



# PG PHD ADMISSION PORTAL

T15: ROHIT, TANISH, SHRUTI AND SUSHIL

## AIM:

To create and implement a platform for PG, PhD admissions at IIT Ropar which will smoothen the admission process and make it easy for both the administration by providing them with filtered and selected students' data, and the student by giving them a better UI.

## TECHNOLOGICAL STACK USED:

1. React JS, Tailwind CSS and the Material UI for the Frontend (client side).
2. Node JS for the Backend (or server side).
3. PSQL for the Database
4. GCP for file storage

## WHAT HAVE WE DONE ?

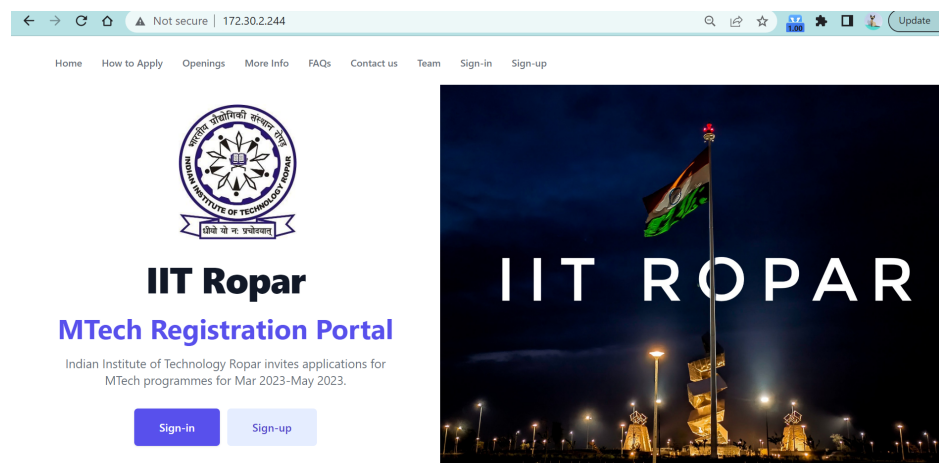
1. Many node modules weren't working which were replaced like the jwt token and the nodemailer.
2. Created a 'how to apply' page.
3. Created multiple template data for the stakeholders (Admin, Faculty, Student) to test the website thoroughly.
4. Found and resolved the following errors:
  - a. The documents uploaded can now be reviewed by faculty. Earlier, we were being redirected to the error page but it was resolved by using Google cloud bucket for uploading the documents.
  - b. Admin/Faculty can upload results and the excel sheet dynamically keeps on updating, which was not the case earlier. Thereafter, the status of applications also gets updated. The error was resolved by matching the format of the uploaded file with what the portal expects.

- c. Multiple logins in the same window were corrected by maintaining cookies to temporarily store the user information and not allowing any other user to login until that cookie exists.
  - d. The input columns of Aadhar number, Phone numbers, PIN codes etc. were accepting any input and not in their required respective formats. Regex patterns were added for the required formats.
  - e. Many frontend errors were resolved such as redundant scroll bars, redundant staff role, updated sign out icon etc.
5. Deployed portal on Institute server (moreover, Frontend on Vercel and Backend on Render) .

## USER INTERFACE SCREENSHOTS:

### 1. GENERAL HOME PAGE:

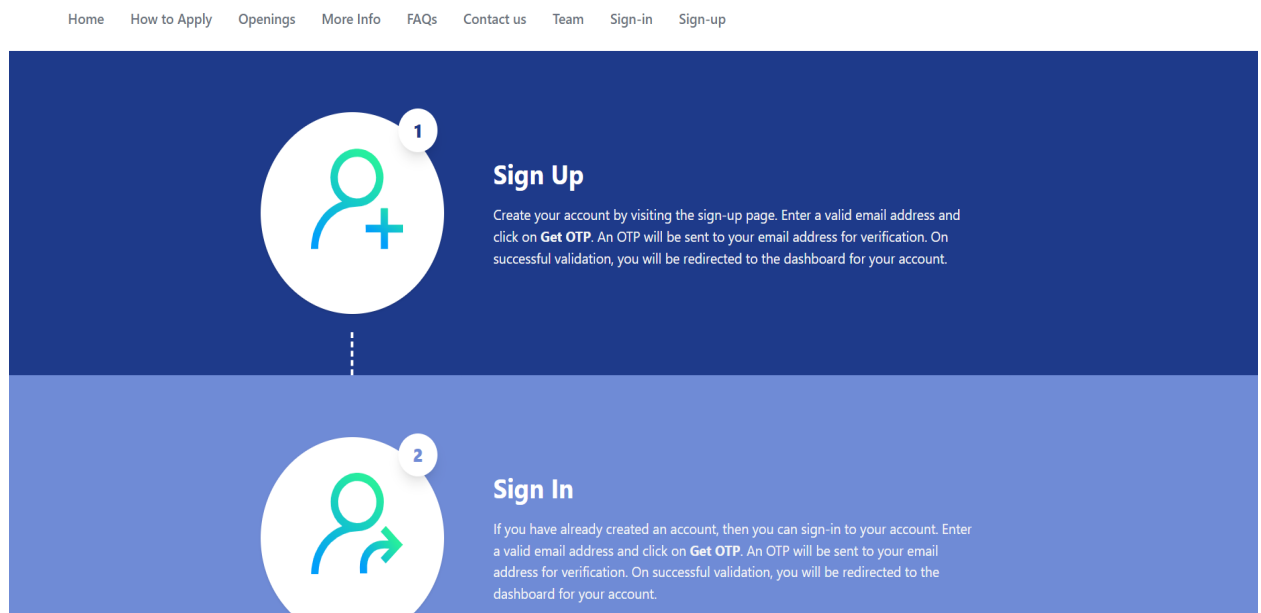
- A user can see the quick navigation options like **Home, How to apply, Openings, More Info, FAQs, Contact Us, Team, Signin and Signup** on the upper side of the home page.
- Moreover, **Signin** and **Signup** options are also made available in the center since they will be often used.



