



REPORT

Spark it Up: Circuits 101 About Engineering; its Domains and Future Career Prospects

EVENT DATE:

4th & 5th October, 2024

ORGANIZED BY:

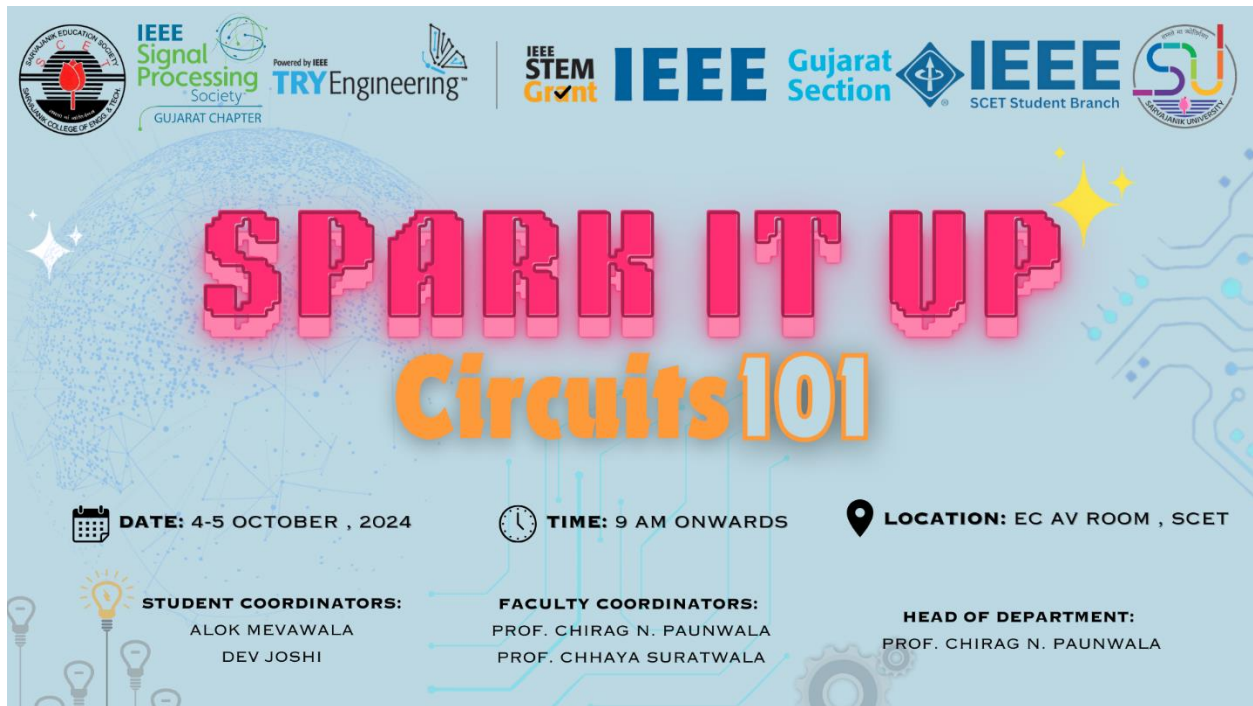
Sarvajanic College of Engineering and Technology
in association with IEEE SCET SB, IEEE SPS GC & IEEE GS

SPONSORED BY:

Try Engineering STEM Grant Program
(IEEE Communications Society)



EVENT BANNER



IDEA BEHIND THE EVENT

A workshop that's hands-on and beginner-friendly, focusing on the Engineering Domain. Our event was to teach pre-University students about the impact of the Engineers on society and thereby enlightening them about the emerging trends in the domain

The goal was to make tech education accessible to everyone. We covered basics like coding and working with sensors. By the end of the workshop, participants knew their way around tech and were also able to build projects.

Our project was about problem-solving, creativity, and getting people excited about the endless possibilities of technology. We're on a mission to promote STEM education, creating a new bunch of tech enthusiasts ready to tackle real-world challenges.

Session 1: Talk-Exploring Engineering: Pathways and Prospects **By: Dev Joshi**



An introductory presentation by the Dev Joshi (Chairperson of IEEE SCET Student Branch & STEM Event Coordinator); regarding the What is Engineering, what are the different fields that one can major in and what are the various career prospects to keep in mind for every field.

