| Module name:        | Project Management 361                                    |  |  |  |
|---------------------|---|--|--|--|
| Code:               | PMM361  |  |  |  |
| NQF level:          | 6   |  |  |  |
| Туре:               | Speciality – Diploma in Information Technology (Business) |  |  |  |
| Contact Time:       | 42 hours  |  |  |  |
| Structured time:    | 7 hours   |  |  |  |
| Self-directed time: | 21 hours  |  |  |  |
| Notional hours:     | 70 hours  |  |  |  |
| Credits:            | 7   |  |  |  |
| Prerequisites:      | PMM261  |  |  |  |

# Module: Project Management 361

## Purpose

The course will provide the student with the means of managing projects at an advanced level with a focus on Yellow Belt level six sigma techniques and tools for process improvement. At the end of the course, students will be able to align and leverage Six Sigma project management components and to integrate these into a single overall project management plan for a simple to a moderately complex project. Advanced PM concepts, Project management lifecycle, Project Organization, Resource allocation, Monitoring and control, Project Quality Management, Project Closure.

### **Outcomes**

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

- Demonstrate a detailed understanding of the main areas of project management including key terms, concepts, facts and current business examples.
- Apply the Six Sigma DMAIC and DMADV method within a certain context.
- Evaluate, select and apply project management standards and best practices in investigation or application processes within the context of agile software projects.
- Identify, analyse and solve problems related to agile software project management in unfamiliar contexts.
- Demonstrate the ability to make decisions and act appropriately in project management in both familiar and new contexts, demonstrating an understanding of the relationships between systems and how they impact other systems.
- Present and communicate complex information reliably and coherently regarding project status reporting and review using appropriate academic and professional or occupational conventions, formats and technologies for a given context.
- Demonstrate the understanding of Six Sigma process of transformation.

### Assessment

Assessment is performed using a variety of instruments:

• Continuous evaluation of theoretical work through written assignments, formative tests, and a summative test.

- Continuous evaluation through tracking of progress, offering support, guidance and provision of constant stream of opportunities to prove mastery of subject material and pursuing more challenging work as they master the basics.
- Final assessment through an examination.

# **Teaching and Learning**

#### Learning materials

#### Prescribed books (EBSCO)

Golembiewski, R. ed. (2018). Current Topics in Management: Volume 8. Routledge.

#### 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**

Learning will be facilitated by the lecturer with student centred activities that involve problem-based learning where pupils are presented with challenges that replicate the situation in the real-world environment. This will be achieved through a combination between presentation of theoretical concepts, guided exercises, group work and discussions during the module.

| Contact | Distance | Other | Type of learning activities   | % Learning |
|---------|----------|-------|---|------------|
| У       | У        | n     | Lectures (face-to-face, limited interaction or technologically mediated)                        | 40%        |
| У       | У        | n     | Tutorials: individual groups  | 20%        |
| n       | У        | n     | Syndicate groups  | 10%        |
| n       | У        | n     | Independent self-study of standard texts and references (study guides, books, journal articles) | 10%        |
| n       | У        | n     | Independent self-study of specially prepared materials (case studies, multi-media, etc.         | 20%        |

#### **Notional learning hours**

### **Syllabus**

- Project management fundamentals.
- Software development methodologies: Traditional vs Agile approaches
- Project management standards and best practices
- Project planning and organisation
- Managing project stakeholders and eliciting initial requirements from input documents

- User stories and brief versions of use cases including defining project scope and work break down structure
- The key principles of Six Sigma
- DMAIC approach, Lean foundations & principles, Decision Making Tools, Quality Tools, Metrics, DPMO, RTY, Cycle Time, CoQ (Six Sigma Yellow Belt Training)