

INFORMATION BROCHURE

for admission to

DOCTOR OF PHILOSOPHY- Ph.D.
MASTER OF TECHNOLOGY - M. Tech.
MASTER OF PLANNING - Urban Planning

(2020-2021)



MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR
JAWAHAR LAL NEHRU MARG, MALVIYA NAGAR, JAIPUR-302017 (RAJASTHAN)

<http://www.mnit.ac.in>

For further information, please contact:

Office of Dean Academic

Malaviya National Institute of Technology

J.L.N. Marg, Jaipur (Raj.) – 302017.

E-mail: admissions@mnit.ac.in,

Telephone no. 0141- 2715035 (2.30 PM to 5.00 PM)

Web Site: www.mnit.ac.in

**Application has to be filled online
(Link available at www.mnit.ac.in).**

Start Date of Online Application :- 10/08/2020

Last Date and Time for submission of Online Application form :- 23/08/2020 (till 5.00 PM)

Provisional list of shortlisted/eligible candidates for online written test/interview will be displayed on Institute website by 27/08/2020.

Dates of online written test :- 31/08/2020 to 02/09/2020

Dates of online Interview of the shortlisted candidates :- 01/09/2020 to 03/09/2020

Final Result :- 15/09/2020

(No separate interview letter will be issued)

Also refer to Rules and Regulations manual for PG programmes for more details given on website mnit.ac.in.

1. INTRODUCTION

Malaviya National Institute of Technology Jaipur is one of the 31 National Institutes of Technology in India. These Institutes have been created as centers of excellence for higher training, research and development in science, engineering and technology. Established as a College of Engineering College in 1963, the Institute was declared as National Institute of Technology in the year 2002. It was then accorded the status of deemed university with powers to decide its own academic policy, to conduct its own examinations and to award its own degrees.

The Institute offers undergraduate, postgraduate and research programmes through its Departments. The Institute admits on an average about 900 students for undergraduate (B.Tech./B.Arch.) programmes and about 650 students for the postgraduate and research (M. Tech./M. Planning/M.Sc./MBA/Ph.D.).

The institute offers four year undergraduate courses of study leading to the Bachelor of Technology degree in Chemical, Civil, Computer, Electrical, Electronics & Communication, Mechanical and Metallurgical & Materials Engineering and five year Bachelor of Architecture.

The institute offers full-time/part-time postgraduate programmes leading to the degree of Master of Technology in Chemical Engineering, Computer Engineering, Design Engineering, Disaster Assessment and Mitigation, Electronics & Communication Engineering, Thermal Engineering, Environmental Engineering, Industrial Engineering, Metallurgical & Materials Engineering, Power Systems, Power Systems Management, Production Engineering, Renewable Energy, Steel Technology, Structural Engineering, Transportation Engineering, VLSI Design, Embedded Systems, Earthquake Engineering, Power Electronics and Drives, Wireless and Optical Communication, Water Resources Engineering and Master of Planning (Urban Planning).

The Institute also offers full time MBA programmes in the Department of Management Studies and M.Sc. in Sciences (Physics, Chemistry and Mathematics).

The institute offers Full-time/Part-time Ph.D. programmes in Architecture & Planning, Civil, Chemical, Computer, Electrical, Electronics & Communication, Mechanical, Metallurgical & Materials, Energy & Environment, Sciences (Physics, Chemistry, Mathematics), Management and Humanities & Social Sciences, National Centre for Disaster Mitigation & Management and Materials Research Centre.

2. THE OBJECTIVE

The objectives of the postgraduate programmes - MBA, M.Plan., M. Tech./M. Plan. and Ph.D. at the Malaviya National Institute of Technology, Jaipur, India (MNIT) are as follows:

- To cultivate high standard of performance in teaching & research,
- To develop the scientific, managerial and engineering manpower of the highest quality to cater to the needs of the Industry, R&D organizations and academia,
- To provide opportunity to students to do research in cutting edge areas,
- To be a role model and leader of educational Institutions in the country,
- To provide a broad grasp of the fundamental principles of the sciences and scientific, managerial and technological methods through its curriculum,
- To provide a deep understanding of the areas of specialization,
- To provide an innovative ability to solve new and open problems,
- To provide a capacity to learn continually and interact with multidisciplinary groups,
- To develop the students with a capability for:
 - Free and objective enquiry
 - Courage and integrity
 - Awareness and sensitivity to the needs and aspirations of society.
 - Doing independent research in their chosen areas

With this end in view, the postgraduate programmes are designed to include courses of study, seminars, project and thesis submission through which a student may develop his concepts and intellectual skills.

The procedures and requirements stated in the “Rules and Regulation manual for PG Programmes” embody the philosophy of the postgraduate education & research and ensure the highest standards of performance in teaching and research at the Institute. Within this general framework, subject to the

approval of the Senate Post-Graduate Board (SPGB)/Senate, the various departments/centres may impose such additional requirements as will serve their particular academic goals. The Rules and Procedures given in the manual are adhered to and implemented without any change and with all fairness. While considering an issue, if the manual does not specifically mention something, the same shall be forwarded by DPGC to SPGB/Senate for its consideration.

Location: MNIT Jaipur is situated on Jawahar Lal Nehru Marg in South of Jaipur. This Institute is about 10 km. away from the Jaipur Railway Station/Main Bus Stand and 5 km from the Airport. Frequent City transports are available to this Institute.

Campus: MNIT Jaipur is a residential Institution and provides residential facilities to the students as well as staff. The Institute campus area extends to 325 acres with many interesting topographical features, imaginatively laid out with picturesque landscape, numerous buildings and wide roads, the campus presents a spectacle of harmony in architecture and natural beauty.

The Central Library, Central Computer Centre and Design Centre of the institute are the backbone of the institution and are accessible to the students and staff of the institute.

3. CREDIT SYSTEM

Education at the Institute is organized around the credit system of study. The prominent features of the credit system are process of continuous evaluation of a student, performance, and a flexibility to allow a student to progress at an optimum pace suited to his/her ability or convenience subject to fulfilling minimum requirement for continuation.

Each course has a certain number of credits, which describe its weightage. A student's performance is measured by the number of credits that he/she has completed satisfactorily. A minimum number of earned credits should also be obtained in order to qualify for the degree.

The minimum academic requirements for the various degrees including minimum & maximum credits to be registered in a particular semester are indicated in the "Rules and Regulation manual for PG Programmes", which is available on Institute website.

Every course is co-ordinated by a member of the teaching staff of the department, which offers the course in a given semester. This faculty member is called the Course Co-ordinator. He has full responsibility for conducting the course, co-ordinating the work of the other members of the faculty involved in that course and for holding tests and assignments and awarding grades. For any difficulty a student is expected to approach the Course Co-ordinator for advice and clarification.

4. ADMISSIONS

Academic Session

The academic session of the PG Programmes is divided into two semesters (odd and even). The odd semester will normally commence around July every year, and the even semester around January every year.

The admissions to Ph.D. programme is made in both the regular semesters, however, admissions to M.Tech./M.Sc./M.Plan are made in the semester commencing in July.

4.1 ELIGIBILITY FOR ADMISSION

- i. The eligibility conditions given below are the absolute minimum. Departments/Centres may prescribe any requirements over and above for short listing. All eligibility requirements **must be met by the date as prescribed in PG Rules & Regulations 2.4 (6&7) as follows:-**
 - a. The selected candidate, who has completed all the examinations including project/thesis examination and the viva voce before the date of registration but is unable to produce the certificate in proof of having passed and secured the minimum specified qualifying marks,

may be considered for provisional admission. However, if admitted provisionally, they will be required to produce the evidence of their having passed (or at least appeared in) the qualifying degree examination by the last date of registration, failing which the admission may be cancelled.

- b. The provisions in para 6 above shall not be applicable in the case of M.Tech./M.Plan./MBA student of this institute, who has been provisionally selected for admission to a Ph.D. programme. Such students will be admitted to the Ph.D. Programme subject to the condition that they must have successfully completed all the prescribed requirements including acceptance of their Thesis/Project in a particular semester by the last registration date as specified in the academic calendar.
- ii. The "specified minimum" CGPA/marks implies a minimum of 6.5 on the 10 point scale (60% marks, only where CGPA is not awarded) for Ph.D. with a relaxation for SC/ST implying minimum of 6.0 on the 10 point scale (55% marks, only where CGPA is not awarded) in qualifying degree (refer Table 1). In exceptional cases, brilliant candidates with CGPA of more than 9 (85% marks) in Bachelors degree in Engineering/Architecture may be recommended by DPGC to SPGB for admission in Ph.D. program.
- iii. Reservation policy as prescribed by Government of India/MHRD from time to time shall be applicable.

