



Defence Institute of Advanced Technology
(Deemed to be University) under section 3 of UGC Act 1956),
Girinagar, Pune-411025

Ph.D. Programmes- July- 2019 Batch

Applications are invited for admission to Ph.D. Programmes, as per description below.

Introduction:

Defence Institute of Advanced Technology (DIAT) is Technological Institute of National repute for higher learning. The Institute imparts education and training in Advanced Technologies used for Tri-services, DRDO, DPSUs etc. DIAT found its roots in 1952, as a training institute has grown over the years into a premier teaching and research institute for DRDO and the Armed Forces.

The main focus of the institute is to evolve as an Innovative Unique Research University to develop indigenous contemporary defence related technologies and also to provide technological solutions to the Services. DIAT is committed to generate high quality and talented human resource in broad areas of Defence Technologies to cater the needs of DRDO, Armed Forces and other Defence establishments.

DIAT offers admission to PhD (full-time) in the frontier areas of Aerospace Engineering, Mechanical Engineering, Electronics Engineering, Computer Science & Engineering, Applied Physics, Applied Mathematics, Materials engineering and Applied Chemistry. Limited few Institute Fellowships are available.

Department-wise areas of Research are as under:

Sr. No	Department	Subject / Research Area	Approx. No. of Vacancies Category wise * in each Dept (With Institutional Fellowship) [#]				
			GEN	OBC	SC	ST	EWSS
1	Metallurgical & Materials Engg.	3D, 4D Printing, Biopolymers, Scaffolds, Nanocomposites, Phase Changing Fabrics, Polymer Composites/ Polymer Foam/Carbon Foam, Powder/Physical Metallurgy Metal Matrix Composites.	2	1	0	0	0
2	Aerospace Engg.	Aerodynamics/Fluid Mechanics	0	1	0	0	0
3	Applied Mathematics	Bio-Fluid Mechanics.	0	0	0	1	0
4	Mechanical Engg.	Composite Materials, Additive Manufacturing, Processing of Aerospace Materials, Micro Machining, Smart composites, Tribology / Surface Engg./ Impact Mechanics.	2	1	0	0	0
5	Computer Science & Engg.	Augmental Reality/Virtual Reality, Cyber Security, Game Theory, Secure Software Engineering, Trusted Computing Cryptography.	0	1	1	0	0
6	Electronics Engg.	Microwave, Radar, EMI/EMC, Antenna, RF System Design, Digital Signal Processing, Radar Signal Processing, Floating Point Computation in FPGA, Digital Image Processing.	1	0	1	0	0
7	Applied Physics	Optical Information Processing, Computational Image Techniques, Deep Neural networks for Image Enhancement, Physics.	1	0	0	0	1
8	Applied Chemistry	Ionic Liquids, Phase change Materials, Catalysis, Energetic Polymers.	1	0	0	0	0
	Total Vacancies		7	4	2	1	1

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

In addition to the above, Candidates with CSIR-NET, DST, UGC-NET or any other National fellowship / scholarship available to them are also eligible to apply for Ph. D admission in any subject area of the concerned deptt as per description below,

Sr. No	Department	Subject / Research Area
1	Applied Chemistry	Organic Synthesis, Energetic Materials, Ionic Liquids, Phase change Materials, Catalysis, Energetic Polymers, Mesoporous Materials, Hybrid Nanomaterials, Self-assembled Nanocomposites.
2	Applied Mathematics	Applied Mathematics, Bio-Fluid Mechanics.
3	Applied Physics	Physics, Materials Science, Electronics, Chemistry, Nanotechnology, Energy Studies, Bio-Physics, Free Space Optical Communication, Nanotechnology, Sensor Technology, EMI Shielding Composites using 2D structures, Fiber Laser.
4	Electronics Engg.	Microwave, Antenna, RF System, Radar System and Signal Processing, Radar Imaging, Photonics Radar, EMI/EMC/EMP, Digital Signal Processing.
5	Metallurgical & Materials Engg.	3D, 4D Printing, Biopolymers, Scaffolds, Nanocomposites, Phase Changing Fabrics, Polymer Composites/ Polymer Foam/Carbon Foam

Eligibility:

a) Qualification

- 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
- A candidate who has passed the qualifying examination with the requisite percentage of marks as prescribed above and who fulfill the following requirement may be considered for admission to the Ph.D. programme:-
 - a) Qualified in a national level test such as, CSIR/UGC NET , Graduate Aptitude Test for Engineering (GATE), Rajiv Gandhi National fellowship, NBHM etc. subject wise and category wise GATE/NET cut off will be decided by DIAT.

