MTech in SMART MANUFACTURING

We currently have 26 M.Tech candidates with us, of which twenty were recruited this year. The remaining six students have completed one year of training, were recruited last year and have undergone 12 courses during this training.

Started in 2019, the Master of Technology (MTech) programme is a two-year full-time graduate programme that aims to impart education in smart manufacturing and development of new manufacturing systems that are innovative and competitive. The programme aims at developing skills, knowledge and aptitude among students so that they can have a 360 degree view of manufacturing as "physical production at the centre of a wider manufacturing value chain" where "highly agile, networked enterprises use information and analytics as skillfully as they employ talent and machinery to deliver products and services to diverse global markets". The course is intended to create future leaders in manufacturing who not only master the state of the art in current design, manufacturing, technology, management and business aspects in the area of smart manufacturing, but also can usher in manufacturing innovation in these through creative problem solving and integration of deep technology from diverse, multiple disciplines.

The MTech programme at CPDM is offered in partnership with faculty members from over twelve departments of IISc, and is spread over four semesters and two summer terms. It contains a challenging mix of courses and projects in materials, processes, digital manufacturing, design methodology, CAD, PLM, sensors, mechatronics, AI, analytics, machine learning, operations management, etc. to train students in the technology behind advanced manufacturing at various scales of systems (process, machines, factories, enterprises) and production, as well as in innovating new manufacturing processes and systems that blend the soft and the hard skills to solve problems related to manufacturing industry.

Candidates with a bachelor's degree in Engineering or equivalent and with a valid GATE score are eligible to apply. Selection is based on GATE score and performance in an interview conducted at the centre. The interview tests engineering knowledge, abstract and analytical thinking ability, communication ability, and overall aptitude for smart manufacturing.

The Centre for Product Design and Manufacturing offers industry opportunity for internships during summer (two months during May-July each year) and for recruiting students graduating from the Master of Technology (M.Tech) course specializing in Smart Manufacturing.