

# BACHELOR OF CIVIL ENGINEERING WITH HONOURS

KPT/JPS(N/521/6/0177)(MQA/PA9591)01/25



MAHSA  
UNIVERSITY

## FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY



"A great bridge is a great monument which should serve to make known the splendour and genius of a nation; one should not occupy oneself with efforts to perfect it architecturally, for taste is always susceptible to change, but to conserve always in its form and decoration the character of solidity which is proper."

- Jean Perronet

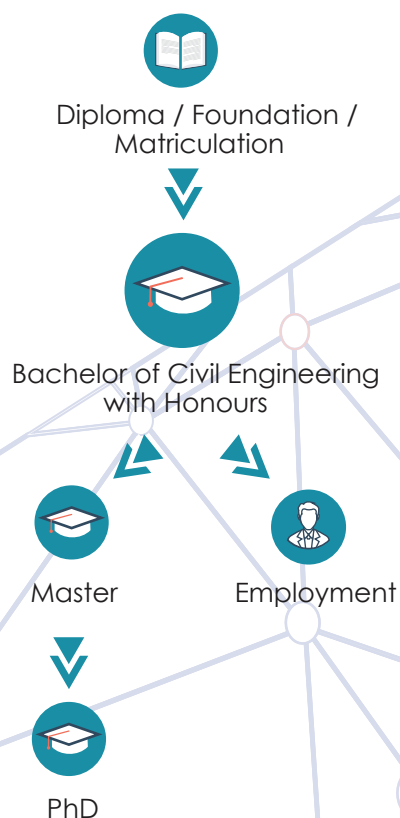


The Bachelor of Civil Engineering with Honours is a four-year programme designed in consultation with a panel of experts and approved by the Engineering Accreditation Council Malaysia (EAC) and Malaysian Qualifications Agency (MQA). This programme is largely conducted in the MAHSA University campus with extensive exposure to laboratory work. The programme promotes student-centred learning, problem-based learning, and hands-on training which will help students develop critical thinking and problem-solving skills.

This programme not only equips students with advanced technical and practical skills but also teaches them to plan and manage a projects strategically. Students apply the knowledge they have learned from the course to study, analyse and address real-life industry requirements. The focus will be on imparting practical and theoretical knowledge required for gainful employment in industry.

Engineering modules provide the necessary industry application and technological skills which are very useful for employment. Students use their knowledge of strong critical thinking, analysis and teamwork to develop and apply relevant engineering skills. Upon completion of the first three years, the Capstone Design Project and other advanced modules will further enhance students' understanding in the fourth year.

## PROGRESSION PATHWAY



## MAHSA 360



During their time at MAHSA University, we want to provide all of our students with the opportunity to develop qualities, skills and understanding that go beyond the disciplinary expertise and prepare them for the next steps in their chosen careers.

MAHSA360 is the ecosystem that works to ensure every single student is nurtured and supported throughout the student journey.

# PROGRAMME STRUCTURE

## YEAR 01

Construction Materials and Technology  
Engineering Drawing  
Engineering Mathematics 1  
Engineering Mathematics 2  
Engineering Mechanics  
Engineering Geology  
Engineering Survey  
Engineering Survey Lab  
Introduction to C Programming  
Strength of Materials

## YEAR 04

Advanced Reinforced Concrete Design  
Capstone Design Project  
Civil-infrastructure Design  
Construction Project Management  
Engineer and Society  
Estimating and Contract  
Technical Elective 1  
Technical Elective 2  
Thesis 1  
Thesis 2

## YEAR 02

Building Services  
Civil Engineering Lab 1  
Civil Engineering Lab 2  
Engineering Statistics  
Fluid Mechanics  
Hydraulics and Hydrology  
Introduction to Environmental Engineering  
Numerical Methods  
Soil Mechanics  
Structural Analysis 1  
Structural Analysis 2

## ELECTIVES

Advanced Steel Design  
Advanced Hydraulics and Hydrology  
Environmental, Safety and Health  
Geo-environmental Engineering  
Hazardous Waste Management  
Pavement Analysis and Design  
Pre-stressed Concrete Design  
Retaining Structures  
Shallow Foundation Engineering  
Solid Waste Management  
Traffic Analysis and Design  
Transportation Planning  
Water Resources Engineering  
Water Supply and Sewerage

## YEAR 03

Civil Engineering Lab 3  
Creativity and Innovation  
Foundation Engineering  
Geotechnical Engineering  
Highway Engineering  
Industrial Training  
Multimedia Application  
Reinforced Concrete Design  
Steel and Timber Design  
Structural Analysis 3  
Traffic and Transportation Engineering  
Water and Wastewater Engineering

## GENERAL MODULES

Community Service  
Entrepreneurship  
Youth Development  
Local Students  
Hubungan Etnik  
Tamadun Islam dan Tamadun Asia  
International Students  
Bahasa Melayu Komunikasi II  
Malaysian Studies

# ENTRY REQUIREMENTS

## Academic Qualification

Diploma / Matriculation /  
Foundation

STPM

A-Level

UEC

Other

## Requirements

Related field pass with minimum CGPA 2.0.

Pass with min. Gred C (GCPA 2.0) in three (3) subjects  
including Mathematics and one (1) Science Subject.

Pass in three (3) Subjects including Mathematics, and  
one (1) Science Subject.

Pass with Gred B in five (5) Subjects including  
Mathematics and one (1) Science Subject.

Recognised Malaysian qualifications or their  
equivalent.

MUET	IELTS	TOEFL
Band 4	6.0	550

## English Proficiency

# CAREER OPPORTUNITIES

Civil and Structural Engineer  
Construction Engineer  
Contractor  
Environmental Engineer  
Geotechnical Engineer  
Hydraulic and Irrigation Engineer  
Project Engineer  
Project Manager  
Site Supervisor  
Site Engineer  
Traffic and Transportation Engineer





Library



The Habitat



Football Field



Residences



Student Success Centre



Global Business Centre

**Contact us**  
**1800 88 0300**

[marketing@mahsa.edu.my](mailto:marketing@mahsa.edu.my)

[www.mahsa.edu.my](http://www.mahsa.edu.my)



MAHSA University



mahsauniversity



MAHSA University

**[www.mahsa.edu.my](http://www.mahsa.edu.my)**

Jalan SP2, Bandar Saujana Putra, 42610 Jenjarom, Selangor, Malaysia

1800-88-0300 +603-7931 7118

+603-5102 2200 [marketing@mahsa.edu.my](mailto:marketing@mahsa.edu.my)

Follow us :



MAHSA UNIVERSITY

**MAHSA**  
**UNIVERSITY**