

## Indra Ganesan

COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi & Affiliated to Anno 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** 

INDRA GANESAN COLLEGE OF ENGINEERING





Criteria 2

**Teaching-Learning and Evaluation** 

350

Key Indicator-2.6 Student Performances and Learning Outcome (90)

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all programmes offered by the institution are stated and displayed on website

#### DEPARTMENT OF MASTER OF ENGINEERING -VLSI DESIGN-R2017

2021-2022

#### ATTAINMENT EVALUATION OF POS & Cos

#### **ME-VLSI**

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Dr. G. Balakrishnan, M.E., Ph.D.,

**Principal** 

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IG Valley Madurai Main Rose



| ACADEMIC YEAR-2021-22 |   |                   |  |  |
|-----------------------|---|-------------------|--|--|
| PO/PSO                | STATEMENT   | ATTAINED<br>VALUE |  |  |
| PO1                   | Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.  | 2.96              |  |  |
| 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.   | 2.04              |  |  |
| 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. | 1.32              |  |  |
| 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   | 1.26              |  |  |
| 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  | 1.33              |  |  |
| 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  | 1.56              |  |  |

professional engineering practice

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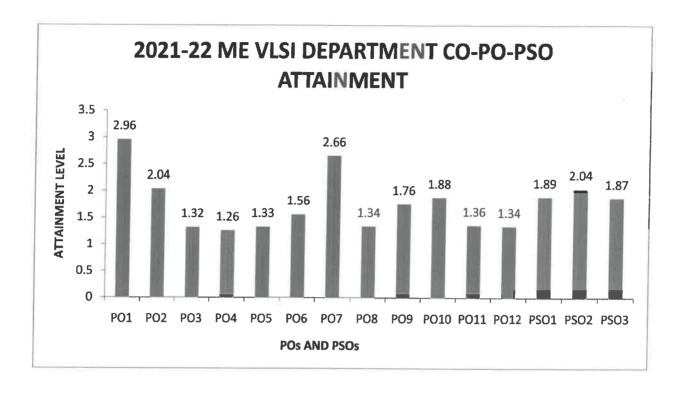
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| PO7  | Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development   | 2.66 |
|------|--|------|
| PO8  | Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice  | 1.34 |
| PO9  | Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings   | 1.76 |
| 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 | 1.88 |
| 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.  | 1.36 |
| PO12 | 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   | 1.34 |
| PSO1 | To design and develop VLSI circuits to optimise power and area requirements, free from faults and dependencies by modelling, simulation and testing.   | 1.89 |
| PSO2 | To develop VLSI systems by learning advanced algorithms, architectures and software – hardware co – design.  | 2.04 |
| PSO3 | To communicate engineering concepts effectively by exhibiting high standards of technical presentations and scientific documentations  | 1.87 |

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#### **DEPARTMENT OF ME-VLSI ACTION TAKAN REPORT FOR CO-PO-PSO ATTAINMENT ACADEMIC YEAR 2021-2022**

In order to bridge the gap between the attainments with respect to target level in each POs and **PSOs** the following measure were taken

| <b>SL.NO</b> | NAME OF ACTIVETIES PROPOSED                 | FOCUSED POs and PSOs     |
|--------------|---|--------------------------|
| 1            | Value Added course (VAC)-advanced           | PO1,PO2,PO3,PO4,PO5,PO9, |
|              | surveying on total stations                 | PO10,PO12,PSO1,PSO2,PSO3 |
| 2            | Entrepreneurship & Development cell         | PO6,PO07.PO8,PO11        |
|              | (EDC) – Awareness about entrepreneurship,   |                          |
|              | innovation and importance of an EDC         |                          |
| 3            | Intellectual Properties Right (IPR)-Role of | PO6,PO07.PO8,PO11        |
|              | IPR Green Technology                        | ,                        |
| 4            | Languages and Communication                 | PO9,PO10                 |
|              | Technologies(LCT) -effect of technology in  | ,                        |
|              | intercultural                               |                          |
| 5            | Soft Skill Programme – way from campus to   | PO10                     |
|              | corporate                                   |                          |
| 6            | Life Skill Programme – entrepreneurship     | PO8                      |
|              | and innovations                             |                          |
| 7            | Information Communication Technology        | PO5,PO12                 |
|              | (ICT) Tools- all in communication tools     | , i                      |
| 8            | Research Methodology (RM)- Safety           | PO1,PO2,PO3,PO4,         |
|              | management system at construction industry  | PSO1,PSO2,PSO3           |

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