Department of Mechanical Engineering – NEW

Master of Science with Specialisation in “Advanced Manufacturing”

Aim

To respond to Government’s call on RIE2020 and an increasing demand from Industry on advanced manufacturing technologies especially on Additive Manufacturing (AM) or 3D Printing (3DP), the Department of Mechanical Engineering at NUS has introduced a new specialisation named “Advanced Manufacturing” for M.Sc/M.Eng. The aim is to provide a learning platform for NUS post-graduate students to be trained on Advanced Manufacturing technologies with the main focus on Additive Manufacturing (AM) or 3D Printing (3DP). The multi-disciplinarily trained professionals with good AM and 3DP backgrounds are highly valued by the local and global industry.

- Additive and Non-Conventional Machining Process (ME5608)
- Computer Aided Development for 3D (ME5612)
- Advanced Robotics (ME5402/EE5106R)
- Sustainable Product Design and Manufacturing
- Modelling of Machining Processes (ME6604)
- Fracture and Fatigue of Material (ME5513)
- Engineering Materials in Medicine (ME6505)
- Topics in Additive Manufacturing/3D Printing (Projects)*
- Advanced Processing of Metallic Material (MLES204)
- Structure and Properties of Material (MST5001)
- Mechanical Behaviour of Materials (MLES102)
- Material Characterization (MST5002)
- Advances in Drug Delivery (PR5216)
- Pharmaceutical Analysis IV (PR5211)
- Topics in Industrial Design: Interaction Design (ID5951B)
- Topics in Industrial Design: Healthcare Design (ID5951C)

*The two project modules (ME5600A & ME5600B) in the specialisation will give students the opportunity to design and fabricate parts using 3D printing machines. Students will learn the operation of 3D printing machines and knowledge related to Design for 3D Printing, 3DP Processes and Materials.

Registration open for existing and new MSc students from 1 August 2016, FCFS, a cap of 20-25 students per semester may be imposed

For further details, please contact A/Prof Lu Wenfeng (mpelwf@nus.edu.sg), Prof Jerry Fuh (mpefuhyh@nus.edu.sg) or Salmiah from ME Office.
Registration at: https://goo.gl/forms/mYwv757hprmrWxc32