ADMISSION TO M.S. (by Research) and Ph.D. PROGRAMMES (January 2016 Session)





NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 620 015, TAMIL NADU



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 620 015, TAMIL NADU

Admission to M.S. (by Research) / Ph.D. Programmes

Applications are invited for admission to M.S. (by Research) / Ph.D. (Full time / Part time) Programmes for the year 2015 – 2016 (January 2016 Session)

Candidates applying for M.S. (by Research) and Ph.D. can apply through the downloaded application available at www.nitt.edu. The information brochure is also available in the website. The filled up application form along with required enclosures and a non-refundable registration fee of Rs.300/- (Rs.100/- for SC/ST/PH) by means of Demand Draft drawn not earlier than 9th November 2015 in favour of "The Director, National Institute of Technology, Tiruchirappalli - 620015" payable at Tiruchirappalli should reach "The Chairperson (M.S./Ph.D. Admissions), Office of the Dean (Academic), National Institute of Technology, Tiruchirappalli - 620015, Tamil Nadu" on or before 11th December 2015 in a sealed cover superscribing "Application for M.S. (by Research) / Ph.D."

DIRECTOR

ADMISSION TO Ph.D. PROGRAMMES

(January 2016 Session)

Information Brochure and Application Form





NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 620 015, TAMIL NADU



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI – 620 015 TAMILNADU

ADMISSION TO Ph.D. PROGRAMMES 2015 – 2016 (January 2016 Session)

Ph.D. Programme (Full time)

A. ELIGIBILITY AND ACADEMIC REQUIREMENTS

I. Faculty of Engineering

Bachelor's and Master's degree / M.S. (by Research) in Engineering / Technology in the appropriate branch of study with a minimum of 60% aggregate marks (CGPA 6.5/10) in UG or PG for admission under OC / OBC category and 55% aggregate marks or equivalent CGPA of 6.0/10 for SC / ST / PH 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 Geomatics, Remote Sensing, Ocean Engineering and Agricultural Engineering in undergraduate or post graduate are also eligible to apply for GIS and Remote sensing specialization.

II. Faculty of Architecture

Bachelors degree in Architecture / Planning and Master's degree in Architecture / Design / Planning / Building Engineering and Management / Building Technology or its equivalent with a minimum of 60% aggregate marks (CGPA 6.5/10) in UG or PG for admission under OC / OBC category and 55% aggregate marks or equivalent CGPA of 6.0/10 for SC / ST / PH candidates.

III. Management Studies

Master's degree in Business Administration with NET / UGC / CAT / ATMA / XAT / MAT or Master's degree in Industrial Engineering / Industrial Management with a minimum of 60% aggregate marks (CGPA 6.5/10) in UG or PG for admission under OC / OBC category and 55% aggregate marks or equivalent CGPA of 6.0/10 for SC / ST / PH candidates.

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

IV. Computer Applications

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

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

V. Faculty of Science & Humanities (Maths / Chemistry / Economics / English)

Master's degree in the relevant discipline of Science / Humanities / Social Science / Economics with a minimum of 60% aggregate marks (CGPA 6.5/10) with a valid GATE / UGC / CSIR / NBHM / NET score for admission under OC / OBC category and 55% aggregate marks or equivalent CGPA of 6.0/10 for SC / ST / PH candidates with a valid GATE / UGC / CSIR / NBHM / NET score.

For Physics Department

Master's degree in Physics / Applied Physics / Material Science / Applied Electronics with a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 with a valid GATE / UGC / CSIR / NET score for admission under OC / OBC category and 55% aggregate marks or equivalent CGPA of 6.0/10 for SC / ST / PH candidates with a valid GATE / UGC / CSIR / NET score.

(or)

M.Tech. in Non Destructive Testing with a minimum of 60% aggregate marks or equivalent CGPA of 6.5/10 for OC / OBC category and 55% aggregate marks or equivalent CGPA of 6.0/10 for SC / ST / PH candidates.

