



RC CAR WORKSHOP



The poster features a central image of an RC car drifting on a sandy surface, kicking up dust. The car is white with orange and black accents. A yellow antenna is visible. The text 'RC CAR WORKSHOP' is overlaid in large, bold, red letters with a black outline. In the top left corner of the poster is the ECSO logo, and in the top right corner is the Tinkerers' Lab logo. Below the car, the text 'GET KITS WORTH RS. 1200' is written in bold black letters. To the left of this text are icons for a calendar and a location pin, followed by the date '16 MARCH' and the venue 'B 101'. To the right is a QR code. At the bottom, contact information is provided: 'For queries, contact: Dhruv - 8238463155, Abhishree - 9998440065'.

GET KITS WORTH RS. 1200

 **16 MARCH**
 **B 101**



*For queries, contact:
Dhruv - 8238463155, Abhishree - 9998440065*

Event Details:

Title: RC Car Workshop

Event Date: 16/03/2024

No. of participants: 97 students

Venue: B 101

A RC car workshop was organised by ECO club in collaboration with Tinkerers' lab of Nirma University wherein the students went through an entire process of programming and assembling various parts of RC car from scratch .The event witnessed an active and enthusiastic participation of total 20 teams including 90+ students.

The workshop commenced with a brief introduction of Tinkerers' lab where the board members made the students aware regarding the instruments and facilities provided at the lab. Further ECO club's president addressed the participants about what they will do and learn in the workshop they are going to attend. The kits worth 1000rs required for the workshop were provided by the Tinkerers' lab which consisted of ESP 32 microcontroller, breadboard, jumpers, motor drivers, chassis, 4 wheels, 2 BO motor, 1 servo, idler pins, 2 wheel mounts, steering connecting shaft and other necessary materials.

The knowledge regarding the functions to code ESP microcontroller from basic to advance level was delivered step by step. Different modules were taught to the students which they were supposed to integrate and build their final program. They tried and tested the code with different instruments after every step and later they coded and tested the whole program on their own. To make the workshop more engaging the students were asked some interesting questions and even asked to summarise what they have learnt till now after some intervals during the workshop. The support and guidance of all the volunteers helped the students to understand and grasp the advance programming functions in an easy and efficient manner.



The excitement and enthusiasm of students was on peak during the final step where they assembled all the different parts provided to the teams and built their own RC car applying all the knowledge and guidance provided to them during the workshop.

Later on a visit to Tinkerers' lab was organised for all the students where Bhavin Sir gave demonstrations of instruments like laser cutter and 3D printer along with explanations of the technology used in each of them. The curious questions of students regarding the working and usage of various instruments were addressed by sir.



The design and development of RC car during this workshop gave the students an invaluable experience along with practical knowledge of integration of all components into a full functional system. Through this hands-on experience, students gained a deeper understanding of engineering principles and programs as well as acquired essential skills for their future careers. The

determination of the students and the mentorship of the volunteers played a major role in workshop's smooth execution along with overall development of students.

