UNIVERSITI TENAGA NASIONAL

The National Energy University

UNIVERSITI TENAGA NASIONAL
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COURSE CONTENT

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A. BACHELOR OF ELECTRICAL & ELECTRONICS ENGINEERING (HONS.)

(JPT/BPP(R/523/06/0175)06/19)

- Circuits Analysis I & II
- Communication System
- Control System I
- Data Communication & Network
- Digital Logic Design
- Digital Signal Processing
- Electrical Machines & Drives
- Electrical Power System I
- Electromagnetic Fields & Waves
- Electronic Analysis & Design I & II

- Mechanics I : Statics
- Microprocessor Systems
- Process Control & Instrumentation
- Random Process
- Semiconductor Devices
- Signal & System
- Thermodynamics I
- Communication System Lab
- Digital Logic Design Lab
- Electrical/ Electronics Measurement Lab
- Electronics Design Lab
- Microprocessor Systems Lab

B. BACHELOR OF ELECTRICAL POWER ENGINEERING (HONS.)

(JPT/BPP(R/522/6/0041)06/19)

- Circuits Analysis I & II
- Communication System
- Control System I
- Digital Logic Design
- Digital Signal Processing
- Electrical Machines & Drives
- Electrical Power System I
- Electromagnetic Fields & Waves
- Electronic Analysis & Design I & II
- High Voltage Technology

- Mechanics I : Statics
- Microprocessor Systems
- Power Electronics
- Process Control & Instrumentation
- Signal & System
- Thermodynamics I
- Communication System Lab
- Digital Logic Design Lab
- Electrical Machines Lab
- Electrical/ Electronics Measurement Lab
- Electronics Design Lab

C. BACHELOR OF MECHANICAL ENGINEERING (HONS.)

(JPT/BPP(R/521/6/0071)06/19)

- Circuits Analysis I & II
- Electro-Mechanical Systems
- Engineering Graphic & CAE
- Engineering Materials
- Fluid Mechanics Lab
- Heat Transfer
- Machine Design
- Manufacturing Processes
- Mechanical Design Process
- Mechanical Vibration

- Mechanic I : Statics
- Mechanics II : Dynamics
- Mechanics of Fluid I & II
- Mechanics of Materials
- Modeling & Control of Dynamic Systems
- Theory of Machines
- Thermodynamics I & II
- Electrical Measurement& Lab
- Engineering Measurement & Lab
- Heat Transfer & Applied Thermo. Lab
- Machine Design & CAD Lab
- Manufacturing Processes Lab
- Mechanics & Materials Lab

Compulsory Subjects

- Ethnic Relations
- Islam/ Moral & Civil Society I, II & III
- Islamic Civilisation, Asian Civilisation
- Literature & Society
- Engineering Economics
- Engineers in Society
- Principles of Management
- Technical Communications

D. BACHELOR OF CIVIL ENGINEERING (HONS.)

(JPT/BPP(R/526/6/0102)02/21)

- Civil Engineering Drafting Technology
- Civil Engineering Elective I & II
- Civil Engineering Materials
- Engineering Geology
- Foundation Engineering I
- Geotechnical Engineering
- Highway Engineering
- Hydraulic Engineering
- Hydrology Engineering

- Integrated Civil Engineering Design Project
- Introduction to Environmental Engineering
- Mechanic I : Statics
- Mechanics II : Dynamics
- Mechanics of Fluids
- Mechanics of Materials
- Numerical Methods for Civil Engineers
- Project Management & Construction
- Reinforced Concrete Design I & II
- Soil Mechanics
- Statistics for Civil Engineers
- Structural Analysis I & II
- Structural Steel Design I

- Surveying for Engineers
- Transportation Engineering
- Water, Wastewater Engineering
- Civil Engineering Drafting Technology Lab
- Civil Engineering Materials Lab
- Geology Lab
- Highway & Transportation Engineering Lab
- Hydrology & Hydraulic Engineering Lab
- Introduction to Environmental Engineering Lab
- Mechanics of Fluids Lab
- Mechanics of Materials Lab
- Soil Mechanics Lab
- Surveying Practical Training

E. BACHELOR OF COMPUTER & COMMUNICATIONS ENGINEERING (HONS.)

(JPT/BPP(N/523/6/0070)03/22)

