



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी  
Indian Institute of Technology Guwahati



# IITG Master of Technology in Robotics & Artificial Intelligence

ONLINE DEGREES

ADMISSION | AUGUST 2026

## Robotics and Artificial Intelligence: A Critical Need

Robotics and Artificial Intelligence are transforming industries across manufacturing, healthcare, agriculture, transportation, defence and smart infrastructure. This hybrid MTech degree builds strong fundamentals on robotics along with a practical understanding of intelligent systems.

## Your Pathway to Expertise: IIT Guwahati's Hybrid MTech Degree Program

This advanced degree in Robotics and Artificial Intelligence is offered in Hybrid Mode by the School of Interdisciplinary Studies and Sustainability at IIT Guwahati. It is designed to transform you into a specialist capable of leading the next wave of technological evolution.

## The Program is Designed for Learners Who Want to:

- Build expertise in AI-driven robotics systems.
- Transition into advance technical roles.
- Work on real-world interdisciplinary problems.
- Pursue research or industry innovation.

## Designed for Impact: Bridging Academia & Industry

The curriculum seamlessly integrates mechanical design and control theory with cutting-edge AI. The curriculum covers:

- Robot Kinematics, Dynamics, and Control.
- Machine Learning & Deep Learning.
- Computer Vision & Perception.

## Flexible & Accessible: Learn Anywhere, Anytime

Designed for high-performing professionals and students, our hybrid format strikes the perfect balance between online flexibility and academic rigor. You can attend live sessions or access recorded content at your convenience, testing complex algorithms in advanced virtual labs while maintaining your career momentum.



# IITG MTech R&AI KEY DATES

Application Opens:  
01 May 2026

Application Closes:  
15 July 2026

Program Starts:  
10 August 2026

# Indian Institute of Technology Guwahati

IIT Guwahati is globally recognized for its exceptional teaching, research standards and commitment to technological excellence. By providing state-of-the-art infrastructure within a vibrant campus ecosystem, the institute offers specialized undergraduate, postgraduate, and doctoral programs designed to foster innovation and leadership. Through an emphasis on interdisciplinary learning and direct industry exposure, students are empowered to master Robotics and AI, enabling them to excel in high-tech fields and contribute to meaningful global solutions.

## IITG MTech R&AI OVERVIEW

## Master of Technology

### Degree in Hybrid Mode

Online Classes, On-Campus Labs, On-Campus Final Exams.

### GATE not required

Selection based on a written test and/or interview.

### Flexible Curriculum

Suitable for working professionals.

### Trimester-Based System

Each trimester consists of 12 weeks of guided instruction.

### Program Duration

Minimum 2 years, extendable up to 5 years.

### Multi-Exit Options

- Early exit possible by earning a PG Certificate, or a PG Diploma, or an MSc (Engineering) Degree.
- Re-joining also possible after a gap of at least one year.

### Total Credits

The MTech degree requires a total of 108 credits, comprising 60 credits of course work and 48 credits of project work through three Capstone Projects.

### Eligibility

- 4-years or 5-years Bachelor's Degree (or equivalent) in Electrical, Electronics, Computer Science, Mechanical, Production, Civil, IT, Design, or a Master's Degree in any discipline of science, engineering, technology, commerce, medicine or business. Candidates must have studied mathematics until Class 12th or equivalent.
- A minimum of 60% marks or 6.0 CPI is required in class XII (or equivalent) and the undergraduate and/or postgraduate degree.



# The Seven Wonders that happen to you with MTech R&AI

- 1** You will become an IITian.
- 2** You will get an official IITG email ID and official IITG ID Card.
- 3** Access to the IITG resources.
- 4** Access to on-campus fests at IITG.
- 5** Access to online IITG Student groups/clubs/fests.
- 6** Receive an Mtech Degree in a Convocation Ceremony at IITG.
- 7** Become lifetime alumnus of IIT Guwahati after completion of MTech Degree.



# MTech IN ROBOTICS & ARTIFICIAL INTELLIGENCE

Offered by  
School of Interdisciplinary Studies and Sustainability  
Indian Institute of Technology Guwahati

## Program Overview

The MTech in Robotics & AI is a specialized program designed to bridge multiple engineering disciplines for development in sectors like agriculture, defense, manufacturing, healthcare, transportation, smart infrastructure, etc. It integrates key concepts of robotics, AI, and automation to build advanced technical expertise. It is designed for both fresh graduates and working professionals seeking careers in emerging technologies.

- **Program Duration:** The minimum duration is 2 years, with the flexibility to extend up to a maximum of 5 years allowing you to balance your studies with your professional commitments.
- **Flexible Exit & Re-entry:** Benefit from multiple early exit routes and the option to re-enter after a gap of at least one year (see details on page 9-10).

## Who Should Apply ?

- Fresh Graduates seeking to build a foundation in Robotics & AI.
- Working Professionals aiming to master cutting-edge technologies to apply in their own careers.
- Parallel Degree Seekers wishing to pursue two degrees simultaneously.

## Program Structure

The MTech program follows a trimester-based system, ensuring a structured and comprehensive learning experience.

- **Terms per Year:** 3 terms (trimesters) per year. Each term includes a minimum of 12 weeks of instruction.
- **Trimesters for Completion:** A minimum of 6 trimesters are required to complete the program.
  - Trimester 1:** August to November/December
  - Trimester 2:** January to April/May
  - Trimester 3:** May to July/August
- **Credit Requirements:** A total of 108 credits are required to complete the MTech program (see detailed course and credit information on pages 9-10).

## Assessments

- **Online continuous assessments throughout the term, comprising:** Practice Assignments, Graded Assignments, Quizzes, and Term Projects. One Summative assessment at the end of trimester at IIT Guwahati.
- **Instructional Mode:** Each week includes 1.5 hours of teaching through recorded videos and 1.5 hours of online live sessions for doubt clearing, example solving etc. (evenings or weekends).
- **Campus Immersion:** Possible for up to 4 weeks total to gain hands-on training and meet instructors and other experts.

## Capstone Projects

- **Industry-Driven Projects**  
Work on real-world problems in collaboration with industry experts after completing core courses.
- **High Credit Value**  
Mandatory project component carrying 48 credits, essential for MTech Degree completion.
- **Flexible & Hybrid Mode**  
Complete projects online during trimesters or breaks, with optional campus visits for faculty interaction.

## Admission

- No GATE score is required for admission to this program.
- Candidates will be selected based on a written test and/or interview.
- Performance in Class X, XII, and qualifying degrees will also be taken into consideration.
- Admissions typically take place twice per year, in July and December.



# MTech in Robotics & Artificial Intelligence

## COURSE CURRICULUM STRUCTURE

### First Year

TRIMESTER I		
COURSE CODE	COURSE	CREDITS
RA 501	Fundamentals of Robotics	6
RA 502	Artificial Intelligence	6
RA 505	Robotic Sensing and Vision	6
		<b>18</b>

TRIMESTER II		
COURSE CODE	COURSE	CREDITS
RA 506	Machine Learning	6
RA	Elective I	6
RA	Elective II	6
		<b>18</b>

TRIMESTER III		
COURSE CODE	COURSE	CREDITS
RA	Elective III	6
RA	Elective IV	6
RA	Elective V	6
		<b>18</b>

### Second Year

TRIMESTER IV		
COURSE CODE	COURSE	CREDITS
RA	Elective VI	6
RA	Capstone Project Phase I	12
		<b>18</b>

