# **Module: Project Management 371**

| Module name:        | Project Management 371                    |  |  |  |
|---------------------|-------------------------------------------|--|--|--|
| Code:               | PMM371                                    |  |  |  |
| NQF level:          | 7                                         |  |  |  |
| Type:               | Core – Bachelor of Information Technology |  |  |  |
| Contact Time:       | 30 hours                                  |  |  |  |
| Structured time:    | 6 hours                                   |  |  |  |
| Self-directed time: | 34 hours                                  |  |  |  |
| Notional hours:     | 70 hours                                  |  |  |  |
| Credits:            | 7                                         |  |  |  |
| Prerequisites:      | PMM271                                    |  |  |  |

#### **Purpose**

The purpose of this course is to build on and delve into the detail the means of conducting the management of a project provided to the student in previous project management course. This comprehensive course is designed to equip students with the requisite skills to ensure that projects are delivered seamlessly. At the end of the course, students will develop up-to-date project management skills and insights, empowered with the necessary advanced project management concepts, tools and techniques to successfully deliver any project.

#### **Outcomes**

Upon successful completion of this module, the student will be able to:

- Demonstrate integrated knowledge of the central areas of agile software project management, including an understanding of and the ability to apply and evaluate the key terms, concepts, facts, rules in an area of specialisation.
- Identify, analyse, evaluate, critically reflect on and address complex problems on agile software projects applying evidence-based solutions and theory driven arguments.
- Demonstrate an understanding of knowledge as contested and the ability to evaluate approaches for managing and optimising project management processes typical within the area of agile software project management.
- Select and apply a range of methods to resolve project management problems or introduce change within the context of software projects.
- Identify, evaluate and address research-based solutions and methods for project risk management and be able to evaluate their industrial application suitability.
- Develop and communicate ideas and opinions in well-formed arguments, using appropriate academic, professional, or occupational discourse as they apply to agile software project management.

#### **Assessment**

Assessment is performed using the following instruments:

• Continuous evaluation of theoretical work through two written assignments, a formative, and a summative test. These assessments will cover a lot of work which will require the student to organise and manage his/her time and activities responsibly.

• Final assessment through a written examination.

## **Teaching and Learning**

### **Learning materials**

- Lecturer hand-outs, samples and class exercises.
- Advanced Project Management IT without frontiers.

### Additional Reference Material:

- Carroll., J. (2012). *Agile Project Management: for speedy results*, Ineasysteps. [ISBN-13: 978-1840784473]
- Stepanek., G. (2005). Software Project Secrets: Why Software Projects Fail. [ISBN 978-1-4302-0055-0]

### **Learning activities**

This course will be taught through presentation of theoretical concepts, exercises and discussions. It is dialogue-oriented with a practical approach, with mandatory assignments which must be completed during the course.

#### **Notional learning hours**

| Activity           | Units | <b>Contact Time</b> | <b>Structured Time</b> | Self-Directed Time |
|--------------------|-------|---------------------|------------------------|--------------------|
| Lecture            |       | 27.0                |                        | 13.0               |
| Formative feedback |       | 3.0                 |                        |                    |
| Project            |       |                     |                        |                    |
| Assignment         | 2     |                     |                        | 6.0                |
| Test               | 2     |                     | 4.0                    | 8.0                |
| Exam               | 1     |                     | 2.0                    | 7.0                |
|                    |       |                     |                        |                    |
|                    |       | 30.0                | 6.0                    | 34.0               |

#### **Syllabus**

- Software project estimation tools and techniques
- Project network models
- Managing and optimising the software development process
- Project schedule development, management and control using project tools
- Reporting progress and project status review meetings
- Project risk management and issues
- Project crashing and resource levelling
- Production release management and hand over