- Circuit Theory
- Communication Systems
- Computer Organization & Architecture
- Control System
- Data Communication & Network
- Data Structure & Algorithms
- Digital Communications
- Digital Logic Design
- Digital Signal Processing

- Digital Systems Design
- Electromagnetic Field & Waves
- Electronic Circuits Analysis
- Embedded Systems
- Microprocessor Systems
- Object Oriented Programming
- Operating Systems
- Programming for Engineers
- Random Process
- Signal & System
- Wireless & Mobile Communication

- Communication System Lab
- Digital Logic Design Lab
- Digital Signal Processing Lab
- Electrical/ Electronics Measurement Lab
- Electronics Design Lab
- Introduction to Computer & Communication Engineering (Workshop)
- Microprocessor Systems Lab
- Introduction to Computer & Communication Engineering (Workshop)
- Microprocessor Systems Lab

Common Technical Subjects

- Advanced Calculus & Analytical Geometry
- Differential Equations
- Linear Algebra*
- Numerical Methods for Engineers*
- Programming
- Capstone Design Courses**
- Industrial Training
- Project 1 & 2
- 4 Technical Electives***

*Except Civil
**Except Civil replaced with Integrated Civil Engineering Design Project
***Except
- Bachelor of Computer & Communication Engineering, 3 electives only.
- Bachelor of Civil Engineering, 2 electives only.

UNIVERSITI TENAGA NASIONAL

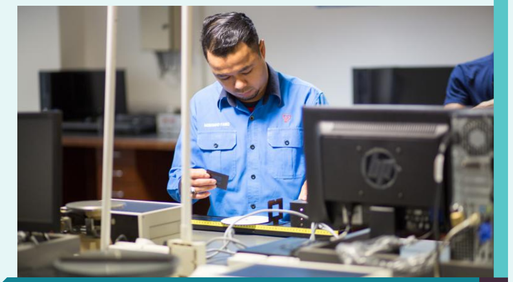
The National Energy University

COLLEGE OF ENGINEERING (C.O.E)

Creative, Innovative & Energetic.

Wholly Owned Subsidiary of TENAGA NASIONAL

INTRODUCTION



The College of Engineering (C.O.E) has kept pace with the demands of scientific and technological world. The college strives to provide a first class educational experience to its undergraduate students and prepare them for positions in the industry or academia. The college comprises of Electronics & Communication Engineering Department, Electrical Power Engineering Department, Mechanical Engineering Department, Civil Engineering Department. The college offers programmes at Bachelor levels. The college, in collaboration with College of Graduate Studies (COGS), offers programmes at Postgraduate levels (Masters & PhD) as well.

All programmes offered are designed to satisfy the academic requirements of Malaysian Qualifications Agency (MQA), Board of Engineers Malaysia (BEM) and also Engineering Accreditation Council (EAC) Malaysia. Apart from that, our programmes are accredited by the Institution of Mechanical Engineers (IMechE), Institution of Civil Engineers (ICE), and Institution of Engineering & Technology (IET) from United Kingdom (UK).

This allows students to register and practice engineering in foreign countries upon graduation.

CAREER PROSPECTS

A. Bachelor of Electrical & Electronics Engineering (Hons.)
(JPT/BPP(R/523/6/0175/06/19)

- Maintenance/ Operation Engineers
- Design Engineers
- Project Engineers
- Consulting Engineers
- Instrumentation & Control Engineers
- Electrical/ Electronic System Engineers
- Manufacturing Engineers
- Communication Engineers
- Research/ Test Engineers
- Academicians

B. Bachelor of Electrical Power Engineering (Hons.)
(JPT/BPP(R/522/6/0041/06/19)

- Electrical Distribution Engineers
- Power System Engineers
- Power Station Engineers
- Maintenance/ Operation Engineers
- Project Engineers
- Consulting Engineers
- Research/ Test Engineers
- Academicians

C. Bachelor of Mechanical Engineering (Hons.)
(JPT/BPP(R/521/6/0071/06/19)

- Project Engineers
- Maintenance/ Operation Engineers
- Automotive Engineers
- Power/ Chemical/ Processing Plant Engineers
- Manufacturing Engineers
- Research/ Test Engineers
- Consulting Engineers
- Academicians

