

Centre for Sensors, Instrumentation, and Cyber-Physical Systems Engineering (SeNSE)

Date: 29-04-2025

The CRC of SeNSE discussed and recommended the following short-listing criteria for M.Tech, PhD and MS(R) programmes for Semester 1, AY 2025-26.

1. Short-listing criteria for M.Tech Instrument Technology (JID) for the year 2025-2026

Full Time

Discipline wise		GEN	EWS	OBC	SC/ST/PwD	
B.E/B.Tech in Electrical Engg, Elec. and Comm./Telecomm Engg. Instrumentation/Elec/Control Computer Science and Engineering	GATE SCORE in (EE, EC, IN)	≥ 575	≥ 575	≥ 525	≥ 400	
	DEGREE	%	60	60	60	55
		CGPA	6.0	6.0	6.0	5.5
B.E/B.Tech in Mechanical Engineering	GATE SCORE in (ME)	≥ 550	≥ 550	≥ 500	≥ 375	
	DEGREE	%	60	60	60	55
		CGPA	6.0	6.0	6.0	5.5
B.E/B.Tech/M.Sc in Physics/Applied Physics/Engineering Physics	GATE SCORE in (PH)	≥ 425	≥ 425	≥ 375	≥ 350	
	DEGREE	%	60	60	60	55
		CGPA	6.0	6.0	6.0	5.5

For candidates with B.Tech. degree from IITs with CGPA more than or equal to 8.00 the requirement of qualifying the national scholarship examination (e.g., GATE) is waived off.

Candidates in the final year of their programmes and who expect to complete all their qualifying degree requirements before the third week of July 2025, are eligible to apply for admission. For short-listing purposes, their performance till the preceding semester (preceding year if their programmes are year based) would be considered, but their admission would be provisional, subject to their meeting the minimum eligibility criteria after their final qualifying examination results are announced.

Part-Time /Full time sponsored

For part time/full-time sponsored applicants of all categories (GEN/OBC/SC/ST/PH), minimum educational qualification is same as for full-time candidates except that the requirement of qualifying the national scholarship examination (e.g., GATE) is waived off. After the qualifying degree they should have relevant work experience of duration as per the following Table in Public Sector Undertakings or Govt. Laboratories and Govt. or Private Industries of Repute.

1

	Qualifications	Work Experience (Post Qualification)
1	B.E./B.Tech./M.Sc or equivalent, from CFTIs/Central Universities	6 Months
2	B.E./B.Tech./M.Sc or equivalent, and working in IIT Delhi* (Project or Regular) * Through proper channel	6 Months
3	B.E./B. Tech./M.Sc. or equivalent, from institutions other than CFTIs/ Central Universities)	1 Year

2. Short-listing criteria for Ph.D. for the Semester I of year 2025-2026

Area of research advertised: Sensors and Transducers; Electronic and optical sensors; Electronic Components and Circuits; Electronic circuit design (analog and digital); Electronic Techniques for Signal Conditioning and Interfacing; Signal and Image processing; CMOS analog and mixed signal circuits & systems for sensors; Optical Metrology; Micro-optics; Aspheric and freeform optics; Optical instrumentation; Holographic microscopy; Digital speckle pattern interferometry; Optical coherence tomography; Display Devices and Technology; Quantum optical devices; Integrated quantum technologies; Optical image processing; Bioengineering/Biotechnology; Nanotechnology; Machine Vision and Automation; Signal, Image and Video Processing Techniques for Non-destructive Testing; Tera Hz, InfraRed, X-ray, and Ultrasound Imaging Modalities; Precision Measurement Systems; Precision mechanics; Instrumentation and Control; Instrument Design and Simulations; Mechatronics; Embedded systems; Sensors Systems; Smart Systems.

The candidates who have mentioned their broad proposed area of research as above related areas of research will only be shortlisted.

