



# INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

Powai, Mumbai – 400 076.

## Admission to Post-Graduate Programmes

Applications are invited for admission to the following Post-Graduate Programmes for the Academic Year 2008-09 starting from **July 2008**

### M.Tech.

Department	Minimum Eligibility Criteria <i>(This is general eligibility criteria, however, applicant must satisfy the eligibility criteria specified by the respective Departments / Centres / Schools/ ID Groups )</i>								
<b>AEROSPACE ENGINEERING</b>	<p>(a) Candidates having First class or 60% marks (55% for SC/ST) in Bachelor's degree ( B.E. / B.Tech. or equivalent) in Aeronautical / Aerospace are eligible for admission to any of the specializations (AE 1, AE 3 &amp; AE 4) with valid GATE score in any discipline.</p> <p>(b) First class or 60% marks (55% for SC/ST) in Bachelor's degree in other branches of Engineering (i.e. Mechanical, Civil, Electrical, Electronics, Instrumentation or allied branches) are eligible for admission to specific specializations of Aerospace Engineering, if they have valid GATE score in disciplines as shown in the table below:</p> <table border="1" data-bbox="618 1073 1414 1402"> <thead> <tr> <th>Specialization</th> <th>Eligibility</th> </tr> </thead> <tbody> <tr> <td>Aerodynamics (AE1)</td> <td>First class or 60% marks (55% for SC/ST) in Bachelor's degree in Mechanical Engg./ Civil Engg. with valid GATE score in ME / CE.</td> </tr> <tr> <td>Aerospace Propulsion (AE3)</td> <td>First class or 60% marks (55% for SC/ST) in Bachelor's degree in Mechanical Engg. with valid GATE score in ME.</td> </tr> <tr> <td>Aerospace Structure (AE4)</td> <td>First Class or 60% marks (55% for SC/ST) in Bachelor's degree in Mechanical Engg. / Civil Engg. with valid GATE score in ME/CE.</td> </tr> </tbody> </table> <p>(c) Candidates having FIRST class or 60% marks (55% for SC/ST) in Bachelor's degree as mentioned above with two years of relevant work experience but do not have valid GATE score, are also eligible for admission, if their candidature is sponsored by the employer. <b>However, they are not eligible for award of Teaching/Research Assistantship.</b></p>	Specialization	Eligibility	Aerodynamics (AE1)	First class or 60% marks (55% for SC/ST) in Bachelor's degree in Mechanical Engg./ Civil Engg. with valid GATE score in ME / CE.	Aerospace Propulsion (AE3)	First class or 60% marks (55% for SC/ST) in Bachelor's degree in Mechanical Engg. with valid GATE score in ME.	Aerospace Structure (AE4)	First Class or 60% marks (55% for SC/ST) in Bachelor's degree in Mechanical Engg. / Civil Engg. with valid GATE score in ME/CE.
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Aerospace Structure (AE4)	First Class or 60% marks (55% for SC/ST) in Bachelor's degree in Mechanical Engg. / Civil Engg. with valid GATE score in ME/CE.								
<b>CHEMICAL ENGINEERING</b>	Candidates with First class or 60% marks (55% for SC/ST) in Bachelor's degree in Chemical Engineering or equivalent with a valid GATE score in Chemical Engineering (CH) are eligible to the M.Tech. programme in Chemical Engineering.								
<b>CIVIL ENGINEERING</b>	Candidates with First class or 60% marks (55% for SC/ST) in Bachelor's degree in Civil Engineering or equivalent with valid GATE score in any discipline are eligible to apply for any of the five specializations.								
<b>COMPUTER SCIENCE &amp; ENGINEERING</b>	<p>Bachelor's degree in Engineering/Master's degree in Science / MCA (with Physics and Mathematics at B.Sc. level) or equivalent degree with a valid GATE score in CS/IT discipline.</p> <p>Valid GATE score in CS/IT is required for all applicants (including Project Staff (PS) / Institute Staff (IS) and Sponsored candidates).</p>								

