



**Dhirubhai Ambani  
University**  
Technology

Formerly DA-IICT

# M.Tech. (ICT)

with specialization in  
Machine Learning



Academics

Service to Society

**DAU**

Research & Innovation



**Admissions 2026**

The School of Technology at Dhirubhai Ambani University (DAU) is a pioneering, forward-thinking institution of higher learning and research. Consistently recognized for its academic excellence, the School has been a cornerstone of technical and intellectual rigor since its inception in 2001. Originally established as DA-IICT—one of India's first institutions dedicated to Information and Communication Technology—it has evolved into the technological heart of a vibrant multidisciplinary university, accredited with **NAAC A+** grade and honored as a **Centre of Excellence by the Government of Gujarat**. It has also been awarded with a **5-Star Rating** by the Gujarat State Institutional Rating Framework (GSIRF) for three consecutive years.

As the institute celebrates **25 years of academic excellence**, it remains committed to advancing technological sustainability while simultaneously fostering a culture of entrepreneurship. The DAU School of Technology continues to strengthen its position as a leading center for technical education and research.

The DAU School of Technology offers a comprehensive suite of undergraduate, dual degree, postgraduate, and doctoral programs meticulously

aligned with emerging and high-impact domains. The undergraduate and postgraduate programs at the School have received commendations from accrediting bodies for their innovative pedagogy and outcome-based learning approach.

The mission of the School is to become a first choice academic institute having high caliber students, a dynamic faculty, a sensitive administration, functioning within an atmosphere of innovative research, emphasizing academic cooperation and global collaboration. To educate engineers and technologists who can lead in a rapidly changing and challenging world.

The School's alumni network spans the globe, with graduates holding leadership roles in organizations such as **Google, Microsoft, Amazon, Oracle, Deloitte, Goldman Sachs, and JP Morgan**. Furthermore, over 100 alumni-led startups highlight the School's significant entrepreneurial impact on the global tech stage.

For the **Academic Year 2025–2026, Rs. 11 crores** is being disbursed by the Institute towards student scholarships. For the **Academic Year 2026–2027, Rs. 13 crores** has been budgeted for the same.



## Interdisciplinary and Multidisciplinary Research Oriented Academic Programs

| Program Level | Name of the Program   | Duration        | Unique Features  |
|---------------|---|-----------------|--|
| Doctoral      | PhD   | 4-6 Years       | - Personalized Mentor-Led PhD, Lab-Driven Research   |
| Dual Degree   | <b>BS-MS Dual Degree</b> in Information Technology                                      | 5 (3+1+1) Years | - From Code to Cloud to Enterprise - Build End to End Real-World Systems   |
|               | <b>BS-MS Dual Degree</b> in Data Science and Artificial Intelligence                    | 5 (3+1+1) Years | - Develop the Expertise to Design Next-Generation Intelligent Systems & Drive Data-Driven Innovation across Industries |
| Postgraduate  | <b>MTech</b> Information and Communication Technology (ICT)                             | 2 Years         | - Mastering next generation intelligent systems  |
|               | <b>MSc</b> Information Technology (IT)  | 2 Years         | - Building scalable software for industry  |
|               | <b>MSc</b> Data Science (DS)  | 2 Years         | - Driving decisions through predictive modeling  |
|               | <b>MSc</b> Agriculture Analytics (AA)   | 2 Years         | - Tech-driven solutions for sustainable agriculture  |
|               | <b>MDes</b> Intelligent User Experience Design (IUXD)                                   | 2 Years         | - Designing the future of interaction  |
| Undergraduate | <b>BTech</b> Information and Communication Technology (ICT)                             | 4 Years         | - Connecting Computing with Communication Technologies   |
|               | <b>BTech</b> (Honours) in ICT with minor in Computational Science                       | 4 Years         | - ICT with Modeling, Simulation and Computation  |
|               | <b>BTech</b> Mathematics and Computing (MnC)  | 4 Years         | - Computing with Depth, Logic and Applications   |
|               | <b>BTech</b> Electronics and VLSI Design (EVD)  | 4 Years         | - From the Concept to Silicon Innovations  |
|               | <b>BTech</b> Computer Science and Artificial Intelligence (CS-AI)                       | 4 Years         | - Built on a Proven Tech Legacy - Designed for the Age of AI   |
|               | <b>BTech</b> Electronics and Communication Engineering-Artificial Intelligence (ECE-AI) | 4 Years         | - A future-ready engineering program that fuses classical Electronics & Communication Engineering with the power of AI |

Since the beginning of this century, we witnessed the convergence of computing technology and communication technology. A new discipline emerged as information and communication technology (ICT). Dhirubhai Ambani University (DAU) since its inception is committed to impart knowledge in the domain of ICT which is one of the most sought after disciplines in the current era. Towards this goal, we introduced M.Tech. in ICT. Now PG programs such as M.Tech. require more in-depth study in a vertical. Hence, we have many specializations under the M.Tech. ICT Program. One such most popular specialization is Machine Learning.

