

Admission Brochure for Post-Graduate Programmes

(Academic Year 2018-19)

Defence Institute of Advanced Technology – Deemed to be University (DIAT) is the premium Technological University of Dept. of Defence R&D / DRDO – Ministry of Defence – Govt. of India, engaged in imparting technical education, in niche areas at PG (M.Tech) & Ph. D levels over the last 60 years, in its various forms & capacities. The main focus of the institute is to be get evolved as an innovative Unique Teaching & Research University to develop indigenous contemporary defence-related technologies. The University is spread over 496 acres in scenic beautiful location, overlooking Khadakwasla Lake, in Sahyadri hills. The University has been awarded various Education Excellence Award. The University has well-equipped laboratories with latest equipments and simulation / analysis software. The M. Tech programmes are designed to include Course of Study, Seminars, Project/Thesis, Practice School & Industry visit through which a student may develop his / her concepts and intellectual skills. Above all, the students is encouraged to develop a capacity for free and objectives inquiry, courage, and integrity, awareness and sensitivity to the needs and aspirations of society. The emphasis is on practical's & use of the software. The education system is CBCS where teaching is done by well-qualified faculty drawn from DIAT and serving / retired scientists & officers of DRDO, Services, ISRO, IIT's, various R&D and teaching institutes in India and abroad. DIAT has MoU's with various Industries in India, Universities & Establishments across the world. DIAT has an active Placement Cell.

The uniqueness of DIAT is that fresh students have an opportunity to interact with service officers who are doing their M. Tech & Share their in field experience with them. The students have an opportunity to visit DRDO laboratories & get opportunity to listen and interaction with scientist engaged in various disciplines carrying out state of art, research & development

DIAT offers the following Post-Graduate Programs for the Academic Year 2018-19:

M. TECH. PROGRAMMES

Sr. No.	Programme Title (M.Tech)	Specialisations	Eligibility [Minimum Qualification with 55% of marks or 5.5 CGPA (on a 10-point scale) in the qualifying examination] and valid GATE Score.	Total No. of Seats
1	Aerospace Engineering	Guided Missiles	B.E./B. Tech. degree in Aerospace, Aeronautical or AeSI/ Mechanical/ Chemical/ Electrical/ Electronics/ Electronics and Communication/ Instrumentation from recognized university/AMIE or as per DIAT norms.	50
		Air Armament (Only for MoD sponsored)	Bachelor's Degree in Aeronautical/Mechanical Engineering of a recognized Institute/University. or as per DIAT norms.	
		UAVs	B.E./B.Tech. degree in Aerospace, Aeronautical or AeSI/ Mechanical/ Electronics/ Electrical/ Electronics and Communication / Instrumentation from recognized university/ AMIE. or as per DIAT norms	
2	Mechanical Engineering	Marine	Bachelor's Degree in Mechanical / Marine Engg of a recognized Institute / University	75
		Armament and Combat Vehicles (ACV)	B.E./B. Tech degree in Mechanical / Production / Automobile Engg disciplines from recognized University.	
		Robotics * (Interdisciplinary)	B.E./B. Tech degree in Mechanical / Electronics / Electrical / Computer Science & Engg/ Aerospace Engg disciplines from recognized University	
		Mechanical System Design	B.E./B. Tech degree in Mechanical / Production Engineering disciplines from recognized University	

