



Defence Institute of Advanced Technology

(Deemed to be University, under section 3 of UGC Act 1956)

Girinagar, Pune-411025

Master of Science (by research) - July- 2024 Batch

Category - MoD Sponsored

Applications are invited for admission to Master of Science (by research) Programme for Session July - 2024, as per description below.

Details of Department-wise vacancies for admission to Master of Science (by research) Programme July - 2024.

Sr. No.	Department / Schools	Subject/Research Area
1	School of Computer Engineering and Mathematical Sciences	Cyber Security, Data Sciences, Computer Science & Engg (AI).
2	Electronics Engg.	Antenna Microwave Engg. & OTH Radar, Radar, Radar Signal Processing, FPGA, SAR/ISAR, RF, Photonics, Brain Computer Interfacing, Human Computer Interaction, Signal Processing, AI&ML, Antenna Design, RF& Microwave, EMI/EMC, Electromagnetic Shielding Material, Wideband Radar, Millimetre wave, RFID, Antennas, Microwave and Millimetre Wave Circuits, Antenna for Automotive, Embedded System FPGA, VLSI, SoC, SDR, AI & ML, Flexible Electronics.
3	Metallurgical & Materials Engg	Nanomaterial for Energy storage application, Nano composite for Energy harvesting application, Nano hybrid materials for drug delivery application, Polymer Nanocomposites, High Entropy Alloys, Powder Metallurgy, Deformation behaviour of materials, Metal Matrix composites, Metal Additive Manufacturing, Microstructure, Thermomechanical Processing of Metallic Materials, Texture, Friction Stir Processing / welding, Amorphous / Nanostructured alloys, Magnetic / Mechanical Properties for defence application, Computational Materials Engineering, Microstructural Modelling, Perovskite Solar Cells, Supercapacitors, Organic Photovoltaics, Battery Modelling, Machine learning / Artificial intelligence.
4	Applied Chemistry	Chemistry, Biotechnology, Chemical Engineering, Synthesis and Applications of Ionic Liquids, Photocatalytic Hydrogen Generation, Wastewater Treatment, Energy Storage Materials, Catalysis & Combustion, Adsorption of Solutes, Membrane Process, Biotechnology, Life Sciences, Food Technology.
5	Mechanical Engineering	Impact Mechanics, Surface Engineering, Tribology, Composite material processing, Additive manufacturing, Micro Machining, Surface Engineering. Composite Structures, Fracture Mechanics, Functionally Graded Structures, Battery Thermal Management Systems.
6	School of Robotics	Robotics & Control, Control System, Aerial Robotics, Underwater Robotics.

7	School of Quantum Technology	Quantum Communication, algorithms and theory, Quantum Metrology & Sensing, Quantum Simulation & Quantum machine learning, Optical Quantum Computing, Quantum Optics.
8	School of Energy and Environmental Systems	Green solvents, Combustion of Hydrogen, Photocatalytic Hydrogen Generation, Biomass to Fuel, Energy Storage Materials, Fuel Cell Membranes, Adsorption of Solutes, Wastewater Treatment, CO ₂ sequestration, Heat transfer enhancement, Heat Exchangers, Refrigeration and Air conditioning, Solar thermal applications- Photovoltaics, Desalination, IC Engines, CFD, Bio-fuels, Waste to Energy, Hydrogen Fuel Cell, Energy Management, Phase change materials, CFD and Heat Transfer, Hydrogen storage, Electric vehicles, Artificial Intelligence and Optimization, Solar Energy, Gas recovery from hydrates, Environmental Impact, Sustainability and Climate Science.

Eligibility for External Part - Time Research Scholar:

- The qualifying degrees are: -
 - a) Bachelor's degree in Engineering / Technology or Master's degree in appropriate Science (M.Sc.) with good academic record.
 - c) The candidate must have at least two years' work experience to be considered under External Registration programme.
 - d) Additional and stiffer criteria than the minimum educational qualification given above may be set by the Selection committee from time to time for short listing candidates to be called for test/ interview.
 - e) A research scholar under external registration programme will normally carry out part or all of his/her research work in the organization employing the scholar under the supervision of a co-guide employed in the same organization and a guide at DIAT.

Last Date of Application:

Duly filled-in application in the prescribed proforma may be forwarded to the Jt. Registrar (Acad), DIAT (DU), Girinagar, Pune-411025 so as to reach on or before **03rd May 2024**

Selection Procedure:

Eligible candidates possessing the minimum educational qualifications and satisfying additional criteria set by the department from time to time will be called for Test/ Interview by Selection committee.

Course Fee & Other Charges:

MoD Sponsored Candidates: Selected candidates for the Ph.D programmes under MoD Sponsored Category are required to pay Semester Fee @ Rs.50,000/- per semester, payable immediately on joining and caution deposit of Rs. 10,000/-

Rules & Regulations :

Rules and Regulations of the Post Graduate Programme is available at Institutes website www.diat.ac.in