



भारतीय प्रौद्योगिकी संस्थान गुवाहाटी
Indian Institute of Technology Guwahati

DEPARTMENT OF
CIVIL ENGINEERING

IITG

Master of Technology in Flood & Water Resources Management

ONLINE DEGREES

Admission | August 2025

**Flood & Water Resources Management:
A Critical Need**

Water scarcity, climate change, and sustainable development are pressing global issues. This program equips you to address these challenges through effective water resource management.

**Your Pathway to Expertise: IIT
Guwahati's Online Degree Programme**

This comprehensive degree in Flood and Water Resources Management is offered in Hybrid Mode by the Department of Civil Engineering at IIT Guwahati.

**Designed for Impact: Bridging
Academia and Industry**

The curriculum integrates theoretical knowledge with practical applications, providing advanced, specialized training relevant to current industry needs.

**Flexible & Accessible: Learn Anywhere,
Anytime**

The hybrid format offers unparalleled flexibility, allowing you to pursue advanced education without interrupting your current career or commitments. Ideal for working professionals.

**Tailored for Professionals: Enhance
Your Career**

Whether you work in government, industry, or other water resource organizations, this program provides customized content to enhance your expertise and meet your specific professional needs.

**Empowering Solutions: Master Cutting-
Edge Strategies**

Gain insights into the latest technologies, innovative methodologies, and best practices in flood and water resources management, enabling you to tackle real-world challenges and contribute to sustainable solutions.



IITG
MTech FWRM
KEY DATES

Application Opens:
07 July 2025

Application Closes:
31 July 2025

Programme Starts:
18 August 2025

Indian Institute of Technology Guwahati

IIT Guwahati is renowned for its exceptional education and research standards. With state-of-the-art infrastructure and a lively campus atmosphere, IIT Guwahati offers a wide array of undergraduate, postgraduate, and doctoral programmes that provides students with a well-rounded education that fosters innovation, leadership, and entrepreneurship. Through an emphasis on interdisciplinary learning, cutting-edge research, and industry exposure, students are empowered to excel in their chosen fields and make meaningful contributions to society.

IITG MTech FWRM OVERVIEW

Master of Technology

Degree in Hybrid Mode

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

GATE not required

Admission based on interview/test

Flexible Curriculum

Suitable for the working professionals

Semester-Based System

12 weeks of instruction in each semester

Flexible 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

110 (10 Courses + 2 Capstone Projects)

Eligibility

4-year Bachelor's Degree (or Equivalent) in Civil/Agricultural Engineering or Allied Disciplines with at least 60% marks or 6.0/10 CPI

Minimum Experience Required

1 year of professional experience in the water resources sector

The Seven Wonders that happen to you with MTech FWRM

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



M.Tech. in FLOOD & WATER RESOURCES MANAGEMENT

Offered by
**Department of Civil Engineering (CE),
Indian Institute of Technology Guwahati**

Who Should Apply?

This program is ideal for

- Eligible Individuals seeking to enhance their knowledge in Flood and Water Resources Engineering.
- Working Professionals looking to upgrade their skills and qualifications without disrupting their current careers.



Admission

- No GATE score is required for admission to this program.
- Candidates will be selected based on a comprehensive interview/written test conducted by the Department.
- Admissions typically take place in July.

Program Overview

The M.Tech. FWRM is a dynamic program designed to equip you with the advanced knowledge and skills needed to address critical global challenges in water resource management. This program offers a unique blend of flexibility and academic rigor.

- **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 the program after a gap (see details on pages 9-10)

Programme Structure

The M.Tech. programme follows a Semester-based system, ensuring a structured and comprehensive learning experience.

- **Terms per Year:** 2 terms (semesters) per year. Each term includes a minimum of 12 weeks of instruction.
- **Semesters for Completion:** A minimum of 4 semesters are required to complete the programme.
 - Semester 1:** August to November
 - Semester 2:** January to April
 - Summer Term:** May to July (if required for special cases, like clearing backlog courses)
- **Credit Requirements:** A minimum of 110 credits are required to complete the entire M.Tech. programme (see detailed course and credit information on pages 9 - 10).



Capstone Project

- Solve real-world problems in the projects.
- Capstone projects can begin after the completion of minimum 6 courses identified by the department.
- Projects carry a total of 48 credits and are mandatory for earning the MTech degree.
- Students may work on projects alongside regular semester courses after completing 6 courses.
- Projects will be conducted in hybrid mode. Student will be required to regularly visit IIT Guwahati while working on capstone project.
- Projects may be carried out in collaboration with other institutions and industries.



