**IQAC – SATYA INSTITUTE OF TECHNOLOGY AND MANGEMENT**

**Qualitative Metrics**

**Criteria 2: Teaching Learning and Evaluation**

**Key Indicator-2.6: Student Performance and Learning Outcomes**

|  |  |
| --- | --- |
| **2.6.1** | **Programme and Course Outcomes for all programmes offered by the Institution are stated and displayed on website and communicated to teachers and students.** |

Under the affiliation to JNTUK, the COs are defined in the syllabi and also published in Academic regulations, Curriculum book, and departmental website. It is made accessible to all the stakeholders of the program through education, faculty workshops, student awareness workshops, student induction program and faculty meetings. The program outcomes and program specific outcomes are achieved through a curriculum that offers a number of courses. Every department has clearly defined Program Specific Outcomes (PSOs) and Course Outcomes (COs). They have been articulated by taking inputs and suggestions from every stakeholder and are nicely stated and displayed on notice boards and discussed in the classrooms as well as available on website along with them printed in their laboratory manuals. Also COs are available in course files maintained by every faculty. The PO and PSOs are aligned with institute’s vision and mission statement. Each CO is linked to one of the Program Outcomes and a set of performance criteria that are used to provide quantitative measurement of how well COs are achieved. The COs are thus directly and quantitatively assessed, and are tied to the program outcomes and program specific outcomes.

The PROGRAM OUTCOMES(POs) are as defined by NAAC and NBA

1. Engineering knowledge
2. Problem analysis
3. Design/development of solutions
4. Conduct investigations of complex problems
5. Modern tool usage
6. The engineer and society
7. Environment and sustainability
8. Ethics
9. Individual and team work
10. Communication
11. Project management and finance
12. Life-long learning

Program Specific Outcomes (UG Programs)

Civil Engg

|  |  |
| --- | --- |
| 1: | Understand their role as leaders and perspective view to be effective in professional  practice of Civil Engineering |
| 2: | Able to design components of multiple civil structures such as buildings, roads, bridges, hydraulic structures etc. |

CSE

|  |  |
| --- | --- |
| 1: | Apply knowledge acquired from the basic hardware design and software core  areas of Computer Science and Engineering for solving real world problems. |
| 2: | Apply cutting edge technologies and strong analytical skills to develop quality software in scientific and business applications for the betterment of society and Industry. |

ECE

|  |  |
| --- | --- |
| 1: | Design and implement the requirements of simple electronic components starting  from fundamentals. |
| 2: | Analyze an existing electronic circuitry and identify the problem areas in the  circuitry. |

ME

|  |  |
| --- | --- |
| 1: | Apply understanding in the realm of Design, Production and Thermal fluid  sciences to solve engineering difficulties utilizing sophisticated technology. |
| 2: | Extend and implement new thoughts on Product Design and Development with  the aids of modern CFD and CAD/CAM tools. |

EEE

|  |  |
| --- | --- |
| 1: | Analyze, design, and implement Power systems, power electronic systems, Instrumentation systems, communication Systems, control systems and computer systems. |
| 2: | Apply project management techniques to Electrical And Electronics, renewable energy systems to utilize statistics And probability. |

Each time a change is effected, the CO-PO mapping performed and a "Program Signature Plot" is drawn to show " spread" of the outcomes visually, also include these plots on the Institute google site.