



UniKL



Flexi Learn

Bachelor Degree Programme

ABOUT UniKL MSI

Universiti Kuala Lumpur (UniKL), a university under Majlis Amanah Rakyat (MARA) is one of the country's leading technical universities. The university aims to provide graduates with the knowledge, skills and attitude required to contribute towards and play major roles in a globalized and knowledge-based economy. Located in Kulim Hi-Tech Park, Universiti Kuala Lumpur Malaysian Spanish Institute (UniKL MSI) was established in response to the rapidly increasing demand of the electronics and semiconductor industry. It encompasses the advanced technology in applied electronics and mechanical design engineering. Furthermore, the university also offers automotive engineering courses as part of the university specialization. It has been fully operational from its campus located in Kulim Hi-Tech Park, Kedah since 2003. With a strong collaborative effort between the Malaysian and Spanish government, UniKL MSI is able to offer unique well-designed academic programs (both at degree and diploma levels) which integrate theoretical training and practical application.

PROGRAMMES OFFERED

Program Bachelor Engineering Technology (Flexi Learn):

- Bachelor of Engineering Technology (Hons.) in Mechanical Design
JPT/BPP (N/521/6/0126) 12/20, MQA PA 7648
- Bachelor of Engineering Technology (Hons.) in Applied Electronics
JPT/BPP (N/523/6/0278) 12/20, MQA PA 7649

Courses will be conducted in UniKL MSI Campus, Kulim.

HRDF
CLAIMABLE
EPF WITHDRAWAL
AVAILABLE

UNIVERSITI KUALA LUMPUR
MALAYSIAN SPANISH INSTITUTE

Center for Advancement & Continuing Education (ACE)
Lot 12-16, Lebuhraya Perdana, Kulim Hi-Tech Park 09090 Kulim Kedah Darul Aman
Tel: 04-722 1400 | Mobile: 013-430 5528 | Email: myusofr@unikl.edu.my

ENTRY REQUIREMENT FOR BACHELOR ENGINEERING PROGRAM (Flexi Learn)

PROGRAM NAME	MINIMUM ENTRY REQUIREMENTS		
	Feeder	Requirements	Additional Requirement
Bachelor of Engineering Technology (Hons.) in <ul style="list-style-type: none"> ▪ Mechanical Design ▪ Applied Electronics 	STPM / A-LEVEL	Pass STPM/A-Level OR its equivalent relevant with minimum Grade C (CGPA 2.0) in Mathematics AND ONE (1) relevant Science subject; AND pass SPM OR its equivalent with at least a pass in English;	Pass in MUET at least band 2 (Except for Diploma holders with English as medium of instruction)
	DIPLOMA	Recognized Diploma in Engineering / Engineering Technology OR its equivalent with minimum CGPA 2.0; OR Recognized related Vocational and Technical / Skills Diploma with minimum CGPA 2.0; AND pass in English at SPM level.	
	APEL	Accreditation of Prior Experiential Learning (APEL)	

STUDY FEES

Students will have to pay based on the number of credit registered per semester. For the students to graduate on time, students are advise to follow the programme structure given by the university.

CREDIT TRANSFER

The UniKL Admission Committee considers credit transfer for applicants from other recognized universities or colleges on a case-by-case basis. For further information please contact the Academic Management Department at 04-4035199.

INDUSTRIAL TRAINING

Trainees will undergo Industrial Training during their studies. This invaluable experience will help develop the students' self-confidence before joining the industries after completing their studies in UniKL. For Flexi Learn programme, the industrial training can be exempted subject to the approval by MQA.

DURATION OF STUDY

In order to complete the minimum 140 credits required for graduation as stipulated by MQA, the maximum duration is about 5.5 years for Flexi Learn programme.

FINANCIAL AID

UniKL will do its best in assisting students to obtain financial aids for their studies. Local Flexi Learn programme students may apply for EPF withdrawal, educational loans from financial institutions and state foundations subjected to their terms and condition.

CLASSROOMS, LECTURE HALLS AND WORKSHOPS

The classrooms are fully air-conditioned and classes are held in small groups of not more than 25 students. The air-conditioned lecture halls are able to accommodate about 250 students

at one time. Workshops are also provided for the various programs and the ratio of machine to students is 1:2.

LIBRARY, LEARNING RESOURCES AND INFORMATION CENTERS

The Library at UniKL reflects the commitment of the Academic department to ensure that the needs of students studying at both City Campus as well as other UniKL branches are met. UniKL has a network of information centers comprising of libraries, communication facilities and resources. Each branch campus is well-equipped with facilities particularly geared to the special interest and requirements of their respective students and staff. All the libraries are well stocked with reference books, journal, periodicals and magazines. Other information Centre facilities include e-learning centers, internet access and computer labs.

ABOUT OUR PROGRAMMES

BACHELOR OF ENGINEERING TECHNOLOGY (HONS) IN MECHANICAL DESIGN

Bachelor of Engineering Technology (Hons.) in Mechanical Design emphasize on components and systems level design to serve the mechanical, manufacturing, automotive, semiconductor, electronics, solar and also oil and gas industry. This program will produce graduates become knowledgeable, competent, and committed to the importance of lifelong learning and continuous improvement. The program will prepare graduates with knowledge of mechanical engineering design and development of products, components and systems.

Career path

Mechanical Design graduates are in great demand as industries seek to apply evolutionary advances in reviewing specifications and other data to develop mechanical layouts. Designers typically have working knowledge of mechanical parts as well as computer-aided design (CAD) software. Mechanical Design graduates can work in any company that develops designs or manufactures. Opportunities exist in Mechanical Design, Mechanical Engineering, Product Design Engineering, Manufacturing Engineering, Product Mechanical Engineering, Production Engineering, and Marketing Engineering.

