

# TOPICS

## ANNALS OF THE UNIVERSITY OF CRAIOVA - Electrical Engineering Series

### **Section 1: Theoretical Electricity**

- 1.1 Circuits Theory
- 1.2 Circuits Modeling and Simulation
- 1.3 Electromagnetic Field Theory
- 1.4 Numerical Modeling of Electromagnetic Field
- 1.5 Electromagnetic Compatibility

### **Section 2: Electrical Equipment and Technologies**

- 2.1 Electrical Apparatus
- 2.2 High Voltage Technique: Discharges, Insulation
- 2.3 Electrotechnologies
- 2.4 Fault Diagnosis and Monitoring
- 2.5 Materials for Electrical Engineering
- 2.6 Nanotechnologies

### **Section 3 Power Electronics**

- 3.1 Components
- 3.2 Topologies
- 3.3 Control

### **Section 4: Electrical Machines and Drives**

- 4.1 Electrical Machines
- 4.2 MEMS
- 4.3 Electrical Drive Systems

### **Section 5: Power Engineering Systems**

- 5.1 Generation
- 5.2 Transport and Distribution
- 5.3 Power System Protection, Earthing
- 5.4 Electrical energy: Efficiency, appliances, DMS
- 5.5 Power Quality
- 5.6 Renewable Energies
- 5.7 Urban Energetics

### **Section 6: Control Engineering and Applied Electronics**

- 6.1 Control strategies
- 6.2 Control processors
- 6.3 Embedded Systems
- 6.4 Intelligent Control
- 6.5 Mechatronics, Industrial Robotics and Flexible Manufacturing Lines
- 6.6 Transducers
- 6.7 Measurement and Data Acquisition

- 6.8 Metrology
- 6.9 Audio and Video Signal Processing

### **Section 7: Applied Informatics in Electrical Engineering**

- 7.1 Communication Systems
- 7.2 Networks/Fieldbus
- 7.3 Industrial Equipment (PLC, CNC....)
- 7.4 Operation Interfaces (HMI, MMI)

### **Section 8: Aerospace Engineering**

- 8.1 Board Equipment and Systems
- 8.2 Aerospace Stabilization, Navigation and Guidance Systems
- 8.3 Fluidic Equipment and Systems
- 8.4 Aircraft Engineering, Control and Command

### **Section 9: Environment Engineering and Equipment**

- 9.1 Environment Modeling
- 9.2 Depollution Equipment
- 9.3 Energy and Environment

### **Section 10: Electric Transportation Systems**

- 10.1 Electrical Traction
- 10.2 Automotive Equipment
- 10.3 Transport Management

### **Section 11: Electrical Engineering Education**

- 11.1 Education in Electrical Technologies
- 11.2 New Educational Tools
- 11.3 Information and Communication Technologies (ICT)
- 11.4 Virtual and Remote Laboratories
- 11.5 Distance Learning, Continuous Learning.
- 11.6 University-Industry Collaboration

### **Section 12: Cryoelectrotechnics and Cryogenics**

- 12.1 Supraconductivity
- 12.2 Materials in Cryogenic Regime
- 12.3 Supraconductivity Applications
- 12.4 Cryogenic Technologies
- 12.5 Refrigeration Equipment
- 12.6 Biphasic Heat Transfer