



# 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





# Indra Ganesan

## COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai  
NAAC Accredited, 2(F) Status Institution by UGC



**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)

## 2019-2020

**ATTAINMENT EVALUATION OF POs & COs**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

### **Table of Content**

| S.No | Particulars                   | Page No |
|------|-------------------------------|---------|
| 1    | CO-PO-PSO Attainment Report   | 3 - 4   |
| 2    | CO-PO Attainment Sample Sheet | 5       |
| 3    | Action taken Report           | 6       |



# Indra Ganesan

## COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012  
Approved by AKTTE, New Delhi & Affiliated to Anna University, Chennai  
NAAC Accredited, 2(F) Status Institution by UGC



### Department of ELECTRONICS AND COMMUNICATION ENGINEERING

Academic Year (2019 - 2020)

#### PO-PSO ATTAINMENT

| PO/PSO | STATEMENT  | ATTAINMENT VALUE |
|--------|--|------------------|
| PO1    | Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.  | 2.73             |
| PO2    | Identify, formulates, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.                                     | 2.03             |
| PO3    | 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 cultural, societal, and environmental considerations. | 1.73             |
| PO4    | 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   | 1.19             |
| PO5    | 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  | 1.23             |
| PO6    | 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.  | 1.56             |
| PO7    | Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate knowledge of, and need for sustainable development.  | 2.67             |

**PRINCIPAL**  
Indra Ganesan College of Engineering  
IG Valley, Madurai Main Road  
Manikandam, Trichy-620 012



|             |   |             |
|-------------|---|-------------|
| <b>PO8</b>  | Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice   | <b>1.4</b>  |
| <b>PO9</b>  | Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings  | <b>1.82</b> |
| <b>PO10</b> | 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 | <b>1.75</b> |
| <b>PO11</b> | 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.   | <b>1.3</b>  |
| <b>PO12</b> | 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.   | <b>1.78</b> |
| <b>PSO1</b> | Design and develop IoT applications using Raspberry Pi, Arduino and other advanced processors   | <b>1.89</b> |
| <b>PSO2</b> | Design and synthesize various circuits using latest hardware and EDA tools  | <b>2.11</b> |
| <b>PSO3</b> | Design and analyse modern communication systems to meet the present and future needs of industry with cost effective solutions  | <b>1.89</b> |



**PRINCIPAL**

Indra Ganesan College of Engineering  
IG Valley, Madurai Main Road  
Manikandam, Trichy-620 012



# Indra Ganesan

**COLLEGE OF ENGINEERING**

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai  
NAAC Accredited, 2(F) Status Institution by UGC

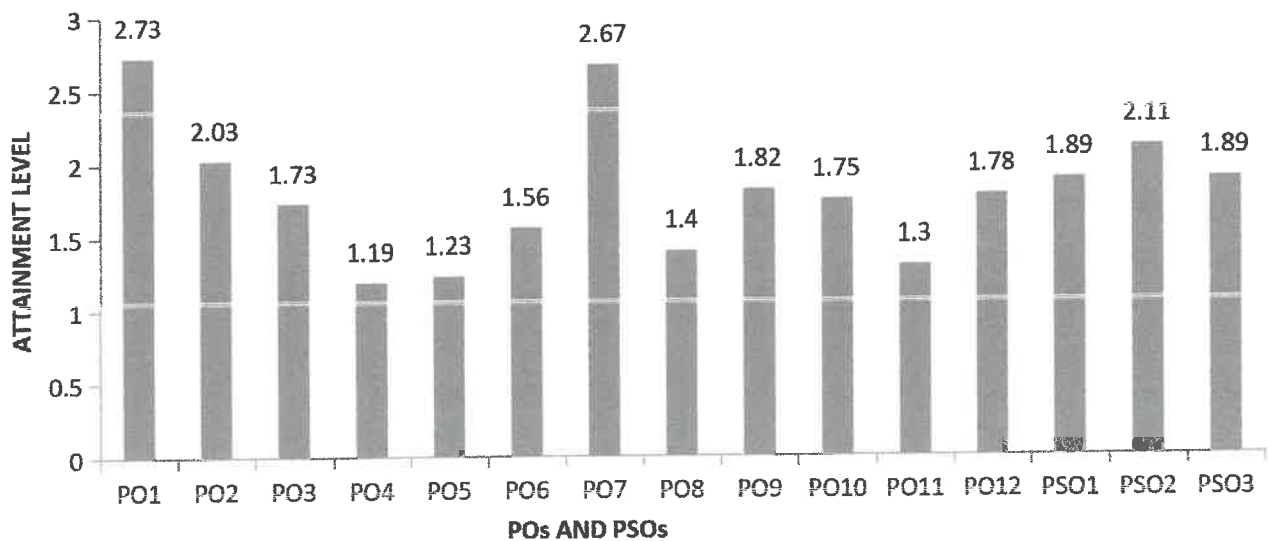


**Department of ELECTRONICS AND COMMUNICATION ENGINEERING**

**Academic Year (2019 - 2020)**

**PO-PSO ATTAINMENT**

## 2019 - 2020 ECE DEPARTMENT CO-PO-PSO ATTAINMENT



**PRINCIPAL**

Indra Ganesan College of Engineering  
IG Valley, Madurai Main Road  
Manikandam, Trichy-620 012



# Indra Ganesan

## COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai  
NAAC Accredited, 2(F) State Institution by UGC



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

ACADEMIC YEAR 2019-2020

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,PO5,<br>PO9,PO10, PO12,<br>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-AI in communication tools  | PO5,PO12   |
| 8    | Research Methodology (RM) - Construction safety management  | PO1,PO2,<br>PO3,PO4,PSO1,PSO2,PSO3.                        |

PRINCIPAL

Indra Ganesan College of Engineering  
IG Valley, Madurai Main Road  
Manikandam, Trichy-620 012