

## **Project (E) 448 keywords**

### **Undergraduate modules:**

- 1 Computer science
- 2 Computer systems
- 3 Control systems
- 4 Electromagnetics
- 5 Electronics
- 6 Energy systems
- 7 Engineering and applied mathematics
- 8 High frequency technique
- 9 Systems and signals
- 10 Telecommunication

### **Specialized knowledge areas:**

- 1 Antennas, guided waves and scattering
- 2 Communication systems
- 3 Digital/integrated circuits
- 4 Electrical machines
- 5 Electromagnetic compatibility/interference
- 6 High frequency components/systems
- 7 High power systems/electronics
- 8 Industrial/feedback control systems
- 9 Machine learning and pattern recognition
- 10 Numerical and computational methods
- 11 Probabilistic systems and inference
- 12 Renewable energy
- 13 Robotics and autonomous vehicles
- 14 Sensors/analogue electronics
- 15 Signal/image processing
- 16 Space systems
- 17 Wireless networks

### **Work activities:**

- 1 Algorithm design
- 2 Circuit design and layout
- 3 Circuit/electromagnetic/multi-physics simulation
- 4 Experimental and empirical evaluation
- 5 Physical design (materials, dimensions, etc.)
- 6 Measurements
- 7 Software development
- 8 System design/simulation