



# 電機系必修課程

## EE Required Courses

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110、111學年度入學生適用  
Applicable to Students Enrolled in School Year 110 and 111

國立中山大學電機工程學系  
Department of Electrical Engineering, NSYSU

# 大學部必修課程

## Required Courses (Undergraduate)

| 年級<br>Grade                  | 上學期<br>Fall Semester                   | 學分<br>Credit | 全英班授課老師<br>Instructor   | 下學期<br>Spring Semester            | 學分<br>Credit | 全英班授課老師<br>Instructor  |
|------------------------------|--|--------------|---|-----------------------------------|--------------|--|
| 一年級<br>1 <sup>st</sup> grade | 微積分(一)<br>Calculus (I)                 | 3            | 羅春光/李欣倫老師<br>Prof. Chun-Kong Law/<br>Prof. Hsin-Lun Li                | 微積分(二)<br>Calculus (II)           | 3            | 羅春光/李欣倫/<br>翁鵬黎老師<br>Prof. Chun-Kong Law/<br>Prof. Hsin-Lun Li/<br>Prof. Peng-Jie Wong |
|                              | 普通物理(一)<br>General Physics (I)         | 3            | 邱大維/史丹哲夫老師<br>Prof. Dah-Wei Chiou/<br>Prof. Rayko Ivanov<br>Stantchev | 普通物理(二)<br>General Physics (II)   | 3            | 邱大維/史丹哲夫老師<br>Prof. Dah-Wei Chiou/<br>Prof. Rayko Ivanov<br>Stantchev                  |
|                              | 計算機概論<br>Introduction to<br>Computers  | 3            | 陳伯煒/柯拉飛老師<br>Prof. Bo-Wei Chen/<br>Rafael David Kaliski               | 線性代數<br>Linear Algebra            | 3            | 高崇堯老師<br>Prof. Chung-Yao Kao   |
|                              | 數位系統設計<br>Design of Digital<br>Systems | 3            | 王朝欽老師<br>Prof. Chua-Chin Wang   | 微分方程<br>Differential<br>Equations | 3            | 吳珮歆老師<br>Prof. Pei-Hsin Wu   |
|                              | 計算機程式<br>Computer<br>Programming       | 3            | 魏家博老師<br>Prof. Chia-Po Wei  | 電路學(一)<br>Circuit Theory (I)      | 3            | 蘇健翔老師<br>Prof. Kin-Cheong Sou  |

# 大學部必修課程

## Required Courses (Undergraduate)

\*分組必修，詳細資訊請P.4。

\*Core Elective Courses, more details in P.4.

| 年級<br>Grade                  | 上學期<br>Fall Semester                        | 學分<br>Credit | 全英班授課老師<br>Instructor   | 下學期<br>Spring Semester                       | 學分<br>Credit | 全英班授課老師<br>Instructor  |
|------------------------------|---|--------------|---|--|--------------|--|
| 二年級<br>2 <sup>nd</sup> grade | 訊號與系統<br>Signals and Systems                | 3            | 曾乙立老師<br>Prof. Yi-Li Tseng                                    | 電子學(二)<br>Electronics (II)                   | 3            | 劉漢胤老師<br>Prof. Han-Yin Liu                                       |
|                              | 電子學(一)<br>Electronics (I)                   | 3            | 劉漢胤老師<br>Prof. Han-Yin Liu                                    | 電工實驗(二)<br>Electrical<br>Engineering Lab. II | 1            | 謝東佑, 陳有德老師<br>Prof. Tong-Yu Hsieh,<br>Prof. Yu-Te Chen           |
|                              | 電工實驗(一)<br>Electrical<br>Engineering Lab. I | 1            | 莊豐任, 謝耀慶老師<br>Prof. Feng-Renn Juang,<br>Prof. Yao-Ching Hsieh | 電機機械<br>Electrical Machines                  | 3            | 哈菲茲老師<br>Prof. Hafiz Furqan Ahmed                                |
|                              | 電路學(二)<br>Circuit Theory (II)               | 3            | 余祥華老師<br>Prof. Shiang-Hwua Yu                                 | 電磁學(二)<br>Electromagnetic<br>Theory (II)     | 3            | 王復康老師<br>Prof. Fu-Kang Wang                                      |
|                              | 電磁學(一)<br>Electromagnetic<br>Theory (I)     | 3            | 王復康老師<br>Prof. Fu-Kang Wang                                   | *機率與統計<br>*Probability Theory                | 3            | 柯拉飛/梁家昌老師<br>Prof. Rafael David Kaliski<br>Prof. Ka-Cheong Leung |

