



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 [certificates](#). 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 entire program can be completed in the evening, and many courses can be completed online – students starting now should be able to finish all courses online. Students must also satisfy all [UMSL requirements for a BS](#) degree. In addition to university scholarships, the department awards \$50k annually in mostly [merit-based scholarships](#).

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

**Additional Electives**  
 Five more CMP SCI courses numbered 3000 and above

For more information visit [umsl.edu/cs](http://umsl.edu/cs). For careers visit [umsl.edu/cs/careers](http://umsl.edu/cs/careers).  
 This document [http://umsl.edu/cs/undergraduate-studies/BSCS\\_Flyer.pdf](http://umsl.edu/cs/undergraduate-studies/BSCS_Flyer.pdf)

**Availability:** Online as of FS2020 (O), Evening (E ) , Summer (S), Fall (F), Spring (P).