# MSc in Mechanical Engineering – Course Schedule

Students are required to complete at least 30 credits of MESF courses. Subject to approval, students may take a maximum of 9 credits of courses from IBTM or MECH postgraduate courses offered by the Department of Mechanical and Aerospace Engineering to fulfill the program requirements.

**Tentative** course offering schedule:

### 2021-22 Fall Term

- MESF 5010  Foundation of Solid Mechanics
- MESF 5210  Fluid Dynamics
- MESF 5430  Thermodynamics and Kinetics of Materials
- MESF 5520  Fundamental Theories and Algorithms of CAD/CAM/CAE
- MESF 5560  Precision Manufacturing Technologies
- MESF 5580  Topology Optimization and Additive Manufacturing
- MESF 5930  Finite Element Methods

### 2021-22 Spring Term

- MESF 5050  Fracture Behavior of Polymers
- MESF 5380  Advanced Numerical Methods in Engineering
- MESF 5450  Intermediate Heat and Mass Transfer
- MESF 5550  Robotics
- MESF 6910L  Advanced Materials Analytics

Courses are offered subject to needs and availability.

For course details, please refer to:

![Course Catalog](CourseCatalog.png)

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