4.2 M. Tech./M. Plan. (Full Time with Assistantship)

The admissions to M.Tech./M.Plan. (Full Time with Assistantship) will be done through Centralized Counseling for M. Tech./M.Arch./M.Plan. (CCMT) for the year 2020-21. For more details and information brochure, please visit the website www.ccmt.nic.in

4.3 M. Tech./M. Plan. (Full Time Sponsored/Part-Time)

Sponsored candidates are employees of a Public Sector Undertaking, a Government Department, a Research & Development organization, or a recognized private industry of repute (approved by SPGB on the recommendation of DPGC), or an Educational Institution, or be a Defence Sponsored Officer. Such candidates must be sponsored as Full-Time students.

Part-Time Candidates are Employees working in any Govt. organization/ Recognized private institutions

- i. The applicant must have a Bachelor's degree in Engineering/AMIE in appropriate discipline or a Master's degree in appropriate discipline with specified minimum CGPA/marks, as discussed above.
- ii. The applicant must have at least two years regular service
- iii. For working employees of MNIT, one year experience is required.

4. 4 Doctor of philosophy

4.4.1 Ph.D. in Engineering, Architecture & Planning Discipline

The applicant must have a Master's degree in Engineering/Technology/Architecture/Planning with CGPA not below 6.5 on a 10-point scale or 60% marks (Where CGPA is not awarded). In exceptional cases brilliant candidates with CGPA of more than 9 (85% marks) in Bachelors degree in Engineering/Architecture/Planning may be recommended by DPGC to SPGB for admission in Ph.D. program. Such candidates having, sufficient experience in the relevant area and publications in refereed conferences/journals as notified by DPGC, may also be considered.

4.4.2 Ph.D. in Humanities & Social Sciences

The applicant must have the master degree with CGPA not below 6.5 on a 10-point scale or 60% Marks (where CGPA is not awarded).

4.4.3 Ph.D. in Management

The applicant must have a two-year post-graduate degree in management /commerce/ economics/ engineering / technology with CGPA not below 6.5 on a ten-point scale or 60% marks (where CGPA is not awarded)

4.4.4 Ph.D. in Sciences (Physics/Chemistry/Mathematics)

The applicant must have a Master's Degree in the relevant Science subject with CGPA not below 6.5 on a 10-point scale or 60% marks (where CGPA is not awarded).

5. ADMISSION OF SPONSORED CANDIDATES

- i. A candidate who is sponsored for either Full time (FT) or Part time (PT) studies at MNIT by his/her employer and who meets the additional conditions specified below may be admitted through the Dept. Selection Committee appointed.
- ii. A sponsored candidate full time or part time must have total experience of more than two years, and in the case of full time sponsored candidate, he/she must have been in service of the sponsoring organization for at least one year at the time of admission. The sponsoring organization must specifically undertake to relieve him/her to pursue the programme for its full duration. The sponsored candidates are required to submit No Objection Certificate (NOC) from their employer/organization stating that:
 - a. His/Her official duties permit him/her to devote sufficient time for M.Tech./M.Plan./Research. Candidate should give undertaking that he would fulfill the attendance requirements of all the courses undertaken by him for fulfillment of the course pursued.
 - b. She/he will have to reside in the institute for a period of not less than one year during his/her registration for the degree. However, this condition can be relaxed for a candidate working in or around Jaipur (within a radius of 70 KM).
 1. M.Tech./M.Plan. Residency requirement of 1 year for doing complete course work
 2. Ph.D. Residency requirement until completing candidacy requirement

6. ADMISSION TO OFF CAMPUS PROGRAMME FOR PH.D.

- i. A candidate working in an R&D establishment or in other institution / organization, which is equipped with the necessary infrastructure for carrying out research and library facilities, may be considered by Senate, for admission only to the Ph.D. programmes in Engineering, Architecture & Planning, Management, and Sciences. Such a candidate must be sponsored by his/her employer and must have been in employment with the sponsoring organization for at least 2 years at the last date of application. The Institutions eligible for Off Campus must be recommended by DPGC and approved by SPGB.

The employer must expressly undertake to relieve him/her to stay on the campus to enable the candidate to complete the "Course work", "Comprehensive" and "State of Art" seminar and at the end of every semester for the semester evaluation.

- ii. A candidate applying for admission to the off campus registration programme must provide detailed information about the research facilities available at his/her organization and a certificate that these would be available to him/her for carrying out research. She/he should also provide the bio-data of the prospective supervisor/coordinator who would supervise/coordinate the candidate's work at his/her organization if required.
- iii. On the recommendation of the DPGC, and SPGB, the Chairperson Senate may approve the admission.
- iv. **However SPGB on the recommendation of DPGC may waive off minimum residence requirement to stay on campus in lieu of his earlier research work.**

7. FINANCIAL ASSISTANCE

- i. **The students will be admitted to the Ph.D. programmes on a self-financing basis. No institute assistantship will be provided.**

8. MINIMUM QUALIFICATION(S) FOR ADMISSION TO PH.D. PROGRAMME

Table 1 : Minimum qualification(s)

Department	Minimum Educational Qualification
Architecture & Planning	Masters degree in Architecture/Planning/Technology in relevant discipline.
Chemical Engineering	B.Tech./M.Tech. or equivalent degree in Chemical Engineering, B. Tech./ M.Tech. or equivalent degree in any branch of Engineering/Chemical Technology and interdisciplinary areas.
Chemistry	M.Sc. in Chemistry/ Medicinal Chemistry / Pharmaceutical Chemistry/ Environmental Chemistry/ Biochemistry/ Biotechnology and related disciplines with chemistry as one of the optional subject.
Civil Engineering	M.E./M.Tech. degree in relevant engineering discipline
Computer Science & Engineering	B.E./B.Tech. in Computer Science and Engg./ Computer Engg./ Information Technology/ Communication and Computer Engg./ Electronics and Communication Engg. M.E./M.Tech. in Computer Science and Engg./ Computer Engg./ Software Engg./ Information Technology/ Information Security/ VLSI
Electrical Engineering	M.E./M.Tech. or equivalent degree in respective & relevant Engineering disciplines
Electronics & Communication Engineering	B. Tech. and M. Tech. Electrical/ Electronics/ Computer/ Communication/ Telecommunication/ Instrumentation/ Control/ Microelectronics or equivalent discipline consistent with research areas of department.
Humanities and Social Sciences	M.A./M.Com. or equivalent degree with 6.5 CGPA on a 10-point scale or 60% marks Master's degree in Science with 6.5 CGPA on a 10-point scale or 60% marks may be considered for research areas consistent with the academic background and special interest.
Mathematics	M.A./M.Sc. in Mathematics/Computer Science/Statistics
Mechanical Engineering	B.Tech./M.Tech. degree or equivalent degree in Mechanical/Industrial/ Production Engg. B.Tech./M.Tech. degree/ disciplines consistent with the research areas of the department.
Metallurgical & Materials Engineering	B.E. / B.Tech degree in Metallurgical/ Materials / Mechanical /Chemical/ Ceramic Engineering/ Manufacturing / Production Engineering with M.E. / M.Tech degree in Metallurgical/ Materials / Ceramic Engineering/ Thermal Engineering or equivalent degree in relevant engineering disciplines.
Physics	The applicant must have a Master's degree with CGPA not below 6.5 on a 10 point scale or 60% marks (where CGPA is not awarded) in following areas: M.Sc. in Physics/Applied Physics/Engineering Physics/allied areas of Physics/interdisciplinary areas in physical sciences

	M. Tech or equivalent degree in Materials Science / Solid State Physics/ Engineering Physics / Polymer Science / Nanoscience and Nanotechnology/ Energy Science /Technology/ Computational Techniques in Physics
Centre for Energy and Environment	B.Tech./B.Arch. With post graduation in relevant discipline
National Centre for Disaster Mitigation and Management	Under Graduate: civil engineering/Architecture Graduate: Structural engineering/Earthquake Engineering or any other branch of civil/architectural Engineering
Management	The applicant must have a two-year post-graduate degree in management /commerce/ economics/ engineering / technology with CGPA not below 6.5 on a ten-point scale or 60% marks (where CGPA is not awarded).
Materials Research Centre	The applicant must have a Master's degree in Engineering/Technology/ Science subject with CGPA not below 6.5 on a ten point scale or 60% marks (where CGPA is not awarded) Other Qualifications: 1. M.Tech/ME or equivalent degree in Materials Science and Engineering, Metallurgical Engineering, Ceramics, Mechanical Engineering, Nanoscience, Polymer Technology, Electronics, Nanotechnology. 2. B Tech students graduating from an IIT with a CGPA of 8.0 or above in the above disciplines along with a valid GATE score OR B Tech / BE (from other reputed Institutions of National importance) with CGPA of 8.5 and above, are eligible to apply. 3. M.Sc in Materials Science/Physics/Chemistry Polymer Technology, Electronics, Nanotechnology. Or equivalent Master's degree in allied areas.

