PROSPECTUS – 2023

Admission to

Regular M.E. PROGRAMMES



Academic Cell

National Institute of Technical Teachers Training and Research,

Sector – 26, Chandigarh – 160 019

Phone: 0172-2759500; 2759593; 2759695; 2759729; Fax: 0172-2791366; 2793893

Website: www.nitttrchd.ac.in; Email Id: academiccell@nitttrchd.ac.in

National Institute of Technical Teachers Training and Research, Chandigarh

M.E. PROGRAMMES (Rules & Procedures)

1. Introduction

In realization of the need for training better quality technicians to meet the large-scale industrialization of the country, the Ministry of Education, Government of India, on the recommendations of All India Council for Technical Education (AICTE), established four Regional Technical Teachers' Training Institutes (now National Institute of Technical Teachers' Training & Research, (NITTTR) at Bhopal, Chandigarh, Chennai and Kolkata in 1967. The institute at Chandigarh, started in collaboration with Royal Netherlands Government (upto 1974), was designed to meet the requirements of developing polytechnic education in the northern region covering the states of Jammu and Kashmir, Himachal Pradesh, Punjab, Haryana, Rajasthan, Uttar Pradesh, Uttrakhand, Delhi and Union Territory of Chandigarh. The institute during the last fifty years acted as a resource system to technical education and provided guidance at national, state and institution levels in policy formulation, planning and management, quality controls etc. The institute is registered under the Societies Registration Act, 1860 and is managed by a Board of Governors.

To achieve its stated objectives, the institute undertakes the following spectrum of activities: Education and Training Programmes; Curriculum Development; Instructional Material Development; Research and Development; Extension Services; Consultancy in Technical Education and Technology areas. Keeping in tune with the various emerging needs of the country, the institute presently extends its services in the following areas as well: Media Development including information resources, their acquisition, storage and retrieval; Entrepreneurship Development; Industry Institute Interaction; Continuing Education for working engineers/technicians; Rural development; Transfer of Appropriate Technology to rural areas; Integrating Persons with disabilities with the mainstream of Technical and Vocational Education.

Since 1992, the institute started offering Regular Master of Engineering Programmes in (i)Engineering Education and (ii) Manufacturing Technology. In the year 1994, two more programmes namely Master of Engineering in Construction Technology and Management and Computer Science and Engineering were added. In the year 1998, two more Master of Engineering Programmes in Instrumentation and Control and Electronics and Communication Engineeringwere added, and, since 2005, the institute started offering Master of Engineering Programmes on Modular mode in all the above disciplines. All these programmes, being offered for teachers of technical institutions and their administrators, professionals from industry, are duly approved by AICTE and affiliated to PU, Chandigarh.

In 2020, to keep pace with the latest technological advancements, the institute started three Specialized ME/M Tech programmes in emerging areas namely: M.E. in Computer Science and Engineering Specialization in IoT (Internet of Things), M.E. in Electronics and Communication Engineering Specialization in AI (Artificial Intelligence), and M.E. in Mechanical Engineering (Robotics).

Since 2003, engineering colleges in the northern region have been brought under the purview of this institute as per the directions of Ministry of Education (then the MHRD). Since then, this institute has been conducting many short-term courses in various subjects for engineering college teachersin addition to catering to their other needs. The institute is organizing large number of short-term courses for faculty of engineering colleges every year. In addition, the institute is also organizing induction training programmes and content based short term courses through ICT.

The status of the institute was elevated to a National Institute and renamed as **National Institute of Technical Teachers Training and Research on 18 November, 2003** with an objective to play larger role for the improvement of Technical Education in the country. **Director is the Executive Head (CEO) of the institute.** The institute has been ISO 9001-2015 certified.

Accreditation of ME Programmes - Three ME Programmes, viz., ME in Computer Science & Engineering, ME in Electrical Engineering (Instrumentation and Control), and ME in Electronics & Communication Engineering are accredited by National Board of Accreditation (NBA), New Delhi for the Academic Years 2016-2017 and 2017-2018 (extended by one year by NBA on submission of prequalifiers) vide its letter No. 31-49-2014-NBA dated 04.02.2017. ME Programme in Computer Science and Engineering was later on accredited for 5 years i.e. upto 2020-21 vide NBA letter No.F. No. 31-49-2014-NBA dated 16.05.2017. National Board of Accreditation (NBA), New Delhi has further accredited 4 ME Programmes Civil Engineering (Construction Technology & Management), Mechanical Engineering (Manufacturing Technology), Electrical Engineering (Instrumentation and Control) and Electronics and Communication Engineering extended for the Academic Years 2022-23 to 2024-25 i.e. upto 30.06.2025 vide its letter No. 31-49-2014-NBA dated 18.08.2022.

Master of Engineering Programmes (Regular) - Recognizing the need to provide professionally trained teachers and administrators for the technical education system as also to offer professional development opportunities to working technical and training personnel in the industry, NITTTR Chandigarh started offering Master of Engineering Programmes since 1992. These programmes, being offered in five disciplines, are affiliated to Panjab University, Chandigarh. The admission priority is as follows: (i) Faculty of Technical Institutions (ii) Industry Professionals, and (iii) Fresh Graduates through GATE (iv) Fresh Graduates through PU-CET.

