







Silizium-Electronics Society of Department of Electronics

Deen Dayal Upadhyaya College, University of Delhi







(Under the aegis of DBT Star College Status Program)
ICT Skill Development Centre (SDC) @ DDUC – University of Delhi
IEEE Electron Device Society (EDS) Delhi Chapter

The National Academy of Sciences India (NASI) – Delhi Chapter

Jointly Organizes

Prizes Worth 10K for Top Performers

IoTronics Training Program on IoT



Hands on Practical Training on Arduino, ESP-32
Blynk Cloud and TinkerCAD

October 13-14, 2023 (Training) & October 16, 2023 (Competition)
ICT Centre at Second Floor

Professor Hem Chand Jain Officiating Principal

Deen Dayal Upadhyaya College

Professor Anurag Mishra Teacher-in-Charge

Department of Electronics Deen Dayal Upadhyaya College

Dr. Poonam Kasturi Convener-Training Program

Department of Electronics
Deen Dayal Upadhyaya College

Shubham Dubey

Student Coordinator

B. Sc. Hons Electronics V Sem. Deen Dayal Upadhyaya College

Professor Manoj Saxena

Convenor-SDC @ DDUC Program Coordinator DBT Star College Status Program

Event Report:

Name of Event: IoTronics – A Training Program on IoT

Date of Event: October 13 – 16, 2023

Venue of Event: DEEN DAYAL UPADHYAYA COLLEGE

Organized by: Silizium Society, Department of Electronics, Deen Dayal Upadhyaya College, University of Delhi, under the aegis of DBT-Star College Program, in collaboration with IEEE-EDS Delhi Chapter under the guidance and supervision of **Prof. Manoj Saxena** (Convenor-SDC@DDUC, Program Coordinator-DBT Star College Status Program, Department of Electronics), **Dr. Poonam Kasturi** (Convener-Training Program, Convener- DBT Star College Status Program — ELECTRONICS, Department of Electronics) and **Prof. Anurag Mishra** (Teacher-in-Charge, Department of Electronics).

A comprehensive two-day IoT Training Program was successfully conducted during October 13 – 14, 2023 which was followed by an intense Competition on October 16, 2023 on the campus of Deen Dayal Upadhyaya College. The initiative aimed to equip participants with practical knowledge and skills related to Arduino hardware, sensors, Esp-32, and Blynk Cloud. The concepts covered during the training program included Introduction to Arduino, it's overview, significance, program structure, Introduction to sensors and servo motors, Interfacing ultrasonic sensor with a servo motor, Definition and significance of IoT, Core components: sensors, connectivity, and cloud services, Introduction to Esp-32 and IoT ecosystem, Hosting devices on the web using various platforms like Blynk and Ubidots. Future of IoT and its real-world applications

Hands-on activities included implementing various circuits on Tinker Cad simulation platform: Blinking LED and creating patterns, interfacing sensors with Arduino board, and then on the hardware Arduino board: Blinking LED patterns, RGB LED and interfacing sensors with Arduino. Hosting devices on the web using various platforms like Blynk and Ubidots, Showcase, explanation and implementation of an IoT home automation project over Blynk app using Esp-32 to control an LED. Hands-on soldering activity for all the participants was also organised.

A total of 110 participants attended the training program, showcasing the enthusiasm and interest in the field of IoT. In all participants were from 19 different institutions: Various colleges of University of Delhi (Acharya Narendra Dev College, Atma Ram Sanatan Dharma College, Deen Dayal Upadhyaya College, Hansraj College, Hindu College, Kirori Mal College (KMC), Maharaja Agrasen College, Motilal Nehru College (MNC), Sri Guru Nanak Dev Khalsa College (SGNDKC), P.G.D.A.V Evening College, Sri Venkateswara College, Zakir Hussain Delhi College), Bhagwan Parshuram Institute of Technology, Cluster Innovation Centre, University of Delhi, Delhi University, Netaji Subhas University of Technology (NSUT) and Utkal University (UU), Bhubaneswar.