In case of AMIE / AMIIM candidates, 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. Those who would receive the assistantship are required to assist the department in academic works to a minimum of 8 hours per week. As per rules in force, candidates 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 for sponsored candidates or to scholars getting financial support from any private agency, state and central governments.

The fellowships are available in the following departments. The areas of specialization for Ph.D work in various departments are given in the Annexure-I.

Department	Vacancies				
	UR	ОВС	SC	ST	Total
Architecture	1	1	1	-	3
Chemical	1	1	-	-	2
Civil Engineering	1	-	1	1	3
Electrical & Electronics Engineering	-	-	1	-	1
Electronics & Communication Engineering	-	-	-	1	1
Humanities	1	-	1	-	2
Management Studies	-	-	-	1	1
Mathematics	3	1	1	-	5
Total	7	3	5	3	18

In addition to the above, fellowships are available under DeiTy Ph.D. scheme in the **Departments of Electrical & Electronics Engineering (1 No.) and Electronics & Communication Engineering (6 Nos.)**. Candidates belonging to any category, who fulfill the minimum eligibility and academic requirements can apply for Ph.D. in these Departments.

However, candidates can apply for Ph.D. (full time) in any department provided they have their own fellowship from funding agencies such as DST, CSIR, UGC, NBHM, etc.

1.2 Ph.D. (Full time) - Project category

The applicants working under sponsored project at NIT-T should submit their application through Proper Channel, 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 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 NIT-T. The categories are:

2.1 Part-time (External): Candidates working in industries of repute /organization 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 Administrative Council (DAC) 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. The Departments concerned would decide the candidature of the selected candidates after thorough discussion and analysis in Departmental Administrative Council (DAC).

2.3 Selection Procedure

For both the 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.

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 from his / her place of work.

For the candidates admitted under "on campus" category, the place of work is NIT-T even though he / she may be carrying out a part of research work in his / her College / Institution. For these scholars, NIT-T 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.

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 full-time 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: The faculty and staff of NIT-T should submit their application through Proper Channel irrespective of the vacancy position. However, the selection procedure shall remain the same.

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 can apply through the downloaded application form available at www.nitt.edu. The filled up application form along with self-attested photo copies of mark sheets, degree certificates, community certificate, and the necessary enclosures and a non-refundable registration fee of Rs. 300/- (Rs. 100/- for SC / ST / PH) by means of Demand Draft drawn not earlier than 09-11-2015, in favor of "The Director, National Institute of Technology, Tiruchirappalli" payable at Tiruchirappalli' should reach 'The Chairperson(M.S./Ph.D. Admissions), Office of the Dean (Academic), National Institute of Technology, Tiruchirappalli – 620 015, Tamil Nadu' on or before 11-12-2015 in a sealed cover superscribing "Application for Ph.D."

E. NIT-T ENTRANCE TEST and INTERVIEW (Tentative Date)

Programme	Date	Time	Activity
Ph.D.	07-01-2016	10.30 a.m.	Written Test
PII.D.	08-01-2016	10.30 a.m.	Interview (for shortlisted candidates only)

For further queries, contact:

The Chairperson (M.S. and Ph.D. Admissions) Office of the Dean (Academic) National Institute of Technology Tiruchirappalli- 620015, Tamil Nadu.

Phone: +91 431 2503011, 2503636

LAST DATE FOR SUBMITTING THE FILLED IN APPLICATION IS 11-12-2015



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 620 015, TAMIL NADU.



