



राष्ट्रीय प्रौद्योगिकी संस्थान वारंगल

National Institute of Technology Warangal

An Institute of National Importance

# PhD Admissions

Information Brochure - December 2025



[Admission Portal](#)



# Content

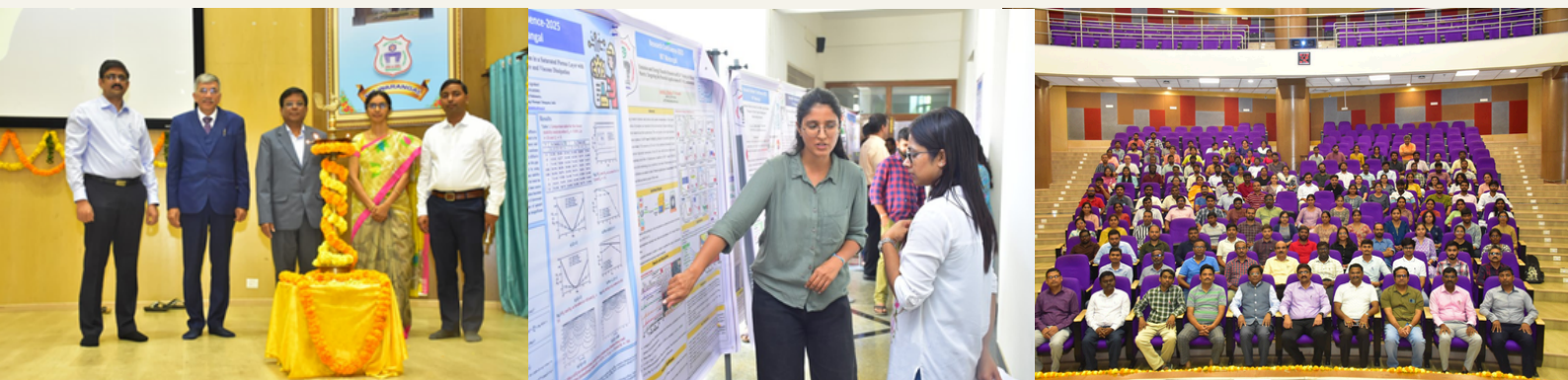
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# Overview

- 250+ acre green campus with excellent facilities, a collaborative research environment, and diverse student community
- Ranked among India's premier institutes with world-class faculty and research culture
- 370+ Faculty Engaged in Cutting-Edge and Interdisciplinary Research
- Over 100+ State-of-the-art laboratories with 24 hours facilities with central facilities at Innovation and Incubation center, Centers of Excellence, Digital Manufacturing Centre, Central Research Instrumental Facility and projects funded by ANRF, DRDO, ISRO, & International agencies.
- International collaborations under SPARC, GIAN & MoUs with leading universities abroad.
- 125 + Patents filed in the last two years and four Technologies transferred and among them one of the technology is from a PhD student
- Section 8 company supporting 35+ startups, providing mentorship & incubation support. Three PhD students have incorporated their companies.
- 1200+ PhDs produced since 2003 and many of them are working in IITs/NITs/PSU/Govt Sectors/R&D labs/Top notch industries. 250+ Research Scholars were awarded with Doctorate during last two years.

## Glimpses of Research Scholars' Confluence

The Research Scholars' Confluence, held annually at NIT Warangal, provides a vibrant platform for scholars to showcase their work, exchange ideas, and build collaborations—reflecting the institute's strong research culture and inspiring prospective applicants to be part of this dynamic community.





# Eligibility, Rules and Regulations for Admission to Ph.D. Program

## 1. Introduction

The Ph.D. Programs in Full-time (FT), and Part-time (PT) modes are offered in the following Departments:

- Civil Engineering
- Electrical Engineering
- Mechanical Engineering
- Electronics and Communication Engineering
- Metallurgical and Materials Engineering
- Chemical Engineering
- Computer Science and Engineering
- Biotechnology
- Mathematics
- Physics
- Chemistry
- Humanities and Social Science
- Management Studies







**Candidates selected for admission to Ph.D. under the Full-Time (Institute Fellowship) program are eligible to receive the Institute Fellowship as per Ministry of Education guidelines, Government of India.**

Currently, the Full-time students are eligible to receive **Rs. 37,000** per month for first two years and **Rs. 42,000** per month for subsequent three years by fulfilling PhD guidelines. However, the Institute fellowships are subject to change from time to time as per the instructions from the Ministry of Education, Government of India.

Category-wise (GEN-EWS, OBC-NCL, SC, ST, PwD) reservations on the overall available seats will be followed as per the Government of India norms. Online applications are invited from highly motivated candidates.

The application must be submitted online at: <https://admissions.nitw.ac.in/>

- Please read the instructions given in the brochure carefully before filling out the online application form and the payment of application fee.
- You are required to submit the application only ONLINE. After filling out the form, you are advised to take a printout of your application and keep the same for your record.
- Applications without online fee payment will not be considered.

