Internet and Web Graduate Certificate

Program Requirements

The graduate certificate in Internet and Web is a four#course (12 credit# hour) program. It is designed to provide broad training in web technologies on both the client and server sides, including various stack architectures and frameworks, recent technologies such as REST, and trends such as microservices. All students must take three required courses and one elective, subject to the Graduate School regulations.

A minimum of three courses must be taken from UMSL. A maximum of two courses can be used from the 4000#level. Courses may be substituted with the permission of the certificate coordinator.

Course Number	Title	Hours
Required Core Courses		
CMP SCI 4010	Web Development with Java	3
CMP SCI 4011	Web Development with Advanced JavaScript	3
CMP SCI 5012	Enterprise Microservice Development	3
Electives		**3**
Choose one of the following:		
CMP SCI 5020	Android Apps: Android Fundamentals	
CMP SCI 5030	Intelligent Web	
CMP SCI 5792	Mobile Computing, Networking, and Security	
CMP SCI 5750	Cloud Computing	
Total Hours		**12**