The session began with small feedback from the participants about what they thought about engineering. The basic answers included:

- Designing new things
- Making innovations
- Helping in making the human life easy
- Creating things that make day-to-day life efficient

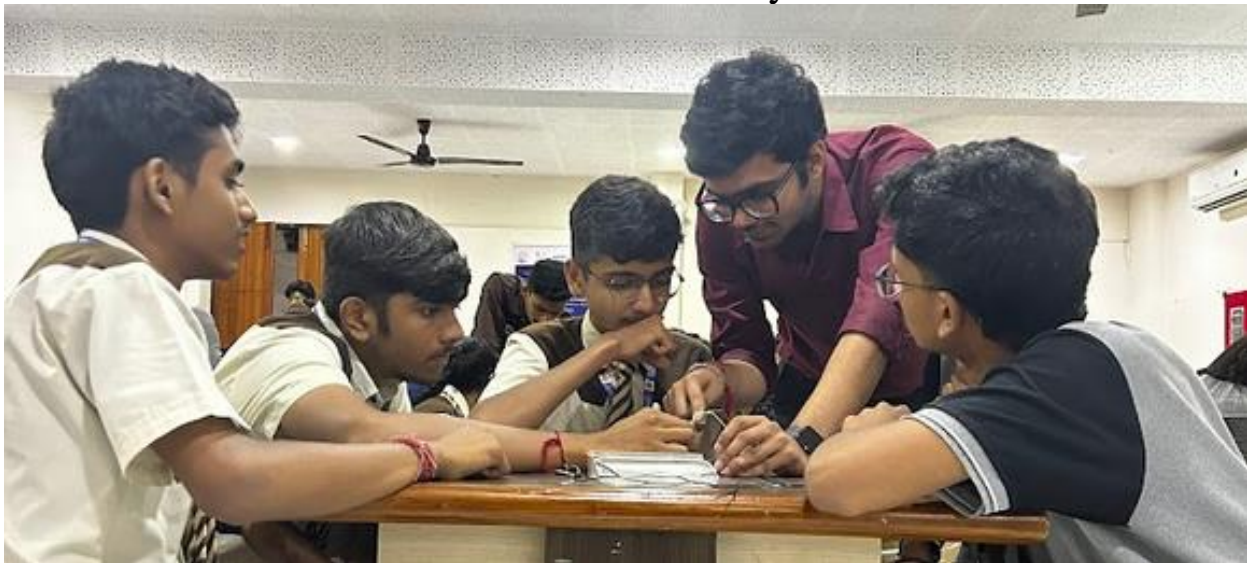
The crowd finally reached to a conclusion that stated a one liner as:
“Engineering is applied version of the theories and its practical use cases.”

The session moved on as the speaker explained different branches of Engineering. The participants had a healthy discussion at length about the re-emerging field of Engineering – Electronics and Communication and how it could help in shaping the future and economy of the nation.

As the talk continued, the students started having clarity about choosing their path as an engineer and branches to consider for the same by being inquisitive & interactive.

Session 2: Hands on project implementation

Student coordinator: Nainesh Gurav and Ayush Jariwala



The students of 2nd Year from the Electronics and Communication Department of SCET designed a whole program to help the students in designing a small project having some real-life impact.

The IEEE SCET SB procured the required kits for the same with the help of the grant provided from STEM. The flow included:

- i) Pre- Assessment form:** - for understanding the familiarity with sensors and its working
 - ii) Project Implementation:** - The participants were taught about basic components like breadboard, sensor modules, LEDs, etc. and how to use them with the help of pin diagram.
 - iii) Quiz:** - A fastest finger first based approach to understand the level of understanding and takeaway from the session.
-

Session 3: Project Showcase

Student Coordinators: Jeel Ramani & Sahil Goti

The final year students of the institute displayed different projects for explaining the working model, prototypes and underlying engineering concepts and problem-solving techniques.





This hands-on introduced a real spark in the students. All started interacting with the committee and expressed their interest in domains like Robotics & Navigation, Cybersecurity, Industrial Internet of Things (IIoT), etc.

Making it a highlight of the day, the students were eager to explore all the projects of seniors that it stretched the whole schedule of the session.

