

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 **select any ONE of the 8 Test disciplines** 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
  - [Click here](#) 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 [www.manipal.edu/met](http://www.manipal.edu/met) 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.
  - 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.

Manipal Academy of Higher Education (MAHE) [www.manipal.edu](http://www.manipal.edu)

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

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**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

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**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

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**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

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**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

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♣ Best of Luck ♣

*Updated: 3.30 PM, February 10, 2024*

### 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	Choice of MET 2024 Test Discipline
<b>Chemical Stream (2)</b>	
<b>M. Tech Industrial Biotechnology</b> BE / B. Tech in Biotechnology / Biochemical Engineering / Bioprocess Engineering / Bioinformatics / Chemical Engineering / Food Technology/ Food Process Engineering/ Pharmaceutical Technology, or equivalent	BT / CH
<b>M. Tech Chemical Engineering</b> 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	
<b>Civil Stream (3)</b>	
<b>M. Tech Construction Engineering &amp; Management</b> BE / B. Tech in Architecture / BE / B. Tech Civil Engineering, or equivalent	CV
<b>M. Tech Environmental Engineering</b> BE / B. Tech in Biochemical Engineering / Biotechnology / Civil / Chemical Engineering / Ceramic Technology / Environmental / Mechanical / Metallurgy / Mining, or equivalent	BT / CH / CV / ME
<b>M. Tech Structural Engineering</b> BE / B. Tech in Civil Engineering, or equivalent	CV
<b>Computer Stream (6)</b>	
<b>M. Tech Computer Science &amp; Engineering</b> 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	CS / EC
<b>M. Tech Computer Science &amp; Information Security</b> 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	
<b>M. Tech Computer Networking &amp; Engineering</b> 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 / EC / EE / IC
<b>M. Tech Data Science</b> BE / B. Tech in Biomedical Engineering / Computer Science & Engineering/ Computer & Communication Engineering / Cyber Security / Electrical & Electronics Engineering / Electronics & Communication Engineering / Information Technology / Instrumentation Engineering / Mechatronics Engineering, or equivalent, Master of Computer Applications	CS / EC / EE
<b>M. Tech Machine Intelligence and Decision Science</b> 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 / EE / EC / IC

Master of Technology (M. Tech) Program Eligibility	Choice of MET 2024 Test Discipline
<b>M. Tech Software Engineering</b> 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	
<b>Electrical Stream (9)</b>	
<b>M. Tech Biomedical Engineering</b> 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
<b>M. Tech Embedded Control and Automation</b> 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
<b>M. Tech Digital Electronics &amp; Communication Engineering</b> 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
<b>M. Tech Electric Vehicle Technology</b> 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
<b>M. Tech Medical Informatics</b> 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
<b>M. Tech Microelectronics</b> 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
<b>M. Tech Power Electronics &amp; Drives</b> BE / B. Tech in Electrical & Electronics Engineering / Electronics & Communication Engineering / Electronics & Instrumentation Engineering, or equivalent	
<b>Management (1)</b>	
<b>M. Tech Engineering Management</b> BE / B. Tech in any branch of Engineering	BT / CH / CS / CV / EC / EE / IC / ME
<b>Mechanical (8)</b>	
<b>M. Tech Applied Computational Fluid Dynamics</b>	CH / CV / ME

Master of Technology (M. Tech) Program Eligibility	Choice of MET 2024 Test Discipline
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	
<b>M. Tech Automobile Engineering</b> 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
<b>M. Tech Avionics</b> BE / B. Tech in Aeronautical Engineering / Aerospace Engineering / Applied Electronics & Instrumentation / Avionics / Computer Science & Engineering / Computer & Communication Engineering / Electrical & Electronics Engineering / Electronics & Communication Engineering / Electronics & Instrumentation Engineering / Instrumentation Engineering / Instrumentation & Control Engineering / Mechanical Engineering / Mechatronics Engineering, or equivalent	CS / EC / EE / IC / ME
<b>M. Tech Computer Aided Analysis &amp; Design</b> BE / B. Tech in Aeronautical Engineering stream / Automobile Engineering / Industrial Engineering / Marine Engineering / Mechanical Engineering / Mechatronics Engineering / Material and Metallurgy / Tool Engineering, or equivalent	ME
<b>M. Tech Defence Technology</b> 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
<b>M. Tech Industrial Automation &amp; Robotics</b> 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
<b>M. Tech Manufacturing Engineering</b> 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
<b>M. Tech Thermal Sciences &amp; Energy Systems</b> 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 Test Discipline
<b>M.E Artificial Intelligence &amp; Machine Learning</b> 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  (BT / CH / CV / ME)* Refer Note

