



澳門科技大學  
Macau University of Science and Technology

創新工程學院-工程學科系  
Faculty of Innovation Engineering - Department of Engineering Science  
自動化與系統工程學學士學位課程  
Bachelor of Science in Automation and Systems Engineering  
2025/2026學年(學習計劃)  
2025/2026 Academic Year (Study Plan)

更新日期 Updated Date: 2025-07-11

科目編號 Course Code	科目名稱 (中文)	Course Name (English)	種類 Type	學分 Credit
<b>第一學年上學期 Semester 1 of First Year</b>				
ENG001	英文 I	English I	必修Compulsory	3
ENG002	英文 II	English II	必修Compulsory	3
GCLBL001	憲法與基本法概論	Introduction to Constitutional Law and Basic Law	必修Compulsory	1
CHNRW001	中文閱讀與寫作	Chinese Reading and Writing	必修Compulsory	3
GUL001	大學生活	University Life	必修Compulsory	1
BE101	大學微積分 I	University Calculus I	必修Compulsory	3
CS110	計算機程序設計	Computer Programming	必修Compulsory	3
PHYS101	物理 I	Physics I	必修Compulsory	3
<b>第一學年下學期 Semester 2 of First Year</b>				
ENG003	英文 III	English III	必修Compulsory	3
ENG004	英文 IV	English IV	必修Compulsory	3
GCWC001	中西文化通論	General Study of Chinese & Western Cultures	必修Compulsory	3
GMS001	科技大師講座	Masters Series of Science and Technology	必修Compulsory	2
BE102	大學微積分 II	University Calculus II	必修Compulsory	3
PHYS102	物理 II	Physics II	必修Compulsory	3
CS120	離散數學	Discrete Mathematics	必修Compulsory	3
BE103	化學	Chemistry	必修Compulsory	3
<b>第二學年上學期 Semester 1 of Second Year</b>				
CS190	專業道德與溝通技巧	Professional Ethics and Communication Skills	必修Compulsory	1
BE201	生物學	Biology	必修Compulsory	3
BE202	傳感器和儀器導論	Introduction to Sensors and Instruments	必修Compulsory	3
MATH100	線性代數	Linear Algebra	必修Compulsory	3
BSAS202	算法設計與數據結構	Algorithm Design and Data Structure	必修Compulsory	3
EIE130	數字電路	Digital Circuits	必修Compulsory	3
BSAS201	數字電路實驗	Experiments of Digital Circuits	必修Compulsory	1
PES-	體育與競技	Physical Education and Sports	必修Compulsory	2
	通識選修(社會科學範疇科目)	General Studies Elective Courses(Social Sciences)	選修Elective	2
	通識選修(人文藝術範疇科目)	General Studies Elective Courses(Humanities and Art)	選修Elective	2
<b>第二學年下學期 Semester 2 of Second Year</b>				
GSDS001	演講與辯論技巧	Speaking and Debating Skills	必修Compulsory	3
EIE240	電路分析	Circuit Analysis	必修Compulsory	3
MATH104	概率與統計	Probability and Statistics	必修Compulsory	3
BE203	創新產品與服務設計	Innovative Product & Service Design	必修Compulsory	2
BE204	綜合工程實踐	Integrated Engineering Practice	必修Compulsory	3
BSAS203	人工智能導論	Introduction to Artificial Intelligence	必修Compulsory	2
<b>第三學年上學期 Semester 1 of Third Year</b>				
EIE340	模擬電路	Analog Circuits	必修Compulsory	3
BSAS301	模擬電路實驗	Experiments of Analog Circuits	必修Compulsory	1
EIE220	信號與系統	Signals And Systems	必修Compulsory	3
BSAS302	運籌學	Operations Research	必修Compulsory	3
	選修科目 (1)	Elective Course (1)	選修Elective	6
<b>第三學年下學期 Semester 2 of Third Year</b>				
BSAS303	自動控制原理	Principle of Automatic Control	必修Compulsory	3
BSAS304	自動控制原理實驗	Experiments of Automatic Control Principles	必修Compulsory	1
BSAS305	MATLAB及其應用	MATLAB With Applications	必修Compulsory	2
	選修科目 (1)	Elective Course (1)	選修Elective	9
<b>第四學年上學期 Semester 1 of Fourth Year</b>				
BE302	畢業設計	Final Year Project	必修Compulsory	12
BE301	創業簡介	Introduction to Entrepreneurship	必修Compulsory	2
	選修科目 (1)	Elective Course (1)	選修Elective	6
<b>第四學年下學期 Semester 2 of Fourth Year</b>				
	選修科目 (1)	Elective Course (1)	選修Elective	4
總學分Total:				137