D. Bachelor of Civil Engineering (Hons.)
(JPT/BPP(R/526/6/0102/02/21)

- Project Engineers
- Construction Engineers
- Structural Engineers
- Water/ Wastewater Engineers
- Geotechnical Engineers
- Highway/ Transportation Engineers
- Consulting Engineers
- Design Engineers
- Materials Engineers
- Research/ Test Engineers
- Sales & Maintenance Engineers
- Academicians

E. Bachelor of Computer & Communication Engineering (Hons.)
(JPT/BPP(N/523/6/0070/03/22)

- Design Engineers
- Project Engineers
- Network Engineers
- Maintenance/ Operation Engineers
- Consulting Engineers
- Instrumentation & Control Engineers
- Electronic System Engineers
- Communication Engineers
- Research/ Test Engineers
- Academicians

PROGRAMMES OFFERED

INFO

A. Bachelor of Electrical & Electronics Engineering (Hons.)
B. Bachelor of Electrical Power Engineering (Hons.)
C. Bachelor of Mechanical Engineering (Hons.)
D. Bachelor of Civil Engineering (Hons.)
E. Bachelor of Computer & Communication Engineering (Hons.)

UNIVERSITY AWARDS

A showcase of UNITEN's Accolades.
The continuous quest for national & global recognition of excellence

The Brand Laureate 2010-2011
Best Brand in Tertiary Education (Engineering)

Asia-Pacific Business Excellence Standard Award
APBEST Grand Award Winner of The Year And Best Education Services In The Asia-Pacific

The Brand Laureate 2008-2009
Best Brand in Education (Engineering and ICT)

Prime Minister's Award for Industry Excellence 2009

4th Business of The Year Award
Service Provider of The Year 2010

"A prestigious recognition of industrial excellence through continuous efforts and development in education"

Brighten Your Path To Success At UNITEN

Let us empower you in building your brighter future.

CAREER PROSPECTS
Employability Rate 95%

D-SETARA (ENGINEERING) & SETARA 13
EXCELLENT TIER 5

WEBOMETRICS RANKING
No. 1 Private University

High Quality Recognised Programmes

For further details, please visit at: http://www.uniten.edu.my/admission

LABORATORY FACILITIES

A. Electronics & Communication Engineering Laboratory

- Communication System Lab
- Electronic Design Lab
- Electrical/ Electronics Measurement Lab
- Microprocessor Applications Lab
- Printed Circuit Board (PCB) Fabrication Lab
- RF & Microwave Technology Lab
- Very Large Scale Integration (VLSI) Design Lab
- Control Systems Lab
- Digital Lab

B. Electrical Power Engineering Laboratory

- Electrical Machines Lab
- Power Electronics & Drives Technology Lab
- Smart Grid Lab
- Power System Protection Lab
- Control System Lab
- Power System Lab
- Digital Logic Design Lab
- Electrical/ Electronics Measurement Lab
- Electronics Design Lab
- Communication System Lab
- Digital Signal Processing Lab
- Condition Monitoring Lab
- Research & Project Lab

C. Mechanical Engineering Laboratory

- Materials Lab
- Machine Design Lab
- Advanced Manufacturing Lab
- Automation & Robotics Lab
- Computer Aided Design & Computer Lab
- Aided Engineering Lab
- Applied Thermodynamics & Heat Transfer
- Internal Combustion Engine Lab
- Fluid Mechanics Lab
- Instrumentation & Measurement
- Computational Fluid Dynamics Lab

D. Civil Engineering Laboratory

- Environmental Engineering Lab
- Highway & Transportation Engineering Lab
- Surveying Lab
- Civil Engineering Materials Lab
- Advanced Structural Engineering Lab
- Geotechnical Engineering Lab
- Civil Engineering Computer Lab
- Civil Engineering Drafting Technology Lab
- Soil Mechanics Lab
- Geology Lab
- Mechanics of Materials Lab
- Mechanics of Fluids Lab
- Hydrology & Hydraulic Engineering Lab

"C.O.E HAS 40 TEACHING LABS"

http://coe.uniten.edu.my/portal/gallery/

http://coe.uniten.edu.my/portal