



# ADMISSION INFORMATION BROCHURE FOR M.TECH. PROGRAMME 2024-25

**MALAVIYA ADMISSION  
COUNSELLING (MAC)  
2024**



## **MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY**

(Formerly Madan Mohan Malaviya Engineering College, Gorakhpur, Estd. 1962)  
(U.P. Govt. Technical University)







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## MESSAGE FROM THE VICE CHANCELLOR



*I am delighted to welcome you to the postgraduate programs at our university for the academic session 2024-2025. Madan Mohan Malaviya University of Technology Gorakhpur (erstwhile Madan Mohan Malaviya Engineering College Gorakhpur) has a 62-year-old legacy of excellence in education and research. The University has been accredited with the "A" Grade by the National Assessment and Accreditation Council (NAAC). Since its inception, the University has been delivering quality education and great emphasis is laid on a holistic, relevant and a professional approach to education which is in tandem with the industry requirements. The comprehensive curricula of our university have been designed to accommodate the emerging challenges in the field of science, technology, engineering, and mathematics (STEM).*

*The university currently offers M.Tech program in twelve specializations in addition to MCA, MBA and three M.Sc programs. M.Tech Chemical Engineering has been introduced in this academic session to further strengthen its commitment for promotion of higher education and research in diverse areas. Similarly, M.Tech (VLSI) and M.Tech (Communication Systems) has been restructured keeping in view the National Policy on Electronics (NPE- 2019). All the post graduate programs have been designed to promote emerging domains of knowledge along with traditional programmes and courses. The University encourages creativity, innovation and entrepreneurship among students and faculty. The University has signed several MOUs with various academic and research institution at national and international level to promote research related activities. The University has also made significant research contributions at both national and international levels, through quality research.*

*In addition to our strong academic programs, we also offer a vibrant campus life to enrich the extracurricular and co-curricular activities through student clubs and societies. University has recently taken several significant steps to create new research facilities and infrastructure for the overall promotion of research and innovation.*

*I am sure a great future awaits you and becoming a part of MMMUT family will help to shape your academic future through skills, friendship, and everlasting bonds. You will learn life skills that will take you far in the journey of life. I hope that this admission brochure shall provide all the needful information about admission procedures, and other related academic activities. Our community of faculty, staff and students look forward to welcoming you onboard at the Madan Mohan Malaviya University of Technology Gorakhpur.*

**Prof. J. P. Saini**



# 1 ABOUT THE UNIVERSITY

## 1.1 MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY, GORAKHPUR

Madan Mohan Malaviya University of Technology (MMMUT), Gorakhpur, was established in the year 2013 by the Government of Uttar Pradesh in the form of a non-affiliating, teaching, and research University after reconstituting the erstwhile Madan Mohan Malaviya Engineering College, Gorakhpur which was established in 1962. The University has a lush green campus that spreads over a vast area of 354 acres. The University is located on the Gorakhpur-Deoria Road about 9 km away from Gorakhpur Railway Station. Gorakhpur airport is approx. 5 km away from the University. Madan Mohan Malaviya University of Technology (MMMUT), Gorakhpur has been awarded an “A” grade by the National Assessment and Accreditation Council (NAAC). It has become the first state university to get this rank.

University has more than 5500 students in eight B. Tech. programs, i.e., Civil Engineering, Electrical Engineering, Mechanical Engineering, Electronics & Communication Engineering, Electronics & Communication Engineering (IoT), Computer Science & Engineering, Chemical Engineering, and Information Technology, along with B.Pharm., B.B.A, M.B.A., M.C.A and M.Sc. in Physics, Mathematics, and Chemistry. The university is currently offering M. Tech. in 12 disciplines and full-time/part-time Ph.D. programs in all departments. The university has distinguished alumni serving in various key positions in India and abroad.

### VISION

To facilitate and promote studies, research, technology incubation, product innovation, and extension work in Science, Technology, and Management Education, and also to achieve excellence in higher technical education.

### MISSION

- ☞ To serve society as a centre of higher learning, providing long-term societal benefits through transmitting advanced knowledge, discovering new knowledge and functioning as an active working repository of organized knowledge.
- ☞ To take a leadership role by providing need-based programs in engineering and technology, applied sciences, management, humanities, architecture, pharmacy, retail and fashion design, mass- communication, agriculture, and other employable Programs in emerging areas.
- ☞ To promote compassionate care of the highest quality that translates new knowledge into meaningful improvements in technological outcomes through interdisciplinary collaboration, fiscal responsibility, support of diversity, a focus on quality, and a culture of professionalism.
- ☞ To establish value-creating networks and foster relationships with other leading institutes of higher learning and research, alumni, and industries in order to provide significant contributions to national and international development.
- ☞ To create an intellectually stimulating Infrastructure and conducive environment for technology research, scholarship, creativity, innovation, entrepreneurship, and professional activity for service to the community and economy.





## 1.2 POST GRADUATE PROGRAMMES OFFERED BY THE UNIVERSITY

The University offers M.Tech, MBA, M.Sc., MCA, and Ph.D. programmes. The University has a total 12 departments offering various programmes as per the following details:

Name of the Department	Name of the Programmes Offered
<b>Civil Engineering (CED)</b>	<ul style="list-style-type: none"> <li>■ M.Tech. (Environmental Engineering)</li> <li>■ M.Tech. (Seismic Design &amp; Earthquake Engineering)</li> <li>■ M.Tech. (Structural Engineering)</li> <li>■ Ph.D.</li> </ul>
<b>Electrical Engineering (EED)</b>	<ul style="list-style-type: none"> <li>■ M.Tech. (Power Electronics &amp; Drives)</li> <li>■ M.Tech. (Control &amp; Instrumentation)</li> <li>■ Ph.D.</li> </ul>
<b>Mechanical Engineering (MED)</b>	<ul style="list-style-type: none"> <li>■ M.Tech. (Energy Technology &amp; Management)</li> <li>■ M.Tech. (Computer Integrated Manufacturing)</li> <li>■ Ph.D.</li> </ul>
<b>Electronics &amp; Communication Engineering (ECED)</b>	<ul style="list-style-type: none"> <li>■ M.Tech. (VLSI)</li> <li>■ M.Tech. (Communication Systems)</li> <li>■ Ph.D.</li> </ul>
<b>Computer Science &amp; Engineering (CSED)</b>	<ul style="list-style-type: none"> <li>■ M.Tech. (Computer Science &amp; Engineering)</li> <li>■ Ph.D.</li> </ul>
<b>Department of Chemical Engineering (CHD)</b>	<ul style="list-style-type: none"> <li>■ M.Tech (Chemical Engineering)</li> <li>■ Ph.D.</li> </ul>
<b>Information Technology &amp; Computer Application (ITCA)</b>	<ul style="list-style-type: none"> <li>■ M.Tech. (Information Technology)</li> <li>■ MCA</li> <li>■ Ph.D.</li> </ul>
<b>Management Studies (MSD)</b>	<ul style="list-style-type: none"> <li>■ MBA</li> <li>■ Ph.D.</li> </ul>
<b>Physics &amp; Material Science (PMSD)</b>	<ul style="list-style-type: none"> <li>■ M.Sc. (Physics)</li> <li>■ Ph.D.</li> </ul>
<b>Chemistry &amp; Environmental Science (CESD)</b>	<ul style="list-style-type: none"> <li>■ M.Sc. (Chemistry)</li> <li>■ Ph.D.</li> </ul>
<b>Mathematics &amp; Scientific Computing (MSCD)</b>	<ul style="list-style-type: none"> <li>■ M.Sc. (Mathematics)</li> <li>■ Ph.D.</li> </ul>
<b>Humanities and Social Sciences (HSSD)</b>	<ul style="list-style-type: none"> <li>■ Ph.D. in Economics</li> <li>■ Ph.D. in English</li> <li>■ Ph.D. in Psychology</li> </ul>

## 1.3 HIGHLIGHTS

- ☞ NAAC “A” accredited university
- ☞ Choice Based Credit System
- ☞ Emphasis on multidisciplinary approaches to learning and research.



- ☞ MoUs with academic and research institutions in India and abroad.
- ☞ Alumni in leadership positions in industry and academia
- ☞ Financial assistance for research work
- ☞ Well-established Training and Placement Cell
- ☞ GATE-qualified M.Tech students are permitted to enrol for a year M.Tech +Ph.D dual degree
- ☞ Availability of a large number of e-journals and e-books
- ☞ Well established incubation cell to support innovation, creativity and intellectual excellence of students

## 2 ADMISSION TO M.TECH. PROGRAMMES

### 2.1 MODE OF ADMISSION

The university offers M.Tech programmes under Regular and Sponsored categories. The admissions in M.Tech. programs for sessions 2024-25 will be made as follows.

- ☞ Direct admission through GATE
- ☞ Admission through CUET (PG) -2024 conducted by National Testing Agency (NTA)
- ☞ Admission through Malaviya Entrance Test (MET-2024)

The University conducts counselling under the supervision and control of the Admission Cell. It has the authority to conduct the admission process and to decide about the modalities of admissions, allotment of seats, and all matters related to the admissions in the University with the approval of the Vice Chancellor, MMMUT, Gorakhpur. For Admissions to all Programs, the reservation rules prescribed by the Uttar Pradesh Government shall be followed strictly. The reservation category-wise breakup in intake of each program shall be notified on the university website separately before the start of online counselling.

***Admissions in all M.Tech. programmes will be completed in 3 phases given as follows:***

- a. In the first phase, valid GATE scorecard holders will be invited and given first priority.
- b. In the second phase, applicants with valid CUET(PG)-2024 scores will be considered. The order of preference in sequence will be as follows (Wherever applicable)
  - a) Engineering degree with CUET (PG)
  - b) MCA degree with CUET(PG)
  - c) M.Sc. degree with CUET(PG).
- c. In the third phase, candidates on the vacant seats will be admitted on the merit basis of the university admission test (Malaviya Entrance Test-2024) tentatively scheduled to be held offline on June 29, 2024, at MMMUT Gorakhpur. Candidates are required to refer the **Appendix C** for detail syllabus of the MET-2024.

The final date of the Malaviya Entrance Test-2024 (MET-2024), registration date for MET-2024, counseling schedule, process, counseling fee, seat confirmation fee, and fee refund policy will be notified separately on the University website for all PG courses. The eligible candidates must regularly visit the university website ([www.mmmut.ac.in](http://www.mmmut.ac.in)) admission section. The allotment of the seats through counselling at MMMUT Gorakhpur will be carried out strictly in accordance with the merit of the candidate, the candidate's order of preference for the seats, and the availability of vacant seats in the respective category. All the latest instructions of the University up to the date(s) of counselling shall be applicable.





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**2.2 DETAILS OF M.TECH. PROGRAMMES WITH INTAKE AND SEAT MATRIX**

S.No.	Program	Intake in 1st Year
<b>Master of Technology (M.Tech.)</b>		
1.	Environmental Engineering (ENV)	18
2.	Seismic Design and Earthquake Engineering (SDEE)	18
3.	Structural Engineering (STR)	18
4.	Power Electronics and Drives (PED)	18
5.	Control and Instrumentation (C&I)	18
6.	Energy Technology and Management (ETM)	18
7.	Computer Integrated Manufacturing (CIM)	18
8.	VLSI	18
9.	Communication Systems (CS)	18
10.	Computer Science and Engineering (CSE)	18
11.	Information Technology (IT)	18
12.	Chemical Engineering (CHE)	18

**Tentative Seat Matrix**

Branch		Intake	GN	EWS	OBC	SC	ST
<b>CED</b>	ENV	18	7	2	5	3	1
	STR	18	8	1	5	4	0
	SDEE	18	8	1	5	4	0
<b>EED</b>	PED	18	7	2	5	4	0
	C&I	18	7	2	5	4	0
<b>ECED</b>	CS	18	7	2	5	4	0
	VLSI	18	8	1	5	3	1
<b>MED</b>	CIM	18	7	2	4	4	1
	ETM	18	7	2	5	4	0
<b>ITCA</b>	IT	18	7	2	5	4	0
<b>CS&amp;ED</b>	CSE	18	7	2	5	4	0
<b>CHD</b>	CHE	18	7	2	4	4	1
<b>Total</b>		<b>216</b>	<b>87</b>	<b>21</b>	<b>58</b>	<b>46</b>	<b>4</b>

**2.3 IMPORTANT INSTRUCTIONS**

- 2.3.1 The candidate must himself/herself ensure his/her eligibility to appear in the respective entrance test of a particular Program. If a candidate who is not eligible to appear in the examination does so, he/she will not have any claim whatsoever for admission to any program through the entrance test.
- 2.3.2 Candidates who are yet to appear in the qualifying examination or have appeared but whose results are awaited are also eligible to appear in the entrance test. However, the candidates in respect of whom the result of the qualifying examination has not been declared by the date of document verification due to any reason

whatsoever, shall not be eligible for admission under any circumstances.

- 2.3.3 For admission to M. Tech. program, the candidates, who have passed the qualifying examination from an institution located outside U.P. and whose parents are NOT domicile of U.P. are also eligible for admission to M. Tech. Programs offered at the university are only under the General (OPEN) category.
- 2.3.4 Accepting admission to the University implies acceptance by the candidate and his/her parents or guardians of all the provisions given in this admission brochure and the University rules as applicable. Any change in the rules, regulations, fees, special conditions, etc., of the University shall mutatis mutandis apply to the admitted candidate.
- 2.3.5 Candidates seeking advantage of reserved categories must indicate the same but not enclose any supporting certificates with the application form. The advantage of horizontal reservation is not applicable for admission to M. Tech. The certificates will have to be produced in original at the time of document verification, along with one attested copy of each one of them. The proforma of certificates is given at the end of this admission brochure in Appendix A. These are subject to change even up to the starting date of counseling as per orders of Govt. of Uttar Pradesh/University. Candidates are essentially required to produce the respective certificates in support of their claim for reservation in the prescribed format only. Unless approved by the University in the proforma, any deviation will deprive the candidate of the benefit being claimed. Note that Certificate 2 for OBC candidates will be valid only when it is issued on or after 01.04.2024 (mandatory due to conditions of creamy layer for OBC).
- 2.3.6 The result of GATE/CUET(PG)-2024/MET-2024 for the respective programme as declared by the conducting IIT/National Testing Agency (NTA)/University shall be final. However, the candidate seeking admission to any programme can challenge the evaluation of his/her answers per the rules prescribed by the conducting IIT/National Testing Agency (NTA)/University.
- 2.3.7 If any document/declaration submitted by the candidate is found to be false at any stage, his/her candidature for admission shall be canceled, and he/she will be liable for prosecution under the law. In case of any legal dispute regarding admission, the jurisdiction will be limited to Gorakhpur courts only. If any Board awards only letter grades without providing an equivalent percentage of marks on the grade sheet, the candidate should obtain a certificate from the Board specifying equivalent marks and submit it at the time of document verification. If the candidate does not provide such a certificate, the decision of the University Admission Cell (UAC) regarding his/her eligibility shall be final and binding.
- 2.3.8 For admission in any program, the admit card, result, and all related notifications in connection with CUET(PG) shall be made available on the official websites of NTA <https://pgcuetsamarth.ac.in>. For matters related to admissions as well as counselling of all Programs, the candidates are required to visit the University's official website [www.mmmut.ac.in](http://www.mmmut.ac.in), regularly. It is the responsibility of the candidate to visit these websites and be informed about all information relevant to him/her, failing which the University will not be responsible for any loss due to lack of communication.
- 2.3.9 For any queries regarding admission, the contact numbers 8765783798 and 9235500507 may be used from 10.00 a.m. to 5.00 p.m. only on all days except gazetted holidays, Sundays, and from 10.00 a.m. to 1.00 p.m. on Saturdays. For the queries through e-mail ([admission2024@mmmut.ac.in](mailto:admission2024@mmmut.ac.in)), the reply will be made after 24 hours.
- 2.3.10 The date of reporting for the newly admitted students shall be notified on the university website and shall also be informed to the candidate in the admission offer letter during the counselling.
- 2.3.11 There is no management quota in the university. Admission is made only through counseling as per the procedure given in this brochure.





