

**General Regulations for Master of Science Program in Manufacturing processes  
Mechanical Engineering Department, Sharif University of Technology**

The program leading to a master degree in manufacturing engineering comprises 29 credits with a maximum duration of 2 years:

A -	Compulsory Core Courses	3 Credits
B -	Compulsory Specialized Courses	9 Credits
C -	Elective Specialized Courses	9 Credits
D -	Seminar	2 Credits
E -	Thesis	6 Credits

**A - Compulsory Core Courses (3 credits)**

Course #	Course Title	Credits
28031	Advanced Mathematics I	3

**B - Compulsory Specialized Courses (9 credits)**

Course #	Course Title	Credits
28536	Machine Tools And Machinery	3
28537	Metal Forming	3
28538	Manufacturing Metallurgy	3

**C- Elective Specialized Courses (9 Credits)**

Course #	Course Title	Credits
28042	Finite Element Method	3
28025	Optimal Design	3
28545	Metal Forming Analysis	3
28598	Introduction to Nano Fabrication	3
28556	Modal Analysis	3
28593	Fracture, Fatigue and Creep	3
28533	Design for Manufacturing	3
28550/28551	Mechatronics and Lab	4

**D. Seminar (2 credits)**

All students should take this course during their 2<sup>nd</sup> semester at the Department of Mechanical Engineering.

**E. Thesis (6 credits)**

Students should submit their project proposal by the end of their 2<sup>nd</sup> semester. All proposals undergo peer review. Alternatively, students may pass six course credits rather than the thesis (course-based program).