

112學年度水資源及環境工程學系水資源工程組課程規畫表(112學年度入學新生適用)
Division of Water Resources Engineering, Department of Water Resources and Environmental Engineering
Curriculum Planning Chart for 112 academic year (2023-2024) incoming freshmen

| 科目名稱 /subjects | | 學分 credits | 第 1 學年 | | 第 2 學年 | | 第 3 學年 | | 第 4 學年 | | 備註 Remarks | | |
|---|---|---------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--|---|--|
| | | | 1st academic year | | 2nd academic year | | 3rd academic year | | 4th academic year | | | | |
| | | | 上 1st semester | 下 2nd semester | 上 1st semester | 下 2nd semester | 上 1st semester | 下 2nd semester | 上 1st semester | 下 2nd semester | | | |
| 基本知能課程12學分 12 credits for general education curriculum | 外國語文學門(Q) Foreign Languages (Field Q) | 8 | 2 | 2 | 2 | 2 | | | | | 大一英文必修、大二外文自由選 Required English in freshman year; elective foreign language in sophomore year | | |
| | 中國語文能力表達 ABILITY OF EXPRESSING IN SPOKEN AND WRITTEN CHINESE | 2 | | | | | | | | | 語文表達 ABILITY OF EXPRESSING | | |
| | 大學學習 LEARNING IN UNIVERSITY | 1 | 1 | | | | | | | | 學習與發展學門(N) Learning And Development (Field N) | | |
| | 社團學習與實作(K) LEARNING AND PRACTICE OF CLUBS | 1 | | 1 | | | | | | | 課外活動與團隊發展 Extracurricular Activities and Team-Ship Development (Field K) | | |
| 通識核心課程14學分 14 credits for General Education Curriculum | AI與程式語言 AI and Programmiing Language | 1 | 1 | | | | | | | | | | |
| | 探索永續 Exploring Sustainability | 1 | 1 | | | | | | | | | | |
| | 文學經典學門(L) Classics In World Literature (Field L) | 2 | | | | | | | | | 人文領域 至少2學分 At least 2 credits in the Humanities field. | 每學門至多修習2科4學分 Students may take up to 2 courses (4 credits) in each academic field. | |
| | 歷史與文化學門(P) History And Culture (Field P) | 2 | | | | | | | | | | | |
| | 哲學與宗教學門(V) Philosophy and Religion (Field V) | 2 | | | | | | | | | | | |
| | 藝術欣賞與創作學門(M) Arts Appreciation and Invention (Field M) | 2 | | | | | | | | | | | |
| | 全球視野學門(T) Global Outlook (Field T) | 2 | | | | | | | | | 社會領域 至少2學分 At least 2 credits in the Social Sciences field. | | |
| | 未來學學門® Futures Studies (Field R) | 2 | | | | | | | | | | | |
| | 社會分析學門(W) Social Analysis (Field W) | 2 | | | | | | | | | 科學領域 至少2學分 At least 2 credits in the Science field. | | |
| | 公民社會及參與學門(S) Civil Society And Participation (Field S) | 2 | | | | | | | | | | | |
| | 資訊教育學門(O) Information & Computer Education (Field O) | 2 | | | | | | | | | | | |
| | *商管學院學生請另詢所屬學系 Students of the College of Business Management, please consult your respective departments. | | | | | | | | | | | | |
| | 全球科技革命學門(Z) Global Technology Revolution (Field Z) | 2 | | | | | | | | | | | |
| | 自然科學學門(U) Natural Sciences (Field U) | 2 | | | | | | | | | | | |
| 其他課程 other subjects | 體育 Physical Education | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| | 全民國防教育軍事訓練（一）-國防科技 ALL-OUT DEFENSE EDUCATION MILITARY TRAINING(I)-NATIONAL DEFENSE TECHNOLOGY | 0 | | | | | | | | | 1年級：單學期0學分 First-year; zero credits in a single semester. | | |
| 校園與社區服務學習 CAMPUS AND COMMUNITY SERVICE-LEARNING | | 0 | 0 | 0 | | | | | | | | | |
| ■本系必修課程：72學分 Required Courses：72 credits | 普通物理 GENERAL PHYSICS | 4 | 2 | 2 | | | | | | | | | |
| | 微積分 CALCULUS | 3 | 3 | | | | | | | | | | |
| | 水環境生態學 WATERSHED ECOLOGY AND THE ENVIRONMENT | 2 | 2 | | | | | | | | | | |
| | 環境化學 ENVIRONMENTAL CHEMISTRY | 2 | 2 | | | | | | | | | | |
| | 水資源工程概論 INTRODUCTION OF WATER RESOURCES ENGINEERING | 1 | 1 | | | | | | | | | | |
| | 基礎工程數學 BASIC ENGINEERING MATHEMATICS | 2 | | 2 | | | | | | | | | |