## 2.4 ELIGIBILITY FOR M.TECH. PROGRAMME

The admission is open to the Indian Nationals who have passed/appeared in the qualifying examination, fulfilling the eligibility requirements given below. GATE-qualified candidates with qualifications stated below will be given first preference, and CUET(PG)-2024 qualified candidates shall be admitted only against those M. Tech. seats which shall remain vacant after admitting valid GATE qualified candidates. All GATE qualified candidates shall receive a monthly stipend as per the norms of AICTE. The candidates who are not domicile of U.P. will be eligible to take admission against general seats only. The reservation policy, as prescribed by the U.P. State Government, shall be applicable for admissions of UP domicile candidates only.

Candidates applying under the sponsored category should possess a working experience of a minimum of two years in any industry/organization (offline mode) and shall be required to provide a sponsorship certificate from sponsoring organization/industry at the time of counselling. The admission to such candidates shall be on a supernumerary basis as per university rules.

### Department: Civil Engineering

- (i) **M.Tech. (Environmental Engineering):** B.E./B.Tech. or equivalent Engineering degree in Civil/Environmental/Chemical/Structural/Agricultural/Construction Technology/Construction Technology and Management with First Division or, if a division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to the first division.
- (ii) **M.Tech. (Structural Engineering):** B.E./B.Tech. or equivalent Engineering degree in Civil/Structural/Construction Technology/Construction Technology and Management with First Division or, if a division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to the first division.
- (iii) **M.Tech. (Seismic Design and Earthquake Engineering):** B.E./B.Tech. or equivalent Engineering degree in Civil/Structural/Construction Technology/Construction Technology and Management with First Division or, if a division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to the first division.

### Department: Computer Science & Engineering

**M.Tech. (Computer Science and Engineering):** B.E./B.Tech. or equivalent Engineering degree in Computer Science/Computer Sc. and Engineering/Computer Engineering/Information Technology/Software Engineering and other relevant branches or M.Sc. degree in Computer Science/Information Technology or MCA with First Division or, if a division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to first division.

### Department: Information Technology & Computer Application

**M.Tech. (Information Technology):** B.E./B.Tech. or equivalent Engineering degree in Information Technology/Computer Science/Computer Sc. and Engineering/Computer Engineering/Software Engineering and other relevant branches or M.Sc. degree in Computer Science/Information Technology or MCA with First Class or, if a class/ division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to the first division.

### Department: Electrical Engineering

- (i) **M.Tech. (Power Electronics and Drives):** B.E./B.Tech. or equivalent Engineering degree in either Electrical

Engineering (EE) or Electrical and Electronics Engineering (EN) with First Division or, if a division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to first division.

- (ii) **M.Tech. (Control and Instrumentation):** B.E./B.Tech. or equivalent Engineering degree in Electrical Engineering, Electrical and Electronics Engineering, Instrumentation, and Control Engineering, and Instrumentation Engineering with First Division or, if a division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to the first division.

### Department: Electronics & Communication Engineering

- (i) **M.Tech. (VLSI):** B.E/B.Tech./AMIE or equivalent in Biomedical Engineering/Computer Science and Engineering/ Information Technology/Electronics and Communication Engineering/Electrical Engineering/Electronics & Telecommunication Engineering/Engineering Physics/Energy Engineering/Instrumentation Engineering/Electrical and Electronics Engineering/Electronics & Instrumentation OR M.Sc. or equivalent in Electronics/Electronics Sciences with first division or if a division is not awarded, and CGPA/CPI is adopted. 6.75 will be considered equivalent to the first division.
- (ii) **M.Tech. (Communication Systems):** B.E/B.Tech./AMIE or equivalent in Biomedical Engineering/Computer Science and Engineering/Information Technology/Electronics and Communication Engineering/Electrical Engineering/Electronics & Telecommunication Engineering/Engineering Physics/Energy Engineering/Instrumentation Engineering/Electrical and Electronics Engineering/Electronics & Instrumentation OR M.Sc. or equivalent in Electronics/Electronics Sciences with first division or if a division is not awarded, and CGPA/CPI is adopted. 6.75 will be considered equivalent to the first division.

### Department: Mechanical Engineering

- (i) **M.Tech. (Computer Integrated Manufacturing):** B.E./B.Tech. or equivalent. Engineering degree in Mechanical/Production/Industrial/Manufacturing/Automobile/Aerospace Engineering/Aeronautical Engineering with First Division or, if a division is not awarded and CGPA/CPI is adopted, 6.75 will be considered equivalent to the first division.
- (ii) **M.Tech. (Energy Technology and Management):** B.E./B.Tech. or equivalent Engineering degree in Mechanical/Production/Industrial/Energy/Chemical/Automobile/Aerospace Engineering/Space Engineering and Rocketry with First Division or, if a division is not awarded and CGPA/CPI is adopted, 6.75 will be considered equivalent to the first division.

### Department: Chemical Engineering

**M.Tech. (Chemical Engineering):** B.E./B.Tech.in Engineering/Technology (Chemical/Petrochemical/Environmental/Leather/Paint/Plastic/Material/Metallurgy/Production/Civil/Paper/Biochemical/Biotechnology/Surface Coating etc.) in the relevant area of research along with a first division, if a division is not awarded and CGPA/CPI is adopted, 6.75 will be considered equivalent to the first division

OR

Master's Degree (M.Sc.) in Science (Chemistry/Environmental/Material/Physics etc.) in the relevant area of research along with a bachelor's degree (B.Sc.) in an appropriate branch of Science with first division, if a division is not awarded, and CGPA/CPI is adopted. 6.75 will be considered equivalent to the first-division





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## 2.5 TEST PAPER CODE OF CUET(PG)-2024 FOR ADMISSION TO M.TECH PROGRAMMES

Department	Program	CUET(PG) 2024 Paper Code
<b>Master of Technology (M.Tech.)</b>		
Civil Engineering	Environmental Engineering (ENV))	MTQP02
	Seismic Design and Earthquake Engineering (SDEE)	
	Structural Engineering (STR)	
Electrical Engineering	Power Electronics and Drives (PED)	MTQP10
	Control and Instrumentation(C&I)	
Mechanical Engineering	Energy Technology and Management (ETM)	MTQP07
	Computer Integrated Manufacturing (CIM)	
Electronics & Communication Engineering	VLSI	MTQP05/MTQP10/ SCQP17/SCQP19/ SCQP24
	Communication Systems (CS)	
Computer Science & Engineering	Computer Science and Engineering (CSE)	MTQP04/SCQP09
Information Tech & Computer Application	Information Technology (IT)	MTQP04/SCQP09
Chemical Engineering	Chemical Engineering (CHE)	MTQP01/SCQP08/ SCQP11/SCQP18/ SCQP24

## 2.6 SCHOLARSHIPS/FINANCIAL ASSISTANCE

- Malaviya Chhatra Kalyan Nidhi (MCKN)
  - Compensation in the event of an accident resulting in permanent/total/partial disability of the student.
  - In case of their parent's demise, complete university fee remittance to the student to continue study. For more information, please visit [http://www.mmmut.ac.in/pdf/Chhatra\\_Kalyan\\_Nidhi\\_Rules\\_FINAL\\_.pdf](http://www.mmmut.ac.in/pdf/Chhatra_Kalyan_Nidhi_Rules_FINAL_.pdf)
- Students are liable to get the social scholarship the UP Govt provides as per candidature validity.
- GATE-qualified students with valid gate scores are liable for scholarships as per MHRD.

## 2.7 FEE DETAILS

The fee structure for the academic sessions 2024-25 will be displayed on the website before final counseling.

# 3

## UNIVERSITY RESERVATION CRITERIA

Candidates seeking admission to different Programs are advised to read the reservation rules carefully before filling out their application form for counseling.

## 3.1 RESERVATION

- Vertical Reservation (Category):

S.No.	Category	Percentage of Reservation
(a)	Scheduled Caste of U.P.	21%
(b)	Scheduled Tribe of U.P.	2%
(c)	Other Backward Classes of U.P.	27%
(d)	Economically Weaker Section of U.P.	10%

- b. Horizontal Reservation (Sub-category in each vertical reservation category):

**Horizontal Reservation is not applicable to the M.Tech program.**

S.No.	Sub-Category	Code	Maximum Percentage of Total Seats*
(a)	Dependents of Freedom Fighters from U.P.	UPFF	2%
(b)	Sons/Daughters of 'defence personnel of U.P. either retired (superannuated) or killed/disabled in action' or 'defence personnel posted in U.P.'	UPAF	5%
(c)	Divyangjan/differently abled person (earlier known as disabled of U.P.)	UPHC	5%
(d)	Girls of U.P.	UPGL	20%

\* Subject to change as per latest instructions of Govt. of U.P. till the date of counselling.

- c. The candidates can claim only one type of horizontal reservation out of UPFF/UPAF/UPHC. However, the female candidates can also claim for any one of UPFF/UPAF/UPHC along with UPGL.
- d. The change of category/sub-category filled in Online submission shall not be entertained under any circumstances.
- e. Category/sub-category must be supported by the relevant certificates as per proforma given in Appendix-B to be produced at the time of document verification in counseling, failing which the candidates will not get the advantage of respective category/sub-category.
- f. The advantage of horizontal reservation in the Armed force sub-category is available to sons/daughters of 'defense personnel of U.P. either retired (superannuated) or martyred/disabled in action and the dependents settled in U.P.' or 'the defense personnel posted in U.P.' on the date of entrance test.
- g. Certificates 4, 5, and 6 in Appendix A are required at the time of document verification for claiming reservations in subcategories mentioned in sections 3.1(b).
- h. Please note that the benefit of the UPGL subcategory will automatically be given to all female candidates.
- i. As per Guidelines from the Ministry of Defence, the order of priorities for reservation or preferences to the wards of Armed Forces Personnel by States/UTs/Central/State Universities/Autonomous. Institutions for admission in Medical/Professional/Non-professional Programs will be as follows:

Priority I	Widows/Wards of Defence personnel killed in action.		
Priority II	Wards of disabled in action and boarded out from service.		
Priority III	Wards of disabled in service and boarded out with disability attributable to military service.		
Priority IV	Wards of disabled in service and boarded out with disability attributable to military service.		
Priority V	Wards of Ex-Servicemen and serving personnel who are in receipt of Gallantry Awards:		
	i. Param Vir Chakra	ii. Ashok Chakra	iii. Sarvottam Yudh Seva Medal
	iv. Maha Vir Chakra	v. Kirti Chakra	vi. Uttam Yudh Seva Medal
	vii. Vir Chakra	viii. Shaurya Chakra	ix. Yudh Seva Medal
	x. Sena, Nau Sena, Vayu Sena Medal		xi. Mention-in-Dispatches.





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Priority VI	Wards of Ex-Servicemen.
Priority VII	Wives of: <ol style="list-style-type: none"> <li>defence personnel disabled in action and boarded out from service.</li> <li>defence personnel disabled in service and boarded out with disability attributable to military service.</li> <li>ex-Servicemen and serving personnel who are in receipt of Gallantry Awards.</li> </ol>
Priority VIII	Wards of Serving Personnel.
Priority IX	Wives of Serving Personnel.

- j. *The advantage of horizontal reservation is not applicable for admission to M. Tech. Programs.*

### 3.2 MEDICAL STANDARDS

- Candidates must submit a certificate of medical fitness/handicap on Certificate 8 in Appendix A at the time of document verification.
- The medical standards prescribed are as given below:

#### Medical Standards Applicable:

Height	Candidate should be Physically fit to pursue his/her studies in the opted Program.
Weight	
Chest Measurement	
Heart and lungs	No abnormality
Hernia, hydrocele, piles etc.	The presence of any of these is to be essentially corrected before joining.
Vision	Normal. If defective, it must be corrected to 6/9 in the better eye and 6/12 in the worse one. Eyes should be free from congenital or any other disease.
Hearing	Normal. If defective, it must be corrected before joining.
Physically handicapped/disabled	The candidate having any one type of physical handicap/ disability is given below.

#### Divyangjan/differently abled person :

Type – I	Minimum 40% Permanent Visual Impairment
Type – II	Minimum 40% Permanent Locomotors Disability
Type – III	Minimum 40% Permanent Speech and Hearing Impairment

### 3.3 CATEGORY DEFINITIONS

S.No	Details	Code
a.	Candidates, who have passed the qualifying examination from an institution located in the State of Uttar Pradesh and who do not claim for any reserved category are eligible for admission to all the Programs in the University against available General (OPEN) seats (No certificate required).	UPGE
b.	Candidates, who have passed the qualifying examination from an institution located in U.P. and are domicile of U.P.; and belong to Schedule Caste (SC) of U.P./Schedule Tribe (ST) of U.P./Other Backward Classes of U.P./Economically Weaker Section (EWS) of U.P. are eligible for admission against available reserved seats of their respective category. Certificate 1 or 2 or 13A and 13B in Appendix A as applicable is required. List of SC, ST and OBC castes as per SC/ST Act 1976 and Government Order 4/1/2001-TC/Ka-2/2002 dt. 19/09/2002 and as provided by concerned U.P. Govt. department.	UPSC/ UPST/ UPBC/ UPGEEWS



S.No	Details	Code
c.	Candidates, who have passed the qualifying examination from an institution located outside U.P. and whose parents are domicile of U.P.; and who have not claimed for any reserved category, are also eligible for admission to Programs offered in the University under General (OPEN) category. Such candidate has to produce the domicile certificate of his/her parents (father/mother only) at the time of counselling (Certificate 3 in Appendix-A)	UPGD
d.	Candidates, who have passed the qualifying examination from an institution located outside U.P.; and whose parents are domicile of U.P.; and who belong to Schedule Caste of U.P./Schedule Tribe of U.P./Other Backward classes of U.P. /Economically Weaker Section (EWS) of U.P. are also eligible for admission against reserved seats of their category. Such candidate has to produce the domicile certificate of his/her parents (Father/Mother only) (Certificate 3 in appendix A) and category certificate (Certificate 1 or 2 or 13A and 13B as applicable) at the time of counselling. List of SC, ST and OBC castes as per SC/ST Act 1976 and Government Order 4/1/2001-TC/Ka-2/2002 dt. 19/09/2002 and as provided by concerned U.P. Govt. department.	GDSC/ GDST/ GDBC/ UPGDEWS
e.	The domicile requirement to son/daughter of following is relaxed and admission is permitted to such: i. Defence personnel settled in U.P. on the date of Admission Test after retirement/being disabled in action or defence personnel killed in action and the dependents settled in U.P. on the date of entrance test. Certificate 5 <b>Appendix-A</b> is required. ii. Defence personnel who are not domicile of U.P. but are posted in U.P. on the date of entrance test. Certificate 5 in <b>Appendix-A</b> is required. iii. Employee of All India services belonging to U.P. cadre. Certificate 10 in <b>Appendix-A</b> is required. GDDA candidates will be considered as UPGD category for all other benefits. <b>GDDA candidates will be considered as UPGD category for all other benefits.</b>	GDDA
f.	For Admission to M. Tech./MCA/MBA/M.Sc. programs, the candidates, who have passed the qualifying examination from an institution located outside U.P. and whose parents are not domicile of U.P. are also eligible for admission to M. Tech./MCA/MBA/M.Sc. Programs offered in the University under the General (OPEN) category. (no certificate required).	OSGE

Abbreviation of allotted Category	Category	Subcategory
GNOP	General (OPEN) Open for all candidates of Home State (Uttar Pradesh)	—
GNGL	General	Girls of U.P.
GNAF	General	Sons/Daughters of defence personnel of U.P. either retired (superannuated) or killed/disabled in action or defence personnel posted in U.P.’
GNFF	General	Dependents of Freedom Fighters from U.P.
GNHC	General	Divyangjan/differently-abled persons of U.P.
EWOP	Economically Weaker Section of U.P.	
EWGL	Economically Weaker Section of U.P.	Girls of U.P.
EWAF	Economically Weaker Section of U.P.	Sons/Daughters of defence personnel of U.P. either retired (superannuated) or killed/disabled in action or defence personnel posted in U.P.’
EWFF	Economically Weaker Section of U.P.	Dependents of Freedom Fighters from U.P.
EWHC	Economically Weaker Section of U.P.	Divyangjan/differently-abled persons of U.P.





