

College of Arts and Sciences

Department of Computer Science

One University Boulevard St. Louis, Missouri 63121-4400 Telephone: 314-516-5743 Fax: 314-516-5400

Bachelor of Science in

Computer Science



The BS in Computer Science is designed for those interested in software and computer systems. It provides a solid foundation in computing and mathematics, along with specializations offered through elective courses and available <u>certificates</u>. Graduating seniors find fulfilling careers in many related areas such as cybersecurity, networks, Internet programming, software and mobile apps development, data science, AI, graphics, or pursue additional graduate studies. Our vast network of alumni have gone on to work for many local and internationally-recognized companies, including Bayer, Boeing, Express Scripts, Google, MasterCard, Microsoft, USPS, World Wide Technologies and more.

The program can be completed full time or part time with a combination of day, evening and/or online courses. Each required course is offered online at least once a year. Students must also satisfy all <u>UMSL requirements for a BS</u> degree. In addition to university scholarships, the department awards \$30k annually in mostly <u>merit-based scholarships</u>.

Required core courses		Availability
CMP SCI 1000	Computer Science Experiences	SFP
CMP SCI 1250	Introduction to Computing	SFP
<u>CMP SCI 2250</u>	Programming and Data Structures	SFP
<u>CMP SCI 2261</u>	Object-Oriented Programming	SFP
<u>CMP SCI 2700</u>	Computer Organization and Architecture	SFP
<u>CMP SCI 2750</u>	Linux Environment and programming	SFP
<u>CMP SCI 3010</u>	Web Programming	SFP
<u>CMP SCI 3130</u>	Design and Analysis of Algorithms	SFP
CMP SCI 4250	Programming Languages	SFP
<u>CMP SCI 4280</u>	Program Translation Project	FP
CMP SCI 4500	Introduction to the Software Profession	FP
<u>CMP SCI 4760</u>	Operating Systems	FP
MATH 1320	Introduction to Probability and Statistics	SFP
MATH 1800	Analytic Geometry and Calculus I	SFP
MATH 1900	Analytic Geometry and Calculus II	SFP
MATH 2450	Elementary Linear Algebra	SFP
MATH 3000	Discrete Structures	SFP
ENGL 3130	Technical Writing	SFP
Additional Electives		
Five more CMP SCI courses numbered 3000 and above		

For more information visit <u>umsl.edu/cs</u>. For careers visit <u>umsl.edu/cs/careers</u>. This document http://umsl.edu/cs/undergraduate-studies/BSCS Flyer.pdf

Availability: Summer (S), Fall (F), Spring (P), online oand evening (3)