TEAM FORMATION: GTU ROBOTICS CLUB for 2024-2025

The Gujarat Technological University Robotics Club has been dedicated to participating in and excelling at regional, national, and international robotics and STEM competitions. The club actively brings together passionate robotics enthusiasts from across Gujarat, creating a collaborative environment where students can learn, grow, and explore their interests in these fields.

Our ambition is to immerse the GTU Robotics Club in a genuine “real-world engineering experience,” extending beyond mere robot design and automation products. We established this team to enhance students' learning journeys, helping them transition from book knowledge to practical expertise. Embracing our motto, “We learn, We create and We teach” we prioritize the comprehensive development of every individual who joins us.

RECRUITMENT CAMPAIGN:

On July 9, 2024, the recruitment circular and poster were published on the GTU website. Later on 21, July 2024 all social media handle including Facebook and Instagram pages of Team GTU ROBOCON were updated with the recruitment details. Students were provided with a link and QR code directing them to a Google Form for registration.

For the recruitment campaign, each team member distributed posters at their own colleges and various other institutions affiliated with GTU for undergraduate students pursuing BE and Diploma. They also shared the post and poster through their WhatsApp contact lists. Students who were unable to register by the initial deadline, were offered an additional opportunity to sign up on till August 10, 2024 .

**Circular for Team Formation:**

The final recruitment dates were determined after considering student issues and the examination schedule. On July 15, 2019, Team GTU Robotics Club published a team formation circular on the GTU website.

In addition to the circular, emails were sent to all principals and heads of departments at GTU-affiliated colleges. Students from all affiliated institutions were invited to participate in the team formation process, regardless of their engineering discipline.

The circular and poster can be accessed via the following link:

Outreach at Colleges:

The entire student team organized themselves and initiated an outreach campaign to promote the GTU Robotics Club and highlight the opportunities available to students. This outreach effort took place from July 29 to August 9. Each team member prepared a PowerPoint presentation and brought along miniature robots to engage students and spark their interest in robotics.

Responses for Recruitment Process:

We are excited to share that this year’s team formation has far exceeded our expectations. In just 11 days, we received 1643 registrations from 22 colleges statewide. Out of these, 234 entries were shortlisted for the recruitment process. The registration statistics are shown in the charts below:

Selection Procedure:

The Selection procedure is divided into 3 parts:

1. Written Test.

2. Personal Interview.

ON Registration Day

A Registration desk was set-up at the test Venue. All students were instructed to

register with the help of the Support team on the desk. They

were supposed to report at the test venue 30 minutes prior to their Written test. Candidates

were informed to carry their College ID card along too.

IDENTIFICATION CODE DESCRIPTION:

GRC19/E (Circuitry Branch including EC, IC, CE, IT, Power Electronics, Electrical, Robotics and Automations, ICT, CE data science, Mechatronics)

students applied in this group had to go through a written technical evaluation test.Later a personal interaction section was condducted on the next day of the written exam.

Written Test:

Written Test The written test was divided into 4 sections:

Section A: This was common and general information section. In which student wrote about their past project works, achievement and their knowledge (information) regarding GTU ROBOTICS CLUB and Events. There were 5 questions. 2 marks were awarded for each answer and 1 mark for partially correct answer.

Section B:This section was Hardware section. In which their test basic conceptual understanding of Electricals and electronics was to be mentioned, this section consisted of multiple choice questions as well as descriptive questions.

Section C: This section was Software section. In which their basic programming skill was tested, this section consisted of multiple choice questions along with a few codes.

Section D: This section was aptitude section. In which general mathematics, puzzle type of question were asked. There were 10 questions.

Personal Interview

Personal interview was conducted after they registered. The interview was designed to judge their

creative thinking, knowledge of basic principles and software knowledge was evaluated. Hardware skills was also examined. They were instructed to be presentable and bring their portfolio.

(Instructed about it through mail and whatsapp message).

GRC19/M (Mechanical Branch including Mech, Mechatronics, Automobile, Robotics and Automations)

Section A: This was common and general information section. In which student wrote about their past project works, achievement and their knowledge (information) regarding GTU ROBOTICS CLUB and Events. There were 5 questions. 2 marks were awarded for each answer and 1 mark for partially correct answer.

Section B: This section contained technical mcqs. Their basic conceptual understanding regarding mechanical systems and machineries were tested. Problem statement to help showcase their mechanism developing capability were included along. Depending upon situation they had to develop efficient mechanism.

Section C: This section was aptitude section. In which general mathematics, puzzle type of question were asked. There were 10 questions.

Personal Interview

Personal interview was conducted after they registered. The interview was designed to judge their

creative thinking, knowledge of basic principles and software knowledge was evaluated. Along with the Hardware skills was also examined. They were instructed to be presentable and bring their portfolio. (Instructed about it through mail and whatsapp message).

GRC19/MG (Non Technical Branch interested student for Management )

Written Test

Written Test The written test was divided into 4 sections:

Section A: This was common and general information section. In which student wrote about their past project works, achievement and their knowledge (information) regarding GTU ROBOTICS CLUB and Events. There were 5 questions. 2 marks were awarded for each answer and 1 mark for partially correct answer.

Section B: This section was content writing. They were given content development on some topic like, a formal mail and an informal content for the social media post.

Section C: This section was aptitude section. In which general mathematics, puzzle type of question were asked. There were 10 questions.

Group Discussion

Students were given three topics, where they have to choose one to be discussed in group discussion. Their knowledge of the topic, listening, communication skills, body language and appearance and leadership skills was judge by the panel.

Personal Interview:

Personal interview was conducted after they qualified the written test. The 15 min interview would judge their real self. From their knowledge to all the soft skills, that they as a team represented and a good team player must possess, was examined by the experienced team members and alumni. They were instructed to be presentable and bring the necessary documents (instructed about it through mail)