As round 1 of the competition a written quiz based on the concepts learnt during the training program was conducted on October 14, 2023. 38 participants were selected for Round 2 which was a project implementation round and was conducted on October 16, 2023. A real-life situation-based project problem statement based on the concepts was given for the competition and the winners were

First : Ansh Gupta (ICE Branch) - NSUT,

Second: Ayush Kukreti (B.Sc (H) Electronic Science) - Sri Venkateswara College,

University of Delhi,

Third : Naman Beri (B.Sc. (H) Electronic Science) - Acharya Narendra Dev

College, University of Delhi

The IoT Training Program and Competition witnessed active participation and engagement from students, fostering a learning environment for the exploration of emerging technologies. The success of the event reflects the collaborative efforts of the organizing team, instructors, and volunteers. The

competition provided a platform for participants to apply their skills and showcase innovative projects, contributing to the promotion of IoT knowledge and expertise within the college community.

Student Organizing Team:

- > Student Coordinators Shubham Dubey and Ajay Singh Shekhawat.
- Instructors Aryan Vashisth, Ayushi Dixit, Mayank, Deepanshu, Neeshu Tomar, Ram Tripathi. Manasvi.
- > Graphics Team Ruba Bano, Mayank, Sarvesh
- **P.R Team** Astha Bhardwaj, Arin Sharma (Social Media Head)
- Management Team Prachi Joshi, Kanika Negi, Priyanshu, Gaurav, Prince Kumar
- Volunteers Ashik, Deepanshu Varun, Tinku Dalal, Mouktik Yadav, Priyanshu Singh

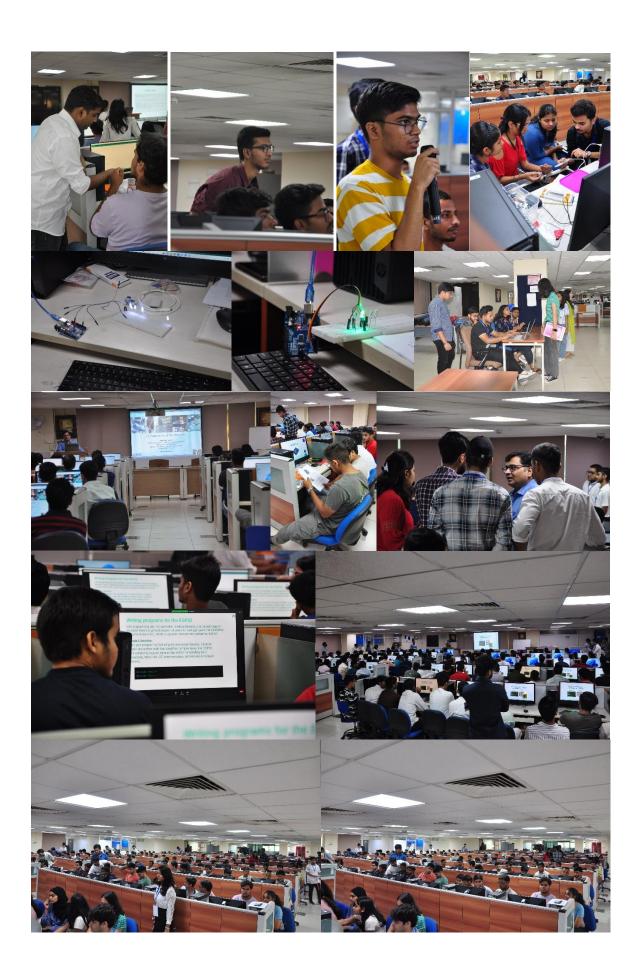
All the members of the students organizing team were of B.Sc. (H) Electronic Science.

