

**(Study Scheme - English)**

**Minor Programme Title**

New Energy Science and Engineering

**Study Scheme**

**Applicable to all students admitted in 2020-21 and thereafter**

**Minor Programme Requirement**

Students are required to complete a minimum of 21 units of courses as follows:

	Units
1. Required Courses:	
ENE3050, 4003, 4008	9
2. Elective Courses[a]:	
CSC3002, 3150, DDA2020, EIE3250, ENE3001, 3003, 3004, 3005, 3006, 4001, 4005, 4007, 4009, 4010, 4011, 4012, 4013, MAT3007, PHY2002, 2010	12
<b>Total:</b>	<b>21</b>

**Explanatory Note:**

[a] Courses used to fulfill the requirements of other majors or minors cannot be counted towards this minor elective requirement.

(Study Scheme – Chinese)

副修課程名稱

新能源科學與工程

修讀辦法

二〇二〇至二一年度及以後入學學生適用

副修課程要求

學生須至少修畢以下科目共 21 學分：

	學分
1. 必修科目：	
ENE3050, 4003, 4008	9
2. 選修科目[a]：	
CSC3002, 3150, DDA2020, EIE3250, ENE3001, 3003, 3004, 3005, 3006, 4001, 4005, 4007, 4009, 4010, 4011, 4012, 4013, MAT3007, PHY2002, 2010	12
共：	<hr/> 21

註：

[a] 已用作符合其他主修或副修課程要求之科目不得再用作符合此副修課程之選修要求。

## Course List

### I. Required Courses

Course Code	Course Title (English)	Course Title (Chinese)	Unit(s)
ENE3050	Electrical Power Systems	電力系統	3
ENE4003	Energy Conversion Processes	能量轉換過程	3
ENE4008	Power Electronics	電力電子	3

### II. Elective Courses

Course Code	Course Title (English)	Course Title (Chinese)	Unit(s)
CSC3002	Introduction to Computer Science: Programming Paradigms	計算機科學導論：程序設計範式	3
CSC3150	Operating System	操作系統	3
DDA2020	Machine Learning	機器學習	3
EIE3250	System & Control	系統與控制	3
ENE3001	Principles of Energy Engineering	能源工程原理	3
ENE3003	Heat and Mass Transfer for Energy Systems	能源系統的熱質傳輸	3
ENE3004	Design of Solar Energy Conversion Systems	太陽能轉換系統設計	3
ENE3005	Electrochemical Energy Conversion	電化學能量轉換	3
ENE3006	Materials for Energy Applications	能源應用材料	3
ENE4001	Green Engineering and Environmental Compliance	綠色工程及環境標準	3
ENE4005	Energy Resources and the Environment	能源與環境	3
ENE4007	Energy Economics	能源經濟學	3
ENE4009	Power System Stability and Control	電力系統穩定性與控制	3
ENE4010	Power System Planning	電力系統規劃	3
ENE4011	Smart Grid	智能電網	3
ENE4012	Electricity Market	電力市場	3
ENE4013	Electrical Machines	電機學	3
MAT3007	Optimization	最優化	3
PHY2002	Thermodynamics	熱力學	3
PHY2010	Fluid Mechanics	流體力學	3

\* The course title of CSC4020 is Fundamental of Machine Learning for students who study the course before 2021-22 term 1. For students who study this course from 2021-22 term 1, the course code is DDA2020 and the course title is Machine Learning.

在 2021-22 學年第一學期前修讀 CSC4020，科目名稱為「機器學習之基礎課程」。在 2021-22 學年第一學期及以後修讀該科目，科目代碼及名稱分別為「DDA2020」及「機器學習」。