

Programs	Institutes
All Master of Technology (M. Tech) Programs	Manipal Institute of Technology (MIT), Manipal
All Master of Engineering (M.E) Programs	Manipal School of Information Sciences (MSIS), Manipal

Manipal Entrance Test (MET) 2024 Details

- Test Duration: 90 minutes
- Based on the qualifying degree, the candidate is expected to <u>select any ONE of the 8 Test disciplines</u> listed below, during Day / Slot booking in the Online Test booking system (OTBS).
 - Once test discipline is selected during test slot booking, NO request for change of discipline will be considered under any circumstances
 - o <u>Click here</u> for the Eligibility requirements for M. Tech & M.E programs
- Total Questions: 60 questions comprising of Chosen Discipline (50 questions) & Engg Mathematics (10 questions)
- Max marks: 240
- Marking Scheme: + 4 awarded for correct answer, 1 deducted for wrong answer, 0 for every unattempted question
- No. of Attempts: 1
- Schedule & Mode: Refer <u>www.manipal.edu/met</u> for updates
- Candidates possessing valid GATE score will be given 10 % additional marks to the MET 2024 score and then ranked in the merit list.
 - Weightage will be given to candidates who have qualified GATE Exam with Cutoff marks applicable for the general category
 - o Additional marks will NOT be awarded if GATE score card is not uploaded before the last date of applications
- There will be two ranks allotted
 - General Rank based on the overall test score
 - Stream Rank based on the overall score amongst the chosen test discipline.

Note: The counseling process will be as per the general rank only

Common MET 2024 Syllabus for M. Tech & M.E programs

Test Discipline: Biotechnology (BT)

Process calculations, Thermodynamics, Transport Processes, Chemical and Biochemical reaction Engineering, Bioprocess Engineering, Biochemistry, Microbiology, Bioinformatics, Animal and Plant Biotechnology, Molecular Biology, Genetic Engineering, Immunotechnology, Downstream Processing

Engineering Mathematics: Linear Algebra, Differential Equations, Probability and Statistics, Numerical Methods

Test Discipline: Chemical (CH)

Process Calculations and Thermodynamics, Fluid Mechanics and Mechanical Operations, Heat Transfer, Mass Transfer, Chemical Reaction Engineering, Instrumentation and Process Control, Plant Design and Economics, Chemical Technology, Material of Construction and Corrosion, Energy Engineering, Pollution Control and Safety.

Engineering Mathematics: Linear Algebra, Differential Equations, Probability & Statistics, Numerical Methods, Transform Theory

Test Discipline: Civil (CV)

Engineering Mechanics, Strength of Materials, Design of Steel and Concrete Structures, Structural Analysis, Geotechnical Engineering, Foundation Engineering, Surveying, Transportation Engineering, Construction Planning - Organization and Management, Environmental Engineering, Fluid Mechanics, Water Resources Engineering, Concrete Technology, Engineering Materials, Estimations and Specification.

Engineering Mathematics: Linear Algebra, Calculus, Differential Equations, Probability & Statistics, Numerical Methods



Test Discipline: Computer Science (CS)

Programming Languages, Data Structure, Logic Design & Circuits, Computer Organization & Architecture, Operating Systems, Database Systems, Computer Networks, Design and Analysis of algorithms, Software Engineering.

Engineering Mathematics: Probability & Statistics, Numerical Methods, Combinatorics, Graph Theory, Mathematic & Predicate Logic

Test Discipline: Electrical Engineering (EE)

Electrical Circuit Analysis, Electrical Machinery, Electromagnetic Field Theory, Generation, Transmission, Distribution, Power System Analysis, Stability, Protection, Power Electronics & Drives, Analog & Digital Electronic Circuits, Signals & systems, Digital Signal Processing, Electrical & Electronic Measurements & Instrumentation, Control systems and Microcontrollers.

Engineering Mathematics: Linear Algebra, Differential Equations, Probability & Statistics, Numerical Methods, Transform Theory

Test Discipline: Electronics & Communication (EC)

Electric Circuit Analysis, Analog Devices & Circuits, Digital VLSI design, Digital Logic design, Verilog HDL, Electromagnetic Waves, Analog Communication, Digital Communication, Antennas & Propagation, Microprocessor & Microcontrollers (16 / 32-bit family), Signal Processing, Linear and Digital Control System.

Engineering Mathematics: Linear Algebra, Complex Variables, Probability & Statistics, Numerical Methods, Transform Theory

Test Discipline: Instrumentation & Control (IC)

Network Analysis & Signals, Electronics Measurements, Transducers & Instrumentation, Linear, Modern, Nonlinear Control Theory, Signal Processing, Microcontrollers (ARM and 8051), Analog & Digital Electronics Circuits & System Design, Biomedical Equipment & Instruments, Control System Components, Process Control & Automation

Engineering Mathematics: Linear algebra, differential equations, probability and statistics, Numerical methods, Transform methods

Test Discipline: Mechanical Engineering (ME)

Engineering Mechanics, Strength of Materials, Design of Machine Elements, Basics of Manufacturing Science, Measurement & Metrology, Theory of Machines, Mechanical Vibrations, Thermodynamics & Heat Transfer, Fluid Mechanics & Machines, Material Science & Metallurgy.

Engineering Mathematics: Linear Algebra, Calculus, Differential Equations, Probability & Statistics, Numerical Methods



Eligibility Requirements for Master of Technology (MTech) and Master of Engineering (ME) Programs

- Pass in BE / B. Tech in a relevant branch from a recognized University, with minimum 50 % aggregate marks or equivalent
- The Bachelor's program eligibility & Choice of MET Question Paper (QP), for the MTech / ME programs are as follows

Master of Technology (M. Tech) Program Eligibility		
	Test Discipline	
Chemical Stream (2)		
M. Tech Industrial Biotechnology		
BE / B. Tech in Biotechnology / Biochemical Engineering / Bioprocess Engineering / Bioinformatics / Chemical		
Engineering / Food Technology/ Food Process Engineering/ Pharmaceutical Technology, or equivalent		
M. Tech Chemical Engineering	BT / CH	
BE / B. Tech degree or equivalent in Chemical Engineering, Biotechnology, Biotechnology and Biochemical Engineering, Biochemical Engineering, Bioprocess Engineering, Chemical Technology, Petroleum Engineering, Petroleum Refining Engineering, Petrochemical Engineering, Pharmaceutical Technology, Food and Process Engineering, Polymer Technology, Electrochemical Engineering	Вт / Сп	
Civil Stream (3)	<u>, </u>	
M. Tech Construction Engineering & Management	CV	
BE / B. Tech in Architecture / BE / B. Tech Civil Engineering, or equivalent	CV	
M. Tech Environmental Engineering		
BE / B. Tech in Biochemical Engineering / Biotechnology / Civil / Chemical Engineering / Ceramic Technology /	BT / CH / CV / ME	
Environmental / Mechanical / Metallurgy / Mining, or equivalent		
M. Tech Structural Engineering	C) /	
BE / B. Tech in Civil Engineering, or equivalent	CV	
Computer Stream (5)		
M. Tech Computer Science & Engineering		
BE / B. Tech in Computer Science & Engineering / CSE Artificial Intelligence and Machine Learning/ Computer &		
Communication Engineering / CSE Cyber Security / Data Science & Engineering / Information Technology / Electronics		
and Computer Engineering/ Electronics and Communication Engineering / Electronics and Telecommunication		
Engineering, or equivalent programs recognized by AICTE		
M. Tech Computer Science & Information Security	CS / EC	
BE / B. Tech in Computer Science & Engineering / CSE Artificial Intelligence & Machine Learning/ Computer &		
Communication Engineering / CSE Cyber Security / Data Science & Engineering / Information Technology/ Electronics		
and Computer Engineering / Electronics and Communication Engineering / Electronics and Telecommunication		
Engineering / Information Technology, or equivalent programs recognized by AICTE		
M. Tech Computer Networking & Engineering		
BE / B. Tech in Artificial Intelligence & Machine Learning / Biomedical Engineering / Computer Science & Engineering		
/ Computer & Communication Engineering / Cyber Security / Data Science & Engineering / Electrical & Electronics	CS / EC / EE / IC	
Engineering / Electronics & Communication Engineering / Information Technology / Instrumentation Engineering, or		
equivalent		
M. Tech Data Science		
BE / B. Tech in Biomedical Engineering / Computer Science & Engineering / Computer & Communication Engineering		
/ Cyber Security / Electrical & Electronics Engineering / Electronics & Communication Engineering / Information	CS / EC / EE	
Technology / Instrumentation Engineering / Mechatronics Engineering, or equivalent, Master of Computer		
Applications		
M. Tech Machine Intelligence and Decision Science		
BE / B. Tech in Artificial Intelligence & Machine Learning / Biomedical Engineering / Computer Science & Engineering		
/ Computer & Communication Engineering / Cyber Security / Data Science & Engineering / Electrical & Electronics Engineering / Electronics & Communication Engineering / Information Technology / Instrumentation Engineering, or equivalent	CS / FF / FC / IC	