EARTH SCIENCES(GS& PG)	<p><b>a. Geoexploration :</b> Candidates having First class or 60% marks (55% for SC/ST) in Master's degree or equivalent in Geology / Applied Geology / Geophysics / Geochemistry <b>with valid GATE score in Geology &amp; Geophysics</b> are eligible for admission.</p> <p><b>b. Petroleum Geoscience :</b> Candidates having First class or 60% marks (55% for SC/ST) in Master's degree or equivalent in Geology / Applied Geology / Geophysics / Applied Geophysics <b>with valid GATE score</b> in relevant areas are eligible for admission.</p>
ELECTRICAL ENGINEERING	<p><b>“For admission under TA category, students are required to have valid GATE score in GATE subjects EC/EE/IN/PH/CS”.</b></p> <p><b>EE 1 (Communication Engineering):</b> First class or 60% marks (55% for SC/ST) in Bachelor's degree in Computer Science and Engineering, Electrical Engineering, Electronics Engineering, Telecommunications Engineering, Engineering Physics OR First class or 60% marks (55% for SC/ST) Master's degree in Physics (with specialization in Electronics) or Electronic Sciences with valid GATE score in CS, EC, EE or PH.</p> <p><b>EE 2 (Control and Computing):</b> First class or 60% marks (55% for SC/ST) in Bachelor's degree in Aeronautical/Aerospace Engineering, Chemical Engineering, Computer Science and Engineering, Electrical Engineering, Electronics Engineering, Telecommunication Engineering, Instrumentation Engineering, Mechanical Engineering, Metallurgical Engineering, Engineering Physics OR First class or 60% marks (55% for SC/ST) in Master's degree in Physics, Mathematics with valid GATE score in CH, CS, EC, EE, IN, ME, MT, PH, MA, XE.</p> <p><b>EE 3 (Power Electronics &amp; Power Systems):</b> First class or 60% marks (55% for SC/ST) in Bachelor's degree in Computer Science and Engineering, Electrical Engineering, Electronics Engineering, Telecommunication Engineering, Instrumentation Engineering with valid GATE score in CS, EC, EE or IN.</p> <p><b>EE 4 (Microelectronics):</b> First class or 60% marks (55% for SC/ST) in Bachelor's degree in Computer Science, Electrical Engineering, Electronics Engineering, Telecommunication Engineering, Engineering Physics, Instrumentation Engineering OR First class or 60% marks (55% for SC/ST) in Master's degree in Physics or Electronic Sciences with valid GATE score in CS, EC, EE, IN or PH.</p> <p><b>EE 5 ( Electronic Systems) :</b> First class or 60% marks (55% for SC/ST) in Bachelor's degree in Biomedical Engineering, Electrical Engineering, Electronics Engineering, Instrumentation Engineering, Telecommunication Engineering, Engineering Physics OR First class or 60% marks (55% for SC/ST) in Master's degree in Physics (with specialization in Electronics) with valid GATE score in EC, EE, IN or PH.</p>
ENERGY SCIENCE & ENGINEERING	<p>Candidates with first class or 60% marks (55% for SC/ST) in Bachelor's degree in Mechanical, Electrical, Chemical, Energy Systems, Thermal Power, Automobile, Aerospace, Aeronautical, Metallurgical or Civil Engineering with valid GATE score in any discipline are eligible for admission.</p>
MECHANICAL ENGINEERING	<p>The qualifications necessary for admission to the various specialization are as follows :</p> <p><b>All applicants must have First class or 60% marks (55% marks for SC/ST) in qualifying degrees in areas mentioned below:</b></p> <p>a) <b>Thermal and Fluids Engineering:</b> Bachelor's degree in Mechanical Engineering or Aeronautical/ Aerospace Engineering or Automobile Engg. with valid GATE score in any discipline.</p> <p>b) <b>Design Engineering:</b> Bachelor's degree in Aerospace Engineering, Mechanical Engineering or Production Engineering or Automobile Engg. or Machine Tool Engineering with valid GATE score in any discipline.</p> <p>c) <b>Manufacturing Engineering:</b> Bachelor's degree in Mechanical Engineering, Production Engineering or Machine Tool Engineering or Industrial Engineering with valid GATE score in any discipline.</p>