- **Footer:** a user friendly and interactive footer containing links to all the relevant information.



- **How to apply section:** Information on how to use the portal to apply for an opening.



- **Openings section:** These are openings in which the student can apply. **Number of seats, GATE Code, the eligibility required by the student and the status of opening (Accepting/Closed)** is what a user can see in this section without signing in.

[Home](#)
[How to Apply](#)
[Openings](#)
[More Info](#)
[FAQs](#)
[Contact us](#)
[Team](#)
[Sign-in](#)
[Sign-up](#)

CS

Computer Science and Engineering

Seats

GATE Paper Codes

Eligibility

Status

10

CS

Everyone

Currently accepting applications

^

- **More Info section:** to help the user gather information about **selection criteria, fellowships/scholarships, reservations and final authority (MTech Admission Committee).**

Home   How to Apply   Openings   More Info   FAQs   Contact us   Team   Sign-in   Sign-up

### Selection

Selection will be based on the GATE performance for the year 2021/2022/2023. Please note that the candidates are required to register on "Common Offer and Acceptance Portal" (COAP) 2021(<https://coap.iitd.ac.in/>) before applying online to the Institute. You are required to look at COAP Website for all round of the offers.

### Financial Assistance

GATE fellowship at the rate of Rs. 12400/- p.m. (tenable for a maximum period of 24 months) will be awarded to Indian Nationals doing the MTech Programmes, subject to Institute rules. They are required to assist the department for 8 hours of work per week related to academic activities of the department such as laboratory demonstration, tutorials, evaluation of assignments, test papers, seminars, research projects etc.

### Reservation of Seats

Seats are reserved for Indian National under the categories, SC / ST / OBC(Non-creamy layer) / EWS(Economically Weaker Section) and PWD(Persons with Disability) according to the Government of India rules.

### Final Authority

In all matters relating to the admission to MTech programme, the decision of the MTech Admission Committee is final.

- **FAQs section:** We have made it easy for users by adding the FAQs section to help him/her get some doubts solved which we think will most probably be asked by him/her.

Home How to Apply Openings More Info FAQs Contact us Team Sign-in Sign-up

#### How MS(R) program is different than an MTech program?

The basic idea of two programs are different. MTech program is oriented towards masters in engineering while MS(R) program is oriented towards research. Due to the basic approach of two programs, we see a couple of differences:

- (a) MTech program has more course work than MS(R). A typical course work of MTech will spread over minimum two semesters.
- (b) In MS(R) student spend most of the time in doing research. Due to nature of research, a student may take more than two years to graduate from MS(R) program.
- (c) MS(R) is evaluated based on his/her research output (typically in form of publications). While for MTech, final project could be implementation or research, therefore, publications is not mandatory.

#### What are the career options after MS(R) or what are the job opportunities after MS(R)

#### As MS(R) is new in IIT Ropar, will it have good placements?

#### Is it actually better to do MS(R) or MTech

#### What are the research areas in the field of MS?

- **Contact us section:** In case of any assistance required by the user.

Home How to Apply Openings More Info FAQs Contact us Team Sign-in Sign-up

## SEND US A MESSAGE

First Name\*

Last Name

Email\*

Phone\*

Message\*

SEND MESSAGE

## CONTACT DETAILS

Indian Institute of Technology Ropar,  
Rupnagar, Punjab - 140001, India

### Mail Us

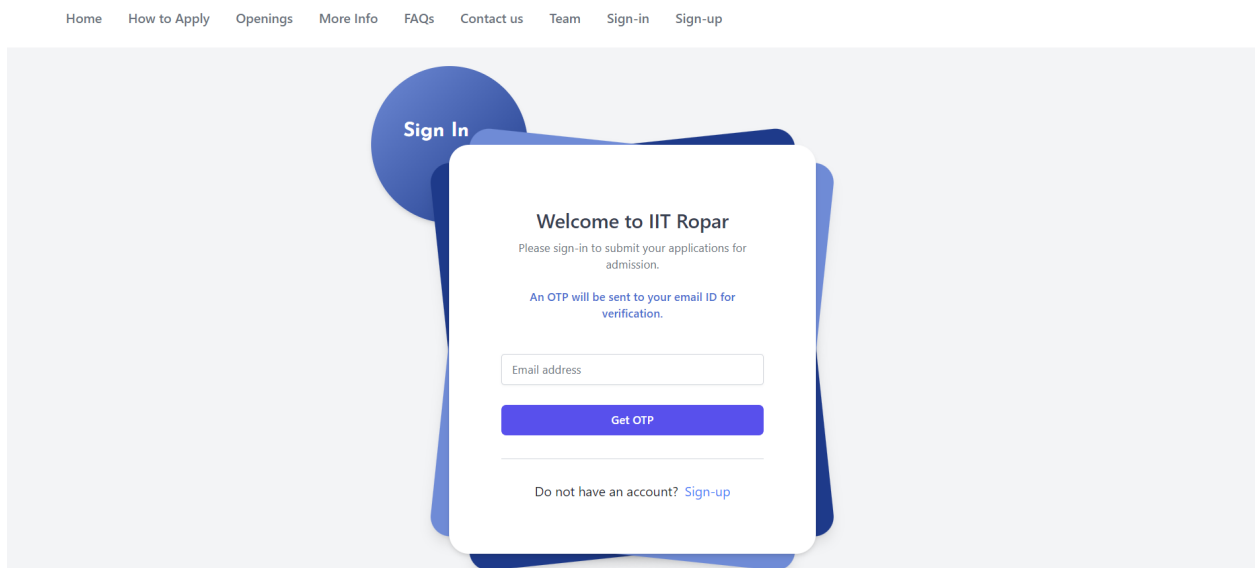
coapcell@iitrpr.ac.in  
info@iitrpr.ac.in

### Call Us

Tel: +91-1881-231114  
Tel: +91-1881-231169

- **Signin/Signup section:**

- a. After signing in, the user will be sent an OTP via the registered email. He/she needs to authenticate by entering in the OTP to get into the portal.
- b. After signing up, the user will be sent an OTP to the entered email. He/she needs to authenticate by entering in the OTP to get into the portal. After that, the user will be required to enter his/her information and personal details to complete the profile.

