

Engineering Re-enrolment Guide 2022

Re-enrolment period: 11 October – 26 November 2021

Re-enrolment WES

July and October 2020 Intake

Reminder: You are required to re-enrol for **both** Semester 1 (Feb-June) and Semester 2 (July-Nov) 2022.

The normal units for each of the branches of engineering are as follows:

Chemical Engineering

1) Semester 1 2022 units

CHE2164	Thermodynamics I
ENG2005	Advanced engineering mathematics
CHE2873	Introduction to Chemical Processes
CHM1051	Chemistry 1 advanced (if taken in Y1, then to take Level 2 elective unit*)

*Elective units

CHE2167	Process material selection
CHE2871	Biochemistry for engineers

Industrial Revolution 4.0

ECE2131	Electrical circuits
ECE2071	Computer organisation and programming

**For those taking IR4 units, ECE2131 and ECE2071 must be taken together. Contact Course Director for more information.

2) Semester 2 2022 units

CHE3162	Process control
CHE3164	Reaction engineering
CHE3166	Process design

***Biotechnology or Nanotechnology**, select one unit:

CHE3171	Bioprocess technology or
CHE3172	Nanotechnology and materials I

Civil Engineering

1) Semester 1 2022 units

CIV2206	Structural mechanics
CIV2263	Water systems
CIV2282	Transport and traffic engineering

Note: One of the following two units can be taken. Priority is with ENG2801 (if not taken)

CIV2283	Civil engineering construction
ENG2801	Leadership and innovation

3) Semester 2 2022 units

CIV3204	Engineering investigation
CIV3221	Building structures and technology
CIV3247	Geomechanics II
CIV3283	Road engineering

read important note at the bottom of the page

Electrical and Computer Systems Engineering

1) Semester 1 2022 units

ENG2005	Advanced engineering mathematics
ECE2131	Electrical circuits
ECE3141	Information and networks
ECE2071	Computer organisation and programming**

** instead of ECE3141 if this unit was not taken in level 1

Plus select one of the following electives

ECW1102	Introductory macroeconomics
BTW1042	Malaysian business law

Electrical and Computer Systems Engineering (continue)

2) Semester 2 2022 units

ECE3121	Engineering electromagnetics
ECE4132	Control system design

Plus select two of the following electives

ECE4808	Organic electronics and micro devices
ECE4809	Solid state lighting
ECE4810	Internet of Things: Communication, Data and Security
ECE4078	Intelligent robotics

Mechanical Engineering

1) Semester 1 2022 units

MEC2401	Dynamics I
MEC2402	Design Methods
MEC2403	Mechanics of materials

Select 1 elective below

MEC3448	Engineering Technologies
ECE2131	Electrical Circuits

1) Semester 2 2022 units

MEC341 6	Machine Design
MEC345 3	Dynamics II
MEC345 7	Systems and control

Select 1 elective below

MEC3458	Experimental Project
MEC3459	Materials Selection for Engineering Design*
MEC3828	Biomedical engineering and healthcare system

* must pick, if you plan to register as a Mechanical Engineer with the Board of Engineers Malaysia in the future and if not attempted in Level 2

Robotics and Mechatronics Engineering (Artificial Intelligence Stream)

1) Semester 1 2022 units

ECE2131	Electrical circuits
MEC2402	Design methods
TRC3200	Dynamical systems

You can choose from the following electives*

ECE3141	Information and networks
ECE3073	Computer systems
ECE2071	Computer organisation and programming**

*please check with the school before the start of semester for any update to offerings of electives

** If you've not done ECE2071 in year one, you **must** do it this semester. It is a core unit.

2) Semester 2 2022 units

TRC3600	Modelling and control
ECE4078	Intelligent robotics
TRC4802	Thermo-fluids & Power Systems**

** compulsory units to be taken before graduation for accreditation in Malaysia

You can choose from the following electives (if you still have empty slots)*

MEC4426	Computer-aided design
MEC3416	Engineering Design 2
ECE4808	Organic Electronics and Micro Devices

* please check with the school before the start of semester for any update to offerings of electives

Robotics and Mechatronics Engineering (Automation Stream)

3) Semester 1 2022 units

ECE2131	Electrical circuits
MEC2402	Design methods
TRC3200	Dynamical systems

You can choose from the following electives*

ECE3141	Information and networks
ECE3073	Computer systems
ECE2071	Computer organisation and programming**

* please check with the school before the start of semester for any update to offerings of electives

** If you've not done ECE2071 in year one, you **must** do it this semester. It is a core unit.

Robotics and Mechatronics Engineering (Automation Stream) [continue]

4) Semester 2 2022 units

TRC3600	Modelling and control
TRC4802	Thermo-fluids & Power Systems
TRC3000	Automation project

You can choose from the following electives (if you still have empty slots)*

MEC4426	Computer-aided design
MEC3416	Engineering Design 2
ECE4808	Organic Electronics and Micro Devices
ECE4078	Intelligent robotics

* please check with the school before the start of semester for any update to offerings of electives

Software Engineering

1) Semester 1 2022 units (For students not intended to take IBL)

FIT3170	Software engineering practice
FIT2004	Algorithms and data structure
MAT1830	Discrete mathematics for computer science
FIT3077	Software engineering architecture & design*

2) Semester 1 2022 units (For students planning for IBL)

FIT3171	Databases
FIT2004	Algorithms and data structure
MAT1830	Discrete mathematics for computer science
FIT3077	Software engineering architecture & design*

3) Semester 2 2022 units (For students not intended to take IBL)

FIT3170	Software engineering practice
FIT2100	Operating systems
FIT3171	Databases
Elective	Choose any one of the level 3 electives offered by School of IT

NOTE: BSE students who intend to go for IBL will need to express their interest in Y2S2 (Feb 2022). The IBL interview will be conducted in April 2022 (tentatively). Actual IBL placement will be in Y3S1 (July 2022). Upon successful placement, you will enroll into FIT4042 in Semester 2 2022.

Important for all engineering students

Please take note that besides the academic requirements, all students must also satisfy both the **Industrial Training** (12 weeks) and **the General Studies** requirements before the engineering degree can be awarded.

Students completing 3rd year (6 semesters of study) and having a minimum of 120 credits will be eligible for industrial training. Students are to submit their industrial training report within 4 weeks of completion of their industrial training.

General Studies

- General Studies consist of units which every student enrolled in a public or private higher education institutions (PHEIs) are required to undertake **effective October 2013 intake onwards.**
- All Malaysian and international students are compelled to enroll, undertake, attend and pass these units as a pre-requisite to the award of a certificate, diploma or degree.
- For further info, please email: mum.generalstudies@monash.edu