Note: In case of equivalent degree, the student is required to submit equivalence certificate w.r.t his/her qualifying degree from Association of Indian University/concerned National Council in case of Architecture/Town planning.

9. AVAILABLE RESEARCH AREAS IN VARIOUS DEPARTMENTS

Table 2. Research Areas offered in various Departments for admission in Ph. D

Department	Tentative Research Area of proposed Ph.D
Architecture and Planning	Environmental Planning
	Urban Water systems
	Urban Design and Planning
	Planning for sustainable development.
	Planning for energy efficient development.
	Environmental planning
	Vernacular architecture and traditional settlements
	Development in disaster prone areas
	Building regulations and sustainable built environment
	Urban Sustainability
	Urban Infrastructure Planning
	Regional Planning & Development
	Urban Growth and Land Management
	Sustainability and Traditional Knowledge systems
Computational approach for decision making	

	Urbanization and Slum Vulnerability
	Sustainable Housing
	Impacts of Planning Models on Urban Planning
	Assessment of Building Envelope Design
	Evaluation of Indoor Spaces
	Design Optimization for Building Facade
	Urban Infrastructure Management
	Planning for Disaster Resilience
	Construction Project management
Chemical Engineering	Hybrid advanced oxidation processes for wastewater treatment utilizing marble slurry/ mineral waste.
	Sustainable Ceramic membrane-based filtration processes for treatment and reuse of grey water
	Wastewater treatment by hybrid advanced oxidation process
	Potential of solar driven electrochemical advanced oxidation techniques for self-sustainable Toilets: Feasibility of H ₂ production
	Waste water treatment by liquid emulsion membrane
	Mechanistic Study of Carbon Dioxide Reduction to Methanol on Electrocatalytic Active Catalysts.
	Extraction and Separation of Natural Products
	Treatment of inorganic ions from wastewater using functionalized resin
	Synthesis of novel catalyst for conversion of Green-house gas (CO ₂) into methanol and value-added product
	Synergistic effect of plastic on biomass pyrolysis
	Nanostructured Catalysts for Energy and Environmental Applications
	Development of Nanostructured catalyst and its application for wastewater treatment
	Study on energy utilization/optimization in cement Industries
	Extraction and Distillation in Microchannels for High Throughput Operations
	Studies on synthesis of reactive adsorbent (s) from waste material for removal of bio-refractory contaminants
	Studies on removal of emerging pollutants in a bubble column reactor
	Development of heterogeneous catalyst derived from waste resource: Catalytic application
Development of nano material for non biodegradable wastewater treatment	
Chemistry	Synthesis of Nanomaterials for industrial and medicinal applications.
	Isolation of bioactive plant products for biomedical applications.
	Design and Synthesis of Low Cost Photonocatalyst for Waste Water Treatment
	Doped Carbon Materials for Ion Sensing Application.
	Green nanocomposite for Pollutant Detection
	Development of Biomass based nanomaterials for Water Remediation
	Bioactive Heterocycles to Drug Candidate – Practical Synthetic Approaches From Bench-Side to Bed-Side.
	Transition-Metal-Free, Organocatalytic, Oxidant-Promoted C _{(sp)²} -H bond activation reactions: Synthesis, Methodology Development, Chemistry and its Practical Applications

	C-H bond functionalization through Chalcogen based pincer complexes of PGM.
	Design and development of green synthetic routes for selective value added organic transformations
	Doped Nano-carbons: Synthesis and Applications
	A Density Functional Theoretical Study for exploring the Mechanism of Heterogeneous Catalytic chemical Reactions.
	Theoretical Investigations of green chemistry routes for chemical Synthesis.
	Stereoselective Synthesis of Carbohydrate scaffolds of Medicinal importance.
	Stereoselective Glycosylation for the Synthesis of deoxy-glycosides & glycoconjugates employing Greener and One-pot techniques.
	Preparation of <i>non-invasive</i> Anti-Cancer Drugs through Organic Synthetic routes.
	Solar-Water Splitting using organometallic Complexes: <i>Synthesis, simulations, and hydrogen evolution reactions.</i>
	Green synthesis of functionalized nanomaterials for Environmental remediation
	Analytical methodologies fate studies and degradation of emerging contaminants by green nanocomposites
	Source and degradation studies on emerging pesticides by functionalized nanomaterials
	Nanoporous Materials for Energy and Environmental Applications
	Transition Metal Nano-catalysts for Overall Water Splitting
	Transition Metal Catalyzed Organic Transformation Reactions
	Poly-NHC Ligand Based Transition Metal Complexes as Catalysts in Organic Transformation Reaction
	Greener approach for the preparations of bio-active heterocyclic molecules through Carbonylations of unsaturated organic compounds.
Centre for Energy and Environment	Study and application of solar photovoltaic based system
	Study of micro wind turbine systems
	Renewable energy-based hybrid system study
	Energy Forecasting and uncertainty analysis
	Energy Management in Smart grids
	Local Energy Transactions and active distribution system operations
Civil Engineering	Evaluation of structural response of jointed concrete slabs
	Investigation on properties of two stage concrete
	Indoor Air Quality and Health
	Source Apportionment Studies for Particulate Matter (PM)
	Risk Assessment
	Material flow in Environmental Engineering
	Waste treatment/ management
	Geo Polymer Concrete
	Alternate Building Material Using Waste
	Use of Solid Waste Materials as Aggregate in Concrete
	Fibre Reinforced Concrete
	Use of Solid Waste Materials in Roads
	Climate Change impact assessment on ecology

	Remote Sensing & GIS based Hazard, Vulnerability and Risk Assessment
	Automatic feature detection using remote sensing
	Conceptual design of structures using artificial intelligence
	Optimization of structures using genetic algorithm or other technique
	Waste material utilization from industries in building/roads
	Fiber-reinforced self-compacting concrete
	Production of low-cost green mortar by using waste materials.
	Effects of addition of Microorganism on the properties of Concrete
	Production of high strength self-compacting concrete by using industrial waste.
	FEM modeling of Concrete
	Performance based seismic design of structures.
	Performance-Based Seismic Design of Structure
	Seismic Vulnerability of Geo-structure
	Seismic Behaviour of Foundation on Slope
	Soil stabilization using waste materials.
	Soil stabilization using reinforcing materials.
	Application of Geosynthetics.
	Behaviour of randomly distributed natural fiber reinforced soils.
	Characterisation of desert soils with special reference to Rajasthan. Strengthening of desert soils using naturally vegetatives found in these soils.
	Strengthening of desert soils using naturally vegetatives found in these soils.
	Planning of groundwater development with emphasis on hydrological extremes.
	Assessment of Hydrology and water resources under climate change employing soft computing techniques.
	Unsaturated zone flow modelling and agricultural planning.
	Numerical modelling and optimization of groundwater resources.
	Design and modelling of water conveyance/treatment system
	Environmental Economic for Assessment of benefits and costs for pollution abatement
	Study on water quality trading in Rajasthan
	Experimental/ Mathematical Modeling of Geosynthetics reinforced Earth Structures
	Ground Modification Techniques using Alternate Materials
	Drainage studies of Western Rajasthan
	CC impact assessment on Hydrology
Computer Science Engineering	Intelligence at Edge Networks
	Issues and Protocols of Heterogeneous Network
	Next Generation Advanced High Speed Networks
	Cyber Security
	AI and ML Applications in Data Analytics
	Internet of Everything (IoE)
	Vehicular Ad Hoc Networks, Internet of Things, Cyber Security
	Android/Windows security, Darkweb, Adversarial Machine Learning, security issues in smart-devices.
	Social Network Analysis using Graph Theory

