

APPROVED

Diploma in Engineering Technology (Automotive Technology)
Faculty of EDICT (Engineering,Design and ICT)

Programme Title (Arabic)	تأبلكرملأ ؤننؤؤف فف ؤولببلا					
Acronym / Abbreviation *	DEngTechAuto					
Nature	Specialisation					
Programme Code	ENT6100	Programme Duration	2 Year/Cycle	Programme Level	Level 6	
Programme Credits	240	Award Category	Diploma			
Effective From	2023/2024 Sem 1					
Owner	School of Engineering					
Professional Body						
Professional Body	Recognition Status	Effective From	Interim Date	Professional Bodies	Contact Person	Evidence
Employability Skills	Yes	23/01/2023		Employability Skills		
Target Groups *						
High School Graduates						
International Students						
People in Employment						
Other						
Qualification Completion Requirements Criteria	<p>Awarded where candidates have met all of the requirements below:</p> <ul style="list-style-type: none">Successful completion of, or exemption from, all courses listed in Schedule A group of courses.Completion of work experience.Completion of National Requirements.					
	<p>The Diploma in Automotive Technology Programme is a two years qualification at NQF level 6. The qualification is designed after extensive interaction with the Bahrain Engineering environment and society, in order to provide work-ready engineering technology graduates. The graduates will acquire technical knowledge in their field, specialized practical skills and valuable employability skills that will allow them to provide the drive for the transformation towards a knowledge-based economy in Bahrain.</p>					

Programme Overview *	<p>The Diploma in Automotive Technology is delivered over a 2-year period consisting of 4 semesters. Students are expected to take 60 credits on average per semester and thus at the completion of their studies they should have accumulated a total of 240 credits. In those 240 credits, there exist 30 credits of English courses, 15 credit as National Requirement courses and the remaining 195 credits are taken from Core and Specialized Mechanical Engineering and Automotive Courses. Additionally, students are required to complete a total of 60 days of work placement. The Diploma in Automotive Qualification share the same common 1st year courses with other Engineering Technology qualifications, these courses lay the foundation of Engineering Technology and provide the students with the required knowledge to succeed in their chosen specialization.</p>
Entry and Selection *	<p>General entry requirements such as secondary school achievements, English and Mathematics as described in the Student Admission Policy A/AB/010. Specific entry requirements for this Programme, beyond those described in the Student Admission Policy are as follows:</p> <p>Academic:</p> <p>Successful completion of</p> <p style="padding-left: 40px;">AP4203 English 2 AP4102 Mathematics 2 (Technical)</p> <p>or</p> <p>Passing English and Mathematics selection tests at the required level or equivalent.</p>
Selection and Criteria and Process *	<p>Where there are more applicants who meet the programme entry criteria than can be accepted, the following shall be used:</p> <p>Selection Criteria</p> <p style="padding-left: 40px;">Successful completion of the Foundation Program at Bahrain Polytechnic and demonstration of a commitment to study Results from programme entry tests. Work experience and prior educational achievement.</p> <p>Selection Process</p>

	Applicants may be required to attend an interview.
Major Selection Criteria *	None
Accreditation / External Approval Requirements *	None
Attendance Requirements *	Attendance requirements are described in the policy Student Attendance A/AB/006.
Qualification Overview *	<p>The Diploma in Automotive Technology qualification is a 2-year (4-semester) programme and is a technically strong qualification. It is the first of its kind in the kingdom of Bahrain as no similar program has been offered yet in Bahrain. The programme has a wide base of Mechanical Engineering knowledge and technical skills in the first year and fundamental Automotive specialized courses upon which graduates can build to reflect the wide range of fields and industries that are present locally and regionally.</p> <p>This qualification emphasizes on solid mechanics, mechanical fundamentals, thermodynamics, and automobile technology to suit the current requirements in the Automobile Industries.</p> <p>Students gain theoretical knowledge and specialist practical skills in the areas of Mechanics (static and Dynamic), workshop practice, thermodynamics. Students are introduced to software packages such as 3-Dimensional modelling software (SolidWorks). In the second year, students are given specialised courses that cover the main areas of automotive technology such as Automobile Powertrain and Chassis, Internal Combustion Engines, and Automobile Electrical and Electronics Systems.</p>
	<p>The aim of this programme is to provide students with essential set of knowledge and skills for employment as Automotive technician/engineering profession in dealing with automobile maintenance/repair, troubleshooting and fault diagnoses of vehicles using latest technologies in the field of automotive</p> <p>The programme will provide students with:</p>

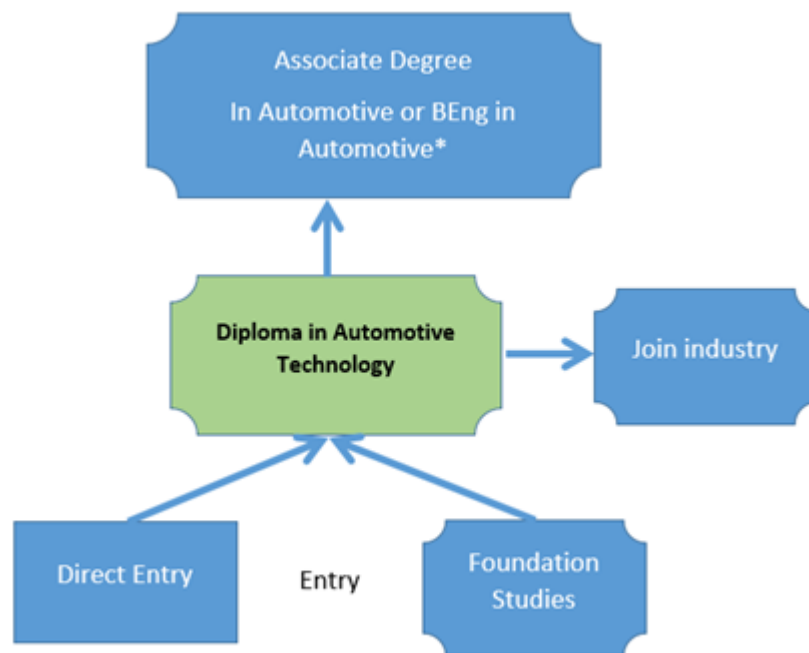
Qualification Aim *

- theoretical and practical skills to solve and deal with engineering problems in the broad area of mechanical engineering and automotive technology.
- skills necessary for effective communication, analysis, team work, documentation and evaluation of systems through the inclusion of courses in English language, mathematics, ethics and social responsibility.

Graduate Pathways and Destination *

Graduates from this programme will have the following pathway to the following qualifications at Bahrain Polytechnic:

Pathways Diagram:



- Currently not offered at Bahrain Polytechnic

Graduates from the Diploma in Automotive Technology programme who wish to continue their studies may apply to any university for admission into their programme. With a Diploma degree, students can progress to Associate Degree in the same field (Automotive, when it is offered), or they can also transfer to year 3 of BEngTech Mechanical Engineering degree.

This programme prepares students for the following further learning, careers and/or employment opportunities:

	<p>Automotive major:</p> <ul style="list-style-type: none">• Auto technician• Auto electrician• Service advisor• Auto sales• Spare part sales• Spare part management• Accident estimator• Auto trainer/instructor	
Other Information *	Skills	Generic Definition
	Communication	Communicate in ways that contribute to productive and harmonious relationships across employees and customers.
	Teamwork	Work effectively independently and in collaboration with others.
	Problem solving	Think critically and respond appropriately to changing needs within a growing and diversifying economy.
	Initiative and enterprise	Apply resourcefulness, innovation and strategic thinking to a range of workplace situations.
	Planning and organization	Plan and manage their working lives.

	Self management	Demonstrate self discipline and adaptability, and be able to plan and achieve personal and professional goals
	Learning	Understand the need for and engage with continuous learning throughout the lifespan.
	Technology	Utilize information technology effectively and ethically in their personal and professional lives

Programme Learning Outcomes

On successful completion of this programme the learner will be able to :

Description
Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialisation to deal with defined and applied engineering procedures, processes, systems or methodologies.
Identify and commit to professional ethics, responsibilities and norms of engineering technology practice.
Demonstrate detailed knowledge of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering technology practice.
Device solutions for broadly-defined automotive technology problems to meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
Select and apply appropriate techniques, resources, and modern engineering tools, including prediction and modeling tools, to broadly-defined engineering activities, with an understanding of their limitations.
Practice as a professional using 21st century skills
Solve practical problems in specific automotive engineering settings using sound analytical, industrial, laboratory, and time-management skills.
Apply techniques and skills to carry out appropriate automotive industrial procedures in repair and maintenance of vehicles.
Operate modern equipment and electronic devices used in Automotive workshops and labs
Analyze vehicle system's performance, diagnose faults and recommend actions needed to rectify problems
Communicate effectively to convey and interpret information related to Automotive Technology Systems

Semester Schedules

Year 1 / Semester 1

Core	
Course Code	Title
EN6000	Electrical Fundamentals
EN6990	Engineering Practice
EL6001	English for EDICT 3
EN6907	Mathematics for Engineers 1

Year 1 / Semester 2

Core	
Course Code	Title
EN6010	Engineering Computing Fundamentals
EL6002	English for EDICT 4
EN6914	Mathematics for Engineers 2
EN6903	Mechanical Fundamentals

Year 2 / Semester 1

Core	
Course Code	Title
EN6904	Engineering Graphics
EN6902	Engineering Mechanics 2
NR	National Requirements
EN7919	Thermodynamics
Optional	
Course Code	Title
NR-Arabic	National Requirements- Arabic

Year 2 / Semester 2

Core	
Course Code	Title
ED7000	Applied Project
EN6101	Automotive Electrical and Electronics Systems
EN6102	Automotive Internal Combustion Engines
EN6103	Automotive Powertrain and Chassis Systems
EN0003	Industry Placement (Diploma)