Machine learning (ML) provides computers the ability to learn from data and experience, and to act without being explicitly programmed. It brings together Computer Science, Statistics and Mathematics to harness predictive power. Computer algorithms for ML work by detecting patterns from historical data and using them to predict future data and outcomes in applications of interest. It is at the heart of several important applications such as “Searching the Internet” with other popular uses being Social Networks, Recommendation systems, Stock Market analysis and Medical Diagnostics.

Data is the most important information available in the current digital era. Data is available in the form of image, video, text and speech. All together these are called multimedia data. The collection, storage and analysis of such data is the key to success in today’s world. At the same time, the development of computing devices makes data analysis more and more challenging and attractive. Towards this goal, researchers are working towards making the computing devices more capable of resolving real life problems in all domains of our society including business, industry and daily human life. Nowadays, the term artificial intelligence (AI) is present in every corner of our society. The discipline machine learning

(ML) is a subset of AI, and many times they come hand in hand, known as AIML.

The broad topics which are included in the curriculum of ML program are listed as image processing, computer vision, pattern recognition, information retrieval, natural language processing and speech processing with fundamentals in linear algebra, probability and random variables. Some more advanced topics which also included are deep neural networks, deep learning, adversarial machine learning and so on. It is also important that students get to know about hardware and software to handle large scale data. Towards this the curriculum includes lab courses. With such a complete curriculum which will be delivered by the well competent faculty, students are expected to join various research and development organizations as an employee after completion of the program. The program is well supported by placement process through a centralized placement cell of the institute. In the recent past, graduated students have also joined in higher studies such as PhD in many well recognized organizations in India and abroad. Many joined the research organizations for doing cutting edge research. The scenario of placement after completion of the program is very satisfactory.

The core research areas and on-going projects are in the areas of

- Bio-medical image segmentation including MRI, CT- scan data; Histopathological image enhancement and classification
- Object identification and tracking in dynamic environment; image segmentation with limited training data
- Person re-identification in surveillance video; anomaly detection in videos

# Program Overview

- Content based video retrieval; multimedia data content labelling; cross-modal remote sensing image retrieval; SAR image classification
- Forecasting time series data with the help of sophisticated machine learning algorithms; wave height prediction
- Analysing adversarial attacks on neural networks; targeted adversarial attack generation; attacks on network traffic classification
- Image dehazing; real world image denoising; single image super-resolution using deep learning; shadow detection and removal from images
- Text detection and automatic text translation; text summarization

In summary, the M.Tech. (ICT) with specialization in Machine Learning program will help students in several aspects including the following:

- Academic foundations in Machine learning and Deep Learning with underlying mathematics
- Gives industry-ready technical skills in modern Machine Learning frameworks
- Develop analytical and problem solving skills
- Strong programming expertise for solving real life problems

The important takeaways of the M.Tech. program in Machine Learning are as follows:

**Choice based curriculum:** Flexibility to register for courses of your choice along with other compulsory courses:

- To strengthen the foundation of ML through courses listed under Specialization Core and Specialization Electives

- To broaden knowledge through courses listed under General Electives

### Hands-on Exposure through Minor Project-I:

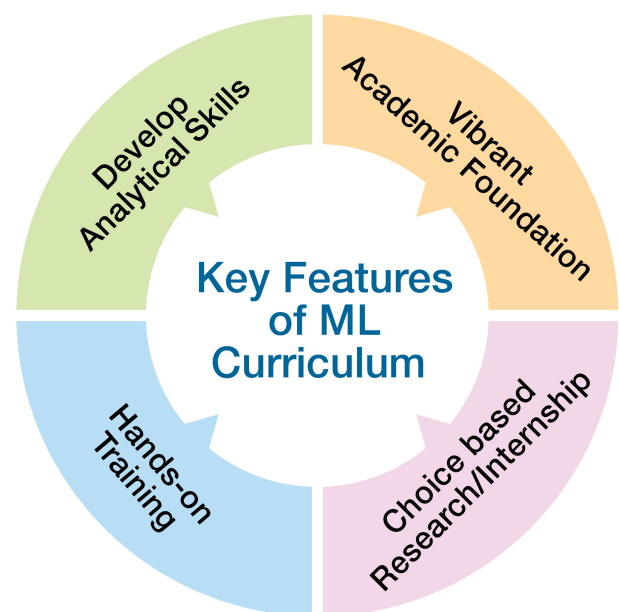
Equips students to be ready for contesting job positions in industry.

