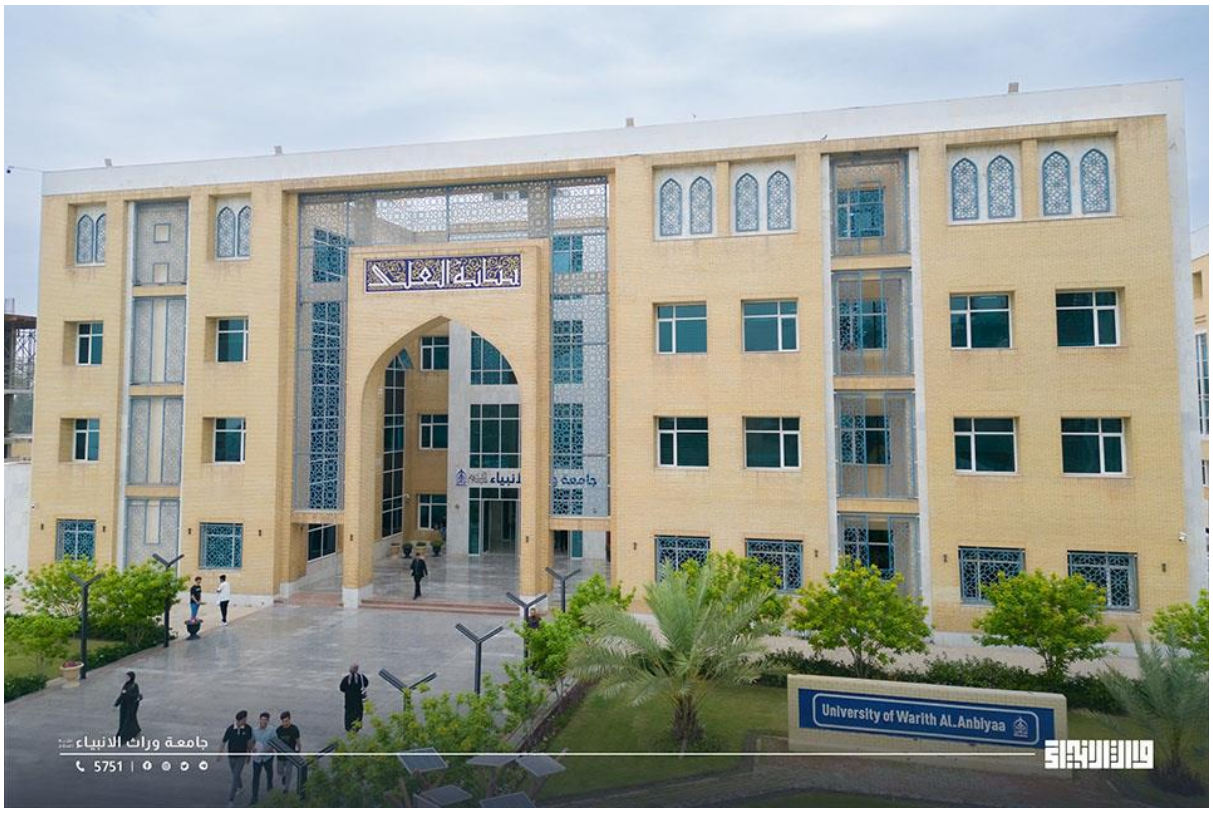
University of Warith Al-Anbiyaa
جامعة وارث الانبياء

First Cycle – Bachelor's Degree (B.Sc.) – Electrical Engineering Techniques

بكالوريوس – تقنيات الهندسة الكهربائية



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1. Overview

This catalogue is about the courses (modules) given by the program of Electrical Engineering Techniques to gain the Bachelor of Science degree. The program delivers (40) Modules with (6000) total student workload hours and 240 total ECTS. The module delivery is based on the Bologna Process.

نظره عامه

يتناول هذا الدليل المواد الدراسية التي يقدمها برنامج تقنيات الهندسة الكهربائية للحصول على درجة بكالوريوس العلوم. يقدم البرنامج (٤٠) مادة دراسية مع (٦٠٠٠) إجمالي ساعات حمل الطالب و ٢٤٠ إجمالي وحدات أوروبية. يعتمد تقديم المواد الدراسية على عملية بولونيا.

