



Defence Institute of Advanced Technology

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

Girinagar, Pune-411025

Ph.D. Programmes- July- 2023 Batch

Category - MoD Sponsored /Self Sponsored (DRDO, Tri-Services), Industry Sponsored / Other R&D Govt. Organizations.

Applications are invited for admission to Ph.D. Programmes for Session July-2023, as per description below.

Details of Department / School-wise vacancies for admission to PhD Programme July-2023.

Sr. No.	Department / Schools	Subject/Research Area	Vacancies
1	Aerospace Engineering	Flight dynamics, Aerodynamics	02
2	Metallurgical & Materials Engg.	Biotechnology / Microbiology / Biochemistry, Supercapacitor and battery type electrode materials, Armor materials, Coating materials, Composite materials, High Temperature coating and Ceramics, Computational Materials Engineering, Energy Materials, Machine Learning, Microstructural modelling, Organic Photovoltaics, Phase-field modelling, Modelling, Simulation and Experimentation of Batteries and Supercapacitors.	04
3	School of Computer Engineering and Mathematical Science. [Computer Science & Engg.]	Quantum Machine Learning, Secure IoT&CPS, Metaverse and AR/VR/AI, Post Quantum Cryptography, Black Chain Technology, Deep Learning, HAR, GANS, Drone Forensics, Computer vision, AI, Cyber Security, NLP, Programme optimization, IoT.	10
	School of Computer Engineering and Mathematical Science. [Applied Mathematics]	Applied Maths, Machine Learning, Deep Learning, Data Science, AI/ML, Computer Vision, Prob & Statistics.	06
4	Applied Physics	Optical Communication, Bio-Photonics, Ultrafast Photonics, High power ultrafast lasers, EMI Shielding / Radar Absorbing Systems.	05
5	Applied Chemistry	Nanomaterials and Pyro Techniques / Propellants, Propellants, Energetic Materials.	02
6	Electronics Engineering	Human computer interaction, Brain computer interfacing, Signal Processing, Automotive radar, Medical robotics, Biomedical Signal Processing, Microwave passive and active antennas, Passive circuits, RFID, Wearable sensors. VLSI design, Embedded system and SOC design, AI and ML for circuits design, RF IC design, Nano-electronics materials, low power circuits, Thin film transistors, GaN HEMTs and High Power devices and circuits.	05
7	Mechanical Engineering	Hyper Velocity Impact, Ballistic Penetration, Dynamic Indentation, FEM, Composite Structures, Material Repairing technologies, FEA, 3D Printing/ Additive Mfging, Composite Materials, Surface Engineering, Impact analysis, CFD, Fluid Mechanics, Heat Transfer, Composite structures,	12

		Fracture Mechanics, Blast, Shock Tube Research, Fluid-structure Interaction, Terramechanics.	
8	School of Robotics	Control and Motion planning of Autonomous Systems, Underwater Robotics, Robot Dynamics Control, Path planning AI, ML.	03
9	Technology Management	Strategy Management; HR Management	01
10	School of Quantum Technology	Quantum Communication, Quantum Metrology & Sensing, Quantum Materials, Quantum Simulation & Quantum Machine learning.	05

* The number of vacancies is only indicative and DIAT reserves the right in this matter.

Eligibility for External Part Time Research Scholar:

- A candidate, seeking admission to the Ph.D. program, shall be required to have passed the qualifying examination securing at least 55% marks or equivalent CGPA/DGPA. A relaxation of 5 % of marks may be allowed for those belonging to SC/ST/OBC (non creamy-layer) / PWD - (Divyang) categories. The qualifying degrees are:-
 - a) Master of Engineering/Master of Technology (or equivalent) for Ph.D. in Engineering/Science.
 - b) Master in Science (M.Sc. or equivalent) for Ph.D. in Science
 - c) BE/B.Tech with 10 years of research/industrial experience for PhD in Engineering / Science.
 - d) For Dept. of Technology Management:
 - i) MBA/MMS/PGDM (2 years) from reputed institutes / M.Sc/ME/M.Tech
 - ii) BE/B.Tech with 10 years of research / Industrial experience
 - iii) M.Phil (Defence and Strategy Studies)
 - e) A candidate who is sponsored as a part-time candidate by a government department / public sector undertaking / R & D, with at least five years of relevant experience, who shall work for his/her PhD in his/her parent organization fulfilling the residency period requirement as per Rules & Regulations for the Award of the Degree of Doctor of Philosophy - 2016. The candidate is required to submit a NOC, sponsorship and work experience certificate from the parent organization. [Annexure I & J]

Last Date of Application:

Duly filled-in application in the prescribed proforma may be forwarded to the Joint Registrar (Academics), DIAT (DU), Girinagar, Pune-411025 so as to reach on or before **20th May 2023**.

Selection:

Admission to Ph.D. will be based on the performance in the entrance exam (written test) conducted by the department concerned followed by a personal interview.

Course Fee & Other Charges:

MoD Sponsored (DRDO & Service Officers) & MoD Self-Sponsored (DRDO &

Service Officers) Candidate: Selected candidates for the Ph.D programmes are required to pay Semester Fee @ Rs.50,000/- per semester payable immediately on joining, and caution deposit of Rs. 10,000/-

For Industry Sponsored, Other R&D Govt. Organisations, DPSU's, Govt. Industry etc are required to pay Semester Fee @ Rs. 65,000/- per semester payable immediately on joining and caution deposit of Rs. 10,000/- & Rs. 4000/- as a one time fee.

Important Dates:

- Last Date of receipt of Hard copy of application : 20th May 2023
- Tentative Date of Written Test / Interview : 2nd/ 3rd week of June 2023
- Tentative date of commencement of the programme : 1st / 2nd week of July 2023