

# ADMISSION TO Ph.D. PROGRAMMES (January 2019 Session)

*Information Brochure*





**NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI-620015  
TAMILNADU  
ADMISSION TO Ph.D. PROGRAMMES 2018 - 2019 (January 2019 Session)**

**Ph.D. Programme (Full Time)**

**A. ELIGIBILITY AND ACADEMIC REQUIREMENTS**

**I. Faculty of Engineering**

Bachelor's and Master's / M.S. (by Research) degree in Engineering / Technology in the appropriate branch of study with 60% (or above) aggregate marks (CGPA  $\geq$  6.5/10) in UG and PG for admission under OC / OBC-NCL category and 55% aggregate (or above) marks or equivalent CGPA of  $\geq$  6.0 for SC / ST / PwD candidates.

**For Metallurgical and Materials Engineering Department**

Candidates with PG degree in Science (Physics / Chemistry / Material Science/ Applied Science / Applied Physics / Applied Chemistry) followed by M.Tech. Degree / M.S (by Research) in Material Science and Engineering / equivalent PG degree in related discipline are also eligible to apply.

**For Civil Engineering department**

Candidates with B.E. / B.Tech. or M.E. / M.Tech. with any specialization offered by Civil Engineering Department are also eligible to apply.

**For CECASE (Part time only)**

Candidates with M.E. / M.Tech. in Metallurgical Engineering, Materials Science & Engineering, Welding Engineering, Industrial Metallurgy, Mechanical Engineering, Thermal Engineering, Manufacturing, Design, Automobile Engineering, Aeronautical Engineering, Nano Science & Nano Technology, Chemical Engineering, Electrical Engineering, Electronics Engineering, Instrumentation and Control Engineering or any other equivalent degree are eligible to apply.

**II. Faculty of Architecture**

Bachelor's degree in Architecture / Planning and Master's degree in Architecture / Design / Planning / Building Engineering and Management / Building Technology or its equivalent with 60% (or above) aggregate marks (CGPA  $\geq$  6.5/10) in UG and PG for admission under OC / OBC-NCL category and 55% aggregate (or above) marks or equivalent CGPA of  $\geq$  6.0 for SC / ST / PwD candidates.

**III. Management Studies**

Master's degree in Business Administration with a valid score in NET / UGC / CAT / ATMA / XAT / MAT or Master's degree in Industrial Engineering / Industrial Management with 60% (or above) aggregate marks (CGPA  $\geq$  6.5/10) in UG and PG for admission under OC / OBC-NCL category and 55% aggregate (or above) marks or equivalent CGPA of  $\geq$  6.0 is the eligibility for SC / ST / PwD candidates.

Candidates with the above eligibility requirements and JRF or equivalent fellowships may also apply.

#### **IV. Computer Applications**

Master's degree in Computer Applications or M.Sc. (Computer Science / OR&CA) with a valid GATE / NET / UGC / CSIR / NBHM score with 60% (or above) aggregate marks (CGPA  $\geq$  6.5/10) in UG and PG for admission under OC / OBC - NCL category and 55% aggregate (or above) marks or equivalent CGPA of  $\geq$  6.0 for SC / ST / PwD candidates with a valid score in GATE / UGC / CSIR / NBHM.

Master's degree (M.E. / M.Tech.) in Computer Science and Engineering with 60% (or above) aggregate marks (CGPA  $\geq$  6.5/10) in UG and PG for admission under OC / OBC-NCL category and 55% aggregate (or above) marks or equivalent CGPA of  $\geq$  6.0 for SC / ST / PwD candidates.

#### **V. Faculty of Science & Humanities (Maths / Chemistry)**

Master's degree in the relevant discipline of Science with 60% (or above) aggregate marks (CGPA  $\geq$  6.5/10) in UG and PG and a valid GATE / UGC / CSIR / NBHM / NET score for admission under OC / OBC-NCL category and 55% aggregate (or above) marks or equivalent CGPA of  $\geq$  6.0 for SC / ST / PwD candidates and a valid GATE / UGC / CSIR / NBHM / NET score.

#### **For Humanities and Social Sciences**

Master's degree in the relevant discipline of Humanities / Social Science / Economics / Business Administration / Commerce / Statistics with a valid score in UGC / NET / CAT / AIMA / XAT / MAT and a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 in UG and PG for admission under OC / OBC-NCL category or a minimum of 55% aggregate marks or equivalent CGPA of 6.0/10 in UG and PG for admission under SC / ST / PwD category.