	Artificial Intelligence, Machine Learning, Soft Computing, Nature Inspired Intelligence, Optimization algorithms, Hybrid Intelligent Systems, Image Processing.
	Security in cloud and IoT
	Social Network and behavior analysis, WSN
	Deep Packet Inspection for Network Traffic Type
	Browser's Security Analysis and Vulnerability Assessment
	Hardware Trojans
Electrical Engineering	Electric Vehicles, Smart Grid, Power System Dynamics and Voltage Stability Studies, FACTS Devices, Renewable Integration in Power Systems
	EV charger development
	Design and development of DC DC Converter/DC /AC Inverters for micro grid.
	Wireless EV chargers
	Renewable Energy Systems and their Optimization.
	Control and operation of Smart Grid.
	Hybrid AC/DC Microgrid: Steady state and fault analysis.
	Applications of AI/Control in Power systems.
	Steady-state and fault analysis of unbalanced Distribution systems with Renewable energy sources.
	Signal Processing, Power system optimization, Control systems.
	PWM Techniques for Converters, Power Quality, Grid-Connected Converters.
	Power Systems Restructuring,
	Game theory applications to Power systems,
	Power system analysis & optimization.
	Power Electronics Converters Application
	Investigation on Multilevel Inverter for Power Quality Improvement
	Development of Control Scheme for Power Quality Improvement,
	Control Scheme for EV Applications.
	Planning and Operation of Efficient RES System with/without Grid Integration
	Systems, Sliding Mode Control Grid Integration of Renewable Energy Systems, Electrical Vehicles, Cyber-Physical Energy
	Power Systems Forecasting
	Data Analytics for power systems operation
	Demand response aggregation for ancillary services
	System Operation with Electric Vehicle Integration
Power System Operation and Control	
FACTS in Power Systems	
Power Systems Economics	
Integration of DG in Power Systems	
Electronics and Communication Engineering	Analog & Digital VLSI Design, Microelectronics, Nano Electronics Device Modeling and Simulation.
	Microstrip Antenna Design, Mobile Communication
	Photonics Devices for Quantum Computing
	Cognitive Approaches with applications to EDA and NLP
	Multi and Many Objective Nature Inspired Clustering Algorithms

	Computer Vision, Machine/Deep Learning, Biometrics
	Design and Development of Free Space Optical Receiver
	Microstrip Antenna for Future Wireless Applications
	Design and Development of Emerging and Non-classical CMOS Devices/Sensors
	Design and Development of IOT based solutions for smart city applications
	Modeling and Simulation of Emerging Devices
	Multirate Signal Processing,
	Wireless Communication
	Biomedical System
	Python/C++ Programming for Advanced Computational Algorithms
	Communication Engg.
	Wireless Networking/ Antennas
	Signal processing, MEMS
Humanities and Social Sciences	Economics: Development Economics, Public Policy, Higher Education, Gender Development, Technology Diffusion, Rural Development, Environment Economics
	Economics: Economics of Well-being; Dynamics of Emerging Market Economies
	English: Teaching English as a Second Language; Gender Issues in fiction/drama; Trends in modern/contemporary fiction/drama; Indian Writing in English; Literature of the Diaspora
	English: Exploring Postmodernist Tendencies in Select Fiction; Ecocritical Concerns in Literature; The Form and Technique of the Short Story
	English: Perspectives in Feminist Literature; Contemporary Indian Literature; Aspects of English Language Teaching,; CALL/MALL in English Language Teaching; Language and Culture
	Sociology: Gender studies; Science, technology and society; Social change and development; Rural and Urban society; Health, Ageing and Well-Being; Globalization, culture and society; Inequalities, Stratification and Exclusion
Mechanical Engineering	Ergonomic Interventions in Small Scale Industries (Part Time for outside MNIT Jaipur)
	Ergonomic Analysis and Design of Hand Tools in Agriculture Sector (Part Time for MNIT Staff)
	Integrating Lean Practices with Industry 4.0 Technology
	Industry 4.0 Enabled Sustainable Manufacturing
	Vibration based fault diagnosis of rotating machines
	XFEM/FEM simulation of smart materials
	Surface modification of biomaterials
	Prognostics of Engineering Systems
	Heat Transfer Enhancement
	Micro heat exchangers
	Solid-state welding of aerospace materials
Investigations on Damage and Failure Mechanisms of Nanocomposites through Simulations	
Management Studies	Sustainable Supply chain practices in Indian Service Industry
	Behaviour in online/digital environments;

	Issues in Mobile payment system adoption;
	AutoID techniques in management of supply chains
	Consumer behavior for Value co-creation
	Green HRM;
	Sustainable HRM
	Risk management in Financial Institutions;
	Fintech and Banking services;
	Financial issues in Family Business Management
	Sustainable Business Strategies;
	Issues in Online/Digital Education
	Psychological Well-being & Individual Behavior;
	People analytics in organizational performance
	Financial Distress and Default;
	Financial and Non-financial disclosures;
	Banking reforms;
	Earnings Management.
Material Research Centre	Development of Biomass derived carbon materials for redox flow battery
	Electrochemical Sensor for Pesticide and Ion detection in Drinking and Irrigation Water
	Improved Efficiency of thermoelectric Materials via Microstructure Engineering
	Design of graphene derived strong and tough biomimetic superalloy for extreme environment
	Hybrid Nanomaterials for Multifunctional Applications
	Metal-organic nanostructures for biological and environmental applications.
Metallurgical and Materials Engineering	Improvement of wear resistance of nanocomposites for biomedical application
	Tribology study of High Entropy alloy coatings
	Development of Fe based cutting tools via powder metallurgy route.
	Development of Creep Resistant Nanostructured Bainitic Steels and Subsequent Structure-Property-Performance Correlations
	Synthesis of Superhydrophobic layer by Electrodeposition technique
	Deformation micromechanism of a high entropy alloy
	Development of Interpenetrated Phase Nano Composites for enhanced toughness applications
	Welding of Aluminum, Steel and Inconel in similar and dissimilar configuration
	Lead (Pb)-free perovskite solar cells
	Studies on friction welding of dissimilar alloy: microstructure, and mechanical behaviour
	Development of high strength light weight alloys for structural applications in new generation electric vehicles.
Physics	Graphene based composite materials for energy applications
	Room temperature composite gas sensor with high sensitivity
	Some studies on Anisotropic FRW Universe
	Some studies on Bianchi Type I Universe
	Some studies on Anisotropic cosmology
	Some studies of Reheating and Inflationary models of Universe.

	Fabrication of self-supported conjugated polymer composite membranes for gas separation
	Development of highly efficient flexible gas sensors
	Functionalized nanocomposite membranes for gas / water purification
	Study the Physics Beyond Standard Model (Experimental High Energy Physics)
	Novel Design of Radiation Shielding using Geant4 Simulations and Effect Analysis for Space Applications (Space Physics).
	Extraction and sensing of bioactive medicinal constituents from ayurvedic herbs.
	Development of disposable electrochemical biosensing platforms for COVID-19
	Development of hydride-based anode/electrolyte materials for high capacity Li/Na batteries
	Tuning the Properties of Topological Insulators by Ion Implantation
	Synthesis and characterization of Core-shell nanoscale precipitate for high- efficiency thermoelectric material.
	Functional and structural characterization of thermoelectric material synthesized by selective laser melting.
	Electronic properties of 2-D materials.
	Surface studies of electrode materials in Metal-air batteries.
	Synthesis of nanomaterials for energy harvesting and storage applications
	High-efficiency Nanomaterials for Hydrogen generation.
	High surface area carbonaceous materials for energy storage applications
	Study of oxide nanostructures for photoelectrochemical water splitting
	Development of nanomaterials for supercapacitor applications
	Developments of nanostructured biosensors
	Self-assembled polymer nanostructured thin films
	Polymer nanocomposites with functional nanomaterials
	Resurgent Asymptotics in Matrix Models
	Resurgence in Quantum Field Theory
	Non-perturbative quantum field theory
	Skyrmions in relativistic quantum mechanics
National Centre for Disaster Mitigation & Management	Earthquake Resisting Design of RC Structures
Mathematics	Numerical Investigations of Ordinary Differential Equations.
	Computational Scheme for Partial Differential Equations.
	Blood Flow With Magnetic Effect.
	Magnetohydrodynamic Boundary Layer Flow of Nanofluid.
	Fractional calculus and applications to geometric function theory.
	Study of Generalized Hypergeometric Functions.
	Study of Fractional calculus and Special functions.
	Generalized continuous functions on topological spaces.
	Whitney Topology on function spaces.
	Topological vector spaces.
	Boundary Layer Flow of Magnetic Nanofluids.
	Numerical Methods for Boundary Value Problems.