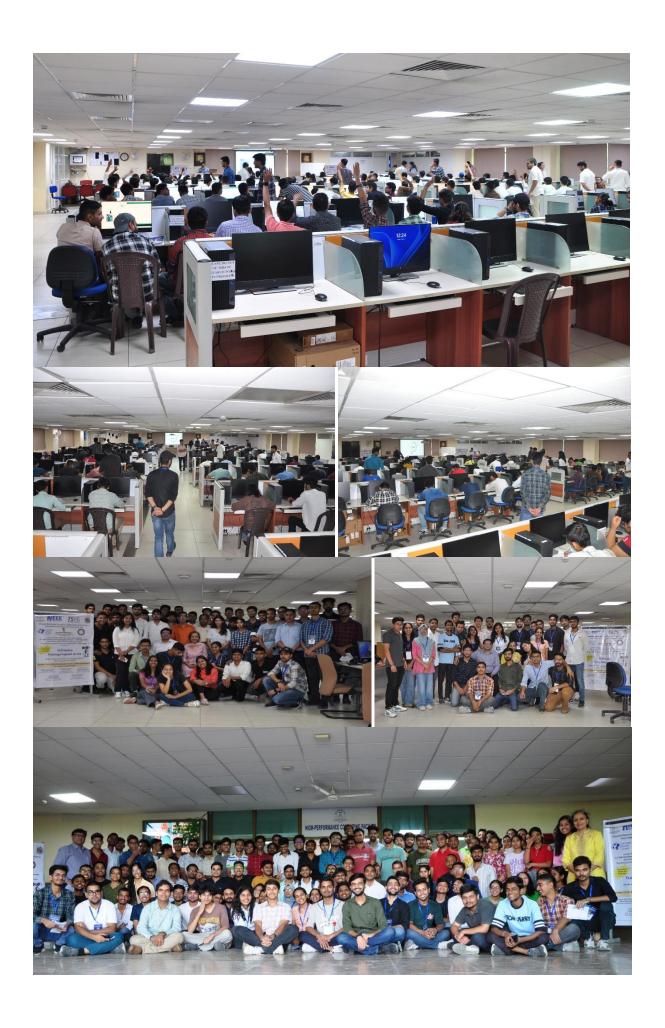
Glimpse Of the Event-













LIST OF STUDENTS for Training Workshop and ROUND-1 of the Competition

S.No.	Name	Course	Year	College/University	Unique ID
1.	Aashika	B.sc(hons.) Electronics	I	Zakir Hussain Delhi College, University of Delhi	IOT2002
2.	Abhishek Kumar Thakur	Bsc Electronics Honours	I	Acharya Narendra Dev College University of Delhi	IOT2004
3.	Abhishek Pratap Singh Arya	Bsc h electronics	I	Sri Venkateswara College, University of Delhi	IOT2005
4.	Abhishek Tripathi	Bsc(H) Electronics	I	Acharya Narendra Dev College University of Delhi	IOT2166
5.	Aditya Sharma	B.Sc. Hons. Electronics	II	Zakir Hussain Delhi College, University of Delhi	IOT2007
6.	Advit Khera	Bsc Hons Electronics	III	Sri Venkateswara College, University of Delhi	IOT2182
7.	Aisha Gupta	BMS	II	Acharya Narendra Dev College University of Delhi	IOT2008
8.	Aman	B.Sc.(H) Physics	III	Deen Dayal Upadhyaya College, University of Delhi	IOT2009
9.	Aman	BSC hons electronics	II	Hansraj College, University of Delhi	IOT2010
10.	Aman Chaudhary	B.sc electronic (hons)	I	Sri Venkateswara College, University of Delhi	IOT2011
11.	Aman kumar	Bsc.Hons in electronics	II	Zakir Hussain Delhi College, University of Delhi	IOT2012
12.	aman mishra	Bsc Electronics	I	Sri Venkateswara College, University of Delhi	IOT2013
13.	AMAN PRASAD	BSC(H) ELECTRONICS	I	Sri Venkateswara College, University of Delhi	IOT2014
14.	AMEEN KHAN	Bsc pscs	II	Deen Dayal Upadhyaya College, University of Delhi	IOT2015