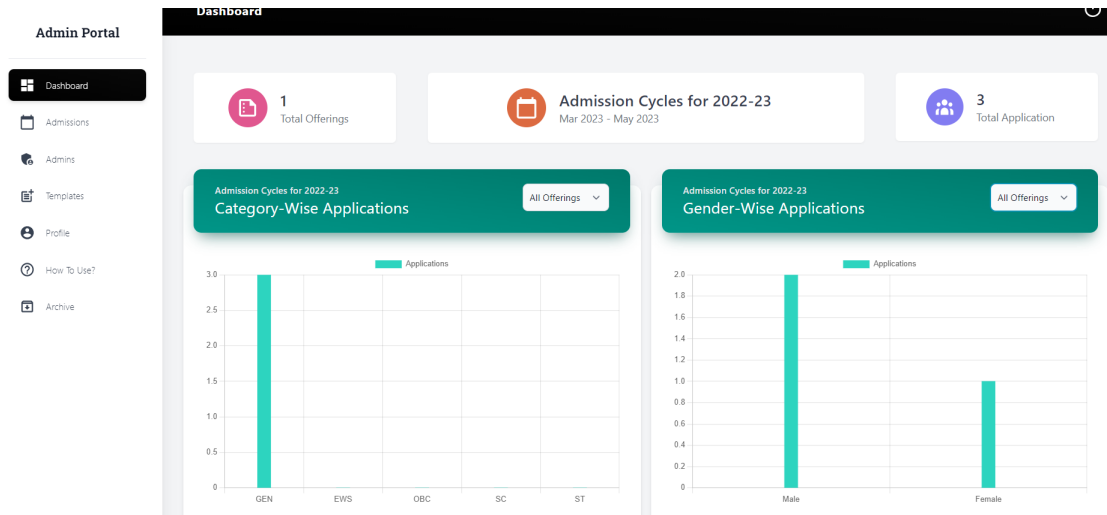


**THIS IS WHAT A USER, WILLING TO LOG INTO IIT ROPAR PORTAL WILL SEE. WE HAVE MADE THE INTERFACE VERY USER FRIENDLY TO CATER TO HIS/HER REQUIREMENTS.**

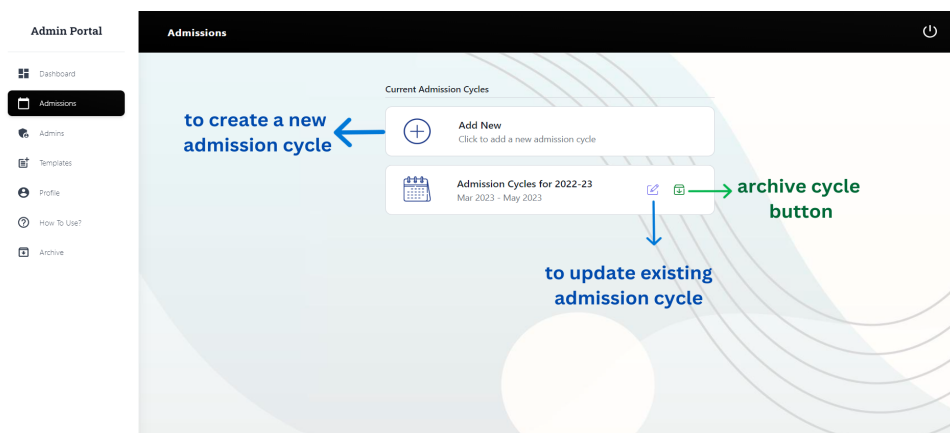
**USER CAN LOGIN AS ADMIN/FACULTY/APPLICANT (STAKEHOLDERS).**

## 2. ADMIN SIDE:

- **Dashboard:** Admins can view the total number of applications as per categories and gender.



- **Admission Cycle:** Admin has the ability to add/delete admission cycles. Admin will create a new cycle for the ongoing/coming admission process.





- **Information on the Admission Cycle going to be rolled out:** Admin needs to fill this data. The columns ask the admin to fill in the necessary inputs that will be visible to the applicants.

Current Admission Cycles

### New Admission Cycle

Name

Admissions for AY 2022-23

Duration

-----, ---

-----, ---

Category-wise Application Fees

GEN

OBC

EWS

SC

ST

PWD

Brochure for M.Tech. Admissions

Public URL of the brochure PDF

GATE opening and closing score

Public URL of the opening-closing-score PDF

☐ Make Current Admission Cycle

Add new cycle

- **Offerings information shown to Admin:** Admin can view/add offerings. Moreover, he can edit current offerings and view **eligibility criteria**, **departments**, **status of offerings** etc. from the panel.

**Admin Portal**

**Admissions**

Admission Cycles for 2022-23 | Offerings

Default | Search | Department

Show 5 entries | Brochure | Score List

+ Add Offering

edit offerings button

DEPARTMENT	SPECIALIZATION	SEATS	ELIGIBILITY	GATE PAPER CODES	DEADLINE	STATUS	RESULTS
Computer Science and Engineering	CS	10	<a href="#">View</a>	Codes +	30/05/2023	Open	Approved by Department

Showing 1-1 of 1

text pop up to view eligibility criteria

expandable textbox with codes of the exam

view all applications button

Previous Next

- **Applicant information shown:** Number of applicants alongwith their data is shown to admin. Accordingly, there are two prompts on the right (**eye** for viewing applications and **trash** for deleting applications).

