

WCCC Transfer Guide to UMA Bachelor of Science, **COMPUTER INFORMATION SYSTEMS**

University of Maine at Augusta - College of Professional Studies

This sheet is intended to be informational only. WCCC students must consult with an academic advisor prior to registration.
2019-2020 Catalog

DEGREE REQUIREMENTS:

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| <input type="checkbox"/> Minimum 121 Total Credit Hours
<input type="checkbox"/> Writing Intensive Course
<input type="checkbox"/> Minimum Cumulative GPA of 2.00 | <input type="checkbox"/> 30 credit hours of Residency Courses
<input type="checkbox"/> 9 credits of Upper-level Residency courses in the Major
<input type="checkbox"/> Minimum GPA in the Major of 2.00 |
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<i>WCCC Equivalent courses</i>	<i>UMA's BS Computer Information Systems Degree Requirements</i>
PROGRAM MAJOR REQUIREMENTS (87 credit hours)	
<input type="checkbox"/>	<input type="checkbox"/> BUA 223 Principles of Management (3)
<input type="checkbox"/>	<input type="checkbox"/> BUA 365 Organizational Behavior (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 101 Introduction to Computer Science (3) ★
<input type="checkbox"/>	<input type="checkbox"/> CIS 110 Programming Fundamentals (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 120 Introduction to Data Structures (3)
<input type="checkbox"/> CTT 144 Web Page Design	<input type="checkbox"/> CIS 131 Web Applications and Development (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 135 Intro to Information Systems & Applications Development (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 150 Introduction to Data Science (3)
<input type="checkbox"/> CTT 130 Introduction to Computer Programming (CIS 212)	<input type="checkbox"/> Complete any 200-level programming course (3): <i>CIS 212 Introduction to Visual Basic Programming</i> <i>CIS 214 Introduction to Java Programming</i> <i>CIS 215 Introduction to C++ Programming</i> <i>CIS 216 Programming in C# and .Net</i>
<input type="checkbox"/>	<input type="checkbox"/> CIS 221 Operating Systems: Linux (3)
<input type="checkbox"/> CTT 140 Introduction to Computer Networking	<input type="checkbox"/> CIS 240 Networking Concepts (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS/DSC 255 Database Design (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 330 Systems Analysis (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 380 or 480 Internship (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 460 Computers & Culture (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 470 Project Management (3)
<input type="checkbox"/>	<input type="checkbox"/> ISS 210 Introduction to Information Security (3)
<input type="checkbox"/> MAT 115 Statistics: Concepts & Methods	<input type="checkbox"/> MAT 115 Elementary Statistics I (3)
<input type="checkbox"/>	<input type="checkbox"/> Complete any two 300-level or higher CIS or ISS courses (6)
SELECT ONE OF THE FOLLOWING PATHWAYS/CONCENTRATIONS	
No Concentration	
<input type="checkbox"/> CTT 245 Computer Network Installation & Configuration <input type="checkbox"/> CTT 250 Microsoft Certification Preparation <input type="checkbox"/> CTT 255 Server Operating Systems <input type="checkbox"/> CTT 260 Computer Capstone Project <input type="checkbox"/> CTT 270 Introduction to Visual Computing	<input type="checkbox"/> Complete any three 200-level or higher CIS or ISS courses (9)
<input type="checkbox"/>	<input type="checkbox"/> Complete any advanced programming course (3): <i>CIS 312 Advanced Visual Basic</i> <i>CIS 314 Advanced Java Programming</i> <i>CIS 354 Algorithms and Data Structures</i>
<input type="checkbox"/>	<input type="checkbox"/> CIS 333 Web Programming: PHP (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 345 Virtual Systems (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 350 Database Management (3)
<input type="checkbox"/>	<input type="checkbox"/> MAT 261 Applied Linear Algebra (3)
<input type="checkbox"/>	<input type="checkbox"/> MAT 280 Discrete Mathematical Structures I (3)
Data Science Concentration	
<input type="checkbox"/>	<input type="checkbox"/> CIS 218 Introduction to SQL (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS/DSC 352 Data Visualization (3)
<input type="checkbox"/>	<input type="checkbox"/> One of the following (3): <i>CIS/DSC/MAT 449 Introduction to R Programming and Data Analysis</i> <i>CIS/DSC/MAT 450 Data Mining</i>
<input type="checkbox"/>	<input type="checkbox"/> Complete five of the following (15): <i>CIS 350 Database Management</i> <i>CIS 351 Database Management Systems: Oracle</i> <i>CIS 354 Algorithms and Data Structures</i>