## Important Dates

Announcement of inviting applications online	<b>8/10/2025</b>
Last date to receive online applications	<b>28/10/2025</b>
Announcement of shortlisted candidates for written test and/or interview	<b>3/11/2025</b>
Dates of written test and/or interview	<b>17/11/2025 to 21/11/2025</b>
1. Release of selected candidates list 2. Online reporting and payment of fee	<b>28/11/2025</b> <b>05/12/2025 to 08/12/2025</b>
Physical reporting of the selected candidates	<b>11/12/2025 &amp; 12/12/2025</b>

## 2. Admissions Categories and Eligibility Conditions

**2.1 Admission Categories:** There are two types of admission categories for Ph.D. Program: Full-time and Part-time.

**Full-time:** There are seven categories in the full-time Ph.D. Program.

- a) Full-time student on the Institute fellowship. The maximum age limit for admission into the Ph.D program under Full-time Institute Fellowship is 30 years for the GEN/ GEN-EWS category, 33 years for OBC-NCL, and 35 years for SC/ST/PwD/Female candidates as on commencement date of this notification.
- b) Candidates holding valid Full-time Government/ Semi-Government Fellowship awardees/ FIP(UGC) /CSIR/ UGC/ DOE/ DST/ DBT/ NBHM/ INSPIRE fellowship awardees etc.
- c) Full-time project fellows/ JRF/ SRF appointed to carry out R&D projects at NITW.
- d) Full-time sponsored candidates from Industry/ R&D organizations.
- e) Indian Council for Cultural Relations(ICCR) fellowship awardees(Foreign students).
- f) Full-time external candidates (CSIR/ JRF/ SRF Fellows) working in National Research Laboratories/ R&D Organizations having necessary facilities.
- g) Full-time Self-financed (Rules of reservation are not applicable). Master's degree is compulsory.

**Part-time:** There are four categories in the part-time Ph.D. Program.

- h) Permanent faculty from Private Academic Institutions.
- i) Both permanent and contractual faculty from Educational Institutions fully funded by the Government or maintained by Public-Private Partnership (PPP) Mode.
- j) Permanent Employees from Private Industries with R&D facilities with membership in CII/ ASSOCHAM or any other similar membership.
- k) Permanent employees working in Government R&D laboratories/ Government Organizations/ Government Industry/ PSUs/ State Undertakings.

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**NOTE:**

- i) A candidate of category (a) will receive the Institute Fellowship for a duration of three years, which may be extendable by two more years, based on the recommendations of the Doctoral Scrutiny Committee.
- ii) Candidates of category (d) shall be sponsored and financed by the sponsoring organization.
- iii) Candidates of category (f) shall produce a no-objection certificate from the Organization where he/ she has got a fellowship and also acceptance from a possible supervisor, along with biodata from the Organization. There will not be any financial commitment from NITW for candidates under this category.
- iv) Candidates of category (g) shall produce a No Objection and Sponsorship Certificate from the Organization where he/ she is working.
- v) A part-time candidate of category (h) shall produce a No Objection Certificate from the present Institute, which should be AICTE-recognized.
- vi) A part-time candidate of categories (i, j and k) shall produce a No Objection Certificate from the present employer.
- vii) Change of status from full-time to part-time will be subject to the approval of the Senate based on recommendations of DSC.
- viii) No student can receive a scholarship/ fellowship from more than one source, either Government or Private.
- ix) Any candidate of the PwD category will only be considered eligible for admission after approval of the Medical Board, duly constituted by the Institute.
- x) The cut-off date for determining the age limit shall be the commencement date of the notification.

2.1.1 In the case of candidates of category (a),(b),(c), GATE is not mandatory, and in the case of candidates with M.Sc./ M.Sc.(Tech)/ MBA/ MA/ MPHARM qualification, GATE/UGC-CSIR-NET/ GPAT qualification is not necessary.

2.1.2 Candidates of category (a) with GATE qualification are exempted from the written test. Candidates without GATE qualification must appear for the written test. The written test comprises of questions from two parts: Part A and Part B.

**Part-A:** Questions will be based on the Department Specific GATE syllabus for which the candidate has applied.

**Part-B:** Questions will be based on the Postgraduate Specialization syllabus for which the candidate has applied.

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2.1.3 In the case of candidates of categories (c), (e), and (g), GATE/ UGC- CSIR-NET/CAT/GPAT, qualification is relaxed. However, the candidates of categories (c) and (g) with GATE qualifications, are eligible for the PhD program through the interview process, exempting them from the written test. The candidates of categories (c) and (g) without GATE qualifications, however, will be required to qualify in a written test followed by an interview.

2.1.4 Candidates of categories (b), (d) and (f) are exempted from the written test, and are eligible for the PhD program through the interview process.

2.1.5 Admission under the category (j and k) is open to Permanent Employees from Private Industries with R&D facilities, Government R&D laboratories/ Government Organizations/ Government Industry/ PSUs/ State Undertakings with B.Tech degree and at least 5 years of experience or 4 years of experience with M.Tech/ME/MSc/MBA/MA. The selection of candidates under this category is based on an interview process only.

2.1.6 Candidates of all categories must appear for an interview.

## 2.2 Eligibility:

### Engineering Departments:

Candidates with a minimum of 60% aggregate marks or 6.5 CGPA at both UG and PG for GEN/ GEN-EWS/ OBC-NCL category and minimum 55% aggregate marks or 6.0 CGPA at both UG and PG for SC/ ST/ PwD category. GATE is not mandatory for full-time and part time candidates.

(OR)

Candidates with Bachelor's degree in Engineering/ Technology with at least CGPA of 7.5/10 or 70% of marks under GEN/ GEN-EWS/ OBC-NCL category and at least CGPA of 7.0/10 or 65% under SC/ ST/ PwD category. GATE is not mandatory for full-time and part-time candidates.

**Note:** Please refer to department-specific qualifications. Departments such as Biotechnology, Chemical Engineering, Metallurgical, and Materials Engineering also consider some of the M.Sc. programs.



### Science Departments:

Candidates with a Master's degree in the relevant discipline of Science (Mathematics/ Physics/ Chemistry) with a minimum of 60% aggregate marks or 6.5 CGPA at both UG and PG (wherever applicable) for GEN/ GEN-EWS/ OBC-NCL category and minimum 55% aggregate marks or 6.0 CGPA at both UG and PG for SC/ ST/ PwD category. GATE/ UGC-CSIR-NET/GPAT is not mandatory for full-time and part-time candidates.