**Admissions**

Admission Cycles for 2022-23 | CS | Applications

Search | Applicant Name

Show 10 entries

Publish Results

Upload Results Export

APPLICANT NAME	EMAIL ADDRESS	COAP REGISTRATION NUMBER	GATE REGISTRATION NUMBER	GATE SCORE	AIR	STATUS
SUSHIL KUMAR	sushilkhatana3710@gmail.com	COAP123456789	CS3456789123	559	323	<a href="#">View</a> <a href="#">Trash</a>
SUSHIL KUMAR	sushilkumarkhatana8980@gmail.com	COAP123456789	CS1234567890	379	989	<a href="#">View</a> <a href="#">Trash</a>
Shruti Sikri	27ssikri@gmail.com	COAP123456789	CS1212121212	678	234	<a href="#">View</a> <a href="#">Trash</a>

Showing 1-3 of 3

Previous Next

- **Generate merit list:** for branches that admin wishes to be eligible for application.

The screenshot shows the 'Applications' page with a top navigation bar containing 'Admission Cycles for 2022-23', 'CS', and 'Applications'. Below the navigation bar, there is a search bar, an 'Applicant Name' dropdown, and a 'Publish Results' toggle switch. On the right, there are buttons for 'Upload', 'Results', and 'Export'. In the center, a modal titled 'Generate Merit List' is displayed, featuring a 'Select Eligible Branches' dropdown menu and a 'Get Merit List' button.

- **Upload result:** of selected applicants as excel file. Admin needs to choose the right upload file format to what the portal expects. Otherwise, the excel sheet won't get updated.

The screenshot shows the 'Upload Result' modal. It has a title bar with a close button. The main content area includes an 'Upload File' section with a 'Choose File' button and a 'No file chosen' text. Below this, it states 'Allowed file formats: .xls, .xlsx'. A 'Note' follows, stating: 'The uploaded excel file should necessarily contain the following fields, besides other fields(if any). Moreover the status can only have two options "Selected" or "Not Selected"'. Another 'Note' lists the required fields: '- Email ID', '- Status', and '- Status Remark'. At the bottom, there is an 'Upload' button. The background shows a table with headers: 'EMAIL ADDRESS', 'COAP REGISTRATION NUMBER', and 'GATE REGISTRATION N'.

- **List of admins:** view all the admins. The image explains the prompts seen in the admin panel.

**Admin Portal**

- Dashboard
- Admissions
- Admins**
- Templates
- Profile
- How To Use?
- Archive

**List of Admins**

NAME	EMAIL ADDRESS	ADMIN ROLE	
Sushil	2020csb1132@iitrpr.ac.in	ADMIN	view current role, edit current role, delete current role
Tanish	2020csb1133@iitrpr.ac.in	ADMIN	view current role, edit current role, delete current role
Rohit	2020csb1118@iitrpr.ac.in	ADMIN	view current role, edit current role, delete current role
Faculty	rohitkinha161201@gmail.com	FACULTY	view current role, edit current role, delete current role
Sushill	katsushh@gmail.com	FACULTY	view current role, edit current role, delete current role

Annotations:

- to add new admin/faculty role**: Points to the **+ Add admin** button.
- view current role**: Points to the eye icon.
- edit current role**: Points to the pencil icon.
- delete current role**: Points to the trash icon.

- **Add admin:** An admin is also given the power to add new admins.

**Add admin**

Name: shruti

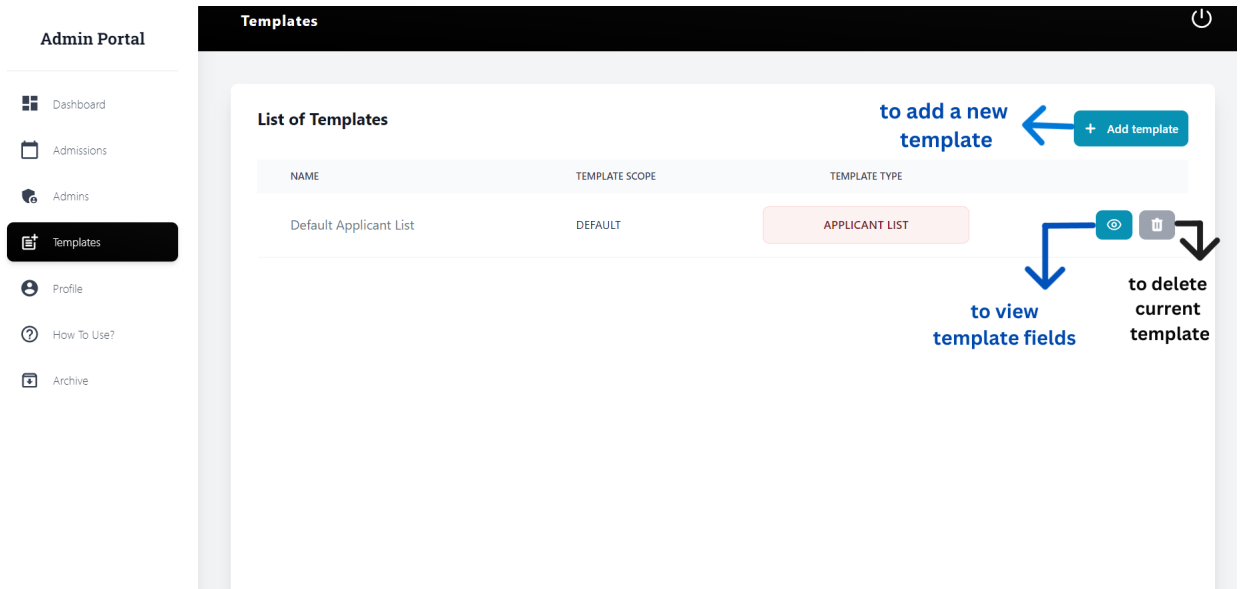
Email Address: shrootii10@gmail.com

Role: FACULTY

Department: Electrical Engineering x Chemical Engineering x

**Add admin**

- **Template list:** List of templates is shown to the admin for review. The image explains the prompts seen in the panel.