	<p><i>CIS 360 Geographical Information Systems recommended</i> <i>CIS/DSC/MAT 370 Statistical Quality Control</i> <i>CIS/DSC/MAT 449 Introduction to R Programming and Data Analysis</i> <i>CIS/DSC/MAT 450 Data Mining</i> <i>CIS 452 Advanced Oracle Programming and Applications Development</i> <i>CIS/DSC 461 Spatio-Temporal Information Science</i> <i>MAT 315 Applied Statistics and Data Analysis</i></p>
<input type="checkbox"/>	<input type="checkbox"/> MAT 280 Discrete Mathematical Structures I (3)
	Information Systems Security Concentration
<input type="checkbox"/>	<input type="checkbox"/> ISS 220 Security Risk Management (3)
<input type="checkbox"/>	<input type="checkbox"/> ISS 232 Introduction to Cyber Forensics (3)
<input type="checkbox"/>	<input type="checkbox"/> ISS 240 Security Policy and Governance (3)
<input type="checkbox"/>	<input type="checkbox"/> ISS 310 Information Security Architecture (3)
<input type="checkbox"/>	<input type="checkbox"/> ISS 320 Security Monitoring (3)
<input type="checkbox"/>	<input type="checkbox"/> ISS 360 Incident Response (3)
<input type="checkbox"/>	<input type="checkbox"/> ISS 410 Cyber Security I (3)
<input type="checkbox"/>	<input type="checkbox"/> ISS 412 Cyber Security II (3)
<input type="checkbox"/>	<input type="checkbox"/> ISS 470 Information Security Management (3)
	Networking Concentration
<input type="checkbox"/>	<input type="checkbox"/> CIS 241 Routing and Switching Essentials (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 245 Wireless Networks (3)
<input type="checkbox"/>	<input type="checkbox"/> Complete one of the following (3): <i>CIS 244 Windows Server Administration</i> <i>CIS 246 Linux Server Administration</i>
<input type="checkbox"/>	<input type="checkbox"/> CIS 340 Scaling Networks (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 341 TCP/IP (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 345 Virtual Systems (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 348 Connecting Networks (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 440 Network Security (3)
<input type="checkbox"/>	<input type="checkbox"/> MAT 280 Discrete Mathematical Structures I (3)
	Software Development Concentration
<input type="checkbox"/> CTT 130 Intro to Computer Programming (CIS 212)	<input type="checkbox"/> Complete three of the following introductory programming courses (9): <i>CIS 212 Introduction to Visual Basic Programming</i> <i>CIS 214 Introduction to Java Programming</i> <i>CIS 215 Introduction to C++ Programming</i> <i>CIS 216 Programming in C# and .Net</i>
<input type="checkbox"/>	<input type="checkbox"/> CIS 314 Advanced Java Programming (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 315 Software Quality Assurance (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 353 Principles of Human Computer Interaction and User Design (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 354 Algorithms and Data Structures (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 410 Software Engineering (3)
<input type="checkbox"/>	<input type="checkbox"/> MAT 261 Applied Linear Algebra (3)
	Web Development Concentration
<input type="checkbox"/>	<input type="checkbox"/> CIS 218 Introduction to SQL (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 231 JavaScript (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 251 Web Authoring Tools (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 333 Web Programming: PHP (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 334 PHP and MySQL (3)
<input type="checkbox"/>	<input type="checkbox"/> One of the following (3): <i>CIS 338 Content Management Systems</i> <i>CIS 339 Web Development Frameworks</i>
<input type="checkbox"/>	<input type="checkbox"/> CIS 353 Principles of Human Computer Interaction and User Design (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 438 Electronic Commerce (3)
<input type="checkbox"/>	<input type="checkbox"/> CIS 444 Object-Oriented Programming with PHP (3)

OTHER PROGRAM REQUIREMENTS (31 credit hours)	
<input type="checkbox"/> ENG 107 Speech	<input type="checkbox"/> Complete any 100-level Communications (3) ★
<input type="checkbox"/> ENG 101 College Composition	<input type="checkbox"/> ENG 101 College Writing (3) ★
<input type="checkbox"/> ENG 210 Technical Writing OR <input type="checkbox"/> BUS 205 Business Communication	<input type="checkbox"/> ENG 317W Professional Writing (3) ★
<input type="checkbox"/> ART 100 Introduction to Art: The Visual Experience	<input type="checkbox"/> Complete one of the following Fine Arts (3) ★:

<input type="checkbox"/> ART 103 Printmaking <input type="checkbox"/> ART 105 Drawing for Beginners <input type="checkbox"/> ART 201 Mixed Media Artwork <input type="checkbox"/> ENG 208 Creative Writing	<i>ARH xxx Any Art History course</i> <i>ART xxx any Art course</i> <i>DRA xxx any Drama course</i> <i>ENG 351 Creative Writing I</i> <i>ENG 452 Creative Writing II</i> <i>MUH 1xx any 100-level Music History course</i> <i>MUS 1xx any 100-level Music course</i>
<input type="checkbox"/> COM 111 American Sign Language II <input type="checkbox"/> ENG 203 Special Topics in Literature <input type="checkbox"/> ENG 208 Creative Writing <input type="checkbox"/> ENG 209 Shakespeare <input type="checkbox"/> ENG 212 Introduction to Literature <input type="checkbox"/> ENG 214 Literature and Film <input type="checkbox"/> ENG 215 Contemporary American Fiction <input type="checkbox"/> HIS 109 History of Downeast Maine <input type="checkbox"/> HIS 112 American History to Reconstruction <input type="checkbox"/> HIS 113 American History from Reconstruction <input type="checkbox"/> HIS 115 Maine History <input type="checkbox"/> HIS 117 World History to 1715 <input type="checkbox"/> HIS 119 World History from 1715 to Present <input type="checkbox"/> HIS 170 History of World Food <input type="checkbox"/> PHI 101 Introduction to Philosophy <input type="checkbox"/> PHI 114 Environmental Ethics <input type="checkbox"/> PHI 115 Ethics <input type="checkbox"/> SPA 101 Introduction to Spanish <input type="checkbox"/> SPA 103 Introduction to Spanish II	<input type="checkbox"/> Complete two of the following Humanities electives (6) ★: <i>AME xxx any American Studies course</i> <i>ARH 105 History of Art & Architecture I</i> <i>ARH 106 History of Art & Architecture II</i> <i>ASL 1xx/2xx any 100-or 200-level ASL course</i> <i>DRA xxx any Drama course</i> <i>ENG xxx any English course (except ENG 100, 101 or 317 W)</i> <i>FRE xxx any French course</i> <i>HGH xxx any Holocaust, Human Rights and Genocide course</i> <i>HTY xxx any History course</i> <i>HUM xxx any Humanities course</i> <i>MUH xxx any Music History course</i> <i>PHI xxx any Philosophy course (except PHI 135 or 335)</i> <i>SPA xxx any Spanish course</i> <i>WGS xxx any Women and Gender Studies course</i>
<input type="checkbox"/> MAT 127 College Algebra	<input type="checkbox"/> MAT 112 College Algebra (3) ★
<input type="checkbox"/> BIO 120 General Biology with Lab <input type="checkbox"/> BIO 130 Human Anatomy and Physiology <input type="checkbox"/> BIO 220 Microbiology with Lab <input type="checkbox"/> BIO 225 Anatomy and Physiology I with Lab <input type="checkbox"/> BIO 235 Anatomy and Physiology II with Lab <input type="checkbox"/> CHY 110 Fundamentals of Chemistry with Lab <input type="checkbox"/> SCI 101 Foundations of Modern Science	<input type="checkbox"/> Complete any 100-level Laboratory Science (4) ★
<input type="checkbox"/> CMJ – Any 100 level Criminal Justice Course <input type="checkbox"/> ECO 200 Macroeconomics <input type="checkbox"/> ECO 201 Microeconomics <input type="checkbox"/> POS 150 Introduction to American Politics <input type="checkbox"/> POS 151 American State & Local Government <input type="checkbox"/> PSC 101 American National Government <input type="checkbox"/> PSY – Any 100 level Psychology Course <input type="checkbox"/> SOC 100 Introduction to Sociology <input type="checkbox"/> SOC 104 Sociology of Globalization	<input type="checkbox"/> Complete 2 of the following Social Science electives (6) ★: <i>ANT 1xx any 100-level Anthropology course</i> <i>ECO 1xx any 100-level Economics course</i> <i>ECO 201 Macroeconomics</i> <i>ECO 202 Microeconomics</i> <i>JUS 1xx any 100-level Justice Studies course</i> <i>POS 1xx any 100-level Political Science course</i> <i>PSY 1xx any 100-level Psychology course</i> <i>SOC 1xx any 100-level Sociology course</i> <i>SSC 1xx any 100-level Social Science course</i>
	GENERAL ELECTIVES
<input type="checkbox"/>	<input type="checkbox"/> Complete any 100-level or higher general elective (3)

General Education:

It is the intention of the University of Maine at Augusta that every degree graduate will be prepared to function in our society as an effective and informed citizen. To this end, the faculty has designed a set of minimum expectations that students are expected to satisfy. The aspirations are defined by core skills, competencies, and abilities as well as knowledge based learning experiences that are the grounds for the General Education Requirements.

Courses notated by a ★ symbol represent a select minimum of courses within this major that satisfy the UMA general education requirements.