



ADITYA ENGINEERING COLLEGE

An Autonomous Institution

Approved by AICTE • Permanently Affiliated to JNTUK • Accredited by NAAC with 'A' Grade
Recognised by UGC under sections 2(f) and 12(B) of UGC Act, 1956
Aditya Nagar, ADB Road, Surampalem - 533437, Near Kakinada, E.G.Dt., Ph:99498 76662

Department Level Objectives

(i) Civil Engineering

- To equip students with the knowledge of analysing data and technical concepts pertaining to the development of infrastructure, design, sustainability, construction management and any other field related to civil engineering.
- To perform their/duties efficiently, effectively, and ethically at individual level and also at group level in a multidisciplinary team, contributing to the welfare of the society.
- To adopt a new innovative technology by continuously updating their knowledge through lifelong learning achieving the personal and organization growth.
- To implement soft skills, leadership qualities and professional ethics among the graduates to handle projects independently as well as in a group.
- To produce graduates who would attain professional competence to fit themselves to industry needs, pursue higher studies and recognize need for lifelong learning
- To inculcate qualities of working in teams with ethical values and social responsibility

(ii) Electrical and electronics engineering

- To set a powerful foundation in science, mathematics, principles and technological advancements in Electrical & Electronics Engineering and allied fields.
- To include value added courses every semester to enhance students' knowledge.
- To furnish the labs with state-of-the-art infrastructure and equipment.
- To digitalise pedagogical material of the department for enhancing students' recognition.
- To inculcate an attitude in students to be a part of community developed programs.
- To enrich the knowledge of faculty and staff members in technological advancements to meet societal needs.

(iii) Mechanical engineering

- To provide contemporary grounding in professional accountability, global and societal implications of engineering decision, quality education and training in the emerging of Mechanical Engineering.
- To educate student with a good conceptual knowledge of core and fundamental engineering principles to prepare them for fast technological change and deal with multidisciplinary tasks for the industry.
- Provide a firm foundation and grasp in the fundamental concepts of mechanical engineering's thermal fluid.
- Professionally utilise engineering basics and state-of-the-art tools in local, regional, and worldwide job situations.


PRINCIPAL
Aditya Engineering College
SURAMPALAM

- To improve students' capacity in the social and human context of computers as it affects individual, team, company, and society, including ethical, legal, security, and global policy concerns.

(iv) Electronics and communication engineering

- To provide students with a strong foundation in the fundamentals of electronics and communications engineering
- To train the students in technical and soft skills to work in teams globally and prepare them for lifelong learning.
- To provide quality education through well-equipped laboratory facilities
- 4. To train the students in adapting the learning culture needed for a successful professional career by encouraging them to acquire higher qualifications.
- To provide students with specialized knowledge in focused areas of their choice, to take up research and keep abreast of latest technological developments.
- To encourage the students in design, build, and testing of electronic and modern communication Systems for the given specifications by considering technical, environmental, and social contexts.

(v) Computer science engineering

- To demonstrate proficiency in problem-solving techniques using programming languages
- To provide quality education and hands on training on recent technologies
- To encourage faculty and students towards research activities.
- To enhance the industry exposure to the students to bridge the gap between institution and industry.
- To develop cooperative research relationships within and outside the computer science discipline, as well as with industry, government, alumni, and local organizations.
- To enhance the student's ability in teamwork and to gain leadership skills

(vi) Information technology

- To prepare students for employment and advanced studies and provide them with significant experiences in complex software development for real-world problems.
- To teach students lifelong learning skills, which will allow them to successfully adapt to evolving technologies throughout their professional careers.
- To teach students effective teamwork, communication and interpersonal skills that enable them to work with others effectively in their professional careers.
- Support and encourage activities which will promote faculty professional growth and recognition.

(vii) Mining engineering

- To provide quality education by demonstrating the latest industrial developments of a particular concept in Mining.
- To equip the labs with state-of-the-art infrastructure and equipment.

- To make the students do hands on practice on the state-of-the-art laboratories and find inferences from the experiments.
- To provide relevant and frequent industrial exposure to the students.
- To encourage the students to learn IT, and Computing tools, and software used in Mining Engineering.
- To provide the students with sufficient innovative space for incubating entrepreneurship ideas applicable in Mineral and mining engineering.

(viii) Petroleum technology

- To provide quality education by demonstrating the latest industrial developments of a particular concept in Petroleum and Gas Industry.
- To equip the labs with state-of-the-art infrastructure and equipment.
- To make the students do hands on practice on the state-of-the-art laboratories and find inferences from the experiments.
- To provide relevant and frequent industrial exposure related to oil and gas industry operations to the students.
- To encourage the students to learn Technology, and Computing tools, and software used in Petroleum Industry.
- To provide the students with sufficient innovative space for incubating entrepreneurship ideas applicable in Petroleum and Gas Industry.

(ix) Agricultural engineering

- To impart education and knowledge to students that would make them competent towards agricultural and rural development.
- To develop technologies for efficient and timely utilization of inputs, enhanced productivity and lower production cost leading to enhancement of farmers' income, conserving resources, climate smart agriculture and better human health of the stakeholder.
- To develop smart machines for production and post-production unit operations and on-farm energy management through contemporary innovations like artificial intelligence, robotics, automation and IoT.
- To provide mechanized interventions in on-farm water management practices for efficient utilization of water.
- To increase energy use efficiency in production and post-production operations through development of appropriate technologies using conventional and renewable sources of energy.

(x) Humanities & Basic Sciences

- To induce scientific temper in students through fundamental principles of Mathematics, Physics and Chemistry.
- To inculcate human values in students for their holistic development.
- To create awareness on environment and sustainability among students.
- To motivate students to pursue a career in Science & Engineering.
- To prepare the students to face the challenges in both personal and professional life.