



भारतीय प्रौद्योगिकी  
संस्थान जम्मू  
INDIAN INSTITUTE OF  
TECHNOLOGY JAMMU

विद्यार्थनं सर्वधनं प्रधानम्

# M.TECH. IN GEOTECHNICAL ENGINEERING

By Dept. of Civil Engineering,  
IIT Jammu

*Building Resilient Infrastructure  
for Challenging Terrains*



## What is this program about ?

Advanced training in:



Soil & Rock  
Mechanics



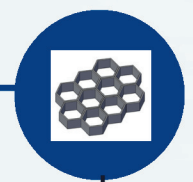
Foundation  
Engineering



Underground  
Construction



Geo-hazard  
Mitigation



Geosynthetic  
Engineering

*Blending theory + lab + field + simulation*

High demand for geotechnical experts in  
complex terrains

## Why choose this program ?

- Designed for Himalayan infrastructure challenges
- Hands-on exposure to geo-hazards, tunnelling, cold weather geotechnics
- Industry mentorship from domain experts
- Internship-driven career readiness

## Specialised Learning

1

Landslide & Slope  
Stabilization



2

Tunnel & Underground  
Infrastructure



3

Transportation Geotechnics



4

Sustainable Ground Improvement



5

Cold Weather Geotechnics



## Core Areas:



Advanced Soil Mechanics



Rock Mechanics



Ground Improvement & Geosynthetics



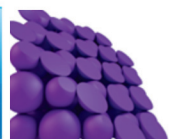
Soil Dynamics



Site Investigation & Foundation design



## Software Tools:



PFC™



UDEC™



SIMULIA  
ABAQUS



GeoStudio



## Research Collaborations with:



UGA  
Université  
Grenoble Alpes

Intake: **15 students per year**

### Career Pathways

- Core engineering firms
- Infrastructure consultancies
- Research & PhD opportunities

Know more:

Visit: [https://iitjammu.ac.in/civil\\_engineering/program-list/geotechnical-engineering-home](https://iitjammu.ac.in/civil_engineering/program-list/geotechnical-engineering-home)

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