Session 4: Feedback



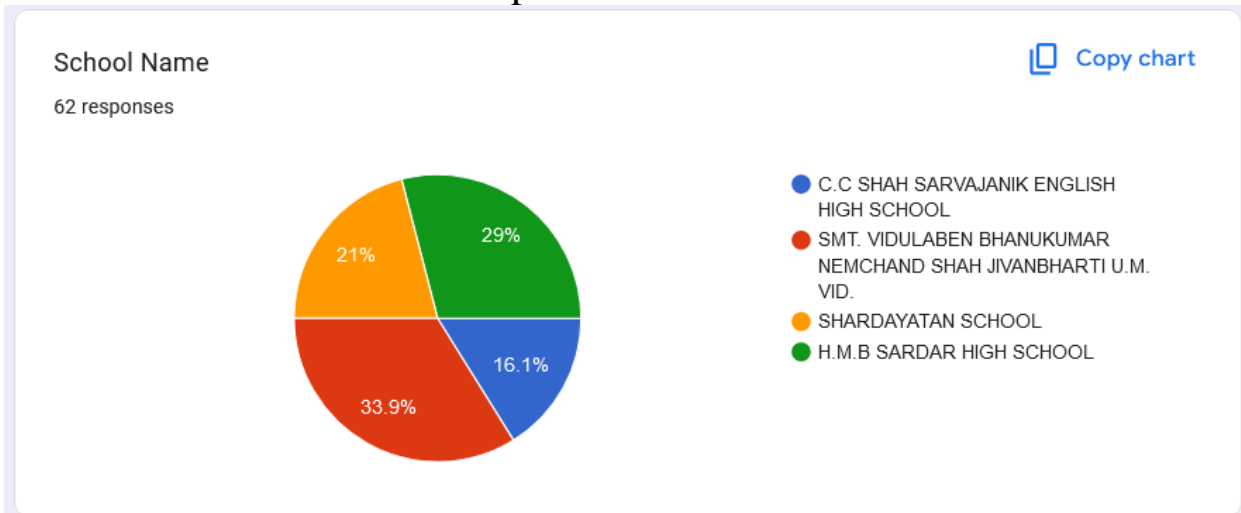
Offline feedback from the students as well as Google form-based online feedback was taken from the students and faculties participating in the event.



The participants not only enjoyed the event but demanded for frequent and longer events in the future. Idea being that every session of this event can be expanded as a whole event in the future events.



School – wise student Breakup:

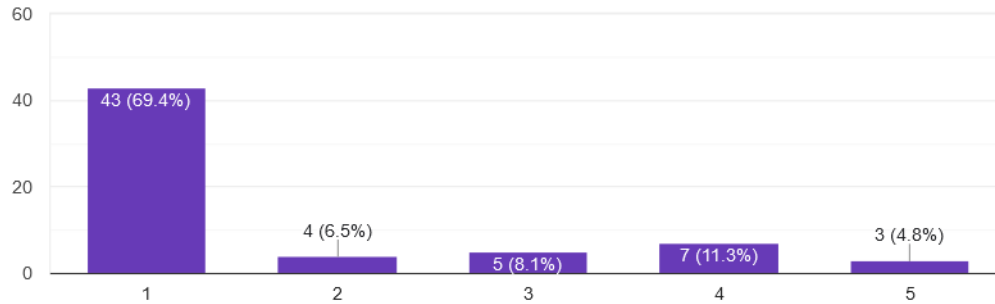


Pre-assessment Form:

How familiar are you with the Arduino platform?

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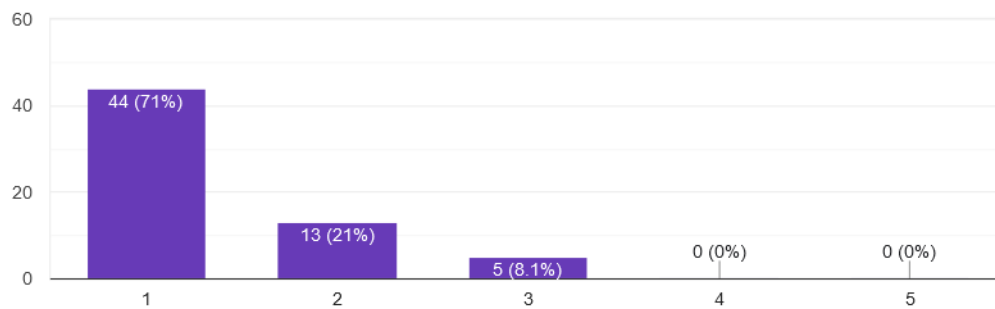
62 responses



Can you write a basic Arduino sketch (program)?

