

## ISCG7436: Advanced Mobile Special Topic Programming

Course number: ISCG7436 Level: 7 Credits: 15  
Main programme: BCS Delivery: One Semester (Full-time)

Endorsement: Elective Hours directed: 32.5  
Other programmes: GDCMP Hours self-directed: 117.5  
Prerequisites: For BCS: ISCG6421 and ISCG6423 Total hours: 150  
For GDCMP: As approved by the Programme Leader

Co-requisites: n/a Number of weeks: 16 weeks (full-time)

Restrictions: n/a

### Entry requirements:

Students are expected to adhere to United's policy on conduct in respect of staff, fellow students, and in the use of resources and facilities.

### NZQA Level Descriptor:

	Knowledge	Skills	Application
7	<p>knowledge of a major discipline with areas of specialisation in depth</p> <p>the analysis, transformation and evaluation of abstract data and concepts</p> <p>the creation of appropriate responses to resolve given or contextual abstract problems</p>	<p>require a command of highly specialised technical or scholastic and basic research skills across a major discipline</p> <p>involve the full range of procedures in a major discipline are applied in complex, variable and specialised contexts</p>	<p>in planning, resourcing and managing processes within broad parameters and functions with complete accountability for determining, achieving and evaluating personal and/or group outcomes</p>

**Course aim:** This unit focuses on the Design, and Development of Advanced Mobile Applications, using a variety of Mobile Platforms and Architectures. Areas such as Mobile User Interface Design, MVC Design Patterns, Mobile Sensors, Networking and Mobile Data Management will be explored in detail using practical exercises. Students will also gain experience publishing an application, and going through the application approval process to certify a Mobile Application for deployment.

### Learning outcomes:

1. In depth understanding of Mobile Platform, Frameworks and Development Kit
2. Understanding of Mobile Development Design and User Interface Constraints
3. The ability to utilise advanced user interface components and events
4. Concrete understanding of the Model View Controller design pattern
5. The ability to manage foreground and background tasks as required