

General Chemistry I (CHEM 101):	A 4-credit course covering key topics such as atomic structure, quantum theory, the periodic table, chemical bonding, reactions in aqueous solutions, gases, thermochemistry, and electrochemistry.
General Physics I (PHY 101):	General Physics I (PHY 101): A 4-credit course focusing on fundamental physics laws, principles of motion, and their application in problem-solving, along with hands-on lab experiments.
Calculus I (MA 101):	A 4-credit course introducing differential calculus, covering limits, continuity, derivatives, and real-life applications of these concepts.
Introduction to Academic Discourse (ESP 101):	A 3-credit course aimed at developing academic reading, writing, and vocabulary skills, with a focus on engaging with various discourse genres.
Electrical Circuits I (EE 201):	A 3-credit course on direct current (DC) electrical circuits, covering essential laws, theorems, and network analysis techniques.
Digital Logic Design (CSE 221):	Professional Ethics (ISL 201): A 2-credit course on the concept of ethics in Islam, focusing on professional conduct and the Islamic perspective on work ethics and violations.
Practical Grammar (ARB 101):	A 2-credit course designed to improve linguistic skills by focusing on grammatical rules and text analysis to enhance cohesion and clarity in writing.
Health and Physical Education (HPE 101):	A 1-credit course providing practical exercises aimed at improving physical health and overall well-being.
General Physics II (PHY 102):	A 4-credit course covering wave motion, sound, thermodynamics, and the basics of electricity and magnetism, linking concepts to everyday applications.
Calculus II (MA 102):	A 4-credit course building on Calculus I, focusing on integral calculus, techniques of integration, and the application of calculus to real-world problems.
Introduction to Report Writing (ESP 102):	A 3-credit course focusing on the essentials of writing various types of reports for academic and professional contexts, including graphical representation and referencing.
Objective Writing (ARB 102):	A 2-credit course introducing objective writing in Arabic, covering essays, summaries, reports, and administrative documents.
Belief and Its Consequences (ISL 101):	Introduction to Artificial Intelligence (CSE 301): A 3-credit course covering fundamental AI concepts, including machine learning, search strategies, and neural networks.
Electrical Circuits II (EE 205):	A 2-credit course on alternating current (AC) circuits, focusing on mutual inductance, power calculations, and frequency analysis.

Signals and Systems (EE 204):	A 3-credit course introducing the principles of signals and systems, covering Fourier analysis, Laplace transforms, and discrete-time systems.
Belief and Its Consequences (ISL 101):	A 2-credit course that explores the foundations of Islamic faith, emphasizing its role in life and the factors that strengthen belief.
Introduction to Programming (CSE 101):	A 2-credit course providing an introduction to programming concepts, including variables, decision structures, loops, and basic object-oriented programming.
Calculus III (MA 201):	A 3-credit course covering multi-variable calculus, including parametric equations, polar coordinates, and partial derivatives.
Probability and Statistics for Engineers (MA 202):	A 3-credit course introducing probability and statistics, with applications in engineering and sciences, focusing on hypothesis testing and regression analysis.
Digital Logic Design (CSE 221):	A 3-credit course introducing digital systems, Boolean algebra, and logic gates, with a focus on design and analysis of digital circuits.
Electrical Circuits I (EE 201):	A 3-credit course on direct current (DC) electrical circuits, covering essential laws, theorems, and network analysis techniques.
Elements of Differential Equations (MA 203):	A 3-credit course on ordinary differential equations, focusing on solution techniques and their applications in various fields.
Introduction to Data Science (CSE 201):	A 3-credit course covering data science principles, including statistics, linear algebra, and optimization, with a focus on practical engineering applications.
Electronics I (EE 202):	A 3-credit course covering the fundamentals of electronics, including semiconductor theory, diodes, BJTs, MOSFETs, and operational amplifiers.
Electronics I Lab (EE 203):	A 1-credit lab course providing hands-on experience with analog and digital electronic circuits, focusing on measurement and construction.
Electrical Circuits II Lab (EE 206):	A 1-credit lab course focusing on experiments with both DC and AC circuits, using physical components and simulation methods.
Human Rights in Islam (ISL 301):	A 2-credit course exploring human rights from an Islamic perspective, addressing misconceptions and highlighting the importance of honoring humanity.
Electricity and Magnetism (PHY 321):	A 3-credit course focusing on electricity, magnetism, and the electrical properties of materials, including semiconductors and photonics.
Literary Styles (ARB 201):	A 2-credit course aimed at developing effective linguistic communication and presentation skills, with an emphasis on professional and practical contexts.

Electronics II (EE 301):	A 3-credit course covering advanced electronics topics such as amplifier frequency response, multi-stage amplifiers, and data converters.
Electrical Energy Engineering (EE 302):	A 3-credit course focusing on electric energy systems, including transformers, DC and AC machines, and transmission lines
Electrical Energy Engineering Lab (EE 303):	A 1-credit lab course providing practical training in electrical energy machinery, focusing on motors, generators, and transformers.
Control Engineering (EE 304):	A 3-credit course on feedback control systems, covering system stability, time and frequency domain analysis, and control system design.
Control Engineering Lab (EE 305):	A 1-credit lab course focusing on control engineering experiments, including response analysis and motor control.
Numerical Methods for Engineers (MA 301):	A 3-credit course covering numerical methods for solving engineering problems, including error analysis and regression techniques.
Business and Entrepreneurship (MS 301):	A 2-credit course introducing the fundamentals of business and entrepreneurship, focusing on developing business plans and managing finances.
Fundamentals of Electrical Engineering Design (EE 306):	A 3-credit course covering the electrical engineering design process, including problem identification and system design.
Communications Engineering (EE 307):	A 3-credit course on communication systems, covering amplitude modulation, frequency modulation, and digital communication techniques.
Communications Engineering Lab (EE 308):	A 1-credit lab course providing hands-on experience with communication systems, including signal measurement and analysis.

Digital Systems Engineering (EE 309):	A 3-credit course covering embedded systems, microcontroller architecture, and hardware blocks, with design and interfacing applications.
Power Electronics (EE 410):	Power System Planning and Operation (EE 411): A 3-credit course on power system planning, including load forecasting, economic dispatch, and system stability analysis.
Power System Analysis (EE 408):	Distributed Control System and SCADA (EE 406): A 3-credit course covering distributed control systems and SCADA, focusing on remote sensing and industrial process control.
System-on-Chip (SoC) Design (EE 405):	Introduction to Nanotechnology (EE 404): A 3-credit course providing an introduction to nanotechnology, exploring its applications in various engineering fields.
Digital Image Processing (EE 403):	A 3-credit course covering image processing techniques, including image enhancement, transformation, and filtering.
Internship (EE 490):	A 6-credit course involving a 12-week industrial placement, followed by evaluation and reflection.
Electromagnetic Waves and Applications Lab (EE 402):	A 1-credit lab course providing practical training on electromagnetic waves, transmission lines, and antennas.
Design Project II (EE 400):	A 2-credit course focusing on completing the capstone design project initiated in Design Project I.
Digital Systems Engineering Lab (EE 310):	A 1-credit lab course focusing on experiments related to embedded systems and digital systems design.
Design Project I (EE 300):	A 2-credit course focusing on initiating a capstone design project, integrating engineering knowledge to solve real-world problems

Electromagnetic Waves and Applications (EE 401):	A 3-credit course covering the principles of electromagnetic waves, including wave propagation, electrostatics, and magnetostatics.
Electromagnetic Waves and Applications Lab (EE 402):	Electromagnetic Waves and Applications Lab (EE 402): A 1-credit lab course providing practical training on electromagnetic waves, transmission lines, and antennas.
Design Project II (EE 400):	A 2-credit course focusing on completing the capstone design project initiated in Design Project I.
Internship (EE 490):	A 6-credit course involving a 12-week industrial placement, followed by evaluation and reflection.
Digital Image Processing (EE 403):	A 3-credit course covering image processing techniques, including image enhancement, transformation, and filtering
Introduction to Nanotechnology (EE 404):	A 3-credit course providing an introduction to nanotechnology, exploring its applications in various engineering fields.
System-on-Chip (SoC) Design (EE 405):	A 3-credit course on designing digital system-on-chip (SoC) using FPGAs and ARM-based processors, covering hardware-software co-design principles.
Distributed Control System and SCADA (EE 406):	A 3-credit course covering distributed control systems and SCADA, focusing on remote sensing and industrial process control.
Industrial Communication Systems (EE 407):	A 3-credit course focusing on designing and maintaining industrial communication networks like Modbus and Ethernet.
Power System Analysis (EE 408):	A 3-credit course covering power system analysis, including fault analysis, load flow problems, and system reliability.

Modeling of Electric Machines (EE 409):	A 3-credit course on electric machine dynamics, focusing on DC and induction motors, as well as modern applications.
Power Electronics (EE 410):	A 3-credit course on power electronics, covering components like rectifiers, AC voltage controllers, and inverters.
Power System Planning and Operation (EE 411):	A 3-credit course on power system planning, including load forecasting, economic dispatch, and system stability analysis.
Renewable Energy (EE 412):	A 3-credit course introducing renewable energy sources, including solar, wind, fuel cells, and the design of integrated systems.
