

**Title:** PROGRAMMING 3

**Code:** ITECH3217

**Formerly:** CP735

**Faculty / Portfolio:** Faculty of Science and Technology

**Pre-requisites:** (CP627 or ITECH2100)

**Co-requisites:** Nil

**Exclusions:** (CP735 and CP893)

**Credit Points:** 15

**ASCED Code:** 020103

## Learning Outcomes:

### Knowledge:

- K1.** be familiar with the syntax of a common object-oriented programming language used for web application development such as Java;
- K2.** be familiar with the process of enterprise application development on mainframe server or local PC environment;
- K3.** understand the role middleware plays in delivering internet capable business systems;
- K4.** understand the importance of programming style concepts (documentation, mnemonic names, indentation);

### Skills:

- S1.** show proficiency in designing, constructing and testing non-trivial object-oriented applications;
- S2.** develop web applications using middleware technology on mainframe server or local PC;
- S3.** develop applications using an API which supports the development of server-side software solutions (such as Java EE);
- S4.** develop applications involving component technology;

## Values and Graduate Attributes:

### Values:

- V1.** appreciate the need for a level of professionalism when designing and implementing software solutions.

## Content:

This course is the third in a sequence of object-oriented programming courses. It involves further study of object-oriented programming principles and concentrates specifically on developing internet enabled applications using an object-oriented approach.

# Course Outline

## ITECH3217 PROGRAMMING 3

Topics may include:

- Introduction to a Internet Programming Language.
- Component technology such as JavaBeans or Enterprise Java Beans.
- Object-Oriented persistence frameworks such as Java Data Objects or the Java Persistence API.
- Web programming technologies such as JavaServer Pages, Java Servlets, or JavaServer Faces.

### Assessment:

Completion of all laboratory worksheets for the teaching period. Maintenance of a folio of exercises and notebook records for tutors to see at any time throughout the teaching period. Participation in lectures, tutorials and computer laboratory classes.

Assessment for the subject will consist of practical assignments, lab tests and an examination. The assignments and lab tests will cover program design and development, and the exam will cover the whole course.

Assessment Task	Assessment Type	Weighting
Practical demonstration of programming, design and report presentation skills	Assignments, laboratory tests	40 - 50%
Class attendance and exercises, reading of reference material and lecture notes	Examination(s), Tutorial participation	50 - 60%

### Adopted Reference Style:

APA

### Presentation of Academic Work: