



Bachelor of Science in Computing Technology

The BS in Computing Technology program is designed for those interested in a broad and deep computing education but without some traditional advanced courses, those who want to focus more on technologies and to transition to fulfilling careers. Elective courses can be grouped into one of the available [certificates](#) to solidify specialization. Graduating seniors can find in-demand 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.

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 [UMSL requirements for a BS](#) degree. In addition to university scholarships, the department awards \$30k annually in mostly [merit-based scholarships](#).

| Required core courses | | Availability |
|---------------------------------|--|--------------|
| CMP SCI 1000 | Computer Science Experiences | SFP |
| CMP SCI 1250 | Introduction to Computing | SFP |
| CMP SCI 2250 | Programming and Data Structures | SFP |
| CMP SCI 2261 | Object-Oriented Programming | SFP |
| CMP SCI 2700 | Computer Organization and Architecture | SFP |
| CMP SCI 2750 | Linux Environment and Programming | SFP |
| CMP SCI 3010 | Web Programming | SFP |
| CMP SCI 3702 | Introduction to Cyber Threats and Defense | SFP |
| or CMP SCI 3780 | Software Security | P |
| CMP SCI 4010 | Advanced Web Development with Java | F |
| CMP SCI 4500 | Introduction to the Software Profession | FP |
| CMP SCI 4610 | Database Management Systems | FP |
| INFSYS 3820 | Introduction to Systems Administration | FP |
| INFSYS 3844 | Developing Business Applications in .NET | FP |
| MATH 1100 | Basic Calculus | SFP |
| or MATH 1800 | Analytic Geometry and Calculus I | SFP |
| MATH 1320 | Introduction to Probability and Statistics | SFP |
| MATH 3000 | Discrete Structures | SFP |
| ENGL 3130 | Technical Writing | SFP |

Additional Electives

Six more CMP SCI courses numbered 2000 and above. At most two can be in INFSYS and must be [preapproved](#)

For more information visit umsl.edu/cs. For careers visit umsl.edu/cs/careers.

This document http://umsl.edu/cs/undergraduate-studies/BSCT_Flyer.pdf

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