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3	Computer Science and Engineering	Cyber Security	BE/B. Tech. in Computer Science/ Electronics/ Electrical/ Communication/Information Technology or M.Sc. in Computer Science.	25
		Software Engg. and Intelligent Systems		
4	Modelling & Simulation		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.	25
5	Sensor Technology(ST)		Master degree in Physics/Applied Physics/Electronics/ Electronic Science/ Photonics or equivalent OR a B.E. / B. Tech / B. Sc (Engineering) degree in Electronics/ Instrumentation / Electrical & Electronics Telecommunication / Electronics and Communication Engg./ Engg. Physics,/Nanotechnology.	25
6	Lasers and Electro-Optics (LEOC)		Master degree in Physics/Applied Physics/Electronics/ Electronic Science / Photonics or equivalent OR a B.E. / B. Tech / B. Sc (Engineering) degree in Electronics/ Electrical & Electronics/ Electronics and Communication Engg./ Computer Science/ Engg. Physics/ Optical Engg/ Instrumentation/ Optics & opto-electronics..	
7	Opto Electronics & Communication Systems	Optical Communication & Photonics (OCP)	Master degree in Physics/ Applied Physics/ Electronics/ Electronic Science/ Photonics or equivalent OR a B.E. / B. Tech / B. Sc (Engineering) degree in Electronics / Electrical & Electronics / Electronics and Communication Engg./ Computer Science/ Engg. Physics/ Optical Engg./ Instrumentation/ Optics & opto-electronics.	25
8	Technology Management(\$)		B.E/B. Tech/M.Sc or equivalent from a recognized university / Institution of India.	25
9	Electronics & Communication Engineering (ECE)	Radar & Communication	B. E. / B. Tech degree in Electronics & Communication / Electronics/Communication/Telecommunication Engineering from any recognized university or equivalent degree.	75
		Defence Electronics Systems (DES)	B.E./B. Tech degree in Electronics/ Communication/ Instrumentation/ Telecommunication/Electrical Engineering from any recognized university, or M Sc Degree in Electronics and Physics specialized in Electronics 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 or equivalent in Electronics & Communication/ Electronics/ Communication / Telecommunication Engineering from any recognized university or equivalent degree.	
		Wireless Networks & Applications	B. E. / B. Tech degree or equivalent in Electronics / Electrical / Communication / Telecommunication / Electronics & Instrumentation / E & TC Engineering/ Computer Engineering / Computer Science & Engineering / Information Technology / Instrumentation Engineering.	
		Navigation Systems	B. E. / B. Tech degree or equivalent in Electronics / Electrical / Communication / Telecommunication / Electronics & Instrumentation / E & TC Engineering / Computer Science & Engineering / Information Technology / Instrumentation Engineering	

Sr. No.	Programme Title (M.Tech)	Specialisations	Eligibility [Minimum Qualification with 55% of marks or 5.5 CGPA (on a 10-point scale) in the qualifying examination] and valid <u>GATE Score</u> .	Total No. of Seats
		VLSI & Embedded Systems (In collaboration with NIELIT, Calicut)	B. E. / B. Tech degree or equivalent in Electronics / Electrical / Communication / Telecommunication / Electronics & Instrumentation / E & TC Engineering / Computer Science & Engineering / Information Technology / Instrumentation Engineering	
10	Material Science and Chemical Technology (MS &CT)	Materials Science and Technology (MST)	B.E./B.Tech or equivalent in Metallurgy / materials Science/ Materials Engineering/ Mechanical Engineering/ Production / Ceramic Engineering/ Chemical Engineering/ manufacturing Engineering/ Polymer Engineering/ Nanotechnology; M.Sc or equivalent in Physics/ Chemistry/Environmental Science/Applied Chemistry/Polymer Chemistry/ Marine Architecture	75
		Chemical Science and Tech. (CST)	M.Sc. in any branch of Chemistry, BE/B.Tech in Chemical Engineering or BE / B.Tech (polymer/ Textile Engineering) or equivalent degree .(For others except MST)	
		Energetic Materials & Polymers (EMP)		
11	Materials Engineering		B.E./B.Tech or equivalent in Metallurgy / Materials Science/ Materials Engineering/ Mechanical Engineering/ Production / Ceramic Engineering/ Chemical Engineering/ manufacturing Engineering/ Polymer Engineering/ Nanotechnology; M.Sc or equivalent in Physics/ Chemistry/Environmental Science/Applied Chemistry/Polymer Chemistry/ Marine Architecture	24
12	Corrosion Technology (#)		B.E./B.Tech or equivalent in Metallurgy / Materials Science/ Materials Engineering/ Mechanical Engineering/ Production / Ceramic Engineering/ Chemical Engineering/ manufacturing Engineering/ Polymer Engineering/ Nanotechnology; M.Sc or equivalent in Physics/ Chemistry/Environmental Science/Applied Chemistry/Polymer Chemistry/ Marine Architecture	26

*Robotics is a multidisciplinary specialisation M.Tech degree will be awarded as per the UG Degree of the student viz. M.Tech in EE/ME/AE etc.

Sponsored (DRDO/Tri Services/DPSUs/PSUs/Industry) only.

\$ Applicable for sponsored/self financed candidates only.

**NOTE: 1 Age Limit: Not more than 26 years as on 1 July 2018. Relaxations as per GOI rules.
2 Sponsored Candidates are exempted from qualifying GATE requirements and there is no age limit.**

Candidates seeking admission for more than one program (specialization) need to apply separately.