Master's degree (M.E./M.Tech.) in Engineering with a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 in UG and PG for admission under OC / OBC-NCL category or a minimum of 55% aggregate marks or equivalent CGPA of 6.0/10 in UG and PG for admission under SC / ST / PwD category

#### **For Physics Department**

Master's degree in Physics / Applied Physics / Materials Science / Applied Electronics with a minimum of 60% (or above) aggregate marks or equivalent CGPA of  $\geq$  6.5/10 in UG and PG with a valid GATE / UGC/ CSIR / NET score for admission under OC / OBC-NCL category and 55% (or above) aggregate marks or equivalent CGPA of  $\geq$  6.0/10 for SC / ST / PwD candidates with a valid GATE / UGC / CSIR / NET score.

(or)

M.Tech. in Non Destructive Testing with 60% (or above) aggregate marks or equivalent CGPA of  $\geq$  6.5/10 for admission under OC / OBC-NCL category and 55% (or above) aggregate marks or equivalent CGPA of  $\geq$  6.0/10 for SC / ST / PwD candidates.

In case of AMIE / AMIIM candidates, a minimum of 55% is eligible for admission in all the branches.

## B. ADMISSION CATEGORIES

1. There are three categories of admission under Ph.D. (Full Time).

### 1.1 Ph.D. (Full Time) - Stipendiary Category

Half Time Research Assistantship (HTRA) is available to full time scholars who are admitted to Ph.D. programmes in different departments subject to the availability as stipulated by Ministry of Human Resources Development. The award and renewal of the assistantship / scholarship is as per the guidelines issued by MHRD, from time to time. The recipients of HTRA are required to assist the department in academic works to a minimum of 8 hours per week. The assistantship / scholarship will not be available for sponsored candidates or to scholars getting financial support from any private agency or other agencies under state or central governments.

The fellowships are available in the following departments. The areas of specialization for Ph.D.

Departments	OC	OBC	SC	ST	Total
Architecture	-	1	1	-	2
Chemical	1	-	-	1	2
Chemistry	-	-	1	-	1
Computer Applications	-	1(PwD)	-	-	1
Computer Science & Engineering	-	-	1(PwD)	-	1
Electronics & Communication Engineering	1(PwD)	-	-	-	1
Energy & Environment Engineering	-	-	-	1	1
Humanities & Social Sciences	-	1	1	-	2
Instrumentation & Control Engineering	-	1	-	-	1
Management Studies	1+1(PwD)	1	-	-	3
Mathematics	1	1	-	1	3
Mechanical Engineering	-	1	-	-	1
Physics	-	1	-	-	1
<b>Total</b>	<b>3+2(PwD)</b>	<b>7+1(PwD)</b>	<b>3+1(PwD)</b>	<b>3</b>	<b>20</b>

**Reservation:** Government of India reservation policy will be followed for OBC-NCL / SC / ST and the Persons with Disabilities (PwD) Candidates. In the absence of application from PwD candidates, the seat reserved for PwD category will be filled by the candidate(s) who belong to the same category (without PwD).

Candidates having their own fellowships from funding agencies such as DST, CSIR, UGC, NBHM, etc. can apply for Ph.D. (full time) in any department relevant to the research grant.

### 1.2 Ph.D. (Full Time) - Project category

The applicants working under sponsored project at NIT-T should submit their application online, irrespective of the vacancy position. However, the selection procedure shall remain the same.

### 1.3 Ph.D. (Full Time) - Non-Stipendiary Category

In the departments of Science and Humanities, non GATE / UGC / CSIR / NBHM / NET candidates will also be considered for admission on non-stipendiary basis.

## 2. Ph.D. Programme (Part time – External / On campus categories)

Part-time Ph.D. programme is offered by all the departments and CECASE for working professionals from Govt. R&D Organizations / Public sector / Industries / National Research laboratories and for faculty members from Govt. / Govt. Aided / private Engineering / Science and Arts Colleges / Universities. There shall be two broad categories for the candidates seeking to pursue part time Ph.D. at NITT. The categories are:

**2.1 Part-time (External):** Candidates working in industries of repute / organizations having R&D facilities, Govt. R&D Departments / National Research Laboratories / Units of Government / Quasi Government / Public sector are considered under this category. The candidates must be **officially sponsored** by their employing organization. A candidate working in an establishment which is equipped with the **necessary research and library facilities** only shall be considered for admission under this category. A committee appointed by the Director (consisting of Dean Academic, Dean-R&C and Head of the Department) in addition to members of Departmental Research Committee (DRC) shall assess the adequacy of these facilities before recognizing the organization for the above purpose.

