



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Mobile Application Development

CSE 5236

Credit Hours:

3.00

Course Levels:

Undergraduate (1000-5000 level)

Graduate (5000-8000 level)

Course Components:

Lecture

Course Description:

Mobile application development frameworks; Architecture, design and engineering issues, techniques, methodologies for mobile application development.

Prerequisites and Co-requisites:

Prereq: 3901 or 3902 or 3903 (560).

Course Goals / Objectives:

- Be competent with the characterization and architecture of mobile applications
 - Be competent with understanding enterprise scale requirements of mobile applications
 - Be competent with designing and developing mobile applications using at least 2 mobile application development frameworks
 - Be competent with comparatively evaluating the capabilities of at least 2 mobile application development frameworks
 - Be exposed to technology and business trends impacting mobile applications
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Course Topics:

- Characteristics of mobile applications
 - History of mobile application frameworks
 - Overview of mobile application development languages - Objective C and Java
 - Application models of mobile application frameworks
 - User-interface design for mobile applications
 - Managing application data
 - Integrating with cloud services
 - Creating enriched user interfaces. Multi-touch and gesture-based applications
 - Integrating networking, the OS and hardware into mobile-applications
 - Addressing enterprise requirements in mobile applications – performance, scalability, modifiability, availability and security
 - Testing methodologies for mobile applications
 - Publishing, deployment, maintenance and management
 - Case studies in mobile applications
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Designation:

Elective