- **Add new template:** Add templates after filling in the required information.

The 'New Template' form is a modal window with a close button (X) in the top right corner. It contains the following fields and controls:

- Name:** A text input field containing the value 'status'.
- Type:** A dropdown menu with 'APPLICANT LIST' selected.
- Scope:** A dropdown menu with 'PERSONAL' selected.
- Select Columns:** A section with two selected columns, 'Status' and 'Status Remarks', each with a close (X) button. There are also a plus (+) and a dropdown arrow (v) at the end of the selection area.
- Add template:** A large blue button at the bottom of the form.

- **Admin Profile:** To view profile of admin user.

**Admin Portal**

**Profile**

**Shruti Sikri**

✉ 2020csb1128@iitrpr.ac.in

👤 SUPER ADMIN

🏢 Academics

172.30.2.244/admin/profile

- **To check previous admission cycles :** An admission cycle can be archived once completed. This helps keep a record of the previous admission cycles.

**Admin Portal**

**Archive**

**Deleted Admission Cycles**

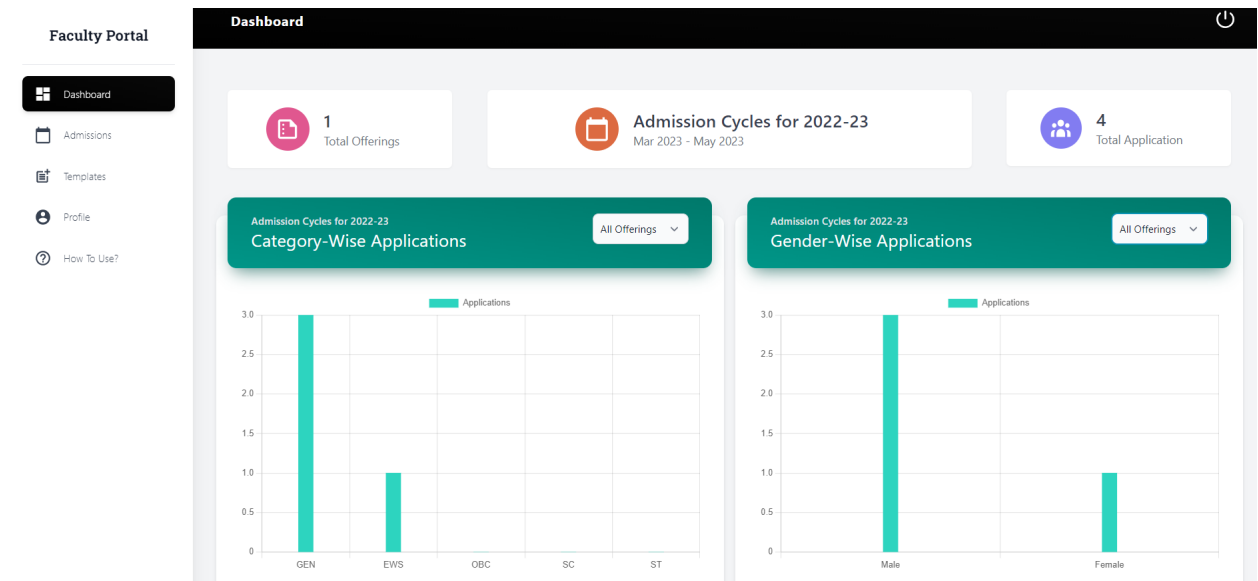
NAME	DURATION START	DURATION END
Admission Cycles for 2022-23	Mar 2023	May 2023

