

SHIV NADAR UNIVERSITY

School of Engineering Department of Mechanical Engineering

Admission to M. Tech Program in Design and Manufacturing Engineering

About the Programme

The Master of Technology (M.Tech) [Department of Mechanical engineering] is a postgraduate program at SNU. Students entering this program will be awarded the M.Tech degree on successful completion of 52 credits in 2 years.

Department of Mechanical Engineering is like to propose M.Tech program with a specialization in **Design and Manufacturing Engineering**.

Objectives of the Programme

This educational program has been started to address the demands of the modern industry. We at Mechanical Engineering Department (SNU) are well- aware of the fact that today's graduates must have the knowledge of the actual state of the industry, its culture and the complex interactive management and operating systems which are based on value-added efforts, team performance and result-oriented leadership.

Mechanical Engineering Department is offering M.Tech program in Design & Manufacturing Engineering.

The Master's Program students are required to complete 23 classroom credit hours, 4 laboratory credit hours and an industrial research thesis of 25 credit hours. The thesis is designed to provide a platform for the students to demonstrate competencies in learned methodologies and acquired skills to enhance real-time manufacturing and business performance. The Program will inculcate the skills and ability in the students to effectively fulfill the requirements of such positions as Design Engineers, Manufacturing Systems Engineer, Process Improvement Specialist, Supply Chain / Logistics Systems Specialist and Material Analyst and Consultant.

Specializations available in the department: Design and Manufacturing Engineering

Programme Structure

Students entering this program will have to complete 52 credits in 2 years that will comprise of coursework and a research thesis.

The semester wise program structure is mentioned below:

M.Tech. (Design and Manufacturing Engineering)

SEMESTER-I

Course Name	L	T	P	C
Advanced Mechanics of Solids	3	0	0	3
Advanced Manufacturing Technology	2	0	1	3
Advanced Material Science and Selection	2	0	1	3
Modelling and Simulation	1	0	2	3
	8	0	4	12

SEMESTER-II

Course Name	L	T	P	C
Design for Manufacturability & Assembly	3	0	0	3
Adv. Machine Design	3	0	0	3
Mechatronics and Industrial Automation	3	0	0	3
Elective I	3	0	0	3
Elective II	3	0	0	3
	15	0	0	15

SEMESTER-III

Course No.	Course Name	L	T	P	C
	Project Phase I	0	0	10	10
		0	0	10	10

SEMESTER-IV

Course No.	Course Name	L	T	P	C
	Project Phase II	0	0	15	15
		0	0	15	15

List of Electives

Tribology and Materials Degradation

Structural Material in Manufacturing

Manufacturing and Supply Chain Strategy

Vibration and Acoustics

Multiscale Manufacturing
Additive Manufacturing
Measurement Science and Technology
Reliability and Fault Diagnostics
Computer Integrated Manufacturing
Continuum Mechanics
Computational Fluid and Solid Mechanics

The department admits MTech students under the following categories

i) REGULAR (FULL -TIME)

These are students who work full-time for their M.Tech degrees and receive assistantships from the Institute.

ii) SPONSORED (FULL-TIME)

A candidate in this category is sponsored by a recognized R&D organisation, academic institution, governmental organisation or industry for doing M.Tech in the Institute on a full-time basis. The applicant must be a regular employee of his/her organisation with at least two years of experience at the time of admission and be engaged in professional work in the discipline in which admission is sought. He/She will not receive any financial support from the Institute.

Sponsorship letter must be attached with the application.

While the admitted sponsored candidates will not receive any teaching assistantship/ stipend, they will receive Hostel and Tuition fee waivers amounting to Rs. 1,74,000/- Per year for two years, just like the students entering through the normal mode of admission.

Eligibility:

B.E/B. Tech. Degree in Mechanical/Production Engineering with overall marks of at least 60% (or minimum 6.5/10 CGPA) and a valid GATE Score. Final year students can apply while awaiting their results.

Note: Those from IITs and NITs and SNU with a CGPA ≥ 8.0 will not have to appear in a written test but only in the interview (a good GATE/CSIR/UGC-NET score is strongly recommended, but not compulsory if CGPA ≥ 8).

Selection Process

Eligibility criteria mentioned above are minimum standards and applications not meeting the same will be rejected. Short-listed candidates will be required to demonstrate their knowledge and preparation through an on-site written test and interview, to be held in July 2017 (see

Application Deadlines on page 4). The written tests and interviews will be conducted at the Shiv Nadar University (SNU) campus in Greater Noida, U.P. ***Please note that not all candidate meeting the minimum eligibility criteria may be shortlisted. The written test may be waived for candidates with excellent academic credentials, solely at the discretion of the department.***

Syllabus for the Written Test

Solid Mechanics, Manufacturing science, Machine design, kinematics and Dynamics of Machine, Material Science, Operations management, Industrial engineering, Thermodynamic.

Total Seats

Regular, full-time candidates are sought for a maximum of 10 seats in the department. Please note that the University reserves the right to admit a smaller number of students if the admissions committee does not find enough suitable candidates.

Financial Assistance

Regular full-time M.Tech. students will receive teaching/research assistantships of ₹ 16,000 per month for 24 months.

Sponsored full-time M.Tech. candidates will not receive any teaching assistantship or stipend.

All full-time M.Tech. students, both regular and sponsored, will receive partial tuition and hostel room fee waivers amounting to a total of ₹ 14,500 per month for two years.

The assistantship and/or fee waivers will continue subject to satisfactory academic performance evaluated at the end of each semester. Satisfactory academic performance is defined as a minimum cumulative GPA of 7.0 on a scale of 10, plus any additional criteria which the department may define at the time of admission.

