



**UNIVERSITI  
MALAYA**  
*Faculty of Engineering*

# *POSTGRADUATE WELCOMING SESSION*

**SEMESTER 2, SESSION 2021/2022**



Prof. Ir. Dr. Ngoh Gek Cheng

Deputy Dean

(Postgraduate Studies)



The King Edward VII College of Medicine was founded in 1905 to train the first Malaysian (Malayan) doctors. The College later became known as the University of Malaya in Singapore.



The University of Malaya Kuala Lumpur campus was established in 1959. The University Hospital was opened in 1968.



# UNIVERSITY OF MALAYA History

1905



King Edward VII College of Medicine, Singapore

1928



Raffles College Singapore

1949



Raffles College was merged with King Edward VII College of Medicine to become the University of Malaya.

1962



University of Singapore (now known as National University of Singapore)



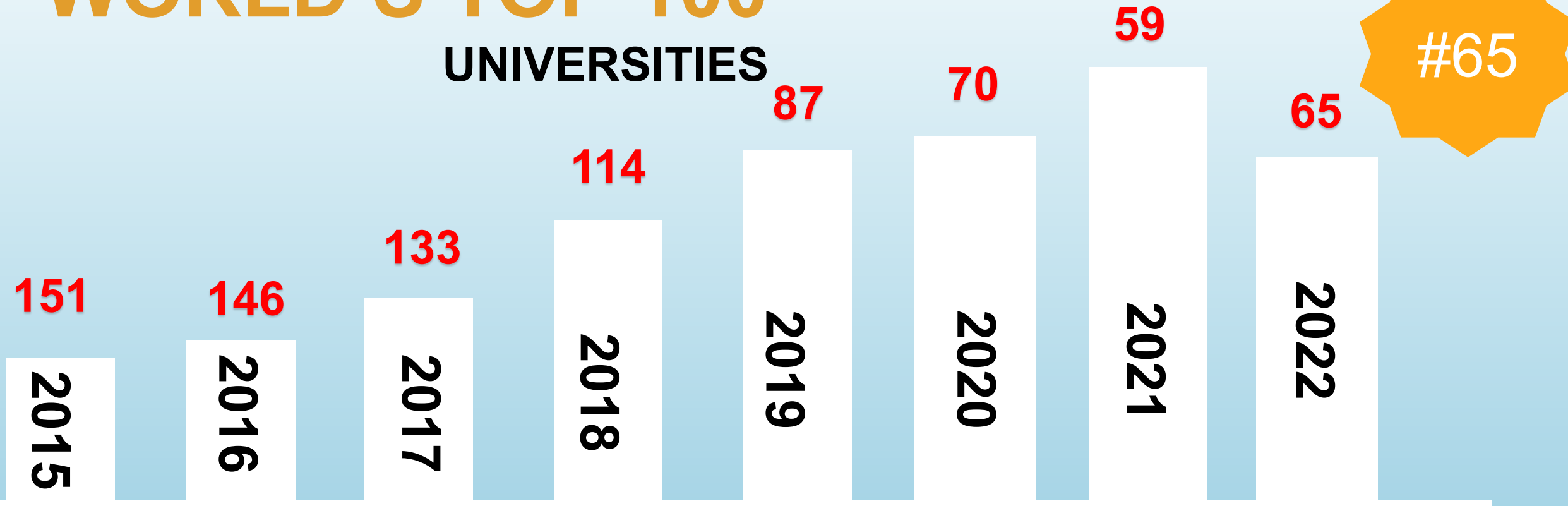
University of Malaya Kuala Lumpur



ONE OF THE

# WORLD'S TOP 100

UNIVERSITIES



Since 2015, UM has always illustrated positive performance

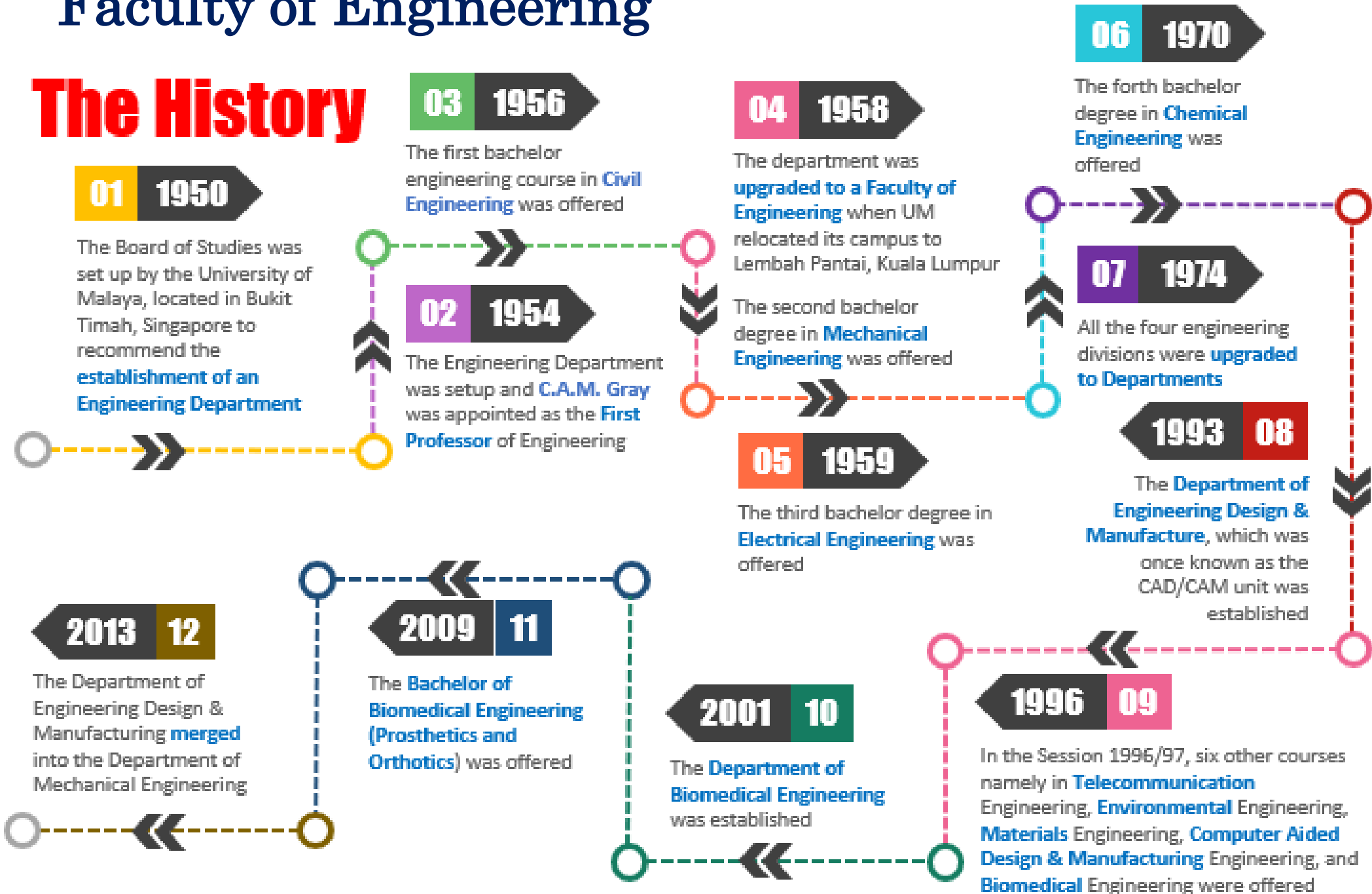


UM Ranking Performance



# Faculty of Engineering

## The History



# Ranking by Subjects



**54**  
ENGINEERING &  
TECHNOLOGY



ranked  
**43**  
ELECTRICAL  
ENGINEERING

**QS** WORLD UNIVERSITY RANKINGS  
*by subject*



ranked  
**107**  
MECHANICAL  
ENGINEERING

**QS** WORLD UNIVERSITY RANKINGS  
*by subject*



ranked  
**69**  
CHEMICAL  
ENGINEERING

**QS** WORLD UNIVERSITY RANKINGS  
*by subject*



ranked  
**51-100**  
CIVIL  
ENGINEERING

**QS** WORLD UNIVERSITY RANKINGS  
*by subject*

**QS** WORLD UNIVERSITY RANKINGS

2022



