DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY

(Deemed to be University)
Girinagar, Pune – 411025 (Maharashtra)
www.diat.ac.in



INFORMATION BULLETIN

Admission to Full Time Self-Financed Post-Graduate Programmes (M. Tech) 2024-25

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1. About DIAT

Amidst the green beautiful Sahyadri Hills, overlooking the picture-sequel Khadakwasla lake, is situated the Defence Institute of Advanced Technology, (DIAT), which came into existence on 1st May 1952 as Institute of Armament Studies at the sprawling campus of the College of Military Engineering, Dapodi, Pune. In the year 1967, the Institute, renamed as the Institute of Armament Technology, was shifted to its present location at Girinagar, Pune. Since then the Institute under the aegis of Department of Defence Research and Development, Ministry of Defence Government of India, grew in strength and stature, was recognized as Deemed to be University on 1st April 2006. The Institute has also acquired ISO 9001: 2000 certification from DNV Norway. Having conferred the status of category" A" Deemed to be University by the Ministry of Human Resource Development, Government of India, the institute is on its way to NBA and NAAC accreditations.

The Institute, a premier autonomous educational entity, equipped with modern laboratories, well-qualified faculty members, is engaged in post graduate education and research leading to M.Tech and Ph.D degrees.

Efforts are continuously on to maintain higher standards of quality training in the critical area of modern Defence Technologies, thereby enhancing the technical capabilities of DRDO Scientists, Service Officers, Officers from Defence Industries and fresh engineering graduates. The institute also prepares trained manpower for industries engaged in "Make in India", campaign of Government of India.

At DIAT, to meet the needs of Armed Forces, DRDO, Defence Quality Assurance, Defence Ordnance Factories, Directorate of Aeronautical Quality Assurance, and other Public Sector undertakings many specialized / customized PG courses are conducted. In addition to the Ph.D. & M.Tech. Courses, The Institute also conducts 1-1.5yr duration specific limited courses and a variety of specialised short-term courses. DIAT opened its gates in the year 2006 for the general public, and since then has been admitting students in open category with scholarships to join its Ph.D/M.Tech programmes. To boost the ongoing research programmes and also to enhance quality of teaching and training the institute has introduced a scheme of "Visiting Professors/Scientists". The institute is on its way to take a quantum leap in the domain of technical education & research, specific to Defence needs.

2. Location

Location of DIAT by Lat, Long is (18.424463, 73.758395) and GPS coordinates are 18° 25' 28.0668" N and 73° 45' 30.222" E.

Mumbai to Pune is about three hours long by road / train. Many of private cabs such as Ola, Uber and any other cabs frequently available from Airport / railway station.

Trains such as Duranto, Intercity, Deccan Queen, etc express from Mumbai Railway station to Pune Railway station are available frequently.

Many trains such as Duranto, Nizamuddin, Goa, Mysore, etc express from New Delhi Railway station to Pune Railway station are available frequently. It will take about one day.

Many direct flights such as Spice jet, Air India, Indigo, etc from New Delhi Airport to Pune Airport are available frequently. It will take about two hours.

3. Information Center and Library

Information Centre and Library is the knowledge hub of the Defence Institute of Advanced Technology (DU), Pune. It reflects the institute's commitment to providing the best possible Library and information services to its academic community of faculty members, scientists, students, and staff members. It is a significant resource for Defence, Science and Technology and allied subjects' information in this part of the world. It has a tremendous collection of both printed and digital resources. It offers a range of services, including reference and consultation, membership, circulation, document delivery, resource sharing, information alert, bibliographic, and digital library services to the library members. The IC&L has been continuing its mission of facilitating new knowledge through the procurement, retrieval, preservation, organization, and dissemination of different resources. The collection of books, journals, e-journals, databases, theses, reports, standards, and other reading resources is the Library's best and largest asset. The Library subscribed 350 print and online journals, databases such as Science Direct, IEL, ASME, ACM, ProQuest: TRC, ABI/Inform, SCOPUS, Springer Link, J-Gate and E-books, etc. Books' total collection is 57242, E-Books 4772, Back Volumes 21875, Reports 2,000, Dissertations, and Theses 1762. The compact storage system was installed in the new library building, and back volumes of before 1960s are preserved in the compact storage. For an integrated information access facility, the Library is using LibSys-10, the web-centric library management software.