Master of Engineering Programmes in Emerging Areas for the academic session 2023-24 (Regular – Programmes in Emerging Areas) - Recognizing the need to provide professionally trained post graduate engineers in the upcoming areas like Internet of Things, Artificial Intelligence and Robotics, NITTTR Chandigarh has started Master of Engineering Programmes with specializations from the academic year 2021-22.

2. Vision, Mission and Quality Policy of NITTTR, Chandigarh

VISION

• To be a lead resource institute for promoting excellence in technical education system.

MISSION

- To offer continuing education and training programs for the faculty and staff of the technical education system.
- To develop need-based curricula for technical education programs.
- To develop instructional material to enhance effectiveness of teaching-learning process.
- To undertake research and development in engineering & technology and technical education.
- To provide extension and consultancy services to technical education system.

QUALITY POLICY

NITTTR is committed to provide high quality and customize education, training, R&D and extension services to technical and vocational education system, industry and community. The institute shall develop leadership in technical teacher training and provide educational products and services to enable the technical education system to achieve excellence internationally.

3. Objective of M.E. Programmes

To keep pace with rapid advancement in technology, the country requires high quality manpower with technical and managerial capabilities in 21st Century. There are primarily three distinct categories of technical manpower needed by the industry in the country i.e. engineering, technicians and skilled workers. Personnel of each of these categories play an equally important role in the day-to-day running as well as the development and growth of industry. The institutions which are producing technical manpower, therefore, need teachers who have the required knowledge and skills to train good technicians and engineers.

Thus, there is a great need to reorient and upgrade the knowledge and skills of existing teachers of technical institutions through Industry oriented and Practice based Programmes in Engineering and Technology as Master's Degree Level. These programmes will help develop the professional capabilities desired by teachers for training technicians/engineers that would meet the changing requirements of industry.

4. Categories of Admissions

NITTTR Chandigarh offers M.E. Programmes for the following categories of students:

- Faculty of Technical Institutions
- Industry Professionals
- QIP (Poly) Selected Candidates as per AICTE guidelines
- Fresh Graduates through GATE
- Fresh Graduates through PU-CET

5. Master of Engineering (Specialization Programmes, Regular and Modular) Programmes – Sanctioned Intake and Reservation

Master of Engineering in Emerging Areas- (Regular Programmes) Starting from the Academic Session 2023-24#: -

Total number of seats in each of the ME Regular Programmes (with Specializations) is given below:

S. No.	Branch of Master of Engineering (with Specializations)	Sanctioned Intake *
1.	M.E. in Computer Science and Engineering (Specialization in Internet	18
	of Things)	
	M.E. in Electronics and Communication Engineering (Specialization	18
2.	in Artificial Intelligence)	10
3.	M.E. in Mechanical Engineering (Specialization in Robotics)	18

[#] Not offered in academic session 2023-24

Salient Features of these M.E. Programmes (in Emerging Areas)

- Approved by AICTE.
- Affordable Fee Structure (Approximately Rs. 1,30,000/- for the complete programme)
- 50% of the Courses are offered by Industry Experts
- Students can complete One full year Internship in Industry as there are no subjects offered in contact mode during 2nd year
- Placement Assistance will be provided
- Industry relevant and highly practical oriented Subjects
- All subjects will be covered with Industrial Case Studies
- Scholarships for GATE qualified students as per AICTE Guidelines
- Competitive Curriculum
- Hostel Facilities available for both Boys and Girls
- Excellent Laboratory Infrastructure

^{*}This does not include EWS Category, through as per Govt. of institute gives 10% reservation to EWS Candidates

Criteria for Admission: The admission is open for GATE/PU-CET candidates.

Master of Engineering Regular Programmes (Affiliated to Panjab University) – Sanctioned Intake

Total number of seats in each of the ME Regular Programmes is given below:

S.	Branch of Master of Engineering	Sanctioned
No.	(Regular) Programme	Intake including EWS
i	ME in Mechanical Engineering (Manufacturing Technology)	23
ii	ME in Civil Engineering (Construction Technology & Management)	31
iii	ME in Computer Science & Engineering	23
iv	ME in Electrical Engineering (Instrumentation and Control)	23
٧	ME in Electronics & Communication Engineering	21

ME Regular Programmes: The admission is for the candidate having valid GATE/PU-CET.

The preference will be given as follows

- Full time <u>sponsored</u> Polytechnic/Engineering College Regular teachers, officials of Directorates and Boards of Technical Education
- Full time <u>sponsored</u> working professionals from industry/other organizations including technical staff of universities
- Fresh engineering graduate candidates. Fresh Engineering graduates shall be admitted on the basis of valid GATE score or PU-CET, (if conducted by PU, Chandigarh) merit of PU, Chandigarh {as per criteria approved by Panjab University, Chandigarh}. All such candidates must apply for these programmes in the institute by the last date on the application form downloaded from www.nitttrchd.ac.in. In addition, they (candidates without valid GATE score) are also required to apply to Panjab University, Chandigarh for appearing in the PU-CET (Rules & Regulations and date of PU-CET can be checked from website of Panjab University, Chandigarh: www.pu.ac.in).

For 2023-24, PU-CET has been withdrawn, so Non-GATE candidates can apply directly to NITTTR Chandigarh. (https://news.puchd.ac.in/show-news.php?id=1326&title=PU-CET+%28P.G.%29-2023+entrance+test-+Important+inform)

GATE qualified candidates shall be paid scholarship as per AICTE quidelines.