	Rayleigh Taylor instability of Newtonian and Non Newtonian Nanofluids.
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Tentative Research Area (Only for Research personnel presently serving in various projects in MNIT)	
Department	Tentative Research Area of proposed Ph.D
Chemical Engineering	Development of Intelligent Control of Heat Integrated Reactive Dividing Wall Column for synthesis of Methyl Acetate.
	Valorization of waste cooking oil using cavitation process
Civil Engineering	Biological wastewater treatment in constructed wetlands
Electrical Engineering	Design and development of DC DC Converter/DC /AC Inverters for micro grid.
	Interval systems/Model order reduction
Electronics and Communication Engineering	Impact of Lateral Straggle on the Logic Gates and SRAM in Tunnel FET
	Signal processing, MEMS

10. MINIMUM QUALIFICATION(S) FOR ADMISSION TO M.TECH./M.PLAN. SPONSORED (FULL TIME/PART TIME) Table 3

S. No.	Academic Department	Post Graduate Programme	Minimum Educational Qualification
1.	Chemical Engg.	Chemical Engg.	B.E./B.Tech. in Chemical Engg., Chemical & Polymer Engg., Chemical Technology, Biochemical Engg., Biotech Engg., Biotechnology, Environmental Engineering, Leather Technology, Material Science & Engg./Technology, Petro-Chemical Engg./Technology, Nanotechnology, Polymer Science & Rubber Technology, Polymer Science & Technology, Polymer Technology, Bioengineering, Biotechnology & Biochemical Engg., Dairy Technology, Environment & Pollution Control, Food Engg./Technology, Industrial Biotechnology, Oil & Paint Technology, Oil Technology, Oils, Oleochemicals & Surfactants Technology, Paint Technology, Petroleum Engg./Technology, Plastic & Polymer Engg., Plastic Engg./Technology, Pulp & Paper Engg., Pulp Technology, Rubber Technology, Surface Coating Technology.
2.	Civil Engg.	Water Resource Engg.	B.E./B.Tech. in Agriculture Engg., Civil Engg., Irrigation Engg., Water Management, Civil Engg. & Planning, Civil Technology.
3.	Civil Engg.	Environmental Engg.	B.E./B.Tech. in Agriculture Engg., Biotech Engg., Biotechnology, Chemical Engg., Civil Engg., Civil Environmental, Computer Technology, Mechanical Engg., Biotechnology & Biochemical Engg., Chemical Technology, Civil Engg. & Planning, Civil Technology, Environment & Pollution Control, Environmental Science & Engg./Technology.
4.	Civil Engg.	Transportation Engg.	B.E./B.Tech. in Civil Engg., Construction Engg., Construction Technology, Highway Engg., Transportation Engg., Transportation & Urban

			Planning , Civil Engineering & Planning, Civil Technology.
5.	Civil Engg.	Structural Engg.	B.E./B.Tech. in Building& Construction Tech., Civil Engg., Construction Engg., Construction Technology Structural Engg., Applied Mechanics, Civil Engg. & Planning, Civil Technology, Computer Aided Design of Structures.
6.	Civil Engg.	Disaster Assessment and Mitigation	B.E./B.Tech. in Agriculture Engg., Chemical Engg., Civil Engg., Computer Technology, Construction Engg., Construction Technology, Irrigation Engg., Water Management, Civil Engg. & Planning, Civil Technology.
7.	Electrical Engg.	Power Systems	B.E./B.Tech. in Electrical Engg.
8.	Electrical Engg.	Power Systems Management	B.E./B.Tech. in Electrical Engg.
9.	Electronics & Communication Engg.	Electronics & Communication Engg.	B.E./B.Tech. in Electronics & Communication Engg. Electronics and Instrumentation Engg., Electronics and Telecom Engg, Electronics Engg ,Telecommunication Engg, Applied Electronics Telecommunication Engg, Communication Engg Computer and Communication Engg., Electronics and Computer Engg., Electronic and Electrical Communication Engg, Electronics Design Technology. Electronics Science and Engg. , Information & Comm. Technology.
10.	Electronics & Communication Engg.	VLSI Design	B.E./B.Tech. in Electronics & Communication Engg. Electronics and Instrumentation Engg., Electronics and Telecom Engg, Electronics Engg ,Telecommunication Engg., Applied Electronics Telecommunication Engg, Communication Engg., Computer and Communication Engg., Electronics and Computer Engg., Electronic and Electrical Communication Engg, Electronics Design Technology. Electronics Science and Engg., Information & Comm. Technology, VLSI System Design.
11.	Mechanical Engg.	Industrial Engineering	B.E./B.Tech. in Mechanical Engg., Industrial Engg., Industrial Engg. & Management, Industrial & Production Engg., Production & Industrial Engg., Production Engg., Production Engg. & Management.
12.	Metallurgical & Materials Engg.	Metallurgical & Materials Engg.	B.E./B.Tech. in Metallurgical & Material Engg., Metallurgical Engg. & Material Tech., Metallurgical Engg., Metallurgical Engg. & Material Science, Metallurgy, Materials Science & Engg./Tech., Materials Science & Metallurgical Engg., Materials & Metallurgical Engg., Cement & Ceramic Tech., Ceramic Engg., Chemical Engg., Electro-Chemical Engg., Engineering Physics, Industrial & Manufacturing Engg., Industrial & Production Engg., Industrial Engg., Industrial Metallurgy,

			<p>Manufacturing Engg./Tech., Mechanical Engg., Mineral Processing, Polymer Science & Technology, Production & Industrial Engg., Production Engg., Ceramic & Glass Tech., Ceramic Engg. & Tech., Ceramic Technology, Chemical & Polymer Engg., Chemical & Polymer Engg., Chemical Technology, Manufacturing Process, Manufacturing Science & Engg., Mineral Dressing, Mineral Engg., Surface Coating Tech.</p> <p>M.Sc. in Applied Physics, Chemistry, Material Science, Mineral Beneficiation, Ore-Dressing, Physics, Engg. Physics, Mineral Dressing, Nano Science & Tech.</p>
13.	Metallurgical & Materials Engg.	Steel Technology	<p>Material Science & Engineering, Material Science & Metallurgical Engineering, Material Science & Technology, Material & Metallurgical Engineering, Metallurgical & Material Engineering, Metallurgical & Material Technology, Metallurgical Engineering, Metallurgical Engineering & Material Science, Metallurgy, Metallurgy & Materials, Metallurgy & Material Technology.</p> <p>Manufacturing Engineering, Material Science & Engineering, Material Science & Metallurgical Engineering, Material Science & Technology, Material & Metallurgical Engineering, Metallurgical & Material Engineering, Metallurgical & Material Technology, Metallurgical Engineering, Metallurgical Engineering & Material Science, Metallurgy, Metallurgy & Materials, Metallurgy & Material Technology, Production Engineering, Mechanical Engineering.</p>
14.	Computer Science & Engg.	Computer Engg.	<p>B.E./B.Tech. in Applied Electronics & Instrumentation Engg., Computer Engg., Computer Science, Computer Science & Engg., Computer Science & Information Technology, Computer Technology, Electrical & Electronics Engg., Electrical & Instrumentation, Electrical Engg., Electrical Engg. (Power), Electrical Power Engg., Electronics & Communication Engg., Electronics & Instrumentation Engg., Electronics & Telecom Engg., Electronics Engg., Information Technology, Power Electronics, Telecommunication Engg., Applied Electronics & Telecommunication Engg., Communication Engg., Computer & Communication Engg., Computer Engg. & Application, Computer Networking, Computer Science & System Engg., Computer Science & Technology, Computing in Computing, Computing in Multimedia, Computing in Software, Electrical Engg. & Industrial Control, Electrical & Instrumentation Engg., Electrical & Power Engg., Electrical Instrumentation & Control Engg., Electronics Instrumentation & Control Engg., Electronics & Computer Engg., Electronics & Control Systems, Electronics & Electrical Communication Engg., Electronics & Electrical Engg., Electronics & Information Systems, Electronics & Power Engg.,</p>

