



# T.J.S ENGINEERING COLLEGE

Approved by AICTE, New Delhi & Affiliated with Anna University, Chennai.

Accredited by NAAC/ISO9001:2015 Certified Institution

TJS Nagar, Peruvoyal, Near Kavaraipettai, Gummidipoondi Taluk, Thiruvallur District -601206

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## PROGRAMME OUTCOME

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**10. Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**11. Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**12. Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

### **PROGRAMME SPECIFIC OUTCOME**

#### **1. COMPUTER SCIENCE ENGINEERING**

##### **PSO1: Competent Professional in Computer Science & Engineering**

Well Versed with Principles of Computer Technologies & Contribute towards to the advancement.

##### **PSO2: Problem Solving & Software Development**

Ability to analyze real time problems, Design algorithms and develop methodologies & software applications for problem solving

#### **2. CIVIL ENGINEERING**

**PSO1:** To motivate students to accept new challenges for multi-disciplinary projects in civil engineering.

**PSO2:** To develop the ability among students to synthesize data & technical concepts for application to civil engineering tools and software's.

### **3. ELECTRICAL AND ELECTRONICS ENGINEERING**

**PSO1:** Ability to use appropriate techniques, resources, and modern engineering tools to complex engineering activities.

**PSO2:** Able to recognize its own's work as a member and leader and involve in multidisciplinary activities.

### **4. ELECTRONICS AND COMMUNICATION ENGINEERING**

**PSO1:** An ability to apply the concepts of electronics, communications, signal processing, VLSI, control systems etc., in the design and implementation of application-oriented engineering systems.

**PSO2:** An ability to solve electronics and communication engineering problems using latest software and hardware tools, along with analytical and managerial skills to arrive appropriate solutions.

### **5. MECHANICAL ENGINEERING**

**PSO 1.** Apply knowledge of applied mathematics and advanced software tools for design specification, development such as fabrication, analysis testing and operations of the mechanical system

**PSO 2.** Apply interdisciplinary subject knowledge and managerial skill. So that they could become an entrepreneur with the necessary skills.