

# 土木工程學系碩士班

112 學年度

|                          |   |
|--------------------------|---|
| 最低修業年限                   | 一般生一年，在職生二年   |
| 應修學分數                    | 24 學分 (不含專題討論學分)  |
| 應修 (應選) 課程及符合畢業資格之修課相關規定 | <p>一、應修學分數中至少須有 12 學分為本系研究所所開課程。</p> <p>二、專題討論課程為一學分，不計入畢業學分，必須修習四學期且通過。若有成績優異且修業期間少於四學期者，經向各學術分組申請通過後，得申請碩士論文口試及減少專題討論必修學期數；本校與境外大學辦理雙聯學制所屬碩士班研究生註冊者，皆需修習專題討論課程且通過(專題討論課程修滿四學期者，不受此限)。</p> <p>三、入學第一學期結束前需至「臺灣學術倫理教育資源中心」平台修習學術倫理課程，並通過課程總測驗達及格標準。未通過總測驗之學生不得申請學位考試。</p> <p>四、各組修課規定</p> <ol style="list-style-type: none"> <li>1. 結構工程組：           <ol style="list-style-type: none"> <li>(1)必須修習且通過下列①~③課程中(①高等結構學、②結構動力學、③彈性力學或高等材料力學)之二門課；若要到外校修習前述課程者，須經組務會議通過。</li> <li>(2)必須修讀至少四門結構專業課程(含前述二門課程)。</li> </ol> </li> <li>2. 營建管理組：           <p>必須修習且通過下列六門課中(工程進度規劃與控制/高科技廠房設施營建管理、風險與決策分析、工程成本管理/進階工程成本管理、公共建設投資理論與實務、大型專案財務學、工程專案管理實務)之二門課。</p> </li> <li>3. 水利及海洋工程組：           <p>必須修習且通過下列四門課中(渠道水力學、水資源規劃、高等水文學、及波浪理論)之兩門課；且必須修讀至少四門水利及海洋相關專業課程(含前述兩門課程)。</p> </li> <li>4. 大地工程組：           <ol style="list-style-type: none"> <li>(1)必須修習且通過下列三門課(高等土壤力學、地工數值方法、岩石力學)</li> <li>(2)修讀至少八門大地專業課程(24 學分)</li> <li>(3)若要修讀非大地專業課程並採計為(2)的八門課程之一，應徵得指導教授同意方得選讀。</li> </ol> </li> <li>5. 測量與空間資訊組：           <p>必須修習且通過下列三門課(平差理論、遙測學、數值攝影測量)。</p> </li> <li>6. 資訊科技組：           <p>必須修習且通過下列四大類別課程中三大類，共計四門課。</p> <p>各類別名稱如下：(1)資料庫與資料探勘(2)人工智慧(3)計算理論與科學計算(4)系統與應用。各類別下之課程採正面表列，並由組務會議訂定及調整之。</p> </li> </ol> <p>五、國際生無核心課程規定，並經指導教授同意後，得以修習「個別研究」課程抵專題討論課程。</p> |
| 備註                       | 其他未盡事宜，依據本系「碩士班研究生修業規章」辦理。  |