restore admission cycle

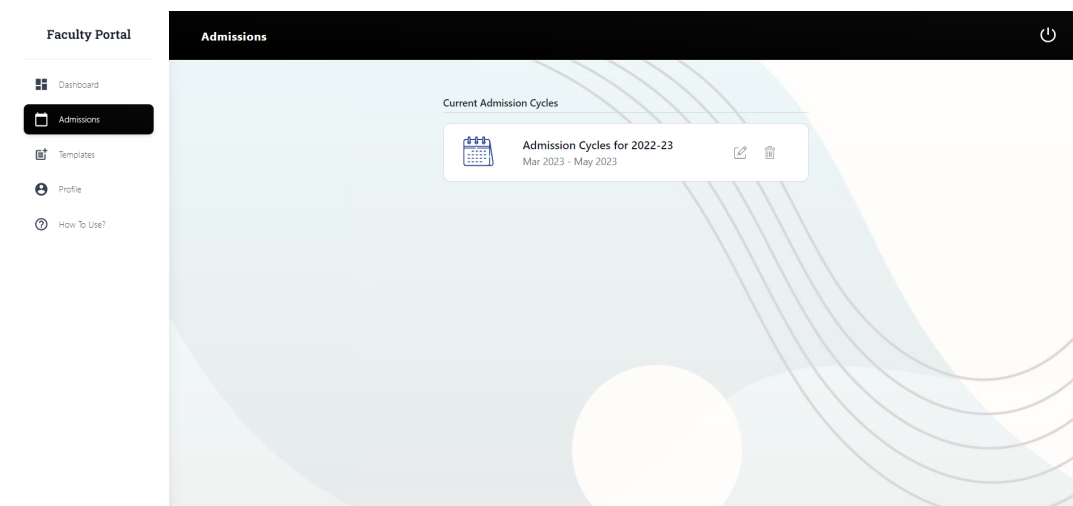
view details of archived cycle

### 3. FACULTY SIDE:

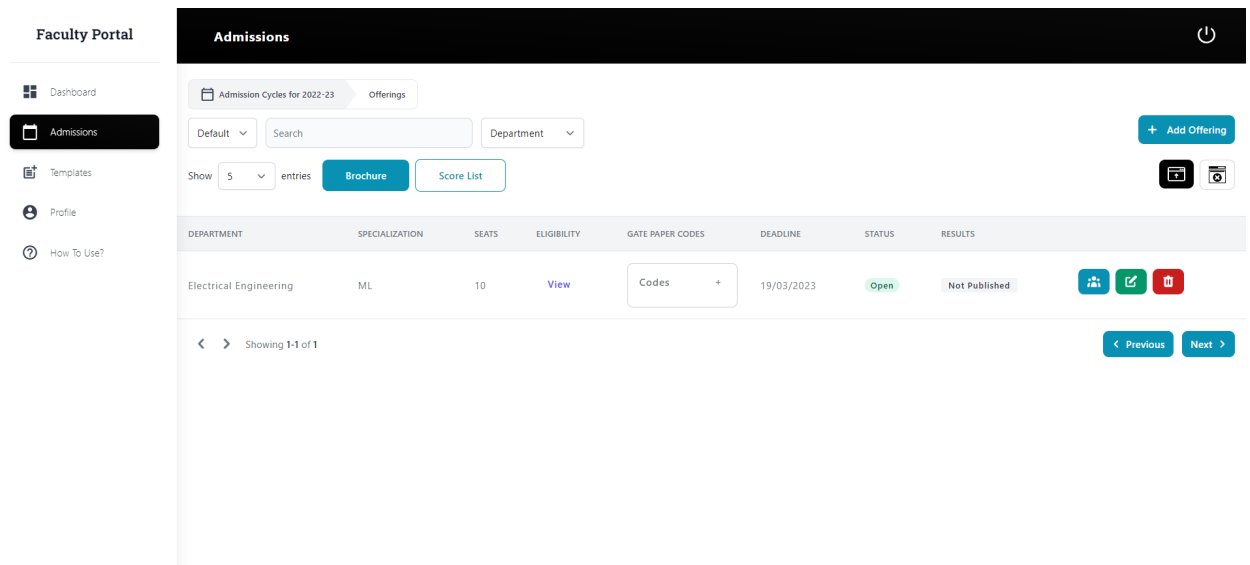
- **Dashboard:** Faculties can also view the total number of applications as per categories and gender.



- **View admission cycle:** Faculty can not edit an admission cycle. He/she can only view it.



- **Offerings shown to faculty:** Offerings are handled by the faculty according to the department they specialize in. The prompts shown allow the same actions to faculty to perform (edit offerings).



- **Add offering:** Add offerings like the admin after filling in the required information.

The 'Add offering' modal form contains the following fields:

- Department:** Electrical Engineering (dropdown)
- Specialization:** ML (text input)
- GATE Paper Codes:** AI, ML, EE (text input)
- Seats:** 10 (text input)
- Deadline:** 19-03-2023 (date picker)
- Eligibility:** Everyone (text area)

At the bottom, a message states: 'This offering will be added in draft mode.' and an 'Add Offering' button is present.



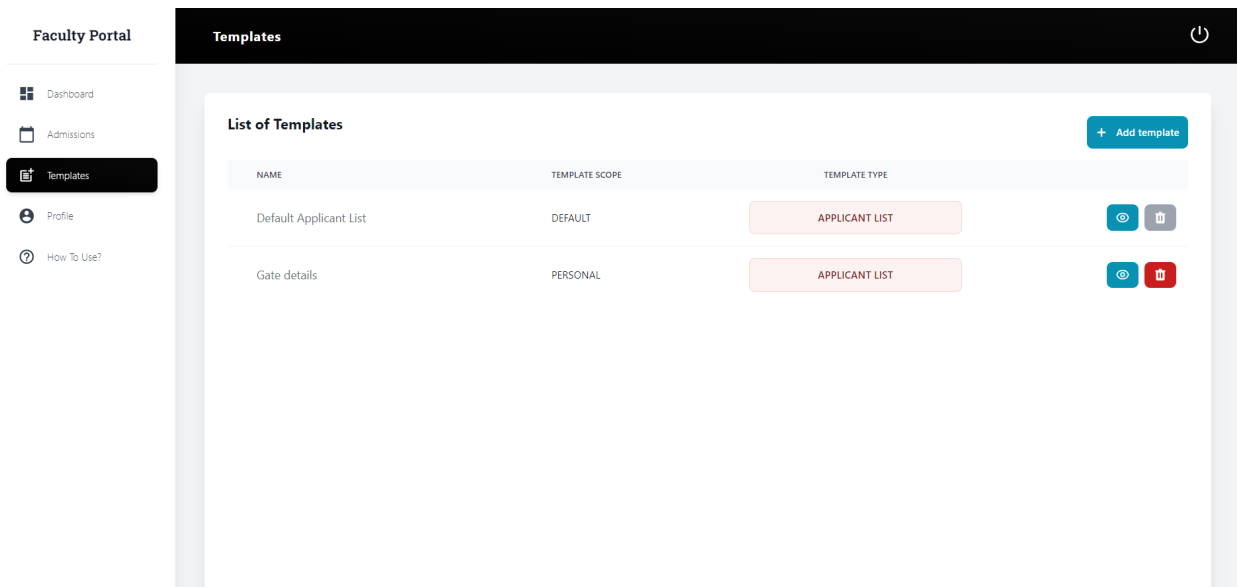
- **Generate Merit List (Results button):** This power is given to the faculty. If he/she wishes to, he/she can also upload the results or save it as draft for future.

