### Table 1A: Requisite Qualifications for M.Tech./M.Pharm. Programmes

Most of the Bachelor's and Master's degrees that are being awarded in the disciplines/areas in the country and abroad are listed in the following. However, a candidate possessing a degree that does not exactly conform to the degrees listed below may be considered for admission, based on the performance in written test / interview and provided that the interview /admission committee, upon scrutiny of the list of courses done and credits earned by the candidate, finds that the degree concerned is at par with those listed below.

#### A. Programmes without specializations

Department/ School offering the Programme	Discipline	Eligibility
Department of Ceramic Engineering	Ceramic Engineering	B.Tech. or an equivalent degree in Ceramic/ Civil/ Electronics/ Electrical/ Mechanical/ Metallurgical Engg./ Chemical Engg. and Technology/Materials Science & Technology/ Silicate Technology or M.Sc. Physics (with special papers in Solid State/ Electronics) or Electronics or Chemistry (with special papers in Physical/ Inorganic/ Solid State Chemistry) provided the candidate has passed B.Sc./ B.Sc.(Hons.) Examination with Physics, Chemistry and Mathematics
Department of Chemical Engineering & Technology	Chemical Engineering	B.Tech. or an equivalent degree in Chemical Engg. or Biochemical Engineering/ Electrochemical Engineering/ Energy Engineering/ Environmental Engineering/ Food Processing Engineering/ Petrochemical Engineering/ Petroleum Engineering/ Chemical Technology/ Oil Technology/ Paint Technology/ Petroleum Technology/ Plastic Technology/ Polymer Technology/ Bio-Technology/ Food Technology with a valid GATE score in Chemical Engineering

#### **B.** Programmes with specializations

Department/ School offering the Programme	Discipline	Specialization	Eligibility
Department of Civil Engineering	Civil Engineering	<ul> <li>a) Hydraulics and Water Resources Engineering</li> <li>b) Geotechnical Engineering</li> <li>c) Structural Engineering</li> <li>d) Environmental Engineering</li> <li>e) Transportation Engineering</li> <li>f) Geoinformatics Engineering</li> <li>g) Engineering Geosciences</li> </ul>	B.Tech. or an equivalent degree in the respective branch of Engineering.  For (f) B.E. or B.Tech. Degree in (i) Civil Engineering (ii) Computer Science and Engineering (iii) Computer Engineering.  For (g) B.Tech. or B.Tech. Degree in (i) Civil Engineering (ii) Mining Engineering (iii) Petroleum Engineering.  M.Sc. in Geology Qualified in GATE in respective disciplines.

Department of Mechanical Engineering	Mechanical Engineering	<ul><li>a) Machine Design</li><li>b) Thermal &amp; Fluid Engineering</li><li>c) Production Engineering</li></ul>	B.Tech. or an equivalent degree in the respective branch of engineering.
Department of Metallurgical Engineering	Metallurgical Engineering	a) Extractive Metallurgy b) Alloy Technology	B.Tech. or an equivalent degree in Metallurgical Engg., Materials Science/Engineering, Mineral/Chemical/Ceramic /Mechanical Engg., Chemical Tech. or M.Sc. (Physics/Chemistry) with specialization in Solid State Physics, Physical/Inorganic Chemistry provided the candidate passed B.Sc./ B.Sc. (Hons.) Examination with Mathematics as one of the subject at undergraduate level
Department of Mining Engineering	Mining Engineering	<ul><li>a) Mine Environment</li><li>b) Rock Mechanics</li><li>c) Mine Planning</li></ul>	B.Tech. or an equivalent degree in the respective branch of engineering.
Department of Electrical Engineering	Electrical Engineering	<ul><li>a) Power Systems</li><li>b) Electrical Machines and Drives</li></ul>	B.Tech. or an equivalent degree in Electrical Engg.
		c) Control Systems	B.Tech. or an equivalent degree in Electrical/ Electronics/ Control Systems/ Instrumentation Engg.
		d) Power Electronics	B.Tech. or an equivalent degree in Electrical/ Electronics Engg.
Department of Electronics Engineering	Electronics Engineering	<ul> <li>a) Microwave Engg.</li> <li>b) Digital Techniques and Instrumentation</li> <li>c) Microelectronics</li> <li>d) Communication System Engg.</li> </ul>	B.Tech. or an equivalent degree in Electrical or Electronics Engg. with valid GATE Score in Electronics and Communication Engineering
Department of Pharmaceutical Engineering and Technology	Pharmacy	<ul><li>a) Pharmaceutics</li><li>b) Pharmaceutical Chemistry</li><li>c) Pharmacology</li><li>d) Pharmacognosy</li></ul>	B.Pharm. or an equivalent degree in Pharmacy.

## C. Inter-disciplinary programmes

Department/ School offering the Programme	Discipline	Eligibility
Department of Mechanical Engineering	Industrial Management	B.Tech. or an equivalent degree in any branch of engineering

Department of Electrical Engineering	Systems Engineering	B.Tech. or an equivalent degree in any branch of engineering
School of Materials Science and Technology	Materials Science and Technology	B.Tech. or an equivalent degree in Ceramic/ Chemical/ Civil/ Electrical/ Electronics/ Polymer/ Plastic Technology/ Materials Technology/ Nanotechnology/ Mechanical / Metallurgical Engineering OR M.Sc. degree in Chemical Science/ Materials Science/ Physical Science provided the candidate has passed B.Sc./ B.Sc. (Hons.) Examination with Chemistry/ Physics/ Mathematics and Computer Science/ Statistics.
School of Biochemical Engineering	Biochemical Engineering	B.Pharm./ B.Tech. or an equivalent degree in Biochemical/ Biotechnology/ Chemical/ Food Engg./ OR M.Sc. degree in Biochemistry/ Bio-Technology/ Microbiology or in Chemistry with specialization in Biochemistry or Physical Chemistry.
School of Biomedical Engineering	Biomedical Engineering	B.Tech. or an equivalent degree in Biomedical/ Ceramic/ Chemical/ Computer/ Electrical/ Electronics (Telecommunication/Instrumentation/Control)/ Mechanical/ Metallurgical Engg. / OR M.Sc. degree in Physics.

# **NOTE:** 1. Candidates desirous of applying for admission to M.Tech. Programmes in different departments/schools as well as M.Pharm. programme are required to fill the primary and additional programme/discipline/specialization if any, in the order of their preference as per the instructions provided in the home page of admission portal.

- 2. Not more than 40% of the total seats in the Departments, wherever candidates from allied disciplines are declared eligible for admission, shall be open for any one allied discipline. However, preference will be given for eligible candidates from the discipline based on their performance in the written test / interview.
- 3. Not more than 40% of the total seats in interdisciplinary programmes in Schools will be open for any ONE branch of Engineering or Science.