

COMPUTER INFORMATION SYSTEMS

online

Bachelor Science (BS)

This is a guide based on the 2025-2026 Undergraduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on several factors such as dual enrollment, remediation, and summer enrollment. Students will meet with an academic advisor each semester and use Degree Works to monitor their individual progress.

CURRICULUM CHECKLIST

78 Hour Major – No Minor Required

Core Courses:

- ___ CS101 Introduction to Computer Programming (3)
- ___ CS155 Computer Science I (3)
- ___ CS265 Computer Science II (3)
- ___ CS300 Computer Science III (3)
- ___ CS433 Data Analytics (3)
- ___ CS440 Database (3)
- ___ CS445 Software Engineering (3)
- ___ CS499 Capstone Experience (3)
- ___ CY201 Introduction to Cybersecurity (3)
- ___ IS145 Introduction to Web Development (3)
- ___ IS175 Information Systems I (3)
- ___ IS245 Web Development & Security (3)
- ___ IS275 Computer Information Systems II (3)
- ___ IS299 Security in Data Protocols (3)
- ___ IS340 Information Technology (3)
- ___ IS360 Mobile Application Development (3)
- ___ IS420 Human Computer Interaction (3)
- ___ IS440 Web Design for Electronic Commerce (3)
- ___ IS448 IS/IT Project Management (3)
- ___ IS465 Management Support Systems (3)
- ___ IU315 Ethics in the Cyber World (3)
- ___ MA223 Elementary Probability & Statistics (3)

Choose One Track:

Artificial Intelligence & Gaming – Choose 12 hours:

- ___ CS173 Introduction to Game Development (3)
- ___ CS2xx Character Development & Storycrafting (3)
- ___ CS373 Game Programming I (3)
- ___ CS453 Machine Learning (3)
- ___ CS473 Game Programming II (3)
- ___ CS485 Internship in Computer Science (3)
- ___ CS505 Data Mining (3)
- ___ CS506 Cloud Computing (3)
- ___ CS533 Mobile Computing (3)
- ___ CS575 Advanced Web Development (3)
- ___ CS591 Advanced Artificial Intelligence (3)

Cybersecurity – Choose 12 hours:

- ___ CS351 C & the Posix Environment (3)
- ___ CS480 Data Communications (3)
- ___ CS485 Internship in Computer Science (3)
- ___ CY101 Fundamentals of Cybersecurity (3)
- ___ CY320 Access Control (3)
- ___ CY410 Web Application Security (3)
- ___ CY450 Introduction to Cyber Operations (3)
- ___ CY530 Computer Network Security & Defense (3)
- ___ TN275 Introduction to Networks (3)
- ___ TN375 Routing & Switching Essentials (3)

Healthcare & Business Administration – Choose 12 hours:

- ___ AC221 Principles of Accounting I (3)
- ___ CS485 Internship in Computer Science (3)
- ___ EC225 Principles of Macroeconomics (3)
- ___ ER361 Principles of Entrepreneurship (3)
- ___ HA510 Healthcare Performance Improvement (3)
- ___ HA520 Healthcare Quality & Value (3)
- ___ HA540 Healthcare Informatics (3)
- ___ HA545 Healthcare Database Systems (3)
- ___ HA556 Healthcare Topics (3)
- ___ HA557 Healthcare Law & Regulatory Compliance (3)
- ___ HA586 Healthcare Strategy & Marketing (3)
- ___ IS575 IS/IT Strategy & Management (3)
- ___ MG301 Principles of Management (3)
- ___ MG362 Management Skills (3)
- ___ MI375 Management Information Systems (3)
- ___ MK301 Principles of Marketing (3)

NOTE: A minimum grade of C or better is required in each core course.

SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	1	CS155	3
	EN100	3	IS145	3
	IS175	3	IS275	3
	CS101	3	IU315	3
	MA116*	3	General Education**	3
	Total	13	Total	15
SECOND YEAR	IS245	3	CS433	3
	IS340	3	IS299	3
	MA223	3	General Education	3
	Track course	3	General Education	3
	Total	15	Total	15
	CS440			
THIRD YEAR	CY201	3	IS420	3
	Track course	3	IS440	3
	General Education	3	General Education	3
	General Education	3	General Education	3
	Total	15	Total	15
FOURTH YEAR	IS448	3	CS499	3
	Track course	4	Track course	3
	General Education	3	General Education	3
	General Education	3	General Education	2
	Total	16	Total	16

*MA116 is a prerequisite to MA223.

**If Business Administration track is chosen, take EC215 as prerequisite to EC225.

A minimum 2.0 GPA in the major is required to graduate with a Bachelor of Science degree.

Degree requirements for all students: a minimum of 120 credit hours, completion of the General Education program, and completion of 39 senior division hours (300-599). Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements for your program.

General Education Requirements – some requirements may be fulfilled by coursework in major program

- Social and Behavioral Sciences – 6 hours
- Constitution Requirement – 3 hours
- Written Communication – 6 hours
- Oral Communication – 3 hours
- Natural Sciences – 7 hours (from two disciplines, one to include a lab)
- Mathematics – 3 hours
- Humanities & Fine Arts – 9 hours (from at least two disciplines)
- Additional requirements – 5 hours (to include UI100 for native students)
- Civics examination



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2025-2026 *degree map*

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