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| 年級<br>Grade                  | 上學期<br>Fall Semester                       | 學分<br>Credit | 全英班授課老師<br>Instructor                                       | 下學期<br>Spring Semester                    | 學分<br>Credit | 全英班授課老師<br>Instructor   |
|------------------------------|--|--------------|---|---|--------------|---|
| 三年級<br>3 <sup>rd</sup> grade | 電工實驗(三)<br>Electrical Engineering Lab. III | 1            | 陳有德, 邱日清老師<br>Prof. Yu-Te Chen,<br>Prof. Jih-Ching Chiu     | 電工實驗(四)<br>Electrical Engineering Lab. IV | 1            | 邱日清, 陳昶孝老師<br>Prof. Jih-Ching Chiu,<br>Prof. Chang-Hsiao Chen |
|                              | 控制系統<br>Control Systems                    | 3            | 高崇堯老師<br>Prof. Chung-Yao Kao                                | *離散數學<br>Discrete Mathematics             | 3            | 梁家昌老師<br>Prof. Ka-Cheong Leung                                |
|                              | 通訊系統<br>Communication Systems              | 3            | 陳彥銘老師<br>Prof. Yen-Ming Chen                                | *實作專題<br>Independent Studies              | 2            | -   |
|                              | *複變函數<br>Complex Variables                 | 3            | 高崇堯/鄭志強老師<br>Prof. Chung-Yao Kao<br>Prof. Chih-Chiang Cheng | -   | -            | -   |
| 四年級<br>4 <sup>th</sup> grade | 電工實驗(五)<br>Electrical Engineering Lab. V   | 1            | 王復康, 溫朝凱老師<br>Prof. Fu-Kang Wang<br>Prof. Chao-Kai Wen      | -   | -            | -   |

# 大學部分組必修課程

## Core Elective Courses (Undergraduate)

| 系必修<br>EE Required<br>Courses            | 課程名稱<br>Course Name  | 學分<br>Credit | 開課時間<br>Semester                                  | 備註<br>Note                                       |
|--|--|--------------|---|--|
| 分組必修 (A)<br>Core Elective<br>Courses (A) | 離散數學<br>Discrete Mathematics   | 3            | 三年級下學期<br>Spring semester in 3 <sup>rd</sup> year | 3科任選1科<br>Choose one of the<br>subjects to study |
|  | 複變函數<br>Complex Variables  | 3            | 三年級上學期<br>Fall semester in 3 <sup>rd</sup> year   |  |
|  | 機率與統計<br>Probability Theory  | 3            | 二年級下學期<br>Spring Semester in 2 <sup>nd</sup> year |  |
| 分組必修 (B)<br>Core Elective<br>Courses (B) | 電子實作專題<br>Independent Studies in Electronic Practice                                   | 2            | 三年級下學期<br>Spring semester in 3 <sup>rd</sup> year | 8科任選1科<br>Choose one of the<br>subjects to study |
|  | 控制實作專題<br>Independent Studies in Control Practice                                      | 2            |   |  |
|  | 計算機實作專題<br>Independent Studies in Computer Practice                                    | 2            |   |  |
|  | 電力實作專題<br>Independent Studies in Electric Power Practice                               | 2            |   |  |
|  | 電波與光電實作專題<br>Independent Studies in Wave and Optics Practice                           | 2            |   |  |
|  | 通訊實作專題<br>Independent Studies In Communication Practice                                | 2            |   |  |
|  | 系統晶片實作專題<br>Independent Studies in System-on-Chip Design                               | 2            |   |  |
|  | 生醫訊號處理與儀器實作專題<br>Independent Studies in Biomedical Signal Processing & Instrumentation | 2            |   |  |