The ICL implemented RFID technology through LibSys-10 for its collections and services. The use of RFID reduces the amount of time required to perform circulation operations. The most significant time saving with bootable is that information can be read from RFID tags much faster than from barcodes. RFID technology automates data collection and vastly reduces human effort and error. It will support tag reading with no line-of-sight or item-by-item scans required.

The Library has been designed and developed DIAT (DU) digital repository. This is information systems that ingest, store, manage, preserve, and provide digital content access. This Institutional digital repository serves multiple purposes; the primary goal is to support scholarly communication and provide open access to articles, dissertations, research data, etc. The DIAT institutional repository consists of formally organized and managed digital content collections generated by faculty, staff, and students at an institution. This repository is essential for the university to manage and capture intellectual assets as a part of the university information strategy. We have been identified Dspace software; it is an open-source repository software package typically used for creating open access repositories for scholarly and published digital content of the DIAT fraternity. The DSpace repository software serves DIAT specific need as a digital archives system, focused on long-term storage, access, and digital content preservation.

4. Admission into Full-time M. Tech (Self-Financed) Programs (2024-25)

The student who is selected under the full time self-financed category will not receive any scholarship / assistantship.

The Full-time M.Tech (Self-Financed) Programs are offered in the following Disciplines: Computer Science and Engineering, Aerospace Engineering, Mechanical Engineering, Electronics Engineering, Sensor Technology, Modelling & Simulation, Materials Engineering, Data Science, Quantum Computing, Technology Management, Automation Robotics, Nano Science and Technology, Cyber Security, Renewable Energy, Green Technology.

5. <u>Tentative Schedule for Full-time M. Tech (Self-Financed) Admissions for 2024-25</u>:

(i) Full-time M.Tech (Self-Financed) Admissions - Phase 1

- ➤ Announcement of inviting Applications: 18/03/2024
- ➤ Last date to receive applications: 18/04/2024
- ➤ Announcement of candidates called for Written Test: 23/04/2024
- Written Test: 01/05/2024
- > Announcement of Merit list: 02/05/2024
- Counseling cum Admission: 2nd & 3rd May 2024

(ii) Full-time M.Tech (Self-Financed) Admissions- Phase 2

- ➤ Announcement of inviting Applications: 19/04/2024
- ➤ Last date to receive applications: 31/05/2024
- ➤ Announcement of candidates called for Written Test: 07/06/2024
- Written Test: 24/06/2024
- ➤ Announcement of Merit list: 25/06/2024
- Counseling cum Admission: 25th & 26th June 2024

(iii) Full-time M.Tech (Self-Financed) Admissions- Spot Admission

DIAT will conduct spot admission for vacant seats. Interested candidates may submit applications and appear for written test cum admission on 19th July 2024.

6. <u>ELIGIBILITY, RULES AND REGULATIONS FOR ADMISSION TO FULL-TIME</u> <u>M. Tech (SELF-FINANCED) ADMISSIONS</u>

ELIGIBILITY:

- 1.1 Minimum Qualification with 55% of marks or 6.0 CGPA (on a 10-point scale) in the qualifying examination (graduation).
- 1.2 Candidates of all disciplines under Self-financed category must appear for Written Test to be conducted at the Institute in **offline mode**. The cut off marks for qualifying written test will be decided by the institute. The written test will be in the respective domain.

7. <u>DETAILS OF THE INSTITUTE FEE</u>:

Fee Structure for Self-Financed M.Tech Programme for the Academic year 2024-25

Fee Details		
One Time Fee		
Admission	1400	
Provisional Certificate	200	
Student Welfare Fund	1000	
Modernization	1000	
Identity Card	400	
Total	4,000	
Per Semester Fee		
Tuition	13000	
Examination	1,000	
Registration	1,000	
Gymkhana	1,000	
Library	1,000	
Association & Culture	2,000	
Medical & Insurance	3,000	
Laboratory	22,000	
Total (Payable in all semesters)		
Caution Deposit (Refundable) (only in 1st Semester) 10		

Fee Structure for M.Tech in Electronics and Communication Engg. with specialization in VLSI and Embedded Systems in collaboration with NIELIT. Calicut

Note: Only First year fee is to be deposited at DIAT. Second year fee to be deposited to NIELIT, Calicut.

