



# Gujarat Technological University

(NAAC Accredited A+ Grade)

School of Engineering and Technology, Ahmedabad

organizes

**The Global Initiative on Academic Network (GIAN),  
Ministry of Education, Govt. of India**

**Approved Course (2564017)**

## **Artificial Intelligence and Machine Learning Algorithms: A Comprehensive Study**

**15-19 September 2025**

### **Overview**

In today's context, artificial intelligence (AI), is the biggest driver of technological change, to inform decision-making, which creates a need for frameworks to implement AI with integrity. AI system outcomes, that have been questioned for fairness and accountability, are recognized by policy makers around the world as a key challenge for contemporary societies. AI refers to machines learning from data to make predictions or automate decisions. The intelligence behind AI comes from algorithms applied to large datasets. Machine learning (ML) is about designing algorithms that allow a computer to learn from data, rather than following pre-programmed rules. Increasing data availability and accessibility along with growing computer processing power has supported the critical capabilities of AI systems.

### **Objectives:**

The primary objectives of the course are as follows:

- To provide attendees with a comprehensive understanding of the field of AI and ML.
- To empower attendees to conduct applied research in the field of AI & ML.
- To enhance attendees' higher-order thinking skills by leading a discussion about critically scrutinizing outcomes of AI applications, countering flaws in algorithm design, and strategies to counter the flaws for improved algorithm design.
- Additionally, attendees will be equipped with knowledge of AI applications in business and will develop the ability to participate with confidence in informed, strategic decision-making to augment business performance.
- Moreover, the course will discuss world wise efforts toward AI legislation to enable educated civic engagement around AI legislative efforts in India.

Course participants will learn through lectures and hands-on experiments. Also, case studies and assignments will be shared to stimulate research motivation of participants.

<b>Duration:</b>	<b>15-19, September, 2025</b>
<b>You Should Attend If...</b>	<ul style="list-style-type: none"> <li>• Faculty members, Engineers, Scientists, and Researchers from academic, industrial and government organizations including R&amp;D laboratories from India or abroad.</li> <li>• Students of BE/BTech/MSc/ME/MTech/PhD/Other in Computer Engineering/Information Technology/Electronics &amp; Communication and its equivalent from academic and technical institutions/universities from India or abroad.</li> </ul> <p>▪ <b>The number of participants for the course is limited to fifty.</b></p>
<b>Registration Fees</b>	<p>The participation fees for taking the course are as follows:</p> <ul style="list-style-type: none"> <li>• <b>Participants from Abroad: US \$250</b></li> <li>• <b>Industry/ Research Organizations: INR 5,000/-</b></li> <li>• <b>Faculty members: INR 2,000/-</b></li> <li>• <b>Students: INR 1,000 (Other than Gujarat Technological University)</b> <b>INR: Nil (For Gujarat Technological University)</b></li> </ul> <p>The above fee includes all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, free internet facility, breakfast and lunch. The participants will be provided with accommodation on a payment basis either at hostels or a guest house as per availability or make their arrangements at nearby hotels.</p> <p><b>Note:</b> <u>There is no central registration on the GIAN portal (<a href="http://gian.iith.ac.in">gian.iith.ac.in</a>); registration will be managed directly by the University.</u></p>
<b>Registration Link</b>	<a href="https://forms.gle/YYfKTBCQ9VohJMDc8">https://forms.gle/YYfKTBCQ9VohJMDc8</a>
<b>Payment Link</b>	<a href="https://gtu.ac.in/page.aspx?p=Payment">https://gtu.ac.in/page.aspx?p=Payment</a>
<b>Payment Process</b>	<p>Steps for Payment of Fees</p> <ul style="list-style-type: none"> <li>• State of Corporate/Institution: Gujarat</li> <li>• Type of Corporate/Institution: Educational Institutions</li> <li>• Educational Institutions Name: GUJARAT TECHNOLOGICAL UNIVERSITY</li> <li>• Select Payment Category: Registration Fees for Conference.</li> <li>• Fill out your personal details. Conference Name as “GIAN Course: 2564017 and pay the registration fees.</li> <li>• At the end, collect the Payment Ref. No. starting with DU”</li> <li>• Upload your payment receipt in the registration form.</li> </ul>
<b>Venue</b>	Gujarat Technological University – School of Engineering and Technology Academic Block, GTU Campus, Near Visat Cross Road, Chandkheda, Ahmedabad, Gujarat.

## The Faculty



**Prof. Anu A Gokhale** serves as Professor and chair of the Department of Computer Systems at Saint Augustine's University, Raleigh, North Carolina, US. Formerly, she served as a Distinguished Professor and Coordinator of the Computer Systems Technology program at Illinois State University. She is honoured with four

prestigious Fulbright awards: Specialist in Data Analytics, Egypt, 2022; Specialist in Cybersecurity, India, 2017; Distinguished Chair in STEM+C, Brazil, 2016; and Scholar in Computer Engineering, India, 2003. She was a Visiting Professor in the College of Business at Shandong University in China in spring 2017 and a Faculty Fellow in Israel in summer 2017. She leads research teams in the U.S., and internationally in India, China, and Brazil. Her achievements encompass extensively cited refereed publications; groundbreaking externally funded research supported by a continuous 20-year stream of grants from state and federal agencies including the National Science Foundation. Originally from India, she a bachelor's from University of Mumbai, India; master's in physics–electronics from The College of William & Mary, and a doctorate from Iowa State University, USA. She consults for healthcare facilities to increase access and productivity while responsibly leveraging Artificial Intelligence (AI) systems. She has delivered multiple workshops on hybrid teaching & learning, STEM public policy, algorithm design, data analytics, and AI applications across a range of sectors.



**Prof. Gautam D. Makwana** serves as Associate Professor and heading computer engineering department at GTU – School of Engineering and Technology, Ahmedabad. He completed his Ph.D. in Electronics & Communication from Dhirubhai

Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar, M.E. (Telecommunication) from Indian Institute of Science (IISc), Bangaluru, and B.E. (Electronics) from Sardar Vallabhbhai National Institute of Technology (SVNIT, Surat) in 1998. He received sponsored research project on “Investigation, analysis of multiband antennas for 5G enabled devices for IoT application” of Rs. 20.77 lacs from GUJCOST, GoG, Gandhinagar. Under his credits 04 design patents are granted and 03 patents are published. He published more than 35 research articles in peer-reviewed international journals and presented 25 research papers at renowned international conferences as authors and His area of research is AI, IoT, 5G/6G technology, machine learning, Deep Learning, Wireless Communication, RF/Microwave and Antenna Engineering.

### Chief Patron

**Dr. Rajul K. Gajjar**  
Hon'ble Vice Chancellor,  
GTU, Ahmedabad

### Patron

**Dr. K. N. Kher**  
Registrar, GTU, Ahmedabad

### Convenor

**Prof. Jignesh A. Amin,**  
Professor, GTU-SET  
**Dr. R. A. Thakker,**  
Director, RDC, GTU

### Course Coordinator

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### Course Co-Coordinator

**Prof. Anu A. Gokhale**  
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