### Research Exposure through Major Project-I:

Allows students to get an exposure on how to handle a project through a systematic approach based on the principles of carrying out a formal research assignment.

### Flexibility in Semester-IV to prioritize Research Track through Major Project-II (for higher studies) over exclusive Industry Internship or vice versa:

Students may extend their research progress culminating into a thesis, or may choose to pursue industry internships depending upon their inclination.



# Program Structure

The key attractive features of **ML** curriculum at DAU Gandhinagar are as follows:

**To build a vibrant academic foundation:**

Courses in the PG curriculum enable the students to get a fine grip over the foundation courses of Machine Learning.

**Develop analytical skills:** The knowledge gained through coursework is further exemplified through extensive programming related to ML applications.

**Familiarization with state-of-the-art skill sets:**

Both Minor and Major projects are developed as part of the curriculum to enable students gain hands-on training of applying their theoretical knowledge to practice, thereby

- Increasing the scope of employability in industry
- Equipping students better to pursue higher studies

**Uniqueness of the program:**

- The fourth semester is made available for students to pursue internship in industry/ academia, or to extend their research work from the previous semesters
- Encourage students to enrich their curriculum knowledge with hands-on experience using Python including Keras, Tensorflow and PyTorch
- Foundation course on Mathematics made compulsory in Semester-I to empower and broaden the knowledge spectrum and fulfill the current information technology demands

## Program Structure and Objectives

### Coursework Specific Details:

The coursework subjects are categorized under 3 broad headings:

**Specialization Core:** Courses in this basket are designed to build a strong foundation on ML specific courses

**General Elective:** Courses in this basket are designed to broaden the knowledge spectrum in ML

**Specialization Elective:** Courses in this basket shall enable to delve into the deeper realms of the curriculum, and aid in specializing across different sub-domains

### Project Specific Details:

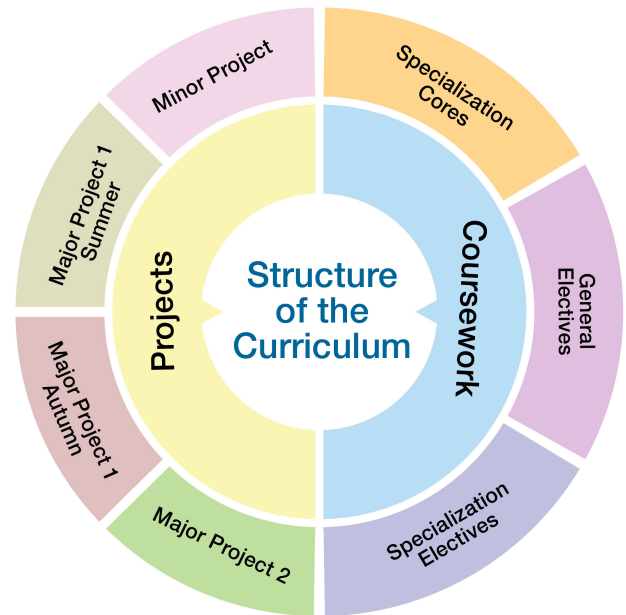
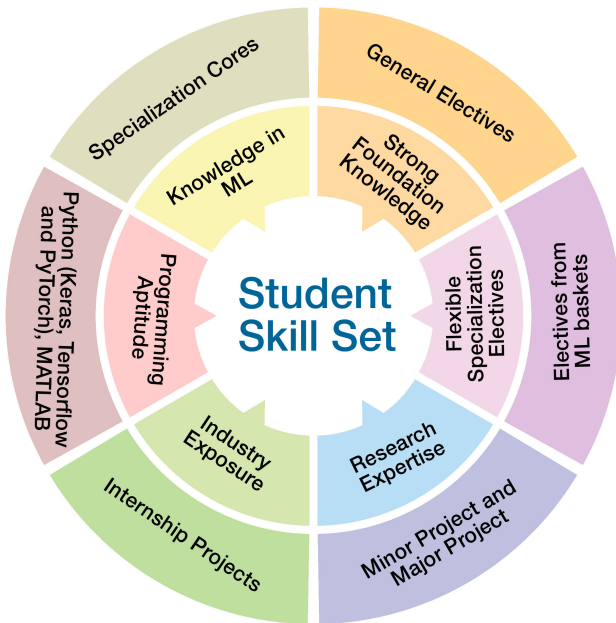
**Minor Project (Hands-on experiments):** ML coursework knowledge gathered in Semester-I are translated to hands-on experiments in minor project of Semester-II for enhancing the analytical capabilities of the students