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Abbreviation of allotted Category	Category	Subcategory
BCOP	Other Backward Classes of U.P.	
BCGL	Other Backward Classes of U.P.	Girls of U.P.
BCAF	Other Backward Classes of U.P.	Sons/Daughters of defence personnel of U.P. either retired (superannuated) or killed/disabled in action or defence personnel posted in U.P.’
BCFF	Other Backward Classes of U.P.	Dependents of Freedom Fighters from U.P.
BCHC	Other Backward Classes of U.P.	Divyangjan/differently-abled persons of U.P.
SCOP	Scheduled Caste of U.P.	
SCGL	Scheduled Caste of U.P.	Girls of U.P.
SCAF	Scheduled Caste of U.P.	Sons/Daughters of defence personnel of U.P. either retired (superannuated) or killed/disabled in action or defence personnel posted in U.P.’
SCFF	Scheduled Caste of U.P.	Dependents of Freedom Fighters from U.P.
SCHC	Scheduled Caste of U.P.	Divyangjan/differently-abled persons of U.P.
STOP	Scheduled Tribe of U.P.	
STGL	Scheduled Tribe of U.P.	Girls of U.P.
STAF	Scheduled Tribe of U.P.	Sons/Daughters of defence personnel of U.P. either retired (superannuated) or killed/disabled in action or defence personnel posted in U.P.’
STFF	Scheduled Tribe of U.P.	Dependents of Freedom Fighters from U.P.
STHC	Scheduled Tribe of U.P.	Divyangjan/differently-abled persons of U.P.
OP	OPEN (Open for all candidates of Other State (Other than Uttar Pradesh))	

Proforma of various certificates is available in Appendix A. In the case of the online category/reservation certificates, the advantage of the reserved category shall be provided subject to their online validation through the respective statutory websites, failing which such candidates will not be entitled to the advantage of the reserve category, and will be treated in the general category. In case of the candidates who do not submit the proper category/reservation certificate in the prescribed proforma at the time of document verification, the advantage of reserved category shall not be provided to them, and they will be treated in the General Category.

## 4

## REGISTRATION AND COUNSELLING GUIDELINES FOR M.TECH PROGRAMMES

## 4.1. ADMISSION IN M.TECH. THROUGH GATE/CUET(PG) 2024

Candidates with a valid GATE/ CUET(PG) 2024 score should apply online for admission to the M.Tech programs as follows.

## Step 1: Online Registration

All candidates with valid GATE/CUET(PG) 2024 scores fulfilling the eligibility criteria for M.Tech as mentioned in Postgraduate Admission Information Brochure 2024 for M.Tech Programmes are required to apply online through

the university website <https://mmmutadm.samarth.edu.in/2024/>. Students are required to create their login using a valid email ID and password.

### Instructions for filling Online Applications Form

- ⊙ Candidates must complete the registration form with the correct information.
- ⊙ Candidates are advised to read the guidelines carefully and check their eligibility and applicable reservation category, subcategory, gender, etc. before filling out and submitting the online registration form. The university shall not be responsible for any mistake made by the candidates in filling out the online application form.
- ⊙ Scan copies of the original documents must be uploaded per the registration form requirement.
- ⊙ Candidates must fill in their choice for specialization (as applicable) during online registration. Candidates who do not fill any choices will not be considered for seat allotment. His/her registration fee will also not be refunded.
- ⊙ There is no provision to change/modify the given choices at any stage of the counselling.
- ⊙ The candidates whose results of the qualifying examination are awaited due to any reason whatsoever shall have to submit an undertaking (Appendix B) that they will produce/submit their original documents on or before August 31, 2024. Failing which, admission of the candidate will be canceled, and the fee deposited will be forfeited.
- ⊙ If the candidate's personal data is found incorrect at the time of document verification or at any later stage, the seat allotment/ admission is liable to be cancelled.

Following Steps are given below :

Step#	Steps	Description of Steps						
1.	Open Applicant Registration Page	The candidate should fill up the On-line application form any place through Internet by login on to <a href="https://mmmutadm.samarth.edu.in/2024/">https://mmmutadm.samarth.edu.in/2024/</a> as per the detailed procedure given on the website.						
2.	New Registration	Applicant must create an account by clicking on <b>New Registration Button</b> and filling <b>Registration form</b> followed by verification of email. Note: Please remember Email Id. OTP is sent to your Registered Email Id for verification purpose.						
3.	Login	Applicant must enter Registered Email ID and Password to login to view dashboard. Three Steps are there to complete your form. <table border="1"> <thead> <tr> <th>STEP 1</th><th>STEP 2</th><th>STEP 3</th></tr> </thead> <tbody> <tr> <td>Complete Profile</td><td>Apply In Programme</td><td>Pay Registration Fees &amp; Submit the Application</td></tr> </tbody> </table>	STEP 1	STEP 2	STEP 3	Complete Profile	Apply In Programme	Pay Registration Fees & Submit the Application
STEP 1	STEP 2	STEP 3						
Complete Profile	Apply In Programme	Pay Registration Fees & Submit the Application						
4.	Profile	Applicant must create his profile (by clicking on <b>Profile Button</b> ) carefully by filling all the required information. Please note that no modification shall be allowed after final submission of profile.						
5.	Select Programme	Applicant must carefully fill information required in following sections (by clicking on <b>Select Programme Button</b> ): <table border="0"> <tr> <td>⊙ Programme Selection</td><td>⊙ Personal Details</td><td>⊙ Academic Details</td></tr> <tr> <td>⊙ Other Details</td><td>⊙ Uploads</td><td>⊙ Preview</td></tr> </table>	⊙ Programme Selection	⊙ Personal Details	⊙ Academic Details	⊙ Other Details	⊙ Uploads	⊙ Preview
⊙ Programme Selection	⊙ Personal Details	⊙ Academic Details						
⊙ Other Details	⊙ Uploads	⊙ Preview						
6.	Payments	⊙ Payments (Applicant must pay the registration fee (by clicking on <b>Payment Gateway Button at bottom</b> ) to finally submit the application form and note down Order number/Transaction ID etc. mandatorily while making payment) after verifying all details by checking all confirmation checkboxes as per filled information.						



Step#	Steps	Description of Steps
		<ul style="list-style-type: none"> <li>○ The candidate has to deposit the application fee (<b>Rs. 2500/-</b> online as per the provisions made in online form. <b>The application fee is non-refundable.</b></li> <li>○ The online fee payment can be made through available online mode only. Additional bank charges will be applicable as per the rules of the respective bank depending upon the transaction mode used and are to be paid by the candidates themselves. The confirmation page will be generated only after making the online fee payment successfully.</li> <li>○ In case the fee amount has been debited from candidate's bank account and On-line application website does not acknowledge any fee payment then the candidate should make the payment again till it is not reflected on the University's On-line application website. Candidate should contact the concerned bank for the difficulty faced by him/her. University will not be responsible for any inconvenience caused due to this. No extra time shall be permissible for any such failure.</li> <li>○ Applicants must download <b>Print registration Slip</b> (by clicking on <b>Payments Button</b>).</li> </ul>
7.	Print Form	<p>On completion of the online application form, the candidates are requested to take the print of the application form and preserve it for future use as they shall submit the duly signed copy of application form at the time of document verification.</p> <p><b>Please note that don't send the had copy of Application form to University.</b></p>

## Step 2: Document Verification

All relevant and original documents will be verified offline at MMMUT Gorakhpur within the stipulated time. Candidates must keep one set of self-attested copies of the required documents. If the documents are found in order, the candidates can participate in the counselling process after document verification.

## Step 3: Display of common general rank based on GATE/CUET(PG) 2024 result

All applicants combined general rank will be generated based on the percentile/score of valid GATE/CUET(PG) 2024 and used for seat allotment in the respective disciplines. First preference will be given to the candidates with valid GATE scores.

### Merit List Preparation

The Merit List will be prepared using scores obtained by candidates in the respective Test Papers. If there is a tie in the score obtained by two or more candidates, the order of merit for such candidates shall be decided in the following order.

- Rank is determined by age of the candidate.** If one candidate is older than another, the older candidate will have a higher rank than the younger candidate.
- Rank determination by Counselling Registration ID provided to candidates by MMMUT.** Candidates with a lesser Registration ID will have a higher rank than those with a higher Registration ID.

## Step 4: Deposition of Confirmation Fee/Full Fee

In the case of seat allotment, the candidate is required to print out the provisional allotment letter from their login. There is no provision for sending the allotment letter individually to the candidate by post.

Candidates are required to pay the Confirmation fee/Full fee as notified by the University later online using the payment gateway services within the stipulated time mentioned in the allotment letter. Failing this, the provisional admission offered to the candidate will be cancelled, and the offered seat will be allotted to another candidate as per



merit. The candidature of such candidate shall not be considered in any subsequent round of seat allotment except spot counselling.

### Step 5: Deposition of remaining University Fee

Candidates are required to deposit their remaining university fees (if any) after deducting the confirmation fee before registration/reporting for the academic session 2024-25.

### Step 6: Physical Document Verification at the University

After provisional admission, all relevant and original documents will be verified at the time of physical reporting at the university, along with one set of self-attested copies of the required documents. Failing which, the provisional admission offered will be cancelled, and the University fee will be forfeited.

**Note:** If the candidate's personal data is found incorrect during the verification of certificates, either at the time of reporting or at any later stage, the allotment of seat/ admission is liable to be cancelled, and his/her university fee will be forfeited.

## 4.2 ADMISSION IN M.TECH. PROGRAMMES THROUGH MET-2024

Applications for admission to various M.Tech. Programme for the session 2024-25 through Malaviya Entrance Test (MET)-2024 are to be submitted online only. For any clarification regarding eligibility, category, subcategory, etc., for admission at MMMUT, Gorakhpur, please refer to the University Admission Brochure-2024 for PG courses.

### Step 1: Online Registration

All candidates fulfilling the eligibility criteria for admission to M.Tech. programs mentioned in Admission Brochure 2024 for PG courses must apply online through the website <https://mmmutadm.samarth.edu.in/2024/>. Students are required to create their login using a valid email id and password.

#### Instructions for filling Online Applications Form

- ⦿ Candidates must complete the registration form with the correct information.
- ⦿ Candidates are advised to read the guidelines carefully and check their eligibility and applicable reservation category, subcategory, gender, etc. before filling out and submitting the online registration form. The university shall not be responsible for any mistake made by the candidates in filling out the online application form.
- ⦿ Scan copies of the original documents must be uploaded per the registration form requirement.
- ⦿ Candidates must fill in their choice for specialization (as applicable) during online registration. Candidates who do not fill any choices will not be considered for seat allotment. His/her registration fee will also not be refunded.
- ⦿ There is no provision to change/modify the given choices at any stage of the counselling.
- ⦿ The candidates whose results of the qualifying examination are awaited due to any reason whatsoever shall have to submit an undertaking (Appendix B) that they will produce/submit their original documents on or before August 31, 2024. Failing which, admission of the candidate will be canceled, and the fee deposited will be forfeited.
- ⦿ If the candidate's personal data is found incorrect at the time of document verification or at any later stage, the seat allotment/ admission is liable to be cancelled.

Following Steps are given below:



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Step#	Steps	Description of Steps						
8.	Open Applicant Registration Page	The candidate should fill up the On-line application form any place through Internet by login on to <a href="https://mmmutadm.samarth.edu.in/2024/">https://mmmutadm.samarth.edu.in/2024/</a> as per the detailed procedure given on the website.						
2.	New Registration	Applicant must create an account by clicking on <b>New Registration Button</b> and filling <b>Registration form</b> followed by verification of email. Note: Please remember Email Id. OTP is sent to your Registered Email Id for verification purpose.						
3.	Login	Applicant must enter Registered Email ID and Password to login to view dashboard. Three Steps are there to complete your form. <table border="1"> <thead> <tr> <th>STEP 1</th><th>STEP 2</th><th>STEP 3</th></tr> </thead> <tbody> <tr> <td>Complete Profile</td><td>Apply In Programme</td><td>Pay Registration Fees &amp; Submit the Application</td></tr> </tbody> </table>	STEP 1	STEP 2	STEP 3	Complete Profile	Apply In Programme	Pay Registration Fees & Submit the Application
STEP 1	STEP 2	STEP 3						
Complete Profile	Apply In Programme	Pay Registration Fees & Submit the Application						
4.	Profile	Applicant must create his profile (by clicking on <b>Profile Button</b> ) carefully by filling all the required information. Please note that no modification shall be allowed after final submission of profile.						
5.	Select Programme	Applicant must carefully fill information required in following sections (by clicking on <b>Select Programme Button</b> ): <table border="0"> <tr> <td>○ Programme Selection</td><td>○ Personal Details</td><td>○ Academic Details</td></tr> <tr> <td>○ Other Details</td><td>○ Uploads</td><td>○ Preview</td></tr> </table>	○ Programme Selection	○ Personal Details	○ Academic Details	○ Other Details	○ Uploads	○ Preview
○ Programme Selection	○ Personal Details	○ Academic Details						
○ Other Details	○ Uploads	○ Preview						
6.	Payments	<ul style="list-style-type: none"> <li>○ Payments (Applicant must pay the registration fee (by clicking on <b>Payment Gateway Button at bottom</b>) to finally submit the application form and note down Order number/Transaction ID etc. mandatorily while making payment) after verifying all details by checking all confirmation checkboxes as per filled information.</li> <li>○ The candidate has to deposit the application fee (<b>Rs. 2500/-</b> online as per the provisions made in online form. <b>The application fee is non-refundable.</b></li> <li>○ The online fee payment can be made through available online mode only. Additional bank charges will be applicable as per the rules of the respective bank depending upon the transaction mode used and are to be paid by the candidates themselves. The confirmation page will be generated only after making the online fee payment successfully.</li> <li>○ In case the fee amount has been debited from candidate's bank account and On-line application website does not acknowledge any fee payment then the candidate should make the payment again till it is not reflected on the University's On-line application website. Candidate should contact the concerned bank for the difficulty faced by him/her. University will not be responsible for any inconvenience caused due to this. No extra time shall be permissible for any such failure.</li> <li>○ Applicants must download <b>Print registration Slip</b> (by clicking on <b>Payments Button</b>).</li> </ul>						
7.	Print Form	On completion of the online application form, the candidates are requested to take the print of the application form and preserve it for future use as they shall submit the duly signed copy of application form at the time of document verification. <b>Please note that don't send the had copy of Application form to University.</b>						
8.	Download Admit Card	Eligible Applicant can download their admit card from same dashboard.						

## Step 2: Appear in MET 2024

All registered candidates without CUET (PG) 2024 and a valid GATE score must appear in the MET 2024

examination to be organised by the University in offline mode tentatively on July 13, 2024, at Madan Mohan Malaviya University of Technology, Gorakhpur. The MET 2024 examination will consist of 100 questions of two and a half hours duration. The detailed syllabus of MET 2024 is given in **Appendix C**.

### Step 3: Document Verification

All relevant and original documents will be verified within the stipulated time in offline mode at MMMUT Gorakhpur. Candidates must keep one set of self-attested copies of the required documents. If documents are found in order, then after document verification, the candidates will be allowed to participate in the counselling process.

### Step 4: Merit List and Seat Allotment

The seat allotment of the candidates would be processed centrally, and results will be announced on counselling portal.

#### Merit List Preparation

The Merit List will be prepared by using scores obtained by candidates in the respective Test Papers. If there is a tie in the score obtained by two or more candidates, the order of merit for such candidates shall be decided in the following order.

- Rank is determined by the age of the candidate.** If one candidate is older than another, the older candidate will have a higher rank than the younger candidate.
- Rank is determined by the Counselling Registration ID provided to candidates by MMMUT.** A candidate with a lesser Registration ID will have a higher rank than a candidate with a higher Registration ID.

### Step 5: Deposition of Confirmation Fee/Full Fee

In case of seat allotment, the candidate must print out the provisional allotment letter from their login. There is no provision for sending the allotment letter individually to the candidate by post.

Candidates must pay the Confirmation fee/Full fee as notified by the University later online using the payment gateway services within the stipulated time mentioned in the allotment letter. Failing this, the provisional admission offered to the candidate will be cancelled, and the offered seat will be allotted to another candidate as per merit. The candidature of such candidate shall not be considered in any subsequent round of seat allotment except spot counselling.

### Step 6: Deposition of remaining University Fee

Candidates must deposit their remaining university fees (if any) after deducting the confirmation fee before registration/reporting for the academic session 2024-25.

### Step 7: Physical Document Verification at the University

After provisional admission, all relevant and original documents will be verified at the time of physical reporting at the university, along with one set of self-attested copies of the required documents. Failing which, the provisional admission offered will be cancelled, and the University fee will be forfeited.

**Note:** If the candidate's personal data is found incorrect during the verification of certificates, either at the time of reporting or at any later stage, the allotment of seat/ admission is liable to be cancelled, and his/her university fee will be forfeited.

