

Bachelor of Science (BS)

Computer Information Systems (Online)

Computer information systems support the delivery, use, and management of information systems within an information systems environment which ranges from government to businesses. The goal of the program is the education of software developers and information analysts – the people who create the software for various systems and applications as well as analyze information to provide digital and intelligent solutions.

The computer information systems program offers three online tracks: Artificial Intelligence, Business Administration and Cybersecurity. Students completing one of these tracks will be well prepared to enter the workforce and apply their computing skills.

Becoming Career Ready...

/ Highly-trained faculty interact with students in an online class environment.

/ Computer Information Systems is a growing field that allows graduates to work with companies' IT systems, analyze issues within the systems, and ensure all systems are kept up to date and working. Graduates often pursue careers as an application analyst, data analyst, database administrator, information systems manager, IT consultant and systems analyst. Graduates are prepared to enter the workforce or be accepted into the graduate school of their choice.

/ Computer Information Systems students obtain a thorough understanding of the fundamental principles of computing, information infrastructure and cyber management. Students will demonstrate programming proficiency in a modern language.

/ 100% of Southeast programs offer real-world experience. Computer Information Systems students earn this experience by demonstrating their software engineering skills on a project for an actual client. Students may also obtain more experiential learning opportunities by completing an internship, working right along industry professionals and learning valuable skills and knowledge in their field.

/ The path to a successful career starts with you! You can maximize your career development by working closely with Career Services and Southeast faculty – they are here to help you connect your passions, interests, and skills to jobs and opportunities in the field. Career Services provides professional career counseling and coaching, resume critiques, practice interviews, job search strategies, career events, networking opportunities, and more.

Internship and Employment Opportunities of Recent Graduates:

- Boeing
- Garmin
- Microsoft
- A T & T
- Edward Jones
- Centene
- NISC
- Element 74
- Vintage Software
- AmerenUE
- Vizient

Graduate Schools of Recent Graduates:

- University of Missouri
- Carnegie Mellon University
- Rice University
- Northeastern University

About Our Online Programs

At Southeast, if a program is designated as an online degree, you can complete your degree anywhere, without ever having to come to one of our campuses. As a student in an online class, your faculty will be the same faculty who teach in our campus classrooms. Advising for online programs and other support services are all completed online by staff who specialize in serving distance students.

Admission Requirements

All high school students interested in majoring in Computer Information Systems are welcome. Some students may need to take trigonometry, pre-calculus, and have strong background in English before enrolling in major courses.

Special Requirements with CIS

Special tuition rates are required for this program of study, <http://www.semo.edu/sfs/fee-schedule.htm>

Transfer and Dual Credit Students

If you have dual credit or transfer credit, please visit our transfer course equivalencies guide at semo.edu/transfercredit.



To learn more
Southeast Online
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To explore
All online degree options,
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This is a guide based on the 2020-2021 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

COMPUTER INFORMATION SYSTEMS

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

78 Hours – No Minor Required

Core Courses:

- ___ CS 101 Introduction to Computer Programming (3)
- ___ CS 155 Computer Science I (4)
- ___ CS 265 Computer Science II (4)
- ___ CS 300 Computer Science III (3)
- ___ CS 440 Database (3)
- ___ CS 445 Software Engineering (3)
- ___ CS 495 Senior Seminar (1)
- ___ CS 499 Capstone Experience (3)
- ___ IS 145 Introduction to Web Development (3)
- ___ IS 175 Information Systems I (3)
- ___ IS 245 Web Development & Security (3)
- ___ IS 275 Computer Information Systems II (3)
- ___ IS 299 Security in Data Protocols (3)
- ___ IS 340 Information Technology (3)
- ___ IS 360 Mobile Application Development (3)
- ___ IS 420 Human Computer Interaction (3)
- ___ IS 440 Web Design for Electronic Commerce (3)
- ___ IS 448 IS/IT Project Management (3)
- ___ IS 465 Management Support Systems (3)
- ___ IS 575 IS/IT Strategy and Management (3)
- ___ IU 315 Ethics in the Cyber World (3)
- ___ MA 223 Elementary Probability & Statistics (3)

Choose One Track:

Artificial Intelligence – Choose 12 hours:

- ___ CS 373 Introduction to Game Programming (3)
- ___ CS 433 Data Analytics (3)
- ___ CS 453 Machine Learning (3)
- ___ CS 473 3D Game Programming (3)
- ___ CS 503 Fundamentals of Computing (3)
- ___ CS 505 Data Mining (3)
- ___ CS 533 Mobile Computing (3)
- ___ CS 575 Advanced Web Development (3)
- ___ CS 591 Advanced Artificial Intelligence (3)

Business Administration – Choose 12 hours:

- ___ AC 221 Principles of Accounting I (3)
- ___ EC 225 Principles of Macroeconomics (3)
- ___ ER 361 Principles of Entrepreneurship (3)
- ___ MG 301 Principles of Management (3)
- ___ MG 362 Management Skills (3)
- ___ MI 375 Management Information Systems. (3)
- ___ MK 301 Principles of Marketing (3)

Cybersecurity – Choose 12 hours:

- ___ CY 101 Fundamentals of Cybersecurity (4)
- ___ CY 201 Introduction to Cybersecurity (4)
- ___ CY 320 Information Security in System Administration (4)
- ___ CY 410 Web Application Security (3)

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

SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	3	CS155	4
	EN100	3	IS145	3
	IS175	3	IS275	3
	CS101	3	IU315	3
	MA116*	3	General Education**	3
	Total	15	Total	16
Milestone: maintain 2.0 cumulative GPA				

SECOND YEAR	CS265	4	CS300	3
	IS245	3	IS299	3
	IS340	3	Track course	3
	MA223	3	General Education	3
	Track course	3	General Education	3
	Total	16	Total	15
Milestone: maintain 2.0 cumulative GPA				

THIRD YEAR	CS440	3	IS360	3
	Track course	3	IS420	3
	General Education	3	IS440	3
	General Education	3	IS465	3
	General Education	3	General Education	4
	Total	15	Total	16
Milestone: maintain 2.0 cumulative GPA				

FOURTH	CS445	3	CS495	1
	IS448	3	CS499	3
	Track course	3	IS575	3
	General Education	5	General Education	3
		3	General Education	3
	Total	14	Total	13
Milestone: maintain 2.0 cumulative GPA				

*MA116 is a prerequisite to MA223.

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

Personalized Pathways:

At Southeast, we offer online courses in a traditional 16-week fall and spring semester with eight-week sessions in the first and last half of both. In addition, we offer a wintertime session between fall and spring and at least six different 4, 6, and 8 week sessions over summer. Talk with an advisor to see how you can utilize these different sessions to expedite your degree completion.

Degree requirements for all students: a minimum of 120 credit hours; completion of/transfer credit for General Education program courses; residency at Southeast - at least 30 hours from Southeast; 39 senior division hours required: current residency at Southeast - 12 of your final 18 hours must be taken with Southeast; grade point average at Southeast: 2.0 minimum required; grade point average cumulative: 2.0 minimum required. Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements.

Revised
6/3/2020

Degree Map 2020-2021

To learn more

Southeast Online
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To explore

All online degree options,
visit online.semo.edu

For advising

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