**17** | BEST GLOBAL UNIVERSITIES  
& WORLD REPORT  
U.S. News  
2020  
FOR ENGINEERING



**65**  
THE WORLD UNIVERSITY RANKINGS  
TIMES HIGHER EDUCATION



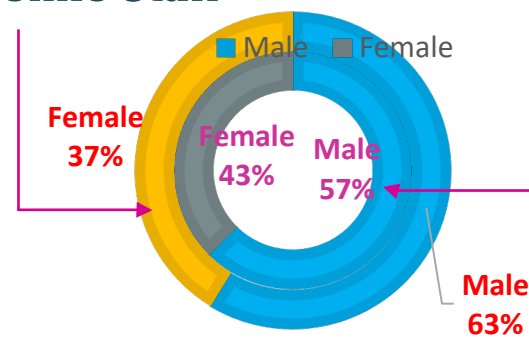


**TOTAL 153**  
Academic staff

**Male 96**  
**Female 57**

## Academic Staff

## Non-Academic Staff

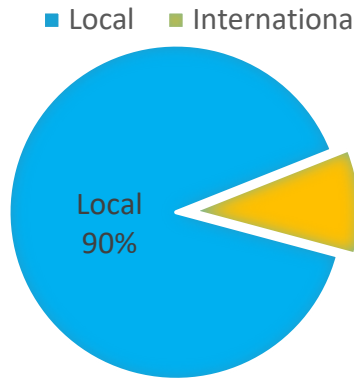


**TOTAL 141**  
Non-Academic Staff

**77 Male**  
**64 Female**



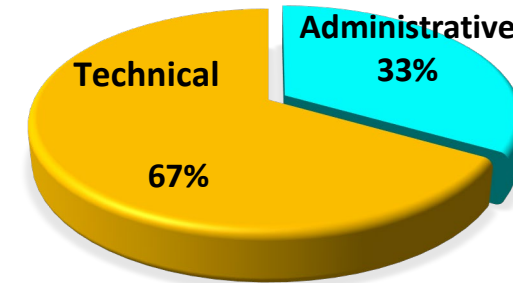
Lecturer	4
Senior Lecturer	84
Associate Professor	42
Professor	23



### International (10%)

1. Egypt (1)
2. India (1)
3. Iran (4)
4. Sudan (1)
5. Bangladesh (4)
6. Indonesia (2)
7. New Zealand (1)
8. Yemen (1)
9. Netherland (1)

## NON-ACADEMIC STAFF



**Chartered Engineer 78**

**6 14 10 17 31**  
Civil Biomedical Chemical Electrical Mechanical

**Professional Engineer 53**

**5 11 10 13 14**  
Civil Biomedical Chemical Electrical Mechanical



# The Management Faculty of Engineering



Professor Ir. Dr. Kaharudin bin Dimiyati  
Dean



Prof. Ir. Dr. Hazlie Mokhlis  
Undergraduate Studies



Prof. Ir. Dr. Ngoh Gek Cheng  
Postgraduate Studies



Dr. Mohd Usman Mohd Junaidi  
Student Affairs



Assoc. Prof. Ir. Dr. Lai Sai Hin  
Research



Assoc. Prof. Ir. Dr. Ahmad Khairi  
Abdul Wahab  
Development



Noor Lailatul Marini Kamal Amir  
General Manager  
(Administrative)



Ir. Dr. Nasrul Anuar Abd. Razak  
Head of Biomedical Department



Dr. Mahar Diana Hamid  
Head of Chemical Department



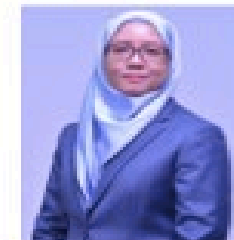
Prof. Ir. Dr. Faridah Othman  
Head of Civil Department



