

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन नदी विकास एवं गंगा संरक्षण विभाग  
केन्द्रीय जल आयोग  
प्रशिक्षण निदेशालय



Government of India  
Ministry of Jal Shakti  
Dept. of Water Resources, RD & GR  
Central Water Commission  
Training Directorate

### Circular

Subject: Sponsoring officers for admission to M. Tech. programmes in "**Dam Safety and Rehabilitation**" of ICED, IIT Roorkee for the academic session 2025-26—reg

It is proposed to nominate CWC officials for the course mentioned under the subject, to be held at IIT Roorkee. Accordingly, it is requested that any interested/suitable eligible CWC official may apply well in advance through proper channel in the prescribed application format with the approval of the Concerned Member/Chief Engineer (HRM) in respect of HRM Unit/Chief Engineer (NWA) in respect of NWA.

Further, the applications in desired format may be submitted to concerned Establishment Section of CWC for verification of eligibility criteria with intimation to this office. After verification, the same may be forwarded by concerned establishment to this office latest by **10.05.2025** for taking further necessary action in the matter.

The detailed Information Brochure for admission to M. Tech program in "**Dam Safety and Rehabilitation**" during the Academic Session— 2025-2026 is enclosed herewith and admission related information is also available on link:(<https://www.iitr.ac.in/Academics/Admission.html>). The applicant must have minimum qualification for admission to aforesaid program.

Digitally Signed by Sachin  
Gupta  
Date: 11-04-2025 15:58:56  
Deputy Director (Training)

Encl: As above

Copy to:-

1. All Chief Engineers, Central Water Commission (HQ & Field Offices).
2. Director, (D&R/WP&P/RM)-Coordination, CWC, New Delhi.
3. Secretary/Director (TC)/Director (Admn.), CWC, New Delhi.
4. M. L. Sharma, Head, International Centre of Excellence for Dams, Professor, Department of Earthquake Engineering, Indian Institute of Technology Roorkee, Roorkee - 247667, Uttarakhand, INDIA. Tel (O): +91 1332 285654; Mobile: +91 9412075062  
Email: head@iced.iitr.ac.in, m.sharma@eq.iitr.ac.in,  
<https://iced.iitr.ac.in/>
5. CWC Website.

नई लाइब्रेरी बिल्डिंग,  
राम कृष्ण पुरम, नई दिल्ली-110066  
दूरभाष: 011-29583531,  
जल संरक्षण-सुरक्षित भविष्य



New Library Building  
R.K. Puram, New Delhi - 110066  
Tel: 011-29583531  
Conserve Water-Save Life

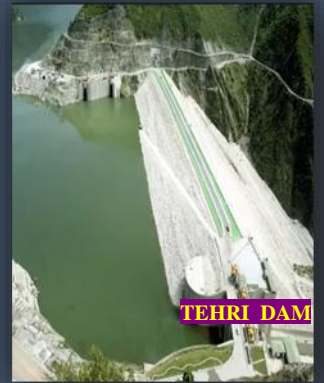
# ADMISSION BROCHURE 2025-26

M.TECH.  
DAM SAFETY AND  
REHABILITATION

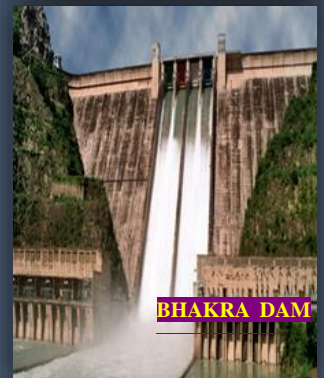


INDIAN INSTITUTE OF TECHNOLOGY ROORKEE  
ROORKEE- 247 667 (INDIA)