## 5 DEPARTMENTS OFFERING M.TECH. PROGRAMME

### 5.1 DEPARTMENT OF CIVIL ENGINEERING

The Civil Engineering Department, established in 1962 in Madan Mohan Malaviya University of Technology, Gorakhpur, is one of the oldest departments of the University, working since its inception. Over the years, the department has established its status as a center for imparting high-quality technical education to undergraduate and





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postgraduate students and extending consultancy services to industries and various government departments located in the Eastern U.P. Besides the undergraduate course of B. Tech. (Civil Engineering), the department offers three regular M.Tech. programs specializing in Seismic Design, Earthquake Engineering, Structural Engineering, and Environmental Engineering. The facilities for doctoral research are also available in the department.

The department has experienced and highly qualified faculty members. The department capitalizes on its well-qualified and dedicated faculty, which is clamoring to achieve excellence. Further, the department's strength is its strong linkages with its alumni and various government/private organizations in the region. The alumni of the department are well placed in various govt./private organizations and are in close contact with the department. The department has continuously interacted with various government and private organizations through consultancy works, expert advice, design projects, etc.

With the strength of faculty, the department has the potential to raise the standards of technical education to any desired level. The department has the following full-fledged laboratories equipped with internet facilities through LAN.

- 🕒 Geotechnical Engineering Lab
- 🕒 Highway Transportation Engineering Lab
- 🕒 Survey Lab
- 🕒 Departmental Computational Lab
- 🕒 Engineering Mechanics Lab
- 🕒 Environmental Engineering Lab
- 🕒 Hydraulics & Water Resources Engineering Lab
- 🕒 Structures and concrete Lab.
- 🕒 Geology and Building Material Lab

### Labs of Civil Engineering Department



## 5.2 DEPARTMENT OF ELECTRICAL ENGINEERING

The Department of Electrical Engineering was established in 1962. Over the years, the department has established its reputation as an excellent center for imparting high-quality technical education to B.Tech. and consultancy to industries and Govt. departments located not only in the Eastern U.P. but also outside. The department has been accredited by the NBA for a period of three years since January 2017. The department offers two regular P.G. courses viz. M. Tech. in Power Electronics & Drive and M. Tech. in Control & Instrumentation. The department also offers Ph.D. Program. A number of AICTE/UGC (MRP) projects are in progress. The department has 11 well-equipped labs, viz.

- |   |  |
|---|--|
| ☞ Electrical Machines & Electrical Workshop Lab | ☞ Switchgear and Protection Lab        |
| ☞ Computer/Research Lab                         | ☞ Control System Lab                   |
| ☞ Power System Lab                              | ☞ Network Lab                          |
| ☞ Circuit Lab                                   | ☞ Electrical Measurement Lab           |
| ☞ Instrumentation Lab                           | ☞ Power Electronics Lab                |
| ☞ Dives Lab                                     | ☞ Non-Conventional Energy Resource Lab |

### Labs of Electrical Engineering Department



## 5.3 DEPARTMENT OF MECHANICAL ENGINEERING

The Department of Mechanical Engineering, established in 1962, imparts quality education to students in the field of Mechanical Engineering through its undergraduate program. Presently, the department is also running M.Tech. programs in “Computer Integrated Manufacturing” since 2001 and “Energy Technology and Management” since 2013 as well as a regular/part-time Ph.D. program.

The department has highly qualified faculty members and technical supporting staff. The department is well known





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for maintaining benchmarks in technical education and research. Most of the alumni of the department occupy the highest positions in Government, Semi-Government, and Private organizations in the country as well as abroad. The laboratories of the department are being updated from time to time so that they remain well-equipped to cater to Research and Development. The department has been recently equipped with a fully automatic Flexible Manufacturing System in the Advanced Machining Lab. The department has the following full-fledged laboratories equipped with internet facilities.

- |                              |  |
|------------------------------|--|
| ☞ Advanced Machining Lab     | ☞ Computer Lab                         |
| ☞ Fluid Machinery Lab        | ☞ Heat Transfer Lab                    |
| ☞ IC Engine & Automobile Lab | ☞ Material Science Lab                 |
| ☞ Measurement Lab            | ☞ Refrigeration & Air Conditioning Lab |
| ☞ Strength of Material Lab   | ☞ Theory of Machine Lab                |
| ☞ Thermodynamics Lab         | ☞ Metrology Lab                        |

### Mechanical Workshop

- |                                      |                          |
|--------------------------------------|--------------------------|
| ☞ Machine Shop                       | ☞ Sheet metal Shop       |
| ☞ Fitting Shop                       | ☞ Carpentry Shop         |
| ☞ Black Smithy Shop                  | ☞ Welding Shop           |
| ☞ Foundry Shop Advance Machining Lab | ☞ Advanced Machining Lab |

### Labs of Mechanical Engineering Department



## 5.4 DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

The Department of Electrical Engineering was established in 1962. Over the years, the department has established its reputation as an excellent center for imparting high-quality technical education to B.Tech. and consultancy to industries and Govt. departments located not only in the Eastern U.P. but also outside. The department has been accredited by the NBA for a period of three years since January 2017. The department offers two regular P.G. courses viz. M. Tech. in Power Electronics & Drive and M. Tech. in Control & Instrumentation. The department also offers Ph.D. Program. A number of AICTE/UGC (MRP) projects are in progress. The department has 11 well-equipped labs, viz.

### The Department offers :

- |                                   |   |
|-----------------------------------|---|
| ☞ B.Tech in ECE (Started in 1973) | ☞ B. Tech in ECE (IoT), (Started in 2023) |
|-----------------------------------|---|



- ☞ M. Tech (VLSI) and M. Tech (Communication Systems),
- ☞ Doctoral programs in Electronics and Communication Engineering

### Major Research area of the Department:

- ☞ Photonics
- ☞ VLSI and nanoelectronics.
- ☞ 5G and next-generation wireless.
- ☞ State-of-art antenna design.
- ☞ Solar cells,
- ☞ IOT and Wireless Communication.
- ☞ Optical and microwave communications.

### Major Achievements from the ECE Department :

- ☞ Large Number of patents/Papers published in the last five years (10 Patents and more than 500 Research Papers in peer-reviewed Journals and Conferences).
- ☞ 16 Govt. funded Research Projects (Total Grant 6.33 Cr).
- ☞ 03 Full-time PhD Positions at 1.08 Cr for five years granted under Visvesvaraya Scheme, MeitY, Govt. of India. (First time in the State Technical University in Uttar Pradesh).
- ☞ Excellent Placement.
- ☞ Two projects won 1st Prize at the National Level Competition from IOT Lab.
- ☞ State of Art Labs like Drone, IoT, and Embedded System Labs.

### Major Project sanctioned to the department :

- ☞ Rs 85 Lacs Project titled “Design of Low Power Memory Circuits” under C2S Scheme under MeitY, Govt. of India. License software such as CADANCE SYNOPSYS around 01 crore and Mentor Visual TCAD around 01 crore is available in VLSI Research Lab.
- ☞ Rs 1.11 Cr project with 03 full-time and 01 Part-time sanctioned under Visvesvaraya Scheme, MeitY, Govt. of India.
- ☞ Rs 2.895 Cr project titled “Development of IoT and Drone-based Agriculture Monitoring System with Objective of Skill Development of Socially Deprived Community” sponsored by MeitY, Govt. of India.
- ☞ Rs 20.8 Lacs project titled “Development of IoT-based Smart Fishpond Water Quality Monitoring System” under NABARD, Govt. of India.
- ☞ Development and characterization of selenium-based chalcogenide glasses for phase change memory (PCM) devices. (Under CST UP Lucknow)
- ☞ Development of SPR-based optical biosensor for cancer cell detection using 2D nanomaterials (Under CST UP Lucknow)

Technical and /or professional society currently exists in the department. The ECE Department at MMMUT is home to technical and professional societies.

- ☞ Drone & IoT Club
- ☞ ECE Society
- ☞ IEEE Society

### Labs of Electronics & Communication Engineering Department







62 Glorious Years



**Drone Exhibition in front of Governor, Chief Minister, Cabinet Minister, Principal Secretary of Governor and ADG Gorakhpur**





## 5.5 DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

The Department of Computer Science and Engineering (CSE) was established in the year 1984. Over the years, the department has established itself as a center for imparting high-quality technical education to undergraduate and postgraduate students. This fact is being demonstrated by its alumni who are serving in various prestigious organizations in India and abroad. At present, the department is offering the following programmes:

- ☞ B.Tech. (Computer Science & Engineering)
- ☞ M.Tech. (Computer Science & Engineering)
- ☞ Ph.D.

The CSE Department offers full-time/part-time doctoral degree programs covering many areas of computer science, viz. artificial intelligence, algorithms, databases, software engineering, systems and networks, data visualization/imaging, security/privacy, embedded systems, and natural language processing. The department provides a unique educational opportunity for its students to achieve excellence both through rigorous coursework and participation in cutting-edge research. The Department of Computer Science is marching forward by following its three-fold goal of creating knowledge, disseminating knowledge, and providing service to the community. The department has the following full-fledged laboratories equipped with internet facilities.

- |                        |                    |
|------------------------|--------------------|
| ☞ Computing Lab I      | ☞ Computing Lab II |
| ☞ Computing Lab III    | ☞ Computing Lab IV |
| ☞ Window and Unix Lab  | ☞ Sun Java Lab     |
| ☞ Mobile Computing Lab | ☞ Design Lab       |
| ☞ PG research Lab      |                    |

### Labs of Computer Science and Engineering Department







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## 5.6 DEPARTMENT OF CHEMICAL ENGINEERING

Department of Chemical Engineering was started in year 2016 with an annual intake of 60 students. In line with the vision of the University, the Department aims to achieve international recognition through education and research and to provide professional service to our faculty, staff, and students to society. We are putting our efforts into providing students with an overall educational experience that prepares them to become successful professional chemical engineers capable of undertaking both lifelong learning and further advanced studies.

### Courses Offered

The programmes offered by the Department of Chemical Engineering are summarized below:

- 🕒 **B.Tech.** - Chemical Engineering: 60 students–Eight Semesters–Choice Based Credit System
- 🕒 **M.Tech.** - Chemical Engineering: 18 students–Four Semesters– Choice-Based Credit System
- 🕒 **Doctor of Philosophy (Ph.D.)**

### Areas of Research

The major research areas of the Chemical Engineering department involved water disinfection, wastewater treatment, advanced oxidation process, and novel material synthesis. The department is also engaged in developing sustainable technology for chemical processing applications using the intensified approach and green synthesis materials. We have achieved expertise in the field of electrochemical processes and microwave and ultrasonic synthesis. The department aims to align department research to the hydrogen mission, and started working in the field on hydrogen storage and biohydrogen synthesis and working on field development technology for converting ethanol into useful products.

### Labs of Chemical Engineering Department



## 5.7 DEPARTMENT OF INFORMATION TECHNOLOGY AND COMPUTER APPLICATION

The Department of Information Technology and Computer Application (ITCA) was inaugurated on 24th August 2018. The ITCA department aims to achieve national and international recognition through its faculty and students' educational and research achievements. The department has dedicated and highly motivated faculty members who make all possible efforts to prepare the student and PhD research scholar to become a successful IT professional and a very good researcher making significant contributions to the development and growth of our nation. The department has a vast legacy of well-placed and highly reputed alumni working in India and abroad.

### Courses Offered

The programmes offered by the Department of ITCA are summarized below:

- ☞ **B.Tech.** - Information Technology: 120 students–Eight Semesters-Choice Based Credit System
- ☞ **M.Tech.** - Information Technology: 18 students-Four Semesters- Choice-Based Credit System
- ☞ **Doctor of Philosophy (Ph.D.)**

### Areas of Research

Presently, our faculty are undertaking research in the following broad areas: Internet of Things (IoT), Cloud Computing, Blockchain, Machine Learning & Deep Learning, Artificial Intelligence, Neural Networks, Social Networks, Web Semantics, Big data Analytics, Wireless Sensor Networks, Natural Language Processing, Cryptography & Network Security.

### IoT and network security

Blockchain & Cryptocurrency, Information Security & Cyber Laws, Big Data Technologies, Web Semantics, Social Networks, Wireless Sensor Networks, Mobile Ad Hoc Networks, Cloud Computing, Sensor Cloud, Routing and Internetworking, advanced concepts wired/wireless networks, Internet of Things, Software Defined Network (SDN), Big data Analytics, Application of Machine Learning and Deep Learning in Networks/IoT, Cryptography & Network Security.

### AI and Machine Learning

Mathematical optimization and dimensionality/model reduction in neural networks. Pattern Recognition, Feature Extraction/Selection, Classification, Segmentation, and reconstruction using deep learning techniques. Learning important features using machine learning, time series data analysis, wearable sensors, medical images/signals (CT, DTI, MRI, fMRI, ECG), Speech processing, natural language processing, fraud detection, graph analytics/mining, deep learning on graphs or probabilistic graphical models, Big data Analytics and Computer Vision.

### Laboratory Infrastructure

A Faculty-In-Charge and a staff-in-charge manage each state-of-the-art laboratory and has the best-of-breed equipment featuring Internet of Things (IoT), Cloud Computing, Blockchain, Machine Learning & Deep Learning, Artificial Intelligence, Neural Networks, Social Networks, Web Semantic, Big data Analytics, Wireless Sensor Network, Natural Language Processing, Cryptography & Network Security.

- ☞ Computing Lab 1: i3 based systems 30 Nos.
- ☞ Computing Lab 2: HP ProOne 440 23.8-inch G9 All-in-One 39 Nos.
- ☞ Computing Lab 3: HP ProOne 440 23.8-inch G9 All-in-One 30 Nos.
- ☞ Computing Lab 4: i7 based systems 20 Nos and HP ProOne 440 23.8-inch G9 All-in-One 11 Nos. total 31 Nos





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## Labs of Information Technology and Computer Application Department



## 6 CENTRAL FACILITIES

### 6.1 INFORMATION TECHNOLOGY RESOURCES CENTRE (ITRC)

Information Technology Resource Centre (ITRC) was established in 2005 under world bank programme (TEQIP-I) and is unique of its kind among all state engineering universities/colleges of U.P. The objective of the center is to provide the central computing resources under one roof to students, faculty and staff with a vision to support and strengthen the teaching-learning process and research. The local area network spread in almost entire campus is being managed from this center. It remains open for 24 hours and is equipped with advanced computer networking hardware and software tools. Having around 300 computers arranged in its different labs, it provides uninterrupted high speed internet connectivity to the entire campus with two leased line connections- 1 Gbps (1:1) NKN and 155 Mbps (1:1) BSNL leased lines.

#### Facilities available at/through ITRC

- ☞ 210 no. of computers and 8 no. of high-end servers (5 HP and 3 Blade).
- ☞ Power backup with 12 no. of 10 KVA UPS, one 5 KVA UPS and one 10 KVA generator.
- ☞ Various design and training software tools for students and faculty members.
- ☞ Aryabhatta Seminar Hall with state of art facilities of Virtual Class for effective learning.
- ☞ Three design labs with advanced software/hardware computing resources to cater to the needs of PG and



Research students having total 70 computers.

- ☞ Three general computing labs with 100 no. of computers for UG students.
- ☞ One research lab exclusively for Ph.D. students with 40 computers.
- ☞ Provides internet connectivity through OFC (of about 5 kms) to academic buildings, hostels and faculty/staff residences thus covering almost entire campus.
- ☞ Provides additional Wi-Fi connectivity in all major university buildings and their surroundings.
- ☞ Provides connectivity to Biometric attendance devices installed in various departments and sections for online attendance.
- ☞ Manages the K-YAN and P.A. Systems installed in classrooms to support the effective teaching and learning.
- ☞ Manages Security system through CCTV Cameras installed at prime locations of the University.
- ☞ Manages computerized Gate Pass installed at university gate to further enhance the security.
- ☞ Establishment of two new Virtual Classroom is under process under the supervision of ITRC.

## 6.2 CENTRAL LIBRARY

Central library has a wide collection of books and periodicals on scientific, technical and allied subjects. It operates on open access system and students are given free access to books and journals that are kept on open shelves. Total carpet area of library is 1779.426 sq. meter. It has a wide collection of Books, E-books, and E-journals. Total number of books including bound journals and ISI Code is 1, 16, 359 (One lakh sixteen thousand three hundred and fifty-nine).