At the time of admission, the employer must expressly undertake to pay full salary to the candidate and relieve him / her to complete his / her residential requirement. A candidate applying for admission to the external registration programme must provide detailed information about the research facilities available at his / her organization and a certificate from the employer / Supervisor that these would be available to him / her for carrying out research. He/she should also provide the bio-data of the prospective supervisor (External guide) or Research Coordinator who would supervise/ co-ordinate the candidate's work at his/her organization.

**2.2 Part-time (on Campus)** Regular / Full-time teachers/employees working in Govt. / Govt. aided / private Engineering / Technical institutions or Science and Arts Colleges / Universities / industry / public sector are considered under this category. At the time of admission, the candidate must submit a “**no objection**” certificate from the Parent institute / organization to relieve him/her to complete his/her residential requirement. The candidate should have **at least three years** experience in a regular / permanent position at the time of application.

### 2.3 Selection Procedure

**For both categories, the mode and norms for selection shall be on par with those in force for full-time Ph.D. candidates.** Following the scrutiny and short-listing of the applications, eligible candidates will be called to attend a written test. The candidates, short listed based on the written test performance need to appear for a technical and personal interview by the Departmental Research Committee comprising HoD, all eligible Supervisors and the Dean's nominee (observer).

### 2.4 Duration of the Programme

The duration of the programme and the time for submission of the thesis are counted from the date of provisional registration. The minimum duration of the Part-time Ph.D. Programme shall be three years for both categories (External and On campus). This implies that a candidate can

submit the synopsis (duly satisfying other academic requirements) only after a minimum period of study of 36 months from the date of registration. The maximum period to complete the part-time Ph.D. Programme is 7 years.

Hostel accommodation may be provided subjected to availability.

## 2.5 Place of research work

The candidates admitted under external category will normally carry out part or all of his / her research work in their respective industry / organization / national laboratories, employing the scholar. For these scholars, there will be two guides, one internal guide from NIT Trichy and one external guide / Co-supervisor from his / her place of work.

For the candidates admitted under “on campus” category, the place of work is NITT even though he/she may be carrying out a part of research work in his/her College / Institution. For these scholars, NITT faculty shall be the internal (principal) guide. External guide, if any shall be from the industry only.

## 2.6 Course work / Residential requirement

The minimum residential requirement for candidates under “external” category for undertaking course work is eight weeks. Four relevant theory courses at Master’s degree level (as recommended by the DC) shall be taken by the scholar. The candidates may complete the course work during their mandatory stay of at least eight weeks which may be undertaken in maximum of four instances of two weeks each. The research scholars are permitted to undertake the course work under “directed study” mode. The course work shall be completed within one and half years of provisional registration in the programme. Subsequent to the completion of course work, they can continue their research work in their respective industry/ institution. However, the scholar shall spend at least one week per semester in the NIT-T campus until the submission of synopsis.

For the candidates under on campus category, the minimum residential requirement is one semester. Four relevant theory courses at Master’s degree level (as recommended by the DC) shall be taken by the scholar. Normally, the course work shall be undertaken during the residential period of one semester itself. The requirements relating to course work will be as per norms of fulltime scholars. Subsequently, the scholars shall continue their research work on a part-time basis, through regular interaction with the guide. The scholar (both external and on campus categories) shall spend at least one week per semester in the NIT-T campus until the submission of synopsis.

**Note: Any faculty or staff members of the institute (NIT-Trichy) seeking admission to part time Ph.D. program should submit the hard copy of completed online application through Proper Channel. However, the selection procedure shall remain the same as cited above.**

## C. SELECTION PROCEDURE

S.No.	Name of Programme	Category	Mode of Selection
1	Ph.D.	Full time / Part time	Written Test & Interview

The detailed Ph.D. Regulations are available at:

<http://www.nitt.edu/home/academics/rules/PhD-regulations.pdf>

#### D. HOW TO APPLY?

Candidates applying for Ph.D. programme must apply online through the web site [www.nitt.edu](http://www.nitt.edu) or [admission.nitt.edu](http://admission.nitt.edu). The information brochure is available in the website. The application fee is Rs. 500/- for OC/OBC-NCL and Rs. 200/- for SC/ST/PwD candidates. The fee payment should be made only through State Bank collect mode

(<https://www.onlinesbi.com/prelogin/icollecthome.htm?corpID=88587>).

