

Course aim: To provide students with the ability to investigate and use advanced techniques that extend the standard software development environment so that the student is competent in approaches required in the development and deployment of software applications for mobile devices.

Learning outcomes:

Learning outcomes	
1.	Acquire in depth knowledge of a range of advanced technical features that extend the standard software development environment to cater for the development of software for mobile devices by obtaining information from the internet, manuals, textbooks and supplied sample code.
2.	Demonstrate the ability to successfully apply such features and techniques when writing code to solve selected problems in the given language for a mobile device.
3.	Communicate the knowledge from learning outcome 1, in a form that other programmers will find usable, relevant and easily intelligible.

Topics/Content outline:

Topics include: researching advanced level techniques, building controls and writing advanced level programming applications.

Expanded Outcomes
<p>Outcome1: Acquire in depth knowledge of a range of advanced technical features that extend the standard software development environment to cater for the development of software for mobile devices by obtaining information from the internet, manuals, textbooks and supplied sample code. Students will demonstrate competence in a selection of the following topics or additional topics depending on language and operating system features.</p> <ul style="list-style-type: none"> • Identification of technology and software trends for mobile devices • Different software environments and technologies available for the mobile devices • Different software development platforms available for mobile devices • User interface design for mobile technologies • Deploying and installing software to mobile devices • Network awareness - off-line and on-line operations • Usability issues for mobile devices
<p>Outcome 2: Demonstrate the ability to successfully apply such features and techniques when writing code to solve selected problems in the given language for a mobile device.</p>
<p>Outcome 3: Communicate the knowledge from learning outcome 1 in a form that other programmers will find usable, relevant and easily intelligible.</p>

Assessment:

Weighting	Nature of assessment	Learning outcomes	Type
70%	Design / develop mobile applications based on prescriptive assignment description(s).	1,2	Individual
30%	Semester long, group work project to design,	1,2,3	Group