### Special features :

- ☞ Equipped with Wi-Fi facility and CCTV surveillance.
- ☞ Availability of OPAC (Online Public Access Catalogue).
- ☞ Air-Conditioned E-Library cum Reading Room.
- ☞ Automated issue and return of books.
- ☞ Air-conditioned Reading Room.

### Books :

S.No.	Books in different sections	No. of Books
1.	General Section	53465
2.	Book Bank Section	28476
3.	Reference Section	8758
4.	Reserve Book Bank Section	8564
5.	M.B.A. Book Bank Section	1911



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### E-Books :

S.No.	Publishers	No. of E-Books
1.	Springer	885
2.	Pearson	559
3.	Wiley	138

### E-Journals :

S.No.	Journals	No. of Titles
1.	IEEE	170
2.	ASCE	28
3.	ASME	35
4.	Springer	1700

## 6.3 LECTURE HALL COMPLEX

There are 03 lecture complexes with well-equipped modern facilities;

- ☞ The Pushpagiri Lecture Hall complex has 14 smart classrooms.
- ☞ Takshila Lecture Hall complex has 14 smart classrooms.
- ☞ 06 Lecture Halls and 02 drawing halls.

Besides these, there are departmental lecture classes equipped with modern facilities and seminar hall/conference hall for different academic purposes.



## 6.4 MULTIPURPOSE HALL (MPH)

The air-conditioned Multipurpose Hall with a capacity of about 700 audience is used for various purposes like convocation, alumni meet, cultural fest, and indoor games.





## 6.5 UNIVERSITY HEALTH CENTRE

The mission of the MMMUT Health Centre is to provide students with quality primary health care and education about healthy lifestyles. This Health Centre provides a full range of primary care, treatment, and referral services, as well as related health education programs. All programs and services are aimed at maintaining the physical and emotional well-being of university students.

The Health Centre is located in front of the University Cafeteria. This well-equipped facility provides medical treatment and office consultation space for a variety of outpatient services. This Health Centre provides a variety of services as elaborated below:

### Medical Clinic

The Outpatient/General Medical Clinic is staffed by physicians and nurses. Appointments may be made with a physician or nurse practitioner; walk-in patients are evaluated by nurses. Minor surgical procedures may be performed after evaluation by a physician. Proper dressing is performed afterward. Serious medical conditions and emergencies are given priority in all cases. Emergencies may be referred to the District Hospital/ Medical College or any other area hospitals as warranted.



### Women's Health

The Women's Health care is provided by all-female staff including a gynecologist and a registered nurse staff with training and experience in gynecology.

### Services

Treatment of women's health issues including routine gynecological examination.

### Men's Health

A full range of health services for male students is available through this Health Centre.

### Sports Medicine

Medical services in support of the University Athletic Program are provided by an athletic medicine physician-nurse team. The services are offered in Sports Injuries as and when required.

### Services :

The services provided concerning sports injuries include primary care both in and out-of-season, physiotherapy, pre-competition physical examinations, and non-operative orthopedics relating to sports injuries.



To achieve the services mentioned on the previous page, this Health Centre is well equipped with the following human resources and infrastructure:





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## Doctors

### Allopathic Doctors :

1. Dr. A.K Pandey, MBBS, PGDMCH, M. MED (Family medicine)
2. Dr. Reena Banka, MBBS, DGO

### Homeopathic Doctor :

1. Dr. Vijay Shankar Singh, BMS

### Staff :

1. Sri Devendra Kumar Pandey, BPT (Physiotherapist)
2. Ms. Prem Tara (Nurse)
3. Ms. Geeta (Nurse)

### Infrastructure/Facilities:

- ☞ A well-equipped doctor's cabin.
- ☞ All desired medicines.
- ☞ Four Beds for emergency.
- ☞ An up-to-date dressing rooms.
- ☞ A well-equipped physiotherapy center.
- ☞ An ambulance; round-the-clock availability.

## 6.6 GUEST HOUSE

The University has a Guest House which has a total of six double-bed well-furnished AC rooms. The Guest House facility is available to the external examiners, special invitees/guests of the University as well as to the parents of the students. Prior booking of these rooms can be made by contacting the officer-In charge guest house. The different type of room for stay in the Guest house will be as follows:

- ☞ Parents of Students
- ☞ Guest of Staff Members
- ☞ For others
- ☞ Alumni
- ☞ Official Guests (Members of BOM/Academic Council/Court/Finance Committee/Examination Committee/ Examiners and Experts)



## 6.7 CANTEEN AND COFFEE HOUSE

The University has one air-conditioned Cafeteria and a Coffee Day outlet, which offers a very good canteen facility at an affordable price on the campus. It also has a University Canteen near the boy's hostel which remains operational round the clock.



## 6.8 BANK, POST OFFICE AND ATM

- ☞ Fully computerized branch of State Bank of India.
- ☞ Two ATMs and Post-Office facility inside the campus



## 6.9 TRANSPORT FACILITIES

Four University buses are available for day scholars to commute to the University and for hostellers to the city of Gorakhpur or any other nearby place. Apart from buses, the University has one mini-bus and two staff cars. Also, 02 Battery driven Auto-Rickshaws are available for the hostellers to commute from the University gate to their respective hostels.



# 7 TRAINING AND PLACEMENT CELL

The basic function of the Training & Placement Cell is to search for opportunities for graduate and post-graduate students at the University in various reputed organizations and industries. The Training & Placement Cell is engaged throughout the year in interactions for building up relations among universities and various reputed industries/organizations. The Cell works as a hub for the following services:

- ☞ Training & Placement of Students.
- ☞ Student Counselling & Career Guidance.



The Cell organizes the training and campus recruitment programs for students of all disciplines practical training for the students is arranged by the cell in consultation with and on the basis of availability of seats in different industries/organizations/ firms/ training centers to make the students have strong practical knowledge and to provide them to know the applications of scientific principles industrial training is essential for students as per university norms.





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## PLACEMENT STATISTICS 2022-23

**1000+**

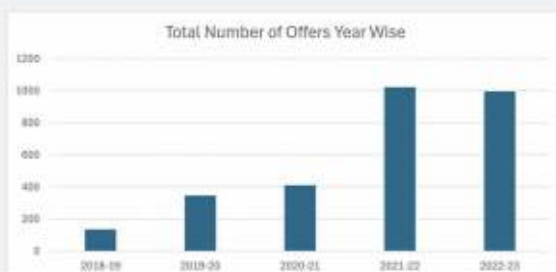
No. of Offers

**52 LPA**

Highest CTC Offered

**90**

Recruiters



## OUR RECRUITERS



Almost all the eligible and interested students get selected through campus selection. The cell organizes personality development programs and Entrepreneurial development programs to inculcate the habit of learning, development of new skills, team spirit, perseverance, and tolerance for disagreement in them, to make them self-directed, self-motivated, and responsible lifelong learners enrich of vocabulary, pronunciation skills, and extempore, participation in seminars, workshops, mock interviews, and group discussion. The idea behind this is to cater to the needs of the companies that require students to have such personalities who are aware of technological development and who are well equipped to face global challenges have problem-solving capabilities and can communicate across cultures globally. For more information, please visit: <http://www.mmmut.ac.in> View\_Placed Student Management



## 8 COUNCIL OF STUDENT ACTIVITIES

The University is strongly committed towards transforming its students into holistic professionals through various extracurricular activities and to do so, the University places special emphasis on student participation in various extra/co-curricular activities. To manage and coordinate such extracurricular activities, the University has a Council of Student Activities (CSA). A Professor level faculty member of the University heads the CSA and is assisted by two Vice Chairmen, an OSD and the Physical Training Instructor (PTI). The Council is further subdivided into various Sub Councils/Cells/ Clubs, prominent of which are the Technical Sub Council, Sports Sub Council, Cultural Sub Council, NSS, NCC etc. which keep the campus vibrant throughout the year. The Sub Councils/Cells/ Clubs are managed by a team of Faculty members and student's office bearers. Students participate in various extra/co-curricular activities at the Department and University level and earn marks/grades for ECA Courses. Besides in-house activities attracting participation of students from colleges/institutions located in different parts of the country, the University also encourages and provides limited financial support to its students to participate in national level sports/cultural/technical festivals being organized in premier institutions throughout India.

### Facilities :

Council of Students Activities (CSA) has a brand-new, state-of-the-art sports stadium named 'Shaheed Bandhu Singh Stadium'. The stadium was inaugurated in 2020 by Hon'ble Chief Minister of Uttar Pradesh Shri Yogi Adityanath and has been named after the famous revolutionary of First War of Indian Independence Late Shri Bandhu Singh. Sprawling into 12 acres of land, the stadium has both outdoor as well as indoor facilities. The stadium has a Football ground, a Hockey ground, a Cricket pitch, a grassy ground for Track & Field activities, two indoor Basketball courts, and a Pavilion with 300 seating capacity. In addition to the stadium, facilities for the following indoor/outdoor sports are also available in the University:

- ☞ **Indoor Sports :** Table Tennis, Badminton, Carrom, Chess, and Billiards.
- ☞ **Outdoor Sports :** Separate concrete courts for Skating and Tennis; Another grassy ground for Football, Kabaddi, & Volleyball.
- ☞ **Gymnasium :** Separate gymnasium for boys and girls are available which are equipped with all modern facilities.





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In addition to the stadium, CSA has a fully air-conditioned auditorium 'Multi-Purpose Hall' (MPH) with seating capacity of 800 persons. The MPH has a 40 x 30 feet stage, two greenrooms, and a robust PA/ audio-visual presentation system. CSA also has a Cultural Ground near the Civil Engineering Department to host open air/outdoor functions.

## 9 HOSTEL FACILITY

The University is residential institution with seven boys' hostels five girls' hostels. The hostels are well furnished with necessary amenities available with in hostel premises. The leased line Internet facility is available for 24x7 hours in every room of each hostel. Students admitted to the University hostels are provided with the necessary furniture. The students are personally responsible for upkeep of the articles issued to them by the warden in sound condition. First year students are provided with three/two-seater rooms as per the availability. Senior students are provided with double and single seated rooms depending upon availability.

- ☞ **Boys Hostels :** Raman Bhawan, Subhash Bhawan, Visveswaraya Bhawan, Tagore Bhawan, Ambedkar Bhawan, Tilak Bhawan, Ramanujam Bhawan.
- ☞ **Girls Hostels :** Saraswati Bhawan, Sarojani Bhawan, Kalpna Chawala Bhawan, Kasturaba Bhawan, New Girls Hostel.





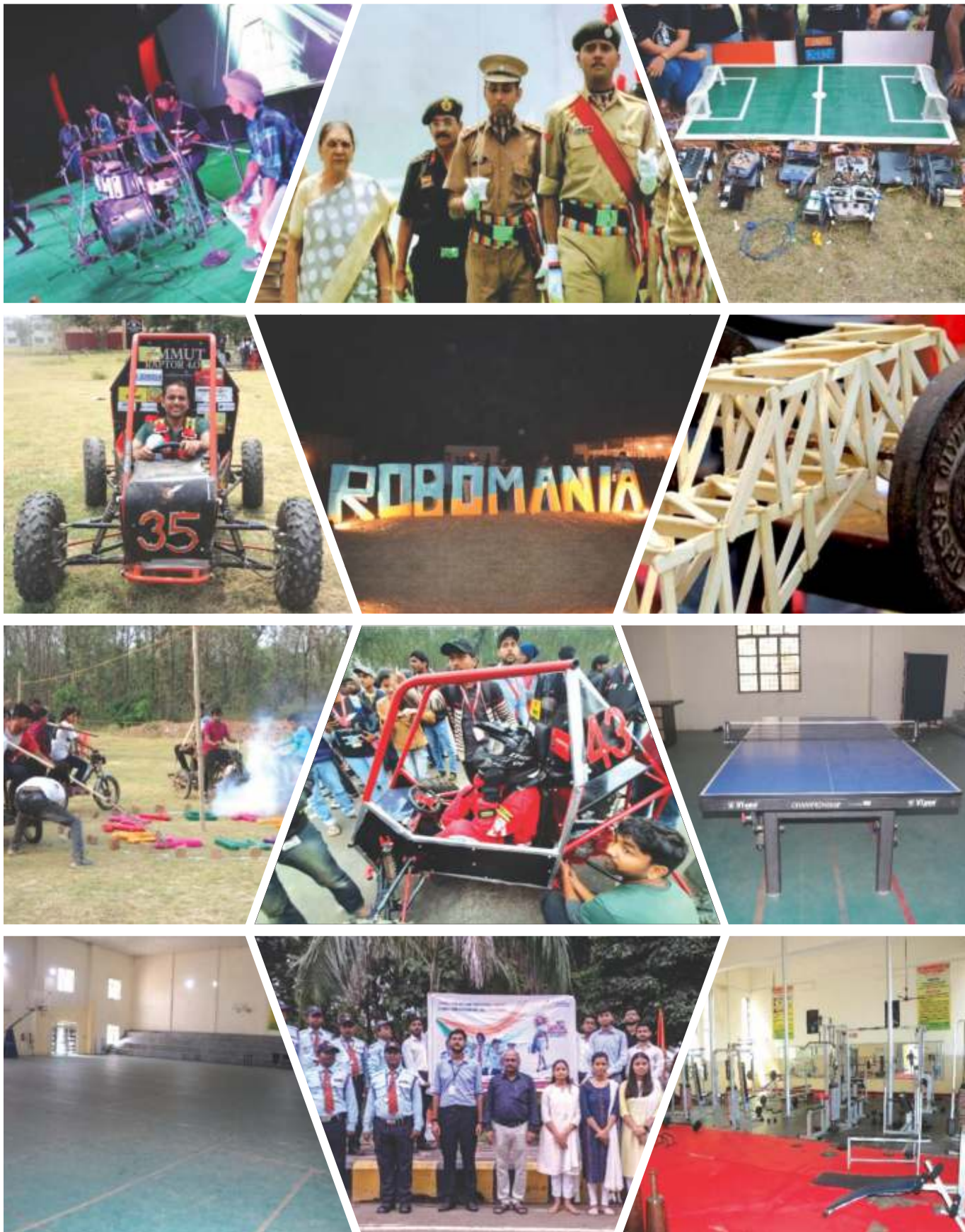
## 10 CAMPUS LIFE AT MMMUT







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## APPENDIX-A

### CERTIFICATE-1 ( प्रमाण पत्र-1 )

#### अनुसूचित जाति/अनुसूचित जनजाति (UPSC/UPST/GDSC/GDST)

जिला ..... दिनांक : .....

तहसील .....

आवेदन क्र. ....

प्रमाण पत्र क्र. ....

प्रमाणित किया जाता है कि श्री/श्रीमती/कु. ....

सुपुत्र/सुपुत्री/श्री .....  
माता का नाम .....  
निवासी .....  
ग्राम .....  
तहसील .....  
जिला .....

उ.प्र. राज्य की ..... जाति के व्यक्ति हैं, जिसे संविधान (अनुसूचित जाति) आदेश, 1950 (जैसा कि समय-समय पर संशोधित हुआ है) संविधान (अनुसूचित जनजाति, उ.प्र.) आदेश, 1967 के अनुसार अनुसूचित जाति/अनुसूचित जनजाति के रूप में मान्यता दी गयी है।

श्री/श्रीमती/कु. .... तथा/अथवा उनका परिवार उ.प्र. के ग्राम/मोहल्ला .....  
तहसील ..... नगर ..... जिला ..... में सामान्यतः रहता है।

जिलाधिकारी/अतिरिक्त जिलाधिकारी/  
सिटी मजिस्ट्रेट/परगना मजिस्ट्रेट/तहसीलदार

**Note :** Certificate will be accepted only in latest U.P. Government format.



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**CERTIFICATE-2 ( प्रमाण पत्र-2 )****उत्तर प्रदेश के अन्य पिछड़े वर्ग के लिए जाति प्रमाण पत्र का प्रारूप (UPBC/GDSC)**

जिला ..... दिनांक : .....

तहसील .....

आवेदन क्र. ....

प्रमाण पत्र क्र. ....

प्रमाणित किया जाता है कि श्री/श्रीमती/कु. ....

सुपुत्र/सुपुत्री/श्री .....

माता का नाम .....

निवासी .....

ग्राम .....

तहसील .....

जिला .....