APPLICATION FOR ADMISSION TO Ph.D. PROGRAMME (2015 – 2016)

Registration Number: (for				(for offic	e use only)
Dem	and Draft Details : D.D	. No	Date:	— Г	
Appli	ication category :1. Fu	unt Rs Bank Ill time (Stipendiary / art-time (On campus	Non-Stipendiary)		
*DEPARTMENT					Affix a recent Passport Size Photo (Self-Attested)
	AREA OF RESEARCH				
(USE (CAPITAL LETTERS)				
	Name of the Candidate				
1	Father's / Guardian's / Hu	sband's Name			
1	Date of Birth (DD-MM-YY	YY)		Age:	Years:
	Sex (strike out the inappropria	te)	Male / Female	Marital Sta	atus Married / Single
2	[#] Category (☑ in the approp	riate)	ос	овс	SC ST
3	*Physically Challenged (P (Persons with disability of 40%		YES	NO	
4	Nationality				
	Address for Co	mmunication		Permanent A	Address
5					
	Land Line:		Mobile		
	E-Mail ID:				

[¥] Candidates applying for more than one department should submit separate application form with all enclosures for each Department in a single cover. However, a single registration fee is sufficient. The candidates are required to write their full name on the reverse side of the draft.

6. *Qualifying Degree Particulars		UG	i	PG		
Name of the Degree						
Branch / Specialization						
*Pei	centage of Marks / CGPA					
Class (Honours / Distinction / First / Second)		d)				
Nam	ne of the Institution					
Nam	ne of the University					
Yea	r of Passing					
* Wri	te as ' RA' if results awaiting	<u> </u>	I .			
7	#GATE/NET/NBHM/CSIR/CAT	Score & Rank		Year appeared		
	UGC (if applicable)	Discipline		and validity		
8	Title of P.G. Project					
9	\$Details of publication in refereed journals / proceeding of conferences (Please add separate sheet, if needed)	gs				
10	10 Awards / Prizes / Sports / NCC etc. (Please add separate sheet, if needed)					
11	*Details of Professional Ex	norioneo :				
Name & Address of Employer		Position F	leld	Duration From To		

I do hereby declare that the information furnished in this application are true and correct to the best of my knowledge. If any of the particulars furnished above is found to be incorrect at the time of admission, the admission may be cancelled.

Date:

Signature of the Applicant

- # Attach photocopies of certificates. Original certificates should be produced at the time of admission.
- **\$** Attach photocopies of journals/conference papers

Note: The part time external Ph.D. applicant should attach the duly filled in Form-1 & Form-2, and Part-Time on campus applicant should attach the duly filled in Form-3. Otherwise, the application will be summarily rejected.



HoD / Admission Co-ordinator

NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 620 015, TAMIL NADU

Ph.D. ENTRANCE EXAMINATION 2015 - 16

ADMIT CARD

Name of the Candid	ate :	
Signature of the Car	ndidate:	Affix a Recent Passport Size Photo (Self-Attested)
	FOR OFFICE US	E
Registration Number		
Department	ː	
Examination Date	:Time:	

Seal

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

The	applicant								working
as			in				since	e	is
herewith re	commended and	forwarded for adm	nission unde	er Exte	rnal Re	gistration S	Scheme o	of the	National
Institute	of Technology,	Tiruchirappalli	for part	time	Ph.D.	Program	in the	e De	partment
of									
Certified tha	nt:								
1. This orga	anization has ade	quate facilities for	carrying o	ut the r	esearch	indicated	by the a	applica	ant and if
he/she is se	elected, these will	be made available	to him / he	er durin	g regula	ar working	hours till	the co	ompletion
of the progr	amme.								
2. The appli	cant will be depute	ed / given leave for	r duration of	f his / he	er reside	ence period	at NIT,	Tiruch	irappalli.
3. Facilities	will be made avail	ilable to the Super	visor (Exte	rnal Gui	ide) to s	supervise t	he work	of the	applicant
and to atten	d the meetings at	NIT, Tiruchirappal	li, when ned	essary.	•				
4. Till the	completion of his	/ her research pro	ogramme, t	he app	licant w	rill not ord	inarily be	trans	ferred to
another uni	t or place which r	may impede his / h	ner work ur	nder the	schem	e. If such	a transfe	er is ne	ecessary,
NIT, Tiruchi	rappalli will be info	ormed within a mor	nth of such t	ransfer					
5. No part o	f the work carried	out in fulfillment of	f the Resea	rch pro	gramme	will be util	ized com	ımerci	ally or for
applying for	a Patent without t	the approval of Nat	tional Instit	ute of	Techno	logy, Tirud	chirappa	ılli -15.	•
Date:			;	Signatu	ure of th	ne Sponso	ring Aut	hority	,
					Name a	nd Desigr	ation		
Seal of the	organization / In	stitution							
Postal add	ress of the Organ	nization / Institutio	on:						

