A Visit Report

on

International Automobile Centre of Excellence (iACE) Gandhinagar

On

17th February 2023

On 17th February 2023, Faculty members from Degree and Diploma Mechanical as well as Civil Engineering department visited at International Automobile Centre of Excellence (iACE) Gandhinagar.

About iACE

The International Automobile Centre of Excellence (iACE) is the premier organisation for skill development in the automotive industry, utilising cutting-edge technology and systems. The centre serves the entire value chain of the automotive industry, including manufacturing and servicing.

It is incorporated as a 'Section 08 Company' under the companies Act 2013, by Government of Gujarat in collaboration with Maruti Suzuki India Limited (MSIL) with 50 % equity stake each. The centre is a world-class institute that provides 'end-to-end' training, development, and research to India's automobile ecosystem. The centre is equipped with cutting-edge infrastructure and technical labs to provide hands-on learning opportunities. For Knowledge & Technological Relevance of Industrial Learning, the institute draws on the expertise of industry-academia collaborations with leading Indian & Foreign Partners.

The centre is 17,000 square metres in size and includes vehicle system labs, manufacturing workshops, electronics labs, auditorium, exhibition hall, and other amenities. This facility houses cutting-edge technology in automotive systems and manufacturing. Students can learn about each system by cutting

out sections of the actual systems and using a combination of hardware and software.

VISION

iACE will be the apex centre for skill development for the automotive sector in India, utilizing modern technology and systems. The centre will cater to the entire value chain of the automotive industry encompassing areas such as:

• Automotive Manufacturing

• Automotive System

iACE TRAINING PROGRAM - KEY FEATURES

- Industry designed curricula & 'state-of-the-art' learning resources of the automotive ecosystem to the participants.
- Integrated internship opportunities and emphasis on employability skills and best practices of the industry.
- Globally recognized certification to facilitate international mobility and multiple learning pathways Target segments for iACE have been identified as – Faculty of all technical institutes, Engineering graduates, and Diploma holders and entry-level professionals of the industry. iACE is envisioned to bridge the skill gap which is unmet by the current training ecosystem. They conduct an analysis of the educational course programs and can upgrade the course content and delivery model.

Key Domains of iACE

- Advanced Automotive System (EV/HV/ Autotronics)
- Smart Automotive Manufacturing Technologies (Industry 4.0)
- Automotive Lifecycle management (Channel Management)

Objective of the visit

The objective is to help candidates discover and comprehend the practical application of technology. iACE continues to offer a one-of-a-kind industry-facing blend of practical and theoretical training requirements. They delve into the most recent developments and advancements in the National Credit Framework, New Trends in the Auto Industry, and the exciting Job Opportunities available in the industry.

The first session of the symposium was conducted by Mr. E. Rajiv who is a General Manager of The International Automobile Centre of Excellence (iACE). He has delivered the introductory session of the entire visit. The symposium was graced by **Mr. Lav Bharadwaj** who is a Consultant Grade 1, NCVET @ Ministry of Skill Development And Entrepreneurship and Monitoring and Evaluation Specialist @ NITI Aayog. He explained the vision of National Education Policy 2020, which emphasises the integration of general (academic) education, vocational education, and experiential learning, including relevant experience and professional levels.

Also, he told that to achieve the vision and intent of the NEP, the UGC, AICTE, NCVET, NIOS, CBSE, NCERT, Ministry of Education, DGT, and Ministry of Skill Development collaborated to develop the National Credit Framework (NCrF). NCrF is a comprehensive framework that encompasses elementary, secondary, higher, and vocational education and training, integrating learning across all dimensions, including academics, vocational skills, and experiential learning, as well as relevant experience and professional levels acquired.

The NCrF credit levels for school education are up to level 4, while for higher education from Level 4.5. to level 8 [Under Graduate Levels 4.5, 5.0, 5.5 & 6.0, Post Graduate Levels 6.0, 6.5 & 7.0, and PhD Level 8] and for vocational education & training level 1 to level 8.

The NCrF provides for the creditisation of all learning and the assignment, accumulation, storage, transfer, and redemption of credits, subject to

assessment; eliminates distinction and establishes academic equivalence between vocational and general education; enables mobility within and between them; and its implementation through the **Academic Bank of Credits (ABC).**

The iACE symposium was jam-packed with information on the latest EV trends, engineered plastics, and material technologies. Attendees had an excellent opportunity to interact with the speakers and ask questions.

Students can learn the technology from the fundamentals of EVs to their equipment, such as the battery, the battery pack assembly process, the EV motor, the charger, charging station development, and all other components and their functions. There was an informative talk on Plastics in EV vehicles was held with expert Rajnikant Bidajwala from iACE.

Finally, the symposium concluded with a sumptuous meal, participation certification and a memento.

Glimpse of the visit

Cut section models of different cars

Visited Faculty Members- Vatsal Upadhyay (Degree Civil)

Bhaumik Bhandari (Degree Mechanical)

Shyamal Prajapati (Degree Mechanical)

Prakash Patel (Diploma Mechanical)

Jayshil Thakore (Diploma Mechanical)