# Indra Ganesan
## College of Engineering

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NAAC with 'B+' Grade, 2(f) & 12B Status Institution by UGC
IG Valley, Madurai Main Road, Manikandam, Tiruchirappalli - 620012

# NAAC DOCUMENTS

## QUALITY INDICATOR FRAME WORK

## CRITERION – 2

# TEACHING-LEARNING AND EVALUATION

SUBMITTED BY

IQAC

INTERNAL QUALITY ASSURANCE CELL

INDRA GANESAN COLLEGE OF ENGINEERING

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COLLEGE OF ENGINEERING
Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
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| Criteria 2 | Teaching-Learning and Evaluation | 350 |
|---|---|---|

# Key Indicator- 2.6. Student Performance and Learning Outcome (90)

2.6.2 Attainment of POs and COs are evaluated (20)

# 2020-2021

## ATTAINMENT EVALUATION OF POs & COs

## ELECTRICAL AND ELECTRONICS ENGINEERING

## Table of Content

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**Department of ELECTRICAL AND ELECTRONICS Engineering**

**Academic Year (2020 - 2021)**

**PO-PSO ATTAINMENT**

| PO/PSO | STATEMENT | ATTAINMENT VALUE |
|---|---|---|
| PO1 | **Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. | 2.83 |
| PO2 | **Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. | 2.23 |
| PO3 | **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. | 1.93 |
| PO4 | **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. | 1.49 |
| PO5 | **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. | 1.43 |
| PO6 | **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. | 2.56 |
| PO7 | **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. | 2.60 |
| PO8 | **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. | 1.4 |
| PO9 | **Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. | 1.62 |

| | | |
|---|---|---|
| **PO10** | **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. | **1.75** |
| **PO11** | **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. | **1.2** |
| **PO12** | **Lifelong 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. | **1.78** |
| **PSO1** | Apply fundamental knowledge of electrical and electronics engineering to identify and analyse real life problems in the realm of electrical machines, power systems, electronics and instrumentation systems, control systems and power electronic systems. | **1.89** |
| **PSO2** | Design and implement electrical and electronic systems to meet global needs with a view of energy conservation and sustainability | **2.08** |
| **PSO3** | Apply software and hardware tools to develop electrical and electronic systems and create passion for research and innovation | **1.07** |

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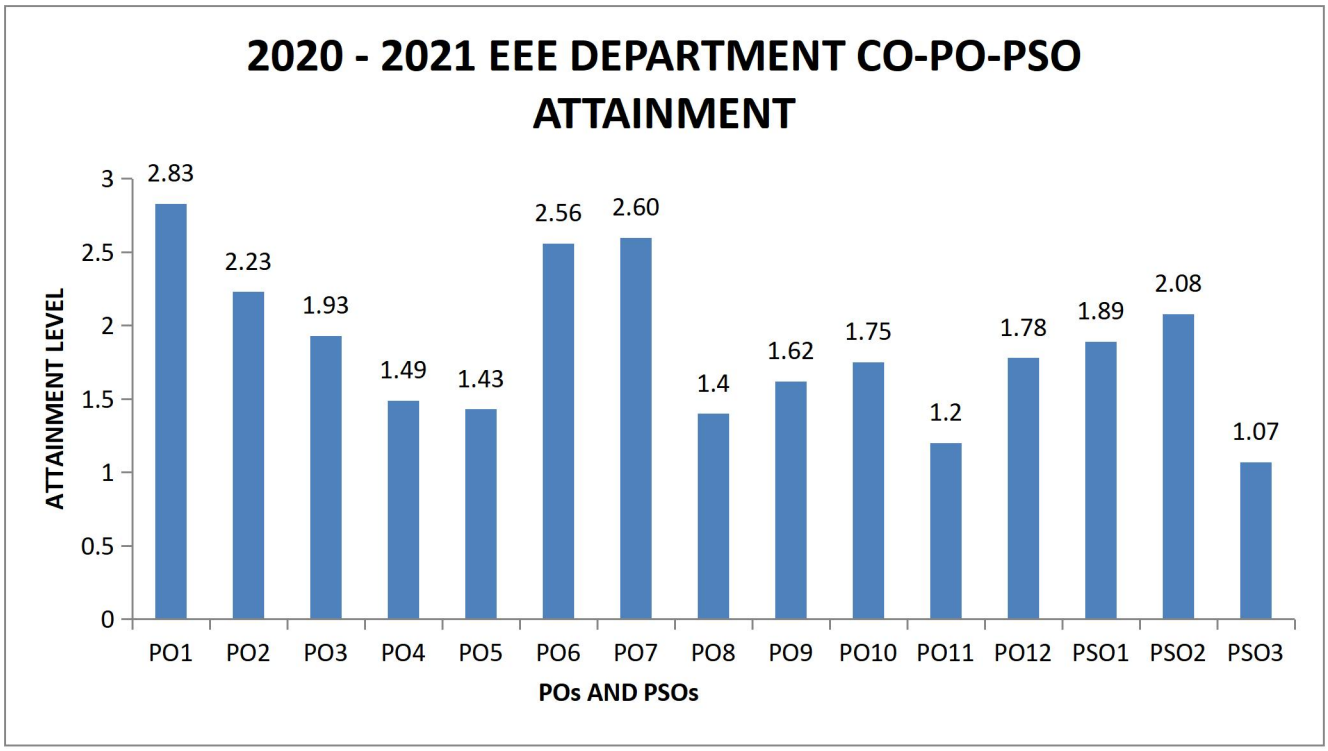
**PO-PSO ATTAINMENT**



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# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
# ACTION TAKEN REPORT FOR CO-PO-PSO ATTAINMENT

### ACADEMIC YEAR 2020-2021

In order to bridge the gap between the attained level with respect to the target level in each POs and PSOs, the following corrective measures were taken.

| S.NO | NAME OF THE ACTIVITY PROPOSED | FOCUSED POS & PSOS |
|---|---|---|
| 1 | Value Added Course (VAC) - Advanced surveying on total station. | PO1,PO2, PO3,PO4,POS, PO9,PO10, PO12, PSO1,PSO2,PSO3 |
| 2 | Entrepreneurship & Development cell (EDC) - Awareness about Entrepreneurship, innovation and importance of an E&I cell. | PO6,PO7,PO8,PO11 |
| 3 | Intellectual Property Rights (IPR) - Role of IPR in green technologies | PO6,PO7,PO8,PO11 |
| 4 | Language and Communication Technology (LCT)-Effect of Technology in Intercultural Communication. | PO9,PO10 |
| 5 | Soft Skill Program - Way from campus to corporate | PO10 |
| 6 | Life Skill Program - Entrepreneurship and Innovation. | PO8 |
| 7 | Information Communication Technology (ICT) tools-Al in communication tools | PO5,PO12 |
| 8 | Research Methodology (RM) - Construction safety management | PO1,PO2, PO3,PO4,PSO1,PSO2,PSO3. |