#### 獎學金 Scholarship

• 澳門大學理工科課程獎學金 STEM Scholarship

詳情請到研究生院網站了解:

For details, please visit the website of Graduate School or scan below QR code: https://grs.um.edu.mo/index.php/stem-scholarship/



• 澳門大學研究助理及教學助理 Research Assistantships & Teaching Assistantships

For details, please visit the website of Graduate School or scan below QR code: https://grs.um.edu.mo/index.php/prospective-students/assistantship/



#### 入學章程 Admission Guideline

詳情請到研究生院網站了解:

For details, please visit the website of Graduate School or scan below QR code: https://grs.um.edu.mo/index.php/prospective-students/assistantship/

















澳門大學科技學院製作

Faculty of Science and Technology (E11) 中國澳門氹仔 大學大馬路 澳門大學 科技學院

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# 澳門大學科技學院 理學碩士學位-建造項目管理

Master of Science in

















智慧工地

Faculty of Science and Technology, University of Macau



項目管理原理 Principles of Project
Management











#### 課程目標 Programme Aims

課程旨在培養建造專業人員和相關領域的從業員,以應對建築環境當前和未來所面臨的挑戰。為了達成這一目標,本課程將讓學生深入理解項目目管理的原理,並將其應用於建造項目開發周期的不同階段,以便在時間、成委員量、安全和可持續性方面取授本、質量、安全和可持續性方面取授學生有關建造業最新的技術知識,由力需要生能滿足未來市場上的勞動力需求。

The programme is designed to prepare construction professionals and those in the related fields to meet current and future challenges in our built environment. To achieve this objective, the programme aims to provide students with a thorough understanding of the principles of project management, and to apply them across different phases of the construction project development cycle to achieve successful project outcomes in terms of time, cost, quality, safety and sustainability. The programme will also provide students with the knowledge of the state-of-the-art technology in the construction industry, so that students will be well equipped to meet the needs of the future workforce.

### 課程架構 Programme Curriculum

- 1. 開辦學年: 2024/2025
- 2. 修讀學分: 30學分
- 3. 修讀年期: 2年
- 4. 教學語言: 英語
- 5. 畢業要求: 學生必須完成修讀所要求的學科·並完成"項目報告"或"實習及報告"。
- 1. Programme to be offered in academic year: 2024/2025
- 2. Total programme Credits: 30
- 3. Duration of Study: 2 years
- 4. Medium of Instruction: English
- Graduation Requirements: Students must complete the required courses and "Project Report" or "Internship and Report".

## 必修及選修科目 Compulsory and Elective Courses

學生可透過以下任一方式完成修讀課程取得 30學分:

- 1. 四門必修學科(12學分)、四門選修 學科單元/科目(12學分)・以及項目報 告(6學分);
- 2. 四門必修學科(12學分)、五門選修 學科(15學分)・以及實習及報告(3 學分)

Student is required to obtain 30 credits by either of the following methods:

- 1. 4 compulsory courses to obtain 12 credits, 4 required elective courses to obtain 12 credits, and "Project Report" to obtain 6 credits, or
- 2. 4 compulsory courses to obtain 12 credits, 5 required elective courses to obtain 15 credits, and "Internship and Report" to obtain 3 credits.

Course 學科單元/科目	Type 種類	Credits 學分
建造項目管理理論與實踐	Compulsory 必修	3
Construction Project Management Theory and Practice		
合同管理 Contract Management		3
高等建造計劃及編排		3
Advanced Construction Planning and Scheduling		
建築信息模擬:發展與應用		
Building Information Modeling (BIM): Development and		3
Application		

Course 學科單元/科目	Type 種類	Credits 學分
建造成本管理 Construction Cost Management		3
創新建造方法與信息技術應用 Innovative Methods and		3
Applications of Information Technology in Construction		
建造可持續性 Sustainability in Construction		3
建造項目管理專題	Required	2
Special Topics in Construction Project Management	Elective	3
建造財務管理 Construction Financial Management	選修	3
建造决策定量分析		2
Quantitative Methods for Construction Decision Making		3
建造質量及安全管理		2
Quality and Safety Management in Construction		3

Course 學科單元/科目	Type 種類	Credits 學分
項目報告 Project Report	Required Elective 選修	6
實習及報告 Internship and Report		3

### 預期學習成效 Intended learning outcomes

- 1. 具備運用與學科領域相關的建造項目管理知識體系的能力;
- 2. 具備展示建造項目中在質量、安全及環境管理方面知識的能力;
- 3. 具備運用建造項目管理原則和實務解 決建造環境中複雜問題的能力;
- 4. 具備在建造業界中以個人及領導角色 均有效於團隊中運作的能力;
- 5. 通過理解、撰寫及演講報告以使具備 與建造管理業界及社會有效溝通的能力:
- 6. 具備及時洞悉當代建造項目管理問題能力;
- 7. 具備了解建造管理上自身需要並終身 <u>學習的能力;</u>
- 8. 具備運用執行項目管理實務所需的技術和技巧的能力。

- 1. An ability to apply the construction project management body of knowledge relevant to the discipline or professional field;
- 2. An ability to demonstrate knowledge on quality, safety and environmental control of construction projects;
- 3. An ability to apply construction project management principles and practices to solve complex problems in the construction environment;
- 4. An ability to function effectively as an individual and a leader in a team within the construction sector;
- 5. An ability to communicate effectively with the construction management community and with society at large, by being able to comprehend and write effective reports and make effective presentations;
- 6. An ability to stay abreast of contemporary issues in construction project management;
- 7. An ability to recognise the need for, and have the preparation to engage in life-long acquisition or application of knowledge or skills in construction management;
- 8. An ability to use the techniques and skills necessary for practicing project management.

### 入學資格 Admission Requirements

- 1. 須具有學士學位或澳大認可的同等學歷。
- 2. 申請人學士學位畢業總平均分達到 相等於\*C+或以上成績; \*相等於4分制GPA之2.3分·20分制 之14分或100分制之70分。
- 3. 申請人必需符合澳大之基本入學英 海水亚。
- 1. Applicants must possess a Bachelor's degree or academic background recognized as equivalent by the University of Macau.
- Applicants should have achieved the equivalent\* of an overall result of Grade C+ or better in the Bachelor's degree studies. \* The equivalent means 2.3 on the 4.0 GPA scale, 14 on the 20-point scale or 70 out of 100.
- 3. Applicants must also meet the English proficiency requirement of the University.

## 申請及學費 Application & Tuition Fee

申請人可透過澳門大學研究生院網站或掃描以下二維碼提交申請: https://grs.um.edu.mo/

Prospective applicant can submit applications through the website of the Graduate School of the University of Macau or by scanning the QR code below:

碩士課程最新學費: https://grs.um.edu.mo/index.php/curr ent-students/tuition-fee/

The latest tuition fees for master programmes: https://grs.um.edu.mo/index.php/current-students/tuition-fee/