<p><b>METALLURGICAL ENGINEERING &amp; MATERIALS</b></p>	<p><b>Eligibility for Materials Science</b> Candidates having First class or 60% marks (55% for SC/ST) in Bachelor's degree in Ceramic, Chemical, Electrical, Electronics, Electrochemical, Mechanical, Metallurgical Engineering, Engineering Physics with valid GATE score OR First class or 60% marks (55% for SC/ST) in M.Sc. degree in Chemistry, Materials science, Physics with valid GATE score in any discipline are eligible for admission.</p> <p><b>Eligibility for Process Engineering</b> Candidates having first class or 60% marks (55% for SC/ST) in Bachelor's degree in Chemical, Electrochemical, Mechanical, Metallurgical Engineering with valid GATE score OR First class or 60% marks (55% for SC/ST) in M.Sc. in Chemistry (General or Specialization in Physical or Inorganic Chemistry), Materials Science with valid GATE score in any discipline are eligible for admission.</p> <p><b>For above specializations, the applicants with M.Sc. qualifying degree, Mathematics as a subject at his / her B.Sc. degree level is an essential requirement.</b></p>																										
<p><b>CORROSION SCIENCE &amp; ENGINEERING</b></p>	<p>First class or 60% marks (55% for SC/ST) in Bachelor's degree in Aeronautical / Aerospace, Chemical, Civil, Electrical, Electro Chemical, Mechanical, Metallurgical Engineering with valid GATE score OR First class or 60% marks (55% for SC/ST) in Master's degree in Chemistry/ Material Science/Ceramics/Petrochemical with valid GATE score in any discipline.</p>																										
<p><b>INDUSTRIAL ENGINEERING AND OPERATIONS RESEARCH</b></p>	<p>Candidates having first class or 60% marks (55% for SC/ST) in Bachelor's degree in any branch of Engineering with valid GATE score in any discipline are eligible to apply.</p>																										
<p><b>SYSTEMS AND CONTROL ENGINEERING</b></p>	<p>Candidates having first class or 60% marks (55% for SC/ST) in Bachelor's degree in Aeronautical/ Aerospace, Chemical, Electrical, Electronics, Instrumentation, Mechanical, Metallurgical Engineering with valid GATE score in one of these disciplines. <b>Candidates should have undergone a course in Control Theory.</b></p>																										
<p><b>ENVIRONMENTAL SCIENCE AND ENGINEERING</b></p>	<p>Candidates having First class or 60% marks (55% for SC/ST) in Bachelor of Engineering degree in Aeronautical/Aerospace, Agricultural, Chemical, Civil, Energy Systems, Environmental, Mechanical, Metallurgical, Mining, Production, Petrochemical Engineering with valid GATE score OR First class or 60% marks (55% for SC/ST) in Master of Science degree (with Mathematics at the Higher Secondary / Intermediate level) in Atmospheric Science, Biochemistry, Biotechnology, Chemistry, Earth Sciences, Environmental Toxicology, Environmental Sciences, Life Sciences, Meteorology, Microbiology and Physics with valid GATE score in any of these discipline are eligible for M.Tech admission.</p>																										
<p><b>CENTRE OF STUDIES IN RESOURCES ENGINEERING (Natural Resources Engineering)</b></p>	<p>Candidates with first class or 60% marks (55% for SC/ST) in Bachelor degree in Engineering/Masters degree in Science (<b><i>preceded By Bachelor degree in Science</i></b>) with valid GATE score in any of the following papers are eligible for admission to this programme.</p> <p><i>Engineering &amp; Science discipline:</i></p> <table data-bbox="618 1365 1185 1711"> <tr><td>Agricultural Engg.</td><td>AG</td></tr> <tr><td>Architecture and Planning</td><td>AR</td></tr> <tr><td>Civil Engg.</td><td>CE</td></tr> <tr><td>Computer Science &amp; Engg.</td><td>CS</td></tr> <tr><td>Chemistry</td><td>CY</td></tr> <tr><td>Electronics &amp; Communication Engg</td><td>EC</td></tr> <tr><td>Electrical Engg.</td><td>EE</td></tr> <tr><td>Environmental Engineering</td><td>EV</td></tr> <tr><td>Geology &amp; Geophysics</td><td>GG</td></tr> <tr><td>Information Technology</td><td>IT</td></tr> <tr><td>Mathematics</td><td>MA</td></tr> <tr><td>Mining Engg</td><td>MN</td></tr> <tr><td>Physics</td><td>PH</td></tr> </table> <p><i>Engineering Sciences (XE) with Qualifying Papers</i> Computational Science Electrical Sciences Environmental Sciences <i>Life Sciences (XL) Qualifying Paper*</i> Botany</p> <p>* Mathematics at 10+2 level is essential.</p>	Agricultural Engg.	AG	Architecture and Planning	AR	Civil Engg.	CE	Computer Science & Engg.	CS	Chemistry	CY	Electronics & Communication Engg	EC	Electrical Engg.	EE	Environmental Engineering	EV	Geology & Geophysics	GG	Information Technology	IT	Mathematics	MA	Mining Engg	MN	Physics	PH
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**AERB Fellowship:**

**Admission to AERB Sponsored M.Tech. Programme.**

Admission to M.Tech. Programme in Energy Systems Engineering and Mechanical Engineering under Atomic Energy Regulatory Board (AERB) Scheme.(more details for AERB Scheme can be seen on website [www.aerb.gov.in/](http://www.aerb.gov.in/))

**Eligibility :** First Class or 60% marks (55% for SC / ST) in B.Tech / B.E in Mechanical, Electrical, Chemical, Aeronautical, Civil, Metallurgical Engg. or allied disciplines with Valid GATE score.

**As per this scheme, the selected candidates would receive a monthly stipend of Rs.11,000/- and a one time education material allowance of Rs.5000/-. The candidates would have to execute a bond to serve AERB for a period of three years.**

Applicants of EN & ME should give their clear willingness to consider their candidature under AERB scheme.