### Office of the Dean Academic Affairs National Institute of Technology, Srinagar

# ADVERTISEMENT NOTICE DATED:13/12/2018

Online applications are invited for enrolment in Ph.D. programmes (Full time and Part time) in the following departments for the Academic session Spring 2019.

S. No	Department	Areas of Research	Eligibility Criteria				
1.	Civil Engg.	Structural Engineering, Reinforced Concrete, Bridge Engineering, Reinforced concrete.	ME/M.Tech in relevant field of Engineering with a minimum CGPA of 6.5 or not less than 60% for General/OBC Category and for SC/ST/PWD minimum CGPA of 6.0 Or not less than 55% marks at Master's level or				
		Water Resources Engineering	any other equivalent qualification recognized by the				
		Environmental Engineering and Water Resources	Institute. OR				
		Engineering/ Hydropower Engineering, Fluid Mechanics, Irrigation & Flood Control	BE/B.Tech with valid GATE score above the prescribed cut off level / NET Qualification. The candidates				
		Geotechnical Engineering	shall have a minimum CGPA of 8.0 or not less than 75% for				
		Geotechnical Engineering/ Soil Dynamics	General /OBC Category and for SC/ST/PWD minimum CGPA of 7.5 or not less than 70% at BE/B Tech level				
		Transportation Engineering	OR Master's degree in Applied				
		Transportation Engineering/ Planning, Transportation Engineering/ Traffic Engineering	Geology/ Geology/ Earth Sciences or an allied area satisfying each of the following criteria:				
		Engineering Geosciences and Rock Engineering Engineering Geosciences and Rock Engineering	A minimum of 65 percent marks or 6.5 CGPA in the Master's degree. (a) First division in Bachelor's degree, and (b) With a valid GATE score or UGC/CSIR NET/NBHM or equivalent qualification in the relevant area tenable for the year of registration.				

S. No	Department	Areas of Research	Eligibility Criteria
2	Electrical	A)Power & Energy Systems:	
		This covers the following	ME/M.Tech in relevant field
		areas of research:	of Engineering with a minimum
		Power System Dynamics &	CGPA of 6.5 or not less than 60%
		Control, Stand Alone Power	for General/OBC Category and for
		System, Power System	SC/ST minimum CGPA of 6.0 Or
		Operation & optimization,	not less than 55% marks at
		Renewable energy systems	Master's level or any other
		(Solar, Wind and Hybrid	equivalent qualification
		Systems), Smart Grid,	recognized by the Institute.
		Probabilistic Power System,	
		Uncertainty quantifications,	
		Deregulation, Distributed	
		Generation, Application of	
		Energy Storage Devices to	OR
		Power Systems, Flexible AC	
		Transmission System, Energy	
		System Planning & Auditing,	
		Loss Allocation, Power	
		System Stability & Control.	BE/B.Tech with valid GATE score
		System stability & control.	above the prescribed cut off
		B) Power Electronics &	level / NET Qualification. The
		Electric Drives: This covers	candidates shall have a
		the following areas of	minimum CGPA of 8.0 or not less
		research:	than 75% for General /OBC
		Power Electronics, Power	Category and for SC/ST minimum
		Quality, Improved Power	CGPA of 7.5 or not less than 70%
		Quality Converters, Custom	at BE/B Tech level
		,	at BE/B reciriever
		Power Drives (DSTATCOM, DVR & UPQC), Active Power	
		• • •	
		Filters, Multi-level converters,	
		Matrix converters, Electric	
		Drives, Flexible AC	
		Transmission System,	
		Isolated Bidirectional DC-DC	
		Converters, AC & DC	
		Microgrids, Smart Grids,	
		Special Machines & Control,	
		Modulation Techniques,	
		Electric Vehicles, Control of	
		Renewable Energy Systems,	
		Variable frequency	
		transformer.	

