

School of Mechanical Engineering (SMEC)

VIT-APUNIVERSITY



Why Mechanical Engineering?

BECAUSE IT IS ALL AROUND YOU.

It's in the way we travel.

It's in the way we power and condition our homes.

It's in the way we design and manufacture products according to our needs.

It's in the way we are improving our healthcare.

It's in the way we are optimize the use of our resources.

It's in the way we manage the waste from our kitchen, industry etc.

IT'S IN THE FUTURE OF EVERYTHING!!!!!

MECHANICAL ENGINEERS play critical roles in ideation, analysis, design, manufacturing, and synthesis aspects of systems you use every day. It is one of the broadest and most versatile of the engineering professions

About VIT-AP UNIVERSITY

VIT-AP UNIVERSITY founded under the eminent guidance of Founder and Chancellor Dr. G Viswanathan has emerged as one of the promising and prominent academic institute of India. Despite of being a quite young institute, the excellent and unique quality of teaching- learning, research and innovations shows the aspirations of the institute to become a global leader. VIT-AP UNIVERSITY attracts students from almost all the states of India because of its academic excellence. VIT has introduced many innovations in academic processes including FFCS (Fully Flexible Credit System), PBL (Project Based Learning) for better learning, fully digitized academic portals that assists students in equipping themselves for 2020 market place, Hackathons / Makeathons as part of curriculum exercise which kindles the interest and the curiosity of students.

SCHOOL OF MECHANICAL ENGINEERING (SMEC), VIT-AP UNIVERSITY

The School of Mechanical Engineering is among the founding schools of VIT-AP UNIVERSITY @ Amaravati to produce high quality engineers in the field of Mechanical Engineering to cater the demands of the nation to move at par with the highly industrialized and technologically advanced modern world. The primary objective of the school is to impart knowledge centered education and mould the students into future engineers for meeting global challenges in the area of mechanical engineering thereby enabling them to

contribute for the societal prosperity of mankind. The school offers undergraduate program (B. Tech.) with one of the most advanced and upto-date academic curriculum including NASSCOM courses designed keeping in view of the industry requirements in India and overseas. The school aims to produce quality professionals in Mechanical Engineering to compete globally and excel by carrying out basic and applied research in emerging areas by forging strong industry - institute interaction. Along with the academic curriculum, the students are encouraged to be a part of various clubs for the overall development of personality.

SMEC, VIT-AP UNIVERSITY Benefits

- Design Your own Degree with Specialization, Minors and Majors
- Inclusion of NASSCOM Courses in curriculum
- Opportunity of Under Graduate Research & Senior Design Projects
- Opportunity to join International Professional Community
- Professional Student Chapters (ASME, ASHRAE, SAE)
- Opportuunity for students for on campus incubation
- School supported Patents for application oriented students Projects
- Combined fundamental class based learning and hands-on training
- Fully Flexible Credit Based System
- Targeted and well-equipped educational laboratory experiments
- Project Based Learning
- A student community (Club and societies) which creates an atmosphere of learning and mutual support and success
- Caring and committed faculty

Degree offered

- B. Tech in Mechanical Engineering
- Ph.D. in Mechanical Engineering

Curriculum Opportunities

Core Engineering Course:

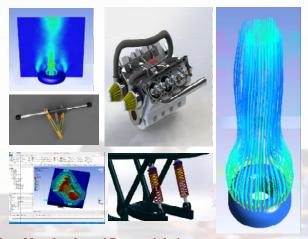
B.Tech Mechanical Engineering with Specilizations offered in

- Automotive Design
- Digital Manufacturing

- Robotics
- Opportunity for Minors in
- Artificiail Intelligence & Machine Learning
- loT
- Embedded Systems & Other Courses

Capstone Projects:

Capstone Projects are hands-on projects that that provides an opportunity to the students to apply their concepts, knowledge and ideas in a Specialization to realistic practical problems. The capstone project outcomes in the process of creating an engineering system or product from inception to implementation and testing. Further the project can be transformed into publications in form of patents or research papers in reputed journals.



List of Academic and Research Labs

There are several academic and Research laboratories for students offered at School of Mechanical Engineering. Each laboratory is well-equipped to serve the requirements of the respective Mechanical courses. With state-ofthe-art facilities, the laboratories are a place for the students to practise, experiment, and innovate.

Software Licenses: CATIA, Solid Work Class Room Pack Edu Edition, Digimat Software, AutoCAD, MATLAB, Ansys

Major Labs:

- Workshop Technology
- •Strength of Materials
- Advanced Manufacturing
- •Manufacturing Process
- •Materials Engineering
- ·Heat Transfer
- •Thermal Engineering
- Applied Robotics Control
- •Theory of Machines
- •Fluid Mechanics and Hydraulic Machines

List of Faculty



Dr. PANKAI BALAKRISHNA TAMBE

Professor & Dean

Specialization Areas: Materials Processing,

Polymer Engineering, Machining Science



Dr. S.V. KOTA REDDY Professor & Vice Chancellor

Specialization Areas: Thermal & fluid Engineering (Refrigeration & Air Conditioning)

Dr. P.S. RAMA SREEKANTH

Professor

Specialization Areas: Polymer Nano-composites, Honeycomb sandwich structures, Biomedical materials

Dr. DILIP KUMAR MOHANTY

Associate Professor

Specialization Areas: Thermal Engineering, Heat Transfer, Heat Exchanges

Dr. AMBUJ SHARMA

Associate Professor

Specialization Areas: Computational Mechanics, Finite Element Analysis, Structural Health Monitoring

Dr. MANOJ KUMAR GUPTA

Associate Professor

Specialization Areas: Tribology, Mineral oils, Dispersants

Dr. V. MANIKANTA RAVINDRA KUMAR

Associate Professor

Specialization Areas: Numerical Modelling of Manufacturing Processes, Metal Forming, Railway Engineering

Dr. MANAS KUMAR PAL

Assistant Professor

Specialization Areas: Optical diagnostics, High speed imaging, Image processing, Experimental and numerical investigations of droplet, Fuels and combustions

Dr. SANTOSH KUMAR SAHU

Assistant Professor

Specialization Areas: Polymer nanocomposite, 4D printing, Biocomposite, Meta-materials, Multiscale modeling of composite materials

Dr. SUYOG JHAVAR

Assistant Professor

Specialization Areas : Metal Additive Manufacturing, Welding Engineering, Advanced Manufacturing, Remanufacturing, Surface Engineering

Dr. B VASAVI

Assistant Professor

Specialization Areas: Functionally Graded Materials, Tribology, Nano Composites, Polymers, Surface Texturing

Dr. K. VENKATESWARULU

Assistant Professor

Specialization Areas: IC engines and combustion, Phase change materials for thermal energy storage, Fluid flow and heat transfer, Nanofluids, Solar energy.

Laboratory Equipment



As a mechanical engineer you can make an impact in: Manufacturing, Product design, Transport and aerospace, Healthcare, Energy and sustainability, Sports engineering, Safety Built environment, Research and more...

SO COME & JOIN US @VIT-AP UNIVERSITY

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