ELIGIBILITY:

I SCHOLARSHIP CATEGORY

a) Qualification:-

55% marks or 5.5 CGPA in the qualifying examination as indicated against the disciplines concerned and valid GATE Score. The qualification should have been obtained from a UGC recognized University / Deemed to be University / Institution in India. The candidates who are in the final semester of their degree are also eligible to apply; Mark sheet up to the last semester should be enclosed. Provisional certificate in such cases along with Mark sheet of the final semester are required to be submitted before commencement of program.

b) Age limit :-

1. Not more than 26 years as on 01 July 2018.
2. Relaxations as per GOI rules apply to SC / ST / OBC / PH applicants.

II. SPONSORSHIP CATEGORY

a) Qualification:-

55% marks or 5.5 CGPA in the qualifying examination as indicated against the disciplines concerned. The qualification should have been obtained from a UGC recognized University / Deemed to be University / Institution in India.

Note: - Sponsored candidates are exempted from qualifying GATE requirement and there is no age limit.

SELECTION PROCESS:

i. SCHOLARSHIP CATEGORY

Admission to the M. Tech programme may be made directly based on the performance at common all-India competitive test such as GATE etc or, based on GATE and Interview with due weight age (80% on GATE score and 20% on interview) with due approval of Vice Chancellor.

ii. MOD (Services & DRDO) SPONSORED CANDIDATE

Admission to the M Tech program will be granted in the July Semester of each year for MoD sponsored candidates through Research & Training (R&T) and Postgraduate Training (PGT) schemes for DRDO and Tri-service officers including Coast Guard respectively. These admissions shall be operated jointly by DIAT and RAC/DRDO (through DHRD/DRDO).

iii. SPONSORED CANDIDATE FROM OTHER AGENCIES/ ORGANIZATIONS

(a) A candidate who is sponsored by his/her employer and who meets the additional conditions specified below may be admitted through a separate selection committee appointed specifically for the purpose.

(b) A sponsored candidate must be in service of the sponsoring organization. The sponsoring organization must specifically undertake to provide full salary to the candidate and to relieve him/her to pursue the programme for its full duration.

(c) The sponsored candidates seeking admission to the M.Tech. programme will be selected based on their performance in a qualifying examination/ interview or both

FEE DETAILS FOR M. TECH STUDENTS

(Subject to revision as per BOM decision)

Fee Details:

1) MoD Sponsored (DRDO, Coast Guard & Services) Students:-

The Institute being an Autonomous Body, fully funded by DRDO, there is no course fee / semester fee (as of now) for sponsored candidates of Ministry of Defence (DRDO, Coast Guard & Services), Govt of India.

2) Sponsored Students from Other Agencies/Organizations:-

One Time Fee		Semester Fee	
Fee Details	Amount (in Rs.)	Fee Details	Amount (in Rs.)
Admission	1,400/-	Tuition	35,000/-
Provisional Certificate	200/-	Examination	1,500/-
Students Welfare Fund	1,000/-	Registration	1,000/-
Modernisation	1,000/-	Gymkhana	1,000/-
Alumni Life Membership	1,000/-	Medical & Insurance	3,500/-
Identity Card	400/-	Library	1,000/-
Sub Total	5,000/-	Internet	500/-
		Laboratory	5,000/-
Caution Deposit (Refundable)	10,000/-	Association and Culture	1,500/-
Total	15,000/-	Total	50,000/-

Note: Hostel and other fee will be charged separately

3) Scholarship Students other than Tech Mgmt:-

	For Gen & OBC	For SC & ST
Fee Details	Amount (in Rs.)	Amount (in Rs.)
Tuition	5,000/-	Nil
Examination	500/-	500/-
Registration	500/-	500/-
Gymkhana	500/-	500/-
Medical & Insurance	1,500/-	1,500/-
Library	1,000/-	1,000/-
Internet	500/-	500/-
Association and Culture	1,000/-	1,000/-
Laboratory	4,500/-	4,500/-
Total (Payable in all semesters)	15,000/-	10,000/-
Caution Deposit (Refundable)		
(only in 1st Semester)	10,000/-	10,000/-

4) Scholarship Students other than Tech Mgmt (Applicable for New Batch Commencing from July 2018):-

	For Gen & OBC	For SC & ST
Fee Details	Amount (in Rs.)	Amount (in Rs.)
Tuition	5,000/-	Nil
Examination	1000/-	1000/-
Registration	1000/-	1000/-
Gymkhana	500/-	500/-
Medical & Insurance	2,500/-	2,500/-
Library	1,500/-	1,500/-
Internet	500/-	500/-
Association and Culture	1,000/-	1,000/-
Laboratory	5,000/-	5,000/-
Total (Payable in all semesters)	18,000/-	13,000/-
Caution Deposit (Refundable) (only in 1st Semester)	10,000/-	10,000/-