Reservation

15% seats are reserved for SC candidates, 7.5% seats for ST candidates, 3% for disabled candidates, 27% seats for OBC candidates and 10% for EWS under general category as per instructions of Govt. of India applicable to Central Educational institutions. The institute reserves the right of admission entirely and the decision of NITTTR authorities on admission will be final in all the cases. The institute reserves the right to make any amendment in the prospectus as and when it is deemed necessary.

6. Qualifications and Experience for Admission

- (i) ME in Computer Science and Engineering Programmes
- (a) M.E. in Computer Science and Engineering with Specialization in Internet of Things An Industry Attached Specialization Programme in the emerging area of IoT: A Bachelor's Degree in Computer Science & Engineering/Electronics Engineering/ Electrical Engineering/ Instrumentation & Control Engineering/Information Technology from a recognized University or its equivalent with at least 60% marks in aggregate.
- (b) M.E. in Computer Science and Engineering: A Bachelor's Degree in Computer Science & Engineering/Electronics Engineering/ Electrical Engineering/ Instrumentation & Control Engineering/Information Technology from a recognized University or its equivalent with at least 60% marks in aggregate and post qualification experience of at least 1 year (2 years in case of AMIE) in teaching/industry/research organization. However, fresh graduates can also apply. But they will be considered after the applications received as per above qualifications are exhausted.

(ii)ME in Electrical Engineering Programmes

- (a) M.E. in Electrical Engineering (Instrumentation and Control): A Bachelor's Degree in Electrical Engineering /Electronics Engineering/ Instrumentation and Control Engineering from a recognized University or its equivalent with at least 60% marks in aggregate and post qualification experience of at least 1 year (2 years in case of AMIE) in teaching/industry/research organization. However, fresh graduates can also apply. But they will be considered after the applications received as per above qualifications are exhausted.
- (iii) ME in Electronics and Communication Engineering Programmes
- (a) M.E in Electronics and Communication Engineering with Specialization in Artificial Intelligence An Industry Attached Specialization Programme in the emerging area of AI: A Bachelor's Degree in Electronics and Communication Engineering from a recognized University or its equivalent with at least 60% marks in aggregate.
- (b) M.E in Electronics and Communication Engineering: A Bachelor's Degree in Electronics and Communication Engineering from a recognized University or its equivalent with at least 60% marks in aggregate and post qualification experience of at least 1 year (2 years in case of AMIE) in teaching/industry/research organization. However, fresh graduates can also apply. But they will be considered after the applications received as per above qualifications are exhausted.
- (iv) ME in Mechanical Engineering Programmes
- (a) M.E. in Mechanical Engineering with Specialization in Robotics An Industry Attached Specialization Programme in the emerging area of Robotics: A Bachelor's Degree in Mechanical Engg/Manufacturing Engineering (or Technology)/Production Engg./Industrial Engg./Automobile Engineering from a recognized University or its equivalent with at least 60% marks in aggregate.
- (b) M.E. in Mechanical Engineering (Manufacturing Technology): A Bachelor's Degree in Mechanical Engg/Manufacturing Engineering (or Technology)/Production Engg./Industrial Engg./Automobile Engineering from a recognized University or its equivalent with at least 60% marks in aggregate and post qualification experience of at least 1 year (2 years in case of AMIE) in teaching/industry/research organization. However, fresh graduates can also apply. But they will be considered after the applications received as per above qualifications are exhausted.
- (v) ME in Civil Engineering (Construction Technology & Management) Programme

A Bachelor's Degree in Civil Engineering from a recognized University or its equivalent with at least 60% marks in aggregate and post qualification experience of at least 1 year (2 years in case of AMIE) in teaching/industry/research organization. However, fresh graduates can also apply. But they will be considered after the applications received as per above qualifications are exhausted.

A certified copy of conversion formula in case of marks in grade points (i.e., CGPA to %), is essential. No Experience is required for admission of Fresh Engineering Graduates to ME (Regular) programmes and Industry Attached Specialization Programmes.

7. Admission under QIP (Poly) scheme only for M.E. Regular Programmes

- a. This institute is one of the centre in the country to run QIP (Poly) Scheme of AICTE, New Delhi.
- b. Only permanent faculty members of AICTE recognized polytechnics can apply for admission through QIP portal.

Admission to ME Programmes at NITTTR Chandigarh under QIP (Poly) scheme are as per the AICTE Norms & Regulations.

Candidates admitted under QIP (Poly) Scheme are eligible to receive a scholarship and a contingency grant as per AICTE norms. The details regarding the admission under this scheme is notified every year separately by AICTE, New Delhi through an advertisement as well as on their website in due course of time.

8. Admission under DASA only for ME Regular Programmes

Two seats in each of ME Mechanical Engineering (Manufacturing Technology) ME Civil Engineering (Construction Technology & Management) and ME Electrical Engineering (Instrumentation & Control) and three seats in each of ME Computer Science & Engineering and ME Electronics & Communication Engineering Regular programmes had been available in the past under DASA in respect of foreign nationals/PIOs and NRIs. Efforts are being made to continue the same.

