

### FACULTY OF ENGINEERING

## BACHELOR OF CHEMICAL ENGINEERING WITH HONOURS



Community-Driven University For a Sustainable World

### INTRODUCTION

Bachelor of Chemical Engineering with Honours is a four-year course, which is accredited by Engineering Accreditation Council (EAC). Chemical Engineering focuses on the application of engineering principles to the design, construction and operation of industrial processing plants. Apart from basic chemical engineering knowledge, this programme is inclined to prepare the students toward specific engineering expertise in energy and natural resources. With such, the students have the options to select preferred elective courses in their final year. The programme has been designed as such that the graduates from this programme can embark their careers not limited to chemical engineering processing industry such as those dealing with petrochemicals, chemicals, pharmaceuticals, semiconductors, food processing and other related industries only.

The job involves supervision of plant operation and maintenance, troubleshooting operational problems related to process, and undertaking plant modification work for process operability and safety improvement. The graduates may also work in other industries related to power generation, environmental engineering and sustainability to a more specific research career in academic institutions. The programme was designed to include contributions from industrial panels allowing students to relate the theory and practicality of knowledge learnt.

Moreover, students have opportunity to experience technical and hands on skill through research in final year project, laboratory experiments and also the 10 weeks of industrial training internship program. Throughout the programme, students gain soft skills such as leadership, teamwork and communication skills, preparing students for their career development. Looking forward to meet you joining us in Department of Chemical Engineering and Energy.

### **DURATION OF THE PROGRAMME**

The minimum of study is 4 years (8 semesters) on full time to a maximum period of 7 years.

### **FACILITIES AND RESOURCES**

- Perpustakaan Tun Abdul Rahman Ya'kub (PeTARY) The University library houses more than 200,000 titles of books and journals, and it also provides access to thousands of resources online.
- Resources Rooms Spaces are provided for students to discuss, collaborate and work on academic tasks within the faculty and throughout the campus.
- Laboratory Facilities To support your study, the university provides various facilities and resources:
  - Process Control Laboratory
  - Analytical Chemistry Laboratory
  - Computer Laboratory
  - Simulation Laboratory
  - Chemistry Laboratory
  - Environment & Energy Sustainability Laboratory
  - General Workshop
  - Unit Operation (Heat & Mass Transfer) Laboratory

### WHO SHOULD APPLY

The programme aims at providing opportunities to various group of potential candidates such as:

- Fresh graduates from STPM, Matriculation, Pre-University, Diploma and equivalents who wish to pursue engineering programme
- Employees from relevant sectors of industries who are determined to develop your human capital and expand your social network for better job performance and prospects

### **ENTRY REQUIREMENTS**

#### **Malaysian Qualifications**

#### **Generic Academic Requirements**

- Possess Sijil Pelajaran Malaysia (SPM)/equivalent with a Credit in Bahasa Melayu/Bahasa Malaysia or Bahasa Melayu/Bahasa Malaysia July Paper and a Pass in Sejarah (SPM 2013 onwards)
- A Diploma or any other Equivalent Qualification OR STPM with minimum CGPA 2.00 with minimum Grade C (NGMP 2.00) in General Paper and in other two (2) subjects OR KPM Matriculation/ UM Science Foundation/ UITM Foundation with minimum CGPA 2.00
- Minimum Band 2 in Malaysian University English Test (MUET)

#### Specific Requirements

- Possess a DIPLOMA in related field/equivalent as approved by UNIMAS Senate with minimum CGPA 2.75; OR
- Obtained at least Grade B- (NGMP 2.67) in **STPM** for the following subjects:
  - Physics
  - Mathematics; and
  - Biology/Chemistry; OR
- Obtained at least Grade B- (2.67) in MATRICULATION/FOUNDATION for the following subjects:
  - Mathematics
  - Physics/Engineering Physics; and
  - Chemistry / Engineering Chemistry/ Biology /Basic Engineering; AND
- Minimum Grade C in SPM for Mathematics/Additional Mathematics; AND
- Minimum Grade E in SPM for English Language; AND
- Minimum Band 2 in Malaysian University English Test (MUET); AND
- Candidate do not have any disabilities (blind/colour blindness/physical disabilities) that hinder physical/laboratory work.

### **COURSE FEES**

Malaysian student **RM 42,228.00** International student **RM 80,000.00** 

The fee is to be paid in eight (8) semesters. Students will have to pay further administrative fees and recurring fees if they extend their studies.

Students are entitled to apply for PTPTN at only 1% interest rate to cover the course fees. Alternatively, they can apply other external scholarship or education loan for undergraduate programme.

#### For international students

- Obtained GCE A Level/Australian Matriculation Programme (AUSMAT)/ with at least Gred C in three (3) subjects as follows:
  - Mathematics
  - Physics
  - Chemistry/Further Mathematics/ Biology;
    OR
- Passed International Baccalaureate (IB) with a minimum score 26 and obtained at least score 4 in three (3) subjects at High Level (HL):
  - Mathematics
  - Physics
- Chemistry/Further Mathematics/ Biology;
  AND
- Obtained atleast Band 2 in MUET/Band 5.5 in IELTS / score 500 in TOEFL PBT / score 59 in TOEFL IBT test; AND
- Applicant does not have any eyesight disabilities and/or physical disabilities which may affect physical / laboratory works

### **CAREER PROSPECTS**

Chemical Engineer or related engineering works

# CONTACT US

### For further information about the programme, please contact:

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