S. No	Department	Areas of Research	Eligibility Criteria				
3	Electronics & Communication Engg.	Image Processing, Security, Biometrics, Optical Fiber Communication System, Opto – Electronic Devices, WireLess Communication, Digital Communication, Antennas, Nano Electronics, Semiconductor Device Modeling, RF Device Modeling and Extraction, Information Theory, Wireless Communication, Machine Learning, Biomedical Signal Processing, Semiconductor Device Modeling and Simulation,	ME/M.Tech in relevant field of Engineering with a minimum CGPA of 6.5 or not less than 60% for General/OBC Category and for SC/ST minimum CGPA of 6.0 Or not less than 55% marks at Master's level or any other equivalent qualification recognized by the Institute.  OR  BE/B.Tech with valid GATE score above the prescribed cut off level / NET Qualification. The candidates shall have a minimum CGPA of 8.0 or not less than 75% for General /OBC Category and for SC/ST minimum CGPA of 7.5 or not less than 70% at BE/B Tech level				
4	Chemical Engineering	Biochemical Engineering & Biotechnology, Modeling and Simulation, Biomass Conversion, Pollution Abatement, Biofuels, CFD, Fluid Flow, Heat & Mass Transfer, Nanotechnology, Heat, Mass and Fluid flow studies in Micro Channels, Studies on Continuous Electro refiner, Industrial Pollution control abatement, carbon dioxide Capture and Utilization, Coal Benefication, Phase Transfer Cataysis, Seperation Process	ME/M.Tech in relevant field of Engineering with a minimum CGPA of 6.5 or not less than 60% for General/OBC Category and for SC/ST minimum CGPA of 6.0 Or not less than 55% marks at Master's level or any other equivalent qualification recognized by the Institute.  OR  BE/B.Tech with valid GATE score above the prescribed cut off level / NET Qualification. The candidates shall have a minimum CGPA of 8.0 or not less than 75% for General /OBC Category and for SC/ST minimum CGPA of 7.5 or not less than 70% at BE/B Tech level				

S. No	Department	Areas of Research	Eligibility Criteria
5	Mechanical	Experimental Fluid	
	Engineering	Mechanics and Heat Transfer,	
		Thermal Energy Storage,	
		Renewable Energy, Nano	
		Fluids, Computer Aided	
		Design of Thermal Systems	ME/M.Tech in relevant field
		Industrial Engineering, Decision Sciences, Ergonomics, Innovations and Entrepreneurship, Data	of Engineering with a minimum CGPA of 6.5 or not less than 60% for General/OBC Category and for SC/ST minimum CGPA
		mining and Manufacturing Strategies	of 6.0 Or not less than 55% marks at Master's level or any other equivalent qualification recognized by the Institute.
		Tribology of Ceramics & Nano-Ceramics, Life Cycle	OR
		Engineering, Tribology & Maintenance Engineering, Aircraft wing vibration, Smart Structures, Finite Elements Method	BE/B.Tech with valid GATE score above the prescribed cut off level / NET Qualification.  The candidates shall have a minimum CGPA of 8.0 or not less than 75% for General /OBC
		IC Engine (Performance, Emission and Combustion), Utilization of Bio fuels, Combustion of Alternative fuels, Emission control Haptics, Robotics, Multi-bod Dynamics, Fault tolerant Control System, MEMS (modeling and simulation), Direct Methanol Fuel Cells (DMFCs)	Category and for SC/ST minimum CGPA of 7.5 or not less than 70% at BE/B Tech level
		Wear Modeling and Tribology, Nano Lubrication and Materials	
		Smart Structures and Material Characterization, FEM, Production Technology, Welding, Materials Processing, Machining, Optimization and Modeling, Composites, High temperature Tribology	