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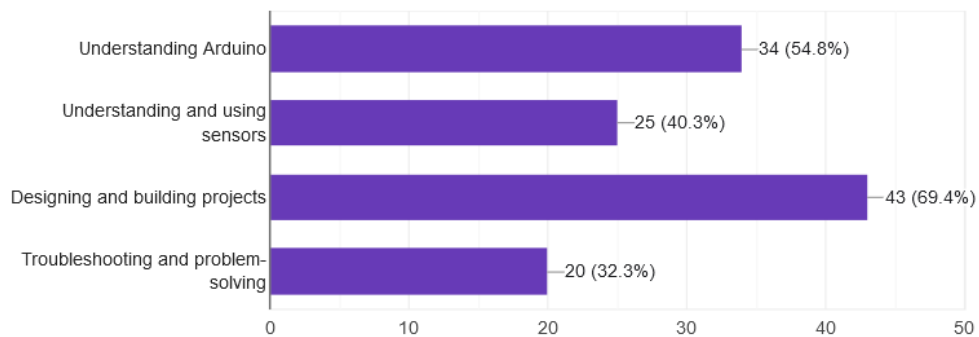
62 responses



What specific skills or topics do you hope to develop during this workshop? (Select all that apply)

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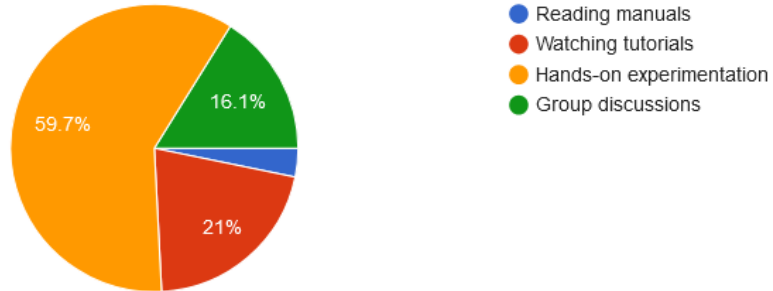
62 responses



What is your preferred method of learning about technology?

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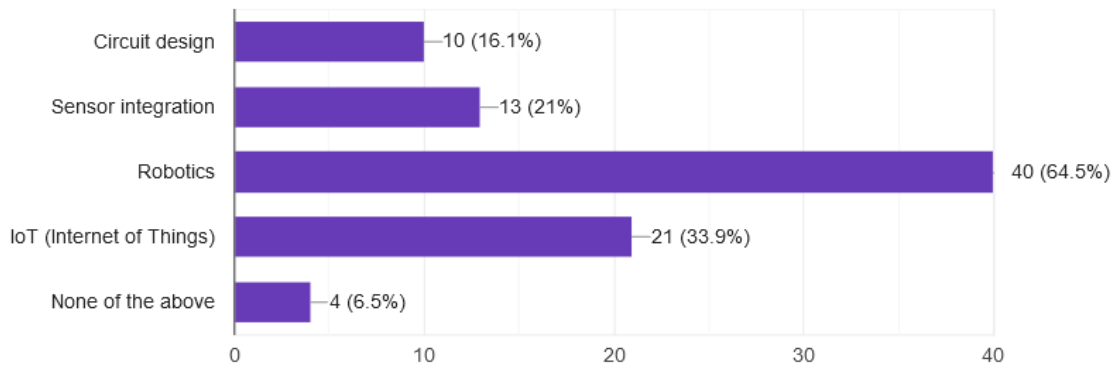
62 responses



Which areas of electronics are you most interested in? (Select all that apply)

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62 responses

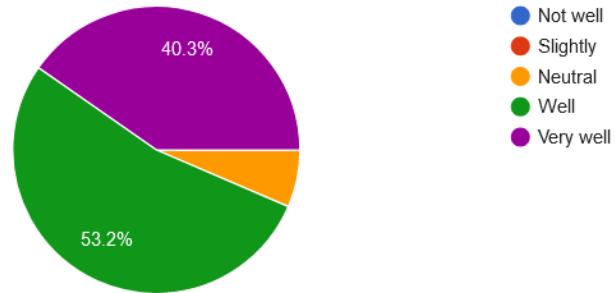


Feedback Form after the event:

How well do you understand the function of each hardware component as explained in the workshop?

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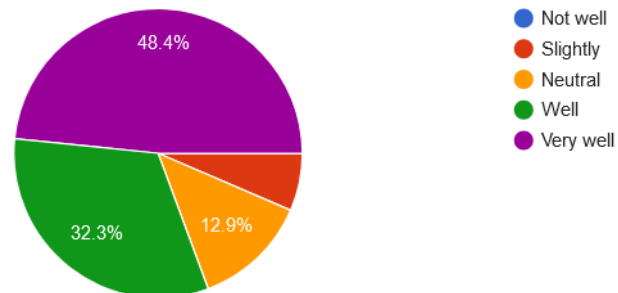
62 responses



How well were you able to analyze and troubleshoot hardware issues during the workshop?

