# ISYS90088 Introduction to Application Development

| | |
|---|---|
| **Credit Points:** | 12.5 |
| **Level:** | 9 (Graduate/Postgraduate) |
| **Dates & Locations:** | 2016, Parkville<br>This subject commences in the following study period/s:<br>Semester 2, Parkville - Taught on campus. |
| **Time Commitment:** | Contact Hours: 36 hours: consisting of 1 - 2 hour lecture per week and 1 - 1 hour laboratory class per week. Total Time Commitment: 200 hours |
| **Prerequisites:** | None |
| **Corequisites:** | None |
| **Recommended Background Knowledge:** | None |
| **Non Allowed Subjects:** | Students enrolled in any of the following are not permitted to take this subject<br>Master of Information Technology<br>Master of Science (Computer Science)<br>Master of Engineering (Software)<br>Master of Engineering (Software with Business)<br>Master of Engineering (Electrical)<br>Master of Engineering (Electrical with Business)<br>Master of Engineering (Spatial)<br>Master of Engineering (Mechatronics) |
| **Core Participation Requirements:** | For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: <a href="http://services.unimelb.edu.au/disability">http://services.unimelb.edu.au/disability</a> |
| **Coordinator:** | Dr Sean Maynard |
| **Contact:** | Dr Sean Maynard<br>Email: seanbm@unimelb.edu.au |
| **Subject Overview:** | AIMS<br>This subject introduces students to the fundamental concepts and models of application development so that they can understand the key processes related to building functioning applications and appreciate the complexity of application development. This subject is suitable for students who have no background in application development or programming. This subject emphasises application development and incorporates the software development life cycle, requirements gathering, designing a solution, and implementing and testing a solution. Students will learn about the software development lifecycle, program design, data structures, problem solving, programming logic, implementation considerations, testing, and enterprise level applications.<br>INDICATIVE CONTENT |

| | |
|---|---|
| | # Program development lifecycle & methodologies<br># Programming concepts – variables, literals, types, expressions, procedures, functions, parameters, operators and operations, decision logic, looping, sub-procedures, passing parameters, control structures (sequential, conditional, iterative)<br># Testing<br># Implementation considerations |
| **Learning Outcomes:** | Intended Learning Outcomes (ILO)<br>On completion of this subject the student is expected to:<br>1 Use primitive data types and data structures offered by the development environment<br>2 Understand basic programming concepts<br>3 Write simple applications that relate to a specific domain<br>4 Design, implement, test, and debug a program that uses each of the following fundamental programming constructs: basic computation, simple I/O, standard conditional and iterative structures, and the definition of functions.<br>5 Test applications<br>6 Apply core program control structures |
| **Assessment:** | Individual Assignment 1 - requiring a time commitment of approximately 13-15 hours, due Week 5 (10%) Mid Semester Test - 1 hour duration, approximately Week 7 (10%) Individual Assignment 2 - requiring a time commitment of approximately 25-30 hours, due Week 11 (20%) 1 - 3 hour exam during the end of Semester examination period (60%) |
| **Prescribed Texts:** | Nil |
| **Recommended Texts:** | Nil |
| **Breadth Options:** | This subject is not available as a breadth subject. |
| **Fees Information:** | Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees |
| **Generic Skills:** | On completion of this subject, students should have developed the following generic skills:<br># An ability to apply knowledge of basic science and engineering fundamentals<br># An ability to undertake problem identification, formulation and solution<br># The capacity to solve problems, including the collection and evaluation of information<br># The capacity for critical and independent thought and reflection<br># An expectation of the need to undertake lifelong learning, and the capacity to do so |
| **Related Majors/Minors/ Specialisations:** | MIS Professional Specialisation |