

Subject type	Subject name	Credit	grade
Major Required	SEMINAR(1)	2	Semester 1
Major Required	SEMINAR(2)	2	Semester 2
Major Electives	DIGITAL CONTROL	3	Semester 1
Major Electives	FUZZY CONTROL	3	Semester 1
Major Electives	ARTIFICIAL NEURAL NETWORK	3	Semester 1
Major Electives	DIGITAL IMAGE PROCESSING	3	Semester 1
Major Electives	DIGITAL SIGNAL PROCESSING	3	Semester 1
Major Electives	ADVANCED ELECTRIC MACHINERY	3	Semester 1
Major Electives	SOLID STATE ELECTRIC MACHINE CONTROL	3	Semester 1
Major Electives	ROBOTICS	3	Semester 1
Major Electives	OPTIMIZATION THEORY	3	Semester 1
Major Electives	POWER SYSTEMS OPERATION	3	Semester 1
Major Electives	STOCHASTIC PROCESSES	3	Semester 1
Major Electives	ADVANCED CONTROL THEORY	3	Semester 1
Major Electives	LINEAR SYSTEMS THEORY	3	Semester 1
Major Electives	DIGITAL COMMUNICATIONS	3	Semester 1
Major Electives	ADVANCED ELECTROMAGNETICS (1)	3	Semester 1
Major Electives	SYSTEM ON A CHIP DESIGN	3	Semester 1
Major Electives	POWER CONTROL WITH SEMICONDUCTOR DEVICES	3	Semester 1
Major Electives	DESIGN AND ANALYSIS OF SWITCHING POWER SUPPLIES	3	Semester 1
Major Electives	CERAMIC MATERIALS AND COMPONENTS	3	Semester 1
Major Electives	ELECTRONIC MATERIALS ENGINEERING	3	Semester 1
Major Electives	ANTENNA ENGINEERING	3	Semester 1
Major Electives	MICROWAVE CIRCUITS AND DEVICES	3	Semester 1
Major Electives	MACHINE VISION	3	Semester 1
Major Electives	PRACTICUM OF OUTSIDE SCHOOL(1)	3	Semester 1
Major Electives	ADVANCED BIOMEDICAL IMAGE PROCESSING SYSTEM	3	Semester 1
Major Electives	MEDICAL ELECTRONICS TECHNOLOGY AND APPLICATION	3	Semester 1
Major Electives	DESIGN OF HIGH SPEED CIRCUITS	3	Semester 1
Major Electives	ROBOT MODELING AND CONTROL	3	Semester 1
Major Electives	COMPUTER VISION	3	Semester 1
Major Electives	DESIGN AND LABORATORY OF IC LAYOUT	3	Semester 1
Major Electives	META-SEMICONDUCTOR DEVICES	3	Semester 1
Major Electives	WIRELESS POWER TRANSFER	3	Semester 1
Major Electives	SPECIAL TOPIC IN HDL	3	Semester 1
Major Electives	POWER QUALITY CONTROL TECHNIQUES	3	Semester 2
Major Electives	VARIABLE STRUCTURE CONTROL	3	Semester 2
Major Electives	DIGITAL INTEGRATED CIRCUIT DESIGN	3	Semester 2
Major Electives	ANALYSIS AND DESIGN OF POWER CONVERTERS	3	Semester 2
Major Electives	INTRODUCTION TO ARTIFICIAL INTELLIGENCE	3	Semester 2
Major Electives	FLEXIBLE AC TRANSMISSION SYSTEMS	3	Semester 2
Major Electives	CPLD AND VLSI DESIGN	3	Semester 2
Major Electives	NONLINEAR SYSTEMS	3	Semester 2
Major Electives	DSP THEORY AND APPLICATIONS	3	Semester 2
Major Electives	INTELLIGENT CONTROL	3	Semester 2
Major Electives	DISTRIBUTED ELECTRIC POWER SYSTEMS	3	Semester 2
Major Electives	ULTRASONIC ENGINEERING	3	Semester 2
Major Electives	MEMORY DEVICES	3	Semester 2
Major Electives	COLOR SCIENCE AND ENGINEERING	3	Semester 2
Major Electives	ENGLISH TECHNICAL WRITING	3	Semester 2
Major Electives	GREEN ENERGY	3	Semester 2
Major Electives	MODERN COMMUNICATION SYSTEM	3	Semester 2
Major Electives	DIGITAL VIDEO PROCESSING AND APPLICATIONS	3	Semester 2
Major Electives	SPEECH SIGNAL PROCESSING	3	Semester 2
Major Electives	MEDICAL IMAGING SYSTEMS	3	Semester 2
Major Electives	COMPUTER-AIDED DIAGNOSIS SYSTEM	3	Semester 2
Major Electives	PRACTICUM OF OUTSIDE SCHOOL(2)	3	Semester 2

Subject type	Subject name	Credit	grade
Major Electives	CLINICAL APPLICATION OF BIOMEDICAL IMAGING SYSTEM	3	Semester 2
Major Electives	SMART ROBOT DESIGN	3	Semester 2
Major Electives	RENEWABLE ENERGY POWER CONVERTER SYSTEM	3	Semester 2
Major Electives	MACHINE LEARNING	3	Semester 2
Major Electives	DEEP LEARNING AND COMPUTER VISION APPLICATIONS	3	Semester 2
Major Electives	DC AND AC BIDIRECTIONAL CONVERTERS	3	Semester 2
Major Electives	OPTOMECHATRONICS SYSTEM DESIGN OPTIMIZATION	3	Semester 2

Graduation qualification :

1. Graduates must pass the National English Test Band 1 (Intermediate Level) or higher, or a national or international English proficiency test of equivalent level administered by a government-recognized institution. Those who cannot obtain the above qualifications must meet the standards set by the department to graduate.
2. Graduates must complete at least 28 credits, including 4 credits of required major courses and at least 12 credits of major elective courses.
3. During their studies, students must complete two semesters of required book and newspaper discussion courses (I) and (II).
4. Upon completion of 28 credits and passing the master's thesis examination, a master's degree will be awarded.
5. Students must complete the Academic Research Ethics Education course according to the "Implementation Guidelines for Academic Research Ethics Education Courses for National United University Students".