Certificate of 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
*Particulars of Prospective External Guide / Research Coordinator:
(1) Name of proposed External Guide / Research coordinator (In Block letters):
(2) Designation of External Guide / Research coordinator:
(3) Academic qualifications of External Guide / Research coordinator:
(4) Experience (No. of Years):
(5) No. of Publications:
(6) Membership of Professional Societies of External Guide / Research coordinator:
Research Facilities Available: (To be filled 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 or the research coordinator should have a PG degree and 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)

	applicant working ainsince is herewith recommended and forwarded for
admi	ssion under Part time on campus scheme of the National Institute of Technology, Tiruchirappalli for programme in the Department of
2 3 4	 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. This organization facility will also be made available to him / her in the case of selection. The applicant will be deputed / given leave for duration of his / her residence period at NIT Tiruchirappalli. 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 within a month of such transfer. 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

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

Thi	nis is to certify that Shri / Smt. / Kum	Son / Daughter of
Shr	ıri / Smt	of Village/Town
	District/Di	vision in the
	State belongs to the	Э
	Commu	nity which is recognized as a backward class under:
(i)	Resolution No. 12011/68/93-BCC(C) dated 10/09/93 publ No. 186 dated 13/09/93.	shed in the Gazette of India Extraordinary Part I Section I
(ii)	Resolution No. 12011/9/94-BCC dated 19/10/94 publish 163 dated 20/10/94.	ed in the Gazette of India Extraordinary Part I Section I No.
. ,	88 dated 25/05/95.	ed in the Gazette of India Extraordinary Part I Section I No.
(iv)	Resolution No. 12011/96/94-BCC dated 9/03/96.	
(v)	 Resolution No. 12011/44/96-BCC dated 6/12/96 publish 210 dated 11/12/96. 	ed in the Gazette of India Extraordinary Part I Section I No.
٠,	Resolution No. 12011/13/97-BCC dated 03/12/97.	
. ,	ii) Resolution No. 12011/99/94-BCC dated 11/12/97.	
•	iii) Resolution No. 12011/68/98-BCC dated 27/10/99.	
(ix)	 Resolution No. 12011/88/98-BCC dated 6/12/99 publish 270 dated 06/12/99. 	ed in the Gazette of India Extraordinary Part I Section I No.
(x)	Resolution No. 12011/36/99-BCC dated 04/04/2000 pub No. 71 dated 04/04/2000.	lished in the Gazette of India Extraordinary Part I Section I
, ,	Resolution No. 12011/44/99-BCC dated 21/09/2000 publi No. 210 dated 21/09/2000.	shed in the Gazette of India Extraordinary Part I Section I
' '	ii) Resolution No. 12015/9/2000-BCC dated 06/09/2001.	
•	iii) Resolution No. 12011/1/2001-BCC dated 19/06/2003.	
•	v) Resolution No. 12011/4/2002-BCC dated 13/01/2004.	
(XV,	 /) Resolution No. 12011/9/2004-BCC dated 16/01/2006 pt I No. 210 dated 16/01/2006. 	blished in the Gazette of India Extraordinary Part I Section
Shr	ri / 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
belo	long to the persons/sections (Creamy Laver) mentioned in Colu	mn 3 of the Schedule to the Government of India, Department of
		/09/93 which is modified vide OM No. 36033/3/2004 Estt.(Res.)
	ted 09/03/2004.	100,000 Million to infoamou vide em 110. 00000,0,200 i 2011.(1.00.)
Dat	ated:	
<u>_</u> u		at Maniatanta / Danata Oamania (Sanata / Oamania (Sanata)
	Distri	ct Magistrate / Deputy Commissioner / Competent Authority

NOTE:

(a) The term 'Ordinarily' used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.