15.	Amish Anand	B.Sc(hons)physics	I	Sri Venkateswara College, University of Delhi	ЮТ2016
16.	amritha jayan	B.Sc. Hons Physics	III	Hindu College, University of Delhi	IOT2017
17.	ANKESH ANJANA GOPAL	BSc Hons Electronics	II	Hansraj College, University of Delhi	IOT2174
18.	Ankit Maurya	B.Sc.(Hons) Electronics	II	Hansraj College, University of Delhi	IOT2018
19.	Ansh Gupta	ICE	I	Netaji Subhas University of Technology (NSUT)	IOT2021
20.	Anshu	B.sc (h)Electronic	II	Hansraj College, University of Delhi	IOT2022
21.	Arjit Brahma	BSc (H) Electronics	II	Sri Venkateswara College, University of Delhi	IOT2024
22.	ARYAN KUMAR	Bsc (h) electronics	I	Acharya Narendra Dev College University of Delhi	IOT2027
23.	Aryan Kumar Prince	Bsc (Hons.) Computer Science	l	Deen Dayal Upadhyaya College, University of Delhi	IOT2029
24.	Atul kumar	Bsc.(h) electronics	II	Hansraj College, University of Delhi	IOT2177
25.	Avan Singh Shekhawat	B.Sc.(H) Electronics	II	Hansraj College, University of Delhi	IOT2033
26.	Ayush Kumar	B.Sc. Hons. Electronics	I	Zakir Hussain Delhi College, University of Delhi	IOT2036
27.	AYUSH KUMAR	B.Sc(H) ELECTRONICS	II	Hansraj College, University of Delhi	IOT2037
28.	Daksh Mathur	mechanical	III	MAIT	IOT2043
29.	Devansh	СН	III	Netaji Subhas University of Technology (NSUT)	IOT2048
30.	Devanshu singhai	Btech information technology and mathematical innovation	I	Cluster Innovation Centre, University of Delhi	IOT2049
31.	Devraj	B.Sc Physical science with Computer science	III	Deen Dayal Upadhyaya College, University of Delhi	IOT2051
32.	Divya Chaudhary	BSc Hons Mathematics	III	Deen Dayal Upadhyaya College, University of Delhi	IOT2055
33.	Drishti	Bsc electronics hons	II	Acharya Narendra Dev College University of Delhi	IOT2056
34.	Faizal Ahmad	Bsc (hons) electronics	I	Acharya Narendra Dev College University of Delhi	IOT2057
35.	Gaurav Kumar	Bcom (prog)	l	Motilal Nehru College (MNC), University of Delhi (DU), Delhi	ЮТ2059
36.	Harsh Bhardwaj	Bsc.(h)Electronics	II	Sri Guru Nanak Dev Khalsa College (SGNDKC), University of Delhi (DU)	IOT2064
37.	HARSH KUMAR GURJAR	Bsc Hons. Electronics	I	Sri Venkateswara College, University of Delhi	IOT2065
38.	Harsh Singh	Bsc (hons) Electronics	I	Zakir Hussain Delhi College, University of Delhi	IOT2066
39.	Harsh Vardhan	Bsc.(h)Electronics	II	Sri Guru Nanak Dev Khalsa College (SGNDKC), University of Delhi (DU)	IOT2067
40.	Himanshu	BSc(H) Electronics	II	Sri Venkateswara College, University of Delhi	IOT2187
41.	Himanshu verma	Bsc (Hons) electronics	I	Acharya Narendra Dev College University of Delhi	ЮТ2069
42.	Honey Aggarwal	Electrical	IV	Maharaja Agrasen College, University of Delhi	ЮТ2070
43.	Jaya Negi	Bsc Cs	III	Deen Dayal Upadhyaya College, University of Delhi	IOT2071
44.	Jitendra Sinha	BSc Electronics	I	Sri Venkateswara College, University of Delhi	IOT2073