The last date for submission of application is 31-10-2018.

#### E. ENTRANCE TEST and INTERVIEW (Tentative Dates)

Programme	Activity	Date	Time
Ph.D.	Written Test	26-11-2018	9.30 a.m. to 12.30 p.m
			2.00 p.m to 5.00 p.m*
	Interview (for Shortlisted Candidates only)	26-11-2018 27-11-2018	2.00 p.m. onwards 9.30 a.m. onwards

\*2.00 p.m for the Departments of Mechanical Engineering, Instrumentation & Control Engineering and Computer Applications only

For further queries, contact:

The Chairperson (MS and PhD Admissions)  
Academic Office  
National Institute of Technology  
Tiruchirappalli – 620015, Tamil Nadu.

Phone: +91 431 2503011, 2503309

E-mail: [phdsection@nitt.edu](mailto:phdsection@nitt.edu)

**LAST DATE FOR SUBMITTING ONLINE APPLICATION IS 31-10-2018**

**Sponsorship Certificate**

(To be submitted in the Official Letter Head by the Ph.D. External Registration Candidates)

The application from Mr./Ms. .... working as..... in ..... since ..... is herewith recommended and forwarded for admission under External Registration Scheme for part time Ph.D. Program in the Department of ....., **National Institute of Technology, Tiruchirappalli**

Certified that:

1. Our organization has adequate facilities for carrying out the research as indicated by the applicant and if he/she is selected, these will be made available to him/her till the completion of the programme.
2. The applicant will be deputed/given leave for duration of his/her residence period at NIT, Tiruchirappalli.
3. Facilities will be made available to the Supervisor (External Guide) to supervise the work of the applicant and to attend the DC meetings at NIT, Tiruchirappalli, when necessary.
4. Till the completion of his/her research programme, the applicant will not ordinarily be transferred to another unit or place which may impede his/her work under the scheme. If such a transfer is necessary, NIT, Tiruchirappalli will be informed atleast before one month of such transfer order.
5. No part of the work carried out in fulfillment of the Research programme will be utilized commercially or for applying for a Patent without the approval of **National Institute of Technology, Tiruchirappalli**

Date:

Signature of the Sponsoring Authority

Name and Designation

Seal of the organization/ Institution

Postal address of the Organization/ Institution:



**Certificate from the External guide/ Research coordinator**

**(To be submitted by the Ph.D. External Registration Candidates)**

This is to state that in the event of Mr./ Ms. .... of this organization being selected for part time Ph.D. programme in the Department of ..... under the External Registration Scheme of NIT, Tiruchirappalli, I agree to be his/her External Guide / Research coordinator and shall extend all possible guidance and access to the following facilities to enable him/her to carry out his/her research programme towards the submission of thesis.

**\*Particulars of Prospective External Guide/Research Coordinator:**

(1) Name of proposed External Guide / Research coordinator (In Block letters):

(2) Designation:

(3) Academic qualifications of External Guide /Research coordinator:

(4) Experience (No. of Years):

(5) No. of Publications with details:

(6) Membership in Professional Societies:

**Research Facilities (relevant to area of research only) Available: (To be listed here)**

**Date:**

**Signature of the External Guide/Research Coordinator**

**Name and Designation**

**Seal of the organization**

\*The external guide should have a Ph.D. degree and a minimum of 2 papers in refereed journals. The research coordinator should have a PG degree with atleast ten years of experience.

**No Objection Certificate from the Employing Organization**

(To be submitted in the Official Letter Head by Ph.D. Part time - On campus candidates)

The applicant ..... working as .....in.....since ..... is herewith recommended and forwarded for admission under Part time on campus scheme for Ph.D. programme in the Department of ..... National Institute of Technology, Tiruchirappalli

1. We note that facilities of the NIT, Tiruchirappalli will be made available to him/ her for carrying out the research work under the supervision of a guide and he/ she has to pay full fees every semester for the use of laboratory, library and other facilities of the Institute.
2. The research facilities available in our organisation will also be accessible to him/ her in the case of selection.
3. The applicant will be deputed/given leave for duration of his/her residence period at NIT, Tiruchirappalli.
4. Till the completion of his/her research programme, the applicant will not ordinarily be transferred to another unit or place which may impede his/her work under the scheme. If such a transfer is necessary, NIT, Tiruchirappalli will be informed atleast before one month of such transfer order.
5. No part of the work carried out in fulfillment of the Research programme will be utilized commercially or for applying for a Patent without the approval of **National Institute of Technology, Tiruchirappalli.**

