Notes

- All minors consist of five courses.
- Minors for the Division of Mathematics, Computation, and Statistics include Biostatistics, Computer Science, Information Technology/Cyber Security, Mathematics, Scientific Computation, Statistics and Web Design and Development.

Minor in Biostatistics

Complete the following three courses.

Course #	Course Title	Credits	Complete
STAT 118*	Introductory Statistics	4	
STAT 227	Statistical Design and Analysis	4	
STAT 229	Regression Models	4	

*Students who had the equivalent of STAT 118 in high school should consult with their Mathematics or Statistics advisor about the selection of a fifth course.

Choose one course from the following list of courses.

Courses Selected	Credits	Complete
	4	

- BIOL 104 Introduction to Environmental Science
- BIOL 113 General Biology
- BIOL 123N Principles of Microbiology
- BIOL 336 Genetics
- BIOL 346 Epidemiology of Infectious Disease

Choose one course from the following list of courses.

Courses Selected	Credits	Complete
	4	

- SOCI 241 Health, Illness & Society
- PSYC 203 Research Methods in Psychology
- STAT 228 Introduction to Data Science

Minor in Computer Science

-Web Development

This option provides a strong technical background for anyone wishing to develop web-based applications. Students will learn HTML, JavaScript/ES6+, Node.js, and database design and implementation, as well as the network infrastructure upon which web applications are built, including security considerations.

Complete the following courses.

Course #	Course Title	Credits	Complete
CS 110	Fundamentals of Information Technology	4	
CS 112	Introduction to Computer Science	4	
CS 221	Database Management Systems	4	
CS 227	Computer Networks	4	
CS 321	Web-Centric Programming	4	

- Software Development

This option provides an introduction to software development and programming. It is appropriate for anyone who is considering a major in Computer Science or who is interested in application programming.

Complete the following courses.

Course #	Course Title	Credits	Complete
CS 112	Introduction to Computer Science	4	
CS 221	Database Management Systems	4	
CS 232	Data Structures	4	
CS 330	Structure and Organization of Programming Language	4	
CS 335	Software Engineering	4	

-Open

A custom-designed minor consisting of five courses may be proposed by students to achieve their specific goals. Faculty members are available to help students design this minor. Computer Science and Information Technology faculty must approve the final proposal.

Minor in Information Technology/Cyber Security

Complete the following courses.

Course #	Course Title	Credits	Complete
CS 110	Fundamentals of Information Technology	4	
CS 112	Introduction to Computer Science	4	
CS 227	Computer Networks	4	
CS 245	Computing Systems	4	
CS 327	Cybersecurity	4	

Minor in Mathematics

Complete the following four courses.

Course #	Course Title	Credits	Complete
MATH 211	Linear Algebra	4	
MATH 220	Multivariable Calculus	4	

Complete three additional MATH courses numbered 121 or higher, except STAT 227, 228 or 229.

Courses Selected	Credits	Complete
	4	
	4	
	4	

Minor in Scientific Computation

Complete the following four courses.

Course #	Course Title	Credits	Complete
CS 112	Introduction to Computer Science	4	
CS 221	Database Management Systems	4	
STAT 118 OR STAT 227	Introductory Statistics OR Statistical Design and Analysis	4	
MATH 343	Mathematical Modeling	4	

Choose one course from the following list of courses.

Courses Selected	Credits	Complete
	4	

- CS 226 Computer Organization and Architecture
- MATH 225 Differential Equations
- STAT 227 Statistical Design and Analysis (if not taken earlier)

- STAT 338/MATH 338 Probability Theory

Minor in Statistics

Complete the following four courses.

Course #	Course Title	Credits	Complete
STAT 227	Statistical Design and Analysis	4	
STAT 229	Regression Models	4	
MATH 338/ STAT 338	Probability Theory	4	
STAT 339	Statistical Theory	4	

Choose one course from the following list of courses.

Courses Selected	Credits	Complete
	4	

- STAT 228 Introduction to Data Science
- MATH 319 Financial Mathematics
- MATH 343 Mathematical Modeling
- MATH 345/STAT 345 Stochastic Processes

Minor in Web Design and Development

Complete the following courses.

Course #	Course Title	Credits	Complete
CS 112	Introduction to Computer Science	4	
CS 321	Web-Centric Programming	4	
COMM 121	Visual Communication	4	
COMM 244	Web I: Design for the World Wide Web	4	
COMM 210 OR CS 221	Introduction to Graphic Design: Principles and Practice OR Database Management Systems	4	

Department Contact

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