# Civil Engineering Master's Degree Program

Academic year 2023

|                         |  |
|-------------------------|--|
| Minimum Term of Study   | 1 year for regular students, 2 years for on-job students   |
| Required Credits        | 24 credits (excluding seminar courses)   |
| Coursework Requirements | <ol style="list-style-type: none"> <li>1. At least 12 of the coursework credits must be among the graduate-level courses from Civil Engineering department.</li> <li>2. Must take and pass at least four semesters of 1-credit graduate seminar. The seminar credits do not account for required credits for graduation. For outstanding academic students who pass the thesis oral exam before 4 semesters can apply for reduced requirement of seminar credits. Note that students enrolled in the joint degree program with foreign/mainland China universities are also required to take and pass the seminar courses unless they have already passed 4 seminar credits.</li> <li>3. Students should study the course on the “Taiwan Academic Ethics Education Resource Center” platform before the end of the first semester after enrollment. Students who fail to pass the final test cannot apply for degree exam.</li> <li>4. Additional specific core course requirements of each graduate program are listed as follows. <ul style="list-style-type: none"> <li><b>(A). Structural Engineering:</b> (1) Required to enroll and pass 2 of the following 3 courses (Advanced Structure Analysis, Structural Dynamics, and Elasticity or Advanced Mechanics of Materials). (2) Required to enroll in at least 4 structural engineering specialized courses (including the 2 courses mentioned above).</li> <li><b>(B). Construction Engineering &amp; Management:</b> (1) Required to enroll and pass 2 of the following 6 courses (Project Scheduling and Control/High-tech Facility Construction Management, Risk Analysis and Decision Making, Construction Cost Management /Advanced Cost Management in Construction, Public Works Investment: Theory and Practice, Project Finance and Project Management Practices for Engineering).</li> <li><b>(C). Hydraulic and Ocean Engineering:</b> (1) Required to enroll and pass 2 of the following 4 courses (Open Channel Hydraulics, Water Resources System Planning, Advanced Hydrology, and Water Wave Theory). (2) Required to enroll in at least 4 Hydraulic and Ocean Engineering specialized courses (including the 2 courses mentioned above).</li> <li><b>(D). Geotechnical Engineering:</b> (1) Required to enroll and pass the following 3 courses (Advanced Soil Mechanics, Numerical and Analytical Methods in Geotechnical Engineering, and Rock Mechanics). (2) Enroll in at least 8 Geotechnical engineering specialized courses (24 credits). (3) Regarding the required 8 courses mentioned above in (2), non-geotechnical engineering related courses will require approval from their advisor before enrolling.</li> <li><b>(E). Surveying Engineering:</b> (1) Required to enroll and pass the following 3 courses (Adjustment and Statistics, Remote Sensing, Digital Photogrammetry).</li> <li><b>(F). Information Technology Engineering:</b> Required to enroll and pass 3 of the following 4 categories (total of 4 courses): (1) Database and Data Mining. (2) Artificial Intelligence. (3) Computer Theory and Scientific Computing. (4) Systems and Applications. Each category consists of courses that will be determined and adjusted by the program committee.</li> </ul> </li> <li>5. International students are not limited by the course requirements prescribed above. They can also take an independent study course as a substitute for each seminar credit if their advisors agree.</li> </ol> |
| Remarks                 | <p>Other matters not covered here will be executed according to the academic regulations for civil engineering graduate program.</p> <p>The Chinese version of the document shall prevail in case of any discrepancy or inconsistency between Chinese version and its English translation.</p>   |

# 土木工程學系博士班

112 學年度

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|----------------------------------|--|
| 最低修業年限                           | 一般生二年，在職生三年  |
| 應修學分數                            | 18 學分 (不含專題討論學分)   |
| 直升博士生<br>應修學分數                   | 30 學分 (不含專題討論學分)   |
| 應修 (應選) 課程<br>及符合畢業資格之<br>修課相關規定 | 一、專題討論課程為一學分，不計入畢業學分，必須修習至少四學期且通過。<br>二、入學第一學期結束前需至「臺灣學術倫理教育資源中心」平台修習學術倫理課程，並通過課程總測驗達及格標準。未通過總測驗之學生不得申請學位考試。<br>三、國際生經指導教授同意後，得以修習「個別研究」課程抵專題討論課程。 |
| 備註                               | 其他未盡事宜，依據本系「博士班研究生修業規章」辦理。   |

## Civil Engineering Doctoral Program

Academic year 2023

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| Minimum Term of Study                                      | 2 years for regular students, 3 years for on-job students  |
| Required Credits   | 18 credits (excluding seminar courses)   |
| Direct Admission into Doctoral Program<br>Required Credits | 30 credits (excluding seminar courses)   |
| Coursework Requirements                                    | <ol style="list-style-type: none"> <li>1. Seminar courses are 1 credit each (excluded from required graduating credits) and are mandatory for 4 semesters.</li> <li>2. Students should study the course on the “Taiwan Academic Ethics Education Resource Center” platform before the end of the first semester after enrollment. Students who fail to pass the final test cannot apply for degree exam.</li> <li>3. International students can take an independent study course as a substitute for each seminar credit if their advisors agree.</li> </ol> |
| Remarks  | <p>Other matters not covered here will be executed according to the academic regulations for civil engineering graduate program.</p> <p>The Chinese version of the document shall prevail in case of any discrepancy or inconsistency between Chinese version and its English translation.</p>   |