



# 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](mailto:office.cpdm@iisc.ac.in)

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

### Partnering Departments



Department of Instrumentation and Applied Physics  
Indian Institute of Science Bangalore

Department of Civil Engineering  
Indian Institute of Science Bangalore

Materials Engineering  
Indian Institute of Science Bangalore

Department of Mechanical Engineering  
Indian Institute of Science Bangalore

Department of Management Studies  
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