Annexure I

Degrees in the following relevant branches/specializations at B.E./B.Tech./ M.E./M.Tech./ and Ph.D. level for various departments are required from the applicants:

S. No.	Department	B.E./B.Tech Branch*	M.E./ M.Tech/ M.Sc./MA Branch/ Specializations*	Ph.D.	Preferred Areas / Specializations
1.	Aerospace Engg.	Aerospace/ Aeronautical Engg.	Aerospace/ Aeronautical Engg. Or allied branches	Aerospace/ Aeronautical Engg. or allied branches	Flight Mechanics/ Aerodynamics/ Structures/ Propulsion/ Avionics
2.	Centre for Management & Humanities	B.Com/ BBA/B.Tech Management/ Commerce	Master of Business Management/ Master of Business Administration (MBA)/ Post Graduate Diploma in Management (PGDM)/ Master of Commerce (M.Com)	Ph.D.	Finance/General Management/ Entrepreneurship.
		B.A Humanities	MA. English	Ph.D.	English Language Teaching (ELT)/ English Literature
			M.A. Psychology	Ph.D.	-
3.	Chemistry	All branches	M.Sc. in Chemistry	Ph.D. in Chemistry	Nil
4.	Computer Science & Engineering	• Computer Engineering • Computer Science • Computer Science & Engineering • Computer Science & Information Technology • Computer Technology • Information Technology • Computer	• Computer Engineering • Computer Science • Computer Science & Engineering • Computer Science & Information Technology • Computer Technology • Information Technology • Computer Science & Technology • Computer Science & Engineering (Artificial Intelligence)	Specialization areas equivalent /related to Computer Science & Engineering	Artificial Intelligence, Machine Learning, Soft Computing, Natural Language Processing, Speech Technology, Bio-Informatics, Wireless Sensor Networks, Networks & Security, Mobile & Adhoc Networks, Deep Learning, Medical Imaging, IOT & related

		Science & Technology • Computer Science & Engineering (Artificial Intelligence) • Computer Science & Engineering (Machine Learning) • Computer Science & Engineering (Data Science) • Cyber Security • Software Engineering • Or Any Other Equivalent related branch	• Computer Science & Engineering (Machine Learning) • Computer Science & Engineering (Data Science) • Cyber Security • Software Engineering Or Any Other Equivalent related branch		areas, Software Engineering, Software Testing, Information retrieval, Prediction Algorithms, Cryptography, Data Analytics, Fault-Tolerant Distributed Computing, Explainable Artificial Intelligence and Blockchain Technology, IOT, SDN, Wireless Communication, Network Security, AI & ML, VANET, Web Crawling, Dark Web and Deep Web, Latest Areas related to Covid 19, Automata theory or any other equivalent and related area
5.	Data Science	Computer Science & Engg./Computer Science/Computer Engg./Information Technology/Data Science/Machine Learning/Artificial Intelligence/IOT/ Electronics Engineering	Computer Science & Engg./Computer Science/Computer Engineering/ Information Technology Data Science/ Artificial Intelligence/ Machine Learning/ /IOT	Ph.D.	Artificial Intelligence, Machine Learning, Mobile Communications IoT, Data Science & Analytics, Networks and Security, algorithms, Social Networks
6.	Electrical Engg.	Electrical Engineering/ Electrical and Electronics Engineering	Electrical/ Power System (Engineering) / Control System (Engineering) /Power Electronics/ Electric Machines/ Electric Drives/ Automation/ Instrumentation/ Energy System/ Renewable/ Power Apparatus/ Signal	Ph.D.	I. Control Engineering II. Power Electronics III. Power System

			Processing OR at least any one of the above specializations in combination with other specializations.		
7.	Electronics Engg.	• Electronics and Electrical Communication Engg. • Electronics & Communication Engg. • Electronics & Tele-communication Engineering.	• Electronics Engg. • Electronics Product Design & Technology • VLSI Design • Communication Engg. • Electronics & Communication Engg. • Electronics & telecommunication Engg. • Electronics (VLSI Design) • Embedded System • Microelectronics • Microelectronics System Design • Microwave Engg. • Optical Communication • Nanoelectronics • Electronics & Electrical Communication Engg. • Digital Signal Processing • Digital Image Processing	Ph.D.	• Electronic Engg. • Electronics & Communication Engg. • Electronics & Electrical Communication Engineering • Electrical & Electronics Engineering • Photonics • Microelectronics • Communication Engg. • Embedded System • VLSI • Optical Communication • Nanoelectronics • Digital Signal Processing • Microwave Engg. • Wireless Communication • Digital Image Processing
8.	Mechanical Engg.	Mechanical Engg.	• Thermal • Design • Manufacturing	Ph.D.	-
9.	Metallurgical & Materials Engg.	Metallurgy, Metallurgical & Materials, Materials & Metallurgical, (Engineering/ Technology)	Metallurgical Engineering, Materials Science &, Engineering, Materials Science & Metallurgy, Metallurgical & Materials Engineering,	Ph.D.	Materials/ Metallurgy

		Materials Science & Metallurgy, Materials Science & Engineering, Metallurgical Engineering and Materials Science	Materials & Metallurgical Engineering, Foundry-Forge Technology, Industrial Materials & Metallurgy, Industrial Metallurgy, Process Metallurgy, Materials Engineering, Material Science		
10.	Production & Industrial Engg. for Bachelor of Design (B.Des.)	Bachelor of Technology (B.Tech)/ Bachelor of Design(B.Des)/ Bachelor of Architecture (B.Arch)/ Bachelor of Fine Arts(BFA)	Master of Design(M.Des)/ Master of Fine Arts (MFA)	Product Design, Industrial Design, Interaction Design visual design, Animation, Artificial Intelligence in Design, Printing, Painting, Sculpture, Applied Art, Film-making, Cinematography, Editing, Sound Design, Music Production, VFX, Visual Communication, Typography and Publication Design, Digital Media, Augmented Reality, Virtual Reality, Usability, User Experience and relevant	**Experience in the area of**- Concept to Realization, design thinking related to product design, product development process, interdisciplinary work. Strong collaborative and Interpersonal skills. Ability to support interdisciplinary initiatives in teaching and research with related fields in the field of Design.

				area	
11.	Mathematics	-	M.A/M.Sc. in Mathematics/Applied Mathematics	Ph.D. Mathematics/ Applied Mathematics	All Specializations of Mathematics/ Applied Mathematics
12.	Physics	-	M.Sc in Physics/ Applied Physics	Ph.D. Physics	• Experimental Condensed Matter Physics • Theoretical Condensed Matter Physics • Quantum Physics • Materials Science
13.	**#** Cyber Security Research Centre (M.Tech. (CS &IS))	Computer Science & Engineering/ Information Security	Computer Science and/or Engg./Tech./Computer Science & Engineering (Information Security/Computer Science & Information Security/ Cyber Forensic/ Cyber Security)	Ph.D.	Information Security/Social Media analytics/ Cryptography
	# Information Security or Cyber Security can be used interchangeably.				
14.	Civil Engineering	Civil Engineering	Civil Engineering	Ph.D. Civil Engineering	Structural Engg./ Transportation Engg./ Environmental Engg./ Construction Management/ Remote Sensing
* For exceptional candidates, equivalence of branch/ specialization may be considered by the Selection Committee.					