TRIMESTER V		
COURSE CODE	COURSE	CREDITS
RA	Capstone Project Phase II	18

TRIMESTER VI		
COURSE CODE	COURSE	CREDITS
RA	Capstone Project Phase III	18

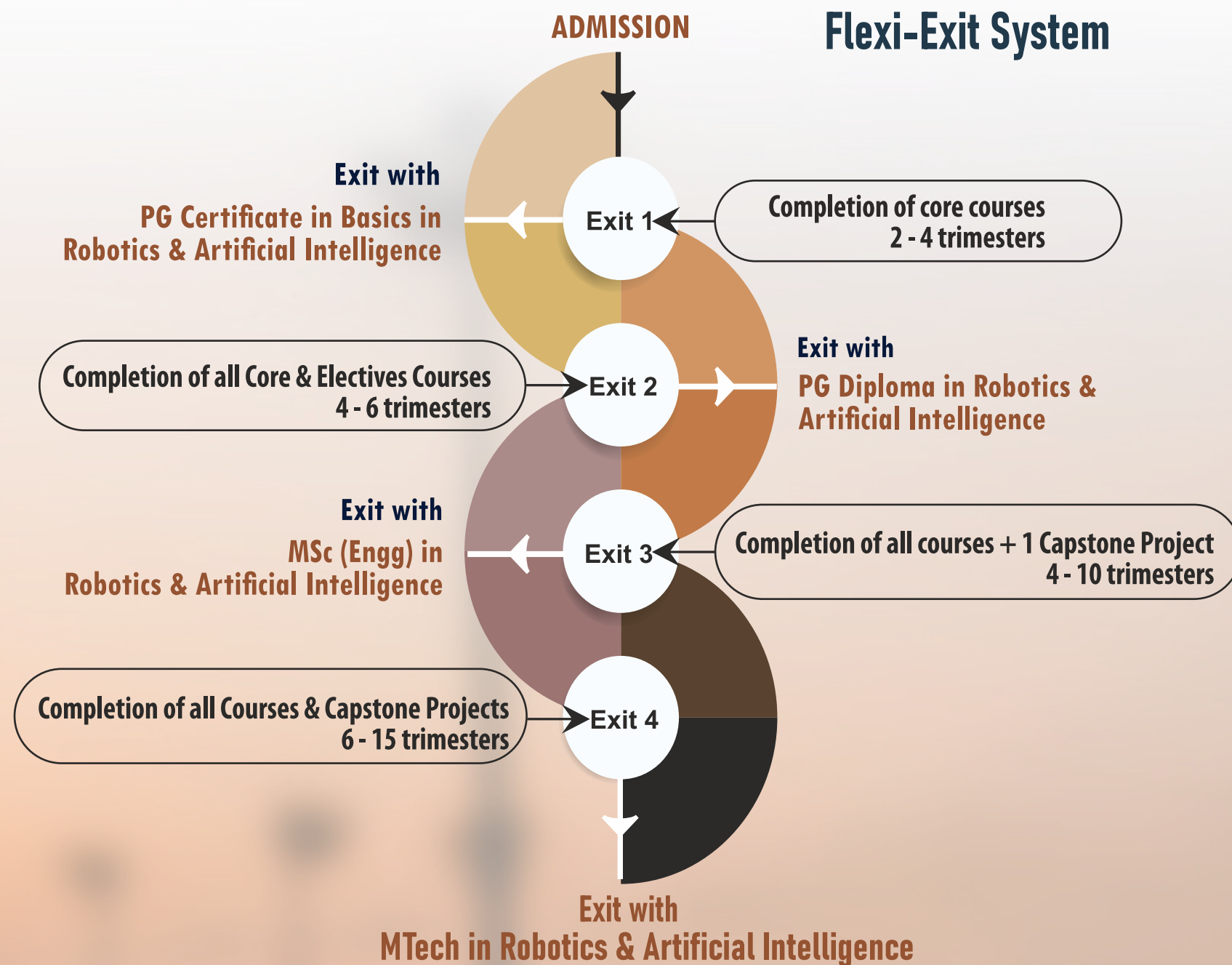
### Elective Courses

Deep Learning	Intelligent Cyber Physical Systems
CAD/CAM	From Semiconductor Materials to Chips
Cyber Security	Optimization Techniques for AI/ML
Mobile Robotics	Natural Language Processing
Additive Manufacturing	Geo Special Data Structure