Seal

- (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 1st 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.

ADDRESS SLIPS

(Should be filled in by the candidate for communication)

(IN BLOCK LETTERS)

То
Mr. / Ms
PIN
То
Mr. / Ms
PIN
To
To No. / Ma
Mr. / Ms
PIN
То
Mr. / Ms
IVII. / IVIG

CHECK LIST

List of Enclosures (Put tick mark in the space provided and strike out whichever is not applicable)

1.	Application fee (DD) – Original	
2.	GATE / UGC / NET / CAT / AIMA / CSIR / NBHM Score card (if applicable)	
3.	Photograph (Affixed)	
4.	10 th or HSC certificate / Degree / Provisional certificate / Mark sheets	
5.	OBC / SC / ST and PH Certificates (if applicable)	
6.	Form-1/ Form-2 / Form-3 (If applicable)	
7.	Experience Certificate (If applicable)	
8.	Journals / conference papers (if applicable)	
9.	Awards / Prizes / Sports / NCC (if applicable)	

Important Note*

- If a candidate is admitted due to an inadvertent error during processing and admission stage, the institute reserves the right to cancel the admission at any time.
- The registration fee is non-refundable.
- The candidate belonging to OBC category should submit the certificate as per the prescribed format attached in the application form.
- Candidates applying for more than one department should submit separate application form
 with all enclosures for each Department in a single cover. However, a single registration fee is
 sufficient. The candidates are required to write their full name on the reverse side of the draft.
- Office of the Dean Academic, National Institute of Technology, Tiruchirappalli is not responsible
 for the non-receipt of applications sent by post or by courier or late receipt of applications due to
 postal delay or for any reason whatsoever.
- In case of any dispute arising out of the Ph.D. Admission process, the decision of the Director, NIT, Tiruchirappalli shall be final. The jurisdiction for legal disputes, if any, will be limited to Tiruchirappalli City only.

ANNEXURE – I

AREAS 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, Structures (Civil Engineering), 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, Any emerging area of specialization related to its discipline.
3	Chemistry	Analytical Chemistry, Inorganic Chemistry, Organic Chemistry, Physical Chemistry, 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 Engg, Any emerging area of specialization related to its discipline.
5	Computer Applications	Big Data Analytics, Computational Optimization, Computer Networks, Cryptography Data Base Management Systems, Data Compression, Data Mining, Distributed Systems, Graph Theory and Algorithms, Information Retrieval, Information Security, Multimedia Computation, Parallel Computing, Software Engineering, Theory of Computing, 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, Any emerging/relevant area of specialization related to CSE discipline.
7	Electronics and Communication Engineering	Digital VLSI Embedded Systems, Electronic packaging, Microwave Engineering / Microwave Integrated Circuits, Networking, Optical communication, RFMEMS, Signal and Image processing, VLSI, Any emerging area of specialization related to its discipline.
8	Electrical and Electronics Engineering	Applied Electronics, Computer Science and Engineering, Control and Instrumentation Energy Engineering, High Voltage Engineering, Power Electronics / Power Electronics & Drives / Electrical Drives & Control / Electrical Machines, Power Systems, VLSI Systems, Any emerging area of specialization related to its discipline.
9	Energy and Environment	Energy Engineering, Environmental Engineering, Any emerging area of specialization related to its discipline.
10.	Humanities	English: Computer aided language teaching, English Language Teaching, Linguistics, Any emerging area of specialization related to its disciplines Economics: Economics, Entrepreneurship Development, Financial Economics, Industrial Economics, Any emerging area of specialization related to its discipline.
11.	Instrumentation and Control Engineering	Control (all sub-fields included), Instrumentation (all sub-fields included), 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, Graph Theory, Numerical Analysis, Operations Research, 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, 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, Any emerging area of specialization related to its discipline.
16.	Physics	Fiber Optic Sensors, Laser Spectroscopy, Materials Science, Nano materials, Thin Films, Photonics, Quantum Computation and Information, Theoretical Condensed Matter Physics, 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, Any emerging area of specialization related to its discipline.

