

## Module: Project Management 361

<b>Module name:</b>	Project Management 361
<b>Code:</b>	PMM361
<b>NQF level:</b>	6
<b>Type:</b>	Speciality – Diploma in Information Technology (Business)
<b>Contact Time:</b>	36 hours
<b>Structured time:</b>	6 hours
<b>Self-directed time:</b>	18 hours
<b>Notional hours:</b>	60 hours
<b>Credits:</b>	6
<b>Prerequisites:</b>	PMM261

### 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:

- Evaluation of theoretical work through a summative test.

- Continuous evaluation of project work, where the student must design, manage and report on the evaluation of testing methodologies and the selection of an appropriate methodology for a given scenario, justifying the choice made with well-formed arguments and evidence.
- Final assessment through a written examination.
- The assignments or projects collectively will count 30% of your class mark.
- All tests will collectively account for 70% of your class mark.
- Your class mark contributes 30% towards your final mark for the subject, while the final assessment accounts for 70% of your final mark.

## 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. One mandatory project which must be completed during the module.

### Notional learning hours

Activity	Units	Contact Time	Structured Time	Self-Directed Time
Lecture		27.0		9.0
Formative feedback		1.0		
Project	1	2.0		7.0
Test	1		2.0	4.0
Exam	1		2.0	6.0
		<b>30.0</b>	<b>4.0</b>	<b>26.0</b>

### 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)