

7.3.1: Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words.

One area distinctive to the institution's priority and thrust is establishing and leveraging "Centres of Excellence in partnership with Industries/Corporates", to realize the vision. Institution has been constantly increasing the number of centres and their facilities.

Centres are equipped with state-of-the-art facilities and focus on specific technology areas. Centres serve as hubs for knowledge sharing, collaboration, specialization, research, innovation, training, capacity building, networking, and partnerships. Established in partnership with leaders in the respective technology domains, centres provide valuable opportunities for students, staff, faculty, youth, and employees of corporates to learn and grow. Centres provide/offer/conduct training programs, courses, projects, testing services, certifications, etc., to different types of audiences/clients. Centres enable students and faculty to experience international standards and facilities within the campus. All centres offer value added course(s) and one credit courses to benefit the students. Value added courses are available in the cafeteria model, to be pursued by the interested students beyond the class hours and during summer/winter breaks at the centres. Some centres undertake execution of programs under corporate social responsibility and government funded skill development programs as part of the Skill India Mission. Through these skilling programs in Pradhan Mantri Kaushal Vikas Yojana (PMKVY) scheme unemployed youth secure gainful employment and students get skilled. Centres also provide upskilling and reskilling of persons employed in industries. At present there are 18 centres in the campus, each with its own focus area with around 12,000 direct beneficiaries in total so far.

MCET - BOSCH REXROTH Regional Centre of Competence focusses on Programmable Logic Controllers (PLC) and Human-Machine Interfaces (HMI) in Industrial Automation Technologies and Fluid Power Technology.

MCET - TUV RHEINLAND Centre for Advanced Training (Welding) focuses on Gas Metal-Arc Welding (GMAW), Shielded Metal-Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW) and Non-Destructive Testing (NDT).

MCET – ALTAIR Centre focuses on Computer Aided Engineering (CAE) and Finite Element Modelling (FEM).

MCET - ASIC Centre focuses on Custom Integrated Circuit Design for Analog and Digital applications using tools such as CADENCE.

MCET – Centre for Design Analysis and Testing focuses on mechanical component testing and certification for automobile and manufacturing industries.

MCET – KEYSIGHT Centre for Radio Frequency Communication Systems focuses on Advanced Communication and RF System Design, Design and Analysis of Microstrip patch antenna for wireless applications.

MCET - SIEMENS Centre for Digital Manufacturing focuses on digital manufacturing with software tools like NX-CAD, Teamcenter PLM, and Plant Simulation.

MCET – HARITA TECHSERV Centre focuses on computer-aided design (CAD) with CATIA V6 and CAD modelling using Creo 2.0.

MCET – TUV RHEINLAND Centre for Advanced Training (Automobile Technology) focuses on Electronic Assist Vehicle Stability Control Systems, Autotronics, and Two/Four-Wheeler Automotive Systems.

MCET – BOSCH Joint Certification Centre focuses on After Market Services of Automobile Engine Starting System, Automobile Alternator, and PE Type Fuel Injection Pump.

MCET - MITSUBISHI ELECTRIC Centre for Factory Automation focuses on Programmable Logic Controllers (PLC) and Human-Machine Interface (HMI) in factory automation.

MCET JANATICS Centre of Excellence for Mechatronics and Automation focuses on Pneumatics, Electro pneumatics, Programmable Logic Controllers, Sensors, Mechatronics Systems, and Automation technology.

MCET- SWELECT Centre for Solar PV Training and Research focuses on Solar PV technology.

MCET – BOSCH Artisan Training Centre focuses on woodworking and carpentry.

MCET – FANUC Centre for Advanced Manufacturing and Robotics focuses on robotic welding and manufacturing with CNC Machines.

MCET – EMBDES IoT Centre focuses on design tools and Printed Circuit Boards (PCBs) using Arduino and Altium EDA tool.

MCET – EKKI International Water Technology Centre focuses on water technology and pump application engineering.

MCET - Electronics Manufacturing Skill Training Centre focuses on electronic circuit design, soldering, and PCB design.

Over the years these centres have resulted in students getting trained in emerging areas of technology and performing well in placements. They also get employed in niche technical areas in core companies after completing trainings. Trainings in these centres are jointly issued by the institution and partnering industry hence valued high in the market. Centres have been creating social impact as well when training unemployed

youth as part of various government skill development programs from National Skill Development Corporation and Tamil Nadu Skill Development Corporation and with funding from corporates under the corporate social responsibility. These youth get gainful employment in the region after completion of these training programs. Industries in the region also use the centres to train their manpower and execute projects. The offerings of the centres are aligned to the National Skill Qualification Framework with the qualification packs of the respective trades forming the basis for programs and courses. The institution leverages the centres to impact the skill and competence of students, staff, faculty, youth in the region and industry personnel. The institution is open to conducting training programs for students and faculty from other institutions which do not have such facility. This gesture has been welcomed by institutions which use these facilities. Centres offer training, consultancy and testing services thereby generating revenue. Centres continue to conduct workshops with hands on sessions to facilitate the learning in the focus areas. The facilities at the centres are continuously upgraded to make it contemporary with the market with investments into hardware, software, and manpower training as well. The institution aims to establish more such centres and augment the existing facilities at the centres to strengthen the ties between the institute and the industry, providing students with a competitive edge in their career prospects while continuing to upgrade the faculty and staff competence to serve the community and nation at large.