ADMISSION TO M.S. (by Research) PROGRAMMES

(January 2016 Session)

Information Brochure and Application Form





NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 620 015, TAMIL NADU

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI – 620 015 TAMILNADU

ADMISSION TO M.S. (by Research) PROGRAMMES 2015-2016 (January 2016 Session)

M.S. (by Research) Programme (Full time)

All branches of Engineering.

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 of aggregate marks or 6.5/10 CGPA (for OC / OBC) in the B.E. / B.Tech. degree and a valid GATE SCORE in the appropriate subject. In case of SC / ST / PH candidates the eligibility requirement is 55% aggregate marks or equivalent CGPA of 6.0/10 and a valid GATE SCORE in the appropriate subject.

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

B. FINANCIAL ASSISTANCE

Half Time Research Assistantship (HTRA) is available to those who are admitted to 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. Those who discontinue the M.S. (by Research) programme are required to refund the entire scholarship amount drawn by them. The assistantship / scholarship will not be available to sponsored candidates or any student getting any other financial support from any agency, state and central governments.

The number of fellowships available under this full time category in various departments are,

Department	Vacancies				
	UR	OBC	SC	ST	Total
Chemical Engineering	1	1	-	-	2
Civil Engineering	2	1	-	-	3
Computer Science and Engineering	-	1	-	-	1
Electrical and Electronics Engineering	1	-	-	-	1
Electronics and Communication Engineering	2	-	1	-	3
Energy and Environment	1	-	1	-	2
Mechanical Engineering	1	-	-	1	2
Metallurgical and Materials Engineering	1	1	1	-	3
Production Engineering	-	1	-	1	2
Physics (Non-Destructive Testing)	1	-	1	-	2
Total	10	5	4	2	21

M.S. (by Research) Programme (Part time)

All branches of Engineering and Centre of Excellence in Corrosion & Surface Engineering.

C. Norms for Part-Time (Sponsored)

The 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 a minimum PG degree with research contribution.

D. SELECTION

SI. 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 M.S. (By Research) Regulations are available at: http://www.nitt.edu/home/academics/rules/MS.pdf

E. How to apply?

Candidates applying for M.S. (by Research) can apply through the downloaded application available at www.nitt.edu. The filled up application form along with self-attested photo copies of mark sheets, degree certificates, community certificate and the necessary enclosures and a non-refundable registration fee of Rs.300/- (Rs.100/- for SC/ST/PH) by means of Demand Draft drawn not earlier than 09-11-2015 in favor of "The Director, National Institute of Technology, Tiruchirappalli" payable at Tiruchirappalli should reach 'The Chairperson(M.S./Ph.D. Admissions), Office of the Dean (Academic), National Institute of Technology, Tiruchirappalli – 620 015, Tamil Nadu' on or before 11-12-2015.

Candidates applying for more than one department should submit separate application form for each department in a sealed cover superscribing "Application for M.S. (by Research)". However, a single registration fee is sufficient. The candidates are requested to write their name and GATE registration number on the reverse side of the draft.

F. NIT-T COUNSELING and INTERVIEW (Tentative Dates)

Programme	Category	Date	Time	Activity
M.S.	Stipendiary	06-01-2016	10.30 a.m.	Counselling
M.S	Sponsored	06-01-2016	10.30 a.m.	Interview

For any queries, contact:

The Chairperson (M.S. and Ph.D. Admissions)
Office of the Dean (Academic)
National Institute of Technology
Tiruchirappalli- 620015, Tamil Nadu.

