

# Mobile Apps and Computing, Undergraduate Certificate

The undergraduate certificate in Mobile Apps and Computing is a five-course (15 credit hour) program. It is designed to provide training in technologies and framework for mobile apps and computing. A minimum GPA of 2.5 is required for admission.

## Required Courses

CMP SCI 4020	Introduction to Android Apps: Android Fundamentals	3
CMP SCI 4220	Introduction to iOS Programming and Apps	3
<del>CMP SCI 4222</del>	<del>iOS Apps</del>	<del>3</del>
CMP SCI 4792	Introduction to Mobile Computing, Networking, and Security	3

## Electives

Choose one <del>one</del> two of the following courses:		3 6
CMP SCI 4010	Web Development with Java	
<del>CMP SCI 4222</del>	<del>iOS Apps</del>	
CMP SCI 4610	Database Management Systems	
CMP SCI 4750	Introduction to Cloud Computing	
<del>CMP SCI 4794</del>	<del>Introduction to Security of IoT Systems</del>	
<b>Total Hours</b>		<b>15</b>

A minimum of three courses must be taken from UMSSL. Courses may be substituted with the permission of the certificate coordinator. For more information, students can contact the department chair or email [info@arch.umsl.edu](mailto:info@arch.umsl.edu).

### Justification for request:

Cmp Sci 4222 hasnt been offered for a 2nd year due to supply and demand, moving to electives. Adding 4794 to electives.