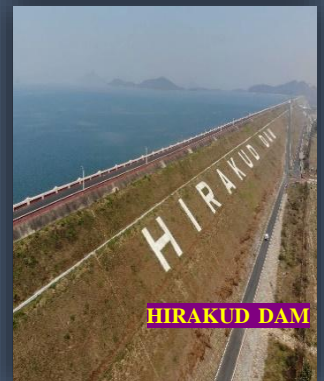
## INDIA'S ICONIC DAMS



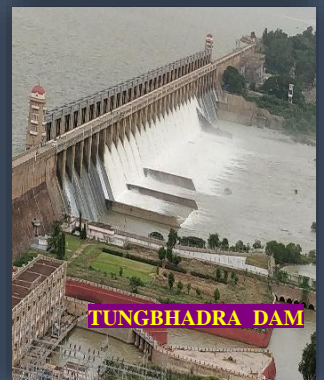
TEHRI DAM



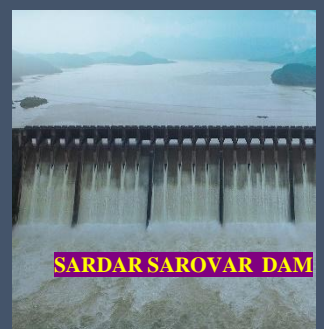
BHAKRA DAM



HIRAKUD DAM



TUNGBHADRA DAM



SARDAR SAROVAR DAM



## Background of the Course

India has 6281 large dams in operation, and about 143 are under construction. There are more than 90,000 small and medium dams in the country, in addition to large dams. These dams have been built to ensure water safety, which is essential for food and energy security. In addition to this, there are numerous dams all over the world. IIT Roorkee has played a significant role in designing and executing these dams since its inception in 1847.

The safety of these dams is of utmost importance. Many of the existing dams are very old and need rehabilitation. Keeping these concerns in view, the Ministry of Water Resources, River Development & Ganga Rejuvenation, through the Central Water Commission, initiated the DRIP project in April 2012 with the World Bank's assistance. IIT Roorkee is the academic partner in this Programme. To cover more dams in the project, phase II and phase III of the DRIP programme have been approved by the Ministry of Jal Shakti, Government of India, on October 29, 2020. The dam safety bill 2021 was enacted on December 14, 2021, and it makes it mandatory for dam owners to ensure the safety of their dams.

Considering the importance of dam safety and rehabilitation, IIT Roorkee started a new M Tech. Programme in dam safety and rehabilitation with effect from session 2021–22. The fifth batch of the programme will be starting with effect from July 14, 2025. The Programme is jointly run under the aegis of **the International Centre of Excellence for Dams by faculty members drawn from the Departments of Hydrology, Civil Engineering, Earthquake Engineering, Water Resources Development and Management, and Architecture and Planning.**

## About the Institute

Indian Institute of Technology Roorkee has its roots in the Roorkee College, established in 1847 as the first engineering college in India. It was rechristened as Thomason College of Civil Engineering in 1854 after its mentor, James Thomason. After 100 years of distinguished services, the college was elevated to the University of Roorkee on November 25, 1949, as the first Engineering University of independent India. On September 21, 2001, the University was converted into an IIT by the Government of India. IIT Roorkee is one of the biggest technical institutions in the country having the largest number of academic units. It has 23 academic departments covering engineering, architecture and planning, humanities & social sciences, and management programmes, 1 school, 9 academic centres, 7 academic service centres and 7 supporting units. IIT Roorkee offers courses like 12 undergraduate courses in engineering and architecture, 3 dual degree programmes and about 57 postgraduate courses in



engineering, architecture, sciences, computer applications and business administration, and research programmes at the doctoral level.

IIT Roorkee has a highly qualified and motivated faculty of about 500+ members engaged in research, consultancy, and teaching. The faculty members offer their expertise through consultancy services to private/public sector and government agencies. Currently, the Institute has around 10300+ students, with approximately 50% as undergraduate students, 20% as postgraduate students and 30% as research scholars.

Several academic and research centres of the Institute are engaged in interdisciplinary research, and many collaborative programmes exist with institutions in India and abroad. Central Library has more than 4,00,000 volumes of books and periodicals. Institute Computer Centre, Education Technology Cell with a full-fledged television studio, Continuing Education Centre, and Institute Instrumentation Centre with highly sophisticated instruments also serve the Institute community's needs as central facilities.

IIT Roorkee is entirely residential, with well-designed hostels (Bhawans) both for boys and girls, and family accommodation for married students, a sprawling sports ground, a swimming pool, a boat club, and a host of students' clubs with facilities for different games, including tennis, squash, and billiards etc. The Institute offers various extra-curricular activities like NCC, rowing, mountaineering, and trekking, which provide excellent opportunities for self-development. The campus also houses a CBSE-affiliated senior secondary school.

## Eligibility for Admission

The Programme is open for sponsored officers from India and abroad with two years of relevant experience in Dam safety, rehabilitation, and other associated areas.