Phone: +91 431 2503011, 2503636





NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 620 015, TAMIL NADU

APPLICATION FOR ADMISSION TO M.S. (by Research) PROGRAMME (2015 – 2016)

Registration Number:				(for office	ce use only)
Dem	and Draft Details : D.D.	Date:	i		
	Amo	unt Rs Ban	k Drawn:		
Appli	cation category : Full t	ime / Part-time (Spon	sored)		
	*DEPARTMENT				Affix a recent Passport Size Photo
	AREA OF RESEARCH				(Self-Attested)
	(USE CAPITAL LETTERS)				
	Name of the Candidate				
	Father's / Guardian's / Husband's Name				
1	Date of Birth (DD-MM-YYYY)			Age:	Years:
	Sex (strike out the inappropriate	Male / Female	Marital St	tatus Married / Single	
2	[#] Category (☑ in the approp	riate)	ос	овс	SC ST
3	*Physically Challenged (P (Persons with disability of 40%		YES	NO	
4	Nationality				
			1		
	Address for C	ommunication		Permanent	Address
_					
5					
	Landi		8.4.1.11		
	Land Line: E-Mail ID:		Mobile		

[¥] Candidates applying for more than one department should submit separate application form with all enclosures for each Department in single cover. However, a single registration fee is sufficient. The candidates are required to write their full name on the reverse side of the draft.

6. *Qualifying Degree Particulars	UG	PG
Name of the Degree		
Branch / Specialization		
*Percentage of Marks / CGPA		
Class (Honours / Distinction / First / Second)		
Name of the Institution		
Name of the University		
Year of Passing		
7 #Details of marks obtained:		

7. "Details of marks obtained:

Year	Semester	Maximum Marks/GPA	Marks / GPA obtained	Remarks
	I			
<u>I</u>	II			
II	III			
	IV			
	V			
III	VI			
IV	VII			
	*VIII			

* Write as 'RA' if results awaiting

9 #CATE Seems (if combined to	Score & Rank		Year appeared and Validity		
8. *GATE Score (if applicable)	Discipline				

9 *Details of Professional Experience:

Name & Address of Employer	Position Held	Duration		
name a ridarese er Empleyer	iployer rosition rield		То	
		From		

I do hereby declare that the information furnished in this application are true and correct to the best of my knowledge. If any of the particulars furnished above is found to be incorrect at the time of admission, the admission may be cancelled.

Date:

Signature of the Applicant

Attach photocopies of certificates. Original certificates should be produced at the time of admission. Note: The M.S. Part time (Sponsored) applicant should attach the duly filled in sponsorship certificate. Otherwise, the application will be summarily rejected.

Sponsorship Certificate

(In official letter head)

The applicant Mr. / Ms <u>.</u>	is employed as	in
our Institute / organization since	He / She is sponsored to purs	ue M.S. in the
department of	, National Institute of Technology, Tiruch	irappalli – 15.
He / She will be relieved from his / her du	uty during the programme, if selected.	
Name and address of the Sponsoring au	thority:	
	Signature of the Hea	d of the
Seal	Sponsoring Institution /C)rganization