The screenshot shows the 'Applications' page with a top navigation bar containing 'Admission Cycles for 2022-23', 'CS', and 'Applications'. Below the navigation bar, there is a search bar, an 'Applicant Name' dropdown, and a 'Publish Results' toggle switch. On the right, there are three buttons: 'Upload', 'Results', and 'Export'. A modal titled 'Generate Merit List' is open in the center, featuring a 'Select Eligible Branches' dropdown menu and a 'Get Merit List' button.

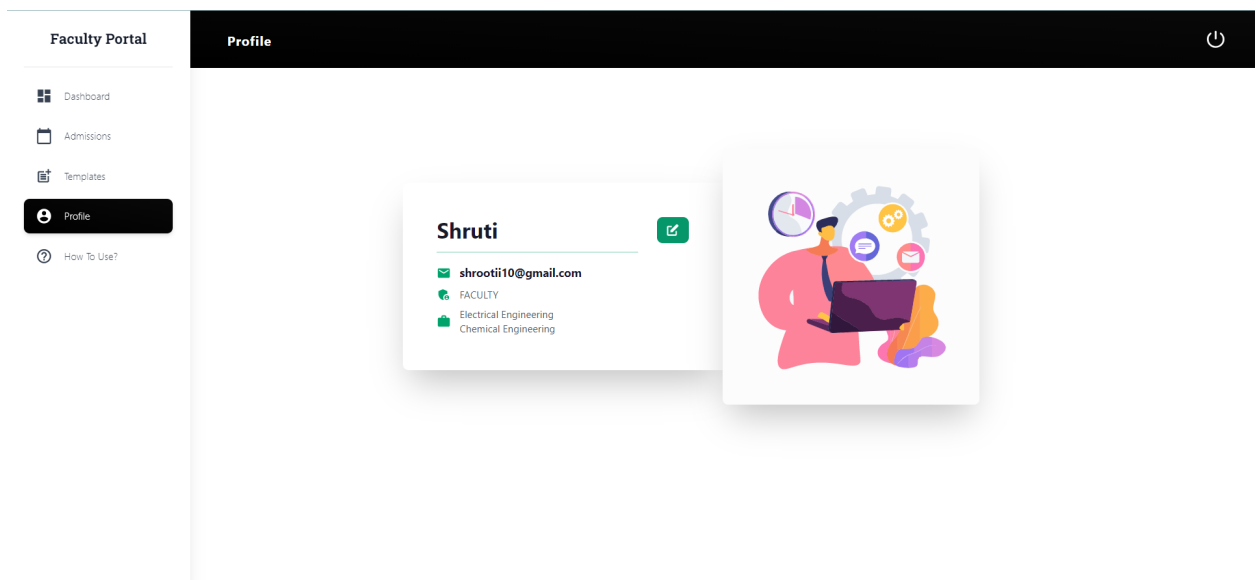
- **Results upload:** of selected applicants as excel file. Faculty needs to choose the right upload file format to what the portal expects. Otherwise, the excel sheet won't get updated.

The screenshot shows the 'Upload Result' modal. It has a title bar with a close button. The main content area includes an 'Upload File' section with a 'Choose File' button and a 'No file chosen' text. Below this, it states 'Allowed file formats: .xls, .xlsx'. A 'Note' follows, stating: 'The uploaded excel file should necessarily contain the following fields, besides other fields(if any). Moreover the status can only have two options "Selected" or "Not Selected"'. Another 'Note' lists the required fields: '- Email ID', '- Status', and '- Status Remark'. At the bottom, there is an 'Upload' button.

- **Templates section:** List of templates is shown to the faculty for review. E.g. Here, the faculty can view templates of the applicant list by clicking on eye. Default Application List is a global template and he/she can only view it but can't delete it. But the faculty can edit/delete the personal templates created by him/her.





- **Faculty profile:** To view the profile of the faculty user.





- **Home page when positions are opened:** They can be applied through the apply button.

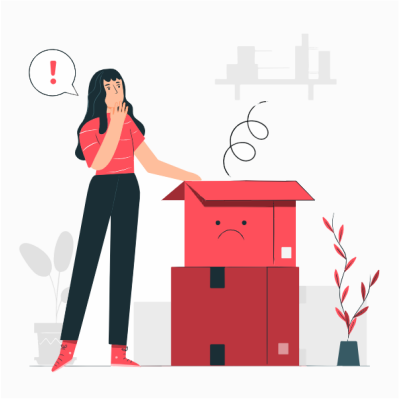

[Home](#)
[My Applications](#)
[My Profile](#)


### Open Positions

DEPARTMENT	SPECIALIZATION	SEATS	ELIGIBILITY	GATE PAPER CODES	DEADLINE	STATUS
Computer Science and Engineering	CS	10	<a href="#">View</a>	<div>Codes +</div>	30/05/2023	<div>Open</div> <div><a href="#">Apply</a></div>

- **Check submitted applications:** The applicant can check the application submitted by him/her along with the application status (accepted or not).

### Submitted Applications

DEPARTMENT	SPECIALIZATION	DEADLINE	STATUS	APPLICATION STATUS	REMARKS
 <p>No applications submitted yet!</p>					

- **Applicant form:** It asks for the GATE details.

← → ↻ 🏠 ⚠ Not secure | 172.30.2.244/apply/1 🔍 📄 ☆ 1.00 🛠 🖨 🗑 Update

Qualifying Exam Details Application Fee Details Declaration Review

### Qualifying Examination(GATE score)

Details of GATE Score: Please fill the details of the highest valid (past 3 years including this year) GATE Score obtained by you . If the GATE Registration No. is filled wrong, the candidate will be responsible for this. GATE 2021/ 2022/ 2023 qualified candidates are only eligible to apply.