Prof. Ir. Dr. Sulaiman Wadi Harun  
Head of Electrical Department



Assoc. Prof. Dr. Farazila Yusof  
Head of Mechanical Department



# PROGRAMME COORDINATORS

## COURSEWORK PROGRAMMES



Master of Biomedical Engineering

- **Assoc. Prof. Ir. Dr. Ting Hua Nong**

[tinghn@um.edu.my](mailto:tinghn@um.edu.my)



Master of Mechanical Engineering

- **Dr. Khoo Shin Yee**

[khooshinyee@um.edu.my](mailto:khooshinyee@um.edu.my)



Master of Safety, Health and Environment Engineering

- **Ir. Dr. Jegalakshimi Jewaratnam**

[jegalaxmi24@um.edu.my](mailto:jegalaxmi24@um.edu.my)



Master of Systems Engineering

- **Dr. Tengku Faiz Bin Tengku Mohmed Noor Izam**

[tengkufaiz@um.edu.my](mailto:tengkufaiz@um.edu.my)



# PROGRAMME COORDINATORS

## RESEARCH PROGRAMMES



Doctor of Philosophy

**Assoc. Prof. Dr. Roslina Binti Ahmad**

[roslina@um.edu.my](mailto:roslina@um.edu.my)



Master of Engineering Science

**Assoc. Prof. Dr. Hendrik Simon Cornelis  
Metselaar**

[h.metselaar@um.edu.my](mailto:h.metselaar@um.edu.my)

# Deputy Dean (Postgraduate Studies) Office



DEPUTY DEAN  
PROF. IR. DR. NGOH GEK  
CHENG

*Deputy Dean's Office (Postgraduate Studies),  
Faculty of Engineering*

Tel: +603-7967 4477 (Administration)/  
4480 (Master Coursework)/  
4481 (PhD & Master Research)/  
4482 (Assistant Registrar)  
Faks: +603-7956 1378



JUNAINAH BINTI  
JAMALUDDIN  
SENIOR ASST.  
REGISTRAR N44

NUUR HAKIMAH BINTI  
MOHD DIN  
SECRETARY



General inquiries

NOOR HAFIZA BINTI  
HALIM  
ASST. ADMINISTRATIVE  
OFFICER



Admission

NORHANIS BINTI  
AHMAD  
SENIOR ADMIN ASST.