9. Special Features of ME Programmes

- a. The nature of programmes offered are flexible, allowing self-pacing and taking up courses of study in a sequence and at the time convenient to the students within the maximum time frame as stipulated by the University for the completion of the programme.
- b. The focus is on the mastery of minimum essential competencies, enhancement of knowledge and development of capabilities such as learning to learn, problem solving, management skills etc.
- c. The focus is on to update knowledge base of teachers/students in specialized field(s) through these programmes. In addition to classroom teaching and laboratory work, the programmes make use of a combination of instructional techniques such as group discussion, home assignments, individual and group projects, independent study, remedial instruction, industry-based instruction, seminars, expert lecture sessions, field visit to industry etc.
- d. Assessment of students' performance is based on both continuous evaluation and end-semester evaluation with the use of a variety of assessment techniques matching the learning objectives of different courses of study. Completion of course work is followed by a thesis.
- e. Almost all courses contain practical/laboratory tasks. These tasks form an essential component of the curriculum implementation. Thesis work is based on problems of technical education system and practical 'on – job Problems' of Industries.

10. Duration of the Programmes

The normal duration of ME (Regular) Programmes including thesis will be 2 academic years (4 semesters). The maximum period of completion of the programme including thesis shall be 3 academic years (6 semesters).

11. Number of Theory Papers Allowed in a Semester

i) For M.E. Regular Programmes in the Emerging Areas (With Specializations)

All students will be required to qualify in 10 theory papers (36 credits) as per study and evaluation scheme during the course. Among these subjects, 12 credit subjects are taught by Industry experts. Further, 4 credits are to be earned by taking MOOCs and there will not be any contact sessions during 2nd year of study. The students may be allowed to do their Internship for the entire year in any of the Industry. The Industrial Project will be for 26 Credits. There shall be at least ten hours of lectures/tutorials/practical/drawing classes during the semester, for everv lecture/tutorial/practical per week i.e. for each credit assigned to a subject shown in the schedule of teaching. I/III Semester examinations will usually be held in the month of December, and II/IV Semester examinations in the month of June every year. A candidate will be promoted to second year only if he/she has earned 50% of the total credits of first year.

ii) For M.E. Regular Programmes

All students will be required to qualify in 12 theory papers (50 credits) as per study and evaluation scheme during the course. In addition, all students will be required to qualify preliminary thesis- based project work (10 credits) in third semester and, thesis work (15 credits) in fourth semester. There shall be at least ten hours of lectures/tutorials/practicals/drawing classes during the

semester, for every hour of lecture/tutorial/practical per week i.e. for each credit assigned to a subject shown in the schedule of teaching. 1st and 3rd Semester (end-semester) examinations will usually be held in the month of December, and 2nd and 4th Semester (end-semester) examinations in the month of June every year. A candidate will be promoted to second year only if he/she has earned 50% of the total credits of first year.

12. Migration (for both ME Regular & Modular programmes)

All the candidates seeking admission to ME Programmes from other universities shall be granted provisional admission subject to the condition that his/her BTech/BE/B.Sc Engineering Examination has been recognized equivalent in the list of 'Equivalence of Examination' of Panjab University, Chandigarh. If the admission is NOT confirmed by the Panjab University, the candidate's name shallbe removed from the institute rolls and he/she shall not be allowed to continue his/her studies at the institute. He/she shall have no claim for any dues (except refundable security).

In addition, it will be the responsibility of the candidate to get the equivalence of his/her qualifying degree for the purpose of admission to ME programmes, In case, the qualifying degree of a candidate is NOT accepted as equivalent to the corresponding degree of Panjab University for admission to Master's degree programme, the institute will not be held responsible for any delay or loss arising thereof.

Every student is required to submit his Degree and Detailed Marks Certificates in original immediately at the time of counseling, if selected for admission to ME Programme at the institute. In addition, they are also required to submit their migration certificate (in original) within a period of one month from the date of commencement of classes. Those who fail to submit the documents (i.e., degree, DMCs and migration) shall be liable to pay a fine as per rules & regulations of the Panjab University, Chandigarh and his/her admission is liable to be cancelled.

13. Conditions for Appearing in End-Semester/Spell Examinations

i) Periodic Tests for ME Regular Programmes

Every student has to appear in two periodic tests (60% of total sessional marks) and Assignments/class projects/presentations/group discussions (40% of total sessional marks) as approved by the Panjab University, Chandigarh and must qualify the same. There will be NO 'special reappear examination'.

ii) Attendance for ME Programmes

A candidate shall be eligible to appear in the university examination only if he/she has attended for each subject, not less than 85% of lectures. A deficiency in the required number of lectures and practicals may be condoned up to 10% by the Director of the institute only in the genuine cases. A candidate who does not fulfil the attendance requirements in any subject will have to repeat the course of instruction in that subject. Students who are absent from the institute continuously for 7 dayswithout permission from the HOD/Director may not be allowed to join back the programme.

12. Examination and Result for ME Programmes

- ME Programmes are organized on Credit System of study. Performance/progress of a candidate
 is measured by the number of credits that he/she has earned (completed satisfactorily, at least 'D'
 grade). Based on the course credits and grades obtained by the candidate, grade point average is
 calculated. The study and scheme of evaluation as approved by Panjab University, Chandigarh in
 this respect shall be followed.
- Minimum Earned Credits: Completion of 75 earned credits including 25 credits for thesis work.
- Weightage in each subject: Equal weightage will be given to internal assessment (sessional) and end semester/spell examination (major examination).
- A candidate with CGPA of 8.5 and above will be awarded ME degree with Honours.

Separate examination forms are to be submitted with the University for end- semester/spell and re-appear examinations.

