L-Università ta' Malta
Faculty for the
Built Environment

M.Eng. Year 1 -Design Workshop

Semester 2

CVE5103-YR-B-2526: Design Workshops - Engineering and Management

PROJECT MANAGEMENT COMPONENT

Project Management

Multi-Storey Project

February - May 2026

Unit Component Co-Ordinator(s):

Perit Mark Borg; Professor Rebecca Dalli Gonzi

Design Tutors:

Professor Rebecca Dalli Gonzi, Dr Joseph Spiteri, Dr Ivan Bondin, Dr George Dimech, Perit Mark Borg, Perit Charlene Darmanin, Dr. Perit Joseph Falzon (all structural tutors are available on request).

Design Project Objectives:

Following the completion of your Structural Engineering Component, you are now being introduced to the project management component for the same project undertaken in Semester One, and the corresponding deliverables will be as follows:

A. **Project team structure and Organigram;**
B. **Programme of Works;**
C. **Project Feasibility and Cost Plan;**
D. **Construction Management Plan and Site Logistics plan;**
E. **Procurement Strategy;**
F. **Sustainability Plan and alternative measures for net-zero considerations;**
G. **H&S Plan and Risk Analysis report;**

The project management module **duration is 14 weeks**, and there will be a final presentation, the date for which is to be announced later. During this module a mix of on-site lectures, site visits and modules will be undertaken and you are expected to start drafting your presentation deliverables as you go along. Extra tutorials will be held accordingly.

Learning Outcomes (Project Management Component):

The learning outcomes for this design project must include your ability to demonstrate knowledge of:

- Understand the different roles of the project team and appreciate the set-up involved;
- Familiarisation with RIBA plan of Work process flow;
- Skills to formulate a project cost plan;
- Ability to determine the feasibility of a project;
- Show an understanding of the importance of spatial coordination between various consultants;
- Understand the use of BIM technology;
- Familiarise with Site management;
- Be aware of the various procurement routes available and prepare an optimized procurement strategy;
- Perform a Sustainability performance check and suggest alternative sustainable solutions/materials;
- Ability to read through LEED/BREEAM certification and scoring techniques;
- Acquire master scheduling skills and draw up programme of works;
- Acquire knowledge in Risk Management tools and techniques;
- Develop an awareness for clear Communication techniques and systems that are essential on a construction project.

Design Project Timeline

CVE5103A-2 (Structural Engineering with Project Management)

Design Project Workshop

SEMESTER 2 **Start Date:** **13th February 2026** **End Date:** **25th May 2026**			
Week 01	**Introduction to a local Case Study Project & Project Team – Project Landmark, St. Julian's** The module will kick-off with an introductory session with all the consultants involved on a case study high rise project – Project Landmark, St. Julian's, with a view to understanding the project team structure, dynamics, roles and responsibilities. The RIBA Plan of Work process flow will be explained. A site visit will also be held to appreciate the logistical challenges of the project in its context. Task: Attend meeting with project team and site visit. Show an understanding of the RIBA Plan of Work in relation to the Case Study Project and roles and responsibilities of project team members working this construction project **Deliverable: Draw up Project Organigram and outline various roles and responsibilities for your own Marsa Multi-Storey Project**		**Friday 13th Feb (2.00pm – 5.00pm)** **MVB**
Week 02 /03	**Project Feasibility Study & Cost Planning** A feasibility study assesses the potential for success of the proposed plan or project by defining its expected costs and projected benefits in detail. **Deliverable: Analyse the technical, economic, legal, operations and time factors and prepare a preliminary Cost Plan and Feasibility Study for your own Marsa Multi-Storey Project**	**Thursday 19th Feb (10.00am – 12.00pm)** **Lecture with Dr. Joseph Spiteri** **Thursday 26th Feb (10.00am – 12.00pm)** **Lecture with Dr. Joseph Spiteri**	**Friday 27th Feb (2.00pm – 5.00pm)** **Tutorial MVB**
Week 04/05	**Scheduling Basics** Scheduling in project management is listing the construction process, taking into account each phase of your project, setting up	**Thursday 5th March (10.00am – 12.00pm)** **MVB / Lecture with Carl Benecke**	

	deliverables and milestones, and producing all this information into a Gantt Chart. **Deliverable: Draw up a Work Breakdown Structure and prepare a Gantt Chart comprising civil works, building services and finishing trades, for your own Marsa Multi-Storey Project**	**Thursday 12th March (10.00am – 12.00pm)** **MVB / Lecture with Carl Benecke**	**Friday 13th March (2.00pm – 5.00pm)** **Tutorial MVB**
Week 06/07	**Construction Management Planning and Site Logistics** The primary objective of construction site plan management is to ensure that individuals and resources arrive at their designated locations at the appropriate time. Construction industry logistics is the process of being aware of the location of your materials and resources at every stage of the project, whether they are on-site, in storage, or in transit. **Deliverable: Draw up a CMP and Site Logistics plan for your own Marsa Multi-Storey Project at various stages during the execution phase**	**Thursday 19th March (10.00am – 12.00pm)** **Lecture with Dr. Ivan Bondin** **Thursday 26th March (10.00am – 12.00pm)** **Lecture with Dr. Ivan Bondin**	**Friday 27th March (2.00pm – 5.00pm)** **Tutorial MVB**

