

# AICTE-ISTE STTPs

## Topics

### **Civil Engineering**

1. Computer aided design of structures
2. Earthquake engineering
3. Construction project management
4. Highway engineering
5. Structural engineering
6. Soil & water conservative engineering
7. Geo technology
8. Environmental engineering & management
9. Geo informatics
10. Town & country planning
11. Hydraulics
12. Foundation engineering

### **Mechanical**

1. Computational analysis in mechanical science
2. Mechatronics
3. Process instrumentation
4. Production engineering & engineering design
5. Farm machinery
6. Turbo machinery
7. Industrial automation & robotics
8. Tool design
9. Heat power engineering
10. CAD/CAM
11. Advanced materials technology
12. Design of mechanical systems
13. Flexible manufacturing systems
14. Finite element analysis

### **Electrical**

1. Electrical devices & power systems
2. Electrical machines
3. Power system & control
4. Electrical energy systems
5. High voltage engineering
6. Embedded systems
7. Electrical systems operation and control
8. Power systems operation and control
9. High voltage DC transmitters
10. Soft computing techniques
11. Advanced control system

## **Electronics**

1. Applied electronics
2. Bio medical electronics
3. Communication systems
4. Micro and nano electronics
5. Microwave and radar engineering
6. Digital signal processing
7. Digital systems and computer engineering
8. Remote sensing
9. Embedded system & VLSI
10. Wired & wireless communication
11. Medical and electronics

## **Computer Science & Information Technology**

1. Hardware maintenance and networking
2. Computer integrated manufacturing
3. Multimedia & software engineering
4. Image processing
5. Web technologies
6. Computer vision & robotics
7. Computer application in industrial drives
8. Computer networks
9. Computer software technologies
10. Information security
11. Information and communication technology
12. Information security management
13. Software engineering

## **Other Areas**

1. Automobile Technology
2. Nano Technology
3. Aerospace engineering
4. Bio technology
5. Textile processing technology
6. Food technology
7. Green technology
8. Printing technology
9. Project management
10. Polymer Technology
11. Pharmaceutical chemical technology
12. Marine engineering
13. Architecture & interior design
14. Chemical engineering
15. Hotel Management
16. Public Administration

## **English**

1. Intensive and extensive listening skills
2. Motivational techniques in teaching of English
3. Pattern manipulation drills
4. Problem and solution while teaching English as a 2<sup>nd</sup> language
5. Various language skills and their inter relationship

## **Basic Sciences**

### **i. Maths**

1. Random process queing theory and application
2. Fuzzy logic and application
3. Numerical methods and MATLAB
4. Application of group theory in engineering

### **ii. Physics**

1. Nano sciences & technologies
2. Material science
3. Nuclear physics
4. Optical engineering

### **iii. Chemistry**

1. Environmental awareness
2. Instrumentation methods
3. Plastic technology
4. Corrosion chemistry

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