The other shortlisting criteria for interview for admission to

Full-time

S. No	Qualifying Degree		Minimum % / GPA / GATE Score				
				GEN	EWS	OBC	SC/ST/P H
1.	M.Sc. in Physics/Electronic Science/Biotechnology/Instrumentation	GATE	M.Sc. % Aggregate	≥ 75.0	≥ 75.0	≥ 75.0	≥ 70.0
			CGPA(10 Point)	≥ 7.5	≥ 7.5	≥ 7.5	≥ 7.0
			GATE Score	≥ 400	≥ 400	≥ 375	≥ 325
			Preceding Degree (%Aggregate)	≥ 60	≥ 60	≥ 60	≥ 55
		JRF(CSIR/UGC /DST-INSPIRE)	M.Sc. % Aggregate	≥ 75.0	≥ 75.0	≥ 75.0	≥ 70.0
			CGPA(10 Point)	≥ 7.5	≥ 7.5	≥ 7.5	≥ 7.0
			Preceding Degree (%Aggregate)	≥ 60	≥ 60	≥ 60	≥ 55
		M.Sc. from IITs	M.Sc. CGPA(10 Point)	≥ 8.0	≥ 8.0	≥ 8.0	≥ 8.0
			Preceding Degree (%Aggregate)	≥ 60	≥ 60	≥ 60	≥ 55

2.	M.Tech. in relevant branch of Engineering or Physics		M.Tec h.	% Aggregate	≥ 75.0	≥ 75.0	≥ 75.0	≥ 70.0
				CGPA(10 Point)	≥ 7.5	≥ 7.5	≥ 7.5	≥ 7.0
			Preceding Degree (%Aggregate)	≥ 60	≥ 60	≥ 60	≥ 55	
3.	B.Tech. in relevant branch of Engineering	GATE	B.Tec h.	% Aggregate	≥ 77.5	≥ 77.5	≥ 77.5	≥ 72.5
				CGPA(10 Point)	≥ 7.75	≥ 7.75	≥ 7.75	≥ 7.25
			GATE Score	≥ 500	≥ 425	≥ 425	≥ 350	
		JRF(CSIR/UGC C /DST-INSPIRE)	B.Tec h.	% Aggregate	≥ 77.5	≥ 77.5	≥ 77.5	≥ 72..5
				CGPA(10 Point)	≥ 7.75	≥ 7.75	≥ 7.75	≥ 7.25
		B.Tech. from IITs	B.Tec h.	CGPA(10 Point)	≥ 8.0	≥ 8.0	≥ 8.0	≥ 8.0
		B.Tech. students from CFTI at the end of 3 rd year	B.Tec h.	CGPA(10 Point)	≥ 8.0	≥ 8.0	≥ 8.0	≥ 8.0

Requirement of qualification in GATE / National Exam is waived for the following categories of applicants:

- Currently registered students in Centrally Funded Technical Institutes (CFTIs) pursuing B. Tech./B.E./ Integrated M. Tech/ Integrated M. Sc. programmes, who have enrolled in final semester, and have CGPA of 8.000 or above (on a 10 point scale). Such students must obtain a CGPA of 8.000 or above at the time of graduation, and before they formally register for the Ph.D. programme (80% aggregate marks, if marks is the primary mode of evaluation);
- Graduates of CFTIs (in the programmes marked under (i)) with a final graduation CGPA of more than 8.000 (80% aggregate marks, if marks is the primary mode of evaluation);
- M.A or M.Sc. graduates from IITs with CGPA 8.000 or above

Part-Time/Full time Sponsored:

For Part-Time/Full time Sponsored applicants of all categories (GEN/OBC/SC/ST/PH etc.), minimum educational qualification is same as for full-time candidates except that the requirement of qualifying the national scholarship examination (e.g., GATE/CSIR/UGC/DST-INSPIRE) is waived off. **After the qualifying degree the Part-Time/Full time Sponsored applicants should have minimum 2 years of relevant working experience** in Public Sector Undertakings or Govt. Laboratories and Industries of Repute approved by the Faculty Board.