Candidature Defence, Thesis  
Seminar

MAZNAH BINTI  
MOHAMMAD ZIN  
SENIOR ADMIN ASST.



Coursework Programme

SENIOR ADMIN ASST.



Research Programme

NOR HARYATI BINTI  
MUEN  
SENIOR ADMIN ASST.



Research Programme

SITI KHAIIRIAH BINTI  
IBRAHIM  
ADMIN ASST.



Research Programme

## Learning Outcomes

1

- Demonstrate continuing advanced knowledge and apply the knowledge in solving complex engineering problems.

2

- Analyze and evaluate complex engineering problems or issues critically and provide solutions through the application of engineering concepts.

3

- Formulate and design solutions for the complex engineering problems using appropriate methods and tools

4

- Communicate critically based on the engineering knowledge using oral or written medium as individual or in a group.

5

- Demonstrate competency incorporating advanced numerical concept and adopt relevant digital technologies in solving complex engineering problems.

6

- Demonstrate significant leadership skills in project management and technical project in the context of complex engineering application.

7

- Identify the need for continuous professional development and entrepreneurial element in the context of engineering discipline.

8

- Plan and execute technical or research project ethically and professionally as a socially responsible engineer.

## Program Structure

- Master of Biomedical Engineering

COURSE	CREDIT
Core Courses	21
Elective Courses	9
Research Project	12
<b>TOTAL CREDITS</b>	<b>42</b>

- Master of Safety, Health and Environment Engineering

COURSE	CREDIT
Core Courses	21
Elective Courses	12
Research Project	10
<b>TOTAL CREDITS</b>	<b>43</b>

- Master of Mechanical Engineering

COURSE	CREDIT
Core Courses	21
Elective Courses	9
Research Project	12
<b>TOTAL CREDITS</b>	<b>42</b>

- Master of System Engineering

COURSE	CREDIT
Core Courses	15
Elective Courses	15
Research Project	12
<b>TOTAL CREDITS</b>	<b>42</b>

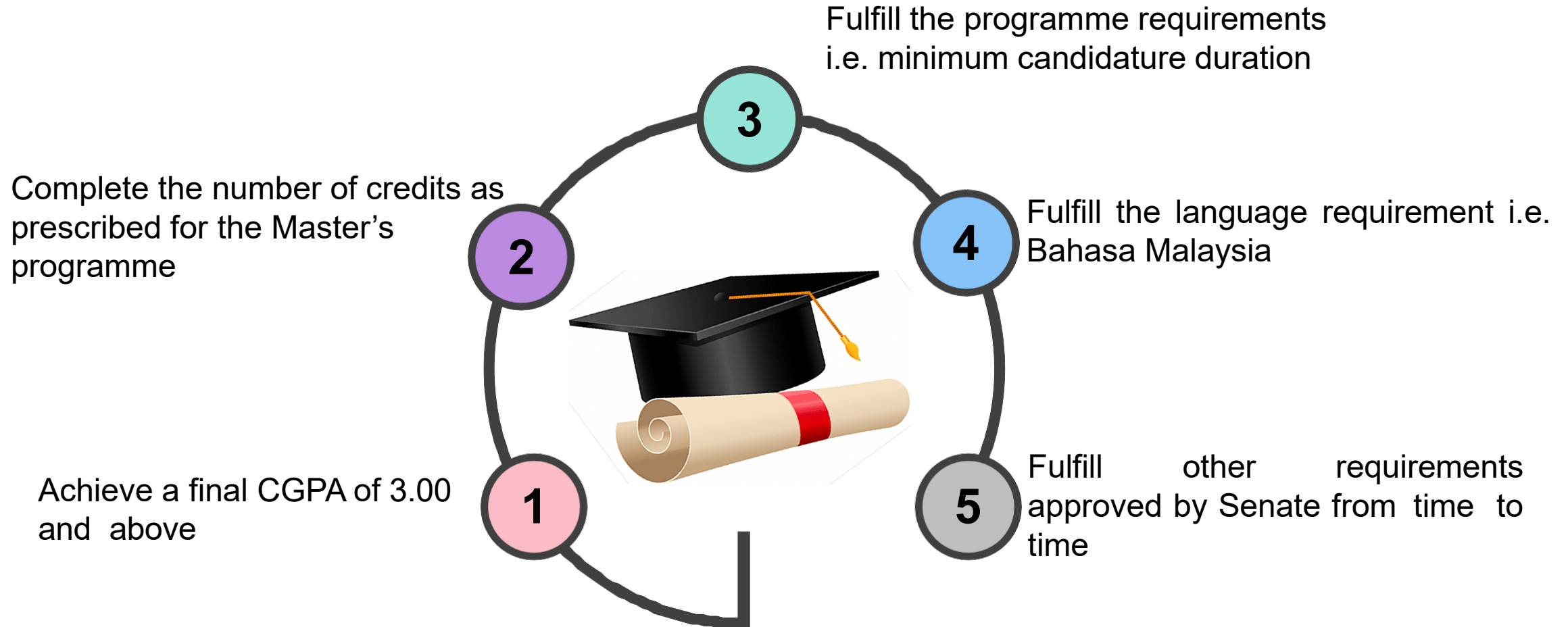
# MARKING SCHEME AND GRADE POINT AVERAGE

