Embedded System Design and Robotics Club

1. Name of the Club : Embedded System Design and Robotics Club
2. Level of the Club : University/Domain
3. Description of the Club : The club focuses on real world engineering and hands on experience using robotic components, working on Arduino board, applying programming skills in embedded C for embeded and robotic applications. Students will be also explored in team building and managing.
4. Objective of Club : The objective of the club is to provide a base for robotics enthusiasts to progress and contributes in the field of robotics. It also helps to facilitate students to understand, design and learn robotics. Additionally, it provides interested students with opportunities to express their skills, knowledge and creativity through conceptualizing, designing and programming robots.
5. Details of Chairperson / Co- Chairperson/ Faculty Team Members (if there)

Designation in the Club	**Name**	**Faculty Id**	**E-Mail Id**	**Mobile Number**
Chair	Dr. Anil Kumar Shukla	1010	akshukla2@amity.edu	9868652014
Co -Chair	Dr. Neeraj Khera	7038	nkhera@amity.edu	9953919617

6. Details of the Coordinating Students:

Designation in the Club	**Name of the Student**	**En No**	**Programme and Batch**	**Name of the Institute**	**E-mail Id**	**Mobile Number**
President	Daksh Sharma	A02314522100 2	B.Tech Robotics	ASET	daksh.sharma1@s.amity.edu	8810222460
Vice President(Male)	Yogesh Giri	A02314522100 8	B.Tech Robotics	ASET	yogesh.giri@s.amity.edu	8595222928
Treasurer	Aishwarya Tripathi	A02314522101 5	B.Tech Robotics	ASET	Aishwarya.tripathi@s.amity.edu	7011610038
Member Secretary	Joel V. George	A02314522100 1	B.Tech Robotics	ASET	Joel.george@s.amity.edu	9605002390
Vice President (Female)	Ojasvi Tak	A02314522100 9	B.Tech Robotics	ASET	Ojasvi.tak@s.amity.edu	6378639662

7. Events Organized: Embedded System Design & Robotics Club

Title of the event: Microcontrollers: The brain of robotics

Academic Year: 2024 – 2025

Date: 8th August 2024

Time: 2:30 P.M. to 4:30 P.M.

Platform: Offline(E1-212)

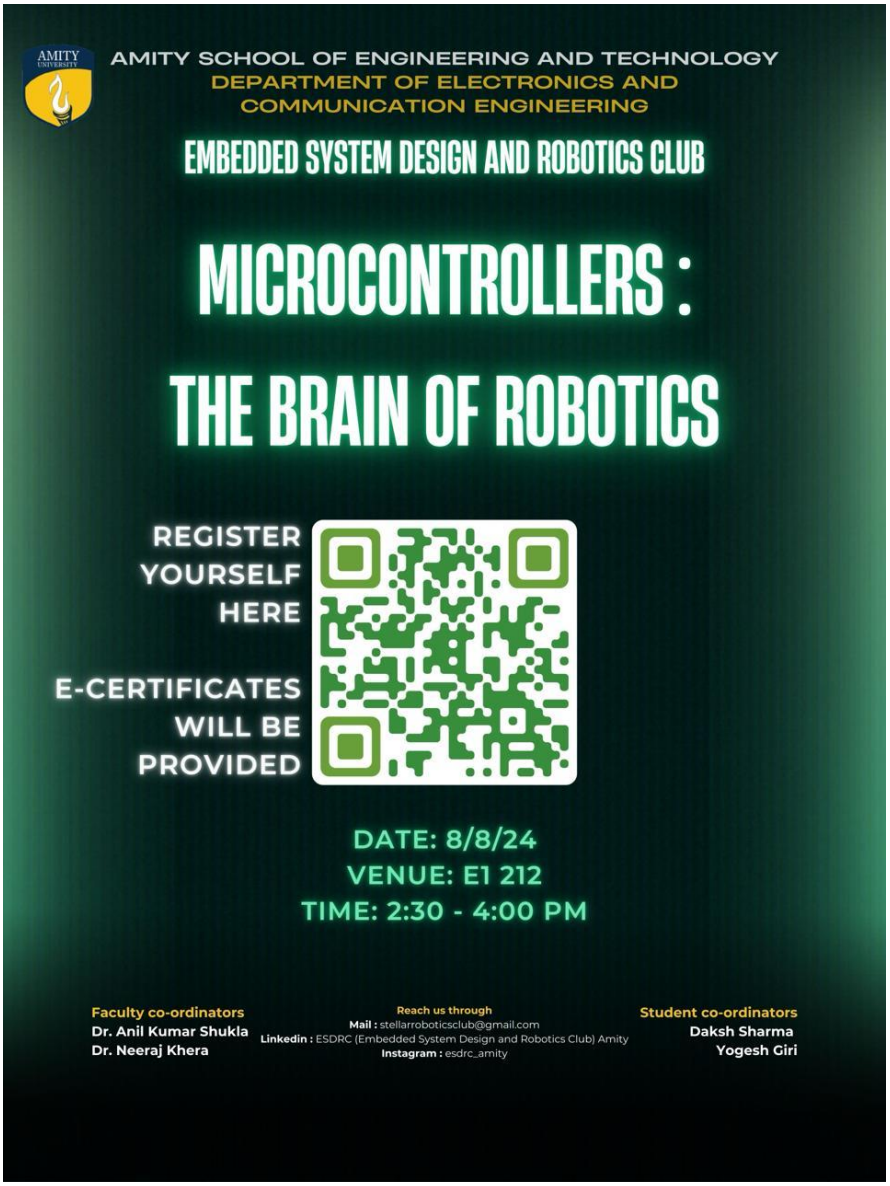
Number of Participants: 27

Report:

In this session, firstly all the students were explained about the rules, some basics of arduino, and microcontrollers for overview. A competition was held in which they have to blink 10 LED s with Arduino programming in a required pattern in given time. Students were divided into 4 groups and material was then provided for the competition.