5) M. Tech in Technology Management Students (Self Financed Category):-

	For Gen & OBC	For SC & ST
Fee Details	Amount (in Rs.)	Amount (in Rs.)
Tuition	20,000/-	Nil
Examination	1,000/-	1,000/-
Registration	1,000/-	1,000/-
Gymkhana	1,000/-	1,000/-
Medical & Insurance	3,000/-	3,000/-
Library	3,000/-	3,000/-
Internet	1,000/-	1,000/-
Association and Culture	1,000/-	1,000/-
Development	2,20,000/-	2,20,000/-
Total (Payable Yearly)	2,51,000/-	2,31,000/-
Caution Deposit (Refundable) (only in 1st Semester)	10,000/-	10,000/-

Note: - 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

FINANCIAL AID AND SCHOLARSHIPS FOR M. TECH PROGRAMME

1) MoD Sponsored (DRDO, Coast Guard & Services) Students:-

No Scholarship is provided to sponsored candidates of MOD (DRDO, Coast Guard & Services).

2) Sponsored Students from Other Agencies/Organizations:-

No Scholarship is provided to sponsored candidates of Other Agencies /Organizations.

3) Scholarship Students:-

All Scholarship category students are eligible for scholarship of Rs.12, 400/- per month under DBT scheme of AICTE during the M. Tech. Course

2. MASTER OF SCIENCE PROGRAMME

Sr. No.	Programme Title	Eligibility Conditions for Sponsored Candidates (MoD, PSUs or Industry)	Total No. of Seats
01	M.Sc in Food Technology (Only for Sponsored category) In collaboration with DFRL, Mysore	Basic graduate degree in Food Science/Food Technology/Nutrition/Sciences/Engineering/Agriculture/veterinary disciplines. Atleast Candidate must have science background at 10+ 2 level.	25

3. POST GRADUATE DIPLOMA PROGRAMME

Sr. No.	Programme Title	Eligibility Conditions for Sponsored Candidates
01	PG Diploma in Fire Engineering and Integrated Safety (Only for Sponsored category) In association with CFEES/DRDO. (Total Intake: 25)	Any graduate who has studied mathematics at H.S.C (+2) stage and at least one paper of Mathematics during graduation(B.E/ B. Tech./B.Sc/B.com) etc.

4. MASTER OF SCIENCE (M.S) (BY RESEARCH) PROGRAMME

Sr. No.	Programme Title	Eligibility Conditions for Sponsored Candidates
01	<u>MASTER OF SCIENCE (M.S) (BY RESEARCH)</u>	<ul style="list-style-type: none"> •Candidates with a Bachelor's degree in Engineering / Technology or a Master's degree in appropriate Sciences with a good academic record. •Candidates having Associate Membership of the following professional bodies will also be eligible for admission to the M.S. programme of their parent discipline provided they have passed both part A and part B of the Membership examinations with a good academic record. : <p>The Institution of Engineers (India) (Civil, Mechanical, Electrical and Electronics, Electronics and Communications), The Aeronautical society of India, The Indian Institute of Metals, The Indian Institute of chemical Engineers, The Institute of Electronics and Telecommunication Engineering.</p>

Note : Candidates belonging to the Scheduled Castes / Scheduled Tribes who have passed the basic qualifying degree as stated above (for all academic programs), are eligible to apply Irrespective of the marks /CGPA/CPI and will be considered for admission.

How to apply:

1. Detailed admission Notice will be published in the month of Feb- March 2018, in the leading news-papers and DIAT website, for admission to various Post-Graduate Programme for July 2018.

2 Candidates have to apply online, as per the instructions, mentioned in the admission notice. Application fee [presently- Rs.500/- for General and OBC candidates (250/- for SC/ST, women, PWD candidates) per programme (specialization) is required to be paid through online 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 admission notice/website. 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 the name of M. Tech Program to the Joint Registrar (Academics), Defence Institute of Advance Technology, Pune 411025 along with the DD drawn/proof of online payment and with the self certified copies of mark lists, certificates and other testimonials. These documents should reach DIAT latest by the prescribed date in the admission notice, to be published every year. Application will be processed only on receipt of the acknowledgement with DD/proof of online payment. Also, candidates seeking admission to more than one program (specialization) need to apply separately.