### Eligibility for Sponsored Candidates\*

1. Graduation/ Post Graduation degree in Civil/ Mechanical/ Earthquake/ Hydrology/ Water Resources Engineering/ equivalent,
2. Post-graduation degree in Physics/ Mathematics/ Geology/ Geophysics; Environmental Engineering/ equivalent,
3. Any other degree acceptable to the State Implementing agencies for regular appointment in the dam safety wings.

\*The candidates applying for admission must have at least 60% aggregate marks or 6.00 CGPA on a 10-point scale at qualifying Graduation/Post-graduation degree.

For Indian candidates belonging to SC/ST category, the qualifying percentage is 55% aggregate marks or 5.5 CGPA on a 10–point scale. SC/ST category candidates must submit the requisite certificate along with the application from a competent authority.

## How to Apply

### Important Dates

Particulars	Date
Online application portal starts	April 01, 2025
Application portal closed	June 16, 2025 (5:00 p.m.)
Interview and/or written test, if any	June 17 – June 24, 2025
Online Admission Registration	July 12–13, 2025
Admission registration cum documents verification in person	July 15, 2025
Commencement of classes	July 17, 2025

### In-Service Engineers/ Officers

1. In-service engineers/ officers should send their application through their departments at the following address:

**Prof. M. L. Sharma,**

Head, International Centre of Excellence for Dams (ICED),

IIT Roorkee, Roorkee –247667,

[head@iced.iitr.ac.in](mailto:head@iced.iitr.ac.in)

Mobile: +91–9997906253 (Mr Rajendra Sudan); *(Preferably leave WhatsApp message/ SMS before calling)*

Office: +91–1332–285654 / 285659 *(Preferable number between 9 am to 6 pm on working days)*

In case of any difficulty, please call Mr. Rahul, Jr. Superintendent: +91–9780320827 ([rahul.mih@iitr.ac.in](mailto:rahul.mih@iitr.ac.in)) *(Preferably leave a WhatsApp message/ SMS before calling).*

2. The advanced applications may be sent to the [head@iced.iitr.ac.in](mailto:head@iced.iitr.ac.in) to check eligibility for admission. This should be done as soon as possible and, at the latest, by **June 16, 2025**.
3. It is mandatory to apply on the IIT Roorkee PG admission portal, failing which consideration at the ICED level will not be possible.  
<https://admission.iitr.ac.in/#/account/login?returnUrl=%2Fhome>

4. The candidates applying for admission must have at least 60% aggregate marks or a 6.00 CGPA on a 10–point scale at the qualifying degree level. For Indian candidates belonging to the SC/ST category, the qualifying percentage is 55% aggregate marks or 5.5 CGPA on a 10–point scale. SC/ST category candidates must submit the requisite certificate along with the application from a competent authority.
5. The officers should not bring their families in the beginning. The family should be brought only after getting the family accommodation by IIT Roorkee. Otherwise, the officers should make their own arrangements for family accommodation outside the IIT R campus.
6. International students can apply through ITEC/ICCSR/ASEAN or other MEA portals through Indian Embassies in their respective countries. Such students can also apply through the International Relations Portal of IIT Roorkee: <https://ir.iitr.ac.in/HowToApply>.

### Number of Seats: 30

22 for sponsored officers and 10 for GATE–qualified fresh graduates. 5 seats are reserved for foreign in–service engineers engaged in dam safety activities.

### Faculty

The Programme is jointly delivered by the IIT Roorkee faculty members drawn from the Departments of Hydrology, Civil Engineering, Earthquake Engineering, Earth Sciences, WRDM, Architecture and Planning, and the National and International experts under the aegis of the **International Centre of Excellence for Dams, IIT Roorkee**.

### Fees & Estimated Annual Expenses

#### International Candidates

International candidates sponsored by various agencies/organisations must pay the Institute fee at the following rates:

1. Candidates from SAARC countries — US\$ 2000 (per annum)
2. Candidates from other countries — US\$ 4000 (per annum)
3. Admission fee – US\$ 500 (one time at the time of admission)

The International officers should ensure their funding source at their end and send the application only through the sponsoring agency.

#### Indian Sponsored / Govt Sponsored International Candidates

1. Please provide certificates as per Annexure I and II.



2. The total fee to be paid to the Institute is of the order of INR 200,0000. The Institute fee is paid semester-wise. The notification for the fee for the session 2024-25 is given in Annexure III. The notification for the session 2025-26 shall be notified soon. The estimates of the fee are tentative and shall be finalised soon. It is expected that the fee structure shall remain the same. However, the possibility of change cannot be ruled out.
3. The Institute fee must be paid in four instalments at the beginning of each semester by the candidates selected and admitted to the course. Provisions may be made to either pay this amount in advance to the officers being deputed or reimburse the amounts to them on receipt of the Institute fee receipt. The fee should be paid by the officers to keep track of the payments made.
4. Other expenses like field Trips, Books, Lecture notes, etc., shall be as per actuals.
5. The sponsoring organisations shall also bear the expenses related to the sponsored officers' salary, travel expenses related to the course, and dearness allowance for the days of absence from the headquarters of the sponsoring organisations as per the Government of India rules. Such costs will be directly payable to the candidates, and the officers shall be treated on duty during the Programme.
6. It is highly recommended that the officers be treated on duty while attending the Programme, as most sponsoring organisations do.

### List of Courses:

Course	Semester
<b>Programme Core Course</b>	
1. Programme Core Course (PCC-I)	First
2. Programme Core Course (PCC-II)	First
3. Programme Elective Course (PEC-I)	First
4. Programme Core Course (PCC-III)	First
5. Programme Core Course (PCC-IV)	First
6. Social Science Course (SSC)	First
<b>Programme Elective Course</b>	
1. Programme Core Course (PCC-V)	Second
2. Programme Elective Course (PEC-II)	Second
3. Programme Elective Course (PEC-III)	Second
4. Programme Elective Course (PEC-IV)	Second
5. Programme Elective Course (PEC-V)	Second
6. Science, Technology, and Advanced Research Tools	Second
7. Seminar	Second
8. Internship and Social Activity	Third
9. Thesis Stage-I (to be continued next semester)	Third
10. Thesis Stage-II (contd. From the third semester)	Fourth

## List of Programme Core Courses:

1. Hydrologic Safety Evaluation of dams
2. Reservoir Sedimentation and Silt Management
3. Seepage through Dams
4. Rock Mechanics and Dam Foundation Engineering
5. Seismic Hazard Assessment of Dams

## List of Programme Electives Courses

1. Assessing and Managing Risks Associated with Dams
2. Disaster Management and EAPs for dams
3. Dam Safety Surveillance, Instrumentation and Monitoring
4. Environmental Monitoring and Impact Assessment of Dams
5. Earthquake Geotechnical Engineering
6. Geospatial Technology for Monitoring of Dams
7. Hydraulic Design of Spillways and Energy Dissipators
8. Contract and Financial Management
9. Seismic Safety Evaluation of Dams
10. Planning & Design of Hydro-Mechanical Components in Dams
11. Ground Improvement and Geo-synthetics.
12. Sustainable Tourism around Dams
13. Analysis of Dam Instrumentation Data– Star course– open for all
14. Stakeholders Management of Dams and Large Infrastructure Projects – Social Sciences Course – open for all

**Note:** The list of programme compulsory and elective courses is under revision.

## APPLICATION FORM

### M. TECH. PROGRAMME ON DAM SAFETY AND REHABILITATION INTERNATIONAL CENTRE OF EXCELLENCE FOR DAMS

**5<sup>th</sup> Course: July 14, 2025, to July 13, 2027**

*(IMPORTANT: Applicant may please ensure that he/she satisfies the necessary eligibility criteria)*

An advance copy of the completed application and academic transcripts (in English) be directly sent to **Prof. M L Sharma, Head, International Centre of Excellence for Dams (ICED), Indian Institute of Technology Roorkee, Roorkee- 247667, India** (Email IDs: [head@iced.iitr.ac.in](mailto:head@iced.iitr.ac.in); [m.sharma@eq.iitr.ac.in](mailto:m.sharma@eq.iitr.ac.in); [nkgoel@hy.iitr.ac.in](mailto:nkgoel@hy.iitr.ac.in)) on or before **June 16, 2025**.