Fee Details	Amount (in Rs)	
One Time Fee		
Admission	1400	
Provisional Certificate	200	
Student Welfare Fund	1000	
Modernization	1000	
Identity Card	400	

Total	4,000	
Per Semester Fee		
Tuition	54,000	
Examination	1,000	
Registration	1,000	
Gymkhana	1,000	
Library	1,000	
Association & Culture	2,000	
Medical & Insurance	3,000	
Laboratory	7,500	
Total (Payable in all	70,500	
semesters)		
Caution Deposit (Refundable)	10,000	
(only in 1 st Semester)		

Note 1: Alumni Life Membership fee of Rs.1,000/- will be paid by all students (irrespective of any category) at the time of admission at DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY (DU) ALUMNI ASSOCIATION (DIAT) office.

Note 2: - Every student shall be required to Re-register by submitting the duly completed Re-registration form along-with proof of payment of Semester Fee, at the beginning of each semester

Note 3: - Hostel and other fees will be charged separately.

Note 4: - All payments need to be made digitally. No Cash transaction will be encouraged.

8. INSTRUCTIONS TO APPLY

M. Tech (Self-Financed) PROGRAM ON FULL-TIME BASIS

Self-Financed application fee for GEN, EWS, and OBC category is INR Rs. 600/- and for SC, ST and PWD is Rs. 200/-. Application fee is required to be paid online through State Bank Collect. For online payment, click on online Payment Gateway: Link is available at Institutes home page www.diat.ac.in. Do not use mobile applications to make the payment. The candidates may apply for maximum 3 programs in single form with no additional application fee. The scan copy of application form with necessary documents in 1 single pdf format to be uploaded in Google (https://forms.gle/C5uQw7YDduqDmLZk8) and also be Email to to mtech_admissions@diat.ac.in. (No need to send hard copy of application through **courier/ post**). However, the original hard copy of the application form with necessary documents, the candidate must submit to the concerned department before the written test.

9. Selection Process:

Admission to M. Tech Self-financed will be based on the performance in the written test, conducted by DIAT. Written test will be of Multiple Choice Questions (MCQ). Written test Duration: 3Hrs The merit list will be valid only for the academic year 2024-2025.

10. Check list of documents to be uploaded along with the application

- Copy of SSC/Class X certificate in support of Date of Birth.
- Copy of Intermediate/ (10+2) / Class XII certificate
- Copies of Provisional Certificate / Degree Certificates and Marks Memos of the qualifying examinations
- Copy of the valid certificate (in case of SC/ST/OBC/EWS candidates)
- Photograph on application form
- Fee payment receipt with transaction number

11. DEPARTMENT SPECIFIC QUALIFICATIONS & SPECIALIZATIONS:

Sr. No.	Programme (M.Tech)	Specialisations	Minimum Qualification with 55% of marks or 6.0 CGPA (on a 10-point scale) in the qualifying examination
1	Computer Science and Engineering	Artificial Intelligence	BE/B. Tech. in Computer Science/ Electronics/ Electrical/ Communication/ Information Technology/ Comp Engg/ Comp Sci & Info Tech/ Comp Tech/ Comp Sci & Engg/ Elec & Tele Comm Engg/ Comp & Comm Engg
2	Aerospace Engineering	Guided Missiles	B.E./B. Tech. degree in Aerospace, Aeronautical or AeSI/ Mechanical/ Electrical/ Electronics/ Electronics and Communication from recognized university.
		UAVs	B.E./B.Tech. degree in Aerospace, Aeronautical or AeSI/ Mechanical/ Electronics/ Electrical/ Electronics and Communication from recognized university.
	Mechanical Engineering	Marine Engineering	Bachelor's Degree in Mechanical / Marine Engg of a recognized Institute / University
3		Armament and Combat Vehicles (ACV)	Bachelor's degree in Mechanical / Production / Automobile /Materials / Metallurgy / Mechatronics Engg disciplines from recognized University.
		Mechanical System Design	B.E/B. Tech degree in Mechanical / Production/ Automobile / Mechatronics/ Metallurgy and Materials / Mining/ Aerospace Engineering disciplines from recognized University
4	Electronics Engineering (EE)	Radar & Communication	B. E. / B. Tech degree in Electronics & Communication / Electronics/Communication/Telecommunication/ Engineering from any recognized university.
	(/	Defence Electronics	B.E./B. Tech degree in Electronics/ Communication/ Instrumentation/