S. No	Department	Areas of Research	Eligibility Criteria			
6 6			i) 4year BE/B.Tech in Computer Science & Engineering / Information Technology / Electronics Communication Engineering  ii) ME/M.Tech in Computer Science & Engineering/ Information Technology			
			/Electronics & Communication Engineering. with a minimum CGPA of 6.5 or not less than 60% for General/OBC Category and for SC/ST minimum CGPA of 6.0 Or not less than 55% marks at Master's level.			
7	Metallurgy and Materials Science	Physical Metallurgy, Mechanical Metallurgy, Fly Ash, Corrosion Engineering, Process Metallurgy.	ME/M.Tech in relevant field of Engineering with a minimum CGPA of 6.5 or not less than 60% for General/OBC Category and for SC/ST/PWD minimum CGPA of 6.0 Or not less than 55% marks at Master's level or any other equivalent qualification recognized by the Institute.			
8	Information Technology	Wireless sensor networks, Internet of things, Cloud computing, Data Analytics, Artificial intelligence/ Machine learning	i) 4year BE/B.Tech in Computer Science & Engineering/Information Technology/Electronics & Communication Engineering / Computer Science  ii) ME/M.Tech in Computer Science & Engineering/ Information Technology/ Electronics & Communication Engineering/ Computer Science with a minimum CGPA of 6.5 or not less than 60% for General/OBC Category and for SC/ST minimum CGPA of 6.0 Or not less than 55% marks at Master's level			

S. No	Department	Areas of Research	Eligibility Criteria
9	Mathematics	Operation Research/ Statistics	Masters Degree in relevant field of Science with NET/GATE Qualification and a minimum CGPA of 6.5 or not less than 60% marks for General /OBC Category and for SC/ST minimum CGPA of 6.0 Or not less than 55% marks at Master's level or any other equivalent qualification recognized by the Institute.
10	Physics	Nanotechnology, condensed matter physics, Renewable energy, high energy physics, nanomaterials / material science	Masters Degree in relevant field of Science with NET/GATE/ JEST Qualification and a minimum CGPA of 6.5 or not less than 60% marks for General/OBC Category and for SC/ST/PWD minimum CGPA of 6.0 Or not less than 55% marks at Master's level or any other equivalent qualification recognized by the Institute.
11	Chemistry	Organic, Inorganic/ Environmental, Physical Chemistry, Material Chemistry, Natural Product Chemistry, Synthetic organic chemistry, Applied Chemistry Catalysis, Analytical Chemistry, Nano materials essential oils, non-linear optics	Masters Degree in relevant field of Science with NET/GATE Qualification and a minimum CGPA of 6.5 or not less than 60% marks for General/OBC Category and for SC/ST/PWD minimum CGPA of 6.0 Or not less than 55% marks at Master's level or any other equivalent qualification recognized by the Institute.

### Relevant Degrees for Chemical Engineering

Degree	Description				
	Chemistry (Organic/Physical/Inorganic/Analytical/Industrial etc.) Pharmaceutical Science or Pharmaceutical Engineering				
M.Sc.	or Pharmacy				
	Food Science or Food Engineering				
	Biotechnology or Biochemistry				
	Environmental Science or Environmental Engineering				
	Civil Engineering				
	Metallurgy or Metallurgical and Materials Engineering				
	Mechanical Engineering				
B.Tech./ M.Tech.	Agriculture Engineering				
D. Tech./ W. Tech.	Chemical Engineering				
	Biochemical Engineering				
	Petroleum Engineering				
	Petrochemical Engineering				

The candidates who have passed their M. Tech. through NIT Srinagar under sponsored category in and after the year 2016 are not eligible to apply.

## **Admission Categories:**

#### • Full Time:

Fellowship Sponsored

#### • Part Time:

Sponsored

#### • Admission Procedure:

The selection of candidates will be made on the basis of merit in written test and by the Institute.

#### • Important Dates:

Activation of Link for filling online applications = 15-12-2018 Last date to submit application forms = 05-01-2019

## Hostel accommodation will be provided subject to availability.

#### Documents to be uploaded along with application:

- 1. Matriculation Certificate for verification of Date of Birth
- 2. B. Tech/B. E Degree and Marks Sheet
- 3. M.Tech./M.E. Degree and Marks Sheet.
- 4. GATE/NET /JEST score card
- 5. Migration Certificate (in case a student coming from other University/Institute).
- 6. No Objection cum Service Certificate from the employer (in case of in-service candidates) (The format may be downloaded from Institute website)
- 7. Schedule Caste/Schedule Tribe/Physically Handicapped Certificate/OBC (NCL) certificate.
- 8. Nature of employment, Research experience, publication and other related details.