Easter Recess (8th April – 9th – 10th April; Dr. Steven Male Workshop; optional)

Week 08/09	**Procurement Strategy; Procurement Routes, Tendering and Contracts** It is important to bear in mind that the construction work may only constitute a relatively minor portion of the overall life cycle of a building or facility. The procurement strategy for the construction project must also consider the project's position within the broader context. A procurement strategy that is suitable will guarantee that the client receives the appropriate project at the appropriate price and quality within the specified timeframe.	**Thursday 16th April (10.00am – 12.00pm)** **Lecture with Dr. George Dimech** **Thursday 23rd April (10.00am – 12.00pm)** **Lecture with Dr. George Dimech**	**Friday 24th April (2.00pm – 5.00pm)** **Tutorial MVB**

	Deliverable: Develop a report highlighting a recommendation on the preferred procurement route Procurement Strategy proposal for case study project		
Week 10	**Risk Management** A method or system for identifying and minimizing different hazards within a building project is known as construction risk management. You are being tasked to build awareness of the potential risks that the building process could encounter. **Deliverable: Compile information regarding the probability of the occurrence of the risk factor and its potential likely impact; Discuss a mitigation plan in relation to your Marsa Multi-Storey Project and Prepare a Risk matrix.**	**Thursday 30th April (10.00am – 12.00pm)** **Lecture with Prof. Rebecca Dalli Gonzi, Dr. Perit Joseph Falzon**	**Friday 1st May**

Week 11/12	**Sustainability Workshop** Sustainable construction is the process of designing, constructing, and operating buildings and infrastructure in an environmentally responsible manner. This may entail the utilization of renewable and non-toxic materials, the enhancement of energy efficiency, and the reduction of waste. Task: Develop a report outlining the sustainability performance of the case study project as proposed and suggest alternative solutions/materials for better sustainability performance **Deliverable: Sustainability performance report and alternative solutions/materials**	**Thursday 7th May (10.00am – 12.00pm)** **Lecture with Perit. Charlene Darmanin/Dr. Amber Wismayer** **Thursday 14th May (10.00am – 12.00pm)** **Lecture with Perit. Charlene Darmanin/Dr. Amber Wismayer**	**Friday 15th May (2.00pm – 5.00pm)** **Tutorial with MVB**

Week 13	**Tutorials and revision session** To be advised	**Thursday 21st May (10.00am – 12.00pm)**	**Friday 22nd May (2.00pm – 5.00pm)**

Final Project Submission Week 14	**Design Projects are to be uploaded in a Single Bound PDF File in the CVE5103-YR-B-2526: Design Workshops - Engineering and Management (Structural Design)** **Date of submission to be announced.**
Formal Final Review Date to be Announced	**This is a formal presentation in front of a panel of examiners.** You are to prepare a MS Power Point Presentation booklet that will include, at least, one slide representing each deliverible: • Project Organigram/Roles & Responsibilities; • Cost Plan/Feasibility Report; • WBS and Gantt Chart; • Outline CMP /Site Logistics Diagram; • Procurement Strategy; • Risk Analysis Report; • Sustainability Building Performance including alternative solutions/materials.

Design Criteria (Project Management Component)
Design Rubric

Marks will be awarded on the basis of the following design criteria:

(1) Knowledge of your construction process, and relevant site management limitations.

(2) Your understanding of management analysis tools including risk tools and valuation methods.

(3) The clarifications used to justify your choice for procurement strategy.

(4) The cause and effect between your final structural design solution and the results presented in your management report.

(5) Oral presentation skills.

ASSESSMENT CRITERIA:

CVE5103-YR-B-2526: Design Workshops - Engineering and Management (Structural Design) are to be uploaded on to the CVE5103 study-unit area of UM VLE by 23:59 Hours on the scheduled date of submission. Assessment of the individual student design projects will be carried out by means of an oral examination following a MS Power-Point presentation by the students of their individual design project deliverables submitted on the UM VLE online facility by the deadline for submissions. Every student will be allocated a maximum of 15 minutes for the oral presentation, following which there will be a 5-minute Q & A (Question and Answer) session with the design project examiners. The date and venue of the Design Project Reviews will be communicated at a later date.

PLAGIARISM & COLLUSION:

When writing their Technical Design Report, students should be mindful of the regulations on plagiarism and collusion of the University of Malta, which may be consulted online herewith: Student Conduct - Office of the Registrar - L-Università ta' Malta (um.edu.mt)

Furthermore, while students are allowed to work within student groups, it is important for students to keep in mind that their design projects will be marked only for individual academic effort. In this respect, students are strongly advised to avoid submitting an individual design project, which is essentially identical, or very similar, to another or other design project/s, since such design project submissions will be heavily penalised by the examiners for collusion.

Note: All AI Material that is generated for design purposes has to be stated in a 'disclaimer sentence' attached to your submitted work.
All material generated using an AI paraphraser has to be stated in a 'disclaimer sentence'. Kindly ensure that you follow these guidelines accordingly.

Date

02.02.2026