Marks	Grade	Grade Point	Meaning
90.00 - 100.00	A+	4.00	High Distinction
80.00 - 89.99	A	4.00	Distinction
75.00 - 79.99	A-	3.70	Distinction
70.00 - 74.99	B+	3.30	Pass
65.00 - 69.99	B	3.00	Pass
60.00 - 64.99	B-	2.70	Fail
55.00 - 59.99	C+	2.30	Fail
50.00 - 54.99	C	2.00	Fail
45.00 - 49.99	C-	1.70	Fail
40.00 - 44.99	D+	1.30	Fail
35.00 - 39.99	D	1.00	Fail
00.00 - 34.99	F	0.00	Fail

Note:

Grade 'P' is given every semester for progressive courses which are conducted consecutively until the total credit of the course is completed. Other than medical reasons, any candidate who does not complete grade P will be given grade F.

# GRADUATION – Programme of Study by Coursework



*For more details please refer to <https://engine.um.edu.my/postgraduate-programmes>*

# CANDIDATURE REQUIREMENTS

## MASTER BY RESEARCH

- (a) FULFILL the **University Bahasa Malaysia** course before graduation (INTERNATIONAL candidates only)
  - (b) PASS **Research Methodology Course not later than the second (2<sup>nd</sup>) semester** of candidature
  - (c) PRESENT research proposal in **Proposal Defence not later than the second (2<sup>nd</sup>) semester** of candidature
  - (d) PRESENT research progress in **Candidature Defence not later than the third (3<sup>rd</sup>) semester** of candidature
  - (e) PUBLISH **at least one (1) article in journals indexed by Thomson Reuters Web of Science (WoS)** (according to the criteria set in the publication guidelines), prior to graduation
  - (f) PASS dissertation examination and Viva Voce
-

# CANDIDATURE REQUIREMENTS

## DOCTOR OF PHILOSOPHY

- (a) FULFILL the **University Bahasa Malaysia** course before graduation (INTERNATIONAL candidates only)
  - (b) PASS **Research Methodology Course not later than the second (2<sup>nd</sup>) semester** of candidature
  - (c) PRESENT research proposal in **Proposal Defence not later than the second (2<sup>nd</sup>) semester** of candidature
  - (d) PRESENT research progress in **Candidature Defence not later than the fifth (5<sup>th</sup>) semester** of candidature
  - (e) PRESENT **Thesis Seminar** before the submission of thesis for examination
  - (f) PUBLISH **at least two (2) articles in journals indexed by Thomson Reuters Web of Science (WoS)** (according to the criteria set in the publication guidelines), prior to graduation
  - (g) PASS thesis examination and Viva Voce
-



# CANDIDATURE REQUIREMENTS

## DOCTOR OF PHILOSOPHY (FAST TRACK)

- (a) FULFILL the **University Bahasa Malaysia** course before graduation (INTERNATIONAL candidates only)
  - (b) PASS **Research Methodology Course** not later than the **second (2<sup>nd</sup>) semester** of candidature
  - (c) PRESENT research proposal in **Proposal Defence** not later than the **second (2<sup>nd</sup>) semester** of candidature
  - \***(d) PRESENT research progress in PhD Confirmation Defence** not later than the **third (3<sup>rd</sup>) semester** of candidature
  - (e) PRESENT research progress at **Candidature Defence** not later than the **fifth (5<sup>th</sup>) semester** of candidature
  - (f) PRESENT **Thesis Seminar** before the submission of thesis for examination
  - (g) PUBLISH **at least two (2) articles** in **journals indexed by Thomson Reuters Web of Science (WoS)** (according to the criteria set in the publication guidelines), prior to graduation
  - (h) PASS thesis examination and Viva Voce
-