BACHELOR OF ENGINEERING TECHNOLOGY (HONS) IN APPLIED ELECTRONICS

Bachelor of Engineering Technology (Hons.) in Applied Electronics is a cross-disciplinary field that provides students with knowledge in radio frequency wireless technology, semiconductor, electrical, electronic devices, control system and instrumentation, automation, mechanical, manufacturing process and project management. These are some of the necessary fields required for the electronics industry. Additionally, students will also be exposed to entrepreneurial skills that will help them developed their own business in future time.

Career path

Students graduated from BET Applied Electronics may choose to embark in "research and development" and "design and development" for system and integrated circuit. In addition, there are many jobs related to this area such as Analog Design Engineer, Digital Design Engineer, Analog Design Verification and Validation Engineer, Digital Design Verification and Validation Engineer, Radio Frequency Communication Engineer, Product Development Engineer and Product Test/Masurement and Development Engineer for Product Engineering, Electronic Process Automation Engineer, Semiconductor Process Automation Engineer, PCB Process Engineer, IC Layout Engineer and Electronics Packaging Engineer, Automation engineer, Electrical Engineer, Electronic Engineer, Service Engineer, Maintenance Engineer, Quality Automation Engineer or Test Automation Engineer.

Bachelor of Engineering Technology (Hons.) in Mechanical Design	
COMPULSORY COURSES	FUNDAMENTALS
	Thermal Science Engineering Mechanics Engineering Materials Fundamentals of Materials Science Finite Element Method Fluid Mechanics Pneumatic & Hydraulic Strength of Materials Fundamentals of Vibration
	DESIGN
	Engineering Drawing Computer Aided Design & Modeling Ergonomics and Human Factors Engineering Design Process Design for Plastics & Elastomer Design for Sheet Metal Forming Machine & Mechanism Design Machine Component Design CAD/CAM Rapid Prototyping
	MANUFACTURING
	Quality Engineering Industrial Safety & Health Manufacturing Technology Metrology Workshop Technology
	ELECTRIC / ELECTRONICS
	Electric Circuit Analysis Electrical & Electronics Workshop Computer Programming Control Systems
	OTHERS
	Industrial Training Final Year Project 1 Final Year Project 2
MATHS	
Engineering Mathematics 1 Engineering Mathematics 2 Applied Statistics	
WAJIB UNIVERSITY	
Professional Engineering Practice and Ethics Co-Curriculum (9 Options) Bahasa Kebangsaan A* Hubungan Etnik / Malaysian Studies 3** Innovation Management Isu-isu Kontemporari Muslim di Malaysia / Culture and Lifestyle in Malaysia*** Tamadun Islam & Tamadun Asia (TITAS) Mandarin 1 / Spanish 1 Mandarin 2 / Spanish 2 Fundamental English Professional English 1 Professional English 2 Technopreneurship	
ELECTIVE COURSES	ELECTIVES (SELECT 3 ONLY)
	MECHANICAL
	Applied Computational Fluid Dynamics Introduction to Oil and Gas Industry Automotive Structure
	DESIGN
	Heat Exchanger Design Automotive Design Engineering
	MANUFACTURING
CNC Technology	
ELECTRIC / ELECTRONICS	
Applied Control Systems Object Oriented Programming Microcontroller and Interfacing	

Bachelor of Engineering Technology (Hons.) in Applied Electronics	
COMPULSORY COURSES	FUNDAMENTALS
	Electric Circuit Analysis Electrical & Electronics Laboratories Computer Programming Semiconductor Technology Signal & Systems Analog Circuit Application 1 Analog Circuit Application 2 Electronic Devices and Applications Engineering Electromagnetics Object Oriented Programming Sensor Technology Electric Machine Fundamentals Electronic Instrumentation and Measurements PCB Design Control Systems Theory Digital Electronics
	RF WIRELESS TECHNOLOGY
	Telecommunication System Analog IC Design
	EMBEDDED
	VLSI Design Microcontroller and Interfacing Digital Signal Processing Applied Control Systems
	MECHANICAL
	Engineering Drawing Fundamentals of Materials Science Engineering Mechanics
	MANUFACTURING
	Quality Engineering
OTHERS	
Industrial Training Final Year Project 1 Final Year Project 2	
MATHS	
Engineering Mathematics 1 Engineering Mathematics 2 Applied Statistics	
WAJIB UNIVERSITY	
Professional Engineering Practice and Ethics Co-Curriculum (9 Options) Bahasa Kebangsaan A* Hubungan Etnik / Malaysian Studies 3** Innovation Management Isu-isu Kontemporari Muslim di Malaysia / Culture and Lifestyle in Malaysia*** Tamadun Islam & Tamadun Asia (TITAS) Mandarin 1 / Spanish 1 Mandarin 2 / Spanish 2 Fundamental English Professional English 1 Professional English 2 Technopreneurship	
ELECTIVE COURSES	ELECTIVES (SELECT 4 ONLY)
	RF WIRELESS TECHNOLOGY
	RF/ Microwave Circuits & Systems RFIC Design for Wireless Communication
	EMBEDDED
	ASIC and FPGA Design Power Electronics and Drive Programmable Logic Controller
	MANUFACTURING
Industrial Safety & Health	

* Subject to change

All information is correct at the time of printing. However, the university reserves the right to change any information without prior notice.
Universiti Kuala Lumpur DU001(W)