### Department of Humanities and Social Science:

Candidates with a Master's degree in the relevant discipline of English with a minimum of 60% aggregate marks or 6.5 CGPA at UG and PG for GEN/ GEN-EWS/ OBC-NCL category, and minimum 55% aggregate marks or 6.0 CGPA at both UG and PG for SC/ ST/ PwD category. GATE/ UGC- CSIR- NET/GPAT is not mandatory for full-time and part-time candidates.

### Department of Management Studies:

Candidates with a minimum of 60% aggregate marks or 6.5 CGPA at both UG and PG for GEN/ GEN-EWS/ OBC-NCL category, and a minimum 55% aggregate marks or 6.0 CGPA at both UG and PG for SC/ ST/ PwD category in the following:

Master's degree or equivalent in Management/ Social Sciences/ Commerce/ 2-year PGDM/ M.Tech or equivalent in any specialization/ Management/ Technology Management/ Entrepreneurship Management/ MSc Statistics /CA/ CS/ ICWA. CAT/UGC- NET/GMAT/ GRE/ GATE/CSIR NET is not mandatory for full-time and part-time candidates.

**Note:** The above mentioned CGPA/Percentage should be awarded by a recognized University/Institute. Only primary mode of evaluation (CGPA or percentage) as mentioned in the qualifying degree certificate/mark sheet shall be considered while verifying eligibility.

## 3. Details of the Fee

For Full-time and Part-time Candidates:

S. No.	Details of the fee	Amount (in Rs.)
1	Tuition Fee per semester	Rs. 15, 000/-
2	*Other Fee	Rs. 42, 500/-
	<b>Total</b>	<b>Rs. 57, 500/-</b>

For Full-time Self-Finance Candidates:

S. No.	Details of the fee	Amount (in Rs.)
1	Tuition Fee Per Semester	Rs. 50, 000/-
2	Contingency	Rs. 10, 000/-
3	*Other Fee (The details are given below)	Rs. 42, 500/-
	<b>Total</b>	<b>Rs. 1, 02,500/-</b>

**\*Other Fee Details ( Rs. 42, 500/-)**

a) One-time payment at the time of Admission: Rs. 30,000/-

- |      |                                    |                |
|------|------------------------------------|----------------|
| i)   | Admission fee                      | : Rs. 7,500/-  |
| ii)  | Identity Card                      | : Rs. 500/-    |
| iii) | NITW Alma-mater Fund               | : Rs. 2,000/-  |
| iv)  | Institute Development Contribution | : Rs. 20,000/- |





b) Other Fee payable per year: Rs. 12,500/-

i)	IT User charges	: Rs. 2,000/-
ii)	Department Society fee	: Rs. 1,000/-
iii)	Student Activity fund	: Rs. 1,000/-
iv)	Student Welfare Fund	: Rs. 500/-
v)	Games & Sports Activities	: Rs. 1,000/-
vi)	Health Services and Insurance	: Rs. 2,000/-
vii)	Student Library Fund	: Rs. 2,000/-
viii)	Institute Fests	: Rs. 1,000/-
ix)	Career Development Activities & Industry Visits	: Rs. 2,000/-

**Convocation and Thesis Fee:**

- i) Convocation Fee: Rs. 2,500/- (to be paid at the time of synopsis submission)
- ii) Thesis processing fee: Rs. 5,000/- (charged in Semester V)
- iii) Thesis evaluation fee: Rs. 35,000/- (charged in Semester V)

Note: The selected candidates are required to pay the fee online.

**Refund of Fee Policy in Case of Withdrawal/Cancellation of Admission**

- a) On or before the date of physical reporting: Rs.5,000/- will be deducted from the institute tuition and other fee, and the remaining amount will be refunded.
- b) After the date of physical reporting: Only Rs. 3,000/- will be refunded from other fees (NITW Alma-Mater Fund - Rs.2000/-, Career Development - Rs.1000/-), and Institute Tuition fee is not Refunded.

## 4. Instructions to Apply

### Ph.D. Program on Full-Time Basis (with Institute Fellowship, Other Fellowships & Self-Finance):

The application form is to be submitted online, which is available at

**<https://admissions.nitw.ac.in/>**

(Copy the above link and paste in the browser)

- All the necessary documents are to be uploaded online.
- The link to pay registration fee (Rs. 1000/- for GEN/ GEN-EWS/ OBC-NCL and Rs. 500/- for SC/ ST/ PwD candidates) is given in the candidate's registered login page.

#### Note:

- The Application Fee, once paid, will not be returned under any circumstances.
- Other payments like mobile payments (IMPS), NEFT, RTGS, and direct transfer will not be accepted. If paid by any chance, it will not be refunded. Do not use mobile applications to make the payment.
- The candidates who are employed and wish to do Ph.D. under full-time must enclose a NO OBJECTION certificate from the employer (see the Annexure-III given at the end).



### Checklist of documents to be uploaded along with the application:

- i) SSC/ Class X certificate in support of Date of Birth
- ii) Intermediate/ (10+2)/ Class XII certificate
- iii) Provisional certificate/ Degree certificates and Marks Memos of both UG and PG as applicable
- iv) Caste certificate (in case of SC/ ST candidates)
- v) For GEN-EWS candidates, EWS certificate issued on or after April 1, 2025 as per the format given in the Annexure-I only is acceptable.
- vi) For OBC-NCL candidates, OBC-NCL certificate issued on or after April 1, 2025 as per the format given in the Annexure-II only is acceptable along with the undertaking.
- vii) No Objection Certificate from the employer issued on or after 08.10.2025 only is acceptable (Annexure-III).
- viii) Relieving certificate from the employer (at the time of admission)
- ix) Photograph
- x) Grade/ Rank Card of GATE or CSIR or NBHM or UGC-NET or INSPIRE or GPAT or CAT or GMAT (as applicable) etc.
- xi) Statement of Proposal (Research Proposal)
- xii) Any other documents (List of publications, if any)

**Note:** The OBC-NCL/ GEN-EWS certificate issued on or after April 1, 2025, should be uploaded online during registration. Original certificates need to be produced at the time of written/interview as well as at the time of physical reporting without fail.





## Ph.D. Program on a Part-time Basis:

The application form is to be submitted online and is available at

**<https://admissions.nitw.ac.in/>**

(Copy the above link and paste in the browser)

- All the necessary documents are to be uploaded online.
- The link to pay registration fee (Rs. 1000/- for GEN/ GEN-EWS/ OBC-NCL and Rs. 500/- for SC/ ST/ PwD candidates) is given in the candidate's registered login page.

### Note:

- The Application Fee, once paid, will not be returned under any circumstances.
- Other payments like mobile payments (IMPS), NEFT, RTGS and direct transfer will not be accepted. If paid by any chance, it will not be refunded. Do not use mobile applications to make the payment.
- The candidates who are employed and wish to do a Part-time Ph.D. must enclose a NO OBJECTION certificate from the employer (see the Annexure-III given at the end).

## Checklist of documents to be uploaded along with the application:

- i) SSC/ Class X certificate in support of Date of Birth
- ii) Intermediate/ (10+2)/ Class XII certificate
- iii) Provisional certificate/ Degree certificates and Marks Memos of both UG and PG as applicable
- iv) No Objection Certificate from the employer issued on or after 08.10.2025 only is acceptable (Annexure-III)
- v) Photograph
- vi) Statement of Proposal (Research Proposal)
- vii) Any other documents (List of publications, if any)

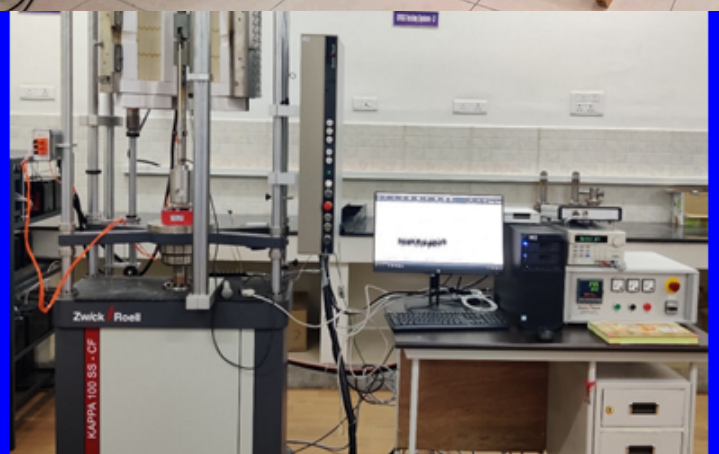
### Important Note:

The candidates selected for admission into the Ph.D program on a part-time basis are not eligible to receive an Institute Fellowship.

## Important Information:

- NIT Warangal is a fully residential Institute. All the admitted Full-time research scholars into NIT Warangal with Institute Fellowship are required to stay on the campus. Accommodation for unmarried research scholars will be provided within the institute premises. Currently, accommodation for married research scholars is not available. There is no provision for House Rent Allowance (HRA).
- Candidates should note that the Institute will neither make any allowances for delays and irregularities in submitting the application.
- If the candidate cancels the seat, the application fee will not be refunded, but the other fee will be refunded as per the institute's refund rules. Visit <https://admissions.nitw.ac.in/>
- No working professional shall be admitted as a full-time scholar unless he/she is relieved of his/her duties by his/her present employer and unless a proper relieving and no-objection certificate for pursuing a Ph.D. is produced to that effect.
- The short-listed candidates for the written test and interview will be notified on the institute website, and no separate call letters shall be sent to the candidates.
- If any candidate has been admitted due to any discrepancies in the processing of the application, the Institute reserves the right to cancel the seat before admission is made final, without payment of any compensation for the inconvenience caused.
- If it is found that any of the applicants admitted to the Institute has either furnished wrong information or tampered with the records, his/her admission is liable to be cancelled at any stage.
- The Institute reserves the right to cancel the admission of any candidate at any stage (even after admission) if any discrepancy is found (or) based on adverse remarks in the Conduct Certificate.

- Wherever ambiguities arise in the interpretation of the Admission Rules, the decision of the Director of this Institute on the matter shall be final.
- The Director is authorized to make appropriate decisions with regard to any other details of admission not covered by the rules listed above.
- The decision of the Institute in all matters will be final and binding on all the applicants who respond to this admissions notification. No interim correspondence or unsolicited query will be entertained from the applicants in connection with the process of scrutiny/selection, including reasons for not being shortlisted for the written test/interview.
- Any legal dispute arising out of this admissions notification is subject to the Courts having jurisdiction over Warangal, Telangana.





## 5. Department Specific Qualifications and Research Areas

<b>Department of Civil Engineering</b>	B.Tech/ B.E. or Equivalent degree in any branch of Engineering & Technology and M.Tech/ M.E in a relevant Civil Engineering specialization.  (OR) B.Tech/ B.E. in Civil Engineering or Equivalent degree in allied branches.
Research Areas - Full Time & Part Time	
Engineering Structures	Water Resources Engineering
Geotechnical Engineering	Construction Technology & Management
Environmental Engineering	Geoinformatics
Transportation Engineering	
<b>Department of Electrical Engineering</b>	B.Tech/ B.E. or Equivalent degree in Electrical Engineering or Electrical and Electronics Engineering and M.Tech/ M.E in Electrical Engineering or allied Specializations in broad research areas mentioned below.
	(OR)
	B.Tech/ B.E or Equivalent degree in Electrical Engineering or Electrical and Electronics Engineering.

### Research Areas - Full Time & Part Time

Power Electronics & Drives	Smart Grid Technologies	Power Systems Engineering
Power Driver for LED Lighting Systems	Wide Area Control of Power Systems	FACTS/ HVDC Control
Motor Drives (SRM/IM/BLDC/PMSM/High Speed Linear Motors)	Renewable Energy Sources	Power Quality
Multi-Level Inverters	Electricity Market Modeling, Risk Optimization Ancillary Service Market	Power System Stability and Security
Pulsed Power Technology	Grid Integration of Large Scale Distributed Energy Resources	Real-Time Control of Power Systems
EV Technologies	Power System State Estimation	Power System & Microgrid Protections
High-frequency Inverters for Induction heating systems	AI/ML Applications in Power Systems	Power System Deregulation
Bidirectional Power Converters & Energy Storage Systems	Control Systems & Robotics	High Voltage Engineering
Multifunctional Grid Tied Inverter Configurations & Control Strategies	DATA Science Application in Power Engineering	Condition Monitoring of Power Equipment
Grid-Forming and Grid-Following Inverters for Resilient Renewable Energy Integration	Cyber-physical systems & Cybersecurity	Digital Twin
Power System Resilience	Z- Source Converters	AI-based Battery Management system for EV



<p><b>Department of Mechanical Engineering</b></p>	<p>B.Tech/ B.E or Equivalent degree in Mechanical Engineering/ Production Engineering/ Industrial Engineering/ Mechatronics/ Automobile Engineering/ Aeronautical Engineering/ Marine Engineering and M.Tech/ M.E. in Mechanical Engineering allied areas and specializations within the broad research areas mentioned below.</p> <p style="text-align: center;">(OR)</p> <p>B.Tech/ B.E or Equivalent degree in Mechanical Engineering/ Production Engineering/ Industrial Engineering/ Mechatronics/ Automobile Engineering/ Aeronautical Engineering/ Marine Engineering.</p>
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Research Areas- Full Time & Part Time		
Automobile Engineering	IC engines and fuels	Micro-combustors
Materials Technology	Machine Design	Tribology
Topology and Shape Optimization	Isogeometric FEA	AI for Design
Robotics	Manufacturing Engineering	Modern Machining Processes
Thermal Engineering	CFD	Battery Thermal Management Systems
Mechatronics	Fluid Mechanics	Additive Manufacturing
Industrial Engineering and Management	Entrepreneurship	Friction Stir Welding
Renewable energy sources and systems	Energy Studies	Refrigeration & Air-conditioning
Solar thermal systems	Computational Materials Science	Machine learning integrated materials design

<b>Department of Electronics and Communication Engineering</b>	B.Tech/ B.E or Equivalent degree in Electronics and Communication Engineering and M.Tech/ M.E in Electronics and Communication Engineering or equivalent with Research areas in Communication/ VLSI/ Instrumentation.  (OR) B.Tech/ B.E or Equivalent degree in Electronics and Communication Engineering.	
Research Areas		
Radar Signal Processing	VLSI Architectures, MOS Devices, On-chip Circuits	Speech Processing
RFIC, MMIC for 5G, MW Active and Passive Circuits	Nano Electronics & Devices	Embedded Systems
Antennas, Antenna Arrays	Visible Light Communications	Bio-medical Engineering
MIMO Antennas & Beam forming, Smart Antennas	Optical Signal Processing	Process Control Design
5G, MIMO, MMIMO	Cognitive Radio	Image & Video Processing
Wireless Ad-hoc & Sensor Networks	AI, ML, DL, IoT & Security	





**Department of  
Metallurgical and  
Materials Engineering**

B.Tech/BE or equivalent degree in Metallurgical & Materials Engineering/ Mechanical Engineering and M.Tech/ME in Metallurgical & Materials Engineering/ Mechanical Engineering and relevant fields

(OR)

M.Sc. in Physics/ Chemistry/ Materials Science/ Electronics/ Nanoscience and Nanotechnology with M.Tech. in Materials Science/ Metallurgy/ Nanoscience and Nanotechnology/ Ceramic Engineering/ Surface Engineering.

(OR)

B.Tech. or B.E or Equivalent degree in Metallurgical & Materials Engineering/ Mechanical Engineering

(OR)

M.Sc. in Physics/ Chemistry/ Materials Science/ Polymer/ Electronics/ Nanoscience and Nanotechnology/ Ceramic Engineering/ Surface Engineering and relevant area.

**Research Areas- Full Time & Part Time**

Physical Metallurgy	Mineral Processing / Extractive Metallurgy
Powder Metallurgy	Nuclear Materials
Materials Joining/ Welding	Mechanical Behavior of Materials/ Creep, Fatigue and Fracture Mechanics
Structure Property Correlation	Environmental Degradation of Materials/ Corrosion and Oxidation
Special Steels/ High Temperature Materials	Ceramics, Polymers and Composites
Severe Plastic Deformation	Biomaterials





Materials for Extreme Environments	Nano Materials
Smart Materials	3D Printing
Non-Destructive Evaluation	Ultra-Fine Grain Materials
Computational Materials Science / AI-ML in Materials Engineering	Energy Materials
Surface Engineering	Circular economy of materials/ Recycling of materials

## Department of Chemical Engineering

B.Tech/ B.E or Equivalent degree in Chemical Engineering/ Mechanical Engineering/ Biotechnology/ Civil Engineering / Metallurgy /Petrochemical Engineering/ Petroleum Technology/ Nanotechnology/ Instrumentation and Control Engineering/ EEE/ Electrochemical Engineering/ Electronics & Communication Engineering / Electronics & Instrumentation/ Chemical Technology/ Polymer Technology/ Biochemical Engineering/ Energy Engineering/ Environmental Engineering/ Agricultural Engineering and allied disciplines and M.Tech. or M.E in Chemical Engineering/ Mechanical Engineering/ Biotechnology/ Petrochemical Engineering/ Petroleum Technology/ Process Control and Instrumentation/ Control Systems/ Polymer Technology/ Biochemical Engineering /Energy Engineering/ Nanotechnology/ Environmental Engineering and allied areas.

(OR)

B.Tech/B.E. or Equivalent degree in Chemical Engineering/ Mechanical Engineering/ Biotechnology/ Civil Engineering / Metallurgy /Petrochemical Engineering/ Petroleum Technology/ Nanotechnology/ Instrumentation and Control Engineering/ EEE/ Electrochemical Engineering/ Electronics & Instrumentation/ Chemical Technology/ Polymer Technology/ Biochemical Engineering/ Energy Engineering/ Environmental Engineering/ Agricultural Engineering and allied disciplines.

(OR)

M.Sc (Chemistry, Material Science, Environmental Science, Polymer Science, Biotechnology, Nanotechnology, Agriculture and allied areas), M.Pharm.



Research Areas- Full Time & Part Time	
Biomass Gasification	Fuel Cells, Batteries and Supercapacitors
Hydrogen generation and storage	Membrane processes
Bioreactors	Electronic waste recycling
Reactive Distillation	Chemical process scheduling
Microfluidics	Multiphase flows
Interfacial Science	Chemical reactor analysis and design
Wastewater Treatment	Sustainable and energy efficient technologies
Microreactors	Process control
Process Intensification	Nonlinear analysis
Nanotechnology & Nanomaterials	Computational Fluid Dynamics
Fluidized Bed Operations	Bioenergy & Biofuels
Catalysis	Corrosion Engineering
Functional materials	Pharmaceuticals and fine chemicals
AI and Machine learning	Polymer and Composite materials
Drug design & delivery	Carbon capture, Sequestration and Utilization
Chemical process modeling, simulation, and optimization	Transport processes
Circular Economy	3D printing
Agricultural Engineering	Molecular Simulations
Electrochemical conversion of CO <sub>2</sub> to Fuel	Granular Mechanics
Biodegradable packaging	Active and intelligent food packaging

Note: Selected candidates have the option to pursue a collaborative dual-degree PhD program with Chemical and Biochemical Engineering at the University of Saskatchewan, Canada.



<p><b>Department of Computer Science and Engineering</b></p>	<p>B.Tech/ B.E or Equivalent degree in Computer Science and Engineering and M.Tech/ M.E in Computer Science and Engineering or equivalent. (OR) B.Tech/ B.E or Equivalent degree in Computer Science and Engineering.</p>
<p><b>Note:</b> Some additional fellowships sponsored by M/s. TCS and IDRBT may be available</p>	
<p>Research Areas- Full Time &amp; Part Time</p>	
<p>Algorithms and Graph Theory, Bioinformatics, DNA Computing, Quantum Computing, Database Systems.</p>	
<p>Artificial intelligence, Machine Learning, Deep Learning, Data Mining, Soft Computing, Evolutionary Computation.</p>	
<p>Big Data Analytics, Computational Neuroscience, Computer Vision, Human Computer Interaction, Image Processing, Natural Language Processing, Optimization Techniques, Video Analytics, Social Media Analysis, Recommender Systems.</p>	
<p>Wireless and Mobile Networks, Internet of Things , Vehicular Adhoc Networks, Next Generation Networks (SDN, NFV), Open Radio Access Networks (O-RAN), Beyond 5G and 6G, Online Social Networks, Cyber-Physical Systems.</p>	
<p>High Performance Computing, Cluster Computing, Osmotic Computing, Fog Computing, Cloud Computing.</p>	
<p>Information Security, Network Security, Edge Security, Fog Security, IoT Security, Cryptanalysis, Cyber Security, Privacy, Block Chain Technologies, Biometric Security.</p>	
<p>Software Engineering, Program Analysis, Software Reliability Prediction, Software Testing, Design Pattern, Formal Methods – Statistical Model Checking, Service-Oriented Architecture, Microservices Architecture, and Model-Driven Framework- oriented Systems.</p>	



**Department of  
Biotechnology**

B.E./B.Tech. in Biotechnology/ Industrial Biotechnology/Biochemical Engineering/ Bioinformatics/ Biomedical Engineering/ Biotech. Engineering/ Bioengineering/ Chemical and Bio-Engineering/ Genetic Engineering/ Food Technology and Biochemical Engineering/ Biological Sciences and Bioengineering/ Biosciences and Bioengineering/ Biotechnology and Biochemical Engineering/ Biochemical and Biotechnology Engineering/ Biomedical Instrumentation, and M.E./ M. Tech./ M.S. (by Research)/ M.S.\* (from abroad Two- year program only) in Biotechnology/ Industrial Biotechnology/ Biochemical Engineering/ Bioinformatics/ Biomedical Engineering/ Biotech Engineering/ Bioengineering/ Chemical and Bio-Engineering/Genetic Engineering/ Food Technology and Biochemical Engineering/ Biological Sciences and Bioengineering/ Biosciences and Bioengineering/ Biotechnology and Biochemical Engineering/ Biochemical and Biotechnology Engineering/ Biomedical Instrumentation.