### Fees

<b>Application Fee</b>	<b>INR 500</b>	You pay to apply to the program.
<b>Qualifier Test/Interview Fee</b>	<b>INR 2000</b>	You pay to undertake the Qualifier Test/Interview for admission.
<b>Admission Fee</b>	<b>INR 50000</b>	You pay to confirm acceptance of admission into the program.
<b>Per Course Tuition Fee</b>	<b>INR 50000</b>	You pay fees based on the number of courses you choose to study.
<b>Capstone Project Fee</b>	<b>INR 70000</b> <b>INR 90000</b>	You pay to register for Capstone Project Phase I. You pay to register for each of Capstone Project Phases II & III.
<b>Total Course Fee</b>	<b>INR 800000</b>	You pay (in parts) for Admission + 10 Courses + 3 Projects.
<b>Continuation Fee</b>	<b>INR 5000</b>	You pay if you do not register for any credits in a particular trimester.

### Flexi-Exit System



# MTech<sup>IN</sup>

ROBOTICS &  
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## Alumni Benefits & Networking Opportunities

Celebrate your achievement by receiving your degree during the convocation ceremony at the campus.

As a graduate, you will join an exclusive global community of IIT Guwahati alumni consisting of successful engineers, scientists, entrepreneurs, industry leaders, and academics, while enjoying a host of benefits.

You will expand your network through global student chapters, gain access to exclusive job boards to explore new opportunities and advance your career, and participate in events to broaden your knowledge and garner industry insights.

You can interact under the aegis of SAIL (Student Alumni Interaction Linkage) and get guidance on navigating diverse career paths through mentorship program and networking events.

## Career Support

Career opportunities are facilitated for the graduating students by the Online Internship and Placement Cell of IIT Guwahati.

A special career readiness program comprising curated courses, interactive workshops with industry veterans, and exclusive networking opportunities has been designed to equip you with the essential skills and knowledge needed to accelerate your career in today's competitive job market.

You will also get access to free mentorship sessions with more than 16,000 mentors worldwide.

## How to Apply

To apply, you need to complete the application form, pay the application fee and submit along with required documents. This takes less than 10 minutes.

Please refer to the dates & timelines for the current cohort that you are applying to.

For all Applications & Admission Queries, please write to: [adm\\_mtech\\_rai@iitg.ac.in](mailto:adm_mtech_rai@iitg.ac.in)

## Eligibility Criteria

- 4-years or 5-years Bachelor's Degree (or equivalent) in Electrical, Electronics, Computer Science, Mechanical, Production, Civil, IT, Design, or a Master's Degree in any discipline of science, engineering, technology, commerce, medicine or business. Candidates must have studied mathematics until Class 12th or equivalent.
- A minimum of 60% marks or 6.0 CPI is required in class XII (or equivalent) and the undergraduate and/or postgraduate degree.