			Electronics & Telematics Engg., Electronics Communication & Instrumentation Engg., Electronics Design Technology, Electronics Instrument & Control, Electronics Science & Engg., Industrial Electronics, Information & Comm. Technology, Information Engg., Information Science, Information Science & Engg./Technology, Software Engg., VLSI System Design
15.	Architecture & Planning	Master of Planning (Urban Planning)	B.Arch., B.Plan., Bachelor in Town Planning, Bachelor in Transportation Planning, Bachelor in Urban Planning, Bachelor in Town & Country Planning, B.E or B.Tech. in Civil Engineering, B.E or B.Tech. in Environmental Engineering, B.E or B.Tech. in Construction Engineering., B.E or B.Tech. in Construction Technology.
16.	Material Research Centre	Material Science & Engineering	M.Sc. in Physics/ Chemistry/ Applied Science/ Electronics/ Materials Science/Nanotechnology. OR B.Tech. in Applied Electronics and Instrumentation Engineering/ Ceramic Engineering/ Chemical Engineering/ Electrical and Electronics Engineering/ Electrical and Instrumentation Engineering/ Electrical Engineering/ Electronics and Communication Engineering/ Electronics and Instrumentation Engineering/ Electronics Engineering/ Engineering Physics/ Instrumentation and Control Engineering/ Instrumentation Engineering/ Manufacturing Engineering/ Materials Science and Engineering/ Mechanical Engineering/ Metallurgical and Materials Engineering/ Nanotechnology/ Polymer Science and Technology/ Production Engineering/ Ceramic Technology/ Chemical Technology/ Electronics and Electrical Engineering/ Instrument Technology/ Materials Science and Metallurgical Engineering/ Materials and Metallurgical Engineering/ Polymer Engineering and Technology
17.	Centre for Energy & Environment	Renewable Energy	B.E./B.Tech. in Architectural Engg., Architecture, Automobile, Biochemical, Biotech., Biotechnology, Chemical, Civil, Civil Environmental, Control & Electrical, Electrical & Electronics, Electrical & Instrumentation, Electrical, Electrical Engg. (Power), Electrical Power, Electro-chemical, Energy, Engineering Physics, Environmental, Industrial Manufacturing, Industrial & Production, Industrial, Industrial Engg. & Management, Industrial Metallurgy, Manufacturing Engg./Tech., Material Science & Engg./Tech., Mechanical Engg., Metallurgical & Materials, Metallurgical & Materials Tech., Metallurgical, Metallurgical Engg. & Material Science, Metallurgy, Power Electronics, Production & Industrial, Production, Production Engg. & Management, Renewable Energy, Chemical & Polymer, Civil Engg. & Planning, Electrical Engg. & Industrial Control, Electrical & Instrumentation, Electrical & Power, Electrical Science & Engg., Environmental Science & Engg./Tech., Material Science & Metallurgical, Mechanical & Automation, Mechanical Engg. Automobile, Power Control & Drives, Power, Solar & Alternate Energy, M. Sc in Applied Physics, Physics, Engineering Physics, Engineering Physics & Instrumentation

11. SEAT MATRIX AND OTHER DETAILS

Table 4. Duration of M. Tech./M.Plan./M.Sc. Programme

Programme	Duration of the Programme	
	Normal duration	Maximum duration
M. Tech.	Full Time: 4 Semesters	6 Semesters
	Part Time: 6 Semesters	8 Semesters
M.Sc.	Full Time: 4 Semesters	6 Semesters

Table 5. Seat Matrix for M.Tech./M.Plan Programme (Session 2020-2021)

Programme	Full Time Sponsored	Part Time Sponsored
Chemical Engineering	5	6
Computer Engineering	5	6
Disaster Assessment and Mitigation	5	6
Electronics & Communication Engineering	5	6
Environmental Engineering	1	6
Industrial Engineering	5	6
Metallurgical & Materials Engineering	5	6
Material Science & Engineering	5	6
Power Systems	5	6
Power Systems Management	5	6
Steel Technology	5	6
Structural Engineering	5	6
Transportation Engineering	5	6
Urban Planning	5	6
VLSI Design	5	6
Water Resources Engineering	5	6
Renewable Energy	5	6

Table 6. Basis for Selection to Postgraduate Programmes leading to M. Tech./M.Plan. Degree for Full Time/Sponsored (Full-time and Part-time) candidates

Candidates Status	Basis for Selection
M. Tech./M.Plan(Full time sponsored/Part Time)	Experience, merit of qualifying examination & interview/Test

12. GENERAL INFORMATION

- Admission will be to the first semester of the respective postgraduate programmes.
- Admission to various PG programmes leading to M.Tech./M. Planning degree would be based on a merit list prepared by the respective departments. The merit list will be made available on the website of the Institute. **No separate information will be sent to the candidates.**
- A student who is admitted and registered for a postgraduate programme at the Institute but leaves before completing or discontinued his/her studies, shall not be admitted to a programme at the same level.

- (d) The institute reserves the right not to run any particular programme, if the number of students in that programme is less than the minimum number specified by the Institute at the time of admission.
- (e) The institute reserves the right to change its statutes and regulations relating to academic programmes and the modalities of admission without prior notice.
- (f) There is no age restriction for postgraduate programme.
- (g) In matters of interpretation of the provisions or any matter not covered here in this information brochure, the decision of the Chairman, Senate shall be final and binding on both the parties.

The institute reserves the right to alter the number of seats in any programme without any prior notice.

Notes:

- (1) The provisions for reservation of seats given above are subject to modification in accordance with any Government Order, if issued subsequently by the Government of India.
- (2) It will entirely be the responsibility of the candidate to prove his/her eligibility in terms of minimum educational qualifications and for claiming reservation under a specific category, if any, at the time of submitting the application.
- (3) The requisite certificate for SC/ST/OBC category must be submitted, along with application, in original, issued by a competent authority listed in Annexure 1, failing which the benefit of the reserved category will not be given. The OBC certificate should have been issued after **March 31, 2020**.
- (4) PWD candidates should submit along with the application, the certificate, in original, from a Government medical board. Such a candidate may, however, be asked to appear before a Medical Board duly constituted by MNIT, Jaipur for this purpose. The Medical Board will decide the courses, which cannot be offered to a candidate, on the basis of the nature of his/her disability. The candidate will be offered admission out of the remaining courses as per the institute policy.
- (5) **The last date for online application is 23/08/2020 (till 5.00 PM)**
- (6) **The candidate should be ready with all original documents and PG dissertation thesis at the time of online interview for PhD admission.**

13. FEES

Updated Fees structure will be available on Institute website (http://mnit.ac.in/academics/fee_structure.php)

14. MATTERS OF DISPUTE

Disputes if any, arising out of or relating to any matter whatsoever shall be subject to the exclusive jurisdiction of Jaipur Courts.

15. RAGGING

Ragging is banned in the institute and anyone indulging in ragging is likely to be punished appropriately and the punishment may include expulsion from the institute, suspension from the institute or classes for a limited period or fine with a public apology. The punishment may also take the shape of: (i) withholding assistantship or other benefits; (ii) debarring from representation in events (iii) withholding results (iv) suspension, rustication or expulsion from hostel or mess. (v) monetary fines.

16. IMPORTANT INSTRUCTIONS

- a. The candidates are advised to read each and every instruction given in this Information Brochure very carefully before filling-up the Application Form.
- b. **The application fee of Rs. 1000/- for General/OBC category and Rs. 500/- for SC/ST category candidates is to be deposited online only while submitting the application.**
- c. The candidate must keep a photocopy of the form for future reference.

- d. Scrutiny of application shall be done solely on the basis of information submitted by you in the application form, hence fill it very carefully. If at any stage of admission process a candidate is found not to meet the eligibility criteria, have hidden/submitted incorrect information, the candidature of the candidate will be summarily cancelled.**
- e. Request for change of category received after the last date will not be accepted under any circumstances.
- f. Original Documents of the following certificates have to be produced at the time of online interview :-
- i. High School/Secondary School certificate in support of age/date of birth. No other certificate is acceptable in support of the age/date of birth.
 - ii. Provisional/Final Degree certificate/Migration Certificate must be attached.
 - iii. The Marks Sheet/Grade Card of Qualifying Examination including Diploma if applicable.
 - iv. Character Certificate from the Director/Dean of Students Affairs of the Institute from where the candidate has graduated (For Full-time course applicants only).
 - v. Character Certificate from two persons of repute where the candidate has been residing for the last two years (For part-time course applicants only).
 - vi. Certificate from the employer on the official stationary and rubber stamp of the organization/institution (For full-time sponsored/part-time candidates only).
 - vii. A statement of purpose (only for those who are applying for Ph.D.) including research idea in not more than 300 words. This SOP will have due weightage during process of screening/selection. This has to be compulsorily filled in the online application.**
- g. In case the candidate is seeking admission as a sponsored candidate, he/she should submit a certificate from his/her present employer on official stationary with rubber stamp that he/she will be sponsored on deputation/study leave/extra ordinary leave with permission to attend the full time M.Tech. course if he/she is admitted. The employer should also indicate that the candidate will not be withdrawn midway till the completion of the course.

Important Dates

Start Date of Online Application	:-	10/08/2020
Last Date and Time for submission of Online Application form	:-	23/08/2020 (till 5.00 PM)
Provisional list of shortlisted/eligible candidates for online written test/interview will be displayed on Institute website by 27/08/2020.		
Dates of online written test	:-	31/08/2020 to 02/09/2020
Dates of online Interview of the shortlisted candidates	:-	01/09/2020 to 03/09/2020
Final Result	:-	15/09/2020

Note :- No need to send copy of the application form by post.

