

# cit Chennai Institute Of Technology

# Mechanical

# **ENGINEERING**

WHEELZ NEWSREPORT Mar-2020 VOL 2

Carrier 360 Magazine

OT is Classified as AAA+ Category

Times Higher Education Review -2020

CT ranks 54 position in Top 100 Engineering colleges ion India

**Chief Editor** 

Dr V Dhinakaran (HoD) Dr M D VijayaKumar(Assc.Prof)

Sub - Chief Editor Aristo Wighles S G 3rd Year Mech Karthi S S 3rd Year Mech

#### Vision of the Institute

To be an eminent centre for Academia, Industry and Research by imparting knowledge, relevant practices and inculcating human values to address global challenges through novelty and sustainability.

#### Mission of the Institute:

- **IM1**.To creates next generation leaders by effective teaching learning methodologies and in still scientific spark in them to meet the global challenges.
- **IM2**.To transform lives through deployment of emerging technology, novelty and sustainability.
- **IM3**.To inculcate human values and ethical principles to cater the societal needs.
- IM4.To contributes towards the research ecosystem by providing a suitable, effective platform for interaction between industry, academia and R & D establishments.
- IM5.To nurture incubation centres enabling structured entrepreneurship and start-ups.

#### **Vision of the Department:**

To Excel in the emerging areas of Mechanical Engineering by imparting knowledge, relevant practices and inculcating human values to transform the students as potential resources to cater the needs of the industries and society in order to uphold the sustained manufacturing activities.

#### Mission of the Department:

DM1: To provide strong fundamentals and technical skills in Mechanical Engineering through effective teaching learning Methodologies.

**DM2**: To transform lives of the students by fostering ethical values, creativity and innovation to become Entrepreneurs and establish Start-ups.

**DM3**: To habituate the students to focus on sustainable resources with optimal usage to ensure the welfare of the society.

**DM4**: To provide an ambience for research through collaborations with industry and academia.

**DM5**: To inculcate learning of emerging technologies for pursuing higher studies leading to lifelong learning.



#### **Program Educational Objectives (PEOs)**

#### Graduates will be able to

**PEO1.** Contribute to the industry as an Engineer through sound

knowledge acquired

In core engineering to develop new processes and implement the solutions for industrial problems.

**PEO2**. Establish an organization / industry as an entrepreneur with

professionalism, leadership quality, teamwork,

## Program Specific Outcomes (PSOs)

S.No	Programme Specific Outcomes
PSO1	To analyse, design and develop solutions by applying the concepts of Engineering Design for societal and industrial needs.
PSO2	To create innovative ideas and solutions for real time problems in Manufacturing sector by adapting the emerging technologies and modern tools.



#### Internships

Students have done their internships in the following companies

- 👃 Internshala.
- Codespeedy Tech Pvt. Limited.
- PAN Tech Prolab India Pvt Ltd.
- Verzes
- National Skill and Development India.
- Tact Labs.
- JRC Engineering.
- 👃 IIT Madras.
- Abyom Space Tech and Defense Pvt Ltd.
- Aashman Foundations.
- Creativegenic Solutions.
- Ashok Leyland.
- Sky Rider Institutions.
- BOSCH.
- Sampson's Plastic Industries.
- APSIS Solutions.
- Komatsu India Pvt Limited.
- Inventrom Pvt Ltd Bolt IOT.
- L&T Construction
- M K Auto components India Pvt Ltd.



#### **INTERNSHIPS**

#### ABYOM SPACE TECH AND DEFENCE PVT.LTD



ABYOM is the 1<sup>st</sup> officially recognised Aerospace Startup from Utter Pradesh with a vision of Make India's space sector fully Reusable and earth from Save space debris. Here they are mainly focused on the idea and mechanism of Reusable Launch Vehicle (RLV) with different commercial projects related to Aeronautics and Aerospace. Our organisation has been successfully incorporated under the Ministry of corporate affairs, Govt. of India and recognised by DPIIT &CM award.



