

**HAJVERY UNIVERSITY COURSE OUTLINE
OF
ELECTRICAL ENGINEERING**

FIRST YEAR

SEMESTER 1

1. Workshop practice
2. Basic Mechanical engineering
3. English-I
4. Applied Calculus
5. Islamic studies/Ethics.

SEMESTER 2

1. Applied physics
2. Linear Algebra
3. English-II
4. Computer Fundamentals
5. Engineering Ethics
6. Pakistan Studies

SECOND YEAR

SEMESTER 3

1. Instrumentation and Measurements
2. Communication Skills
3. Electronic Devices and Circuits
4. Object Oriented Programming
5. Differential Equations

SEMESTER 4

1. Electro -mechanical systems
2. Digital logic design
3. Electrical Network Analysis
4. Engineering Economics
5. Complex Variables and Transforms

THIRD YEAR

SEMESTER 5

1. Electromagnetic Field Theory
2. Signals and systems
3. Probability and statistics for engineers
4. Social Sciences -II
5. Introduction to Power Engineering

SEMESTER 6

1. Numerical Analysis
2. Engineering Management
3. Applied thermodynamics
4. Computer Aided Design and Simulation
5. Elective I

FOURTH YEAR

SEMESTER 7

1. Microprocessor based systems
2. Linear Control Systems
3. Elective II
4. Elective III
5. Senior Design Project -I

SEMESTER 8

1. Senior Design Project - II
2. Elective 4
3. Elective 5

NOTE:

EE-421 is the final year project which will spread over two semesters starting semester -7.

ELECTRONIC ENGINEERING(ELECTIVE SUBJECTS)

1. VLSI design
2. Industrial process control
3. Digital electronics
4. Digital instrumentation
5. Opto-electronics
6. Industrial electronics
7. Power electronics
8. Digital signal processing
9. Digital system design
10. Electromagnetic compatibility