45.	Jugantar Sensua	B.Sc Electronics hons	II	Acharya Narendra Dev College University of Delhi	IOT2075
46.	Kaaraj Wadhwa	Information Technology		Utkal University (UU), Bhubaneswar	ЮТ2076
47.	Kanika	Bsc. Honours Electronics	Ш	Acharya Narendra Dev College University of Delhi	IOT2078
48.	Kartik Parashar	Bsc electronics	II	Sri Venkateswara College, University of Delhi	IOT2189
49.	Kashish	Physics hons	Ш	Deen Dayal Upadhyaya College, University of Delhi	IOT2080
50.	Kaushik Roy	BSC(H) ELECTRONICS	I	Acharya Narendra Dev College University of Delhi	ЮТ2082
51.	Khushi Singhal	BSC Hons Electronics	Ш	Maharaja Agrasen College, University of Delhi	ЮТ2084
52.	Krishita Garg	B. Tech. in ECE with AI & ML	I	Netaji Subhas University of Technology (NSUT)	ЮТ2087
53.	Kritika Dhawan	Bsc Cs	Ш	Deen Dayal Upadhyaya College, University of Delhi	ЮТ2088
54.	Manish Yadav	B.SC (Electronics)	I	Acharya Narendra Dev College University of Delhi	ЮТ2091
55.	Manshi	Electronics	II	Sri Guru Nanak Dev Khalsa College (SGNDKC), University of Delhi (DU)	ЮТ2092
56.	Mayank	Bsc h electronics	Ш	Delhi university	IOT2093
57.	Mayank Singh	B.Sc Maths Hons	I	P.G.D.A.V Evening College	IOT2094
58.	Megha R	BSc(Hons)Physics	Ш	Hindu College, University of Delhi	IOT2095
59.	Mehtab Siddiqui	B.Sc. Hons. Electronics	I	Zakir Hussain Delhi College, University of Delhi	ЮТ2096
60.	MOHD Farman	BSC(Hons.) Electronics	I	Acharya Narendra Dev College University of Delhi	ЮТ2099
61.	Mohd Hermain Irfan	Bsc electronics honors	I	Delhi university	IOT2101
62.	Mohd Samar	Bsc Hons computer science	I	Deen Dayal Upadhyaya College, University of Delhi	IOT2102
63.	Najiya Mundoly	Bsc Physics hons	Ш	Hindu College, University of Delhi	IOT2106
64.	Naman Beri	B.sc. Electronics honours	I	Acharya Narendra Dev College University of Delhi	IOT2107
65.	Paarin Pundir	Bsc Electronics (H)	I	Acharya Narendra Dev College University of Delhi	IOT2111
66.	Piyush Jha	B. Sc (H) Electronic	I	Sri Venkateswara College, University of Delhi	IOT2112
67.	Prabhat Mishra	Electronics hons	II	Sri Guru Nanak Dev Khalsa College (SGNDKC), University of Delhi (DU)	IOT2113
68.	Prerna Chauhan	B.Sc. (H) Physics	III	Deen Dayal Upadhyaya College, University of Delhi	IOT2116
69.	Priya	B-tech	I	Netaji Subhas University of Technology (NSUT)	IOT2117
70.	Rimjhim Shukla	B.sc life science	II	Acharya Narendra Dev College University of Delhi	IOT2122
71.	Riya Srivastava	Bsc Cs	III	Deen Dayal Upadhyaya College, University of Delhi	IOT2127
72.	Sachin Yadav	Bsc.(h)Electronics	II	Hansraj College, University of Delhi	IOT2129
73.	samiksha sharma	Bsc physical science with chemistry	III	deen Dayal Upadhyaya College, University of Delhi	IOT2132
74.	Shamiul	B. Tech	II	Netaji Subhas University of Technology (NSUT)	IOT2135

