

**114 學年度永續與綠能科技研究學院 EMI 課程地圖**  
**Graduate College of Sustainability and Green Energy**  
**Academic year 114 EMI Course map**

| 課號<br>Course<br>Code | 課程名稱<br>Course Name                                                                                   | 修課年級<br>Year            | 學分數 Credit |      | 備註<br>Note     |
|----------------------|-------------------------------------------------------------------------------------------------------|-------------------------|------------|------|----------------|
|                      |                                                                                                       |                         | 1141       | 1142 |                |
| SA5001               | 地球環境<br>Earth Environment                                                                             | 碩博同修<br>Doctoral-Master | 3          | ---  | 必修<br>Required |
| SA5006               | 氣象資訊與風光電實務<br>Wind and solar energy practice with<br>weather data                                     | 碩博同修<br>Doctoral-Master | 2          | ---  | 選修<br>Elective |
| SA5009               | 氣候變遷風險與評估<br>Climate Change Risk and Assessment                                                       | 碩博同修<br>Doctoral-Master | 2          | ---  | 選修<br>Elective |
| SA5023               | 廢棄物處理與循環工程<br>Waste Treatment and Recycling Engineering                                               | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SA5026               | 離岸風電與多維環境參數與評估<br>Offshore Wind Power and Multidimensional<br>Environmental Parameters and Assessment | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SA5005               | 跨領域空間資料分析與永續應用<br>Interdisciplinary Spatial Data Analysis and<br>Sustainable Applications             | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SA5030               | 地球工程概論<br>Fundamentals of Geoengineering                                                              | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SA5031               | 無人機攝影測量<br>UAV Photogrammetry                                                                         | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SA5002               | IPCC 報告導讀<br>Introduction to the IPCC assessment<br>reports                                           | 碩博同修<br>Doctoral-Master | ---        | 3    | 選修<br>Elective |
| SA5013               | 循環經濟材料於基礎建設之再利用<br>Reuse of Circular Economy Materials in<br>Road Engineering                         | 碩博同修<br>Doctoral-Master | ---        | 3    | 選修<br>Elective |

**114 學年度永續領導力碩/博士學位學程 EMI 課程地圖**  
**MS/PhD Program in Sustainability Leadership**  
**Academic year 114 EMI Course map**

| 課號<br>Course<br>Code | 課程名稱<br>Course Name                                                                    | 修課年級<br>Year            | 學分數 Credit |      | 備註<br>Note     |
|----------------------|----------------------------------------------------------------------------------------|-------------------------|------------|------|----------------|
|                      |                                                                                        |                         | 1141       | 1142 |                |
| SL5001               | 永續發展專題探討<br>Seminar on Sustainable Development                                         | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SL5002               | 永續製造與企業資源規劃<br>Sustainable Manufacturing and ERP                                       | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SL5004               | 企業社會責任<br>Corporate Social Responsibility                                              | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SL5011               | 空間資訊數位研究<br>Geospatial Digital Study                                                   | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SL5014               | 永續領導力基礎<br>Sustainability Leadership Essentials                                        | 碩博同修<br>Doctoral-Master | 3          | ---  | 必修<br>Required |
| SL5015               | DEI 多元平等共融概論<br>Introduction to DEI: Diversity, Equity, and Inclusion                  | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SL5005               | 環境、社會與治理基礎與實務<br>Environmental, Social, and Governance (ESG) Fundamentals and Practice | 碩博同修<br>Doctoral-Master | ---        | 3    | 選修<br>Elective |
| SL5006               | 再生能源與永續發展<br>Renewable Energy & Sustainable Development                                | 碩博同修<br>Doctoral-Master | ---        | 3    | 選修<br>Elective |
| SL5007               | 數位影像與社會變遷<br>Digital Image and Social Change                                           | 碩博同修<br>Doctoral-Master | ---        | 3    | 選修<br>Elective |
| SL5008               | 社會投資報酬分析實務專題<br>Practical Project on Social Return on Investment                       | 碩博同修<br>Doctoral-Master | ---        | 3    | 選修<br>Elective |

**114 學年度永續去碳科技碩/博士學位學程 EMI 課程地圖**  
**Master/Ph.D. Programs, Sustainability in Decarbonization**  
**Academic year 114 EMI Course map**

| 課號<br>Course<br>Code | 課程名稱<br>Course Name                                                                                    | 修課年級<br>Year            | 學分數 Credit |      | 備註<br>Note     |
|----------------------|--------------------------------------------------------------------------------------------------------|-------------------------|------------|------|----------------|
|                      |                                                                                                        |                         | 1141       | 1142 |                |
| SD5003               | 儲能原理與技術<br>Theory and Technology of energy storage                                                     | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SD5004               | 工程材料之減碳減排原理與其應用<br>The principal and application of Carbon emission reduction for engineering material | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SD5011               | 地熱資源調查與實作<br>Geothermal Resource Survey and Implementation                                             | 碩博同修<br>Doctoral-Master | 2          | ---  | 選修<br>Elective |
| SD5008               | 循環經濟與綠色技術實務<br>Circular Economic and Green Technology Practices                                        | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SD5014               | 儲氫技術<br>Hydrogen Storage Technologies                                                                  | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |

**114 學年度永續綠能科技碩/博士學位學程 EMI 課程地圖**  
**Master/Ph.D. Programs, Sustainability in Green Energy**  
**Academic year 114 EMI Course map**

| 課號<br>Course<br>Code | 課程名稱<br>Course Name                                         | 修課年級<br>Year            | 學分數 Credit |      | 備註<br>Note     |
|----------------------|-------------------------------------------------------------|-------------------------|------------|------|----------------|
|                      |                                                             |                         | 1141       | 1142 |                |
| SG5001               | 電力電子電路分析與設計<br>Analysis and Design of Power Electronics     | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SG5002               | 電力系統故障分析<br>Power System Fault Analysis                     | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SG5004               | 電力品質訊號處理<br>Signal Processing of Power Quality Disturbances | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SG5006               | 人工智慧<br>Artificial Intelligence                             | 碩博同修<br>Doctoral-Master | 3          | ---  | 選修<br>Elective |
| SG5003               | 切換式電能轉換器<br>Switching Mode Power Converters                 | 碩博同修<br>Doctoral-Master | ---        | 3    | 選修<br>Elective |
| SG5027               | 綠能總論<br>General introduction to green energy                | 碩博同修<br>Doctoral-Master | ---        | 3    | 必修<br>Required |