#### PAN TECH SOLUTIONS



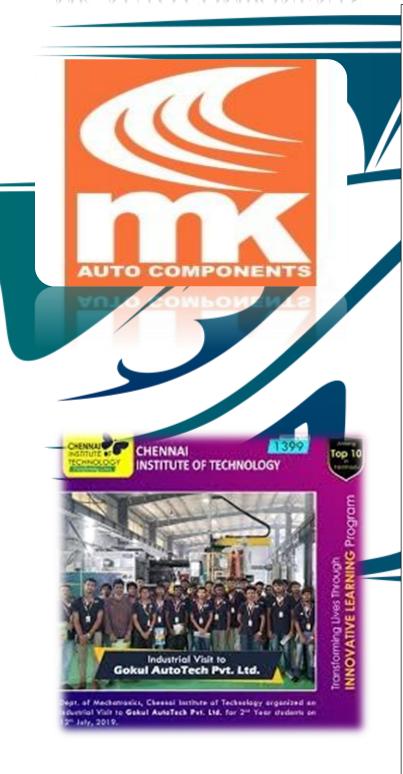


Pantech Pro labs India Pvt Ltd is best known for manufacturing and marketing of high-quality, state-of-the-art Engineering Equipment's Lab and Electronic Hobby Kits. Its products are delivered across the globe and many satisfied customers are the best guarantee of its firstrate service. Many of our products are also extensively Hobbyists, used by Electronics, Electrical, Instrumentation, Communication and Bio Medical engineers.



#### **INDUSTRIAL VISIT**

#### MK AUTO COMPONENTS



MK Auto components India Limited was established in the year 1996. MK Auto is a manufacturing company with primary focus on machining, cold forging heat treatment of steel and aluminium parts and sub assembly. The product portfolio of the company includes steering, starter motor, brake, fuel injection, engine, transmission parts of major Automobile OEM. Some of the machining facilities includes sliding head automats, CNC lathes, VMC, Cylindrical grinding, CNC angular grinding, Drilling, Surface grinding, Tapping, Thread Rolling, Worm rolling, Polygon Turning, Internal grinding, gun drilling, Serration rolling and also Special Purpose Machines are used to cater customer needs.



#### INTEGRAL COACHS FACTORY



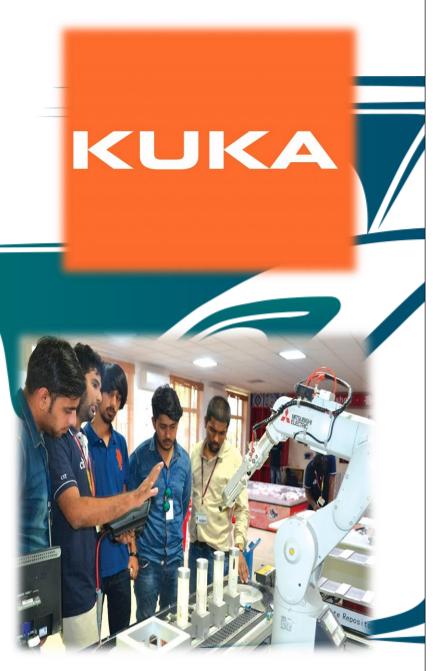


ICF has the capability of designing and developing any variant with in-house facility. Every year, new variants are added to the product mix. ICF continues to experiment with design & development of new type coaches such as self-propelled and other special type coaches.

ICF has exported more than 650 coaches, shells and components to countries such as Thailand, Burma, Taiwan, Zambia, Philippines, Tanzania, Uganda, Vietnam, Nigeria, Bangladesh, Mozambique.



### **AUTOMATION- KUKA**



KUKA is а German manufacturer of industrial robots and systems for factory automation. It has been predominantly owned by the Chinese company Midea Group since 2016. The KUKA Robotics Corporation has 25 subsidiaries mostly sales and service subsidiaries, including in the United States, Australia, Canada, Mexico, Brazil, China, Japan, South Korea, Taiwan, India, Russia and most European countries. The company name, KUKA, is an acronym for Keller and Knapp ich Augsburg.



#### CNC MACHINING



CNC machine piece processes а material (metal, plastic, wood, ceramic, composite) to meet specifications by following coded programmed instruction and without a manual operator directly controlling the machining operation. Instructions are delivered to a CNC machine in the form of a sequential program of machine control instructions such as G-code and M-code, then executed. 3D printers also use G-Code.