2. Undergraduate Courses 2025-2026

Module 1

Code	Course/Module Title	ECTS	Semester
EET1101	DC Electrical Circuits	6	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
3	3	94	106
Description			
This module introduces the fundamental principles of direct current (DC) electrical circuits. Students study basic electrical quantities such as voltage, current, resistance, and power, and learn to analyze DC circuits using Ohm's Law and Kirchhoff's Laws. The course covers series, parallel, and combination circuits, as well as network theorems including Thevenin's and Norton's theorems. Practical problem-solving skills are developed through circuit analysis, calculations, and basic laboratory or simulation exercises. Emphasis is placed on understanding circuit behavior, measurement techniques, and safe working practices, providing a foundation for further studies in electrical and electronic engineering.			

Module 2

Code	Course/Module Title	ECTS	Semester
EET1102	Digital Technologies	6	1

Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
4	4	94	56
Description			
This module introduces the fundamental concepts of digital technology and digital systems. Students explore number systems, binary arithmetic, logic gates, Boolean algebra, and combinational and sequential logic circuits. The course also covers basic digital components such as multiplexers, decoders, flip-flops, counters, and registers, along with an introduction to microcontrollers and digital communication concepts. Emphasis is placed on problem-solving, logical design, and practical applications through simulation and hands-on activities, providing a foundation for further study in electronics, computing, and embedded systems.			

Module 3

Code	Course/Module Title	ECTS	Semester
MTU1001	Arabic Language	2	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
1	1	33	17
Description			
This module aims to enhance students' Arabic language skills by developing their ability to recognize and avoid common grammatical and spelling errors. It focuses on correct writing rules, including ta' marbuta and ta' maftuha, alif mamduda and alif maqsurah, hamza rules, sun and moon letters, punctuation, numbers, and the distinction between similar letters such as dad and dha'. The module also strengthens grammatical understanding of nouns, verbs, objects, prepositions, nun and tanween, and their correct use in sentences. In addition, it introduces students to the principles and language of administrative correspondence, enabling them to understand and apply proper administrative writing styles in formal communication.			

Module 4

Code	Course/Module Title	ECTS	Semester
EET1104	Differential Mathematics	6	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
3	3	93	57
Description			
This module introduces the fundamental concepts and techniques of differential mathematics with an emphasis on applications in science and engineering. Students study limits, continuity, and differentiation of algebraic, trigonometric, exponential, and logarithmic functions. Applications of differentiation—including rates of change, optimization, curve sketching, and basic differential equations—are explored. The course develops analytical and problem-solving skills and provides a mathematical foundation for further studies in engineering, physics, and applied sciences.			

Module 5

Code	Course/Module Title	ECTS	Semester
EETC101	Engineering Workshops	6	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
	4	63	87
Description			
This module provides students with practical exposure to basic workshop practices and manufacturing processes used in engineering applications. It focuses on developing hands-on skills, safety awareness, and an understanding of tools, machines, and materials commonly used in workshops. Topics include fitting, carpentry, welding, smithy, sheet metal work, and basic machining operations, along with measurement and inspection techniques. Students learn proper handling of tools, workshop safety standards, and process planning through supervised practical sessions. The module emphasizes skill development, workmanship, and problem-solving through experiential learning. By the end of the course, students will have gained foundational practical skills and confidence necessary to support engineering design, fabrication, and maintenance activities in professional environments.			

Module 6

Code	Course/Module Title	ECTS	Semester
MTU1006	Human Rights and Democracy	2	1
Class (hr/w)	**Lect/Lab./Prac./Tutor**	**SSWL (hr/sem)**	**USWL (hr/w)**
2		33	17
Description			
This module introduces the fundamental principles of human rights and democratic governance. Students examine the historical development of human rights, key international and regional human rights instruments, and the core values of democracy, including participation, equality, rule of law, and accountability. The course explores the roles of governments, civil society, and international organizations in the promotion and protection of human rights, as well as contemporary challenges such as discrimination, social justice, and civic responsibility. Emphasis is placed on critical thinking, ethical reasoning, and active citizenship.			

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