**Major Project I (Summer) (Research exposure):** Comprises completion of literature survey, finalizing problem definition, and clearly defining the motivation, objective and scope of the project during the summer (after completion of the first year)

**Major Project I (Autumn):** Scheduled in Semester-III, it is preferably an extension of Major Project I (Summer)

**Major Project II (optional):** An extension of the project work carried out in previous semesters, culminating into a thesis

# Program Structure



## Autumn Semester (Semester-I)

| Course Name   | Credits (L-T-P-C) |
|---|-------------------|
| General Elective – Mathematics                                | 3-0-0-3           |
| Communication Skills and Technical Writing                    | 2-0-0-2           |
| Programming Lab   | 1-0-4-3           |
| <b>Specialization Core I:</b> Foundations of Machine Learning | 3-0-2-4           |
| General Elective – Technical                                  | 3-0-0-3           |
| *Choose from the general elective baskets                     |                   |

## Winter Semester (Semester-II)

| Course Name  | Credits (L-T-P-C) |
|--|-------------------|
| <b>Specialization Core II:</b> Advanced Machine Learning | 3-0-2-4           |
| <b>Specialization Elective I-II:</b> (Choose any two)    | 3-0-0/2-3/4       |
| Digital Image Processing                                 |                   |
| Information Retrieval                                    |                   |
| Recommendation System                                    |                   |
| Adversarial Machine Learning                             |                   |
| Deep Learning  |                   |
| Multimedia Security & Forensic                           |                   |
| Speech Technology  |                   |
| <b>Minor Project</b>                                     | 0-0-6-3           |

## Summer

| Course Name                     | Credits (L-T-P-C) |
|---------------------------------|-------------------|
| <b>Major Project I</b> (Summer) | 0-0-8-4           |

## Autumn Semester (Semester-III)

| Course Name   | Credits (L-T-P-C) |
|---|-------------------|
| <b>Specialization Elective III-IV:</b> (Choose any two) | 3-0-0/2-3/4       |
| Computer Vision   |                   |
| Natural Language Processing                             |                   |
| Reinforcement Learning                                  |                   |
| Computational Shape Modeling                            |                   |
| Wavelet Image Processing                                |                   |
| Time Series Forecasting                                 |                   |
| <b>Major Project I (Autumn)</b>                         | 0-0-12-6          |

## Winter Semester (Semester-IV)

| Course Name   | Credits (L-T-P-C) |
|---|-------------------|
| <b>Major Project II / Industrial Training Project</b> | 0-0-24-12         |

### General Electives – Mathematics in the areas of:

Probability & Statistics, Linear Algebra, Optimization, Graph Theory

### General Electives – Technical in the areas of:

Advanced Algorithm, Cloud computing, Artificial Intelligence, Human Computer Interaction

## All India Category: Total Seats: 24

GATE 18 & Non-GATE 6

## Gujarat Category: Total Seats: 8

### Eligibility Criteria

#### GATE Qualified candidates

A candidate with a qualifying degree in any one of the following:

- BE/BTech (CS/IT/EL, ECE, Electrical, Instrumentation)
- M.Sc. degree in Computer Science / Electronics / Mathematics / Statistics
- M.Sc. degree of DAU
- M.C.A. degree (3 year program)

The aggregate marks in the qualifying degree should not be less than 60% or equivalent as per the norm set by the degree awarding Institute/University.

#### Non-GATE candidates

- MSc (CS), MCA, BE/BTech (CS, IT, CSE, ECE, Instrumentation)

The aggregate marks in the qualifying degree should not be less than 65% or equivalent as per the norm set by the degree awarding Institute/University.