Master of Technology (M. Tech) Program Eligibility	Choice of MET 2024 Test Discipline
Electrical Stream (8)	
M. Tech Biomedical Engineering B. Tech/BE in: Biomedical Engineering, Biomedical Instrumentation, Biochemical & Biotechnology, Bioengineering, Medical Electronics, Pharmaceutical Technology, Medical Instrumentation, Electrical & Mechanical Engineering, Electrical & Electronics Engineering, Biotechnology & Biochemical Engineering, Biosciences & Bioengineering, Biotech Engineering, Biological Sciences & Bioengineering, Electrical and Computer Engineering, Electronics & Instrumentation Engineering, Electronics & Communication Engineering, Instrumentation Engineering	BT/CH/CS/EC/ EE/IC/ME
M. Tech Embedded Control and Automation BE / B. Tech in Applied Electronics & Instrumentation Engineering / Electrical & Electronics Engineering / Electronics & Communication Engineering / Electronics and Telecommunications / Electronics & Instrumentation Engineering / Instrumentation & Control Engineering / Mechatronics Engineering / Medical Electronics / Robotics & Automation Engineering, / Automation Engineering/Automation and Robotics Engineering/Cyber physical systems/Electrical and Computer/electrical and instrumentation/Electronics Instrumentation and Control/Electronics Technology/Power Electronics and Instrumentation or equivalent	EC / EE / IC
M. Tech Digital Electronics & Communication Engineering BE / B. Tech in Electrical & Electronics Engineering / Electronics & Communication Engineering / Electronics & Telecommunication Engineering, / Telecommunication Engineering / Electronics and Computer Engineering / Instrumentation & Control / Electronics and Instrumentation Engineering / Computer and Communication Engineering, Applied Electronics and Communication Engineering or equivalent.	EC / EE / IC
M. Tech Electric Vehicle Technology BE / B. Tech in Automobile Engineering / Electrical & Electronics Engineering / Electronics & Communication Engineering / Industrial Production Engineering / Instrumentation & Control Engineering / Manufacturing Engineering / Mechanical Engineering / Mechatronics Engineering, or equivalent	EC / EE / IC / ME
M. Tech Medical Informatics B. Tech/BE in: Biomedical Engineering, Biomedical Instrumentation, Biochemical & Biotechnology, Bioengineering, Medical Electronics, Computer Science & Engineering, Information Technology, Medical Instrumentation, Bio-Informatics, Electrical & Electronics Engineering, Biotechnology & Biochemical Engineering, Biosciences & Bioengineering, Biochemical Engineering, Biotech Engineering, Bio-Technology & Informatics, Industrial Bio-Technology, Instrumentation & Control Engineering, Biological Sciences & Bioengineering, Electrical and Computer Engineering, Applied Electronics & Instrumentation Engineering, Electronics & Instrumentation Engineering, Electronics & Communication Engineering, Instrumentation Engineering	BT /CS / EC / EE
M. Tech Immersive Technology BE / B. Tech in any branch of Engineering	EE / EC / IC / ME / CS/ BT / CH / CV
M. Tech Microelectronics BE/B. Tech in Electrical & Electronics / Electronics & Communication / Electronics & Telecommunication / Instrumentation & Control / Electronics and Instrumentation Engineering, Applied Electronics Engineering, Electronics and Computer Engineering or equivalent.	EC/EE/IC
M. Tech Power Electronics & Drives BE / B. Tech in Electrical & Electronics Engineering / Electronics & Communication Engineering / Electronics & Instrumentation Engineering, or equivalent	
Management (1)	1
M. Tech Engineering Management BE / B. Tech in any branch of Engineering	BT / CH / CS / CV / EC / EE / IC / ME