# Sponsored Full Time/Part Time candidates must produce the following documents at the time of Enrolment.

- a) No Objection Certificate & Sponsorship Certificate from the employer.
- b) Proof of 02 years regular services
- c) Deputation order from employer for 06 months from start of enrolment for completing course work for part time candidates.
- d) Internal faculty and Institute candidates will be exempted from any test and deputation order by this Institute

The candidates have to apply online using the link **nitsriadmission.mastersofterp.in** Candidates are required to pay application processing fee in the form of Demand Draft for Rs: 400/= (in case of SC/ST candidates Rs: 200/ only) drawn in favor of Director, NIT Srinagar, payable at Srinagar by or before 05-01-2019. The D.D. details should be uploaded along with the application form and the original D.D. submitted at the time of written test.

Applications will be screened by concerned Departments and list of eligible candidates will be put on website <a href="www.nitsri.ac.in">www.nitsri.ac.in</a> All announcements related to admissions will be made through our website. All candidates are advised to keep in touch with the website till the process of enrolment is complete.

Sd/-(Prof. (Dr.) Kowsar Majid) Dean Academic Affairs

No.NIT/DAA/M. Phil / Ph. D/2018/1084

Dated: 13-12-2018

#### Copy for information and n/a to:

- 1. All Deans, National Institute of Technology Srinagar.
- 2. All Heads of the Department, National Institute of Technology Srinagar.
- 3. Coordinator, NIT Camp Classes, Old University Campus, Canal Road, Jammu
- 4. Registrar, National Institute of Technology Srinagar
- 5. Dy. Registrar (Accounts), National Institute of Technology Srinagar.
- 6. Controller of Examinations, National Institute of Technology Srinagar
- 7. Officer Incharge web is requested to please direct the concerned to upload the above advertisement Notice along with application form on the Institute website
- 8. PA to Director, NIT Srinagar for kind information of the Director Pl.
- 9. Advertisement Notice File for record and reference.

#### NATIONAL INSTITUTE OF TECHNOLOGY SRINAGAR J&K SRINAGAR

# CHOICE FORM FOR

### M.Phil/Ph.D Enrolment for the Session Spring 2019

an applicant for Enrolment to M.Phil/Ph.D Programme in the Department of appearing under Roll No of the ereby give my choice of research areas and corresponding supervisors in the order of their priority sunder:-							
Research Area	Name of the Supervisor	Preference No.					

Signature of Candidate Date:

#### Note:

- 1. Students are advised to fill in the details after visiting the website of the concerned department. Information regarding availability of different Research areas, prospective supervisors and Research developments in the department/Institute can be obtained by visiting website of the department concerned.
- 2. Students are advised not to leave any column unfilled.
- 3. Choice form will be submitted by candidates online.
- 4. Choice form once filled cannot be changed.

# **Annexure IV**

Final Ph. D Slot Position available for advertisement for session Spring-2019

Department	OP	OP (PWD)	SC	SC (PWD	ST	ST (PWD	ОВС	OBC (PWD)	Total
Civil Engg.	1	1	3	1	1	0	5	0	12
Mechanical Engg.	2	0	1	0	1	0	4	0	8
Electrical Engg.	1	0	1	0	0	0	2	1	5
Electronics & Communication Engg.	1	0	2	0	2	0	3	0	8
Chemical Engg.	2	0	2	0	1	0	4	1	10
Metallurgical & Materials Engg.	1	0	1	0	0	0	1	1	4
Information Technology	0	0	1	0	0	0	1	0	2
Computer Science& Engg.	1	0	1	0	1	0	1	0	4
Physics	3	1	3	0	0	0	3	2	12
Chemistry	2	1	3	0	0	0	4	2	12
Mathematics	3	0	1	0	1	0	1	0	6
Total	17	3	19	01	07	0	29	07	83