# Lecture Hall and Rooms

Lecture Hall	No of Rooms	Capacity
Auditorium	2	200 - 400 pax
Lecture Hall	9	100 – 240 pax
Tutorial Room	11	80 pax
The Cube	12	40 – 50 pax
Computer Labs	7	30 – 60 pax
Teaching and research labs	175	

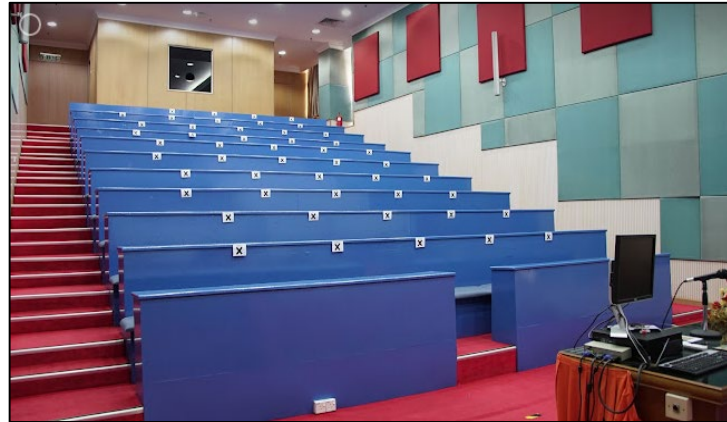
For more information please refer to <https://engine.um.edu.my/facilities>