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62 responses



School-wise participant list:

School Name: C.C SHAH SARVAJANIK ENGLISH HIGH-SCHOOL

Annexure 2

Name of the School:

Sr. No.	Name of the Student	Grade (IX-XII)	Mobile Number	Sign
1	Aalibyan M. Joshi	11 Sci	9429864592	
2	Kshitij S. Jadhav	"	9979987626	
3	Falak D. Surti	"	8160345041	
4	Mann P. Pabel	"	9825444566	
5	Smith B. Panchal	"	8780205618	
6	Jay Kadodazala	"	7878119391	
7	Aliyazgar A. Granchi	"	7779022752	
8	Qutbuddin K. Jabrot	"	9033904496	
9	Shubham V. Jha	"	7487898991	
10	Rashmi A. Choksi	"	9904253201	
11	Murtaza S. Tapja	"	9909107816	

School Name: SHARDAYATAN SCHOOL

Annexure 2

Name of the School:

Sr. No.	Name of the Student	Grade (IX-XII)	Mobile Number	Sign
1	Sachak Teril J	XI	9507010100	
2	Rana Het J	XI	9825636190	
3	Bhanu Sushrah L	XI	9922446009	
4	Bingh Ayush C	XI	9805412982	
5	Mansuriga Jay K	XI	9825046096	
6	Mehta Prayak S.	XI	9689793302	
7	Mansuriga Abhel quatr	XI	8140243732	
8	Shudiyari Anaya D	XI	9424162077	
9	Mistry Vrat H.	XI	2120008047	
10	Shudiyari Angel D	XI	9878613820	
11	Patil Viviana N	XI	9825706322	
12	Kothiyar Aayushi A.	XI	9909920333	
13	Shani Vrushki N	XI	9890559830	
14	Bolanki Hirva P	XI	8160729167	
15	Patel Prayansh K	XI	9878868122	
16	Jadav Prem	XI	9913257704	

School Name: SMT. VIDULABEN BHANUKUMARNEMCHAND
SHAH JIVANBHARTI U.M. VIDHYALAY

Annexure 2

Name of the School: *Smt. V. B. N. Shah Jeevanbharti U. M. Vidyalay*

Sr. No.	Name of the Student	Grade (IX-XII)	Mobile Number	Sign
1	ADITYA DIPAKDHAJ RANA	<i>std</i> 11- science A-Group	7984193183	<i>Aditya</i>
2	MO. AYAAN IYFAN DHAMDHANI	"	8200242371	<i>Aayan</i>
3	ISHAN NIKULKUMAR PATEL	"	9898618138	<i>Ishan</i>
4	FENIL AMITKUMAR MAKVANA	"	8490670183	
5	AAYUSH RAJESH DHAJ KANTHAIYA	"	81606705308	
6	FAIZANKHAN ASARAF- KHAN PATHAN	"	7041909881	<i>Faizan</i>
7	DHAVIK SANJAY DHAJ SONAR	"	9106266846	
8	ABELISH VIMAL LESHWALA	"	9537210100	
9	REHMATJAHAN FAIZAH SHAIKH MED	"	9664993151	
10	MITISHA KETANKUMAR JARIWALA	"	8460881051	<i>Mitisha</i>
11	ANUSHKA DILIPDHAJ PATEL	"	8160586616	<i>Anushka</i>
12	CHITRAKSHI VIMAL JARIWALA	"	8000358669	<i>Chitruksai</i>
13	SANJANA AJAYKUMAR JARIWALA	"	9054919188	<i>Sanjana</i>
14	NENCY CHETANKUMAR RANA	"	9979914457	<i>Nancy</i>
15	ISHAN RITESH DHAJ GADHER	"	9825553303	
16	JAINHEEL RAMESH DHAJ ROT	"	9913124458	<i>Jainpat</i>
17	HARSH JIGNESH DHAJ RANA	"	9265384209	<i>Harsh</i>
18	GAURAV RANJIT DHAJ MORE	"	9016146249	
19	MEET VIJAYKUMAR DALIA	"	8866674240	<i>Meet</i>
20	SHUBHAM MANISH KUMAR JARIWALA	"	9712022761	<i>Shubham</i>

Student Volunteers:

Avni Deshpande; Hita Jariwala; Jaynee Choksy;
Pranjal Patel; Parth Patel; Shrey Patel; Tej Desai

Report Compiled by:

Dev Joshi

(4th EC, Chairperson IEEE SCET SB)