Date:

**Signature of the Sponsoring Authority  
Name and Designation**

**Seal of the organization/ Institution**

**Postal address of the Organization/ Institution**



**ANNEXURE – I**  
**AREA OF SPECIALIZATION**

S.No	Department	Specializations
1	Architecture	Architecture (General / Any specialization), Building Technology and Construction Management, City Planning/ Town & Country Planning, Fine Arts (Painting), Landscape Architecture and any emerging area of specialization related to its discipline.
2	Chemical Engineering	Bio-Chemical Engineering / Biotechnology, Computer Aided Design, Electrochemical Engineering, Nano Technology / Membranes / Ionic Liquids / Advanced Material Synthesis, Particle Technology, Polymer Engineering, Process Control, Process Systems Engineering, Reaction Engineering, Thermodynamics, Transfer Operations, Waste Water Treatment, Separation Process and any emerging area of specialization related to its discipline.
3	Chemistry	Analytical Chemistry, Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Fuel cell, Supercapacitors, Conducting Polymers and Composites, Solar Selective Coatings, Electrode Kinetics, Computational Chemistry, Nanoscience, Sonochemistry, Photochemistry, Photocalalysis, Electrochemical Storage Systems, Solar Cells, Sensors, Corrosion, Chemosensors, Bioinorganic Chemistry and any emerging area of specialization related to its discipline.
4	Civil Engineering	Construction Engineering, Environmental Engineering, Geotechnical Engineering, Remote Sensing, Structural Engineering, Transportation Engineering, Water resources, Hydraulics & Ocean Engineering.
5	Computer Applications	Big Data Analytics, Bioinformatics, Cloud Computing, Computational Optimization, Computer Networks, Cryptography, Data Base Management Systems, Data Compression, Data Mining, Distributed Systems, DNA Computing, Graph Theory and Algorithms, Information Extraction, Information Retrieval, Information Security, Membrane Computing, Multimedia Computation, Parallel Computing, Software Engineering, Text Analytics, Theory of Computing and Web Technology.
6	Computer Science and Engineering	Algorithms and Graph Theory, Computer Architecture/Computer hardware, Computer Networks and Network Security, Databases and Data mining, Operating Systems and Cloud Computing, Speech and Vision, Theoretical Computer Science, VLSI design, Web Informatics and Web Technology, Wireless Networks, Cryptography, Image Processing & Image Security and any emerging area of specialization related to CSE discipline.
7	Energy and Environment	Energy Engineering, Environmental Engineering and any emerging area of specialization related to its discipline.
8	Electronics and Communication Engineering	Substrate Integrated Waveguide (SIW), Microwave Integrated Circuits, Wireless Communication, Mobile Communication, Digital VLSI, Embedded Systems, Electronic packaging, Microwave Engineering, Networking, Antennas, Optical Communication, RFMEMS, Signal and Image Processing, VLSI, Photonics, Pattern recognition and Computational Intelligence, and any emerging areas of specialization related to its discipline