Preliminary Thesis Work/Thesis Work for ME Programmes (Regular/Modular)

Four neatly typed or printed copies of Thesis properly bound, out of which two copies shall be submitted to the Head of the concerned Department through Guide and a copy to Head, AcademicCell of the institute for keeping a record in the institute library. The thesis grades shall be awarded as per criteria approved by Panjab University, Chandigarh.

Preliminary Industrial Project Work/Project Work (Industry Attached Specialized Programmes)

The Project work can be carried out in Industry / Start-ups / Incubation Centre. The final year project can be converted into a technology project / IPR / Patent. The separate rubrics will be formulated to evaluate these projects based on the novelty and utilization.

13. Evaluation and Improvement for ME Programmes

Subject wise result in the form of grades awarded to each student at the end of each spell/semester shall be prepared by the respective departments/institutes and sent to the university examination branch for the declaration of result and issuance of grade cards. Before sending the awards to the university, subject teacher will display the grades awarded to the students on the notice board after showing the answer sheets to the students within TEN working days. The process of evaluation is completed within FIFTEEN days from the date of conduct of examination. If a candidate is notsatisfied with the award of marks in a particular paper(s), he/she may approach the concerned ME Coordinator for rechecking, if any as per the rules and regulations of Panjab University, Chandigarh.

The performance of a student shall be evaluated in terms of two indices, viz. Semester/Spell Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA).

SGPA is the grade point average for the semester/spell and CGPA is the cumulative grade point average for all the completed semesters/spells at any point in time.

The earned credits (EC) are defined as the sum of course credits for course in which A+ to D grade has been obtained. Credits from courses in which NP or S grade has been obtained are also added. Points earned in a semester =

Σ (Course Credits X Grade Points) for courses in which A+ to D grade has been obtained

The SGPA is calculated on the basis of grades obtained in all courses, except audit courses and courses in which S/Z grade is awarded, registered for the particular semester.

$$SGPA = \frac{\sum Semester(Course\ Credits*Grade\ Points)\ for\ all\ courses\ except\ audit\ and\ s\ or\ z\ grade\ course}{\sum Semester\ (Course\ Credits)\ except\ audit\ and\ s\ or\ z\ grade\ course}$$

$$SGPA = \frac{Points\ Secured\ in\ the\ Semester}{Credits\ Registered\ in\ the\ Semester, Excluding\ audit\ and\ s\ or\ z\ grade\ course}$$

$$\mathsf{CGPA} = \frac{\sum \mathsf{Semester}\left(\mathsf{Course}\,\mathsf{Credits*Grade}\,\mathsf{Points}\right) for all\,\mathsf{courses}\,\mathsf{with}\,\mathsf{pass}\,\mathsf{grade}\,\mathsf{except}\,\mathsf{audit}\,\mathsf{and}\,\mathsf{s}\,\mathsf{or}\,\mathsf{z}\,\mathsf{grade}\,\mathsf{course}}{\sum \mathsf{All}\,\mathsf{Semester}\left(\mathsf{Course}\,\mathsf{Credits}\,\mathsf{earned}\right)\mathsf{except}\,\mathsf{audit}\,\mathsf{and}\,\mathsf{s}\,\mathsf{or}\,\mathsf{z}\,\mathsf{grade}\,\mathsf{course}}$$

Conversion formula from CGPA to Percentage = 10 x CGPA as per letter No. 12057-75/GM dated 08.10.2013 received from Assistant Registrar (General), Panjab University, Chandigarh. There shall be no 'special reappear examination' for any student.

14. Courses of Study and Evaluation Scheme

ME Regular Programmes: In each of these ME Regular programmes, all students will be required to qualify in the required theory subjects as specified by the University as per its study and evaluation scheme during the course. In addition, all students will be required to qualify preliminary thesis-based

project work/Industrial project in third semester and, thesis work/final industry project in fourth semester. No numerical marks will be assigned to Preliminary Thesis and Thesis work. It will be either 'Satisfactory' (S Grade) or 'Unsatisfactory' (X Grade). The thesis grades shall be awarded as per criteria approved by Panjab University, Chandigarh. The courses of study and evaluation scheme in respect of each of ME programmes are given here:

1.	ME in Mechanical Engineering (Manufacturing Technology)	
2.	ME in Civil Engineering (Construction Technology & Management)	
3.	ME in Computer Science & Engineering	
4.	ME in Electrical Engineering (Instrumentation and Control)	https://puchd.ac.in/syllabus.php?qstrfacid=5
5.	ME in Electronics & Communication Engineering	
6.	M.E. in Computer Science and Engineering (Specialization in Internet of Things)#	
7.	M.E. in Electronics and Communication Engineering (Specialization in Artificial Intelligence)#	
8.	M.E. in Mechanical Engineering (Specialization in Robotics)#	

[#] These courses are not offered in academic session 2023-24.

Admission Procedure for ME (Regular) Programmes

Applications for admission to ME Programmes (Regular) for the session 2023-24, duly sponsored by the competent authority should reach the institute as per detail given below:

ME Regular Programmes:

Last Date for Receipt of duly sponsored Applications : 25.07.2023 upto 5.00 P.M.