ACADEMY of HIGHER EDUCATION IVIANIPAL Entrance Test (IVIET) 2024 Syllabus	
Mechanical (8)	
M. Tech Applied Computational Fluid Dynamics BE / B.Tech in Aeronautical Engineering / Automobile Engineering / Automotive Technology / Chemical Engineering / Civil Engineering / Industrial Production Engineering / Manufacturing Engineering / Mechanical Engineering / Mechatronics Engineering, or equivalent	CH / CV / ME
M. Tech Automobile Engineering	
BE / B.Tech in Automobile Engineering / Automobile Maintenance Engineering / Automotive Technology / Industrial Engineering / Industrial Production Engineering / Manufacturing Engineering / Material Science & Technology / Mechanical Engineering / Mechanical & Smart Manufacturing / Mechatronics Engineering / Tool Engineering, or equivalent	ME
M. Tech Avionics	
BE / B. Tech in Aeronautical Engineering / Aerospace Engineering / Applied Electronics & Instrumentation / Avionics / Computer Science & Engineering / Computer & Communication Engineering / Electronics & Electronics Engineering / Electronics & Communication Engineering / Instrumentation Engineering / Instrumentation & Control Engineering / Mechanical Engineering / Mechatronics Engineering, or equivalent	CS / EC / EE / IC / ME
M. Tech Computer Aided Analysis & Design	
BE / B. Tech in Aeronautical Engineering stream / Automobile Engineering / Industrial Engineering / Marine Engineering / Mechanical Engineering /	ME
M. Tech Defence Technology	
BE / B. Tech in Aerospace Engineering / Aeronautical Engineering / Applied Electronics & Communication Engineering / Applied Electronics & Instrumentation Engineering / Avionics / Chemical Engineering / Computer Science & Engineering / Computer & Communication Engineering / Computer Networking / Electrical & Computer Engineering / Electrical & Electronics Engineering / Electrical and Instrumentation Engineering / Electronics & Communication Engineering / Electronics and Computer Engineering / Instrumentation Engineering / Instrumentation & Control Engineering / Marine Engineering / Marine Technology / Mechanical Engineering / Mechatronics Engineering / Metallurgical & Materials Engineering / Military Engineering / Optics and Opto-Electronics / Radio, Physics & Electronics / Software Engineering / Structural Engineering, or equivalent	CH / CS / CV / EC / EE / IC / ME
M. Tech Industrial Automation & Robotics	
BE / B Tech in Aeronautical Engineering / Automobile Engineering / Electrical & Electronics Engineering / Electronics & Communication Engineering / Telecommunication Engineering / Industrial & Production Engineering / Instrumentation & Control Engineering / Electrical and Instrumentation Engineering / Cyber Physical Systems (CPS)/ Mechanical Engineering / Mechatronics Engineering, or equivalent	EC / EE / IC / ME
M. Tech Manufacturing Engineering	
BE / B Tech in Aeronautical Engineering / Automobile Engineering / Industrial Engineering / Manufacturing Engineering / Marine Engineering / Material and Metallurgy / Mechanical Engineering / Mechatronics Engineering / Tool Engineering, or equivalent	ME
M. Tech Thermal Sciences & Energy Systems BE / B Tech in Aeronautical Engineering / Automobile Engineering / Automotive Technology / Aerospace Engineering / Avionics / Chemical Engineering / Industrial Engineering / Marine Engineering / Material and Metallurgy / Mechanical Engineering / Mechatronics Engineering, / Tool Engineering, or equivalent	- ME



