

शैक्षणिक परिषद की 01/2025-26 बैठक का कार्यवृत्त

MINUTES OF THE 01/2025-26 MEETING OF THE
ACADEMIC COUNCIL

26th Sept, 2025



**DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY
(DEEMED TO BE UNIVERSITY UNDER SECTION 3 OF UGC ACT 1956)**

GIRINAGAR, PUNE - 411025

DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY

(DEEMED TO BE UNIVERSITY), GIRINAGAR, PUNE



01/2025-26 MEETING OF THE ACADEMIC COUNCIL

11:00 HRS, FRIDAY, 26th Sept 2025

Item. No.	Particulars
1	Opening remarks by the Vice-Chancellor and Chairman, Academic Council
2	Progress / Action taken Report on minutes of the last Academic Council Meetings held on 20th May 2025 & 27th June 2025
3	Confirmation of minutes of the last Academic Council Meetings held on 20 th May & 27 th June 2025
4	Reporting Items- <ul style="list-style-type: none">a) M.Tech Admission for the AY 2025-26b) M.Sc. Admissions for the Academic Year 2025-26c) Ph.D. Admission for the Session July-2025d) Status of M. Tech. Industrial Systems Engineering (MBSE) for working professionalse) National Institutional Ranking Framework (NIRF)f) Details of newly joined Adjunct Facultyg) Patent detailsh) Industrial design detailsi) MoU and projectsj) NBA Accreditation
	AGENDA ITEMS FOR DISCUSSION
5.	Approval of Syllabus for M.Tech in Mechanical Engineering.
6.	<ul style="list-style-type: none">• Enhancement of seats for M.Sc. in Materials Science.• Dept. of Metallurgical and Materials Engg. has revised the syllabus of M.Tech in Materials Engineering and M.Sc. in Materials Science as per NEP.
7.	Introduction of a two-year extended post-induction training programme by offering an M. Tech. in Defence Technology for newly recruited DRDO scientists.
8.	New M.Tech. Program in Industrial Systems Engineering (Specialization: Radar Systems and Technologies) For Working Professionals
9.	Any other point with the permission of the Chair



DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY
(Deemed to be University under Section 3 of UGC Act 1956)
Girinagar, Pune-411 025

DIAT/F/REG/ACAD/AC/01/2025-26

Dated 26th Sept 2025

**Minutes of the meeting of Academic Council held on 26th Sept, 2025 (Friday) at 1100 Hrs,
4th floor conference room, DIAT, Pune**

The Following Members were present: -

SI.No	NAME	Description
1.	Dr. B.H.V.S. Narayana Murthy	Chairman
2.	Dr. Mehbuba Begum, Sc 'F, DHRD	Member
3.	Prof. K. Sudhakar	Member
4.	Dr. Subramanian Neelakantan	Member
5.	Prof. Avinash Mahajan	Member
6.	Shir Viswam Gapala, LRDE	Special Invitee
7.	Prof. G. Raghavan,	Member
8.	Prof. Prashant Kulkarni / CoE	Member / Permanent Invitee
9.	Prof. Shaibal Banerjee	Member
10.	Prof. A. Kumaraswamy	Member
11.	Prof. Somanchi Krishna Murthy	Member
12.	Prof. A. A. Bazil Raj	Member
13.	Prof. Odelu Ojjela	Member
14.	Dr. Tejashree Bhave	Member
15.	Dr. Ganapathi Joshi	Member
16.	Prof. Sunil Chandel	Member
17.	Dr. H. S. Panda	Member
18.	Dr. Arun Mishra	Member
19.	Dr. Vijay Hiwarkar	Member
20.	Dr. Rajesh K. Singh	Member
21.	Dr. Devnath Dhirhe	Member & JR (Acad)
22.	Dr. Debashish Pradhan	Chairman, PGC

Leave of absence was granted to the following:

1. Dr. Jagannath Nayak, Director, CHES
2. Prof. Gnanamoorthy, Dept of Mechanical Engg., IIT-Madras
3. Prof. P.K. Khanna, Dean (Student Affairs), Dept of Applied Chemistry
4. Prof. Suwarna Datar, Dean (Industry, Training & Placement), Dept. of Applied Physics

1. Welcome remarks by Vice Chancellor & Chairman, Academic Council:

At the outset, the Chairman welcomed all members of the Academic Council and provided a briefing on recent events and key developments since the last meeting. He made the significant announcement about the appointment of a new Dean for Industry, Training & Placement to focus on progress of customized courses & placements. He congratulated the new Joint Registrar Academics, Dr. Devnath Dhirhe and thanks to Prof. H.S.Panda, the outgoing Joint Registrar for remarkable services. He also congratulated the new Heads of the departments on assumption of charge. He informed that approximately 90% of admissions for the Academic Year 2025–26 had been completed and announced the commencement of a new M.Tech program, Industrial Systems Engineering (specialization: MBSE), designed for working professionals. Furthermore, he informed the Council about two new specializations introduced under M.Tech (ECE) — Semiconductor Chip Design and Defence & Space Electronics, in the Department of Electronics Engineering.

In addition, the Chairman announced that the POINTS training program has been upgraded to a two-year M.Tech program titled M.Tech in Defence Technology for the upcoming batch of newly recruited DRDO scientists. He also apprised the Council of the recent merger of certain departments and schools. He mentioned about MoU with BEML Ltd.

2. Progress/Action taken report (ATR) on minutes of the last Academic Council meeting:

The Registrar expressed gratitude to the Vice-Chancellor for the opening remarks and extended a warm welcome to all members of the Academic Council. He informed that this was the first meeting of the Council for the Academic Year 2025–26 and then presented the Action Taken Report on the decisions made during the previous Academic Council meeting held on May 20, 2025, as detailed below:

Sl. No.	Academic Council No & Date	Point	Action taken /Status
1.	A.C. Meeting held on 20th May 2025	Commencement of admission to the M.Sc. Food Technology program under the CCMN/Self-Financed category from AY 2025-26.	Action Completed: Admissions under CCMN/Self-Financed Category for M.Sc. Food Technology has been processed for the AY 2025-26 - HoD, Applied Chemistry
2.		Changes in PG curriculum as per NEP and Assessment Methodology	Action Completed: As per the NEP syllabus has been updated.

3.		Presentation of the Academic Calendar for the Academic Year 2025-26.	The Academic Calendar for the AY 2025-26 has been circulated and uploaded to the website Chairman, PGC
4.		Approval of syllabus Industrial Systems Engineering (General) Department of Mechanical Engineering.	Action Completed: The syllabus for Industrial Systems Engineering (General) has been implemented HoD, Mechanical Engineering
5		Approval of syllabus Industrial Systems Engineering. (Hybrid Mode) Department of Aerospace Engineering and fee structure.	Action Completed: syllabus for Industrial Systems Engineering (Hybrid Mode) has been implemented HoD, Aerospace Engineering
6		Presentation of the results of PG programs 2023-25 batch. Declaration of toppers of M.Tech & M.Sc. programs. Presentation of the results of Ph.D. awardees.	Action Completed: Result declared and degrees awarded COE

4. Confirmation of the minutes of the last Academic Council Meeting held on 20th May & 27th June 2025.

The minutes of the meetings of the Academic Council held on 20th May 2025 & 27th June 2025 were circulated to members. It was noted that no comments were received thereupon. Therefore, the minutes of the Academic Council meeting held on 20th May 2025 & 27th June 2025 were confirmed, as circulated.

5. Following reporting items were noted:

The below-mentioned reporting items were presented by the respective heads, and brief information about the items is given in **Annexure-1**

- M.Tech Admission for the AY 2025-26
- M.Sc. Admissions for the Academic Year 2025-26
- Ph.D Admission for the Session July-2025
- Status of M. Tech. Industrial Systems Engineering (MBSE) for working professionals
- National Institutional Ranking Framework (NIRF)
- Details of newly joined faculty members
- Patent details
- Industrial design details
- MoU and projects
- NBA Accreditation

Agenda items for discussion:

5. **Approval of Syllabus for M.Tech in Mechanical Engineering.**

Prof. Sunil Chandel, Head of the Department of Mechanical Engineering, presented the agenda item. He informed the Academic Council that the department had conducted Board of Studies meetings for three M.Tech programs — *Armament and Combat Vehicles, Marine, and Mechanical System Design*. He stated that the syllabi for these programs had been revised and redesigned in accordance with the NEP 2020 guidelines. After due deliberation, the Academic Council approved the implementation of the revised syllabi. The detailed syllabi are provided in **Annexure-2**.

Action: HoD, Mechanical Engineering.

6. **Enhancement of seats for M.Sc. in Materials Science.**

Dept. of Metallurgical and Materials Engg. has revised syllabus of M.Tech in Materials Engg., and M.Sc. in Materials Science as per NEP.

Prof. H. S. Panda, Head of the Department of Metallurgical & Materials Engineering, presented the agenda item. He briefed the Academic Council on the proposed increase in intake for the M.Sc. Materials Science program and shared admission statistics since 2023. He also informed the Council about the revision of the M.Tech in Materials Engineering syllabus align with NEP 2020 guidelines. After deliberation, the Academic Council resolved to enhance the intake for the M.Sc. The Materials Science program from 15 to 20 seats, and to implement the revised syllabus for the M.Tech in Materials Engineering program. The details of the syllabus are given in **Annexure-3**.

Action: HoD, Mechanical Engineering.

The following agenda items were discussed with the permission of the Chair.

7. **Introduction of a two-year extended post induction training programme by offering an M.Tech in Defence Technology for newly recruited DRDO scientists**

Prof. Shaibal Banerjee, Director of the School of Defence Technology and Management, presented the agenda item. He informed the Academic Council that, as mentioned by the Vice-Chancellor in his opening remarks, DRDO has upgraded its Post Induction Training Program (POINTS) for newly recruited scientists into a two-year M.Tech in Defence Technology program. He further explained that the syllabus and faculty structure have been developed in consultation with DRDO cluster heads. After detailed deliberation, the Academic Council approved the introduction of the M.Tech in Defence Technology program for DRDO scientists. The details of the programs are given in **Annexure-4**.

Action: Director, School of Defence Technology & Management.

8. **New M.Tech. Program in Industrial Systems Engineering (Specialization: Radar Systems and Technologies) For Working Professionals**

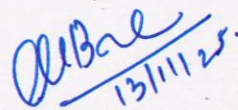
Prof. A. A. Bazil Raj, Head of the Department of Electronics Engineering, presented the agenda item. At the outset, the Vice-Chancellor shared introductory remarks on the evolution of the idea to introduce a new M.Tech program in Radar Systems & Technologies. Prof. Bazil Raj informed the Academic Council that LRDE has been actively engaged in the field of Radar Systems & Technologies and has made significant advancements in this domain. He stated that the proposed program is designed specifically for working professionals.

Shri Viswam Gapala, the special invitee from LRDE, also contributed valuable insights regarding the introduction of the new M.Tech program. During the discussions, a query was raised regarding the nomenclature of the program. After detailed deliberations, the Academic Council approved the introduction of the M.Tech in Industrial Systems Engineering (Specialization: Radar Systems and Technologies) for working professionals. The details of the program and syllabus are given in **Annexure-5**.

Action: HoD, Electronics Engineering

9. **Concluding remarks by Chairman:**

With no further matters left for discussion, the Chairman expressed gratitude to all members for their valuable insights and contributions. The meeting concluded with a vote of thanks to the Chairman and all members for their active participation.



(Shri Kamal Kumar Bajre)
Registrar & Secretary, Academic Council



REPORTING ITEMS

- M.Tech Admission for the AY 2025-26
- M.Sc. Admissions for the Academic Year 2025-26
- Ph.D Admission for the Session July-2025
- Status of M. Tech. Industrial Systems Engineering (MBSE) for working professionals
- National Institutional Ranking Framework (NIRF)
- Details of newly joined Adjunct Faculty
- Patent details
- Industrial design details
- MoU and projects
- NBA Accreditation

M. Tech Admissions for the AY 2025-26								
Sr. No	Programme	Specialisation	Sponsored	Self-Sponsored	Self-Financed	Scholarship	Total Joined	Total Seat Approved by AICTE
1	Aerospace Eng.	Guided Missiles	06	01	03	15	25	24
		UAVs	03	01	03	15	22	24
2	Computer Science & Eng.	Artificial Intelligence	05	00	04	17	26	24
3	Cyber Security	-----	04	00	03	22	29	24
4	Renewable Energy	-----	01	01	02	04	08	18
5	Electronics & Comm. Engi.	Radar & Comm.	00	00	03	07	10	12
		Defence & Space Electronics	01	00	03	06	10	12
		Signal Processing & AI	01	00	05	07	13	12
		VLSI	00	00	03	18	21	21
		Semiconductor Chip Design	00	00	04	11	15	18
6	Data Science	-----	03	00	00	25	28	30
7	Quantum Computing	Quantum Comm. & Sensing	04	00	06	18	28	30