उ.प्र. राज्य की ..... पिछड़ी जाति के व्यक्ति हैं। यह जाति उत्तर प्रदेश लोक सेवा (अनुसूचित जातियों, अनुसूचित जनजातियों तथा अन्य पिछड़े वर्गों के लिए आरक्षण) अधिनियम 1994 (यथा संशोधित) की अनुसूची-एक के अन्तर्गत मान्यता प्राप्त है।

यह भी प्रमाणित किया जाता है कि श्री/श्रीमती/कु. .... पूर्वोक्त अधिनियम 1994 (यथा संशोधित) की अनुसूची-दो (जैसा कि उ.प्र. लोक सेवा) अनुसूचित जातियों, अनुसूचित जन जातियों और अन्य पिछड़े वर्गों के लिए आरक्षण (संशोधन) अधिनियम 2001 द्वारा प्रतिस्थापित किया गया है एवं जो उ.प्र. लोक सेवा) (अनुसूचित जातियों, अनुसूचित जनजातियों और अन्य पिछड़े वर्गों के लिए आरक्षण) (संशोधन) अधिनियम, 2002 द्वारा संशोधित की गयी है, से आच्छादित नहीं है। इनके माता-पिता की निरन्तर तीन वर्ष की अवधि के लिए सकल वार्षिक आय आठ लाख रु. या इससे अधिक नहीं है तथा इनके पास धनकर अधिनियम, 1957 में यथाविहित छूट सीमा से अधिक सम्पत्ति भी नहीं है।

जिलाधिकारी/अतिरिक्त जिलाधिकारी/  
सिटी मजिस्ट्रेट/परगना मजिस्ट्रेट/तहसीलदार

नोट : अभ्यर्थी ध्यान दें कि उ.प्र. के अन्य पिछड़े वर्ग के लिए जाति प्रमाण मार्च 31, 2024 के पश्चात का बना होना आवश्यक है क्योंकि क्रीमीलेयर के अन्तर्गत आने वाले अभ्यर्थियों को आरक्षण का लाभ अनुमन्य नहीं है।

**Note :** Certificate will be accepted only in latest U.P. Government format.



**CERTIFICATE-3 ( प्रमाण पत्र-3 )****उत्तर प्रदेश सामान्य निवासी के पुत्र/पुत्री (UPGD/GDSC/GDST/GDBC)**

(उस जिले के अधिकारी द्वारा प्रमाणित जिस जिले के माता/पिता निवासी हैं)

जिला ..... दिनांक : .....

तहसील .....

आवेदन क्र. ....

प्रमाण पत्र क्र. ....

सम्बन्धित लेखपाल की जांच आख्या दिनांक ..... के आधार पर तदनुसार

प्रमाणित किया जाता है कि श्री/श्रीमती/कु. ....

सुपुत्र/सुपुत्री/श्री .....

माता का नाम .....

निवासी .....

ग्राम .....

तहसील .....

जिला .....

1. उत्तर प्रदेश का/की निवासी है व उसका वर्तमान पता मकान नम्बर ..... ग्राम/मोहल्ला .....  
तहसील ..... जनपद ..... उत्तर प्रदेश है।

2. उपर्युक्त की पुष्टि प्रारूप-1 में आवेदन एवं सत्यापनकर्ता द्वारा उपलब्ध कराई गई सूचना तथा इससे संतुष्ट हो जाने के उपरान्त  
अधोहस्ताक्षरी द्वारा उत्तर प्रदेश के इस जनपद का सामान्य निवासी होने विषयक प्रमाण पत्र निर्गत किया जा रहा है।

जिलाधिकारी/अतिरिक्त जिलाधिकारी/  
सिटी मजिस्ट्रेट/परगना मजिस्ट्रेट/तहसीलदार

**Note :** Certificate will be accepted only in latest Government format.



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### CERTIFICATE-4 ( प्रमाण पत्र-4 ) (Sub-Category UPFF)

उत्तर प्रदेश लोक सेवा (शारीरिक रूप से विकलांग, स्वतंत्रता संग्राम सेनानी के आश्रितों और भूतपूर्व सैनिकों के लिए आरक्षण) अधिनियम, 1993 के अनुसार स्वतन्त्रता संग्राम सेनानी के आश्रित के प्रमाणपत्र का प्रपत्र

प्रमाणित किया जाता है कि श्री/श्रीमती (स्वतंत्रता संग्राम सेनानी का नाम) .....  
निवासी ग्राम ..... तहसील ..... नगर .....  
जिला ..... उत्तर प्रदेश लोक सेवा (शारीरिक रूप से विकलांग, स्वतंत्रता संग्राम सेनानी के आश्रितों और भूतपूर्व सैनिकों के लिए आरक्षण) अधिनियम 1993 के अनुसार स्वतन्त्रता संग्राम सेनानी हैं और श्री/श्रीमती/कु. (आश्रित अभ्यर्थी का नाम) ..... पुत्र/पुत्री/पौत्र/अविवाहित पौत्री उपरांकित अधिनियम, 1993 के ही प्रावधानों के अनुसार उक्त श्री/श्रीमती (स्वतन्त्रता संग्राम सेनानी) ..... के आश्रित हैं।

दिनांक

हस्ताक्षर

स्थान

पूरा नाम एवं पदनाम

मुहर (जिला मजिस्ट्रेट की सील)

**Note :** Proforma of certificate may be changed according to latest Govt. order.

**CERTIFICATE-5 ( प्रमाण पत्र-5 )****उत्तर प्रदेश/सेनादल (Sub-Category UPAF)**

(अंतिम यूनिट के आफिसर कमान्डिंग/जिला सैनिक कल्याण बोर्ड द्वारा प्रमाणित)

यह प्रमाणित किया जाता है कि श्री/श्रीमती (अभ्यर्थी के पिता अथवा माता का नाम) .....  
 निवासी गाँव/शहर ..... तहसील ..... जिला .....  
 उत्तर प्रदेश, के दिनांक ..... को सेवानिवृत्त (Superannuated) युद्ध में मारे गये/अपंग हो गये/उत्तर प्रदेश में वर्तमान  
 में तैनात है। वे भारतीय थलसेना/जलसेना/वायुसेना के स्थान ..... दिनांक ..... से  
 दिनांक ..... तक कार्यरत थे/हैं। अभ्यर्थी Department of Ex-Servicemen Welfare, Ministry of Defence,  
 Government of India द्वारा अधिसूचित प्राथमिकताओं में से प्राथमिकता नंबर (Please enter a valid priority number applicable to  
 this candidates per Govt. order No. F.No.6(1)/2017/D(Res.II) dated November 30, 2017) .....  
 (केवल शब्दों में/only in word) के अंतर्गत अर्ह है।

दिनांक

यूनिट कमान्डिंग आफिसर के हस्ताक्षर

स्थान

नाम

मुहर

**(जिला मजिस्ट्रेट द्वारा प्रमाणित)**

यह प्रमाणित किया जाता है कि श्री/कु. (अभ्यर्थी) ..... निवासी ..... उत्तर  
 प्रदेश गाँव/शहर ..... तहसील ..... जिला .....  
 उपरोक्त सेना दल के सेवानिवृत्त (Superannuated) युद्ध में मारे गये या अपंग हो गये कर्मचारी जो उत्तर प्रदेश के स्थायी निवासी हैं/थे,  
 के पुत्र/पुत्री हैं अथवा प्रवेश परीक्षा की तिथि को उत्तर प्रदेश भारतीय थलसेना/जलसेना/वायुसेना में कार्यरत थे/हैं।

दिनांक

हस्ताक्षर

स्थान

नाम

मोहर



## CERTIFICATE-6 ( प्रमाण पत्र-6 )

### (Sub-Category UPHC) काउन्सिलिंग में जमा करने हेतु

दिव्यांग जन के अधिमान के लिए प्रमाणपत्र (मुख्य चिकित्सा अधिकारी द्वारा प्रमाणित)

जिला .....

दिनांक : .....

तहसील .....

आवेदन क्र. ....

प्रमाण पत्र क्र. ....

1. यह प्रमाणित किया जाता है कि श्री/कु. (अभ्यर्थी) .....  
पुत्र/पुत्री श्री (पिता का नाम) ..... नीचे लिखे कारणों से शारीरिक रूप से दिव्यांग हैं।  
(केवल मुख्य चिकित्सा अधिकारी ही कारण लिखें) .....

2. अभ्यर्थी की उपरोक्त दिव्यांगता को निम्न प्रकार की दिव्यांगता की श्रेणी में रखा जा सकता है।

(कृपया ✓ का निशान लगायें)

Type - I: Minimum 40% permanent Visual impairment	
Type-II: Minimum 40% permanent Locomotors disability	
Type-III: Minimum 40% permanent Speech Hearing impairment	

3 यह भी प्रमाणित किया जाता है कि उपरोक्त दिव्यांग स्थिति अभ्यर्थी के इंजीनियरिंग शिक्षा प्राप्त करने में बाधक नहीं होगी।

अभ्यर्थी के हस्ताक्षर

चिकित्साधिकारी के हस्ताक्षर

नाम

नाम

दिनांक

मुहर

**CERTIFICATE-7 ( प्रमाण पत्र-7 )****CHARACTER CERTIFICATE FROM THE HEAD OF THE INSTITUTION LAST ATTENDED**

This is to certify that Sri/Km. \_\_\_\_\_  
has been a bonafide student of from \_\_\_\_\_ to \_\_\_\_\_ and has  
passed/appeared at the \_\_\_\_\_  
examination in the year \_\_\_\_\_

**Proctorial reports:**

- |   |  |        |
|---|--|--------|
| 1 | Has he/she involved himself/herself in any act of indiscipline?  | Yes/No |
| 2 | Has he/she been warned, Fined or punished for any act of indiscipline?   | Yes/No |
| 3 | Has he/she been restricted or expelled from Hostel of College for any reason?  | Yes/No |
| 4 | Has he/she been involved in any act of indiscipline outside the College campus like group clashes or faction fights etc. | Yes/No |
| 5 | Has he/she been addicted to drugs or intoxicants?  | Yes/No |

**General remarks (Please state your assessment of the student)**

**Date:** \_\_\_\_\_

**Signature** \_\_\_\_\_

**Name** \_\_\_\_\_

**Designation** \_\_\_\_\_



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**CERTIFICATE-8 ( प्रमाण पत्र-8 )****FORMAT FOR MEDICAL CERTIFICATE**

(To be obtained from a Chief Medical Officer or Medical Officer of MMMUT, Gorakhpur)

This certificate has to be submitted at the time of admission in the University

Name of Candidate:		Age:	Sex:	Weightage:
Roll No.:		Category:		Subcategory and Rank Position:
Father's Name :				
<b>(To be filled in by the Candidate)</b>				
L.T.	M.I.	VISION	Colour Vision:	
Height	Weight		Chest	Abdomen
History	Operation	Koch's	Colic's	B.P.
	Seizures	Asthma	Piles	Diabetes
EXAMINATION	Pulse	Tonsil	DNS	Hernia
	Pallor	L.Nodes	CSOM	Hydrocele
	Cardiovascular	CNS		
	Respiratory	GIT		
	Genitourinary	Others		
Is the candidate physically handicapped/Disabled : (Please tick)      Yes/No				
If yes, type of handicap/disability: <input type="checkbox"/> Type-I: Minimum 40% permanent Visual impairment				
(Please tick ✓ the type of handicap/disability) <input type="checkbox"/> Type-II: Minimum 40% permanent Locomoter disability				
<input type="checkbox"/> Type-III: Minimum 40% permanent speech and Hearing impairment				
Any other finding:				
Certified that the candidate is physically fit/unfit/temporally disqualified to pursue engineering studies				

Signature of Candidate

Signature of the issuing Medical Officer (with Official stamp)

**CERTIFICATE-9 ( प्रमाण पत्र-9 )****UNDERTAKING BY CANDIDATE FOR MEDICAL FITNESS**

I certify that I have no such physical handicap/disability which would hinder the pursuit of studies in the Programs in which I am seeking admission. If at any stage it is found that I have a physical handicap/ disability which would hinder the pursuit of studies in the Programs in which I am seeking admission then my admission will be liable to be cancelled. I will produce medical fitness certificate from a C.M.O./C.M.S. at the time of my joining the University.

Dated:

Counter Signed by Father/Guardian

Signature of the Candidate



**CERTIFICATE-10 ( प्रमाण पत्र-10 )****अखिल भारतीय सेवा के उ.प्र. कैंडर के अधिकारियों/कर्मचारियों हेतु**

प्रमाणित किया जाता है कि श्री/श्रीमती (अभ्यर्थी के माता/पिता का नाम) .....  
 पद नाम ..... विभाग का नाम ..... कैंडर संख्या .....  
 अखिल भारतीय सेवा के उ.प्र. कैंडर के अधिकारी/कर्मचारी है तथा वर्तमान में इस कार्यालय में कार्यरत हैं। यह प्रमाणपत्र इनके पुत्र/पुत्री  
 (अभ्यर्थी का नाम) ..... को मदन मोहन मालवीय प्रौद्योगिकी विश्वविद्यालय में प्रवेश हेतु  
 प्रदान किया जाता है।

दिनांक

विभागाध्यक्ष/कार्यालयाध्यक्ष का हस्ताक्षर

नाम एवं पद नाम

मुहर

**CERTIFICATE-11 ( प्रमाण पत्र-11 )****(Income Certificate) (काउन्सिलिंग में जमा करने हेतु)**

क्षेत्रीय भूलेख निरीक्षक तथा लेखपाल की जांचरिपोर्ट के आधारपर प्रमाणित किया जाता है कि .....  
 आवेदक के अभिभावक/माता/पिता का नाम सुपुत्र .....  
 निवासी/ग्राम ..... परगना ..... तहसील .....  
 नगर ..... जिला ..... राज्य .....  
 के स्वयं की मासिक आय रुपये ..... तथा वार्षिक आय रुपये ..... है।  
 लेखपाल की रिपोर्ट के अनुसार आय का स्रोत ..... है।

स्थान

तहसीलदार

दिनांक

मुहर

नोट : अभ्यर्थी ध्यान दे कि उ.प्र. के आर्थिक रूप से कमजोर अभ्यर्थियों के लिए प्रमाणपत्र मार्च 31, 2024 के पश्चात का बना हुआ होना आवश्यक है।



कार्यालय-जाप संख्या-3/2019/4/1/2002/का-2/19टी.सी. दिनांक 14 मार्च, 2019 का संलग्नक

## CERTIFICATE – 13A

उत्तर प्रदेश सरकार

कार्यालय का नाम.....

आर्थिक रूप से कमजोर वर्ग के सदस्य द्वारा प्रस्तुत किया जाने वाला आय एवं परिसम्पत्ति प्रमाण-पत्र

प्रमाण-पत्र संख्या-..... दिनांक-.....

वित्तीय वर्ष ..... के लिए मान्य

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी .....

पुत्र/पति/पुत्री ..... ग्राम/कस्बा.....

पोस्ट ऑफिस ..... थाना .....

तहसील ..... जिला ..... राज्य .....

पिन कोड..... के स्थायी निवासी है, जिनका फोटोग्राफ नीचे अभिप्रमाणित है, आर्थिक रूप से कमजोर वर्ग के सदस्य हैं, क्योंकि वित्तीय वर्ष ..... में इनके परिवार की कुल वार्षिक आय 8 लाख (आठ लाख रुपये मात्र) से कम है। इनके परिवार के स्वामित्व में निम्नलिखित में से कोई भी परिसम्पत्ति नहीं है:-

- I 5 (पाँच) एकड़ कृषि योग्य भूमि अथवा इससे ऊपर ।
- II एक हजार वर्ग फीट अथवा इससे अधिक क्षेत्रफल का प्लॉट।
- III अधिसूचित नगरपालिका के अंतर्गत 100 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।
- IV अधिसूचित नगरपालिका से इतर 200 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।

2. श्री/श्रीमती/कुमारी ..... जाति ..... के

सदस्य हैं, जो अनुसूचित जाति, अनुसूचित जनजाति तथा अन्य पिछड़े वर्गों के रूप में अधिसूचित नहीं है।

आवेदक का पासपोर्ट साईज का  
अभिप्रमाणित फोटोग्राफ

हस्ताक्षर ..... (कार्यालय का मुहर सहित)

पूरा नाम .....

पदनाम .....