OR
 - b) A candidate who is a recipient of National Doctoral Fellowship or other fellowships from government / semi-government organization such as Council of Scientific and Industrial Research (CSIR), University Grants Commission (UGC), INAE, All India Council for Technical Education (AICTE), Department of Science and Technology (DST), Dept. of Biotechnology (DBT), Defence Research and Development Organization (DRDO), Department of Atomic Energy (DAE) and similar organizations.

b) Age limit

Not above 30 years as on July 1, 2019.

Relaxations as per Govt. of India rules apply to SC / ST / OBC / PH applicants.

Note:-

- Women candidates are encouraged to apply for admission.
- The Institute shall implement the reservation policy in Ph.D. admission in accordance with relevant act of Parliament being in-force from the time.

- A PWD (Divyang)/ SC/ST/OBC (non-creamy layer) candidate shall not get double benefit of being an SC/ST/OBC (non-creamy layer) as also a PWD candidate.

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.

Financial Assistance:

- a) The selected Ph.D. candidates against this admission notice, admitted as full-time Ph.D. students will be provided financial assistance as per Institute rules, in force from time to time. The Ph.D. students (who are provided Institute fellowship) will be required to assist in research and teaching activities for a maximum of 10 hours per week in addition to their own duties.
- b) In addition to the Ph.D. scholarship, such candidates would also be entitled for contingency grant (presently ₹ 15,000/- per year) in accordance with the decisions of the Institute.

Boarding / Lodging:

Selected candidates will be provided hostel accommodation (Exclusive Girls Hostel available). Mess facilities are available on payment basis. The present monthly charges towards boarding and lodging are ₹ 7000/- (subject to revision). However, ₹ 40,000/- is to be deposited at the beginning of each Semester towards lodging and boarding charges, in advance. A security deposit of ₹ 10,000/- would need to be paid to Hostel Office.

How to Apply:

Candidates have to apply online through the website, <http://www.diat.ac.in> . Application fee of ₹.500/- for General, OBC, EWS Category and ₹ 250/- for Women and reserved category (SC/ST/PWD) candidates per programme, is required to be paid either online (through State Bank Collect) or by Demand Draft drawn in favour of Vice Chancellor, DIAT, Pune, payable at Pune. The application has to be uploaded as per the instructions provided in the website, <http://www.diat.ac.in>. A print out of the application, acknowledgement generated by the system after upload of application, has to be forwarded in a sealed envelope, super scribed "Application for Admission to PhD Programme in the Department of _____" to the Joint Registrar (Academics), Defence Institute of Advanced Technology, Pune 411025 along with online generated receipt / Demand Draft and self certified copies of mark lists, certificates and other testimonials. **These documents should reach DIAT latest by 30 April 2019.** Postal delay will not be entertained. Application will be processed only on receipt of the acknowledgement with online generated receipt / Demand Draft. Also, Candidates seeking admission to more than one Department need to apply separately.

General Information:

- Since the applications may be short listed, mere possessing of the prescribed qualifications would not entitle a person to be called for test/interview. The Institute may restrict the number of candidates to be called for test / interview to a reasonable limit, on the basis of qualifications / marks higher than that of the minimum prescribed in the advertisement.
- For short listing of candidates, the department screening committee may decide subject-wise and category-wise GATE/NET Cut off.
- Application once made will not be allowed to be withdrawn and fees once paid will not be refunded on any count nor can it be held in reserve for any other admission process
- Canvassing in any form will be a disqualification. Postal delay shall not be entertained.
- No correspondence will be entertained in respect of advertisement, interview, selection etc. The list of Shortlisted candidate will be displayed on <http://www.diat.ac.in> website along with other information viz.

date of Interview / Written Test / Result. The candidates are requested to check the DIAT (DU) Website <http://www.diat.ac.in> for related information from time to time.

Course Fee and Other Charges:

Selected candidates for the Ph.D programmes are required to pay Semester Fee @ ₹.25, 000/- per semester (for Gen & OBC) and @ ₹ 15,000/- (for SC & ST) payable immediately on joining and a caution deposit of ₹ 10,000/-, commencing from July 2019.

Important Dates:

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| ➤ The online application process will start on | 26 March 2019 |
| ➤ Last Date for accepting online application form | 23 Apr 2019 |
| ➤ Last Date of receipt of Hard copy of application | 30 Apr 2019 |
| ➤ Tentative Date of Interview / Written Test | 3 rd / 4 th week of May 2019 |
| ➤ Tentative date of commencement of the programme | 1 st Week of July 2019 |
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