

## Certificate in Internet and Web

The undergraduate Certificate in Internet and Web is a six-course (18 credit hours) program. It is designed to provide a broad training in technologies related to the Internet and Web, with flexibility allowing a student to satisfy specific interests. A minimum GPA of 2.5 is required for admission.

Required:		
CMP SCI 3010	Web Programming	3
CMP SCI 4010	Advanced Web Development with Java	3
CMP SCI 4011	Client-Side Technologies	3
CMP SCI 4012	Introduction to Enterprise Web Development	3
Choose <del>three</del> two of the following:		9
CMP SCI 4020	Introduction to Android Apps: Android	
CMP SCI 4030	Introduction to Intelligent Web	
CMP SCI 4610	Database Management Systems	
CMP SCI 4730	Computer Networks and Communications	
CMP SCI 4750	Introduction to Cloud Computing	
INFSYS 3846	E-Commerce	
<b>Total Hours</b>		<b>18</b>

A minimum of four courses must be taken in residence at UMSL. Courses may be substituted with the permission of the department. For more information, students can contact the department chair or email [info@arch.umsl.edu](mailto:info@arch.umsl.edu).

Sign-offs from other departments affected by this proposal

None

Rationale Adding a newly proposed course Cmp Sci 4011.