

COMPUTER SCIENCE AND INFORMATION SYSTEMS DEPARTMENT

Minnesota State University Moorhead

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CURRICULUM FOR COMPUTER INFORMATION TECHNOLOGY BACHELOR OF SCIENCE DEGREE (58 credits)

Required courses (49 credits)

- CSIS 103 Computer Concepts and Applications (3)
- CSIS 140 Introduction to Information Systems and Internet Technologies (4)
- CSIS 152 Introduction to Computers and Programming I (4)
- CSIS 221 Foundations of Computing (3)
- CSIS 311 Server-Side Scripting (3)
- CSIS 316 Ethics in the Information Age (**Dragon Core 9**) (3)
- CSIS 336 C#.Net Programming (3)
- CSIS 341 System and Network Administration (3)
- CSIS 349 Networks and Data Communications (3)
- CSIS 360 UNIX Programming and Development Tools (3)
- CSIS 440 Computer Networks Software Concepts (3)
- CSIS 441 Network Security (3)
- CSIS 444 Database Concepts, Design and Implementation (4)
- CMST 100 Speech Communications (**Dragon Core 1A**) (3)
- ENGL 387 Technical Report Writing (4)

Restricted Electives (3 credits)

- Capstone (3) CSIS 469 - Internship (3) **OR**
- CSIS 405 E-Commerce Technology (3) **OR**
- CSIS 446 - Decision Support Systems (3)

Unrestricted Electives (6 credits)

- CSIS 115 Introduction to Mac OS X (1)
- CSIS 212 Client-Side Scripting (3)
- CSIS 252 Introduction to Computers and Programming II (4)
- CSIS 260 Current Programming Languages (3)
- CSIS 290 Special Topics (3 credits)
- CSIS 320 Architecture (4)
- CSIS 335 Graphical User Interface Programming (3)
- CSIS 340 Software Engineering (4) (not both 340 & 345)
- CSIS 345 Analysis and Design of Information Systems (3) (not both 340 & 345)
- CSIS 352 Advanced Concepts in Programming (3)
- CSIS 405 E-Commerce Technology (3)
- CSIS 430 Operating Systems (4)
- CSIS 433 Design, Implementation and Support of Information Systems (3)
- CSIS 435 Compilers (4)
- CSIS 443 Artificial Intelligence (3)
- CSIS 445 Graphics (3)
- CSIS 446 Decision Support Systems (3)
- CSIS 450 Programming Languages (3)
- CSIS 469 Internship (3) (up to 3 applied)
- CSIS 485 Senior Seminar (1)
- CSIS 490 Topics in Computer Science and Information Systems (3 credits)
- CSIS 497 Undergraduate Research (3 credits)