AUTHORITIES WHO MAY ISSUE CASTE/TRIBE CERTIFICATE
(SC/ST/OBC candidates should submit certificate issued by any of the following authorities)

District Magistrate/Additional District Magistrate/ Collector/ Deputy Commissioner/ Additional Deputy Commissioner/ Deputy Collector/ 1st Class Stipendiary Magistrate/ City Magistrate/ Sub-Divisional Magistrate / Taluka Magistrate /Executive Magistrate /Extra Assistant Commissioner/ Chief Presidency Magistrate/Additional Chief Presidency Magistrate/ Presidency Magistrate/ Revenue Officer not below the rank of Tehsildar/Sub-Divisional Officer of the area where the candidate and /or his/her family normally resides/Administrator/Secretary to Administrator/Development Officer (Lakshadweep Island).

(Certificate issued by any other authority will be rejected.)

ANNEXURE II

CERTIFICATE FROM INSTITUTE / UNIVERSITY

(Required during registration from candidates whose result of the qualifying examination has not been declared)

I hereby certify that Mr./Ms. has appeared in the final year examination including theory, practical and project examination for B.E./B.Tech./B.Sc./M.Sc.....degree (strike out the non-applicable ones and write in the blank if the degree is not mentioned) and the result is likely to be announced by His/her conduct and character during his/her stay at the Institute/University was "GOOD".

Place:

Date:.....

Signature of the Principal/Dean/Registrar/

Dy. Registrar/Proctor/Administrative

Officer of the institute last attended with seal

ANNEXURE III

CERTIFICATE OF THE FORWARDING OFFICER

(Required from candidates who is yet to appear in the qualifying examination or yet to get the degree)

I hereby certify in connection with the application of Mr./Ms. that he/ she is a bonafide student of our institution and is applying for admission to PG programmes at MNIT Jaipur. He/She is yet to complete / has completed all the requirements of qualifying examination including theory, practical and project examination for B.E./B.Tech./B.Sc./M.Sc. (Strike out the non-applicable ones and write in the blank if the degree is not mentioned) and the result is likely to be announced by His/her conduct and character during his/her stay at the Institute/University is "GOOD".

Place:.....

Date:.....

Signature of the Principal/Dean/Registrar/

Dy. Registrar/Proctor/Administrative Officer

of the institute attending/last attended with seal

SPONSORSHIP CERTIFICATE
(Required from Full-time Sponsored Candidates only)

(This should be typed on the letterhead of the Sponsoring Organization and enclosed with application for admission)

To,
The Director
MNIT, Jaipur
Sub: Sponsoring of an employer for M.Tech. Programme.

We hereby Sponsor the candidature of Mr./Ms. who is working in this organization for the lastyears and is presently holding the rank/position of for joining his/her M. Tech. programme in at your Institute as a Full Time candidate in the Department of with specialization in the following areas:

- 1.....
- 2.....
- 3.....

His/her conduct and character is good.

The Institution/Organization would relieve him/her immediately for joining the above course, if selected for admission. We shall fully relieve him/her duties in the organization to devote sufficient time for M. Tech./M. Plan..

Place:	Signature of Head of the Institution/Organization with seal
Date:.....	Name
	Designation

*Candidate should also give a separate undertaking that he would fulfill the attendance requirements of all the courses undertaken by him for fulfillment of the course pursued.

NO OBJECTION CERTIFICATE
(Required from Candidates Seeking Admission on Part-time Basis)

(On a letterhead of the sponsoring organization & enclosed with application for admission)

The undersigned is pleased to permit Mr./Ms. who is working in this organization for the last years and is presently holding the rank/position of for pursuing the programme (course) at MNIT Jaipur in the Department of with specialization in the following areas:

- 1.....
- 2.....
- 3.....

His/her conduct and character is good. We are ready to relieve him/her during study hours (usually 8-10 hours of classroom instructions in a week) to undergo the Masters' programme / (usually about 6 hours of classroom instructions in a week) to undergo the Ph.D. programme as per time-table of the Institute, which follows slot system. We understand that the duration of course work is expected to be 4 semesters for Part-Time M.Tech. programme/ 3 semesters for part-time Ph.D. programme, while total duration is expected to be 3 years for part time M.Tech./ 5 years for part-time Ph.D.

Place:	Signature of Head of the Institution/Organization with seal
Date:.....	Name
	Designation

FORMAT FOR OBC [NCL] CERTIFICATE
TO BE PRODUCED BY OTHER BACKWARD CLASSES
[This certificate MUST have been issued on or after 1st April 2020]

This is to certify that Shri/Smt./Kum. _____ Son/Daughter of Shri/Smt. _____ of Village/Town _____ District/Division _____ in the _____ State/UT 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. 12016/9/2000-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.
- (xvi) Resolution No. 12015/2/2007-BCC, dated 18/08/2010.
- (xvii) Resolution No. 12015/2/2007-BCC, dated 11/10/2010.
- (xviii) Resolution No. 12015/13/2010-BC-II, dated 08/12/2011.
- (xix) Resolution No. 12015/05/2011-BC-II, dated 17/02/2014.
- (xx) Resolution No. 12011/6/2014-BC-II, dated 07/12/2016.

Shri/Smt./Kum. _____ and/or his family ordinarily reside(s) in the _____ District/Division of _____ State/UT. 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. 36 012/22/93-Estt.(SCT), dated 08/09/93 which is modified vide OM No. 36033/3/2004 Estt.(Res.), dated 09/03/2004.

Place _____
 Date _____

Signature _____
 Designation^ _____
 (with seal of office)

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 / First 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.
(iv) Sub-Divisional Officer of the area where the candidate and / or his family resides.
- (C) OBC Certificate issued from Maharashtra State must be validated by the Social Welfare Department of Maharashtra Government.

Annexure VII

OBC Undertaking

Declaration / undertaking - for OBC Candidates only

I, _____ son/daughter of Shri _____ 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 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. 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, 2020.

Place:

Signature of the Candidate

Date:

Declaration/undertaking not signed by Candidate will be rejected

SC/ST CERTIFICATE FORMAT**FORM OF CERTIFICATE TO BE PRODUCED BY A CANDIDATE BELONGING TO SCHEDULED CASTE OR SCHEDULED TRIBE**

This is to certify that Shri/Smt./Kum. _____ Son/Daughter of Shri _____

_____ of village/Town _____ in District/ Division _____ of the State/Union Territory _____

belongs to the _____ caste/Tribe, which is recognized as a Schedule Caste/Scheduled Tribe under.

The Constitution (Scheduled Castes) order, 1950.

The Constitution (Scheduled Tribes) order, 1950.

The Constitution (Scheduled Castes)(Union Territory) order, 1951.

The Constitution (Scheduled Tribes) (Union Territory) order, 1951.

(As amended by the Scheduled Castes and Scheduled Tribes (Modification) Order 1956, the Bombay Reorganization Act, 1960, the Punjab Reorganization Act, 1966, The State of Himachal Pradesh Act, 1970, the North Eastern Areas (Reorganization Act, 1971) and the Scheduled Castes and Scheduled Tribes orders (Amendment) Act, 1976.)

*The constitution (Jammu & Kashmir) Scheduled Caste Order, 1956;

*The Constitution (Andaman and Nicobar Islands) Scheduled Tribes, 1959, as amended by the Scheduled Castes and Scheduled Tribes orders (Amendment) Act. 1976;

*The Constitution (Dadra and Nagar Haveli) Scheduled Castes Order 1962;

*The Constitution (Dadra & Nagar Haveli) Scheduled Tribes Order, 1962; *

The Constitution (Pondichery) Scheduled Castes Order, 1964;

*The Constitution (Uttar Pradesh) Scheduled Tribes Order, 1967;

*The Constitution (Goa, Daman & Diu) Scheduled Castes Order, 1968;

*The Constitution (Goa, Daman & Diu) Scheduled Tribes Order, 1968;

*The Constitution (Nagaland) Scheduled Tribes Order, 1970;

*The Constitution (Sikkim) Scheduled Castes Order, 1978;

*The Constitution (Sikkim) Scheduled Tribes Order, 1978;

*The Constitution (Scheduled Castes) Orders (Amendment) Act, 1990.

*The Constitution (Scheduled Tribes) Order, (Amendment) Ordinance, 1991.

*The Constitution (Scheduled Tribes) Order, (Second Amendment) Act, 1991.