75.	Shivam bisht	B.Sc electronics (hons)	II	Hansraj College, University of Delhi	IOT2170
76.	Shivangi Gupta	mechanical	Ш	MAIT	IOT2137
77.	SNEHA SINGH	BSC(HONS.) ELECTRONICS	II	Acharya Narendra Dev College University of Delhi	IOT2140
78.	Sourav Singh	General	II	motilal Nehru College (MNC), University of Delhi (DU), Delhi	IOT2142
79.	Sudarshan Bhardwaj	Bsc(Hons) Electronics	III	Deen Dayal Upadhyaya College, University of Delhi	IOT2143
80.	sudhanshu kumar	Bsc hons electronic	I	Acharya Narendra Dev College University of Delhi	IOT2144
81.	Sunny chaudhary	B.sc(H) Electronics	III	Maharaja Agrasen College, University of Delhi	IOT2146
82.	Syed Haseeb Rizvi	B. Sc (H) Electronics	I	Zakir Hussain Delhi College, University of Delhi	IOT2147
83.	Tanu Panwar	B. Sc(hons) Electronic Sciences	II	Sri Guru Nanak Dev Khalsa College (SGNDKC), University of Delhi (DU)	IOT2148
84.	tanya sharma	ECE	II	Netaji Subhas University of Technology (NSUT)	IOT2149
85.	Tarun Gahlot	ICE	I	Netaji Subhas University of Technology (NSUT)	IOT2151
86.	Tushar Sethi	B.Tech CSE	III	Bhagwan Parshuram Institute Of Technology	IOT2152
87.	Utkarsh Singh	B.Sc.(H) Electronic Science	II	Sri Venkateswara College, University of Delhi	IOT2155
88.	Vicky Kumar	BSc (prog) Physical Science with Computer Science	I	Deen Dayal Upadhyaya College, University of Delhi	IOT2172
89.	YASH MIGLANI	Instrumentation And Control (B.TECH)	II	Netaji Subhas University of Technology (NSUT)	IOT2162
90.	Yash Yadav	B.S.C (Honours) Electronics	I	Acharya Narendra Dev College University of Delhi	IOT2163
91.	Yuvraj Raika	B.sc(H)Electronics	II	Sri Venkateswara College, University of Delhi	IOT2184
92.	Aarav Majumdar	Bsc. Hons. Electronics	I	Sri Venkateswara College, University of Delhi	IOT2001
93.	Abhinav Pawar	Information Technology and Engineering	III	Maharaja Agrasen Institute of Technology (MAIT), New Delhi	IOT2003
94.	Abhishek	Bsc(H) electronic	П	Hansraj College, University of Delhi	IOT2179
95.	Abhishek maurya	B.Sc electronic	II	Deen Dayal Upadhyaya College, University of Delhi	IOT2165
96.	Abhishek Tiwari	B.Sc Computer Science (hons.)	II	Deen Dayal Upadhyaya College, University of Delhi	ЮТ2006
97.	Adarsh Singh chandravanshi	Physics department	III	Deen Dayal Upadhyaya College, University of Delhi	IOT2178
98.	Amritansh singh	B.sc hons electronics	II	Hansraj College, University of Delhi	IOT2175
99.	Anjul Bhatia	B. Sc Maths	III	Kirori Mal College (KMC), University of Delhi, Delhi	IOT2168
100.	Anmol Gupta	Electronics and Communication	II	Sri Guru Nanak Dev Khalsa College (SGNDKC), University of Delhi (DU)	ЮТ2019
101.	Ansh Gupta	B. Sc(h) Electronics	II	Deen Dayal Upadhyaya College, University of Delhi	ЮТ2020
102.	Anuj Pahuja	B.Sc Physics (Hons.)	I	Deen Dayal Upadhyaya College, University of Delhi	IOT2023