9	Electrical and Electronics Engineering	Applied Electronics, Wireless Sensor networks and Knowledge Management, Control and Instrumentation Energy Engineering, High Voltage Engineering, Power Electronics / Power Electronics & Drives / Electrical Drives & Control / Electrical Machines, Power Systems, VLSI Systems and any emerging area of specialization related to its discipline.
10	Humanities and Social Sciences	<b>English:</b> English Literature, American Literature, Indian Writing in English, Commonwealth Literature, English Language Teaching, Linguistics, Any emerging area of specialization related to its discipline. <b>Economics:</b> Economics, Entrepreneurship Development, Financial Economics, Industrial Economics, Labour Economics Any Emerging area of specialization related to its discipline (like Development Studies, Commerce and Statistics. Subject to approval by the Senate)
11	Instrumentation and Control Engineering	Control (all sub-fields included), Instrumentation (all sub-fields included) and any emerging area of specialization related to Instrumentation and Control Engineering.
12	Management Studies	Finance, General Management, Human Resources, Information Systems, Marketing Operations, Technology Management, Any emerging area of specialization related to its discipline.
13	Mathematics	Applied Mathematics, Computational Fluid Dynamics, Fuzzy Dynamics, Fuzzy Logic and its Applications, Numerical Analysis, Operations Research, Bio Fluid Mechanics, Differential Equations and any emerging area specialization related to its discipline.
14	Mechanical Engineering	Absorption, Acoustics and Noise Control, Alternate Fuels, Automobile Engineering, Biomass Combustion and Gasification, Biofuels, Biomechanics, Biomethanation, CAD/CAM, Combustion, Computational Fluid Dynamics, Cryogenics, Design of Experiments, Design of Pressure Vessel and Piping, Dynamics, Electronic Cooling, Energy Conservation and Management, Energy and Sustainable Development, Environmental Pollution Control, Ergonomics, FEM, Fluid Mechanics, Fluid Power Systems and Control, Heat Pumps, Heat Transfer, IC Engines, Industrial Safety Engineering, Laser Materials Processing, Machine Design, Mechanical Properties of Materials, Mechanisms, Mechatronics, Micro Electro-Mechanical Systems (MEMS), Mixture Design, Modeling & Simulation, Nano-Additives, Nanomaterials and Composites, Occupational Health and Safety, Optimization and Design, Polymer Nanocomposites, Product Safety, Refrigeration and Air Conditioning, Renewable Energy, Reuse and Recycling, Risk Analysis, Robotics, Solar Energy Applications, Stress Analysis of Machine Elements, Total Quality Management, Tribology, Turbomachines, Turbulence, Vehicle Crashworthiness and Occupant Safety, Vibrational Analysis, Waste Management, Welding, Wind and any emerging area specialization related to Mechanical Engineering.
15	Metallurgical and Materials Engineering	Bio-materials, Ceramic Materials, Composite Materials, Computational materials science, Corrosion, Electro – chemistry, Failure Analysis, Foundry Technology, Fuel Cells, Iron making and Steel making, Joining of Materials, Material Characterization, Materials Processing, Mechanical Behaviors of Materials, Metal Casting, Metal Forming, Mineral Processing, Nano-materials, Non Destructive testing, Non-ferrous extraction, Non-metallic materials, Physical Metallurgy, Polymers, Powder Metallurgy, Process Metallurgy / Extractive Metallurgy, Process Modeling, Simulation, Structure Property Correlations, Surface Engineering, Welding and any emerging area of specialization related to its discipline.

16	Physics	Fiber Optic Sensors, Laser Spectroscopy, Materials Science, Nano Materials, Carbon Nanotubes, Graphene And Graphene Oxides, Carbon Nanocomposites, Transparent Conducting Materials And Devices, Gas Sensors, Polymer Nanocomposites, Ferrofluids/Nanofluids, Thin Films, Graphene like 2D-Materials, Photonics, Quantum Computation and Information, Strongly Correlated Electron Systems, Nanophotonics And Raman Spectroscopy, Biomaterials, Theoretical Condensed Matter Physics and any emerging area specialization related to its discipline..
17	Production Engineering	Casting/Welding/Manufacturing Technology Flexible Manufacturing/Computer Integrated Manufacturing, Human Factor Engineering/ Ergonomics, Machine Tools and Tool Engineering, Machining /Micromachining, Material Handling Systems, Metal Forming Technology, Nontraditional Material Processing/Composite Materials Processing, Quality and Reliability Engineering, Rapid Prototyping/Rapid Manufacturing, Robotics/ Mechatronics, Supply Chain Management/Operations Management/Industrial Engineering, Tribology and Surface Engineering and any emerging area of specialization related to its discipline.
18	CECASE	Basic and Applied Aspects of Corrosion Science and Engineering, Basic and Applied Aspects of Surface Science and Engineering, Surface Catalysis, Spectroscopy and Sensors, Engineering and Industrial Tribology, Lubrication, Industrial Coatings, Thermal Spray, Laser Surface Engineering, Weldment Corrosion & its Control, Corrosion Inhibition, Castings, Development of New Materials, Coatings for High Temperature Applications, Nano Materials, Nano Composite Coatings, Solid State Joining, Process Control and Instrumentation, Electro Chemical Engineering – as applicable to Railways, Power Plants, Process Industries, Petro Chemical Plants, Naval / Marine, Mining, Paper and Pulp, Automobile and all their allied industries.

# ADMISSION TO M.S. (by research) PROGRAMMES (January 2019 Session)

*Information Brochure*





## NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI: TAMILNADU

### ADMISSION TO M.S. (by Research) PROGRAMMES 2018- 2019 (January 2019 Session)

#### M.S. (by Research) Programme (Full time / Sponsored)

All branches of Engineering.

