## **Required Details**

## **Detailed Description of the Club:**

The Robotics Club of VIT Bhopal is the collab of all the engineering branches. The Club Consists of the following Departments-

- 1. Design Department
- 2. Electronics Department
- 3. Coding Department
- 4. Media Department
- 5. Documentation Department
- 6. Research and Development Department

As of now the club has organized many events and done a project as well. The main motive is to bring all the creative and curious brains together to encourage him in the field of A.I. and Robotics.

Name of Club: Robotics Club

**Slogan of the Club:** Robotics teams build the future.

**School:** School Of Mechanical Engineering

**Advisor:** Dr. Shiv Manjaree Gopaliya

Dr. Ribu Mathew

#### **Student Chairman:**

Prasoon Shukla (20BME10039) Siddhi Manglam(20BCE10550)

**Domain:** In the Domain of A I and Robotics

**Objective of the Club:** Bring all the creative and curious brains together to revolutionize A.I. and Robotics.

**Achievements:** Successfully conducted 2 days of nationwide workshops for school students on A.I. and Robotics, in which more than a hundred students from almost all parts of India took part. Apart from this, we held multiple intra-university events, the Robotics Competition and Robusta 2.0, in which almost 300 students from VIT Bhopal University took part.

### **Event details (Till date):**

## 1. Robotics Competition (Jun 2021)

This competition was an online competition in which all the students of VIT Bhopal University from any course or branch were allowed to take part without paying any registration fee. The whole competition was comprised of 3 rounds.

1st round- This round was a quiz round.

2nd Round- Participants had been given 10 problems in different fields like space, education, defense, etc. and they had to choose any one problem and prepare an innovative solution to solve that particular problem by applying the knowledge of Robotics. After solving the problem, they had to make the report in a pdf format of less than 5 pages and submit it to the organizing team.

3rd Round- Shortlisted participants had presented their ideas or solutions in more depth through a Powerpoint presentation in front of the faculty coordinators within 5 minutes followed by a Q/A session of 2 minutes.

## 2. Robusta 2.0 (Sep 2021)

"ROBUSTA 2.0" is the name of the event which contains a series of competitions that are being organized by the Robotics Club of VIT Bhopal. This event consists of three competitions named Design, E-phantoms, and Coding competition.

### **CODING COMPETITION:**

It is an online event in which VIT Bhopal University students regardless of their field of study are welcome to participate. This competition is focused on coding skills, with questions covering topics such as Data Structures and Algorithms, Fundamentals of programming, Principles of AI, Arduino, and Basics of Robotics. There are three rounds to this competition-

1st Round - Quiz Round

2nd Round - Live Coding Round

3rd Round - Innovative Solution Round

#### **E-PHANTOMS COMPETITION:**

This competition is based on basic knowledge of electrical circuits and components. There are three rounds to this competition-

1st Round: Quiz

2nd Round: Flow chart based on the problem statement

3rd Round: Circuit designing using LTSPICE

### **DESIGN COMPETITION:**

This competition is based on design ideas. In this competition, contestants have to present the design idea considering all the principles of design. There are three rounds to this competition-

1st Round - Quiz 2nd Round - Submission of Design Idea 3rd Round - Presentation of Design Idea

## 3. **RoboVIT** (Feb 2022)

RoboVIT is a 2Days Nationwide workshop on A.I. and Robotics for School Students. This event was focused on 11th and 12th class students highlighting the need and importance to learn robotics. Also, how Robotics and Industry 4.0 is changing the face of India.

## 4. Robothon (Jul 2022- Ongoing)

"Robothon" event is a combination of Workshop and Competition.

### <u>First Phase – Workshop</u>

The online workshop is conducted by the Robotics Club. The theme of the workshop is-"Robotics with Tinkercad". This workshop aims to give a glimpse of robotics with Tinkercad so that students can use this tool in their robotics projects.

### Second Phase- Competition

This competition consists of three rounds

- a) 1st Round (Idea submission): In this round, participants will have to choose a project which falls into the domain of A.I. and Robotics and submit tentative information about the project they will be working on.
- b) 2nd Round (Video and Report Submission): In this round, participants will have to submit a report and a short video in which they will put all the project work they have done Ex. CAD design/Circuit diagram/Code etc.
- c) 3rd Round (Presentation): This round will be the final round of the competition in which the selected participants will have to present their projects through PowerPoint presentations that they would have submitted during the 2nd round.

Event Photos & Players: Attached with mail

# Club contact details:

+91 83598 02302 Prasoon Shukla

+91 83180 71029 Siddhi Manglam