

# Enterprise Systems Development, Graduate Certificate

~~The Certificate in Enterprise Systems is a six-course (18 credit hours) program housed in the College of Business Administration at the University of Missouri – St. Louis. It serves a broad group of managers, technical specialists, and entry level professionals. A prior background in information systems is not required to enter this program. The certificate is designed to help students from all backgrounds achieve competence in the development and management of legacy information systems including the interface with modern programming languages, platforms, and security standards. The program provides students the flexibility to choose one IS elective based on their interests.~~

## Program Description

The Graduate Certificate in Enterprise Systems Development is designed to help students from all backgrounds achieve competence in the development and management of web-based or legacy information systems including the interface with contemporary programming languages, frameworks, platforms, testing methodologies, and security standards.

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.

Required Course		
INFSYS 6806	Managerial Applications of Object-Oriented Technologies	3
Electives		
Choose one of the following sequences:		6
<del>INFSYS 6807</del>	<del>Contemporary z/OS COBOL</del>	<del>3</del>
<del>INFSYS 6817</del>	<del>Advanced COBOL and Modern z/OS System Tools</del>	<del>3</del>
INFSYS 6807 & INFSYS 6817	Contemporary z/OS COBOL and Advanced COBOL and Modern z/OS System Tools	
INFSYS 6814 & INFSYS 6815	Course INFSYS 6814 Not Found and Advanced Web Applications for Business	
Chose one of the following courses:		3
INFSYS 6818	Management of Software	<del>3</del>
<del>INFSYS 6828</del>	<del>Principles of Information</del>	<del>3</del>
INFSYS 6868	Software Assurance	
<del>INFSYS Elective<sup>1</sup></del>		<del>3</del>
<b>Total Hours</b>		<b>18</b>

~~† Topics include Web Design, Advanced Web Design, Advanced Java, C#, Systems Analysis, Database Management, Data Networks and Security, Advanced Cybersecurity, Risk Management and Business Continuity, Project Management, Open Source Software Development, Decision Support Systems for BI, and Enterprise Information Systems (ERP).~~

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

Rationale

Enterprise Systems Development is an important skill-set for practitioners who design, develop, test, and secure enterprise information systems. This new certificate covers essential components of development, testing, and software assurance. 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.