***Design and Development of Applications for Mobile Devices***

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| *SMS Code* | IN721000 | *Directed Learning hours* | 60 |
| *Level* | 7 | *Workplace or Practical Learning hours* | *0* |
| *Credits* | 15 | *Self-Directed Learning hours* | 90 |
| Prerequisites | *IN610001* | *Total Learning Hours* | 150 |
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***Aims***

To develop facility with the design and implementation of applications for mobile devices.

***Learning Outcomes***

At the successful completion of this course, students will be able to:

1. Implement complete mobile applications following sound architectural and code-quality standards.
2. Explain relevant principles of human perception and cognition and their importance to software design.
3. Identify relevant use cases for a mobile computing scenario and incorporate them into an effective user experience design.
4. Follow industry-standard software engineering practice in the design of mobile applications.

***Indicative Content***

* Software architecture for mobile
* Industry-appropriate languages and environments for mobile development, covering a range of SDKs, APIs, libraries and other tools
* Interaction and interface design for mobile
* Use case analysis for native vs. web-based development
* User-centred design and testing
* Hardware opportunities and constraints
* Deployment policies and procedures

***Assessment***

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| **Assessment Activity** | **Weighting** | **Learning Outcomes** |
| Application development | 70% | 1, 2, 3, 4, 5, 6 |
| Exam | 30% | 1, 2, 3, 4 |

***Resources***

* Appropriate IDE and SDK
* Device test bed

**Required:**