**It is mandatory to apply on the IIT Roorkee PG admission portal, failing which consideration at the ICED level will not be possible.**

1. Full Name: .....  
in block letters (underline surname)
2. Father's Name .....
3. Mother's Name .....
4. Gender (Male/ Female) .....
5. Nationality: .....  
(Any change in nationality may be indicated with the period)
6. Date and Place of birth: .....
7. Parentage (your country of origin): .....
7. Passport details (for foreign candidates only)  
Passport number: ..... Place of Issue: .....  
Date of Issue: ..... Date Validity: .....
9. Present address (correspondence address):  
House No. /Flat No and street:  
City/Town with Pin Code:  
State and Country:  
Mobile no with country code:  
Email:
10. Emergency address:  
House No. /Flat No and street:  
City/Town with Pin Code:  
State and Country:  
Mobile No with Country Code:  
Email:

Photograph

11. Official Address:  
House No. /Flat No and street:  
City/Town with Pin Code:  
State and Country:  
Mobile No with Country Code:  
Email:
12. Dates and place of the previous stay in India *(for International Applicants Only)*:  
.....
13. Occupation: .....
14. Expected duration of stay: .....
15. Places to be visited: .....
16. Name of Indian Mission where visa will be applied *(for International Applicants only)*  
Name of City and Country:  
Phone No.:  
Email:
17. Source of funding: .....
18. Whether accompanied by spouse/ dependent. If so. give particulars:  
Name:  
Passport number: Place of Issue:  
Date of Issue: Date Validity:  
(Family to be brought only after ensuring the permission and accommodation availability)
19. Qualifying Degree: .....
20. Mathematics at Graduation Level (Yes/No): .....
21. Qualifications (highest Degree first): *(Attach photocopies of mark sheets & certificates)*

College/Institute Name & address	Degree or Examination passed	Year of Passing	Division with % of marks secured	Minimum duration of the Degree	Main Subject(s)

- Note: 1. The percentage in the qualifying should necessarily be given.
2. A certificate of equivalence should be given if the name of the Degree is not the same as the essential Qualifications mentioned.
3. Duration of the qualifying degree after 10+2 education after preschool should be necessarily mentioned.

22. Professional/ work experience (Starting from the recent one):

Name of Department/ Organisation	Position held	Period		Details of work done
		From	To	

23. Knowledge of the English language (read/write/speak): .....  
(Certificate for the level of proficiency attained be submitted)

24. Appeared in GRE or equivalent Examination (if yes, give details): .....

Place: .....

Date: .....

Signature of Applicant

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## Annexure-I

### **Undertaking by the applicants for submission of the required certificates towards admission to M. Tech./ M.Arch. /MURP Programmes 2025-26**

I.....S/o/D/o  
..... R/o (address)  
..... want to apply to  
pursue my study in M. Tech./ M. Arch./MURP programme at IIT Roorkee.

I hereby undertake that I will submit the following required documents:

- 1.....
- 2.....
- 3.....
- 4.....
- .....

at the time of registration. In case, I fail to submit the required documents within the due date or found ineligible or information/certificate found incorrect/ false at any stage, the Institute reserves the right to cancel my admission offer and registration.

Signature of the Applicant: .....

Name of Applicant: .....

Email: .....

Mobile:



**SPONSORSHIP CUM NO OBJECTION CERTIFICATE**

**(Required from sponsored candidates)**

The undersigned is pleased to permit Mr./Ms. .... who is working in this organization for the last.....years (from ..... to ..... ) and is presently holding the rank/position of ..... for pursuing the M. Tech. in Dam Safety and Rehabilitation at IIT Roorkee.

His/her conduct and character has been good.

The Institution/Organization would relieve her/him immediately of joining the above Programme if selected for admission. If admitted, the candidate will be permitted to be present at the Institute as required by the M Tech's academic schedule for a period of.... Years. He/ she will continue to remain in service of this organization for the duration of the course.

The Institution/Organization also agrees to pay the contingent/all expenses stipulated by the Institute, through the officer. This is further certified that the sponsorship for admission will not be withdrawn midway till completion of the course. Our enterprise is registered in a stock exchange/had an annual turnover of above Rs. 5.0 crores in the past two years (for candidates working in a Firm/ Company/ Industry) .....(Yes/No/ Not Applicable).

Signature of Head of the Institution/Organization with seal, Name and Designation

Place: .....

Name: .....

Date: .....

Designation: .....

## Fee Structure

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

STRUCTURE OF FEES / CHARGES (SESSION 2024-25)

M.Tech./M.Arch./M.U.R.P./M.Des.