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| 應用力學 APPLIED MECHANICS | 3 | | 3 | | | | | | |
| 工程統計 ENGINEERING STATISTICS | 3 | | 3 | | | | | | |
| 水文學 HYDROLOGY | 3 | | 3 | | | | | | |
| 工程數學 ENGINEERING MATHEMATICS | 6 | | | 3 | 3 | | | | |
| 流體力學(一) FLUID MECHANICS(I) | 3 | | | 3 | | | | | |
| 材料力學 STRENGTH OF MATERIALS | 3 | | | 3 | | | | | |
| 水文測量與實習 PRACTICE & SURVEY OF HYDROLOGY | 2 | | | 2 | | | | | |
| 程式設計 PROGRAM DESIGN | 3 | | | | 3 | | | | |
| 結構學 STRUCTURAL THEORY | 3 | | | | 3 | | | | |
| 流體力學(二) FLUID MECHANICS(II) | 3 | | | | 3 | | | | |
| 水環境 WATER ENVIRONMENT | 2 | | | | 2 | | | | |
| 流體力學實驗 FLUID MECHANICS LAB. | 1 | | | | | 1 | | | 實驗課程 Laboratory course |
| 數值方法 NUMERICAL METHOD | 3 | | | | | 3 | | | |
| 土壤力學 SOIL MECHANICS | 3 | | | | | 3 | | | |
| 明渠水力學 HYDRAULICS AND OPEN CHANNELS | 3 | | | | | 3 | | | |
| 水資源工程(一) WATER RESOURCES ENGINEERING(I) | 3 | | | | | 3 | | | |
| 渠道水力學實驗 OPEN CHANNEL HYDRAULICS EXPERIMENTS | 1 | | | | | | 1 | | 實驗課程 Laboratory course |
| 水資源規劃 WATER RESOURCES PLANNING | 3 | | | | | | 3 | | |
| 防洪工程 FLOOD ENGINEERING | 3 | | | | | | 3 | | |
| 專題實作 PRACTICE OF PROJECTS | 2 | | | | | | 2 | | |
| 地理資訊在工程上之應用 GIS AND ITS ENGINEERING APPLICATION | 2 | | | | | | | 2 | |
| 工程材料學 ENGINEERING MATERIALS | 2 | 2 | | | | | | | |
| 工程材料實驗 ENGINEERING MATERIALS LABORATORY | 1 | | 1 | | | | | | |
| 工程經濟學 ENGINEERING ECONOMICS | 2 | | 2 | | | | | | |
| 水質實驗 WATER QUALITY ANALYSIS | 1 | | | 1 | | | | | 實驗課程 Laboratory course |
| 水資源概論 INTRODUCTION TO HYDROINFORMATICS | 3 | | | 3 | | | | | 這門課開設於人工智慧學系 This course is offered by the Department of Artificial Intelligence. |
| 中等水文學 INTERMEDIATE HYDROLOGY | 3 | | | | 3 | | | | |
| 工程圖學 ENGINEERING GRAPHICS | 2 | | | | 2 | | | | |
| 智慧水資源管理概論 INTRODUCTION TO SMART WATER RESOURCES MANAGEMENT | 3 | | | | 3 | | | | 這門課開設於人工智慧學系 This course is offered by the Department of |
| 專題實作導論 INTRODUCTION TO PRACTICE OF PROJECTS | 2 | | | | | 2 | | | |
| 工程地質學 ENGINEERING GEOLOGY | 2 | | | | | 2 | | | |
| 地下水及土壤污染 GROUNDWATER AND SOIL POLLUTION | 4 | | | | | 4 | | | |
| 基礎工程 FOUNDATION ENGINEERING | 3 | | | | | | 3 | | |
| 鋼筋混凝土 REINFORCED CONCRETE | 3 | | | | | | 3 | | |
| 給水工程 WATER SUPPLY ENGINEERING | 3 | | | | | | 3 | | 這門課開設於水環系環境工程 組 This course is offered by the Division of Environmental Engineering, Department of Water Resources and |
| 水資源工程(二) WATER RESOURCES ENGINEERING(II) | 3 | | | | | | | 3 | |
| 企業實習 PRACTICUM IN EDUCATIONAL TECHNOLOGY | 2 | | | | | | | 2 | |

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| 灌溉及排水工程 IRRIGATION AND DRAINAGE ENGINEERING | 3 | | | | | | | 3 | | |
| 水土保持工程 SOIL AND WATER RESERVATION ENGINEERING | 2 | | | | | | | 2 | | |
| 污水工程 WASTEWATER ENGINEERING | 3 | | | | | | | 3 | | 這門課開設於小環系環境工程組 This course is offered by the Division of Environmental Engineering, Department of Water Resources and Environmental Engineering |
| 水利法規 HYDRAULIC REGULATIONS | 2 | | | | | | | | 2 | |
| 海岸工程 COASTAL ENGINEERING | 3 | | | | | | | | 3 | |
| 水利工程應用軟體 HYDRAULIC MODELING SOFTWARES | 3 | | | | | | | | 3 | |

(1)必修科目總學分數：98學分(含通識教育課程26學分)

(1)Total Credits for Required Courses: 98 credits (including 26 credits in General Education courses)

(2)最低應修本系選修科目總學分數：10學分

(2)Minimum Credits Required for Departmental Elective Courses: 10 credits

(3)其他選修總學分數：20學分

(3)Minimum Number of Credits Required for Other Elective Courses: 20credits

畢業總學分數：128學分

Total Number of Credits Required for Graduation: 128 credits