No separate call letters will be issued for attending the counseling. Application downloaded from the institute website must accompany with RTGS/NEFT of Rs.2,000/- drawn in favour of Director, National Institute of Technical Teachers Training and Research, Chandigarh in INDUSIND BANK LIMITED, Bank Account No.151811200301, IFSC No.INDB0000014. Incomplete applications (i.e., without application fee and documents) will not be entertained. The institute reserves the Right of Admission entirely and the decision of institute authorities on admission will be FINAL. Click on the following link to fill the online Google for submission of your application

https://forms.gle/XfmMvbau3JBvj4rR8

Note: Candidates shall attend the counseling interviews for admission to ME programmes at their own expenses. All admissions to these programmes made during the counseling shall be provisional and subject to approval by the Director of the institute and affiliating Panjab University, Chandigarh.

Candidates should enclose attested photocopies of the following documents along with their applications failing which their applications will not be considered for admission:

- i) Certificate of Migration
- ii) Certificate of Matriculation/Senior Secondary Leaving Certificate as a proof of date of birth.
- iii) Certificates of Bachelor's Degree or its equivalent.
- iv) Certificates of claim under SC/ST/OBC/Physically handicapped category seats.

v) Certificate of sponsorship (No Objection) from the competent authority.				

- vi) Semester/year-wise all Detailed Marks sheets (along with degree certificate) of Bachelor's Degree or its equivalent. Valid GATE Score card in case applying under Fresh Engineering Graduates categories.
- vii) All experience certificates {on organization's letter head bearing letter No. & date and clearly stating date of joining and leaving; Appointment letter/salary slips as proof will not be considered}. However, weightage will be given only to the certificates received along with application by due date.
- viii) Maximum marks obtained in each semester/year should be given in the application form under Sr. No. 11. A certified copy of conversion formula in case of marks in grade points is essential. Otherwise his/her name will be placed last in the merit list.

Important Note:

- 1. Candidates may send an advance copy of their application along with all DMCs, Experience certificates and with RTGS/NEFT of Rs.2,000/- drawn in favour of Director, National Institute of Technical Teachers Training and Research, Chandigarh in INDUSIND BANK LIMITED, Bank Account No.151811200301, IFSC No.INDB0000014 to avoid delay. However, final consideration of application will be subject to their being sponsored by the competent authority at the time of counseling at this Institute.
- 2. The fresh engineering graduate candidates who have appeared in the final semester/year of their BE/B.Tech examinations may also send an advance copy of their application (s) attaching therewith the detailed marks sheets of all 7 semesters/3 years but must send a copy of their detailed marks sheet of final semester/year on or before the last date of receipt of applications, otherwise their application
 - (s) will not be considered for admission.
- 3. If a candidate wishes to apply for more than one programme or category, separate applications along with certificates will have to be sent for each programme/category. Photocopies of application form may be used for applying for more than one programme/category but a Demand Draft of 2,000/- in favour of Director, NITTTR, Chandigarh should be attached with each application form.
- 4. Some of the Universities award divisions of Bachelor's degrees based only on the marks obtained by the students in 7th and 8th semesters/final year but all the candidates seeking admission are essentially required to give maximum marks and marks obtained in all the 8th semesters/4 years because the merit of admission will be prepared on the basis of aggregate marks obtained in all the 8 semesters /4 years. In case the BE/B.Tech result is declared in grade points, an authenticated copy of the formula for conversion to percentage of marks should be attached, otherwise the application of the candidate is liable to be rejected.
- 5. Candidates admitted for various ME Programmes (Regular & Modular) will have to submit their Medical Fitness Certificate duly signed by Medical Officer of any Govt. Dispensary/hospital within 15 days from the date of their admission (in case of Regular programmes) and 05 days from the date of their admission (in case of Modular programmes).
- 6. Candidates who have applied for seeking admission to ME Programmes under OBC category are required to furnish FRESH AFFIDAVIT (NOT MORE THAN SIX MONTHS OLD) from Executive Magistrate at the time of counseling (along with OBC certificate; not more than six months old) that he/she belongs to OBC category (For an updated list of state-wise OBCs eligible for availing the benefit of reservation, please see the list maintained by NCBC at its website: http://ncbc.nic.in/backward-classes/index.html and that he/she does not belong to creamy layer (as per website http://ncbc.nic.in/html/creamylayer.html as well as the clarifications issued by the Department of Personnel & Training on the definition of creamy layer & income criteria at http://persmin.gov.in/writeData/WMS/ScanDocument/36033- 5-2004-01 April 2005.htm.).
- 7. As per directions of Supreme Court of India, Ragging in Educational Institutions in any form should be prevented. In order to ensure that the ragging does not take place in the institute in any form, the institute has constituted Anti Ragging Squads and Anti Ragging Committee which would conduct raids & detect the cases (if any) & suggest preventive measures. If any incident of ragging comes to the notice of the authority, the concerned student shall be given liberty to explain and if his explanation is not found satisfactory, the authority would expel him from the institution. It is

mandatory as per the Hon. Supreme Court & UGC/AICTE Regulations that all students fill in an Anti-Ragging Affidavit, each year.

To make the process easy, MHRD has developed an ONLINE Facility. Affidavits can be filled ONLINE at: www.amanmovement.org (OR) at www.antiragging.in. All students are required to filltheir Affidavits on any of the two web sites. The procedure is very simple and explained on the web sites.