(OR)

B.E./B.Tech. in Biotechnology/ Industrial Biotechnology/ Biochemical Engineering/ Bioinformatics/ Biomedical Engineering/ Biotech. Engineering/ Bioengineering/ Chemical and Bio- Engineering/ Genetic Engineering/ Food Technology and Biochemical Engineering/ Biological Sciences and Bioengineering/ Biosciences and Bioengineering/ Biotechnology and Biochemical Engineering/ Biochemical and Biotechnology Engineering/ Biomedical Instrumentation

(OR)

M.Sc. in Biotechnology/ Biochemistry/ Microbiology/ Botany/ Zoology/ Bioinformatics/ Life Sciences and M.Tech. in Biotechnology.

(OR)

M.Sc. in Biotechnology/ Biochemistry/ Microbiology/ Botany/ Zoology/ Bioinformatics/ Life Sciences.



Research Areas- Full Time & Part Time	
Algal Biotechnology & Microbial Fuel Cell	Gene Therapy
Big Data & Data Science	Machine Learning
Bioelectrochemical System & Biological Wastewater Treatment	Microbial Gene Regulation & Epigenetics
Bioenergy, Biorefinery& Therapeutic Proteins/ Enzymes	Modeling & Simulation of Bioprocesses
Bioinformatics	Molecular & Biochemical Parasitology
Biomass, Biomaterials & Metabolic Engineering	Nanobiotechnology & Medical Biosensors
Bioseparations Technology	Genomic Data Analysis & Cancer Signaling Pathways
Cancer Biology & Cell Signaling	Plant Biotechnology & Plant Tissue Culture
Computational Biophysics	Stem Cell Engineering
Drug Design & Discovery	Structural Biology
Environmental Biotechnology	Systems Biology
Functional Genomics & Metabolic Disorders	Enzyme Engineering
Biopharmaceutical Technology	





<b>Department of Mathematics</b>	B.Sc. and M.Sc./ M.Phil. in Mathematics or equivalent Degree.
<b>Research Areas-Full Time</b>	
Algebraic Coding Theory	Number Theory and Cryptography
Commutative Algebra	Numerical Analysis
Fluid Mechanics	Operations Research
Fractal Approximation	Partial Differential Equations
Fractional Differential Equations	Probability and Statistics
Fuzzy Set Theory	Quantum Computing
Graph Theory	
<b>Research Areas-Part Time</b>	
Fluid Mechanics	Operations Research
Fuzzy Set Theory	Probability and Statistics
Graph Theory	Quantum Computing
Number Theory and Cryptography	

<b>Department of Physics</b>	B.Sc. with Physics and M.Sc./ M.Sc. (Tech) in Physics/ M.Tech with specialization in Photonics/ Electronics/ Instrumentation/ Materials Science/ Nanotechnology/ Solid State Physics or any equivalent specialization.
<b>Research Areas- Full Time &amp; Part Time</b>	
Materials Science: Multiferroics, Thin Films, Irradiation Effects on Materials, Hybrid Materials, Glass and Glass Ceramics, Polymer Composites, Luminescent Materials, Liquid Crystals, Green Synthesis.	
Energy Conversion and Storage: Renewable Energy, Energy Harvesting, Recycling Waste, Batteries, Supercapacitors.	
Theoretical Physics: Condensed Matter Physics, Statistical Mechanics	
Device Physics: Self-powered Sensors and Devices, Solar Cells, Fuel Cells, Organic Electronic Devices, Resistive Switching and Memristor, Piezo and Triboelectric Nanogenerators	
Photonics: Fibre Optic Sensing, Optical Design, Optical Elements Productions Testing, Light-matter Interaction, Nano-optics.	
Electronics: Optoelectronic Materials and Devices, Sensors, and Transducers.	
Computational Physics: Soft Matter, Biophysics, Machine Learning, DFT, Quantum Computing.	
Nanoscience: Low Dimensional Systems, Quantum Dots, Nanomaterials.	
Biophysics and Interdisciplinary Physics: Drug Delivery, Bioimaging, Tissue Engineering, Biomaterials.	

## Department of Chemistry

B.Sc. and M.Sc./ M.Phil. in Chemistry or equivalent Degree.

### Research Areas- Full Time & Part Time

Nanocatalysts for Fuel Cells	Nanocatalysts for Fuel Cells
Electrochemistry	Bio-Organic Chemistry / Biomaterials
Catalysis	Nanomaterials
Ultrafast Spectroscopy	Organic Synthesis
Chromatography	Medicinal Chemistry
Environmental Remediation	Supramolecular Chemistry
Synthetic Organic Chemistry	Carbohydrate Chemistry
Stereo Selective Synthesis	Molecular Modeling
Electrochemical Biosensors / Batteries	Time Resolved Spectroscopy
Organometallics	Photo Chemistry





<b>Department of Humanities &amp; Social Sciences</b>	Post Graduate Degree in English and having studied B.A./ B.Sc./ B.Com. or any other Bachelor's Degree.
<b>Research Areas- Full Time &amp; Part Time</b>	
British Literature	English Language Teaching

<b>Department of Management Studies</b>	Any graduate having Full-time M.B.A. degree (OR) Master's degree or equivalent in Management/ Social Sciences/ Commerce/ 2-year PGDM/ M.Tech or equivalent in any specialization/ Management/Technology Management/Entrepreneurship Management/ MSc Statistics / CA/CS/ICWA.
<b>Research Areas: Full Time</b>	
Marketing	Human Resources
Organizational Behaviour	Corporate Governance
Operations	Supply Chain Management
Quality Management	Sustainability
Project Management	Industrial Management
Analytics and Decision Sciences	Strategic Management
Management of Technology and Innovation	Entrepreneurship
Competitiveness	Management and Allied Areas



### Research Areas: Part Time

Finance	Human Resources
Organizational Behaviour	Operations
Supply Chain Management	Quality Management
Sustainability	Project Management
Industrial Management	Analytics and Decision Sciences
Strategic Management	Management of Technology and Innovation
Entrepreneurship	Competitiveness
Management and Allied Areas	







# Annexures







Annexure-I

Proforma for Economically Weaker Section (EWS) Certificate

Government of .....