Each group was given proper material like arduino, breadboard, LEDs and jumper wires. Timer was on and the competition started. Teams who won top 3 positions were given Golden elite, silver elite and bronze certificate respectively for appreciation.

Following is the poster of the event:-



Title of the event: Introduction to Robotics - BUILD A BRIDGE

Academic Year: 2023 – 2024

Date: 5th October 2023

Time: 2:30 P.M.- 4:30 P.M.

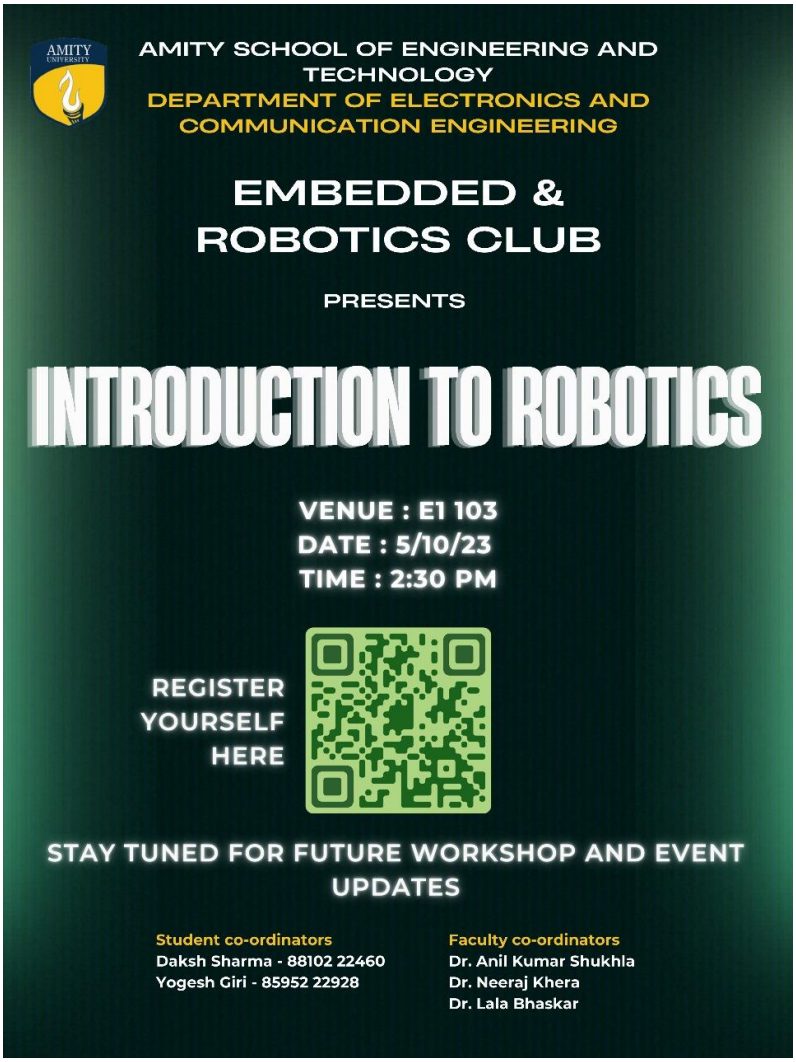
Platform: Offline(E1-306)

Number of Participants: 22

Report:

In this event, basics of robotics was explained along with some initial demonstration of projects. After that a bridge building competition was held. There was a total of 22 students in the event. So, they were divided into 2 teams of 11 each and given the task to build bridges by the materials provided. Both the teams built excellent bridges within 15 min. Their bridges were then judged based on the number of coins that their bridges could hold. The second team won the competition by balancing 33 coins. The session was ended by a quick discussion on future events and upcoming projects.

Following is the poster of the event:-



Title of the event: Building Wired RC Car

Academic Year: 2023 – 2024

Date: 20th October 2023

Time: 2:30P.M. to 3:30P.M.

Platform: Offline(E1-306)

Number of Participants:

Report:

In this event , the first the rules were introduced for wired remote controlled car. There was a total of 17 members present who participated in this session. These 17 were divided into 4 groups of 6,3,3,5 respectively. The material that was distributed to each group was:

1. Two dc geared motors 300 rpm
2. Nuts screws and screwdriver
3. Glue gun
4. Soldering iron and wire
5. 2mm copper wire 4m
6. 2 DPDT toggle switches
7. Wooden base
8. Caster wheel
9. 2 plastic wheels
10. 9 V Batteries and battery cap

Using these materials these 4 teams made 4 wired remote-controlled cars using the materials provided by the core team members.

Following is the poster of the event:-

AMITY SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EMBEDDED SYSTEM DESIGN & ROBOTICS CLUB

SESSION -2

BUILDING WIRED RC CAR

SESSION BY - DAKSH SHARMA (BTECH ROBOTICS)

VENUE- E1 312

DATE - 20/10/23

TIME - 3:30 PM

REGISTER YOURSELF HERE

Student co-ordinators

Daksh Sharma - 88102 22460

Yogesh Giri - 85952 22928

Faculty co-ordinators

Dr. Anil Kumar Shukla

Dr. Neeraj Khera

Dr. Lala Bhaskar