



# SHIV NADAR UNIVERSITY

**School of Engineering**

**The Department of  
Computer Science and Engineering**

**Master of Technology Programme**

**2017-2019**

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## About the Programme

The Master of Technology (M.Tech) programme in the department of Computer Science and Engineering is a postgraduate programme at SNU. Students entering this programme will be awarded the M.Tech degree in Computer Science and Engineering on successful completion of 48 credits in 2 years.

## Objectives of the Programme

The Master of Technology in Computer Science and Engineering is designed to prepare students for more highly productive careers in academics and industry. Students are exposed to a wide range of core and elective courses with in-depth syllabi, combined with specialized research which culminates in a thesis. Such an excellent combination provides the students the breadth and depth knowledge necessary for pursuing highly productive careers in academics as well as in industry.

## Areas of Specializations

The department currently has 3 identified areas of growth. These 3 areas and some of their sub-areas of research are mentioned below:

- **Wireless, Mobile Computing and Networking:** Internet of Things, Mobile Sensing, Cyber Physical Systems, Wireless Sensor Networks, Wireless Networks.
- **Data Science and Engineering:** Data Mining, Machine Learning, Mobile Data Management, Data Analytics. Big Data.
- **Security and Privacy:** Security of Cyber Physical Systems, IoT and Cyber Security.

## Programme Structure

Students entering this programme will have to complete 48 credits in 2 years that will comprise of coursework, and a research thesis.

The coursework comprises of (a) **Core Courses:** 16 credits, and (b) **Elective Courses:** 16 credits.

**Research Thesis:** 16 credits.

### Semester 1 (12 credits)

	Course Code	Course Title	L T P C
1.	CSD655	Advanced Operating Systems	3 0 1 4
2.	CSD631	Advanced Programming Techniques and Algorithm Design	3 0 1 4
3.	CSD650	Advanced Probability and Statistics	3 1 0 4

### Semester 2 (12 credits)

	Course Code	Course Title	L T P C
1.	CSD644	Advanced Computer Networks	3 0 1 4
2.		Elective 1	3 0 1 4
3.		Elective 2	3 0 1 4

### Semester 3 (12 credits)

	Course Code	Course Title	L T P C
1.		Elective 3	3 0 1 4
2.		Elective 4	3 0 1 4
3.		Thesis	4 0 0 4

### Semester 4 (12 credits)

	Course Code	Course Title	L T P C
1.		Thesis	12 0 0 12

## Admissions to the Programme

### Eligibility

B.E. / B.Tech. Computer Science and Engineering/Information Technology from a recognized Technical Institute or University with minimum of 60% marks or 6.5 CGPA. Applicants waiting for the qualifying examination results are also eligible to apply.

### Total Seats

Admission is sought for a maximum of 10 seats in the department. Please note that the University reserves the right to admit lower number of students if the admissions committee does not find enough suitable candidates. Sponsored candidates may be admitted over and above the seat limit mentioned above.

### Selection Process

Eligibility criteria mentioned above is the minimum required and applications not meeting the same will be rejected. Shortlisted candidates will be invited to take a written test and interview, to be held in July 2017, as mentioned below. Final selections will be based on past academic performance, written examination and interview. **Please note that not all candidates meeting the minimum eligibility criteria may be shortlisted. Candidates with a valid GATE (Computer Science and Information Technology) score of 95 percentile and above will be directly called for interview and they will not have to sit for the written test.** Candidates from IITs, NITs and SNU with a CGPA  $\geq 8.0$  will not have to appear in a written test but only in the interview.

### Sponsored Candidates

Computer Science and Engineering will accept applications from eligible sponsored candidates. Only candidates sponsored by R&D Institutions/Industries/Engineering Colleges approved by AICTE and who have been working for a minimum of 2 years are eligible. They will only have to appear for an interview, dates for which will be notified in due course. Eligibility criteria for sponsored candidates is same as for the normal mode of admission. ***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.

### Important Dates

<b>Last date for the receipt of completed application form &amp; application fee</b>	<b>June 20, 2017</b>
<b>Written Tests and Interview</b>	<b>July 1, 2017</b>
<b>Declaration of Results</b>	<b>by July 17, 2017</b>

### Syllabus for Written Test

The Syllabus for the written test will be same as that of GATE Computer Science and Information Technology 2017.

## Fees Structure, Fee Waivers and Assistantships

SNU provides attractive financial assistance in the form of substantial Tuition and Hostel Fee waivers, and an attractive Assistantship to attract the best candidates. The fee structures, Waivers and Assistantships information is mentioned below:

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	
<b>Sub-Total (One Time):</b>	<b>₹ 99,000</b>	
Tuition Fee (per year)	₹ 10,000	(after 90% waiver)
Hostel Fee – Single Room (per year)	₹ 36,000	(after 70% waiver)
<b>Sub-Total (per year):</b>	<b>₹ 46,000</b>	

#### Note:

- Teaching Assistantship is available to fulltime M.Tech. students. The sponsored candidates are not entitled for receiving Teaching Assistantship.
- Waivers:
  - 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.
  - The Department reserves the right to reduce the waiver based on the academic credentials of the applicant.
- 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.
- All charges are payable at the beginning of the Academic Year as per schedule announced separately.
- 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 fees 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 circumstances.

### Application Instructions

All interested applicants shall apply online using the link provided in SNU Website. 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 (10<sup>th</sup> 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.**

### Address for Speed Post:

Mrs. Simple Sharma  
Executive Assistant to the Head of Department  
Department of Computer Science and Engineering  
Shiv Nadar University  
P.O. - Shiv Nadar University  
NH-91, Tehsil Dadri  
District - Gautam Buddha Nagar, UP-201314.

For any queries, please write to [hod.cse@snu.edu.in](mailto:hod.cse@snu.edu.in)

## Annexure 1

### Fees Structure 2017–19 (in ₹)

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



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 passed 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