Vision

To nurture the excellence in modeling and designing of modern mechanical engineering systems by imparting timeless core values to the learners and to mould the Department into a centre of academic excellence catering to the industrial needs through advanced research.

Mission

To offer high quality graduate and post graduate programs in Mechanical Engineering in order to make the learners globally competitive technologists who are professionally capable and socially responsible. The department enables the learners inculcate and imbibe theoretical and practical knowledge for exploration and deep insight for advanced technological innovations and inventions.

PROGRAM EDUCATIONAL OBJECTIVES

PEO 1: Excel in professional career and/or scientific research by acquiring knowledge in sound foundation in the mathematical, scientific and engineering fundamental

PEO 2: Develop the ability among students to synthesize data, interpret them appropriately and be able to apply key concepts functions and applications of CAD/CAM to mechanical system design and manufacturing or to a mechanical subsystem of an interdisciplinary system

PEO 3: To enable students for lifelong learning and introduce them to professional ethics and sustainable development and an attitude towards self-employment through entrepreneurship.

PEO 4: To prepare students for successful careers in industry to meet the needs of Indian and Global companies.

PROGRAM OUTCOMES: At the end of the program the student will be able to:

PO1: To get the mathematical and engineering knowledge to solve real life problems in design and manufacturing systems.

PO 2: To acquire the basic skills to model and analyze the mechanical engineering problems.

PO 3: To get the capabilities to manufacture the components efficiently using advanced manufacturing processes.

PO 4: To provide competence to investigate, solve and optimize complex problems.

PO 5: To learn the basic computer aided tools which includes computer graphics, geometric modeling, finite element analysis, etc.

PO 6: To manufacture the products to cater the needs of the society emphasizing on improving quality, production and productivity.

PO 7: To design and manufacture the components considering also environmental issues and sustainability.

PO 8: To expose to the diversified applications of the CAD/CAE such as motion analysis, structure analysis, dynamic analysis, vibration analysis, etc.

PO 9: To get acquaintance with diversified applications of CAM based on industrial robotics, rapid prototyping, reverse engineering, virtual engineering, CAPP .etc.

PO 10: To enable continuous learning and improvement by getting exposed to latest technologies like nano materials, nano coatings, mechatronics, etc.

COURSEOUTCOMES

Course Code	
R19MD103	**GEOMETRIC MODELLING**

After completion of course, students would be ableto:

Course Code	
CA 102	**COMPUTER AIDED MANUFACTURING**

COURSEOUTCOMES

After completion of course, students would be ableto:

Course Code	
R19CA 1031A	**COMPUTATIONAL METHODS IN ENGINEERING (Elective-I)**

COURSEOUTCOMES

After completion of course, students would be ableto:

Course Code	
R19CA 1032B	**MATERIALS TECHNOLOGY (Elective-I)**

COURSEOUTCOMES

After completion of course, students would be ableto:

Course Code	
R19CA 1033C	**MECHANICAL VIBRATIONS (Elective-I)**

COURSEOUTCOMES

After completion of course, students would be ableto:

Course Code	
R19CA 1041A	**MECHATRONICS (Elective-II)**

COURSEOUTCOMES

After completion of course, students would be able to:

Course Code	
R19CA 1042B	**INDUSTRIAL ROBOTICS (Elective-II)**

COURSEOUTCOMES

After completion of course, students would be able to:

Course Code	
CA 1043	**SIMULATION OF MANUFACTURING SYSTEMS (Elective-II)**

COURSEOUTCOMES

After completion of course, students would be able to:

Course Code	
R19MD107	**RESEARCH METHODOLOGY AND IPR**

COURSE OUTCOMES: At the end of this course, students will be able to

CO1: Understand research problem formulation.

CO2: Analyze research related information

CO3: Follow research ethics

CO4: Understand that today's world is controlled by Computer, Information Technology, but tomorrow world will be ruled by ideas, concept, and creativity.

CO5: Understanding that when IPR would take such important place in growth of individuals &

nation, it is needless to emphasis the need of information about Intellectual Property Right to be promoted among students in general & engineering in particular.

CO6: Understand that IPR protection provides an incentive to inventors for further research work and investment in R & D, which leads to creation of new and better products, and in turn brings about, economic growth and social benefits.

Course Code	WRITING SKITTS ON SCIENTIFYIMIMINICATION
R19CA 108	

CO1. Understand that how to improve your writing skills and level of readability.
CO2. Learn about what to write in each section.
CO3. Understand the skills needed when writing a Title Ensure the good quality of paper at very first-time submission

Course Code	**THEORY OF ELASTICITY AND PLASTICITY**
R19CA 201	

Course Code	**ADVANCED MANUFACTURING PROCESS**
R19CA 202	

Course Code	**ADVANCED FINITE ELEMENT METHODS (Elective-III)**
R19CA 2031A	

Course Code	**FRACTURE MECHANICS (Elective-III)**
R19CA 2032B	

Course Code	**PRODUCT DESIGN AND DEVELOPMENT (Elective-III)**
R19CA 2033C	
Course Code	**MATERICAL CHARACTERIZATION TECHNIQUES (Elective-IV)**
R19CA 2041A	

COURSEOUTCOMES
After completion of course, students would be ableto:

Course Code	
R19CA 2042B	**OPTIMIZATION & RELIABILITY (Elective-IV)**

COURSEOUTCOMES

After completion of course, students would be able to:

Course Code	
R19CA 2043C	**ADDITIVE MANUFACTURING (Elective-IV)**

COURSEOUTCOMES

After completion of course, students would be able to:

Course Code	
CA 208	**PERSONALITY DEVELOPMENT THROUGH LIFE ENLIGHTENMENT SKILLS**

CO 1. Study of shrimad - Bhagwad-Geeta will help the student in developing his personality and achieve the higher goal in life

CO 2. The person who has studied Geeta will lead the nation and mankind to peace and prosperity.

CO 3. Study of Neetishatakam will help in developing versatile personality of students.

Course Code	
R19ME4201A	**NON DESTRUCTIVE EVALUATION (ELECTIVE V)**

COURSEOUTCOMES

After completion of course, students would be able to:

Course Code	
R19CA 3012B	**QUALITY ENGINEERING (ELECTIVE V)**

COURSEOUTCOMES

After completion of course, students would be able to:

Course Code	
R19CA 3013C	**GREEN MANUFACTURING (ELECTIVE V)**

Course Code	

R19CA 3014D	**MOOCS/NPTEL (ELECTIVE V)**

COURSEOUTCOMES

After completion of course, students would be able to:

Course Code	**NANO TECHNOLOGY (OPEN ELECTIVE)**
R19CA 3021A	

COURSEOUTCOMES

After completion of course, students would be able to:

Course Code	**OPTIMIZATION TECHNIQUES (OPEN ELECTIVE)**
R19CA 3022B	

COURSEOUTCOMES

After completion of course, students would be able to:

Course Code	**PRODUCT DESIGN AND MANUFACTURING**
R19CA 3023C	

COURSEOUTCOMES

After completion of course, students would be able to: