SIR C R REDDY COLLEGE OF ENGINEERING, ELURU

3.7 Pedagogy and Learning Methodologies

The teaching-learning process of Sir C R Reddy College of Engineering involves experiential, participative, problem-solving, experimental, peer Project and project-based learning etc. Efforts are taken by the college to provide e-learning resources. There has been a paradigm shift in the teaching process from using only chalk and talk to adopting a thoughtful combination of lecture methods and new pedagogy, thereby promoting knowledge on a variety of current topics and specialized technologies.

Experiential learning: Experiential learning encourages students to enhance their knowledge through experiences, expanding education beyond the classroom. Activities include internships, workshops, project expos, industrial training/in-house training, and field trips/industrial visits at reputed industries/government sectors. Numerous seminars/webinars and guest lectures are being organized at the institute level, inviting distinguished persons from reputed business organizations and academic institutions to bridge the gap between academics and industry.

Participative Learning: Students are encouraged to participate in various technical events, such as paper presentations and technical quizzes, organized regularly under the umbrella of professional society bodies, and professional student forums in association with the department. Additionally, students are advised to participate in various online courses.

Problem-solving methodologies: The institution actively fosters problem-solving skills among students through various initiatives:

Students are urged to create solutions and prototypes for specific real-world issues using Code hackings.

Students are encouraged to do mini-projects, which allow them to analyze and solve complex

problems within a defined scope.

Organizing guest lectures on diverse topics provides students with exposure to real-world

challenges and solutions, enhancing their problem-solving abilities.

Experimental Learning: The students are made to conduct experiments as per the academic curriculum during the laboratory sessions.

Peer Projects: Students are organized into groups to undertake various societal and environmental projects, including community service and mini-projects, based on their respective departments.

Project-based Learning: To enhance their knowledge and skills, students are made to engage in instructional learning through projects aimed at solving real-world problems.

Teachers use ICT-enabled tools including online resources for effective teaching and learning processes:

Sir C.R. Reddy College of Engineering employs various skill-based methods using ICT to deliver effective classroom lectures to all the students. The library is equipped with a large number of computers and projectors, in addition to high-speed internet access of 1Gbps.

ICT tools supplement the traditional classroom teaching on campus. ICT-enabled tools like Google blogs, Google Forms, Zoom, etc., along with the use of LCD projectors, are being effectively employed in the Teaching-Learning Process. Students can expose themselves to the Digital Library and Online Courses (MOOCs, NPTEL, Coursera, etc.) to upgrade with recent trends. ICT-enabled tools are also being used in the Communication Skills Lab and English Lab to acquire proficiency in listening, speaking, reading, and writing skills. In addition, they are being utilized in various training sessions and FDPs to enhance the technical skills of participating students.