Particulars	M.Tech./M.Arch./M.U.R.P./M.Des. 1st Year		M.Tech./M.Arch./M.U.R.P./M.Des. 2nd Year	
	Autumn Semester	Spring Semester	Autumn Semester	Spring Semester
<b>I. Semester Fees (To be paid every Semester)</b>				
<b>1. Institute Fees</b>				
(a) Tuition Fees – Gen/OBC and Q.I.P./IITR-Staff	5000	5000	5000	5000
(b) Tuition Fees – Sponsored candidates/In-service	25000	25000	25000	25000
(c) Tuition Fees – SC/ST/PD (Not chargeable)	0	0	0	0
<b>2. Semester charges</b>				
(a) Student Establishment & Maintenance (Non refundable)	7000	7000	7000	7000
(b) Medical Insurance	750	750	750	750
(c) Career Development Cell (CDC) [Including IITR-Staff]	300	300	300	300
(d) Miscellaneous	2500	2500	2500	2500
<b>Total (a+b+c+d)</b>	<b>10550</b>	<b>10550</b>	<b>10550</b>	<b>10550</b>
<b>3. Hostel Charges (Per Semester) #</b>				
(a) Accommodation	6000	6000	6000	6000
(b) Electricity*	3000	3000	3000	3000
<b>Total (a+b)</b>	<b>9000</b>	<b>9000</b>	<b>9000</b>	<b>9000</b>
<b>II. One time payments at the Time of Admission</b>	<b>6000</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>III. Deposits (Refundable)</b>				
(a) Institute Caution Deposit	1000	0	0	0
(b) Library Deposit	2000	0	0	0
<b>Total (a+b)</b>	<b>3000</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>IV. Mess Charges #</b>				
(a) Mess Advance towards Food Charges**	24300	24300	24300	24300
(b) One Time Mess Admission Fee (Non refundable)	4000	0	0	0
(c) Mess Security (Refundable)	2000	0	0	0
<b>Total (a+b+c)</b>	<b>30300</b>	<b>24300</b>	<b>24300</b>	<b>24300</b>
<b>Grand Total for Gen/OBC/Q.I.P. (Under Dining &amp; Residing Cate.)</b>	<b>63850</b>	<b>48850</b>	<b>48850</b>	<b>48850</b>
<b>Grand Total for Sponsored candidates In-service (Under Dining &amp; Residing Cate.)</b>	<b>83850</b>	<b>68850</b>	<b>68850</b>	<b>68850</b>
<b>Grand Total for SC/ST/PD (Under Dining &amp; Residing Cate.)</b>	<b>58850</b>	<b>43850</b>	<b>43850</b>	<b>43850</b>
<b>Grand Total for Gen/OBC/Q.I.P. (Under Non-Dining &amp; Non-Residing Cate.)</b>	<b>24550</b>	<b>15550</b>	<b>15550</b>	<b>15550</b>
<b>Grand Total for Sponsored candidates/In-service (Under Non-Dining &amp; Non-Residing Cate.)</b>	<b>44550</b>	<b>35550</b>	<b>35550</b>	<b>35550</b>
<b>Grand Total for SC/ST/PD (Under Non-Dining &amp; Non-Residing Cate.)</b>	<b>19550</b>	<b>10550</b>	<b>10550</b>	<b>10550</b>
<b>Grand Total for IITR-Staff</b>	<b>5300</b>	<b>5300</b>	<b>5300</b>	<b>5300</b>

**NOTE:**

- \* This is the minimum charge for Bachelor Hostel. For married accommodation charges will be as per actual.
- \*\* Mess Advance towards food charges is subject to adjustment as per actual.
- # These charges will not be applicable on the students to be admitted under NDNR(Non-Dining & Non-Residing) category.
- Candidates admitted under EWS have to pay fee according to their respective categories i.e. General/OBC/SC/ST/PD.
- In case of conversion from Dining & Residing to Non-dining & Non-residing after the fee submission than the accommodation and electricity charge will not be refundable.

  
 सहायक कुलसचिव शैक्षणिक मामले (करिकुलम)  
 Assistant Registrar Acad. Affairs (Curriculum)  
 भारतीय प्रौद्योगिकी संस्थान रुड़की  
 Indian Institute of Technology Roorkee  
 रुड़की / Roorkee-247 667