Master of Engineering (ME) Program Eligibility	Choice of MET 2024
Muster of Engineering (ME) 1 Togram Engineery	Test Discipline
M.E Artificial Intelligence & Machine Learning	CS / EC / EE / IC
BE / B. Tech in Biomedical Engineering / Computer Science & Engineering / Electronics & Communication Engineering	
/ Electrical & Electronics Engineering / Information Technology / Instrumentation & Control Engineering / Medical	
Electronics or equivalent	(BT / CH / CV / ME)*
	Refer Note
* Note: Candidates of other engineering streams may also apply for this program. However, their candidature will be	
considered only after exhausting the merit list prepared considering the candidates of above-mentioned branches.	
Also, note that the Selection of such candidates is based on an additional screening test at the institute.	
Selection will be as under	
Apply for the program	
Appear in the Manipal Entrance Test (MET)	
Screening Test at the Institute	
Provisional Admission Offer	
M.E Big Data Analytics	
BE / B. Tech in Biomedical Engineering / Biotechnology / Computer Science & Engineering / Electrical & Electronics	
Engineering / Electronics & Communication Engineering / Information Technology / Instrumentation & Control or	
equivalent	
	CS / EC / EE / IC/
* Note: Candidates of other engineering streams may also apply for this program. However, their candidature will be	
considered only after exhausting the merit list prepared considering the candidates of above-mentioned branches.	
Also, note that the Selection of such candidates is based on an additional screening test at the institute.	(BT / CH / CV / ME)*
Selection will be as under	Refer Note
Apply for the program	
Appear in the Manipal Entrance Test (MET)	
Screening Test at the Institute	
Provisional Admission Offer	
M.E Cloud Computing	
BE / B. Tech in Biomedical / Computer Science / Electrical & Electronics / Electronics & Communication /	
Information Technology / Instrumentation & Control / Mechatronics / Medical Electronics or equivalent	
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* Note: Candidates of other engineering streams may also apply for this program. However, their candidature will be	CS / EC / EE / IC
considered only after exhausting the merit list prepared considering the candidates of above-mentioned branches.	
considered only diter exhibiting the ment list prepared considering the candidates of above mentioned stantones.	
Also, note that the Selection of such candidates is based on an additional screening test at the institute.	(BT / CH / CV / ME)*
Selection will be as under	Refer Note
Apply for the program	
Appear in the Manipal Entrance Test (MET)	
Screening Test at the Institute	
Provisional Admission Offer	



"Teach" (Institution of Emiracic December to be University)	
M.E Cyber Security	
BE / B. Tech in Biomedical Engineering / Computer Science & Engineering / Electronics & Communication	
Engineering / Electrical & Electronics Engineering / Information Technology / Instrumentation & Control Engineering	
/ Medical Electronics or equivalent	
	CS / EC / EE / IC
* Note: Candidates of other engineering streams may also apply for this program. However, their candidature will be	65/ 26/ 22/ 16
considered only after exhausting the merit list prepared considering the candidates of above-mentioned branches.	
7 · · · · · · · · · · · · · · · · · · ·	(BT / CH / CV / ME)*
Also, note that the Selection of such candidates is based on an additional screening test at the institute.	Refer Note
Selection will be as under	Refer Note
Apply for the program	
Appear in the Manipal Entrance Test (MET)	
Screening Test at the Institute	
Provisional Admission Offer	
M.E Embedded Systems	
BE / B. Tech in Biomedical Engineering / Computer Science / Electrical & Electronics / Electronics & Communication /	
Information Technology / Instrumentation & Control / Medical Electronics / Mechatronics or equivalent	
M.E Microelectronics and VLSI Technology	CS / EC / EE / IC
BE / B. Tech in Computer Science stream / Electrical and Circuits stream	
M.E VLSI Design	
BE / B. Tech in Biomedical Engineering / Computer Science / Electrical & Electronics / Electronics & Communication	
/Information Technology / Instrumentation & Control / Medical Electronics / Mechatronics / Telecommunication	
orequivalent	

Note:

If you are pursuing / completed your Bachelor's Degree with a specialization other than those listed above, please email admissions@manipal.edu with your B. Tech syllabus contents for us to check for your eligibility for the M. Tech / M.E program that you are interested in.

Updated: 3.30 PM, June 21, 2024.