## THE CUBE, BLOCK L



## LECTURE HALL



## COMPUTER LAB



## STUDENT WORKSHOP



## STUDY CORNER



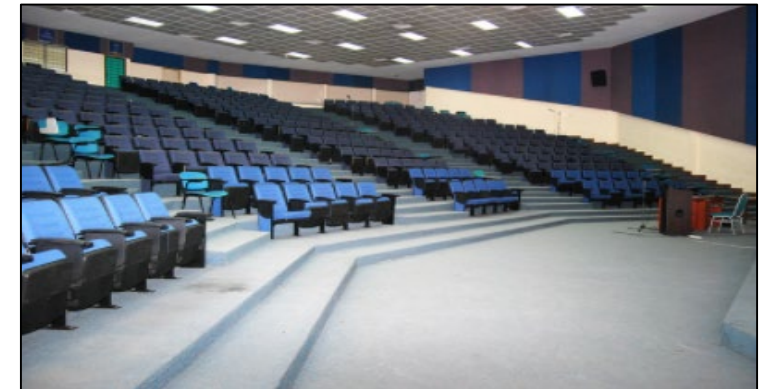
## CAFETERIA



## ENGINEERING LIBRARY



## AUDITORIUM



High Voltage Lab



Power Electronics and Renewable Energy Lab



175  
Laboratories

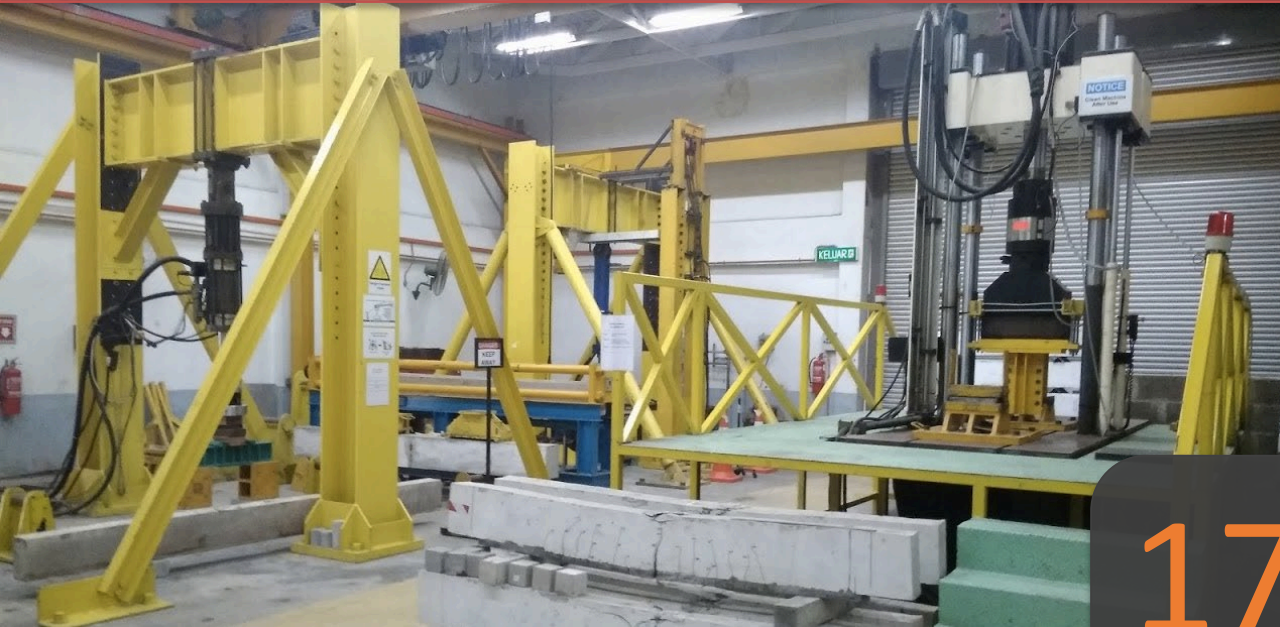


Tribology Lab



Advanced Manufacturing Lab

Heavy Structure Lab



Body Performance and Motion Analysis Lab



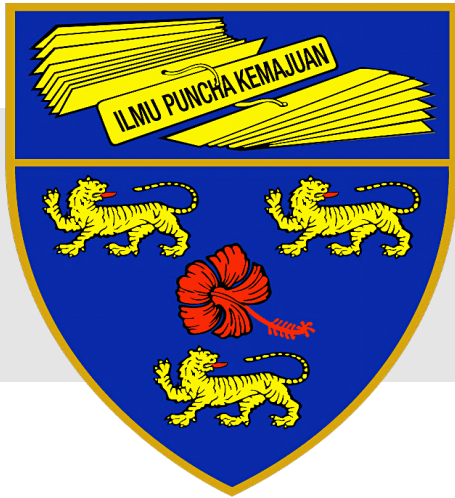
175  
Laboratories



Environmental Lab



Mass Transfer Lab



# Important Points

# Important Points

## Research Project

*Determination of field of research  
Appointment of supervisor(s)  
Confirmation of title  
Meet submission dateline*

## Research Methodology

*Join the class according to the mode of studies (please refer to the Handbook)*

## Plan schedule for examinations

*Strictly follow the examination schedule*

## BAHASA MALAYSIA MODULE

*INTERNATIONAL STUDENT must fulfill the course before graduation (approach the Faculty of Languages and Linguistics for more information)*

## Enrolment Status

*Confirm registration and ensure status is **ACTIVE***

## Add and Drop Modules

*No add and drop module is allowed after confirmation of registration*

## CONFIRMATION LETTER FOR VISA

*Apply at least **ONE MONTH** before the expiry date of Visa  
(**NO Last Minute!**)*

## SISWAMAIL

*Check regularly for important updates and notification i.e. reminder on Progress Report, Deadlines , change of timetable & etc.*

