

# Advanced Manufacturing Programme at IISc

Admissions are now open for August 2019 at Centre for Product Design & Manufacturing (CPDM), IISc Bangalore

## MTech in Smart Manufacturing:

This two-year interdisciplinary masters' programme is open to candidates with BE/ BTech/ BDes/ BArch or equivalent degree in any discipline (with a valid GATE score). The course will train students in design thinking, materials, processes, digital manufacturing, data analytics and artificial intelligence, and operations management, as well as through a flexible course structure deepen and combine their knowledge in design-materials-manufacturing and systems-analytics-AI. The students will learn to apply this knowledge in hands-on 'capstone' projects, industry internships and practice or research intensive projects.

25 students will be shortlisted using GATE and performance in an interview.

## MTech (Research) and PhD in Advanced Manufacturing:

**Areas of interest :** Materials Processing & Joining (additive manufacturing, powder generation; friction stir welding; deformation processing/modelling; composites); Digital Manufacturing (CAD/CAM/CAE, DFX, simulation/visualisation, AR/VR/MR; digital twins, model-based manufacturing, informatics, quality control; computational metrology; digital Human modelling); Supply Chains (blockchain, market platforms, smart contracts; network games, dynamic routing/control; large scale logistics/ supply chain simulation/optimisation); Sustainable Manufacturing (assessment/traceability; lifecycle costing; developing new sustainable manufacturing processes); Industry 4.0 (wireless sensor networks, cyber-security protocols, fog/edge computing, AI, certification); Controls, Autonomous Systems, Robotics (AGVs/walking robots/drones for factory traffic management; micro/nano manufacturing; cobotics); Policy & Entrepreneurship (start-ups, eco-systems, incubators; distributed/inclusive manufacturing)

The programme is open to candidates with BE/ BTech/ BDes or equivalent degree in any discipline or BArch, or Masters' degree in Computer Science, Physiology, Management, or Master's in Computer Applications, or Graduates of 4-year Bachelor of Science programmes.

### Important dates

Online applications open : 1 February 2019

Online applications deadline : 25 March 2019

Printed applications to reach IISc : 27 March 2019

MTech Interviews : 17 April 2019

Research Interviews : 20-24 May 2019

Candidate shortlist : 3<sup>rd</sup> week of June 2019

MTech candidates report to IISc : 23 July 2019

Research candidates report to IISc : 24 July 2019

For further details:

 office.cpdm@iisc.ac.in

 <https://www.iisc.ac.in/admissions/programmes/>

### Partnering Departments