Candidates appearing in their final degree examination and expecting to complete it by July 2025 may also apply. However, their final admission will be subject to the condition that they obtain an aggregate of marks required based on mode of admission i.e. GATE/Non-GATE, or its equivalent as per the norms set by the degree granting Institute/University. All admitted candidates have to submit their degree certificates or proof of completion of degree, before 30 October 2025 failing which their admission is liable to cancellation.

**Age:** There is no age limit applicable to this program.

### Selection Process

Admission to All India category of M. Tech. (ICT) with specialization SS, ML, VLSI&ES and WCSP will admit candidates through two channels: GATE and NON-GATE.

#### Admission through GATE Channel:

Candidates who have a valid GATE score in the disciplines of Electronics & Communication Engineering (EC), Electrical Engineering (EE), Computer Science & Information Technology (CS), Instrumentation Engineering (IN) and Data Science & Artificial Intelligence (DA), only can apply.

The final merit list for admission will be prepared on the basis of valid GATE score only.

#### Specialization GATE Discipline

- Machine Learning (CS/EC/EE/DA)
- Software Systems (CS)
- VLSI and Embedded Systems (EC/EE/IN)
- Wireless Communication & Signal Processing (EC)

#### Admission through Non-GATE Channel:

The selection of candidates in Non-GATE category will be based on the entrance test to be conducted at selected centers all over the country. The tentative list of centers is: DAIICT Gandhinagar, Ahmedabad, Bhopal, Bengaluru, Chennai, Mumbai, Hyderabad, Patna, Jaipur, Kolkata, New Delhi, Pune, Rajkot, Surat, Udaipur, Bhavnagar, Bhilai, Bhubaneswar, Chandigarh, Guwahati, Jammu, Kochi, Lucknow, Pant Nagar, Porbandar, Ranchi and Vijayawada. The final merit list for admission will be prepared on the basis of the aggregate score in the entrance test.

The candidates can give up to two preferred specializations based on their eligibility conditions. Counseling for allotment of the specialization will be done online. Applicants are advised, from the date of announcement of first merit list, to check for e-mail communications from the Institute to learn about the admission status and steps they need to take to continue with the counseling process.

**Note:** The decision of the Competent Authorities of DAU regarding eligibility and selection of any candidate shall be final.

## How to Apply

Candidates submit an online application by clicking on the link given on the Institute website.

## Admission Offer

The short-listed candidates will be offered admission (confirmed/waitlisted) in order of their merit.

## Important Dates

Online application website opens  
**24<sup>th</sup> March 2026**

Last date for submission of online applications  
**25<sup>th</sup> May 2026**

Entrance test for Non-GATE Category  
**14<sup>th</sup> June 2026**

## Education Loan

The Institute will facilitate the students to avail educational loan from selected Banks. The bank officials will be present on campus at the time of registration of admitted students so as to enable the students to obtain details on procedures and terms and conditions of the loan. The students can also avail loan from banks of their choice and in either of the case; the Institute will extend support in completing the loan documentation process.

## Fees Structure\*

At the time of counselling an amount of Rs. 1,43,500 (Rs. 1,18,500 towards Tuition Fee for the First Semester and Rs. 25,000 towards Caution Deposit) is to be paid. The registration fee is payable at the time of registration and hostel rent on allotment of the hostel room.

|                  |   |
|------------------|---|
| Tuition fee      | Rs. 1,18,500 per Semester   |
| Registration Fee | Rs. 2,500 per Semester  |
| Caution Deposit  | Rs. 25,000 (Refundable at the end of the program)   |
| Hostel Rent      | Rs. 37,800 per semester   |
| Food             | On actuals. There are multiple food options available in the campus (The expense will be approximately Rs.5,500 pm) |

**\*This Fee Structure is submitted to the Appellate Committee of the State Government for consideration.**

**\*Subject to revision every Academic Year from 8 to 10%.**

## Financial Assistance

- **GATE Admitted Students:** Eligible for a monthly stipend of Rs. 15,000 in the form of a Teaching Assistantship during the first semester.
- **Non-GATE Admitted Students:** Eligible for a monthly stipend of Rs. 12,500 in the form of a Teaching Assistantship during the first semester.
- **Subsequent Semesters:** Continuation of the stipend depends on meeting the academic requirements.

For Inquiries

Email: [pg\\_admissions@dau.ac.in](mailto:pg_admissions@dau.ac.in) | Voice call: 079 69 08 08 08

For more details please visit: [www.dau.ac.in](http://www.dau.ac.in)