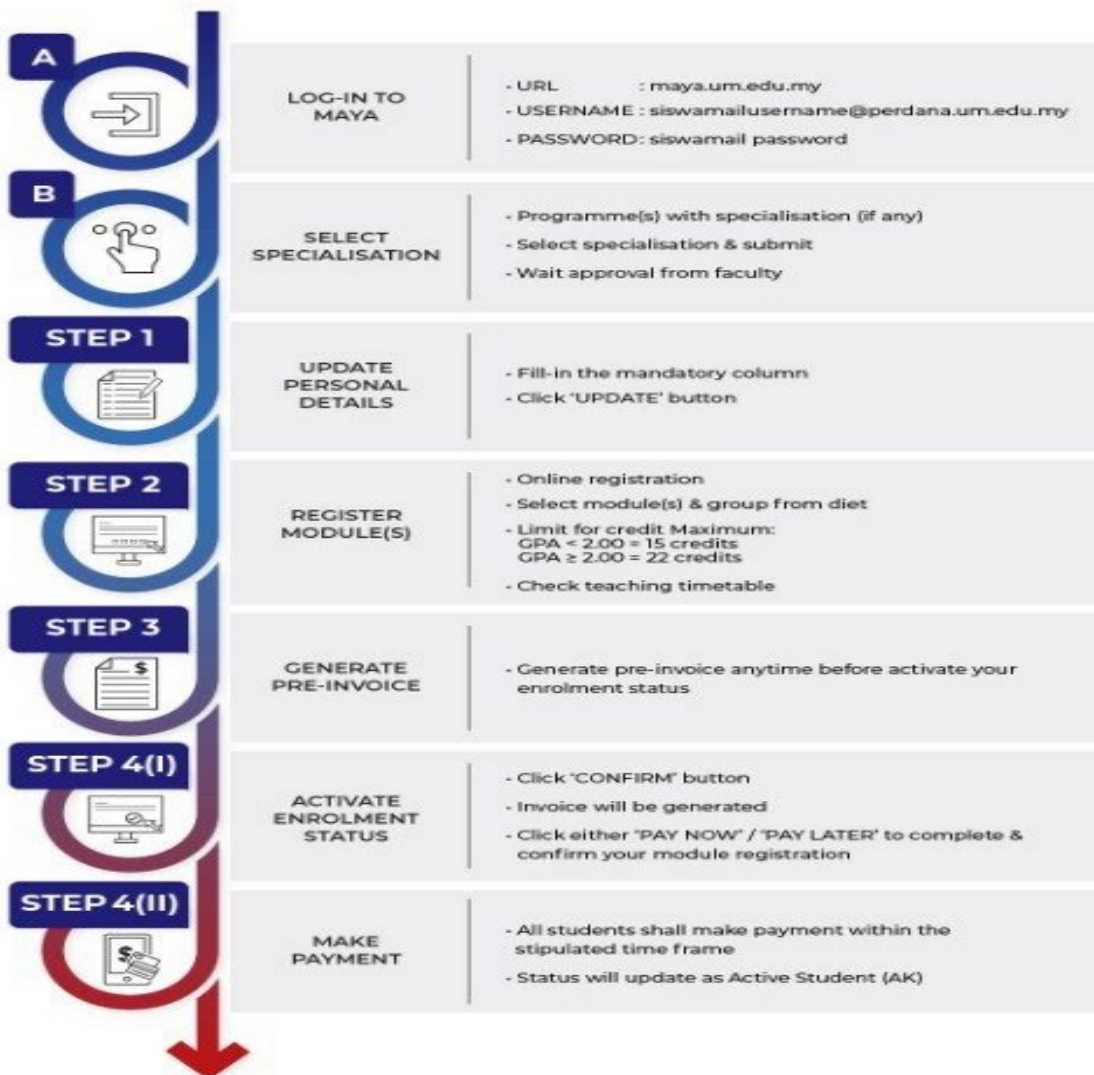
## Teaching and Learning

*Due to current pandemic situation, teaching and learning activities will be conducted online or in hybrid mode*



Dear Students,

To ensure the registration process runs smoothly, it is advisable for students to complete the Module Registration first. You are encouraged to Generate Pre-Invoice during non peak hours followed by Enrolment Activation.



## REGISTRATION SCHEDULE FOR NEW STUDENTS SEMESTER II, 2021/2022 ACADEMIC SESSION

### NEW POSTGRADUATE STUDENTS

	Start Date	End Date
<b>Acceptance of the Offer Letter (AOL)</b>		
<ul style="list-style-type: none"> <li>• International Students</li> <li>• Local Students</li> </ul>		25.02.2022 28.02.2022
<b>Self-Enrol</b>		
<ul style="list-style-type: none"> <li>• Coursework and Mixed Mode</li> <li>• Research Mode</li> </ul>	21.02.2022 21.02.2022	02.03.2022 29.07.2022
<b>Module Registration</b>		
<ul style="list-style-type: none"> <li>• Coursework &amp; Mixed Mode Students</li> <li>• Research Students</li> </ul>	24.02.2022	07.03.2022
(a) Registration for Research Methodology AND Thesis/ Dissertation only	24.02.2022	25.03.2022
(b) Registration for Thesis/ Dissertation only	24.02.2022	05.08.2022
<b>Registration Activation</b>		
<ul style="list-style-type: none"> <li>• Coursework &amp; Mixed Mode Students</li> <li>• Research Methodology AND Thesis/ Dissertation Modules</li> <li>• Thesis/ Dissertation Module</li> </ul>	01.03.2022 24.02.2022 24.02.2022	07.03.2022* 25.03.2022* 05.08.2022*
<b>Lecture Weeks</b>	14.03.2022	24.06.2022
<b>Submission of Progress Report</b> <i>(For students who have registered for the Dissertation or Thesis Module in Semester 2, 2021/2022)</i>	23.05.2022	27.06.2022

- Module Registration on the 24th February 2022 will start at 8.30 a.m.** (Malaysia time).
- Registration Activation on the 24th February 2022 & 1st March 2022 will start at 8.30 a.m.** (Malaysia time).
- Final date for registration activation (Status will remain as NOT REGISTERED if registration is not activated).**
- Students are not allowed to ADD and/or DROP any module once registration is activated within the stipulated dates.**
- Please note that the registration schedule is subject to change.** (Updated 24th February 2022)



MENARA  
KEJURUTERAAN

**THANK YOU**

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