

Cybersecurity Minor

General Requirements

- All minors are 15 credit hours or 5 courses, including business core courses.
- Students must attain a 2.0 grade point average for all courses in the minor.
- Students must attain a minimum grade of C- in each course included in the minor.
- All courses in the minor must be on a graded basis.
- A minimum of 9 credit hours of coursework included in the minor must be taken in residence at UMSL.
- One must complete a baccalaureate degree at UMSL in order for a minor to be conferred.
- A minor may be added for up to two years following completion of the baccalaureate degree

Specific Requirements for the Minor

The Undergraduate Minor in Cybersecurity is a five-course (15 credit hours) program. It is designed to help students from all backgrounds achieve a foundation in Cybersecurity. It provides students the flexibility to focus on technical and/or managerial aspects of Cybersecurity. The program also allows students to choose from a range of electives based on student interests. This minor serves a broad group of managers, technical specialists, and professionals enrolled in any baccalaureate degree at UMSL. A prior background in information security is not required to enter this program. This minor may be added for up to two years following completion of the baccalaureate degree.

Requirements: All students must take four required courses and one elective.

Required

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| INFSYS 3842 | Data Networks and Security | 3 |
| INFSYS 3848 | Introduction to Information Security | 3 |
| INFSYS 3858 | Advanced Security and Information Systems | 3 |
| INFSYS 3878 | Information Security Risk Management and Business Continuity | 3 |

Elective 3

Choose one of the following:

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| INFSYS 3868 | Secure Software Development |
| CMP SCI 4700 | Computer Forensics |
| CMP SCI 4780 | Computer and Network Security |

Total Hours 15

Students may substitute the above courses with other courses upon approval by the Chair of the Information Systems department. In all cases, 15 hours are needed to complete the Undergraduate Minor in Cybersecurity. A minimum of four courses must be taken in residence at UMSL.

Learning Outcomes

Upon completion of the program, graduates will be able to:

- Analyze a complex cybersecurity problem and apply principles of cybersecurity and business decision making to identify potential solutions.
- Design, implement, and evaluate a cybersecurity-based solution to meet a given set of cybersecurity and business requirements.
- Describe professional responsibilities and make informed judgments in cybersecurity practice based on legal and ethical principles.
- Communicate with a wide range of audiences about critical challenges and solutions related to cybersecurity.
- Function effectively as a member of a team engaged in activities appropriate to the cybersecurity discipline.