

New Program Proposal

Information Systems and Technology, Graduate Certificate

Program Description

The Graduate Certificate in Information Systems and Technology provides students with core technical skills in programming, database management, systems analysis, and systems design. These skills are a foundation for specialized domains of study in business intelligence, cybersecurity, and enterprise systems development.

This 12 credit hour certificate program also counts toward the 30 credit hour Master of Science in Information Systems and Technology degree program requirements. Students may choose to combine this certificate with other courses and/or certificates to obtain the Master of Science in Information Systems and Technology degree.

Admission Requirements

Applicants must meet general University of Missouri-St. Louis Graduate School admissions requirements.

Certificate Requirements

All course prerequisites and all course waivers are applicable. Substitute courses may be approved by the appropriate department chairperson and the Director of Graduate Business Programs.

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| INFSYS 6805 | Applications of Programming for Business Solutions | 3 |
| or INFSYS 6806 | Managerial Applications of Object-Oriented Technologies | |
| INFSYS 6840 | Information Systems Analysis | 3 |

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| INFSYS 6845 | Database Management Systems | 3 |
| INFSYS 6850 | Information Systems Design | 3 |
| Total Hours | | 12 |

The required courses may be substituted with other courses with the approval of the Chair of the Information Systems and Technology Department.

Rationale

Information Systems and Technology is a critical skill-set for practitioners who seek to utilize technology to solve business problems thereby improving organizational efficiency and effectiveness. This new certificate covers essential components of systems development, analysis, design, and data. This certificate program is part of broader efforts within the department of Information Systems and Technology to create flexible pathways for students to complete the full Master of Science in Information Systems and Technology (MSIST) by transferring all courses taken within Graduate Certificates into the MSIST. This restructuring makes the graduate programs attractive to prospective students who may not be ready to commit to a full degree while providing them with the flexibility to combine certificates toward a student centered MSIST degree. These efforts are in line with the College of Business Administration, Graduate School, the University of Missouri-St. Louis, and the University of Missouri System strategic initiatives. This certificate can also be utilized by the University of Missouri (Columbia) as well as the National Geo-spatial Intelligence Agency (NGA) in separate ongoing efforts aimed at increasing collaboration across the four UM campuses and providing reskilling/upskilling opportunities to NGA employees.