 201	Data, Information & Society	
ISCI 202	Information Literacy and Technology	
Total Credit Hours		6

Note: No course used to satisfy a Carolina Core, Major, or other Minor requirement may be used to satisfy the Applied Computing Minor requirements. In the event of conflict for an Intermediate Course, any Intermediate or Advanced course may be substituted to satisfy the minor.

Advanced Courses (6 hours)

Course	Title	Credits
Select two of the following:		
GEOG 551	Remote Sensing of the Environment	6
GEOG 554	Spatial Programming	
GEOG 563	Advanced Geographic Information Systems	
GEOG 564	GIS-Based Modeling	
GEOG 565	Geographic Information System (GIS) Databases and Their Use	
ITEC 362	Introduction to Web Systems	
ITEC 370	Database Systems in Information Technology	

ITEC 445	Advanced Networking and Security	
ITEC 447	Management of Information Technology	
ITEC 493	Information Technology Security for Managers	
ITEC 545	Telecommunications	
ITEC 560	Project Management Methods	
ITEC 562	Advanced Web Support Systems	
ITEC 564	Capstone Project for Information Technology	
ITEC 570	Database Management and Administration	
MART 371	The Moving Image	
MART 380	New Media Art	
MART 571C	Moving Image Advanced: Animation	
MART 581D	New Media Advanced: Video Game Design	
ISCI 301	Text Mining in Big Data Analytics	
ISCI 402	Management in Data Driven Organizations	
ISCI 420	Information and Communication Needs and Assessment	
ISCI 430	User-Centered Information Architecture	
ISCI 435	Planning and Sustaining Digital Projects	
Total Credit Hours		6

Note: No course used to satisfy a Carolina Core, Major, or other Minor requirement may be used to satisfy the Applied Computing Minor requirements. In the event of conflict for an Advanced Course, any other Advanced course may be substituted to satisfy the minor.

Advisement Tracks

The following tracks are recommended (but not required) for students interested in particular areas within computing. Suggested courses for such tracks are listed below.

Animation

Course	Title	Credits
CSCE 101	Introduction to Computer Concepts	3
CSCE 102	General Applications Programming	3
CSCE 201	Introduction to Computer Security	3
MART 210	Digital Media Arts Fundamentals	3
MART 371	The Moving Image	3
MART 571C	Moving Image Advanced: Animation	3
Total Credit Hours		18

Databases

Course	Title	Credits
CSCE 101	Introduction to Computer Concepts	3
CSCE 102	General Applications Programming	3
ITEC 264	Computer Applications in Business I	3
ITEC 265	Introduction to Databases	3
ITEC 370	Database Systems in Information Technology	3
ITEC 570	Database Management and Administration	3
Total Credit Hours		18

Game Design

Course	Title	Credits
CSCE 101	Introduction to Computer Concepts	3
CSCE 102	General Applications Programming	3

CSCE 201	Introduction to Computer Security	3
MART 210	Digital Media Arts Fundamentals	3
MART 380	New Media Art	3
MART 581D	New Media Advanced: Video Game Design	3
Total Credit Hours		18

Geographic Information Systems

Course	Title	Credits
CSCE 101	Introduction to Computer Concepts	3
CSCE 104	Program Design and Development	3
GEOG 105	The Digital Earth	3
GEOG 263	Geographic Information Systems	3
GEOG 554	Spatial Programming	3
GEOG 563	Advanced Geographic Information Systems	3
Total Credit Hours		18

Geographic Data: Visualization and Application

Course	Title	Credits
CSCE 101	Introduction to Computer Concepts	3
GEOG 105	The Digital Earth	3
GEOG 263	Geographic Information Systems	3
GEOG 341	Cartography	3
GEOG 551	Remote Sensing of the Environment	3
GEOG 564	GIS-Based Modeling	3
Total Credit Hours		18

Information Infrastructure

Course	Title	Credits
CSCE 101	Introduction to Computer Concepts	3
CSCE 102	General Applications Programming	3
CSCE 104	Program Design and Development	3
ISCI 202	Information Literacy and Technology	3
ISCI 402	Management in Data Driven Organizations	3
ISCI 435	Planning and Sustaining Digital Projects	3
Total Credit Hours		18

Information Science

Course	Title	Credits
CSCE 101	Introduction to Computer Concepts	3
CSCE 102	General Applications Programming	3
CSCE 104	Program Design and Development	3
ISCI 201	Data, Information & Society	3
ISCI 301	Text Mining in Big Data Analytics	3
ISCI 420	Information and Communication Needs and Assessment	3
Total Credit Hours		18

Networking

Course	Title	Credits
CSCE 101	Introduction to Computer Concepts	3
CSCE 102	General Applications Programming	3
ITEC 233	Introduction to Computer Hardware and Software	3
ITEC 245	Introduction to Networking	3

ITEC 445	Advanced Networking and Security	3
ITEC 545	Telecommunications	3
Total Credit Hours		18

Project Management

Course	Title	Credits
CSCE 101	Introduction to Computer Concepts	3
CSCE 102	General Applications Programming	3
ITEC 265	Introduction to Databases	3
ITEC 362	Introduction to Web Systems	3
ITEC 560	Project Management Methods	3
ITEC 564	Capstone Project for Information Technology	3
Total Credit Hours		18

Web Development

Course	Title	Credits
CSCE 101	Introduction to Computer Concepts	3
CSCE 102	General Applications Programming	3
CSCE 104	Program Design and Development	3
MART 210	Digital Media Arts Fundamentals	3
ITEC 362	Introduction to Web Systems	3
ITEC 562	Advanced Web Support Systems	3
Total Credit Hours		18

Other Course Substitutions

The university may develop new courses that are appropriate for this minor as a result of rapid advances in computing. A student may substitute such a course for one of the requirements only with the approval of the advisor of the student and the director of the minor.