		Systems (DES)	Telecommunication Engineering from any
		- ,	recognized university. The core intake will be sponsored candidates from Defence R&D Organisation as DRDO, DGOF, Public Sector Undertakings and service officers who meet the eligibility criteria mentioned above.
		Signal Processing & Communication	B. E. / B. Tech degree in Electronics & Communication/ Electronics/ Communication / Telecommunication Engineering from any recognized university.
		VLSI & Embedded Systems (In collaboration with NIELIT, Calicut) (^)	B. E. / B. Tech degree in Electronics / Electrical / Communication / Telecommunication / Electronics & Instrumentation / E & TC Engineering / Computer Science & Engineering / Information Technology / Instrumentation Engineering
5	Sensor Technology/ LEOC	-	Master degree in Physics/Applied Physics/ Applied Science/ Electronics/ Electronic Science / Photonics or equivalent/ Instrumentation Science/ Nano Science and Tech/ Applied Electronics/ Engineering Physics/ Radio Physics and Electronics/ Remote Sensing OR
6	Modeling & Simulation	-	B.E. / B. Tech (Any Discipline) The candidate must have qualified from a recognized Institute / University in Bachelors Degree in Engineering / Technology / OR MSc / MS degree in CS /IT / Mathematics/ Physics /Electronics Provided mathematics is one of the subject at the graduate level and Proficiency in computer programming is essential.
7	Materials Engineering	-	B.E / B.Tech (all discipline) or M.Sc. in any branch of Science
8	Data Science	-	B. Tech / BE degree in CS / IT / ECE / ME / AE CE/ CSE/ CS&IT/ ETE/ CT/ EE/ IS/ ISE/ ITE OR MSc / MS degree in CS / IT / Mathematics / Physics / Electronics/ Statistics/ OR/ MC, Provided 1) Mathematics is one of the subject at the graduate level and 2) Proficiency in computer programming
9	Quantum Computing	-	Master degree or equivalent in Physics/Applied Physics/ Electronic Science / Photonics/ Applied Science/ Material Science/ Nano Sci & Tech/ Radio Physics & Elec/ Remote Sensing OR B.E. / B. Tech / B.Sc (Engg) or equivalent in Electronics Engg / Electrical Engg / Electrical & Electronics Engg / Electronics & (Tele) Communication Engg / Electronics & Instrumentation Engg / Instrumentation Engg / Optics & Optoelectronics

10	Technology Management	-	B.E/B. Tech/M.Sc or equivalent from a recognized university / Institution of India.
11	School of Robotics	Automation and Robotics	Bachelor's degree in Mechanical / Electrical / Electronics / Mechatronics / Computer Science / Instrumentations Technology / Aerospace / Aeronautical / Control / Automobile / Industrial / Instrumentations Design Engg
12	Nano Science and Technology	-	B.E/B. Tech(all Discipline) or M.Sc in any branch of science
13	Cyber Security	-	BE/B. Tech. in Computer Science/ Comp Engg/ Comp Sci Engg/ Comp Sci & Info Tech/ Ele & Telecomm Engg/ Electronics/ Electrical/ Communication/Information Technology, Comp Aided Design of Structures/ Comp Networking/ MCA
14	Renewable Energy	-	BE/ B Tech in Mechanical/ Chemical/ Civil/ Electrical/ Electronics/ Biotechnology or Full time M Sc in Chemistry or Physics or Environmental Science
15	Green Technology	-	BE / B.Tech. in Chemical/ Mechanical/ Civil/ Environmental Science/ Biotechnology/ B Pharmacy or Full-time M.Sc. in all branches of Chemistry.

[^] In association with NIELIT, Calicut.

Note:

- Candidates having valid GATE score along with Minimum Qualification with 55% of marks or 6.0 CGPA (on a 10-point scale) in the qualifying examination (graduation) are eligible to apply for AICTE PG scholarship.
- The seat allotment in program/specialization is subject to availability of seats.
- Students admitted in this category will be given equal opportunity during Campus placement.
- Hostel accommodation will be provided for all M.Tech students.
- Ragging: If any incident of ragging comes to the notice of the authority, concerned accused student shall be given liberty to explain and if his explanation is not found satisfactory, the authority would expel him / her from the institution.
- DIAT hostel rooms are well furnished. Girls and boys have separate blocks. Students have access to TV room, and other leisure/sports activities within the hostel premises.
- DIAT reserves the right to decide the number of seats to be filled under this category. By mere fulfilment of eligibility criteria does not guarantee the candidates to be shortlisted for wentest.