<p><b>* Note:</b> 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.</p> <p>Also, note that the Selection of such candidates is based on an additional screening test at the institute. Selection will be as under</p> <ul style="list-style-type: none"> <li>• Apply for the program</li> <li>• Appear in the Manipal Entrance Test (MET)</li> <li>• Screening Test at the Institute</li> <li>• Provisional Admission Offer</li> </ul>	
<p><b>M.E Big Data Analytics</b> BE / B. Tech in Biomedical Engineering / Biotechnology / Computer Science &amp; Engineering / Electrical &amp; Electronics Engineering / Electronics &amp; Communication Engineering / Information Technology / Instrumentation &amp; Control or equivalent</p> <p><b>* Note:</b> 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.</p> <p>Also, note that the Selection of such candidates is based on an additional screening test at the institute. Selection will be as under</p> <ul style="list-style-type: none"> <li>• Apply for the program</li> <li>• Appear in the Manipal Entrance Test (MET)</li> <li>• Screening Test at the Institute</li> <li>• Provisional Admission Offer</li> </ul>	<p style="text-align: center;">CS / EC / EE / IC/  (BT / CH / CV / ME)* Refer Note</p>
<p><b>M.E Cloud Computing</b> BE / B. Tech in Biomedical / Computer Science / Electrical &amp; Electronics / Electronics &amp; Communication / Information Technology / Instrumentation &amp; Control / Mechatronics / Medical Electronics or equivalent</p> <p><b>* Note:</b> 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.</p> <p>Also, note that the Selection of such candidates is based on an additional screening test at the institute. Selection will be as under</p> <ul style="list-style-type: none"> <li>• Apply for the program</li> <li>• Appear in the Manipal Entrance Test (MET)</li> <li>• Screening Test at the Institute</li> <li>• Provisional Admission Offer</li> </ul>	<p style="text-align: center;">CS / EC / EE / IC  (BT / CH / CV / ME)* Refer Note</p>
<p><b>M.E Cyber Security</b> BE / B. Tech in Biomedical Engineering / Computer Science &amp; Engineering / Electronics &amp; Communication Engineering / Electrical &amp; Electronics Engineering / Information Technology / Instrumentation &amp; Control Engineering / Medical Electronics or equivalent</p> <p><b>* Note:</b> 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.</p> <p>Also, note that the Selection of such candidates is based on an additional screening test at the institute. Selection will be as under</p> <ul style="list-style-type: none"> <li>• Apply for the program</li> <li>• Appear in the Manipal Entrance Test (MET)</li> <li>• Screening Test at the Institute</li> <li>• Provisional Admission Offer</li> </ul>	<p style="text-align: center;">CS / EC / EE / IC  (BT / CH / CV / ME)* Refer Note</p>

<b>M.E Embedded Systems</b> BE / B. Tech in Biomedical Engineering / Computer Science / Electrical & Electronics / Electronics & Communication / Information Technology / Instrumentation & Control / Medical Electronics / Mechatronics or equivalent	CS / EC / EE / IC
<b>M.E VLSI Design</b> BE / B. Tech in Biomedical Engineering / Computer Science / Electrical & Electronics / Electronics & Communication / Information Technology / Instrumentation & Control / Medical Electronics / Mechatronics / Telecommunication or equivalent	

**Note**

*If you are pursuing / completed your Bachelor's Degree with a specialization other than those listed above, please email [admissions@manipal.edu](mailto: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, February 10, 2024*