3. Short-listing criteria for MS (R) for the Semester I of year 2025-2026

Full Time:

Discipline wise		GEN	EWS	OBC	SC/ST/PwD	
Electrical Engg, Elec. and Comm./Telecomm Engg. Instrumentation/Elec/Control/ Computer science and Engineering/Biomedical	GATE SCORE	≥ 575	≥ 575	≥ 525	≥ 400	
	DEGREE	%	60	60	60	55
		CGPA	6.0	6.0	6.0	5.5

for the chair

Mechanical Engineering and Allied sciences	GATE SCORE		≥ 550	≥ 550	≥ 500	≥ 375
	DEGREE	%	60	60	60	55
		CGPA	6.0	6.0	6.0	5.5
Physics	GATE SCORE		≥ 425	≥ 425	≥ 375	≥ 350
	DEGREE	%	60	60	60	55
		CGPA	6.0	6.0	6.0	5.5

Requirement of qualification in GATE / National Exam is waived for the following categories of applicants:

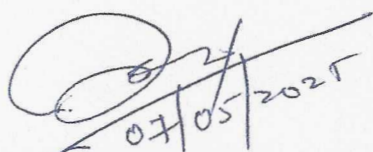
- (i) Currently registered students in Centrally Funded Technical Institutes (CFTIs) pursuing B. Tech./B.E./ Integrated M. Tech/ Integrated M. Sc. programmes, who have enrolled in final semester, and have CGPA of 8.000 or above (on a 10 point scale). Such students must obtain a CGPA of 8.000 or above at the time of graduation, and before they formally register for the MS(R) programme (80% aggregate marks, if marks is the primary mode of evaluation);
- (ii) Graduates of CFTIs (in the programmes marked under (i)) with a final graduation CGPA of more than 8.000 (80% aggregate marks, if marks is the primary mode of evaluation);
- (iii) M.Sc. graduates from IITs with CGPA 8.000 or above

However, if a candidate admitted to M.S.(R) programme following the above criterion wanted to convert to M.Tech. programme, he/she should also meet the shortlisting criteria of the M.Tech. programme, in addition to the conversion criteria (including requirement, if any, of a valid examination in GATE / National Examination).

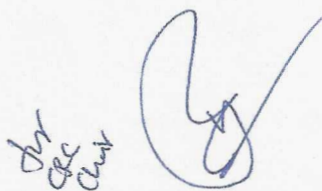
Part-Time /Full time Sponsored:

For part time/full-time sponsored applicants of all categories (GEN/OBC/SC/ST/PH), minimum educational qualification is same as for full-time candidates except that the requirement of qualifying the national scholarship examination (e.g., GATE/) is waived off. After the qualifying degree they should have relevant work experience of duration as per the following Table in Public Sector Undertakings or Govt. Laboratories and Govt. or Private Industries of Repute.

Sl. No.	Qualifications	Work Experience (Post Qualification)
1	B.E./B.Tech./M.Sc or equivalent, from CFTIs/Central Universities	6 Months
2	B.E./B.Tech./M.Sc or equivalent, and working in IIT Delhi* (Project or Regular) * Through proper channel	6 Months
3	B.E./B. Tech./M.Sc. or equivalent, from institutions other than CFTIs/ Central Universities)	1 Year


07/05/2025

Prof Jolly Xavier P
CRC Convenor, SeNSE

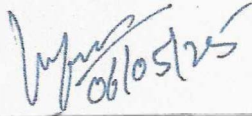

Chk
CRC
Chair

Prof Ravibabu Mulaveesala
CRC Chairman, SeNSE

Academics & Examination

M.Tech., M.S.(R) and Ph.D students shortlisting criteria of Centre for Sensors, Instrumentation, and Cyber-Physical Systems Engg. (SeNSE) (full-time/ part-time/ sponsored) for admission to 1st semester 2025-26 has been checked and found correct.

submitted for approval please.

06/05/25