#### 1. Full time

##### A. ELIGIBILITY FOR ADMISSION TO M.S. (by Research)

Candidates for admission to M.S. (by Research) degree programme shall be required to have 60 percentage (or above) of aggregate marks or  $\geq 6.5$  CGPA (for OC / OBC-NCL) in the B.E. / B.Tech. degree and a valid GATE SCORE in the appropriate subject. In case of SC / ST / PwD candidates the eligibility requirement is 55% (or above) aggregate marks or equivalent CGPA of  $\geq 6.0$  and a valid GATE SCORE in the appropriate subject.

In case of AMIE/AMIIM candidates, minimum mark of 55% in the qualifying degree is eligible for admission in all branches.

##### B. FINANCIAL ASSISTANCE

Half Time Research Assistantship (HTRA) is available to those who are admitted to full time M.S. (by Research) programmes in different departments subject to the availability as stipulated by Ministry of Human Resources Development.

The award and renewal of this assistantship / scholarship is as per the guidelines issued by MHRD from time to time. Those who are receiving the assistantship are required to assist the department in academic works to a minimum of 8 hours per week. As per rules in force, those who are interested in getting the assistantship / scholarship, have to give an undertaking on stamped paper to the effect that they will not discontinue the course before completion. The assistantship / scholarship will not be available to sponsored candidates or any student getting any other financial support from any agency, state or central government.

The fellowships are available in the following departments,

Department	OC	OBC	SC	ST	Total
Chemical Engineering	2	1	-	-	3
Energy & Environment	-	1	-	-	1
Computer Science & Engineering	-	-	-	1	1
Electrical & Electronics Engineering	2	1(PwD)	1	-	4
Electronics & Communication Engineering	1	1	1	-	3
Instrumentation & Control Engineering	2+1(PwD)	1	-	-	4
Mechanical Engineering	-	1	1	1	3
Metallurgical & Materials Engineering	2	-	-	-	2
Production Engineering	-	1	1	-	2
Physics (NDT)	1	-	-	-	1
<b>Total</b>	<b>10+1(PwD)</b>	<b>6+1(PwD)</b>	<b>4</b>	<b>2</b>	<b>24</b>



**Reservation:** Government of India reservation policy will be followed for OBC-NCL / SC / ST and the Persons with Disabilities (PwD) Candidates. In the absence of application from PwD candidates, the seat reserved for PwD category will be filled by the candidate(s) who belong to the same category (without PwD).

## 2. M.S. (by Research) Programme (Sponsored)

All branches of Engineering and Centre of Excellence in Corrosion & Surface Engineering. Hostel accommodation is provided subjected to availability.

### C. Norms for Sponsored (Candidates)

Candidates from organizations with R & D Labs of national repute and public sector undertakings such as DRDO, ISRO, IGCAR, BHEL, BEL, NLC etc., are eligible to apply. Such candidates may have an External guide from their parent organization in addition to the Internal Guide. External Guide should have at least a PG qualification with research contribution.

### D. SELECTION

Sl. No.	Name of the Programme	Category	Mode of Selection
1	M.S.	Stipendiary	GATE score*
2	M.S.	Sponsored	Interview

\* GATE Examination paper should be in their UG discipline

The detailed regulations for M.S. (By Research) are available at: <http://www.nitt.edu/home/academics/rules/MS.pdf>

### E. How to apply?

Candidates applying for M.S.(by Research) programme must apply online [www.nitt.edu](http://www.nitt.edu) or [admission.nitt.edu](http://admission.nitt.edu) The information brochure is available in the website. The application fee is Rs.500/- for OC/OBC-NCL and Rs.200/- for SC/ST/PwD candidates.

The fee payment should be made only through State Bank collect mode (<https://www.onlinesbi.com/prelogin/icollecthome.htm?corpID=88587>). The last date for submission of application is 31-10-2018.

### F. COUNSELING and INTERVIEW (Tentative Dates)

Programme	Category	Date	Time	Activity
M.S.	Stipendiary	28-11-2018	10.30 a.m.	Counselling
M.S	Sponsored	28-11-2018	10.30 a.m.	Interview

#### For any queries, contact:

The Chairperson (MS and PhD Admissions)  
Academic Office  
National Institute of Technology  
Tiruchirappalli- 620015. Tamil Nadu.  
Phone: +91 431 2503011, 2503309  
E-mail: [phdsection@nitt.edu](mailto:phdsection@nitt.edu)

**LAST DATE FOR SUBMITTING ONLINE APPLICATION IS 31-10-2018**

**Sponsorship Certificate**

(In official letter head)

The applicant Mr. / Ms. \_\_\_\_\_ is employed as \_\_\_\_\_ in our Institute / organization since \_\_\_\_\_

He / She is sponsored to pursue M.S. (by research) in the department of \_\_\_\_\_, National Institute of Technology, Tiruchirappalli. He / She will be relieved from his/her duty during the programme, if selected.

