COURSE PLANNER

Bachelor of Engineering (Honours)(Chemical)

SK401

Semester 1 | 2023

Recommended Sequence

Units are listed on your Course Planner in a recommended sequence. However, this can be amended depending on unit availability, unit progression, timetabling and the semester in which you commenced your course.

Year One

Semester 1 Feb/Mar 2023					
Unit Code	Unit Name	Pre-requisites			
ENG10001	Humanitarian Engineering Design Project	Nil			
COS10009	Introduction to Programming	Nil			
MTH10012	Calculus and Applications	Nil			
PHY10001	Energy and Motion	Nil			
MPU3193	Philosophy and Current Issues (Malaysian and International Students)	Nil			
Winter Term	June 2023				
MPU3212	Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu credit)	Nil			
Semester 2 A	Aug/Sept 2023				
COS10025	Technology in an Indigenous Context Project	Nil			
MTH10013	Linear Algebra and Applications	Nil			
ENG10002	Engineering Materials	Nil			
ENG10003	Engineering Mechanics	Nil			
MPU3183	Penghayatan Etika dan Peradaban (Malaysian Students Only)	Nil			
MPU3143	Malay Language Communication 2 (International Students Only)	Nil			

Year Two

Semester 3 Feb/Mar 2024					
Unit Code	Unit Name	Pre-requisites			
CEE20001	Introduction to Chemical Engineering Design	ENG10001			
CEE20005	Engineering Chemistry	Nil			
MTH20010	Statistics and Computation for Engineering	MTH10013 & MTH10012			
CEE30002@	Reaction Engineering	ENG10002			
Semester 4 Aug/Sept 2024					
CEE20002	Chemical Engineering Thermodynamics	Nil			
CEE20003	Fluid Mechanics C	MTH10012 & MTH10013			
CEE20004	Process Safety and Sustainability	ENG10001			
COS10022 ^{&}	Data Science Principles	Nil			

Year Three

Semester 5 Feb/Mar 2025				
Unit Code	Unit Name	Pre-requisites		
CEE40005	Environmental Engineering	CEE20001		
CEE30004 [@]	Process Heat Transfer	CEE20002		
CEE30006 [®]	Process Modelling and Optimisation	CEE20001 & MTH20010		
CEE30007 [®]	Process Control & Measurements	MTH20010		
EAT20008 #	Professional Experience in Engineering	Introductory Seminar		
Semester 6 Aug/Sept 2025				
CEE30001 [@]	Transport Phenomena	CEE20002 & CEE20003		
CEE30003 [®]	Process Mass Transfer	CEE20002		
CEE30005 [®]	Multiphase Processes	CEE20003		
MME30002 [@]	Engineering Management Project	100 Credit points		

Year Four

	Semester 7 Feb/Mar 2026					
	Unit Code	Unit Name	Pre-requisites			
	CEE40002 [®]	Process Plant Design 1	CEE30006 & 275 Credit points			
	ENG40005®	Final Year Capstone Project 1	287.5 credit points			
	PEH20002 ^{&}	Food Science	CHE10001/ CEE20005			
	SOC10005 ^{&}	Environment and Society: Problems and Solutions	Nil			
Semester 8 Aug/Sept 2026						
	CEE40004@	Process Plant Design 2	CEE40002			
	MEE40011	Renewable Energy and Hydrogen Technologies	Nil			
	ENG40006®	Final Year Capstone Project 2	ENG40005			
	BIO10003 ^{&}	Concepts of Biotechnology	Nil			

- # EAT20008 Professional Experience in Engineering is compulsory for all engineering students and must be taken before the last semester of study as part of EAC's requirement. Introductory Seminar will be conducted in week 4 of normal semester.
- Honours merit units (tentative)
- Elective units (can be customised). Please consult the Head of Department



How to use your Course Planner

Refer to the below table to help explain what units are required each semester throughout your course. The units in your planner are colour coded to assist you with mapping out your studies.

Course Information

Each unit is equivalent to 12.5 credit

To qualify for the award of this course, students must complete 33 units (400 credit points) comprising of:

10 Core Units

125 credit points

A set of compulsory units you MUST complete as part of your Course.

18 Chemical Major Units 225 credit points

A set of compulsory units you MUST complete as part of your Course.

4 Elective Units

50 credit points

A combination of elective units or a Minor package.

1 Industry Placement Unit

0 credit point

A compulsory, not-for-credit unit.

General Studies/Mata Pelajaran Umum 0 credit points

All commencing students of Master, Degree, Diploma and Foundation programs will be automatically registered for the **Academic Integrity** Training Module in the first semester (Note: Students articulating from Foundation Studies are expected to undertake this unit as a refresher). There are 4 topics in this online module that are recommended for completion during Week 1-4 of your commencing study period. At the end of this module, students are required to complete a quiz comprised of 10 questions and achieve a score of at least 90%.

Ministry of Education requires that all NEW Cohorts pursuing Degree program (International and Malaysian) students must take the MPU units as a prerequisite for the award of their degree.

- Malaysian students: Must take and pass the units as a prerequisite for the award of their degree.
- International students: Must take and pass the units as a prerequisite for the award of their degree