Preparation of Merit List

a) Sponsored Candidates

The Institute prepares a merit list of all sponsored eligible candidates based on the aggregate percentage of marks obtained in all the semesters/years of qualifying examination and the total experience. The admission is granted to candidates strictly according to the merit list, prepared as follows:

(i) Qualification Multiplying Factor Χ

Aggregate % of marks in BE or its equivalent

The candidates must write in the application form (under S.No. 11), the maximum marks, marks obtained in each of eight semesters/four years and the exact percentage of aggregate marks.

0.4

(ii) Experience

One score for each number of completed years of total experience on the last day of receiving application gained after obtaining minimum entry qualification subject to a maximum of ten. Experience against leave vacancy, visiting/guest faculty will not be counted.

Note: The total score calculated based on qualifications and experience as mentioned in (i) and (ii) above should not be less than 25. In case of a tie in the score of merit so calculated, seniority in age will be the deciding factor for their inter-se merit.

- b) Fresh Engineering graduates for admission in ME Regular programmes at S.No. (i), (ii) and (iii) as stated on page 4 and 5
- c) Fresh Engineering graduates and candidates from industry/other organizations including technical staff of universities for admission in ME Regular programmes at S.No. (iv) and (v) as stated on page 4 and 5

The candidates listed at (b) and (c) above shall be admitted on the basis of valid GATE score {obtained and shall be offered the seat at the first instance} or through CET merit {as per criteria approved by Panjab University, Chandigarh).

16. Fee, Funds and Expenses for ME/M.Tech

a) Programme Fee (for M.E. Courses in Emerging Areas – with Specializations)

Fee Detail	For ME Regular Programmes (in ₹)
Admission Fee (one time	₹ 2,000/-
Programme Fee	₹ 40,000/- I Semester ₹ 40,000/- II Semester ₹ 25,000/- III Semester ₹ 25,000/- IV Semester Total: 1,30,000/- (For 2 Years)
Continuation Fee	₹5000/- per semester (after 4th semester to be paid to NITTTR in addition to university continuation fee)
Pre-Thesis Exam and Final Thesis Exam	₹ 2000/- per candidate per exam
Security (refundable)	₹ 7,000/- (one time)
Insurance Fee	₹ 500/- (one time for 2 years)

University Enrolment Fee (for those who are not registered with	
Panjab University, Chandigarh	200/-

b) Programme Fee for other Regular M.E. Programmes:

Fee Detail	For ME Regular	For ME Modular
	Programmes (in ₹)	Programmes (in ₹)
Admission Fee (one time	₹ 2,000/-	₹ 2,000/-
Programme Fee		
i) Sponsored Teachers of technical institutions, officialsof	₹ 20,000/- per semester	₹ 15,000/- per spell
State DTEs/ BTEs etc.	₹ 25,000/- per semester	
ii) Engineering Graduates iii) Industry sponsored candidates	₹ 25,000/- per semester	₹ 17,000/- per spell
Continuation Fee	₹ 5000/- per semester (after 4th semester to be paid to NITTTR in addition to university continuation fee)	₹ 5000/- per spell (after 7th spell) to be paid to NITTTR in addition to university continuation fee
Pre-Thesis Exam	₹ 2000/- per candidate	₹ 2000/- per candidate
Final Thesis Exam	₹ 2000/- per candidate	₹ 2000/- per candidate
Security (refundable)	₹ 7,000/- (one time)	₹ 7,000/- (one time)
Insurance Fee	₹ 750/- (one time for 2 years	-

The following funds (Non-Refundable) are also payable by the students during each semester/spell:

Item	For ME Regular	For ME Modular (1/3/5/7 Spell)
	Programmes (in ₹)	Programmes (in ₹)
Campus Development Fee	₹800/- per semester	₹ 600/- per year
Student Activities Fee	₹600/- per semester	₹ 600/- per year
Medical Fee	₹400/- per semester	₹ 300/- per year
Students Welfare Fund	₹500/- per semester	₹ 500/- per year
Internal Examination Fee	₹500/- per semester	₹ 300/- per year
Library Fee	₹500/- per semester	₹ 500/- per year
Total	₹ 3300/- per semester	₹ 2,800/- per year

Note: Every component of fees is subject to revision by the NITTTR, Chandigarh from timeto time.

b) University Examination/Thesis/Extension Fee

ltem	For ME Regular	For ME Modular	
item	Programmes (in₹)	Programmes (in₹)	
University Examination	₹3,385/- per semester	₹3,385/- per spell	
Fee or as prescribed by the Pa		niversity from time to time	
Thesis Fee	₹1,000/-	₹ 1,000/-	
	or as prescribed by the Panjab University from time to time		
Fee for Extension ofperiod for submission of thesis (peryear or part thereof)	₹1,775/- (or as prescribed bythe Panjab University from time to time)	₹ 1,775/- (or as prescribed by the Panjab University fromtime to time)	

c) University Annual Charges (for both ME Regular & Modular Programmes)

Fee Detail	Amount (in ₹)
College Development Council Fee	85/-
University Sports Fee	187/-
Youth Welfare Fund	95/-
Student Holiday Home Fee	75/-
University Sports Development Fee	44/-
University Registration Fee (for those from other University/Board/Council)	210/-
University Enrolment Fee (for those who are not registered with Panjab University, Chandigarh	210/-
Migration Fee (for those candidates who have passed their lower examination from other than Panjab University, Chandigarh)	420/-
University Continuation Fee @ Rs. 100/- per semester	210/-
Panjab University Alumni House & Scholarship Fund	33/-
World University Service Fund	50/-
Service Tax fee @ Rs. 1 per month per year	20/-
Total	1639/-

Note:

- 1. All Institute fee, funds, expenses and university fee etc. whether recurring/non-recurring are subject to revision by the Institute/Panjab University from time to time.
- 2. Any student who fails to pay institute/university fee by the prescribed date may be fined, suspended or ultimately removed from the institute rolls. The decision of the Director of the institute will be final in this regard.