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 t	the
State belongs to the		
Community wh	ch is recognized as a backward class under:	
(i) Resolution No. 12011/68/93-BCC(C) dated 10/09/93 published in No. 186 dated 13/09/93.	n the Gazette of India Extraordinary Part I Section I	l
(xi) Resolution No. 12011/9/94-BCC dated 19/10/94 published in t 163 dated 20/10/94.	ne Gazette of India Extraordinary Part I Section I N	0.
(xii) Resolution No. 12011/7/95-BCC dated 24/05/95 published in t 88 dated 25/05/95.	ne Gazette of India Extraordinary Part I Section I N	lo.
(xiii) Resolution No. 12011/96/94-BCC dated 9/03/96.		
(xiv) Resolution No. 12011/44/96-BCC dated 6/12/96 published in t 210 dated 11/12/96.	ne Gazette of India Extraordinary Part I Section I N	lo.
(xv) Resolution No. 12011/13/97-BCC dated 03/12/97.		
(xvi) Resolution No. 12011/99/94-BCC dated 11/12/97.		
(xvii) Resolution No. 12011/68/98-BCC dated 27/10/99.		
(xviii) Resolution No. 12011/88/98-BCC dated 6/12/99 published No. 270 dated 06/12/99.	in the Gazette of India Extraordinary Part I Section	n I
(xix) Resolution No. 12011/36/99-BCC dated 04/04/2000 published No. 71 dated 04/04/2000.	in the Gazette of India Extraordinary Part I Section	٦l
(xi) Resolution No. 12011/44/99-BCC dated 21/09/2000 published i No. 210 dated 21/09/2000.	n the Gazette of India Extraordinary Part I Section I	
(xvi) Resolution No. 12015/9/2000-BCC dated 06/09/2001.		
(xvii) Resolution No. 12011/1/2001-BCC dated 19/06/2003.		
(xviii) Resolution No. 12011/4/2002-BCC dated 13/01/2004.		
(xix) Resolution No. 12011/9/2004-BCC dated 16/01/2006 publishe I No. 210 dated 16/01/2006.	d in the Gazette of India Extraordinary Part I Section	on
Shri / Smt. / Kum.	and / or his family ordinarily reside(s) in t	the
District / Division of	State. This is also to certify that he/she does r	not
belong to the persons/sections (Creamy Layer) mentioned in Column 3 c	f 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.(Re	s.)
dated 09/03/2004.	· ·	ŕ
Dated:		
District Mad	gistrate / Deputy Commissioner / Competent Author	ity
	, ,	,

NOTE:

(c) The term 'Ordinarily' used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.

Seal

- (d) The authorities competent to issue Caste Certificates are indicated below:
- (v) 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).
- (vi) Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate.
- (vii) Revenue Officer not below the rank of Tehsildar' and
- (viii)Sub-Divisional Officer of the area where the candidate and / or his family resides.

ADDRESS SLIPS

(Should be filled in by the candidate for communication)

(IN BLOCK LETTERS)

То
Mr. / Ms
PIN
То
Mr. / Ms
PIN
То
Mr. / Ms
PIN
То
Mr. / Ms
PIN

CHECK LIST

List of Enclosures:

(Put tick mark in the space provided and strike out whichever is not applicable)

1.	Application fee (DD) – Original	
2.	GATE Score card (if applicable)	
3.	Photograph (Affixed)	
4.	10 th or HSC certificate Degree / Provisional certificate / Mark sheets	
5.	OBC / SC / ST and PH Certificates (if applicable)	
6.	Sponsorship certificate (If applicable)	
7.	Experience Certificate (If applicable)	
8.	Journals / conference papers (if applicable)	
9.	Awards / Prizes / Sports / NCC (if applicable)	

Important Note

- If a candidate is admitted due to an inadvertent error during processing and admission stage, the institute reserves the right to cancel the admission at any time.
- The registration fee is non-refundable.
- The candidate belonging to OBC category should submit the certificate as per the prescribed format attached in the application form.
- Candidates applying for more than one department should submit separate application form with all enclosures for each Department in a single cover. However, a single registration fee is sufficient. The candidates are required to write their full name on the reverse side of the draft.
- Office of the Dean Academic, National Institute of Technology, Tiruchirappalli is not responsible for the non-receipt of applications sent by post or by courier or late receipt of applications due to postal delay or for any reason whatsoever.
- In case of any dispute arising out of the M.S. (by Research) Admission process, the
 decision of Director, NIT, Tiruchirappalli shall be final. The jurisdiction for legal
 disputes, if any, will be limited to Tiruchirappalli City only.