M. Tech Admissions for the AY 2025-26

Sr. No	Programme	Specialisation	Sponsored	Self-Sponsored	Self-Financed	Scholarship	Total Joined	Total Seat Approved by AICTE
8	Material Engineering	-----	05	00	06	08	19	30
9	Mechanical Eng.	Marine Engineering	04	00	01	01	06	16
		Armament & Combat Vehicles	04	02	08	05	19	16
		Mechanical System Design	03	00	12	04	19	16
10	System Engineering	System Engineering	02	00	01	03	06	24
11	Automation and Robotics	-----	04	00	07	19	30	30
12	Modelling & Simulation	-----	01	00	04	12	17	24
13	Sensor Tech./ LEOC	LEOC	00	00	02	05	07	12
		Sensor Technology	00	00	06	01	07	13
14	Technology Management	-----	06	00	07	06	19	30
15	Nano Science and Technology	-----	00	00	02	06	08	18
Total			57	05	95	235	392	478
16	System Engineering (Working Professionals)		00	19	00	00	19	48

M.Sc. Admissions for the Academic Year 2025-26

Name of the program	Scholarship	Self-Financed	MoD Sponsored/ Service Officers	Total
M.Sc. Materials Science	10	04	0	14
M.Sc. Photonics	15	01	0	16
M.Sc. (Tech.) Photonics	13	01	0	14
M.Sc. Applied Chemistry	07	01	0	08
M.Sc. Data Science	12	00	0	12
M.Sc. Food Technology	12	02	02	16
M.Sc. Tank Technology	0	0	30	30

Ph.D Admission for the Session July-2025

After completion of admission process for July session 2025, a total of 39 students have been admitted for Ph.D program as detailed below:

SERVICE OFFICER	DRDO	OTHER INSTITUTE /R&D ORG.	PROJECT STAFF	INDUSTRY	INSTITUTION FELLOWSHIP	NATIONAL FELLOWSHIP
05	12	02	01	03	14	02



**Status of M. Tech. Industrial Systems
Engineering (MBSE) for working professionals.**

**HoD, Aerospace Engineering and
Autonomous Systems**

Department of Aerospace Engineering & Autonomous Systems

Status of M. Tech. Industrial Systems Engineering (MBSE) for working professionals

- BoS meeting completed on 17 May 2025. The Program Structure & Syllabus approved by BoS Committee.
- The details of the program was presented in Academic Council Meeting Held on 20 May 2025.
- The program structures, syllabus, eligibility criteria and fee structure have been approved by Academic Council Committee.
- Advertisement Date: 08/05/2025 to 16/08/2025.
- No. of Applications Received: 27
- No. of Applications Shortlisted & Called for Interview: 24
- Interview conducted on 23/08/2025
- No. of Candidates selected: 24
- No. of Candidates Joined: 20
- 1 week Laboratory work (offline) completed (15th to 19th September)
- Classes starting from 26/09/2025.

IQAC Activities
IQAC Director



Defence Institute of Advanced Technology

(Deemed to be University) Girinagar, Pune-411 025
(An Autonomous Organization fully funded by Department of
Defence Research & Development, Ministry of Defence)

Internal Quality Assurance Cell (IQAC)

National Institutional Ranking Framework (NIRF)



Congratulations

Stanford top 2% list - 2025

Year 2025

Khanna Pawan K.
Balasubramanian, Kandasubramanian
C. S. Unnikrishnan

Career wise

Khanna, Pawan K.
Balasubramanian, Kandasubramanian
Kulkarni, Prashant S.
Bazil Raj, A. Arockia
C. S. Unnikrishnan



Defence Institute of Advanced Technology

Engineering Category

Year	Rank
NIRF 2024 -	63 rd Rank
NIRF 2025 -	92 nd Rank



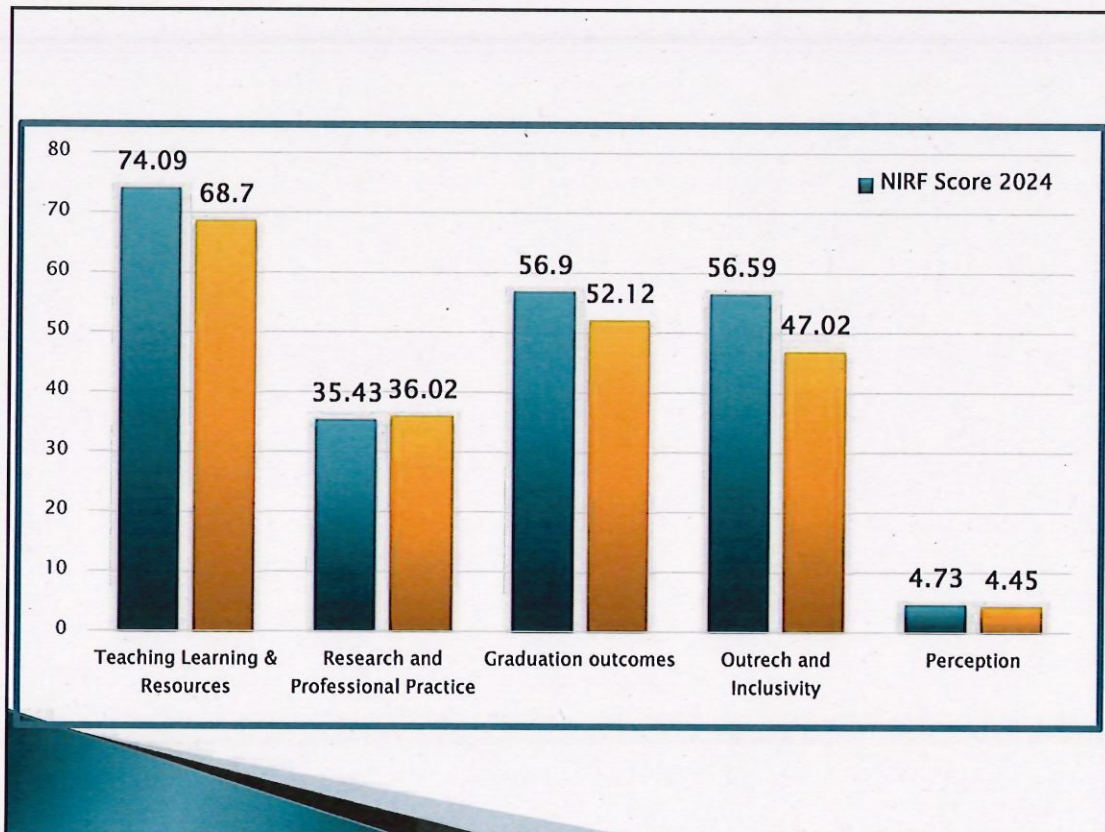
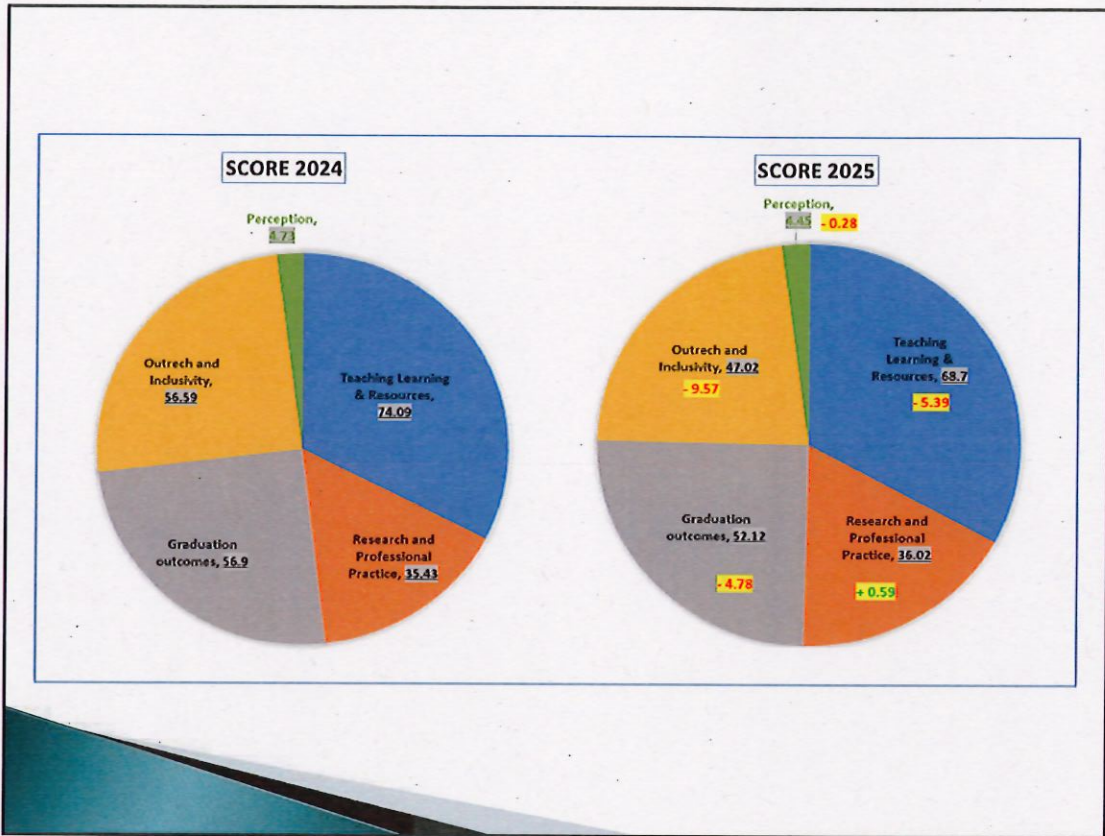
Defence Institute of Advanced Technology

Parameters includes:

1. Teaching learning & resources (TLR)- Faculty-student ratio, faculty qualification and experience.
2. Research and Professional Practice (RPP)- Research publication, projects and funding
3. Graduation Outcomes (GO)- placement statistics, higher education and entrepreneurship
4. Outreach and Inclusivity (OI)- Diversity, inclusive and social responsibility.
5. Perception(P)- Reputation, alumni satisfaction and industry recognition.

Summary of Ranking Parameters and weightage

Sr.no	Parameters	Marks	Weightage
1.	Teaching Learning & Resources	100	0.30
2.	Research and Professional Practice	100	0.30
3.	Graduation Outcomes	100	0.20
4.	Outreach and Inclusivity	100	0.10
5.	Perception	100	0.10



ACTION POINTS

Sr.no	Parameters		Remarks	Action
1.	Teaching Learning & Resources	Student Strength(SS)	Full enrollment of Students as per approved seats	Academic Section
		Faculty Student Ratio (FSR)	Maintain the expected ratio is 1:15	Admin/ Academic Section
		Faculty with PhD & Experience (FQE)	<ul style="list-style-type: none"> ➤ Recruit faculty with PhD only ➤ Encourage non-phd holding faculty to finish their graduate school 	Academics and HOD
		Financial Resources (FRU)		Finance Section
2.	Research and Professional Practice	Publication (PU)	More publications (Scopus/Orcid) (Maintain 3 per year for each faculty)	All Faculty
		Quality of Publication (QP)	More Citations and good quality publications in Q1 and Q2 journals	All Faculty
		IPR & Patents	More patents	IPR cell
		FPPP	Projects & Professional Practice	Dean (S&R), faculty and HOD
3.	Graduation Outcomes	Placements & Higher Studies (GPH)	Graduating students Placed & selected for higher studies	Placement cell
		Examination (GUE)	Percentage of students graduated	COE
		Median salary (GMS)	Salary of graduates	Dean (ITP) and Placement cell
		PhD students Graduated (GPHD)	PhD Students Graduated over previous 3 years	Faculty, DRC and COE
4.	Outreach and Inclusivity	Region Diversity (RD)	Encourage students from other states & country	Academic Section
		Women Diversity (WD)	Ideal strength: 50% women students and 20% women faculty.	Academic Section/ Admin
		Economically & socially Challenged students	Disadvantaged students being provided full tuition waiver	Academic Section, EOC, finance
		Facilities for physically challenged students	full facilities for physically challenged students in every building	EWO
5.	Perception	Peer Perception	Wide publicity	PRO/Dean

DETAILS OF NEW FACULTY
Dean Academics

DETAILS OF NEWLY JOINED ADJUNCT FACULTY

Sr	Name	Designation	Dept/ School	Establishment	Doj	Extn period	Qualification
1	Dr. R. Santhanaman	Adjunct Faculty	AE	DRDL Hyd.	06-09-2024	06/09/2025 05/09/2026	PhD(2021)
2	Dr. Abhijit Dey	Adjunct Faculty	AC	HEMRL, Pune	01-10-2024	01/10/2025 30/09/2026	PhD(2012), Mech,MSc
3	Dr. SE Talole, Sc. H	Adjunct Faculty	AE	R&DE(Engrs)	13-12-2024	-	PhD(2010), ME(1989)
4	Dr. Dhruva J. Biswas, Sr. Sc. & former Head LPT	Adjunct Faculty	AP	BARC, Mumbai	30-12-2024	-	PhD(1986)M.Sc (Physics)
5	Dr. J. John Rozario Jegaraj, Dir (PE&P)	Adjunct Faculty	M&ME	DRDL Hyd	29-12-2024	-	PhD(2006), ME(2000) PGDIM(2002)
6	Dr. Sumit Goswami	Adjunct Faculty	TM	Dir Planning & Co-ordination, DRDO HQ	27-12-2024	-	PhD(2016), M.Tech(2009)
7	Dr. Rajeev Varshney	Adjunct Faculty	AC	Ex DIPAS		-	PhD(1993), M.Phil(1989) M.Sc(1987)
8	Dr. Ramakrishnan Raman	Adjunct Faculty	AE	Eaton India		-	PhD(2019), MBA(2012) MS(1997)

DETAILS OF NEWLY JOINED ADJUNCT FACULTY

Sr	Name	Designation	Dept/ School	Establishment	Doj	Qualification
9	Dr. Yoganand Jeppu	Adjunct Faculty	AE	Boing Engg. India		PhD,ME
10	Dr. DRM Samudraiah,	Adjunct Faculty	EE	SAC/DRDO		PhD,MSc
11	Sh. Dinesh Kumar	Adjunct Faculty	EE	Aritra Tech Pvt Ltd		M.Tech(2008),
12	Sh. S.S. Patil	Adjunct Faculty	EE	Ex-LRDE		M.Tech(RFDT, 2010)
13	Sh. Ginja Venkat Reddy	Adjunct Faculty	EE	Ex-RCI		
14	Dr. Arijit Ukil	Adjunct Faculty	EE	TCS kolkata		PhD(2023), ME(2017)
15	Dr. Rashad T.S	Adjunct Faculty	EE	RCI		PhD(Pursuing , MS()
16	Dr. Sankalp Singh	Adjunct Faculty	EE	Synopsis India		PhD(2019), MS(2013)

DETAILS OF NEWLY JOINED DISTINGUISHED VISITING FACULTY/VISITING FACULTY

Sr	Name	Designation	Dept/ School	Establishment	Doj	Extn period	Qualification
1	Dr. G. Athithan	Distinguished Visiting Professor	CSE	Former DG (MEDCOS)	01-09-2024	01/07/2025 30/06/2026	PhD(1997)
2	Mr. RD Misal	Visiting Professor	AE	Ex ARDE/ DRDO	02-09-2024	02/09/2025 01/09/2026	M.Tech (987)
3	Mr. Amal Nathan Joseph	Visiting Professor	SQT	Ex BARC	03-09-2024	01/07/2025 30/06/2026	M.Sc(1986)
4	Sh. Madhav Kuber	Visiting prof	SoR	Ex R&DE(E)	13-11-2024	13/11/2025 12/11/2025	M.Sc 186 M.Tech(1994)
5	Vice Admiral Kishor O. Thakare (Retd.)	Distinguished Visiting Professor	TM	EX DG ATVP	27-12-2024	-	BSc(1977)
6	Dr. Sudhakar Krishnarao	Distinguished Visiting Professor	ME	Ex IIT B	10-01-2025	-	PhD, M.Tech, B. Tech
7	Dr. Josyula Umakant	Visiting Professor	AE	Ex DRDL Hyd	05-05-2025	-	PhD(2008)

DETAILS OF NEWLY JOINED REGULAR FACULTY

Sr	Name	Designation	Dept / School	DOB	Doj	Qualification	Remarks
1	Dr. Bansidhar Joshi	Assistant Professor	CSE	25/02/1986	01-09-2025	PhD(2022)	PwBD-A
2	Dr. Sumanta Khan	Assistant professor	SQT				Offer accepted and will be joining DIAT by 06/10/2025

PATENT DETAILS:-

TITLE: MULTILAYER COMPOSITE PRESSURE VESSEL INTEGRATED WITH SELF-HEALING LAYER FOR UNIVERSAL GAS CONTAINMENT

INDIAN PATENT APPLICATION NUMBER: 202511074363

DATE OF FILING PROVISIONAL PATENT: 05/08/2025

INVENTOR: Prof. Balasubramanian Kandasubramanian

CO-INVENTORS: Shristhi, Neelaambhigai Mayilswamy, Kshitija Sanjay Vaidya

INDUSTRIAL DESIGN DETAILS:-

TITLE: HEXAGONAL HOPPER WITH TRIANGULAR FOLDS

DESIGN NUMBER: 399480-001

DATE OF FILING INDUSTRIAL DESIGN: 08/11/2023

DATE OF ISSUE: 10/01/2024

INVENTOR: Prof. Balasubramanian Kandasubramanian

CO-INVENTORS: Vishwanath Gholap, Dhruv Patil, Tharikha Joseph, Priyanka Patil

MoU and Project
Dean (Sponsored Research)

Title of the Project: Design and Development of High-Power Ultrafast Fiber Laser-Amplifier System (HUFLAS)

- ▶ Funding Agency: DRDO
- ▶ Mode of Funding: Directorate of Planning and Commissioning (DP&C)
- ▶ Sanctioned Amount: Rs. 14.418 Cr.
- ▶ Project Investigator: Dr. Shyamal Mondal, Dept. of Applied Physics
- ▶ Co-Project Investigator: Dr. AVR Murthy, Dept. of Applied Physics
- ▶ Applications related to the Project outcomes:
 - High-Power Laser Source for Directed Energy Weapons
 - Nonlinear Optics and High-energy Physics experiments
 - High Electric Field THz generation and detection
 - Optical Communication and precision metrology
 - Manufacturing of Optical Components (e.g., FBG, waveguide writing, etc.)
 - Industrial (e.g., micromachining, cleaning, ablation, welding, etc.) applications
 - Medical (e.g., cancer therapy, lithotripsy, FLACS, etc.) applications

MoU Between DIAT & BEML

▶ Area of Co-operation

- Internships
- Placements
- Customized courses
- Explicitly for BEML Masters program for their working professionals (no details are yet (discussed)
- Joint Research projects on challenging areas of BEML



NBA Accreditation
Dean Academic

AGENDA – 1

ANNEXURE-2



Approval of Syllabus for M.Tech in Mechanical Engineering.

- HoD, Mechanical Engineering

Board of Studies (BoS) Meeting



**DEPARTMENT OF MECHANICAL ENGG
DIAT (DU), DRDO, PUNE**



Program Aim (M.Tech. in Mechanical Engineering)

MSD

To impart knowledge to Engineers/ Scientists pertaining to Mechanical system design from the basics of engineering to final machine or equipment design

Marine

To impart training and update knowledge in the field of marine systems like gas turbine, engines, tribology, warship transmission, for officers from Indian Navy, DRDO, DPSUs and GATE qualified students.

ACV

To provide students with the principles of Combat Vehicle Technology and Armament Engineering. To study advances in combat vehicle technology and armament engineering

Department of Mechanical Engineering, DIAT(DU), Pune



Defence Institute of Advanced Technology (DU), Pune

**NBA
Accreditation**

M.Tech (Mechanical Engineering) has been accredited for 5 years by National Board of Accreditation (NBA).

राष्ट्रीय प्रत्यायन बोर्ड NATIONAL BOARD OF ACCREDITATION



File No: 28-347-2010-NBA

Date: 02-11-2022

To,

The Principal
Defence Institute of Advanced Technology,
Girgaon, Pune,
Maharashtra - 411025.

Subject: Accreditation status of programs applied by Defence Institute of Advanced Technology, Girgaon, Pune, Maharashtra - 411025.

Sir,

This has reference to your application I.O. No. 5346-02/03/2021 seeking accreditation by National Board of Accreditation to the Engineering programs applied by Defence Institute of Advanced Technology, Girgaon, Pune, Maharashtra - 411025.

2. An Expert Team conducted onsite evaluation of the programs from 26th to 28th August, 2022. The report submitted by the Expert Team was considered by the concerned Committees constituted for the purpose in NBA. The Competent Authority in NBA has approved the following accreditation status to the program as given in the table below:

Sl. No. (1)	Name of the Program(s) (2)	Basis of Evaluation (3)	Accreditation Status (4)	Period of validity (5)	Remarks (6)
1.	Mechanical Engineering	May, 2017 Document	Accredited	Academic Years 2022-2023 to 2027-2028 i.e. upto 30-06-2028	Accreditation status granted is valid for five years provided the program has the approval of the competent authority, whichever is earlier.

3. It may be noted that only students who graduate during the validity period of accreditation, will be deemed to have graduated with an NBA accredited degree.

4. The accreditation status awarded to the program as indicated in the above table does not imply that the accreditation has been granted to Defence Institute of Advanced Technology, Girgaon, Pune, Maharashtra - 411025 as a whole. As such the institution should continue along with its process including on its letter head etc. with that it is accredited by NBA because it is program accreditation and not institution accreditation. If such an instance comes to NBA's notice, this will be viewed seriously. Complete name of the program (if accredited level of program) and the period of validity of accreditation, as well as the Academic Year from which the accreditation is effective should be mentioned unambiguously wherever and whenever it is required to indicate the status of accreditation by NBA.

Chitambar

Contd./

Tel: +91 22 2430 0620-22, 2430 0534; Telefax: +91 22 2430 4903



**M. Tech. in Mechanical Engineering [Mechanical System Design]
New Course Structure as per guidelines of NEP**

Semester-I

Sl. No.	Course Type	Course Code	Course	Contact Hours per week		Total Credits (*)
				L/T	P	
1	PSC-1	ME 602	Advanced Mechanics of Materials	3	0	3
2	PSC-2	ME 603	Advanced Fluid & Thermal Sciences	3	0	3
3	PSC-3	ME 604	Advanced Defence Materials and Processing	3	0	3
4	PSC-4	ME 609	Mechanical Vibrations	3	0	3
5	PE-1	---	-----	3	0	3
6	PSL	ME 665L	Lab in Mechanical Engineering	0	6	3
7	PGC	PGC-601	Research Methodology and IPR	2	0	2
Total				17	6	20

Semester-II

Sl. No.	Course Type	Course Code	Course	Contact Hours per week		Total Credits (*)
				L/T	P	
1	PSC-5	ME 630	Design of Machinery	3	0	3
2	PSC-6	ME 631	Product Design and Development	3	0	3
3	PE-2	---	-----	3	0	3
4	PE-3	---	-----	3	0	3
5	PE-4	---	-----	3	0	3
6	PE-5	---	-----	3	0	3
7	PGC	PGC-602	Professional Development & Employability Skills (PDES)	2	0	2
Total				20	0	20

Semester-III

Sl. No.	Course Code	Course	Contact Hours per week		Total Credits (*)
			L	T/P	
1	ME 651	M.Tech. Dissertation Phase-I	40		20
Total			40		20

Semester-IV

Sl. No.	Course Code	Course	Contact Hours per week		Total Credits (*)
			L	T/P	
1	ME 652	M.Tech. Dissertation Phase-II	40		20
Total			40		20

Total Credits= 80

Nomenclature:
PSC: Program Specific Core
PSL: Program Specific Lab
PE : Professional Elective
PGC: Post Graduate Committee



**M. Tech. in Mechanical Engineering [Marine]
New Course Structure as per guidelines of NEP**

Semester-I

Sl. No.	Course Type	Course Code	Course	Contact Hours per week		Total Credits (*)
				L/T	P	
1	PSC-1	ME 602	Advanced Mechanics of Materials	3	0	3
2	PSC-2	ME 603	Advanced Fluid & Thermal Sciences	3	0	3
3	PSC-3	ME 609	Mechanical Vibrations	3	0	3
4	PSC-4	ME 641	Warship Transmission & Tribology	3	0	3
5	PE-1	---	-----	3	0	3
6	PSL	ME 665L	Lab in Mechanical Engineering	0	6	3
7	PGC	PGC-601	Research Methodology and IPR	2	0	2
Total				17	6	20

Semester-II

Sl. No.	Course Type	Course Code	Course	Contact Hours per week		Total Credits (*)
				L/T	P	
1	PSC-5	ME 644	Marine Diesel Engines	3	0	3
2	PSC-6	ME 645	Marine Gas Turbines	3	0	3
3	PE-2	---	-----	3	0	3
4	PE-3	---	-----	3	0	3
5	PE-4	---	-----	3	0	3
6	PE-5	---	-----	3	0	3
7	PGC	PGC-602	Professional Development & Employability Skills (PDES)	2	0	2
Total				20	0	20

Semester-III

Sl. No.	Course Code	Course	Contact Hours per week		Total Credits (*)
			L	T/P	
1	ME 651	M.Tech. Dissertation Phase-I	40		20
Total			40		20

Semester-IV

Sl. No.	Course Code	Course	Contact Hours per week		Total Credits (*)
			L	T/P	
1	ME 652	M.Tech. Dissertation Phase-II	40		20
Total			40		20

Total Credits= 80

Nomenclature:
PSC: Program Specific Core
PSL: Program Specific Lab
PE : Professional Elective
PGC: Post Graduate Committee



**M. Tech. in Mechanical Engineering [Armament and Combat Vehicles]
New Course Structure as per guidelines of NEP**

Semester-I

Sl. No.	Course Type	Course Code	Course	Contact Hours/week		Total Credits (*)
				L	T/P	
1	PSC-1	ME 601	Combat Vehicles Engineering and Technology	3	0	3
2	PSC-2	ME 602	Advanced Mechanics of Materials	3	0	3
3	PSC-3	ME 609	Mechanical Vibrations	3	0	3
4	PSC-4	ME 604	Advanced Defence Materials and Processing	3	0	3
5	PE-1	---	---	3	0	3
6	PSL	ME 662L	Combat Vehicle Engineering Lab	0	3	3
7	PGC	PGC-601	Research Methodology and IPR	2	0	2
Total				17	03	20

Semester-III

Sl. No.	Course Code	Course	Contact Hours per week		Total Credits (*)
			L	T/P	
1	ME 651	M.Tech. Dissertation Phase-I	40		20
Total			40		20

Semester-IV

Sl. No.	Course Code	Course	Contact Hours per week		Total Credits (*)
			L	T/P	
1	ME 652	M.Tech. Dissertation Phase-II	40		20
Total			40		20

Semester-II

Sl. No.	Course Type	Course Code	Course	Contact Hours/week		Total Credits (*)
				L/T	P	
1	PSC-5	ME 610	Armament Engineering and Technology	3	0	3
2	PSC-6	ME 615	Trials & Evaluation of Weapon and Combat Sys.	3	0	3
3	PE-2	---	-----	3	0	3
4	PE-3	---	-----	3	0	3
5	PE-4	---	-----	3	0	3
6	PSL	ME663L	Armaments Engineering Lab	0	3	3
7	PGC	PGC-602	Professional Development & Employability Skills (PDES)	2	0	2
Total				20	0	20

Total Credits= 80

Nomenclature:

PSC: Program Specific Core

PSL: Program Specific Lab

PE : Professional Elective

PGC: Post Graduate Committee



AGENDA – 2

- Enhancement of seats for M.Sc. in Materials Science.
- Dept. of Metallurgical and Materials Engg. has revised syllabus of M.Tech in Materials Engg. and M.Sc in Materials Science as per NEP.

- HoD, Metallurgical & Materials Engineering

Proposal for increasing intake for M.Sc. in Materials Science from the AY 2026-27 batch onwards

- Department of Metallurgical and Materials Engineering started M.Sc. in Materials Science program from the AY 2022-23 onwards.
- The total Admission happened for last two years as given below-

Students Enrolled	M.Sc. (Materials Science)
2024-26	13/15
2025-27	15/15
2026-28 (onwards)	20 (Proposed)

- Most of the students after getting M.Sc. degree either qualified National level test and gone for higher studies or placed in Industries
- Therefore department is requesting to approve for increasing the number of seats from 15 to 20 numbers. Increasing the number will not exceed the prescribed limit of the student teacher ratio (UGC/AICTE)

AGENDA 3 & 4

(With the permission of the Chairman)



AGENDA – 3

INTRODUCTION OF A TWO-YEAR EXTENDED POST INDUCTION TRAINING PROGRAMME BY OFFERING AN M. TECH. IN DEFENCE TECHNOLOGIES For newly recruited DRDO SCIENTISTS

**HoD, School of Defence Technology
& Management**

Programme Structure

AICTE has sanctioned 150 seats for M.Tech. in Defence Technology Programme

- This will be a 4 semester program with total 80 credits as per NEP).
- The programme has 9 specializations,
- Semester -1 will have common curriculum
- Semester 2 curriculum will be varied as per the specialization.
- Semester 3 & 4 includes dissertation work at Respective DRDO Laboratories
- M. Tech. in Defence Technology will be having following specializations:

Sr. No.	Specialization
1.	Armament & Combat Engineering
2.	Aerospace Technology
3.	Missile Technology
4.	Naval Technology
5.	Communication Systems & Sensors
6.	Optoelectronics & Directed Energy Technology
7.	Microelectronics, AI and Cyber Technology
8.	Human Support and Engineering
9.	Advanced Materials

Board of Studies

Sr. No	Name of the Specialization	Chairperson, BoS Committee
1	Armament & Combat Engineering	Prof. R.D. Misal, Sc. H (Retd.)
2	Aerospace Technology	Dr. S. E. Talole, Sc. 'H'
3	Missile Technology	Dr. Umakant J, Sc. 'H' (Retd)
4	Naval Technology	Dr. K. Balasubramanian, Professor
5	Communication Systems & Sensors	Dr. K. P. Ray, Professor
6	Directed Energy Weapons	Dr. Jagannath Nayak, Director, CHES
7	Microelectronics and Computational & Cyber Systems	Dr. Gopaldasamy Athithan, DS & DG DRDO (Retd)
8	Human Support and Engineering	Dr. Rajeev Varshney, Director, DIPAS (Retd)
9	Advanced Materials	Dr. K. Balasubramanian, Professor

Tentative Schedule of M.Tech. Defence Technology Programme

Semester	Start	End	Place
I	January 2026	May 2026	DIAT
	Tour of North India DRDO Laboratories / ITM Mussoorie		
II	July 2026	November 2026	DIAT
	Tour of South India DRDO Laboratories		
III	January 2027	June 2027	Respective DRDO Laboratories
	Project Dissertation / Seminar- Phase I		
IV	July 2027	December 2027	Respective DRDO Laboratories
	Project Dissertation / Seminar- Phase II		



APPROVAL PROCESS 2025-26
Extension of Approval (EOA) - Conspicuous

F No. W/2025/1464/0200832025/EOA/Conspicuous 1 Date of Approval: 16 Apr 2025

To,
 The Secretary,
 Tech & Higher Education Dept.,
 Govt. of Maharashtra, Maharashtra,
 Arjunji Building, Mumbai-400032

Sub: Extension of Approval for the Academic Year 2024-25
 EOA based on F No. W/2025/1464/0200832025/EOA 24 Mar 2025
 Conspicuous 1 F No. W/2025/1464/0200832025/EOA 10 Apr 2025
 Conspicuous 1

Ref: Online application of the Institution submitted for Extension of Approval for the Academic Year 2024-25
 Submission
 In terms of the provisions under the All India Council for Technical Education (Start of Approval for Technical Education) Powers
 delegated in ACTE ACT 1987, (in 'G.O. No. 1587) chapter II - sub 2(a) to regulate Technical and Subsequent Regulations of ACTE, as
 directed to comply the approval to:

Particulars	S-FIN/2025/1	Application No	S-464/2025/1
Name of the Institution	DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY	Name of the Society/Trust	DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY
Institution Address	GIRINAGAR, NEAR WINDGARWADALA DAM, WINDGARWADALA, PUNE - 411 025, WINDGARWADALA, PUNE, PUNE, Maharashtra, 411025	Society/Trust Address	GIRINAGAR, NEAR WINDGARWADALA DAM, WINDGARWADALA, PUNE, PUNE, Maharashtra, 411025
Institution Type	Institution Deemed to be University (Govt)	Region	Western
Year of Establishment	1964		

To conduct following Programs/Courses with the intake indicated below for the Academic Year 2025-26

Level	Program	Course	Attaching Body (University Body)	Intake Approved for 2024-25	Intake Approved for 2025-26	MSI Approval Status	PI / Govt. Statute OCE Approval Status
POST GRADUATE	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	NOT APPLICABLE	24	24	No	No

Level	Program	Course	Attaching Body (University Body)	Intake Approved for 2024-25	Intake Approved for 2025-26	MSI Approval Status	PI / Govt. Statute OCE Approval Status
POST GRADUATE	ENGINEERING AND TECHNOLOGY	CYBER SECURITY	NOT APPLICABLE	24	24	No	No
POST GRADUATE	ENGINEERING AND TECHNOLOGY	RENEWABLE ENERGY	NOT APPLICABLE	18	18	No	No
POST GRADUATE	ENGINEERING AND TECHNOLOGY	INDUSTRIAL SYSTEMS ENGINEERING	NOT APPLICABLE	0	24 ^{MSI}	No	No
POST GRADUATE	ENGINEERING AND TECHNOLOGY	DEFENCE TECHNOLOGY	NOT APPLICABLE	0	4 ^{MSI}	No	No
POST GRADUATE	ENGINEERING AND TECHNOLOGY	INDUSTRIAL SYSTEMS ENGINEERING	NOT APPLICABLE	0	4 ^{MSI}	No	No

Approved New Courses

To conduct following Programs/Courses for Working Professional for the Academic Year 2025-26

Level	Program	Course	Working Professional Approved Intake 2025-26
POST GRADUATE	ENGINEERING AND TECHNOLOGY	DEFENCE TECHNOLOGY	150
POST GRADUATE	ENGINEERING AND TECHNOLOGY	INDUSTRIAL SYSTEMS ENGINEERING	48

Courses/Intake Applied for Closure by the Institution for the Academic Year 2025-26

Level	Program	Course	Attaching Body (Univ/Body)	Course Closure Status	Intake Approved for 2025-26
POST GRADUATE	ENGINEERING AND TECHNOLOGY	GREEN TECHNOLOGY	NOT APPLICABLE	Approved	0



AGENDA – 4

New M.Tech. Program in Industrial Systems Engineering (Specialization: Radar Systems and Technologies) For Working Professionals

- **HoD, Electronics Engineering**

Program Aim

M. Tech. in Industrial Systems Engineering (Specialization: Radar Systems and Technologies) For Working Professionals

- Currently, LRDE is working in the field of Radar Systems and Technologies for multiple defence applications for their diversified requirements.
 - As the Radar systems are very critical in defence, and for becoming fully self-reliant in this critical technology, the industry capability and capacity must be improved in the field.
 - A M.Tech. Program in Radar Systems and Technologies for the working professionals is very important for ensuring and meeting the current demand of skilled/qualified manpower in the field of Radar for the nation.
-
- M. Tech. in Industrial Systems Engineering (Specialization in Radar Systems and Technologies) focuses on Radar Systems Thinking, Radar Architecture, Radar Design, Subsystems Design, System Integration, Performance Analysis and System Testing.
 - Software and its intricacies along with hands-on experience in many critical areas of Radar Systems design.
 - Exposure to real-time radar systems and radar signal processing.

Program Structure

Semester-1

SN	Course Type	Course Code	Course Title	Credits
1.	Core	ISE 616	Mathematical Background for Radar	3
2.	Core	ISE 617	Introduction to Radar Systems & Engineering	3
3.	MOOC/ SWAYAM NPTEL	PGC 603	Research Methodology	3
4.	Lab	ISE 661	Radar systems lab-I (Mathematical Tools for Radar Simulation and RF simulation of Radar and subsystems)	2
Credits for first semester				11

Semester-2

SN	Course Type	Course Code	Course Title	Credits
1.	Core	ISE 618	RF Technology for Radars	3
2.	Core	ISE 619	Radar Signal Generation, Reception, Digitization and Processing	3
3.	MOOC/ SWAYAM NPTEL		Professional elective - I	3
4.	Lab	ISE 662	Radar systems lab-II (System / Sub-system live measurements and Advanced Radar Topics)	2
Credits for second semester				11

Semester-3

SN	Course Type	Course Code	Course Title	Credits
1.	Core	ISE 620	Radar Software and Computing Systems	3
2.	Core	ISE 621	Auxiliary Systems for Radars	3
3.	Core	ISE 601	Introduction to Systems Engineering	3
4.	Project	ISE 651	M.Tech. Dissertation Phase-I	10
Credits for third semester				19

Semester-4

SN	Course Type	Course Code	Course Title	Credits
1.	Core	ISE 622	Radar Systems Integration, Testing and Performance Evaluation	3
2.	Core	ISE 623	Systems Engineering for Radar	3
3.	MOOC / SWAYAM NPTEL		Professional elective - II	3
4.	Project	ISE 652	M.Tech. Dissertation Phase-II	10
Credits for fourth semester				19

Course Structures are as per the NEP

Program Structure

Semester-5

SJ No	Course Type	Course Code	Course Title	Credits
1.	Project	ISE 653	M.Tech. Dissertation Phase III	20
Credits for fifth semester				20

List of professional electives

SJ No	Course Code	Course Title	Credits
1.	ISE 624	Space Environment and its Effects on Orbital Spacecrafts	3
2.	ISE 625	Applied Accelerated Artificial Intelligence	
3.	ISE 626	Real-Time Digital Signal Processing	
4.	ISE 627	Artificial Intelligence: Search Methods for Problem Solving	
5.	ISE 628	Neural Networks for Signal Processing	
6.	ISE 629	Passive Microwave Circuits, Devices, and Measurements	
7.	ISE 630	Industrial Engineering and Operations Research	
8.	ISE 631	Ergonomics Research Techniques	
9.	ISE 632	Risk-Based Engineering	
10.	ISE 633	Introduction to Photonics	

Note 1

Students can opt NPTEL/MOOC/SWAYAM Courses

Note 2

Course Work : 40 Credits
 Dissertation/Thesis : 40 Credits
 Total Credits : 80