(Name & Address of the authority issuing the certificate)

[This certificate MUST have been issued on or after 1st April 2025]

Certificate No. ....

Date: .....

VALID FOR THE YEAR 2025-2026

1. This is to certify that Shri/Smt./Kumari \_\_\_\_\_, son / daughter/ wife of \_\_\_\_\_ permanent resident of \_\_\_\_\_, Village/Street \_\_\_\_\_ Post Office \_\_\_\_\_ District in the State/Union Territory \_\_\_\_\_ Pin Code \_\_\_\_\_ whose photograph is attested below belongs to Economically Weaker Sections, since the gross annual income\* of his/her family\*\* is below Rs. 8 lakh (Rupees Eight Lakh only) for the financial year 2024-2025. His/her family does not own or possess any of the following assets\*\*\*:

- I. 5 acres of agricultural land and above;
- II. Residential flat of 1000 sq. ft. and above;
- III. Residential plot of 100 sq. yards and above in notified municipalities;
- IV. Residential plot of 200 sq. yards and above in. areas other than the notified municipalities.

2. Shri/Smt./Kumari \_\_\_\_\_ belongs to the \_\_\_\_\_ caste which is not recognized as a Scheduled Caste, Scheduled Tribe and Other Backward Classes (Central List).

Recent Passport size attested  
photograph of the applicant

Signature with seal of Office

Name: .....

Designation: .....

The income and assets of the families as mentioned would be required to be certified by an officer not below the rank of Tehsildar in the States/UTs.

Note:

\* Income covered all sources i.e. salary, agriculture, business, profession, etc.

\*\* The term 'Family' for this purpose includes the person, who seeks benefit of reservation, his/her parents and siblings below the age of 18 years as also his/her spouse and children below the age of 18 years.

\*\*\* The property held by a 'Family' in different locations or different places/cities have been clubbed while applying the land or property holding test to determine EWS status.

**Annexure-II****Proforma for Other Backward Class (OBC Certificate)**

(CERTIFICATE TO BE PRODUCED BY CANDIDATES FROM OTHER BACKWARD CLASSES  
APPLYING FOR ADMISSION TO CENTRAL EDUCATIONAL INSTITUTIONS (CEIs), UNDER  
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 09/03/96.
- 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 or the latest notification of the Government of India.

Dated:

District Magistrate/ Competent Authority  
Seal

NOTE:

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

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

i) District Magistrate/ Additional Magistrate/ Collector/ Deputy Commissioner/ Additional Deputy Commissioner/ Deputy Collector/ 1st 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 Tahsildar, and

iv) Sub-Divisional Officer of the area where the candidate and/ or his family resides.

(c) The annual income/ status of the parents of the applicant should be based on the financial year ending March 31, 2025.



### Declaration/ Undertaking for OBC Candidates only

I, \_\_\_\_\_ Son/ Daughter of Shri/ Smt\_\_\_\_\_.  
resident of\_\_\_\_\_ village/ town/ city,\_\_\_\_\_ district,\_\_\_\_\_  
State, hereby declare that I belong to the\_\_\_\_\_ community which is recognized  
as a backward class by the Government of India for the purpose of reservation in services  
admission in Central Government Institutions as per orders contained in Department of  
Personnel and Training Office Memorandum No. 36012/22/93 – Estt. (SCT), dated 8/9/1993.  
It is also declared that I do not belong to persons/ sections (Creamy Layer) mentioned in  
Column 3 of the Schedule to the above referred Office Memorandum, dated 8/9/1993, which  
is modified vide Department of Personnel and Training Office Memorandum No.  
36033/3/2004 Estt. (Res.) dated 9/3/2004 or the latest notification of the Government of  
India.

I also declare that the condition of status/ annual income for creamy layer of my parents/  
guardian is within prescribed limits as on financial year ending on March 31, 2024.

Place:  
Date:

Signature of the Candidate

Note: Applications without a declaration/undertaking not signed by the Candidates will be rejected.



Annexure-III

No Objection Certificate  
(Should be on the letterhead of the employee's organization)

Ref. No.

Date:

To  
The Director,  
National Institute of Technology, Warangal-506 004,  
Telangana

Sub.: No objection certificate for pursuing Ph.D. (Full-time/part-time) at NIT Warangal

Dear Sir,

We have no objection if Mr./ Mrs./ Ms. \_\_\_\_\_ is an employee of our Organization/ Institute, if admitted to the Ph.D. program in the Department of \_\_\_\_\_ at the National Institute of Technology, Warangal, as a Full-time/part-time student.

It is certified that he/she has completed \_\_\_\_\_ years of service in our Organization/ Institute as a regular employee.

We shall give him/ her a leave of absence at our Organization/ Institute to complete the coursework during his/ her Ph.D. program at NIT Warangal.

Signature and Seal  
Head of the Organization/ Institute

Note: No Objection Certificate issued on or after **08.10.2025** is only acceptable.



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