President University

COURSES TAKEN IN
ELECTRICAL ENGINEERING

Academic Year 2018/2019

COURSE GUIDELINE

CORES

1. Entrepreneurship
2. Intrapreneurship
3. Calculus
4. Chemistry
5. Linear Algebra
6. Physics-1: Mechanics
7. Physics-2: Electromag - netism, Wave, and Optics
8. Physics 3: Thermal Physics
9. Physics4: Quantum Physics
10. Digital Systems
11. Fundamentals of Electrical Engineering
12. Engineering Economy and Management
13. Engineering Mathematics
14. Engineering Electromag netics
15. Environmental Awareness
16. Linear Circuit Analysis
17. Engineering Programming
18. Linear Circuit Analysis
19. Object-Oriented Programing
20. Instrumentation Electronics
21. Semiconductor Device Physics
22. Digital Signal Processing
23. Research Methodology for Engineering
24. Probabilistic System Analysis
25. Electronic Circuit Design Analysis

ELECTIVES COURSES

1. Artificial Intelligence
2. Mechatronics
3. Sensors and Measurements
4. Microwave Circuits and Systems
5. Radar and Navigation Systems
6. Satellite Communications
7. Electric Power Purchase and Transaction
8. Environmental Policy and Regulation
9. Renewable Energy
10. IC Technology and Design
11. Real-Time Software Engineering
12. Real-Time Operating Systems

CONCENTRATION IN CONTROL SYSTEMS

1. Digital Control System
2. Linear System
3. Feedback and Control System
4. Robotic Design
5. Fuzzy Logic and Neural Networks
6. System Modeling and Identification

CONCENTRATION IN COMMUNICATION SYSTEMS

1. Communication Systems
2. Fiber-Optic Communications
3. Telecommunication Networks
4. Mobile and Wireless Communications
5. Transmission Lines
6. Antenna and Propagation

CONCENTRATION IN POWER SYSTEMS

1. Electrical Power Engineering
2. Electric Machinery
3. Power Electronics
4. Power Operation and Control
5. Power Transmission and Distribution
6. Relay and Protection System

CONCENTRATION IN ELECTRONIC AND EMBEDDED SYSTEMS

1. Introduction to Embedded System Design
2. Computer Architecture
3. Microcomputer Interfacing
4. Computer Organization
5. Microelectronic Devices
6. Computer Networks