*The Constitution (Scheduled Tribes) Ordinance, 1996

This certificate is issued on the basis of the Scheduled Castes/Scheduled Tribes Certificate issue to

Shri _____ Father of Shri _____

_____ of _____ village/town _____ in District/Division _____ of the State/UT _____

_____ who belongs to the _____ caste/Tribe which is recognized as a SC/ST in the State/Union Territory

_____ issued by the _____ (name of the prescribed issuing authority) vide their No. _____ dated _____

_____ or Shri _____ and or his/her family ordinarily reside(s) in Village/Town _____ of _____ District/Division of the State/Union Territory of _____.

Place _____

Date _____

Signature _____

Designation _____

(With seal of Office)

NOTE: - The terms ordinarily reside(s) used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.



SC Certificate issued from Maharashtra State must be validated by Social Welfare Department and ST Caste certificate must be validated by Tribal Development Department of Maharashtra Government.

LIST OF AUTHORITIES EMPOWERED TO ISSUE CASTE/TRIBE CERTIFICATE:

1. District Magistrate/Additional ^{1st} District Magistrate/Collector/Deputy Commissioner /Additional Deputy Commissioner/Dy. Collector/ _____ Class Stipendiary Magistrate/Sub Divisional Magistrate/Extra Assistant Commissioner/ Taluka Magistrate/Executive Magistrate.
2. Chief Presidency Magistrate/Additional Chief Presidency Magistrate/Presidency Magistrate.
3. Revenue Officers not below the rank of Tahsildar.
4. Sub-Divisional Officers of the area where the candidate and/or his family normally resides.

PWD CERTIFICATE FORMAT**DISABILITY CERTIFICATE FORMAT - I****{In cases of amputation or complete permanent paralysis of limbs and in cases of blindness}****(NAME AND ADDRESS OF THE MEDICAL AUTHORITY ISSUING THE CERTIFICATE)**

No. - _____

Date - ____ / ____ / ____

Signature/LTI/RTI of the Candidate

--

Passport size photograph of the Candidate

This is to certify that I have carefully examined Shri/Smt./Kum. _____,
 son/wife/daughter of Shri _____ Date of Birth ____ / ____ / ____
 [Age - _____ years], male/female, Registration No. _____ permanent resident of
 House No.- _____, Ward/Village/Street _____ Post Office
 _____ District _____ State _____, whose
 photograph is affixed above, and am satisfied that

1. he/she is a case of (Please tick as applicable):
 - a. locomotor disability
 - b. blindness
2. the diagnosis in his/her case is _____.
3. He / She has _____ % (in figure) _____ percent (in words)
 permanent physical impairment/blindness in relation to his/her _____
 (part of body) as per guidelines (to be specified).
4. The applicant has submitted the following document as proof of residence:-

Nature of Document	Date of Issue	Details of authority issuing the certificate

Official Seal:

[Authorised Signatory of notified Medical Authority]

Name: _____

DISABILITY CERTIFICATE FORMAT - II

{In cases of multiple disabilities}

(NAME AND ADDRESS OF THE MEDICAL AUTHORITY ISSUING THE CERTIFICATE)

No. - _____

Date - ____ / ____ / ____

Signature/LTI/RTI of the Candidate

Passport size
 photograph
 of the
 Candidate

This is to certify that I have carefully examined Shri/Smt./Kum. _____,

son/wife/daughter of Shri _____ Date of Birth ____ / ____ / ____

[Age - _____ years], male/female, Registration No. _____ permanent resident of

House No.- _____, Ward/Village/Street _____ Post Office

_____ District _____ State _____, whose

photograph is affixed above, and am satisfied that

1. He/she is a Case of **Multiple Disability**. His/her extent of permanent physical impairment/ disability has been evaluated as per guidelines (to be specified) for the disabilities ticked below, and shown against the relevant disability in the table below:

S. No.	Disability	Affected Part of Body	Diagnosis	Permanent physical impairment/mental disability (in %)
1	Locomotor disability	@		
2	Low vision	#		
3	Blindness	Both Eyes		
4	Hearing impairment	£		
5	Mental retardation	X		
6	Mental-illness	X		

Contd.

2. In the light of the above, his/her overall permanent physical impairment as per guidelines (to be specified), is as follows:

In figures: _____ %

In words: _____ percent

3. The above condition is progressive/ non-progressive/ likely to improve/ not likely to improve.

4. Reassessment of disability is:

(i) Not Necessary [or]

(ii) is recommended/after _____ years _____ months, and therefore this certificate shall be valid till (DD/MM/YY) _____.

@ - e.g. Left/Right/both arms/legs

- e.g. Single eye/both eyes

£ - e.g. Left/Right/both ears

5. The applicant has submitted the following document as proof of residence:

Nature of Document	Date of Issue	Details of authority issuing the certificate

6. Signature and seal of the Medical Authority:

Name and Seal of Member	Name of Seal of Member	Name and Seal of the Chairperson

DISABILITY CERTIFICATE FORMAT - III

{In cases of any other case not covered in Format - I & II}

(NAME AND ADDRESS OF THE MEDICAL AUTHORITY ISSUING THE CERTIFICATE)

No. - _____

Date - ____ / ____ / ____

Signature/LTI/RTI of the Candidate

Passport size
 photograph
 of the
 Candidate

This is to certify that I have carefully examined Shri/Smt./Kum. _____,

son/wife/daughter of Shri _____ Date of Birth ____ / ____ / ____

[Age - ____ years], male/female, Registration No. _____ permanent resident of

House No.- _____, Ward/Village/Street _____ Post Office

_____ District _____ State _____, whose

photograph is affixed above, and am satisfied that

1. He/she is a Case of **Multiple Disability**. His/her extent of permanent physical impairment/ disability has been evaluated as per guidelines (to be specified) for the disabilities ticked below, and shown against the relevant disability in the table below:

S. No.	Disability	Affected Part of Body	Diagnosis	Permanent physical impairment/mental disability (in %)
1	Locomotor disability	@		
2	Low vision	#		
3	Blindness	Both Eyes		
4	Hearing impairment	£		
5	Mental retardation	X		
6	Mental-illness	X		

Contd.

2. In the light of the above, his/her overall permanent physical impairment as per guidelines (to be specified), is as follows:

In figures: _____%

In words: _____percent

3. The above condition is progressive/ non-progressive/ likely to improve/ not likely to improve.

4. Reassessment of disability is:

(i) Not Necessary [or]

(ii) is recommended/after _____ years _____ months, and therefore this certificate shall be valid till (DD/MM/YY) _____.

@ - e.g. Left/Right/botharms/legs

- e.g. Single eye/both eyes

£ - e.g. Left/Right/both ears

5. The applicant has submitted the following document as proof of residence:

Nature of Document	Date of Issue	Details of authority issuing the certificate

Official Seal:

[Authorised Signatory of notified Medical Authority*]

Name: _____

* In case this certificate is issued by a medical authority who is not a government servant, it shall be valid only if countersigned by the Chief Medical Officer of the District. Note: The principal rules were published in the Gazette of India vide notification number S.O. 908(E), dated the 31st December, 1996.

Countersigned^

Official Seal:

[CMO/Medical Superintendent/Head of Govt. Hospital]

Name: _____

^ Countersignature and seal of the CMO/Medical Superintendent/Head of Government Hospital is essential in case the certificate is issued by a medical authority who is not a government servant.

Contact Details of Head of Departments

S. No.	Academic Department	Email	Phone Number (STD Code 0141)
1	Architecture & Planning	hod.arch@mnit.ac.in	2591164
2	Center for Energy & Environment	hod.cee@mnit.ac.in	2713211
3	Chemical Engg.	hod.chem@mnit.ac.in	2299711
4	Chemistry	hod.chy@mnit.ac.in	2521635
5	Civil Engg.	hod.ce@mnit.ac.in	2713379
6	Computer Science & Engg.	hod.cse@mnit.ac.in	2713418
7	Electrical Engg.	hod.ee@mnit.ac.in	2713398
8	Electronics & Communication Engg.	hod.ece@mnit.ac.in	2713222
9	Humanities & Social Science	hod.hum@mnit.ac.in	2713396
10	Management Studies	hod.dms@mnit.ac.in	2713345
11	Mathematics	hod.maths@mnit.ac.in	2713213
12	Mechanical Engg.	hod.mech@mnit.ac.in	2713330
13	Metallurgical & Materials Engg.	hod.meta@mnit.ac.in	2713140
14	Physics	hod.phy@mnit.ac.in	2713114
15	National Centre for Disaster Mitigation and Management	hod.ncdmm@mnit.ac.in	2713551
16	Materials Research Centre	hod.mrc@mnit.ac.in	2713568