Name and address of the Sponsoring authority:

Signature of the Head of the Organization

Seal of Sponsoring Institution / Organization

Date:

**Prescribed Format for OBC Certificate FORM OF CERTIFICATE TO BE PRODUCED BY  
OTHER BACKWARD CLASSES  
APPLYING FOR APPOINTMENT TO POSTS / ADMISSION TO CENTRAL  
EDUCATIONAL INSTITUTIONS (CEIs), UNDER THE GOVERNMENT OF INDIA**

This is to certify that Shri / Smt. / Kum. \_\_\_\_\_ Son /  
Daughter of Shri / Smt. \_\_\_\_\_ of Village/Town  
\_\_\_\_\_ District/Division \_\_\_\_\_ in the  
\_\_\_\_\_ State belongs to the  
\_\_\_\_\_ Community which is recognized as a backward class under:

- (i) Resolution No. 12011/68/93-BCC(C) dated 10/09/93 published in the Gazette of India Extraordinary Part I Section I No. 186 dated 13/09/93.
- (ii) Resolution No. 12011/9/94-BCC dated 19/10/94 published in the Gazette of India Extraordinary Part I Section I No. 163 dated 20/10/94.
- (iii) Resolution No. 12011/7/95-BCC dated 24/05/95 published in the Gazette of India Extraordinary Part I Section I No. 88 dated 25/05/95.
- (iv) Resolution No. 12011/96/94-BCC dated 9/03/96.
- (v) Resolution No. 12011/44/96-BCC dated 6/12/96 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 11/12/96.
- (vi) Resolution No. 12011/13/97-BCC dated 03/12/97. (vii) Resolution No. 12011/99/94-BCC dated 11/12/97.
- (viii) Resolution No. 12011/68/98-BCC dated 27/10/99.
- (ix) Resolution No. 12011/88/98-BCC dated 6/12/99 published in the Gazette of India Extraordinary Part I Section I No. 270 dated 06/12/99.
- (x) Resolution No. 12011/36/99-BCC dated 04/04/2000 published in the Gazette of India Extraordinary Part I Section I No. 71 dated 04/04/2000.
- (xi) Resolution No. 12011/44/99-BCC dated 21/09/2000 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 21/09/2000.
- (xii) Resolution No. 12015/9/2000-BCC dated 06/09/2001.
- (xiii) Resolution No. 12011/1/2001-BCC dated 19/06/2003.
- (xiv) Resolution No. 12011/4/2002-BCC dated 13/01/2004.
- (xv) Resolution No. 12011/9/2004-BCC dated 16/01/2006 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 16/01/2006.

Shri / Smt. / Kum. \_\_\_\_\_ and / or his family ordinarily reside(s)  
in the \_\_\_\_\_ District / Division of \_\_\_\_\_ State. This is also to certify that  
he/she does not belong to the persons/sections (Creamy Layer) mentioned in Column 3 of the Schedule to the Government of  
India, Department of Personnel & Training O.M. No. 36012/22/93-Estt.(SCT) dated 08/09/93 which is modified vide OM No.  
36033/3/2004 Estt.(Res.) dated 09/03/2004.

Dated: \_\_\_\_\_

District Magistrate / Deputy Commissioner / Competent Authority

Seal

**NOTE:**

(a) The term 'Ordinarily' used here will have the same meaning as in Section 20 of the

(b) The authorities competent to issue Caste Certificates are indicated below:

- (i) District Magistrate / Additional Magistrate / Collector / Deputy Commissioner / Additional Deputy Commissioner / Deputy Collector / Ist Class Stipendiary Magistrate / Sub-Divisional magistrate / Taluka Magistrate / Executive Magistrate / Extra Assistant Commissioner (not below the rank of Ist Class Stipendiary Magistrate).
- (ii) Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate.
- (iii) Revenue Officer not below the rank of Tehsildar' and
- (iv) Sub-Divisional Officer of the area where the candidate and / or his family resides.