## Computer Requirements

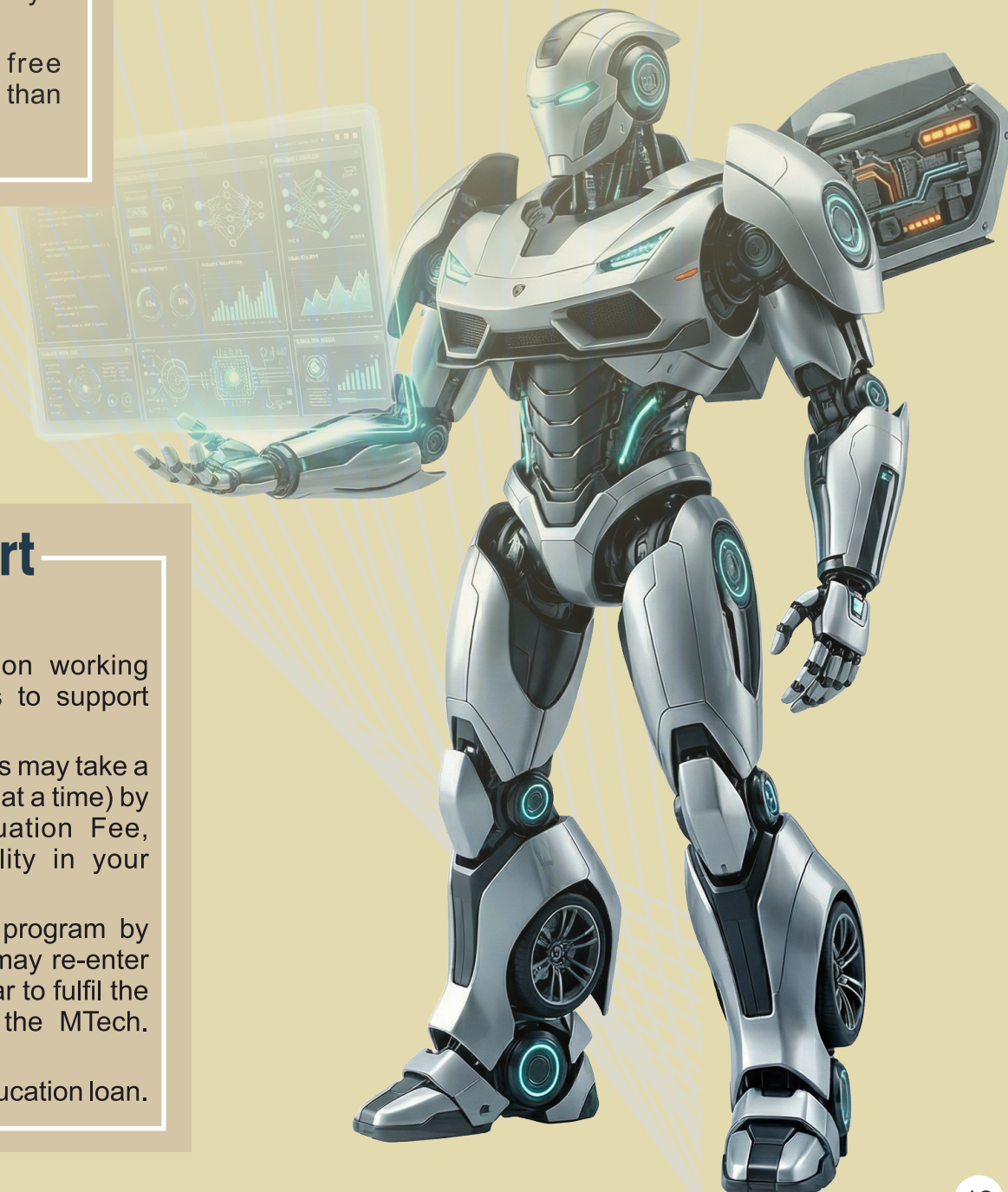
To get the most out of this degree, you'll need:

- A reliable Internet connection.
- A computer/laptop with a webcam and with at least 16 GB of memory/RAM.
- Assessments must be taken on a PC/Laptop with an active webcam.

## Flexibility & Support

We understand the demands on working professionals and offer features to support your academic journey.

- **Long Leave Option:** Students may take a trimester leave (one trimester at a time) by paying a Program Continuation Fee, allowing for greater flexibility in your studies.
- **Multi-Entry:** If you exit the program by opting for an early exit, you may re-enter after a gap of at least one year to fulfil the remaining requirements for the MTech. degree.
- Support letters for availing Education loan.



For further information on the program,  
please visit our website [ [www.iitg.ac.in/oes/odp/mtech/rai](http://www.iitg.ac.in/oes/odp/mtech/rai) ]

Contact:

**Head of The Section**

**Online Education and Skilling**

**Indian Institute of Technology Guwahati**

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