Hostels Charges

Existing and Proposed Rental Charges of the Institute Hostels

Sr.	Category	Proposed Rates Rs.		
No.				
1	ME/Ph.D Students (for eligible period)	₹12500/- per semester (six months)		
	i.e.,(ME Reg. 2 years)	, , ,		
	(ME Modular 7 spells)	₹3500/- per Spell		
	(Ph.D 3 years)	₹150/- per day		
2	ME/Ph.D Students in hostel during Thesis	₹ 5000/- per month (Maximum for		
	work beyond the eligible period	period of 1 year)		
	ME Reg. beyond 2 years	₹ 500/- per day beyond above 1 year for a		
	ME Modular beyond 7th spells	maximum period of 2 years.		
	Ph.D beyond 3 years	-		
Note: * Hostel Accommodation is subjected approval of competent authorities.				

- 1. Accommodation in Hostel will not be provided to the local students of Chandigarh, Panchkula, Mohali and nearby stations.
- 2. All students are required to conform to all Hostel/Mess Rules which may be enforced by Faculty Incharge Hostel/Mess from time to time as approved by the Director of the institute.
- 3. Hostel charges given above are subject to revision from time to time and students shall be required to deposit charges as applicable.
- f) Mess/Canteen Charges

: ₹ 2,700/- (per month) approximately subject to revision. Mess

Canteen : As per approved prevailing rates

g) Refund Rules:

Except for the refundable deposit of ₹ 7,000/-, no other amount will be refunded if a student leaves the institution after joining the programme. However, if a candidate does not join the institute or surrenders his/her seat without attending the classes, he/she will be refunded the fee as per AICTE quidelines.

17. Academic Prizes

- (i) Academic Award: This award will be given in respect of each branch of ME Programme who gets maximum percentage of marks based on the performance in all theory subjects including thesis (all four semesters/seven spells) subject to a minimum of 75% marks provided that there are minimum 5 students appearing in the examination in the concerned ME programme. The condition of minimum 5 students appearing in the examination will not apply if a student gets 90% or more marks. A merit certificate and ₹ 5,000/- cash are presented to all such students during Annual Day Celebrations of the Institute.
- (ii) Dr. S.P. Luthra Memorial Gold Medal: Dr. S.P. Luthra Memorial Gold Medal and a certificate of merit is awarded during Annual Day Celebrations of the Institute every year to a student whose performance based on the complete course is 'the best performance' among all students of all ME Programmes (separately for Modular and Regular) provided that there are minimum 5 students appearing in the examination of the concerned ME programme.

18. Library

NITTTR Library provides an extensive collection of information resources, services and facilities to our students and staff for their learning, research and personal development. In view of the high vision of the institute, a well-equipped library with full of resources and services has been established to facilitate the quality and value-added services to its students and staff. Library system of the institute is more focused on creating and providing a comfortable and user-friendly environment that enables learning and advancement of knowledge, and also promotes discovery beyond classroom learning. The institute's state-of-the-art library boasts a collection of more than 49967 books, and Indian standards 10,043, 578 e-books, 34 technical journals and newspapers, 355 CDs & DVDs, etc. the library collection consists of textbooks, reference books, technical journals, dissertations, e-Journals, encyclopaedias and more. The Library is located in the Administrative block of the institute occupying an area of 900 sq meters. 100 students can sit and study at a time comfortably in the reading halls. The Library subscribes to 08 e- resources through the inflibnet's Sodh-Sindhu consortium namely ASCE, ASME, IEL, Springers 1700 journals, JSTOR, J-Gate etc. the library is fully computerized with Web-OPAC for instant online access to students and staff to use all types of information for their learning research and personal growth.

19. Journal of Engineering and Technology Education

The institute publishes a bi-annual Journal of Engineering and Technology Education (ISSN 2229 – 631X), The Journal provides an interdisciplinary forum to teachers, students, officials/administrators of technical education system and working professionals in industries to share research & development in Engineering & Technology Education and express freely their ideas about various aspects of technical education. Published in January and July each year, the journal will include research papers/reports, articles and book reviews (if accompanied by a copy of the book reviewed) on engineering and technology education.

20. Medical Facilities

The Institute has its own dispensary where the medical facilities exist for the students, staff and their families. A part-time doctor and an attendant have been engaged to look after the patients.

21. Hostel

The Institute has four hostel blocks. In all, the institute has 108 single rooms in the Chander Shekhar hall main hostel block, 160 (80 each) rooms in Tagore hall and Amartya Hall, 44 rooms in Mother Teresa Hall. Hostel for accommodating nearly 350 trainees/students.

22. NITTTR, Chandigarh Alumni Association

It is mandatory for all ME students to become member of NITTTR- Chandigarh Alumni Association. They are required to submit their application forms along with life membership fee of `1,500/- at the time of submission of thesis. The membership fee may also be adjusted from security deposit with the institute.

NOTE: Academic Calendar will be as notified by the affiliating University and will be updated in the Institute Website.