जिलाधिकारी/अतिरिक्त जिलाधिकारी/सिटी  
मजिस्ट्रेट/परगना मजिस्ट्रेट/तहसीलदार।

कार्यालय-जाप संख्या-3/2019/4/1/2002/का-2/19टी.सी.-11, दिनांक 14 मार्च, 2019 का संलग्नक

### CERTIFICATE-13B

#### आर्थिक रूप से कमजोर वर्ग के लाभार्थ स्वयं घोषणा पत्र

#### स्वयं घोषणा पत्र

मैं ..... पुत्र/पुत्री/पत्नी .....  
 ग्राम/कस्बा ..... पोस्ट ऑफिस .....  
 थाना ..... ब्लॉक ..... तहसील .....  
 जिला ..... राज्य ..... ने आर्थिक रूप से कमजोर वर्ग के  
 प्रमाण पत्र हेतु आवेदन दिया है, एतद् द्वारा घोषणा करता/करती हूँ :-

1. मैं ..... जाति से सम्बन्ध रखता/रखती हूँ, जो उत्तर प्रदेश हेतु अधिसूचित अनुसूचित जाति, अनुसूचित जनजाति एवं अन्य पिछड़ा वर्ग की सूची में सूचीबद्ध नहीं है।
2. मेरे परिवार की कुल श्रोतों (वेतन, कृषि, व्यवसाय, पेशा इत्यादि) से कुल वार्षिक आय रु ..... (शब्दों में) है।
3. मेरे परिवार के पास उल्लिखित आय के सिवाय अथवा इसके अतिरिक्त अन्यत्र कोई परिसम्पत्ति नहीं है।

#### अथवा

कई स्थानों पर स्थित परिसम्पत्तियों को जोड़ने के पश्चात भी मैं (नाम) ..... आर्थिक रूप से कमजोर वर्ग के दायरे में आता/आती हूँ।

4. मैं घोषणा करता/करती हूँ कि मेरे परिवार की सभी परिसम्पत्तियों को जोड़ने के पश्चात् निम्नलिखित में से किसी भी सीमा से अधिक नहीं है-

- I 5 (पाँच) एकड़ कृषि योग्य भूमि अथवा इससे ऊपर।
- II एक हजार वर्ग फीट अथवा इससे अधिक क्षेत्रफल का फ्लैट।
- III अधिसूचित नगरपालिका के अंतर्गत 100 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।
- IV अधिसूचित नगरपालिका से इतर 200 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।

मैं प्रमाणित करता/करती हूँ कि मेरे द्वारा उपरोक्त जानकारी मेरे ज्ञान और विश्वास के अनुसार सत्य है और मैं आर्थिक रूप से कमजोर वर्ग के लिए आरक्षण सुविधा प्राप्त करने हेतु पात्रता धारण करता/करती हूँ। यदि मेरे द्वारा दी गई जानकारी असत्य/गलत पायी जाती है तो मैं पूर्ण रूप में जानता हूँ/ जानती हूँ कि इस आवेदन पत्र के आधार पर दिये गये प्रमाण पत्र के द्वारा शैक्षणिक संस्थान में लिया गया प्रवेश/लोक सेवाओं एवं पदों में प्राप्त की गई नियुक्ति निरस्त कर दी जायेगी/कर दिया जायेगा अथवा इस प्रमाण पत्र के आधार पर कोई अन्य सुविधा/लाभ प्राप्त किया गया है उससे भी वंचित किया जा सकेगा और इस सम्बन्ध में विधि एवं नियमों के अधीन मेरे विरुद्ध की जाने वाली कार्यवाही के लिए मैं उत्तरदायी रहूँगा/रहूँगी।

नोट:- जो लागू नहीं हो उसे काट दें।

आवेदक/आवेदिका का हस्ताक्षर तथा पूरा नाम।

स्थान :-

दिनांक :-



**APPENDIX-B****UNDERTAKING BY CANDIDATE****(Whose Result of Qualifying Examination is awaited)**

Date :

I ..... son/daughter of  
..... seeking admission in ..... hereby  
submit my undertaking that I will produce/submit the evidence of having passed the qualifying examination  
securing the minimum passing marks as prescribed by the University by August 31, 2024. I am fully aware that if I  
fail to submit the required document on or before August 31, 2024, my admission will be cancelled and no claim to  
refund the fee will be made by me whatsoever the reason may be.

(Signature of the parents/guardian)

(Signature of the candidate)

Name : .....

Name : .....

Date : .....

GATE/CUET(PG)/ : .....

MET Registration No.

Contact No. : .....

Contact No. : .....

## APPENDIX-C

### SYLLABUS FOR MALAVIYA ENTRANCE TEST (MET)-2024

#### SYLLABUS FOR M.TECH. CIVIL ENGINEERING

##### Section 1: Engineering Mathematics

**Linear Algebra:** Matrix algebra; Systems of linear equations; Eigen values and Eigen vectors.

**Calculus:** Functions of single variable; Limit, continuity and differentiability; Mean value theorems, local maxima and minima; Taylor series; Evaluation of definite and indefinite integrals, application of definite integral to obtain area and volume; Partial derivatives; Total derivative; Gradient, Divergence and Curl, Vector identities; Directional derivatives; Line, Surface and Volume integrals.

**Ordinary Differential Equation (ODE):** First order (linear and non-linear) equations; higher order linear equations with constant coefficients; Euler-Cauchy equations; initial and boundary value problems.

**Partial Differential Equation (PDE):** Fourier series; Separation of variables; solutions of one- dimensional diffusion equation; first and second order one-dimensional wave equation and two-dimensional Laplace equation.

**Probability and Statistics:** Sampling theorems; Conditional probability; Descriptive statistics – Mean, median, mode and standard deviation; Random Variables – Discrete and Continuous, Poisson and Normal Distribution; Linear regression.

**Numerical Methods:** Error analysis. Numerical solutions of linear and non-linear algebraic equations; Newton's and Lagrange polynomials; numerical differentiation; Integration by trapezoidal and Simpson's rule; Single and multi-step methods for first order differential equations.

##### Section 2: Structural Engineering

**Engineering Mechanics:** System of forces, free-body diagrams, equilibrium equations; internal forces in structures; Frictions and its applications; Centre of mass; Free Vibrations of un-damped SDOF system.

**Solid Mechanics:** Bending moment and shear force in statically determinate beams; Simple stress and strain relationships; simple bending theory, flexural and shear stresses, shear center; Uniform torsion, Transformation of stress; buckling of column, combined and direct bending stresses.

**Structural Analysis:** Statically determinate and indeterminate structures by force/ energy methods; Method of superposition; Analysis of trusses, arches, beams, cables and frames; Displacement methods: Slope deflection and moment distribution methods; Influence lines; Stiffness and flexibility methods of structural analysis.

**Construction Materials and Management:** Construction Materials: Structural Steel – Composition, material properties and behavior; Concrete - Constituents, mix design, short-term and long-term properties. Construction Management: Types of construction projects; Project planning and network analysis - PERT and CPM; Cost estimation.

**Concrete Structures:** Working stress and Limit state design concepts; Design of beams, slabs, columns; Bond and development length; Pre-stressed concrete beams.

**Steel Structures:** Working stress and Limit state design concepts; Design of tension and compression members, beams and beam- columns, column bases; Connections - simple and eccentric, beam-column



connections, plate girders and trusses; Concept of plastic analysis -beams and frames.

### Section 3: Geotechnical Engineering

**Soil Mechanics:** Three-phase system and phase relationships, index properties; Unified and Indian standard soil classification system; Permeability - one dimensional flow, Seepage through soils – two - dimensional flow, flow nets, uplift pressure, piping, capillarity, seepage force; Principle of effective stress and quicksand condition; Compaction of soils; One- dimensional consolidation, time rate of consolidation; Shear Strength, Mohr's circle, effective and total shear strength parameters, Stress-Strain characteristics of clays and sand; Stress paths.

**Foundation Engineering:** Sub-surface investigations - Drilling bore holes, sampling, plate load test, standard penetration and cone penetration tests; Earth pressure theories - Rankine and Coulomb; Stability of slopes – Finite and infinite slopes, Bishop's method; Stress distribution in soils – Boussinesq's theory; Pressure bulbs, Shallow foundations – Terzaghi's and Meyerhoff's bearing capacity theories, effect of water table; Combined footing and raft foundation; Contact pressure; Settlement analysis in sands and clays; Deep foundations – dynamic and static formulae, Axial load capacity of piles in sands and clays, pile load test, pile under lateral loading, pile group efficiency, negative skin friction.

### Section 4: Water Resources Engineering

**Fluid Mechanics:** Properties of fluids, fluid statics; Continuity, momentum and energy equations and their applications; Potential flow, Laminar and turbulent flow; Flow in pipes, pipe networks; Concept of boundary layer and its growth; Concept of lift and drag.

**Hydraulics:** Forces on immersed bodies; Flow measurement in channels and pipes; Dimensional analysis and hydraulic similitude; Channel Hydraulics - Energy-depth relationships, specific energy, critical flow, hydraulic jump, uniform flow, gradually varied flow and water surface profiles.

**Hydrology:** Hydrologic cycle, precipitation, evaporation, evapo-transpiration, watershed, infiltration, unit hydrographs, hydrograph analysis, reservoir capacity, flood estimation and routing, surface run-off models, ground water hydrology - steady state well hydraulics and aquifers; Application of Darcy's Law.

**Irrigation:** Types of irrigation systems and methods; Crop water requirements - Duty, delta, evapo-transpiration; Gravity Dams and Spillways; Lined and unlined canals, Design of weirs on permeable foundation; cross drainage structures.

### Section 5: Environmental Engineering

**Water and Waste Water Quality and Treatment:** Basics of water quality standards – Physical, chemical and biological parameters; Water quality index; Unit processes and operations; Water requirement; Water distribution system; Drinking water treatment.

Sewerage system design, quantity of domestic wastewater, primary and secondary treatment. Effluent discharge standards; Sludge disposal; Reuse of treated sewage for different applications.

**Air Pollution:** Types of pollutants, their sources and impacts, air pollution control, air quality standards, Air quality Index and limits.

**Municipal Solid Wastes:** Characteristics, generation, collection and transportation of solid wastes, engineered systems for solid waste management (reuse/ recycle, energy recovery, treatment and disposal).



## Section 6: Transportation Engineering

**Transportation Infrastructure:** Geometric design of highways - cross-sectional elements, sight distances, horizontal and vertical alignments.

Geometric design of railway Track – Speed and Cant.

Concept of airport runway length, calculations and corrections; taxiway and exit taxiway design.

**Highway Pavements:** Highway materials - desirable properties and tests; Desirable properties of bituminous paving mixes; Design factors for flexible and rigid pavements; Design of flexible and rigid pavement using IRC codes.

**Traffic Engineering:** Traffic studies on flow and speed, peak hour factor, accident study, statistical analysis of traffic data; Microscopic and macroscopic parameters of traffic flow, fundamental relationships; Traffic signs; Signal design by Webster's method; Types of intersections; Highway capacity.

## Section 7: Geomatics Engineering

Principles of surveying; Errors and their adjustment; Maps - scale, coordinate system; Distance and angle measurement - Leveling and trigonometric leveling; Traversing and triangulation survey; Total station; Horizontal and vertical curves.

Photogrammetry and Remote Sensing - Scale, flying height; Basics of remote sensing and GIS.

## SYLLABUS FOR M.TECH. ELECTRICAL ENGINEERING

**Measurements and Instrumentation:** SI units, standards (R, L, C, voltage, current and frequency), systematic and random errors in measurement, expression of uncertainty - accuracy and precision, propagation of errors, linear and weighted regression. Bridges: Wheatstone, Kelvin, Megaohm, Maxwell, Anderson, Schering and Wien for measurement of R, L, C and frequency, Q-meter. Measurement of voltage, current and power in single and three phase circuits; ac and dc current probes; true rms meters, voltage and current scaling, instrument transformers, timer/counter, time, phase and frequency measurements, digital voltmeter, digital multimeter; oscilloscope, shielding and grounding.

Resistive-, capacitive-, inductive-, piezoelectric-, Hall effect sensors and associated signal conditioning circuits; transducers for industrial instrumentation: displacement (linear and angular), velocity, acceleration, force, torque, vibration, shock, pressure (including low pressure), flow (variable head, variable area, electromagnetic, ultrasonic, turbine and open channel flow meters) temperature (thermocouple, bolometer, RTD (3/4 wire), thermistor, pyrometer and semiconductor); liquid level, pH, conductivity and viscosity measurement. 4-20 mA two-wire transmitter.

**Control and Automation:** Mathematical modeling and representation of systems, Feedback principles, Block Diagram and signal flow graphs, transient response, steady-state-errors, Bode plot, phase and gain margins, Routh and Nyquist criteria, root loci, design of lead, lag and lead-lag compensators, state-space representation of systems; time-delay systems; mechanical, hydraulic and pneumatic system components, synchro pair, servo and stepper motors, servo valves; on-off, P, PI, PID, cascade, feedforward, and ratio controllers, tuning of PID controllers and sizing of control valves, State space model, Solution of state equations of LTI systems.

**Electrical Circuits:** Voltage and current sources: independent, dependent, ideal and practical; v-i relationships of resistor, inductor, mutual inductance and capacitor; transient analysis of RLC circuits with dc excitation. Kirchoff's laws, mesh and nodal analysis, superposition, Thevenin, Norton, maximum power transfer and



reciprocity theorems.

Peak-, average- and rms values of ac quantities; apparent-, active- and reactive powers; phasor analysis, impedance and admittance; series and parallel resonance, locus diagrams, realization of basic filters with R, L and C elements. transient analysis of RLC circuits with ac excitation. One-port and two-port networks, driving point impedance and admittance, open-, and short circuit parameters.

**Electrical Machines:** Single phase transformer: equivalent circuit, phasor diagram, open circuit and short circuit tests, regulation and efficiency; Three phase induction motors: principle of operation, types, performance, torque-speed characteristics, no-load and blocked rotor tests, equivalent circuit, starting and speed control; Types of losses and efficiency calculations of electric machines.

Operating principle of single-phase induction motors; Synchronous machines: cylindrical and salient pole machines, performance and characteristics, regulation and parallel operation of generators, starting of synchronous motors; Types of losses and efficiency calculations of electric machines.

**Analog and Digital Electronics:** Simple diode circuits: clipping, clamping, rectifiers; Amplifiers: biasing, equivalent circuit and frequency response; oscillators and feedback amplifiers; operational amplifiers: characteristics and applications; single stage active filters, Active Filters: Sallen Key, Butterworth, VCOs and timers, combinatorial and sequential logic circuits, multiplexers, demultiplexers, Schmitt triggers, sample and hold circuits, A/D and D/A converters.

**Power System:** Basic concepts of electrical power generation, ac and dc transmission concepts, Models and performance of transmission lines and cables, Economic Load Dispatch (with and without considering transmission losses), Series and shunt compensation, Electric field distribution and insulators, Distribution systems, Per-unit quantities, Bus admittance matrix, Gauss- Seidel and Newton-Raphson load flow methods, Voltage and Frequency control, Power factor correction, Symmetrical components, Symmetrical and unsymmetrical fault analysis, Principles of over-current, differential, directional and distance protection; Circuit breakers, System stability concepts, Equal area criterion.

**Power Electronics:** Static V-I characteristics and firing/gating circuits for Thyristor, MOSFET, IGBT; DC to DC conversion: Buck, Boost and Buck-Boost Converters; Single and three-phase configuration of uncontrolled rectifiers; Voltage and Current commutated Thyristor based converters; Bidirectional ac to dc voltage source converters; Magnitude and Phase of line current harmonics for uncontrolled and thyristor based converters; Power factor and Distortion Factor of ac to dc converters; Single-phase and three-phase voltage and current source inverters, sinusoidal pulse width modulation

## SYLLABUS FOR M.TECH. MECHANICAL ENGINEERING

### Section 1: Applied Mechanics and Design

**Engineering Mechanics:** Free-body diagrams and equilibrium; friction and its applications including rolling friction, belt-pulley, brakes, clutches, screw jack, wedge, vehicles, etc.; trusses and frames; virtual work; kinematics and dynamics of rigid bodies in plane motion; impulse and momentum (linear and angular) and energy formulations; Lagrange's equation.

**Mechanics of Materials:** Stress and strain, elastic constants, Poisson's ratio; Mohr's circle for plane stress and plane strain; thin cylinders; shear force and bending moment diagrams; bending and shear stresses; concept of shear centre; deflection of beams; torsion of circular shafts; Euler's theory of columns; energy methods; thermal stresses; strain gauges and rosettes; testing of materials with universal testing machine; testing of

hardness and impact strength.

