



PROGRAMME **HANDBOOK**

**FOUNDATION IN
ENGINEERING TECHNOLOGY (FTV)**

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Vision & Mission

01



Vision

To be the Leading-Edge TVET Institution.

Menjadi peneraju institusi TVET yang unggul.

Mission

To provide wide access to quality & recognized TVET programmes;

Menyediakan akses yang meluas kepada program TVET berkualiti dan diiktiraf;

To empower communities through lifelong learning;

Memperkasa komuniti melalui pembelajaran sepanjang hayat;

To develop holistic, entrepreneurial and balanced graduates; and

Melahirkan graduan holistik, berciri keusahawanan dan seimbang; dan

To capitalise on smart partnership with stakeholders.

Memanfaatkan sepenuhnya perkongsian pintar dengan pihak berkepentingan.



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Program Information

02

INTRODUCTION

Foundation in Engineering Technology is a full-time programme that is carried out over a period of one year and consist of two semesters. This Foundation Programme is a preparatory programme for engineering technology students before pursuing undergraduate studies.

The curriculum programme is designed to provide knowledge, attitude and emphasis on practical elements. The programme offers courses that is based on science, technology, engineering and mathematic and equip students with skills in the field of engineering technology.

Students of this programme are also expose to skills in collaborative, thinking, communication (written and verbal) and lifelong learning. With these additional skills, the students will be prepared for pursuing their studies.

SYNOPSIS

This programme is designed to equip students with knowledge, skills, attitude and understanding of the science, technology, engineering and mathematics.

The knowledge and skills acquired will be useful for success in pursuing undergraduate studies.

Students of this programme also are exposed to practical work, presentations, project implementation, as well as soft skills activities that help develop collaborative, communication and thinking skills.

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Academic Calendar

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FOUNDATION IN ENGINEERING TECHNOLOGY (FTV)



Full time programme: one year



Consist of TWO semesters



18 weeks per semester

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Program Structure

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Classification	Credit Value	
	Semester 1	Semester 2
Common Core	11	7
Core	10	10
Specialization	4	8
Total	25	25



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Program Structure

05

SEMESTER 1

Classification	Course Code	Course Name	Credit Value
Common Core	FUI0012	Thinking Skills	2
	FUI0102	Basic Information and Communication Technology (ICT)	2
	FUI0032	English 1	2
	FUI0043	Fundamental of Engineering Technology	3
	FUI0052	Engineering Technology Practice	2
Core	FB10064	Mathematics 1	4
	FB10073	Physics 1	3
	FB10083	Chemistry 1	3
Specialization	FS10094	Engineering Drawing and Computer Aided Design (CAD)	4
Total Credit			25

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Program Structure

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SEMESTER 2

Classification	Course Code	Course Name	Credit Value
Common Core	FU20012	Pendidikan Islam*	2
	FU20022	Pendidikan Moral**	
	FU20142	English 2	2
	FU20041	Co-Curriculum	1
	FU20052	Basic Programming	2
Core	FB20154	Mathematics 2	4
	FB20073	Physics 2	3
	FB20083	Chemistry 2	3
Specialization	FS20114	Workshop for Mechanical and Manufacturing Engineering Technology	4
	FS20124	Project	4
Total Credit			25

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Outcome Based Education (OBE)

07

FOUNDATION IN ENGINEERING TECHNOLOGY (FTV)

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Programme Educational Objectives (PEO)

Programme Learning Outcomes (PLO)

Course Learning Outcomes (CLO)



When To Measure?

Programme Educational Objectives (PEO)

Statements that graduates are expected to accomplish after three to five years after graduation.

Programme Learning Outcomes (PLO)

Statement that students are expected to accomplish during the time at graduation.

Course Learning Outcomes (CLO)

Statement that students are expected to accomplish after each course completion.

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Outcome Based Education (OBE)

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FOUNDATION IN ENGINEERING TECHNOLOGY (FTV)

VISION

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Programme Educational Objectives (PEO)

Programme Learning Outcomes (PLO)

Course Learning Outcomes (CLO)

Programme Educational Objectives (PEO)

PEO1 : apply fundamental knowledge and skills in engineering technology when pursuing higher education.

PEO2 : participate in collaborative conducts, communicate effectively and display good values while pursuing further education.

PEO3 : continue engagement and commitment to continuous learning in engineering technology.

Programme Learning Outcomes (PLO)

PLO1: utilise facts to describe and discuss concepts, principles, and processes in a specific field of study;

PLO2: apply fundamental principles in the field of study to identify and solve problems;

PLO3: conduct academic activities such as collect, analyse, organise, and process data/information to make conclusions individually or in groups;

PLO4: communicate effectively in oral and writing;

PLO5: utilise basic digital technology applications to seek and process data related to a specific field of study; and

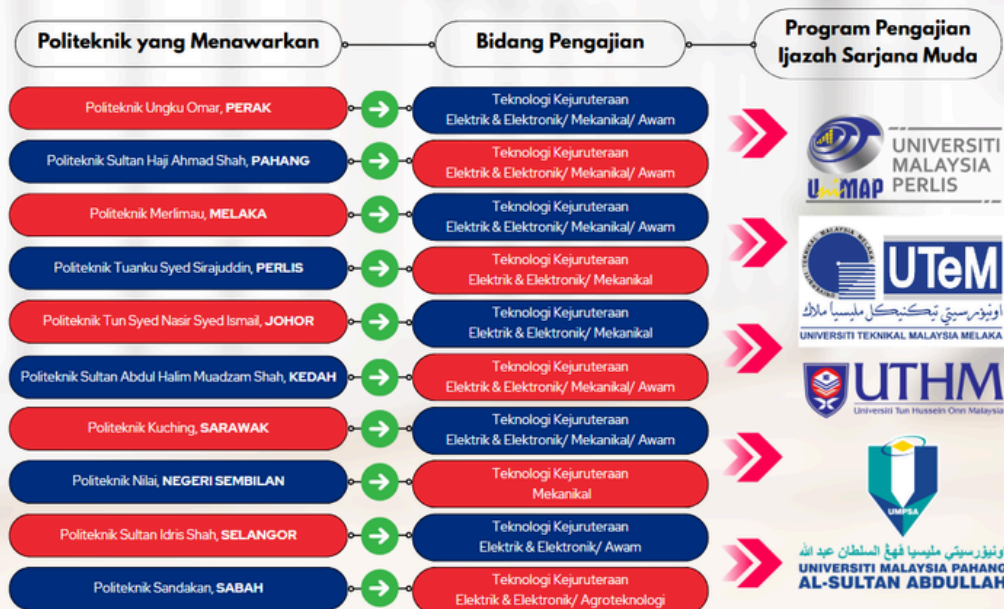
PLO6: search, interpret, and use relevant information ethically to pursue lifelong learning independently.

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Education Pathways

09

This programme is preparatory for students to pursue undergraduate study at Malaysian Technical University Network (MTUN) as well as polytechnic institutions.



*MTUN menawarkan semua bidang kecuali **UTeM tidak menawarkan Teknologi Kejuruteraan Awam**

*data as May, 2025

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Buku Panduan Arahan Peperiksaan

Edisi 2025



SCAN



General Information



[Website: Politeknik Nilai](#)



[Staff Directory](#)



[Facebook: Politeknik Nilai](#)



[Instagram: Politeknik Nilai](#)



[TikTok: Akaun Rasmi](#)

[Jawatankuasa Perwakilan Pelajar \(JPP\)](#)

Hotline Number

- **General Line:** 06 850 5800
- **Student Affairs Office:** 06 850 5809

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Pusat Pengajian Asasi
Politeknik Nilai