Program and Admission Fees (Please see annex 1 for more information)

Particulars	Fee	Remarks
Admission Fee (Non-refundable)	₹ 24,000	One-time fee payable at the time of admission in the first year of the M.Tech. program
Security Deposit (Refundable)	₹ 75,000	
Sub-Total (One Time):	₹ 99,000	
Tuition Fee (per year)	₹ 10,000	(after 90% waiver)
Hostel Fee – Single Room (per year)	₹ 36,000	(after 70% waiver)
Sub-Total (per year):	₹ 46,000	

Note:

- Teaching Assistantship is available to fulltime M.Tech. students. The sponsored candidates are not entitled for receiving Teaching Assistantship.
- Waivers:

- a. Waivers for tuition and hostel fees are for 2 years only. Beyond year 2, the student has to pay the tuition and hostel fees in full.
 - b. The Department reserves the right to reduce the waiver based on the academic credentials of the applicant.
3. Continuation of financial assistance is subject to satisfactory performance evaluated continuously, and compliance with all University regulations. The student is required to maintain a minimum CGPA of 7.00.
 4. All charges are payable at the beginning of the Academic Year as per schedule announced separately.
 5. Mess and Laundry Charges: In addition to the above, the use of mess and laundry services from the University authorized resident vendor is mandatory for all resident students irrespective of the degree program they are pursuing. We collect ₹21,500 per semester for mess and ₹ 2,250 per semester for laundry, which is pass through to the vendors. These charges are collected by the University at the beginning of every semester and paid to the vendor. These charges may vary from year to year based on inflation and the decisions of the relevant student body and Dean-Student Welfare, and will be communicated by Dean-Student Welfare at the beginning of each academic year.
 6. Security deposit is refunded on Graduation after deduction of any recoveries.

Application Fees: You will be required to pay a non-refundable application fee of Rs. 1200 (One Thousand Two Hundred Only) by credit/debit card on-line or Demand Draft drawn in favor of **Shiv Nadar University** payable at **NOIDA**. Candidates may note that the University reserves the right to accept or reject any application based on its departmental screening criteria, hence all applications may not be shortlisted for written examination and/or interview. No requests for refund of the application fee shall be entertained under any circumstance.

Application Instructions:

All interested applicants shall apply online using the link given below. Please follow the instructions carefully.

- Fill all the mandatory fields
- Online upload of the following documents is required
 - Passport size color photograph
 - Current CV
 - All Mark Sheets/Degree Certificates (10th Standard onwards)
 - Standardized Examination Certificate- CSIR, UGC, GATE etc. (only If applicable)
- After online submission, print the completed form for your record. It need not be sent to the University except in the case mentioned below.

- In case you have not been able to pay the application fee on-line and are sending it by a bank draft, please send it by speed post to the University at the address given below along with a copy of your application form.
 - **Sponsored candidate** need to send a sponsorship letter from their respective organizations.
- **Please note that the application is not deemed complete until we receive all the necessary prescribed documents and application fees.**

Application Deadlines

Last date for the receipt of completed application form & application fee	June 9, 2017
Written Tests and Interview (<i>subject to change</i>)	July 4 & 5, 2017
Declaration of Results (<i>subject to change</i>)	July 17, 2017

Applications will be considered immediately upon receipt and shortlisted candidates will be notified by email well in advance so that they can plan their travel. Hence, candidates are urged to apply as early as possible.

Completed applications received after **June 9, 2017** will be considered on a case by case basis subject to availability of assistantships.

Address for Speed Post:

Bhupender Verma

Executive Assistant to the Head of Department
 Department of Mechanical Engineering (SOE)
 Shiv Nadar University
 P.O. - Shiv Nadar University
 NH-91, Tehsil Dadri
 District Gautam Buddha Nagar, UP-201314.

Annexure 1

Fees Structure 2017–19 (in ₹)

	Item	Year 1	Year 2	Full Program
(1)	One time charges			
	Admission Fee (Non-refundable)	₹ 24,000		₹ 24,000
	Security Deposit (Refundable)	₹ 75,000		₹ 75,000
(2)	Recurring Charges			
	Tuition Fee	₹ 1,00,000	₹ 1,00,000	₹ 2,00,000
	Hostel Fee (Single)	₹ 1,20,000	₹ 1,20,000	₹ 2,40,000
(3)	Total Charges (1)+(2)	₹ 3,19,000	₹ 2,20,000	₹ 5,39,000
(4)	Financial Assistance			
	Tuition Fee Waiver 90%	₹ 90,000	₹ 90,000	₹ 1,80,000
	Hostel Fee Waiver - 70%	₹ 84,000	₹ 84,000	₹ 1,68,000
(5)	Net Payable (3)-(4)	₹ 1,45,000	₹ 46,000	₹ 1,91,000
(5A)	Cost Excl. Security Deposit	₹ 70,000	₹ 46,000	₹ 1,16,000
(6)	Teaching Assistantship @₹16,000 per month (for 24 months max)	₹ 1,92,000	₹ 1,92,000	₹ 3,84,000

Note:

1. Teaching Assistantship is available to fulltime M.Tech. students. The sponsored candidates are not entitled for receiving Teaching Assistantship.
2. Waivers
 - a. Waivers for tuition and hostel fees are for 2 years only. Beyond year 2, the student has to pay the tuition and hostel fees in full
 - b. The Department reserves the right to reduce the waiver based on the academic credentials of the applicant.

3. Continuation of financial assistance is subject to satisfactory performance evaluated continuously, and compliance with all University regulations. The student is required to maintain a minimum CGPA of 7.0.
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