Assessments

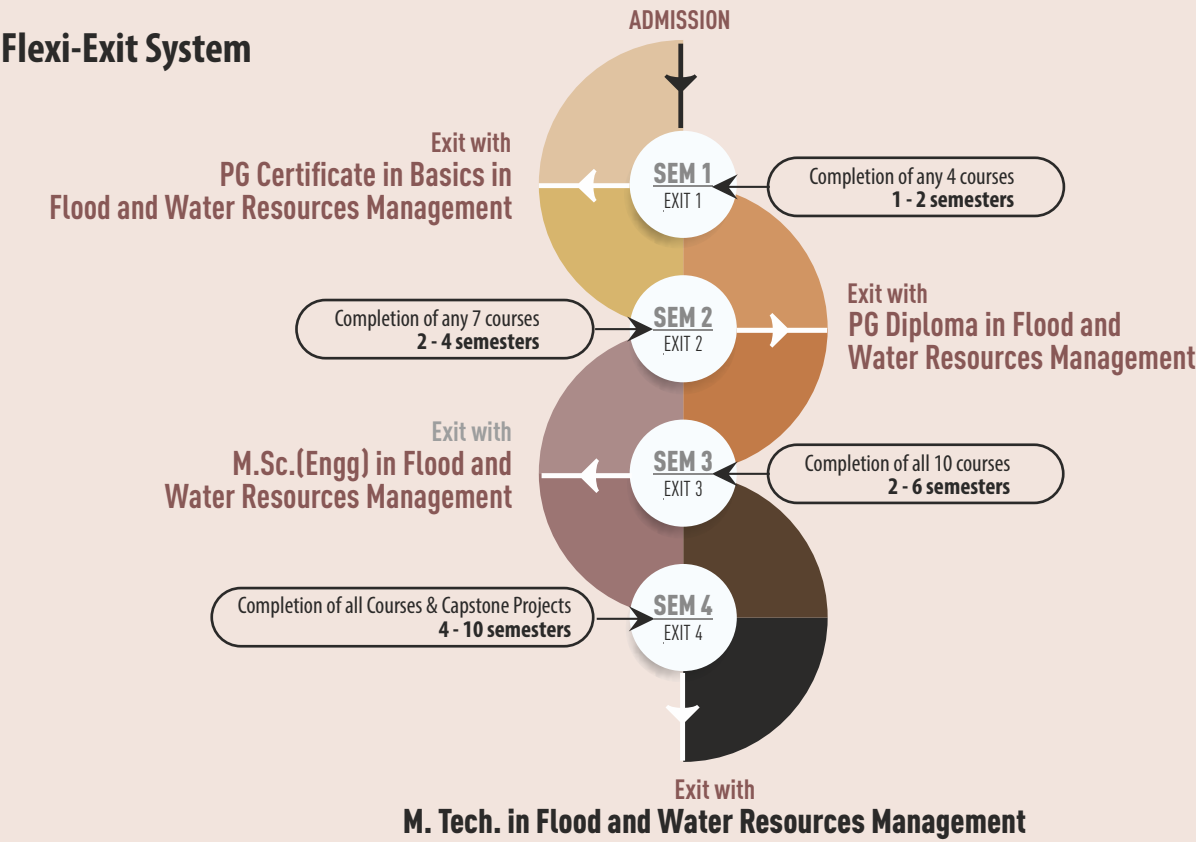
- Online continuous assessments throughout the semester, comprising: Practice Assignments, Graded Assignments, Quizzes, and Term Projects.
- Final examination at IIT Guwahati for each course at the end of each semester.

M.Tech. in
FLOOD & WATER RESOURCES MANAGEMENT

Curriculum Structure

FIRST YEAR					
Semester I			Semester II		
Course code	Course	Credits	Course code	Course	Credits
CEO 501	Introduction to numerical and optimization methods	6	CEO 506	Stochastic Hydrology	6
CEO 502	Advanced Hydraulic Engineering	8	CEO 507	River Engineering and Structures	6
CEO 503	Applied Hydrology	6	CEO 508	Soft Computing Applications in Integrated Water Resource Management	6
CEO 504	Sediment Dynamics and River Morphodynamics	6	CEO 509	Flood Risk Assessment and Management	6
CEO 505	Water Resources Systems Analysis, Planning & Management	6	CEO 510	Integrated Water Management & Policy	6
		32			30

SECOND YEAR					
Semester III			Semester IV		
Course code	Course	Credits	Course code	Course	Credits
CEO 598	Capstone Project Phase-I	24	CEO 599	Capstone Project Phase-II	24



Teaching from Industrial Experts

The program will include collaborations with other institutes and industries to offer students a globally relevant curriculum and practical, real-world insights.

Credit Transfer

The student may take up to 12 credits from NPTEL MOOC courses identified by the department.

Campus Visit

Candidates will be required to visit the IIT Guwahati campus to attend lab courses, take the final examination, and participate in project-related activities.

Fees

Application Fee	INR 500	You pay to apply to the programme
Qualifier Test/Interview Fee	INR 2000	You pay to undertake the Qualifier Test/Interview for admission
Admission Fee	INR 50000	You pay to confirm acceptance of admission into the programme
Per Course Tuition Fee	INR 50000	You pay fees based on the number of courses you choose to study
Per Capstone Project Fee	INR 125000	You pay to register for the Capstone Projects
Total Course Fee	INR 800000	You pay (in parts) for Admission+10 Courses+2 Projects
Continuation Fee	INR 5000	You pay if you do not register for any credits in a particular semester

All fees are non-refundable.

You will have the flexibility to select courses based on your workload.

Additional fee may be incurred in case of repetition of courses.

You have the option to learn at your own pace and can also register for fewer courses than prescribed in a given semester.

If you plan to not register for any course in a semester, you need to maintain your active enrollment by paying a Program Continuation Fee of Rs. 5,000 per semester.

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 programmes 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_fwrm@iitg.ac.in

Eligibility Criteria

- 4-year Bachelor's Degree (or Equivalent) in Civil/Agricultural Engineering or Allied Disciplines with at least 60% marks or 6.0/10 CPI
- At least one year of professional experience in the water resources sector after completing your bachelor's 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 8 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 semester leave (one semester 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 M.Tech. degree.

For further information on the programme,
please visit our website (www.iitg.ac.in/oes/odp/mtech/fwrm)
or contact us at:

Assistant Registrar

Online Education and Skilling Section

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