Department *	Specialization *
Computer Science and Engineering	CS
Qualifying Examination *	Branch Code *
GATE	CS
Year *	GATE Enrollment Number/Registration Number *
2023	CS1212121212
COAP Registration Number *	All India Rank (AIR) *
COAP123456789	234
GATE Score * ?	Valid Upto *
678	2024

Self attested copies of GATE as mentioned in the form \*

Declaration.pdf

- **Fee details:** Asks the applicant for the category as the fee structure is different for different categories. Also, the applicant is required to fill in the bank details.

Qualifying Exam Details Application Fee Details Declaration Review

### Application Fee Details

Submit your application fee through [SB Collect](#).

Category *	Transaction ID *
GEN	12342342
Amount *	Bank *
2000	sbi
Transaction Slip *	Date of Transaction *
Declaration 1.pdf	17-03-2023

Back Next

- **Declaration required before application:** for the correctness of details provided, and abide by institute decision on admitting the applicant or not.

The screenshot shows a web browser at the URL 172.30.2.244/apply/1. The navigation bar includes 'Qualifying Exam Details', 'Application Fee Details', 'Declaration' (active), and 'Review'. The 'Declaration' section contains a paragraph of text, a text input field for the full name (filled with 'Shruti Sikri'), a file upload area for a signature (with a 'Choose File' button and instructions), a text input field for a place (filled with 'ropar'), and a date input field (filled with '17-03-2023'). 'Back' and 'Next' buttons are at the bottom.

**Declaration**

I hereby declare that I have carefully read the instructions and particulars supplied to me and that the entries made in this application form are correct to the best of my knowledge and belief. If selected for admission, I promise to abide by the rules and discipline of the Institute. I note that the decision of the Institute is final in regard to selection for admission and assignment to a particular Department and field of study. The Institute shall have the right to expel me from the Institute at any time after my admission, provided it is satisfied that I was admitted on false particulars furnished by me or my antecedents prove that my continuance in the Institute is not desirable. I agree that I shall abide by the decision of the Institute, which shall be final.

Write your full name if you agree to the above declaration \*

Shruti Sikri

Upload your Signature \*

Choose File No file chosen

Maximum file size: 1 MB Allowed file formats: .jpeg, .png, .jpg, .gif  
Recommended File Name Format: Signature\_<your\_email\_id>  
For Example: Signature\_abc@gmail.com

Place \*

ropar

Date \*

17-03-2023

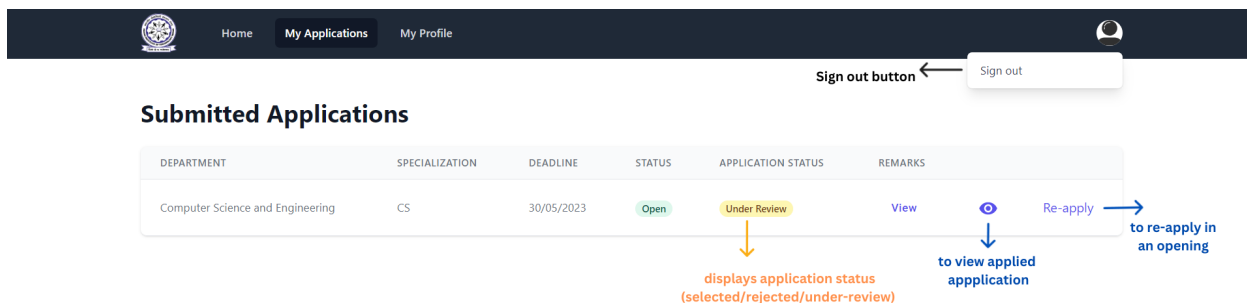
Back Next

- **Review the application:** Review the form details filled during application.

The screenshot shows the 'Review' step of the application form. The navigation bar is the same as the previous step. The 'Application Details' section is titled 'Please review your application details.' and contains a table with the following information:

Application Details	
Department	Computer Science and Engineering
Specialization	CS
Amount	2000
Transaction ID	12342342
Bank	sbi
Transaction Slip	Declaration 1.pdf
Date Of Transaction	2023-03-17
Qualifying Examination	GATE

- **Check submitted applications:** Check what is submitted by the applicant. The image explains the prompts seen in the panel.



- If the application is successful, then an acknowledgement email is sent to the applicant which contains the relevant information of the applicant like **Application ID, Department and Specialisation of the registered offering.**

## DEPLOYMENT:

We have deployed the web app on our local institute server and the app is running fine on [M-Tech Admission](#).

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## INDIVIDUAL CONTRIBUTIONS:

1. **Rohit:** Resolved errors of sign-in/sign-up OTP, upload results, and gcp file storage, made some minor frontend changes in landing page, resolved the issue of base-url and deployed the site on the local institute server, and also on Vercel and render.
2. **Tanish:** Tested the site thoroughly. Resolved the errors of incorrect input acceptance in various columns like phone numbers, Aadhar number, PIN Codes etc by adding regex pattern matching, created the presentation for the mid semester report.
3. **Sushil:** Helped in solving errors in the code, result uploading and helped in hosting on render and created the demo video.
4. **Shruti:** Tested the site thoroughly. Removed the redundant scroll bars and toggles, created the presentation for the mid semester report.

## FUTURE GOALS:

- In coming weeks we will be testing the app thoroughly and adding a logger to it for better detection of errors that may occur any time in future.
- We will be completing the issue of gcp storage.
- We will try to refactor the code as much as possible to make it more efficient and easy to read.

THANK YOU