

POs & PSOs ATTAINMENTS – ATR

POs	TARGETLEVEL	ATTAINMENT LEVEL	OBSERVATIONS
PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.			
PO 1	2.32	2.02	Target is Not Attained Target is not attained due to nonattainment of course outcomes(COs) in the Courses: ➤ C102- Applied Chemistry, ➤ C104-Programming forProblem Solving Using C, ➤ C111- Linear Algebra &Numerical Methods. Observations: Non-attainment of CourseOutcomes(COs) in the abovecourses is observed due to: ➤ Lack of knowledge totranscend theory to a practicalapplication. ➤ Poor Orientation of the studenttowards the engineering andtechnology courses. ➤ Student is lack of self-directedlearning capabilities.
Action 1: Bridge course is conducted to accelerate the student's knowledge in the courses at 10+2 level.			

Action 2: Additional tutorial sessions in the courses C111-Linear Algebra & Numerical Methods are conducted to provide additional practice.

Action 3: Additional sessions are conducted to bridge the gap between the school science syllabus and the level needed to understand their application to engineering concepts.

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.

PO 2	2.68	2.36	Target is Not Attained Target is not attained due to non-attainment of course outcomes (COs) in the Courses: • C114 – Computer Organization, • C301 – Design and Analysis of Algorithms. Observations: Non-attainment of Course Outcomes(COs) in the above courses is observed due to: • Students demonstrate a lack of self-directed learning capabilities, affecting their problem-solving skills and analytical thinking. This is reflected in their low performance. • Lack of full semester Digital logic design course in the curriculum.
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Action 1: Flipped classroom pedagogy using NPTEL videos are implemented.

Action 2: Tutorial sessions in the courses C301 - Design and Analysis of Algorithms are conducted to provide additional practice.

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.			
PO 3	2.67	2.43	Target is Attained
Action 1: Laboratory sessions on courses beyond the syllabus needed to be offered through virtual mode.			
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.			
PO 4	2.75	2.69	Target is Attained
Action 1: Projects and Innovation lab with advanced facilities and tools are established and students are encouraged to take up the hobby projects. Action 2: Coding sessions with IDE platforms are provided to enhance the logic building skills.			
PO5: Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.			
PO 5	2.6	2.45	Target is Attained
Action 1: Conducted invited talks by the industry experts and workshops on concepts related to emerging technologies. Action 2: Industrial visits are arranged. Action 3: Coding challenges, competitive programming and hackathon are conducted.			
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.			
PO 6	2.22	2.21	Target is Attained
Action 1: Community Service Project and its execution are strengthened. Action 2: Community visits are arranged. Action 3: Schools are adopted. Students in the program are encouraged to visit the schools and address the school children on digital literacy and digital security.			

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.			
PO7	2.5	2.44	Target is Attained
Action 1: Students are encouraged to participate in national campaigns like “Swachata hi seva”, “EkPedMaaKeNaam”. Action 2: Visits are organized to the industries working on waste to wealth. Action 3: Adoption of the trees and plants by the departments is encouraged.			
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
PO8	2.1	2.09	Target is Attained
Action1: Professional Ethics and Universal Human Values is introduced as a mandatory course. Action 2: Invited lectures on ethics and moral values are organized.			
PO9: Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.			
PO9	2.81	2.76	Target is Attained
Action 1: Internships, Community service project and hobby Projects are encouraged. Action 2: Students are encouraged to organize and lead various technical events.			
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.			
PO10	2.27	2.22	Target is Attained
Action 1: NPTEL Course on Enhancing soft skills and personality /Developing softskills and personality is mandated for all the students. Action 2: Mock Interviews and JAM sessions are conducted by CGTP Cell. Action 3: Soft Skill training sessions are conducted by CGTP Cell.			
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.			

PO11	2.2	2.1	Target is Attained
Action 1: An open elective course on Innovation and Entrepreneurship is offered. Action 2: An active institute Innovation Council (IIC) with innovation ambassadors is operational.			
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.			
PO12	2.11	2.05	Target is Attained
Action 1: Credit transfer policy from SWAYAM–NPTEL Courses is implemented Action 2: NAD - Digi Locker and ABC Policy is implemented.			