**Theory of Machines:** Displacement, velocity and acceleration analysis of plane mechanisms; dynamic analysis of linkages; cams; gears and gear trains; flywheels and governors; balancing of reciprocating and rotating masses; gyroscope.

**Vibrations:** Free and forced vibration of single degree of freedom systems, effect of damping; vibration isolation; resonance; critical speeds of shafts.

**Machine Design:** Design for static and dynamic loading; failure theories; fatigue strength and the S-N diagram; principles of the design of machine elements such as bolted, riveted and welded joints; shafts, gears, rolling and sliding contact bearings, brakes and clutches, springs.

## Section 2: Fluid Mechanics and Thermal Sciences

**Fluid Mechanics:** Fluid properties; fluid statics, forces on submerged bodies, stability of floating bodies; control-volume analysis of mass, momentum and energy; fluid acceleration; differential equations of continuity and momentum; Bernoulli's equation; dimensional analysis; viscous flow of incompressible fluids, boundary layer, elementary turbulent flow, flow through pipes, head losses in pipes, bends and fittings; basics of compressible fluid flow.

**Heat-Transfer:** Modes of heat transfer; one dimensional heat conduction, resistance concept and electrical analogy, heat transfer through fins; unsteady heat conduction, lumped parameter system, Heisler's charts; thermal boundary layer, dimensionless parameters in free and forced convective heat transfer, heat transfer correlations for flow over flat plates and through pipes, effect of turbulence; heat exchanger performance, LMTD and NTU methods; radiative heat transfer, Stefan- Boltzmann law, Wien's displacement law, black and grey surfaces, view factors, radiation network analysis

**Thermodynamics:** Thermodynamic systems and processes; properties of pure substances, behavior of ideal and real gases; zeroth and first laws of thermodynamics, calculation of work and heat in various processes; second law of thermodynamics; thermodynamic property charts and tables, availability and irreversibility; thermodynamic relations.

**Applications:** Power Engineering: Air and gas compressors; vapour and gas power cycles, concepts of regeneration and reheat. I.C. Engines: Air-standard Otto, Diesel, and dual cycles. Refrigeration and air-conditioning: Vapour and gas refrigeration and heat pump cycles; properties of moist air, psychrometric chart, basic psychrometric processes. Turbomachinery: Impulse and reaction principles, velocity diagrams, Pelton-wheel, Francis, and Kaplan turbines; steam and gas turbines.

## Section 3: Materials, Manufacturing, and Industrial Engineering

**Engineering Materials:** Structure and properties of engineering materials, phase diagrams, heat treatment, stress-strain diagrams for engineering materials.

**Casting, Forming and Joining Processes:** Different types of castings, design of patterns, moulds and cores; solidification and cooling; riser and gating design. Plastic deformation and yield criteria; fundamentals of hot and cold working processes; load estimation for bulk (forging, rolling, extrusion, drawing) and sheet (shearing, deep drawing, bending) metal forming processes; principles of powder metallurgy. Principles of welding, brazing, soldering and adhesive bonding.

**Machining and Machine Tool Operations:** Mechanics of machining; basic machine tools; single and multi-point cutting tools, tool geometry and materials, tool life and wear; economics of machining; principles of non-





traditional machining processes; principles of work holding, jigs and fixtures; abrasive machining processes; NC/CNC machines and CNC programming.

**Metrology and Inspection:** Limits, fits and tolerances; linear and angular measurements; comparators; interferometry; form and finish measurement; alignment and testing methods; tolerance analysis in manufacturing and assembly; concepts of coordinate-measuring machine (CMM).

**Computer Integrated Manufacturing:** Basic concepts of CAD/CAM and their integration tools; additive manufacturing.

**Production Planning and Control:** Forecasting models, aggregate production planning, scheduling, materials requirement planning; lean manufacturing.

**Inventory Control:** Deterministic models; safety stock inventory control systems.

**Operations Research:** Linear programming, simplex method, transportation, assignment, network flow models, simple queuing models, PERT and CPM.

#### Section 4: Mechatronics and Industrial Robotics

**Sensors and Drives:** Sensor characteristics, different types of sensors and transducers, micro sensors, electrical contacts, actuators, and switches, signal processing devices; relays, output devices. Drives: Electrical, Mechanical, Hydraulic & Pneumatic. Automatic Production and Assembly Machines: Transfer lines, Production and throughput, Buffer Storage.

**Robot Kinematics & Gripper Mechanism:** Role of robotics in automated manufacturing system, Robot anatomy. Robot classifications and specifications, Manipulation and Control. Robot kinematics, forward and reverse transformation, homogeneous transformations. Fundamental Rotation matrices, Kinematic modelling of the manipulator, Denavit-Hartenberg Notation.

**Robot Manipulators, Actuators and Drives:** Robot vision and their interfaces, Machine Vision Applications. Welding, spray painting and finish coating, Parts Mating & Parts Joining Operations. Types of Robot Manipulators, Application of Robot Manipulators, Construction of a Robot Manipulator.

**Robot Sensors and Robot Safety:** Sensors in Robotics, classification of Robotic sensors, Acoustic sensors Optical Sensors, Pneumatic Sensors. Touch Sensors, Force Sensors, Force Sensing Wrist and its applications. Robot Planning and Installation, Robot Safety, Need of Robot Safety.

### SYLLABUS FOR M.TECH. ELECTRONICS AND COMMUNICATION ENGINEERING

#### Section 1: Networks, Signals and Systems

Circuit analysis: Node and mesh analysis, superposition, Thevenin's theorem, Norton's theorem, reciprocity. Sinusoidal steady state analysis: phasors, complex power, maximum power transfer. Time and frequency domain analysis of linear circuits: RL, RC and RLC circuits, solution of network equations using Laplace transform. Linear 2-port network parameters, wye-delta transformation. Continuous-time signals: Fourier series and Fourier transform, sampling theorem and applications. Discrete-time signals: DTFT, DFT, z-transform, discrete-time processing of continuous-time signals. LTI systems: definition and properties, causality, stability, impulse response, convolution, poles and zeroes, frequency response, group delay, phase delay.

## Section 2: Electronic Devices

Energy bands in intrinsic and extrinsic semiconductors, equilibrium carrier concentration, direct and indirect band-gap semiconductors. Carrier transport: diffusion current, drift current, mobility and resistivity, generation and recombination of carriers, Poisson, and continuity equations. P-N junction, Zener diode, BJT, MOS capacitor, MOSFET, LED, photo diode and solar cell.

## Section 3: Analog Circuits

Diode circuits: clipping, clamping and rectifiers. BJT and MOSFET amplifiers: biasing, ac coupling, small signal analysis, frequency response. Current mirrors and differential amplifiers. Op-amp circuits: Amplifiers, summers, differentiators, integrators, active filters, Schmitt triggers and oscillators.

## Section 4: Digital Circuits

Number representations: binary, integer and floating-point- numbers. Combinatorial circuits: Boolean algebra, minimization of functions using Boolean identities and Karnaugh map, logic gates and their static CMOS implementations, arithmetic circuits, code converters, multiplexers, decoders. Sequential circuits: latches and flip-flops, counters, shift-registers, finite state machines, propagation delay, setup and hold time, critical path delay. Data converters: sample and hold circuits, ADCs and DACs. Semiconductor memories: ROM, SRAM, DRAM. Computer organization: Machine instructions and addressing modes, ALU, data-path and control unit, instruction pipelining.

## Section 5: Control Systems

Basic control system components; Feedback principle; Transfer function; Block diagram representation; Signal flow graph; Transient and steady-state analysis of LTI systems; Frequency response; Routh-Hurwitz and Nyquist stability criteria; Bode and root-locus plots; Lag, lead and lag-lead compensation; State variable model and solution of state equation of LTI systems.

## Section 6: Communications

Random processes: auto correlation and power spectral density, properties of white noise, filtering of random signals through LTI systems. Analog communications: amplitude modulation and demodulation, angle modulation and demodulation, spectra of AM and FM, super heterodyne receivers. Information theory: entropy, mutual information, and channel capacity theorem. Digital communications: PCM, DPCM, digital modulation schemes (ASK, PSK, FSK, QAM), bandwidth, inter-symbol interference, MAP, ML detection, matched filter receiver, SNR and BER. Fundamentals of error correction, Hamming codes, CRC.

## Section 7: Electromagnetics

Maxwell's equations: differential and integral forms and their interpretation, boundary conditions, wave equation, Poynting vector. Plane waves and properties: reflection and refraction, polarization, phase and group velocity, propagation through various media, skin depth. Transmission lines: equations, characteristic impedance, impedance matching, impedance transformation, S-parameters, Smith chart. Rectangular and circular waveguides, light propagation in optical fibers, dipole and monopole antennas, linear antenna arrays.



## SYLLABUS FOR M.TECH. COMPUTER SCIENCE AND ENGINEERING/ INFORMATION TECHNOLOGY

### Section 1: Engineering Mathematics

**Discrete Mathematics:** Propositional and first order logic. Sets, relations, functions, partial orders and lattices. Monoids, Groups. Graphs: connectivity, matching, coloring. Combinatorics: counting, recurrence relations, generating functions.

**Linear Algebra:** Matrices, determinants, system of linear equations, eigenvalues and eigenvectors, LU decomposition. Calculus: Limits, continuity and differentiability. Maxima and minima. Mean value theorem. Integration.

**Probability and Statistics:** Random variables. Uniform, normal, exponential, poisson and binomial distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem.

### Information Technology

**Section 2:** Digital Logic Boolean algebra. Combinational and sequential circuits. Minimization. Number representations and computer arithmetic (fixed and floating point).

**Section 3:** Computer Organization and Architecture Machine instructions and addressing modes. ALU, data path and control unit. Instruction pipelining, pipeline hazards. Memory hierarchy: cache, main memory and secondary storage; I/O interface (interrupt and DMA mode).

**Section 4:** Programming and Data Structures Programming in C. Recursion. Arrays, stacks, queues, linked lists, trees, binary search trees, binary heaps, graphs.

**Section 5:** Algorithms Searching, sorting, hashing. Asymptotic worst case time and space complexity. Algorithm design techniques: greedy, dynamic programming and divide and conquer. Graph traversals, minimum spanning trees, shortest paths.

**Section 6:** Theory of Computation Regular expressions and finite automata. Context-free grammars and push-down automata. Regular and context-free languages, pumping lemma. Turing machines and undecidability.

**Section 7:** Compiler Design Lexical analysis, parsing, syntax-directed translation. Runtime environments. Intermediate code generation. Local optimisation, Data flow analyses: constant propagation, liveness analysis, common sub expression elimination.

**Section 8:** Operating System System calls, processes, threads, inter process communication, concurrency and synchronization. Deadlock. CPU and I/O scheduling. Memory management and virtual memory. File systems.

**Section 9:** Databases ER model. Relational model: relational algebra, tuple calculus, SQL. Integrity constraints, normal forms. File organization, indexing (e.g., B and B+ trees). Transactions and concurrency control.

**Section 10:** Computer Networks Concept of layering: OSI and TCP/IP Protocol Stacks; Basics of packet, circuit and virtual circuit-switching; Data link layer: framing, error detection, Medium Access Control, Ethernet bridging; Routing protocols: shortest path, flooding, distance vector and link state routing; Fragmentation and IP addressing, IPv4, CIDR notation, Basics of IP support protocols (ARP, DHCP, ICMP), Network Address Translation (NAT); Transport layer: flow control and congestion control, UDP, TCP, sockets; Application layer protocols: DNS, SMTP, HTTP, FTP, Email.



## SYLLABUS FOR M. TECH. CHEMICAL ENGINEERING

### Process Calculations

Steady and unsteady state mass and energy balances including multiphase, multi-component, reacting and non-reacting systems. Use of tie components; recycle, bypass and purge calculations; Gibb's phase rule and degree of freedom analysis.

### Fluid Mechanics

Fluid statics, surface tension, Newtonian and non-Newtonian fluids, transport properties, shell balances including differential form of Bernoulli equation and energy balance, equation of continuity, equation of motion, equation of mechanical energy, Macroscopic friction factors, dimensional analysis and similitude, flow through pipeline systems, velocity profiles, flow meters, pumps and compressors, elementary boundary layer theory, flow past immersed bodies including packed and fluidized beds, Turbulent flow: fluctuating velocity, universal velocity profile and pressure drop.

### Mechanical Operations

Particle size and shape, particle size distribution, size reduction and classification of solid particles; free and hindered settling; centrifuge and cyclones; thickening and classification, filtration, agitation and mixing; conveying of solids.

### Heat Transfer

Equation of energy, steady and unsteady heat conduction, convection and radiation, thermal boundary layer and heat transfer coefficients, boiling, condensation and evaporation; types of heat exchangers and evaporators and their process calculations; design of double pipe, shell and tube heat exchangers, and single and multiple effect evaporators.

### Mass Transfer

Fick's laws, molecular diffusion in fluids, mass transfer coefficients, film, penetration and surface renewal theories; momentum, heat and mass transfer analogies; stage-wise and continuous contacting and stage efficiencies; HTU & NTU concepts; design and operation of equipment for distillation, absorption, leaching, liquid-liquid extraction, drying, humidification, dehumidification and adsorption, membrane separations (micro-filtration, ultra-filtration, nano-filtration and reverse osmosis).

### Chemical Reaction Engineering

Theories of reaction rates; kinetics of homogeneous reactions, interpretation of kinetic data, single and multiple reactions in ideal reactors, kinetics of enzyme reactions (Michaelis-Menten and Monod models), non-ideal reactors; residence time distribution, single parameter model; non-isothermal reactors; kinetics of heterogeneous catalytic reactions; diffusion effects in catalysis; rate and performance equations for catalyst deactivation

### Instrumentation and Process Control

Measurement of process variables; sensors and transducers; P&ID equipment symbols; process modeling and linearization, transfer functions and dynamic responses of various systems, systems with inverse response, process reaction curve, controller modes (P, PI, and PID); control valves; transducer dynamics; analysis of closed loop systems including stability, frequency response, controller tuning, casca.



62 Glorious Years

## PROGRAMMES OFFERED IN ACADEMIC SESSION 2024-25 AT A GLANCE

S.No.	Category	Programme	Mode of Admission
1.	Undergraduate	B.Tech.	JEE Mains 2024
		B.Tech. (Lateral Entry)	CUET(UG) 2024/CUET(PG) 2024
		BBA	CUET(UG) 2024
		B.Pharm.	CUET(UG) 2024
		B.Pharm. (Lateral Entry)	CUET(UG) 2024
2.	Postgraduate	M.Tech.	GATE/CUET(PG)2024/MET2024*
		M.C.A.	CUET(PG) 2024
		M.B.A.	CAT/CMAT-2024/ CUET(PG)2024
		M.Sc.	CUET(PG)2024/MET-2024*
3.	Ph.D.	Ph.D.	MET-2024*

\*MET 2024 stands for Malaviya Entrance Test 2024 which is the admission test conducted by the University.

# कुल-गीत

महामना की सुयश शोभा, तकनीकि की यह तपस्थली।  
योग-स्थली गुरु गोरक्ष की, बुद्ध की निर्वाण स्थली।।

दृश्य अनुपम् राष्ट्री का, मिलती गले रोहिन वलय।  
ज्ञान मार्गी संत कबिरा की, कृति हुयी मनोहर मधुमय।।

ज्ञान और विज्ञान का, मंदिर मनोरम शुभ्र पावन।  
शोध के जिज्ञासु करते, सरस्वती का चरण वंदन।।

मानवता का मंदिर मनोहर, आलोक मय दिव्य सुन्दर।  
गूंजता परिसर हमारा, सकल विद्या का शंख स्वर।।

नवीनता की खोज में, संलग्न यह विद्या सदन।  
सुज्ञान के इस कल्पतरु का, करते हैं हम शत-शत नमन।।

## योगः कर्मसु कौशलम्

मदन मोहन मालवीय  
इन्जीनियरिंग कालेज,  
गोरखपुर  
स्थापित-1962



मदन मोहन मालवीय  
प्रौद्योगिकी विश्वविद्यालय,  
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स्थापित-2013





### Contact Details

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Email	: <a href="mailto:admission2024@mmmud.ac.in">admission2024@mmmud.ac.in</a>

### Office Timing

9.30 am to 5.00 pm (Monday to Friday)  
9.30 am to 2.00 pm (Saturdays)