

# COURSE PLANNER

## Bachelor of Engineering (Honours) (Chemical)

### SK-401

Semester 1 | 2022

#### 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 2022		
Unit Code	Unit Name	Pre-requisites
ENG10001	Engineering, Design and Innovation	Nil
ENG10002	Engineering Materials	Nil
MTH10012	Calculus and Applications	Nil
PHY10001	Energy and Motion	Nil
Semester 2   Aug/Sept 2022		
ENG10003	Mechanics of Structures	Nil
ENG10004	Digital and Data Systems	Nil
MTH10013	Linear Algebra and Applications	Nil
PHY10004	Electronics and Electromagnetism	Nil

### Year Two

Semester 3   Feb/Mar 2023		
Unit Code	Unit Name	Pre-requisites
COS10022 <sup>&amp;</sup>	Introduction to Data Science	Nil
CEE20001	Introduction to Chemical Engineering Design	ENG10001
CEE20005	Engineering Chemistry	Nil
MTH20010	Mathematics 3A	MTH10012 & MTH10013
Semester 4   Aug/Sept 2023		
SWE20004 <sup>&amp;</sup>	Technical Software Development	ENG10004
CEE20002	Chemical Engineering Thermodynamics	Nil
CEE20003	Fluid Mechanics C	MTH10012 & MTH10013
CEE20004	Process Safety and Sustainability	ENG10001

### Year Three

Semester 5   Feb/Mar 2024		
Unit Code	Unit Name	Pre-requisites
CEE30004 <sup>@</sup>	Process Heat Transfer	CEE20002
CEE30006 <sup>@</sup>	Process Modelling and Optimisation	CEE20001 & MTH20010
CEE30007 <sup>@</sup>	Process Control & Measurements	MTH20010
CEE30002	Reaction Engineering	ENG10002
EAT20008 <sup>#</sup>	Professional Experience in Engineering	Introductory Seminar
Semester 6   Aug/Sept 2024		
CEE30001 <sup>@</sup>	Transport Phenomena	CEE20002 & CEE20003
CEE30005 <sup>@</sup>	Multiphase Processes	CEE20003
CEE30003 <sup>@</sup>	Process Mass Transfer	CEE20002
MME30001 <sup>@</sup>	Engineering Management 1	100 credit points

### Year Four

Semester 7   Feb/Mar 2025		
Unit Code	Unit Name	Pre-requisites
ENG40001 <sup>@</sup>	Final Year Research Project 1	287.5 credit points
CEE40002 <sup>@</sup>	Process Plant Design 1	CEE30006 & 275 Credit points
CEE30008	Environmental Engineering	CEE20001
COS20083 <sup>&amp;</sup>	Advance Data Analytics	COS10022 & SWE20004
Semester 8   Aug/Sept 2025		
ENG40002 <sup>@</sup>	Final Year Research Project 2	ENG40001
CEE40004 <sup>@</sup>	Process Plant Design 2	CEE40002
MME40001 <sup>@</sup>	Engineering Management 2	100 credit points
BIO10003	Concepts of Biotechnology	Nil

#### Notes

# 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.

& Recommended Elective units [Industry 4.0]. You may choose other approved elective units from the published elective list for Electrical and Electronic. Enrolment in the selected elective units are subject to:

- Discipline Leader Approval
- No timetable clash between selected elective units and core / major units
- Seat availability in the selected electives
- Selected elective units are offered in the current semester

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

#### 12 Core Units

150 credit points

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

#### 16 Chemical Major Units

200 credit points

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

#### 4 Recommended Elective Units

50 credit points

A combination of elective units, or a Minor.

#### 1 Industry Placement Unit

0 credit point

A compulsory, not-for-credit unit.

All commencing students of Master, Degree, Diploma and Foundation courses 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 course (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 attempt all coursework and final exam as a prerequisite for the award of their degree.