選修科目 Elective Courses

科目編號 Course Code	科目名稱 (中文)	Course Name (English)	種類 Type	學分 Credit
CS230	計算機組成原理	Computer Organization	選修Elective	3
CS240	數據庫系統	Database Systems	選修Elective	3
EIE470	計算機網絡	Computer Networks	選修Elective	3
CS461	機器人學	Robotics	選修Elective	3
CS490	實習	Internship	選修Elective	3
BSAS401	現代控制理論	Modern Control Theory	選修Elective	3
BSAS402	可編程邏輯控制器	Programmable Logic Controllers	選修Elective	2
BSAS403	電機與拖動	Electric Motor and Drive	選修Elective	3
BSAS404	復變函數與積分變換	Functions of Complex Variable and Integral Transforms	選修Elective	3
BSAS405	系統建模與仿真	Systems Modeling and Simulation	選修Elective	2
BSAS406	生產規劃與調度	Production Planning and Scheduling	選修Elective	2
BSAS407	形式化方法	Formal Methods	選修Elective	3
BSAS408	智能算法與控制	Intelligent Algorithms and Control	選修Elective	3
BSAS409	機器人動力學與控制	Robot Dynamics and Control	選修Elective	3
BSAS410	機器學習與模式識別	Machine learning and Pattern Recognition	選修Elective	2
BSAS411	計算機視覺與圖像處理	Computer Vision and Image Processing	選修Elective	3
BSAS412-	自動化與系統工程專題 I	Special Topics in Automation and Systems Engineering I	選修Elective	3
BSAS413-	自動化與系統工程專題 II	Special Topics in Automation and Systems Engineering II	選修Elective	3

通識選修科(社會科學) General Studies Elective Courses (Social Sciences)

科目編號 Course Code	科目名稱 (中文)	Course Name (English)	種類 Type	學分 Credit
GSH031	政治學概論	Introduction to Politics	選修Elective	2
GSH009	社會學	Sociology	選修Elective	2
GSH024	心理學導論	Introduction to Psychology	選修Elective	2
GSH033	國際關係概論	Introduction to International Relations	選修Elective	2
GSH020	公共行政	Public Administration	選修Elective	2
GSH021	澳門歷史	History of Macau	選修Elective	2
GSH022	中國歷史	Chinese History	選修Elective	2
GSH035	哲學導論	Introduction to Philosophy	選修Elective	2
GSH025	國際時事	Global Issues	選修Elective	2
GSH-	社會科學專題	Special Topic in Social Science	選修Elective	2

通識選修科(人文藝術) General Studies Elective Courses (Humanities and Arts)

科目編號 Course Code	科目名稱 (中文)	Course Name (English)	種類 Type	學分 Credit
GSA046	電影賞析	Films Appreciation	選修Elective	2
GSA047	中國近現代文學作品選讀	Selective Readings of Modern Chinese Literature	選修Elective	2
GSA048	詩詞欣賞	Appreciation of Traditional Chinese Poems	選修Elective	2
GSA049	世界文學名著選讀	Selective Readings of Masterpieces in World Literature	選修Elective	2
GSA050	音樂欣賞	Music Appreciation	選修Elective	2
GSA051	美術作品欣賞	Fine Arts Appreciation	選修Elective	2
GSA052	文化藝術素養	Appreciation of Culture and Arts	選修Elective	2
GSA053	世界文化遺產	World Cultural Heritage	選修Elective	2
GLL-	語言專題	Special Topic in Language Learning	選修Elective	2
GSA-	人文藝術專題	Special Topic in Humanities and Arts	選修Elective	2

備註:

- 完成25學分選修科目。  
Complete 25 credits in Elective Courses.
- 學生必須按大學提供之學習計劃完成自動化與系統工程理學學士學位課程所需之137學分：
  - 專業必修科目81學分及選修科目25學分。
  - 通識必修科目27學分及選修科目4學分。
 Students are required to complete 137 credits of Bachelor of Science in Automation and Systems Engineering:
  - 81 credits in major compulsory courses and 25 credits in elective courses
  - 27 credits in general studies compulsory courses and 4 credits in elective courses
- 所有課程大綱及學習計劃，均以澳門特別行政區公報所載為準。  
All syllabi and study plans are in accordance to the information published on the Macau SAR Official Gazette.
- 各學期課程安排或有所變動，按學院公佈為準。  
The University reserves the right to interpret and modify all courses and schedules.
- 2025/2026學年起入讀本科生的累計平均積點需達到2.0或以上才能畢業。  
Students admitted from the academic year 2025/2026 onwards are required to achieve a cumulative GPA of 2.0 or above in order to graduate.
- 本校採用學分制之修讀模式，學生必須在課程期限（一般為四學年，最長為七學年）內完成課程所需的學分總數。  
The programme can usually be completed in 4 years and the maximum study period is 7 years.
- 聯絡方法：電話：(+853) 8897-2021 電郵：fie@must.edu.mo 學院辦公室：A206a室  
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