103.	Arjun Singh	BSc(Honours) Electronics	I	Acharya Narendra Dev College University of Delhi	IOT2025
104.	Aryan	BSc. (Hons.) Physics	III	Deen Dayal Upadhyaya College, University of Delhi	IOT2180
105.	Aryan Ahmed	Bsc. (Hons) Computer Science	II	Atma Ram Sanatan Dharma College, University of Delhi	ЮТ2026
106.	Aryan kumar	Bsc. H Computer Science	I	Deen Dayal Upadhyaya College, University of Delhi	IOT2028
107.	Aryan Meena	B.Sc. Hons. Computer Science	II	Deen Dayal Upadhyaya College, University of Delhi	ЮТ2030
108.	Aryan Shukla	PSE	I	Hindu College, University of Delhi	IOT2031
109.	Atharva	Bsc.(h)Electronics	II	Sri Guru Nanak Dev Khalsa College (SGNDKC), University of Delhi (DU)	ЮТ2032
110.	Ayan Aggarwal	Information Technology and Engineering	IV	Maharaja Agrasen Institute of Technology (MAIT), New Delhi	ЮТ2034

LIST OF STUDENTS SELECTED FOR ROUND-2 OF THE COMPETITION

S.No.	Name	Course	Year	College/University	Unique ID
1.	Aman kumar	Bsc.Hons in electronics	II	Zakir Hussain Delhi College, University of Delhi	IOT2012
2.	Govind Kushwaha	B.Sc (H) Electronics	II	Acharya Narendra Dev College University of Delhi	IOT2169
3.	Sudarshan Bhardwaj	Bsc(Hons) Electronics	III	Deen Dayal Upadhyaya College, University of Delhi	IOT2143
4.	Ankit Maurya	B.Sc.(Hons) Electronics	II	Hansraj College, University of Delhi	IOT2018
5.	Ayush Kukreti	B.Sc.(H) Electronics	II	Sri Venkateswara College, University of Delhi	IOT2186
6.	Naman Beri	B.sc. Electronics honours	I	Acharya Narendra Dev College University of Delhi	IOT2107
7.	Shamiul	B. Tech	II	Netaji Subhas University of Technology (NSUT)	IOT2135
8.	tanya sharma	ECE	II	Netaji Subhas University of Technology (NSUT)	IOT2149
9.	Vicky Kumar	BSc (prog) Physical Science with Computer Science	I	Deen Dayal Upadhyaya College, University of Delhi	IOT2172
10.	Abhinav Pawar	Information Technology and Engineering	Ш	Maharaja Agrasen Institute of Technology (MAIT), New Delhi	IOT2003
11.	Ansh Gupta	ICE	I	Netaji Subhas University of Technology (NSUT)	IOT2021
12.	Anshu	B.sc (h)Electronic	П	Hansraj College, University of Delhi	IOT2022
13.	Himanshu	Bsc electronics	II	Sri Venkateswara College, University of Delhi	IOT2188
14.	Kanika	Bsc. Honours Electronics	Ш	Acharya Narendra Dev College University of Delhi	ЮТ2078
15.	Krishita Garg	B. Tech. in ECE with AI & ML	I	Netaji Subhas University of Technology (NSUT)	IOT2087
16.	Megha R	BSc(Hons)Physics	III	Hindu College, University of Delhi	IOT2095
17.	Prerna Chauhan	B.Sc. (H) Physics	Ш	Deen Dayal Upadhyaya College, University of Delhi	IOT2116
18.	Syed Haseeb Rizvi	B. Sc (H) Electronics	I	Zakir Hussain Delhi College, University of Delhi	IOT2147
19.	Tushar Sethi	B.Tech CSE	III	Bhagwan Parshuram Institute Of Technology	IOT2152

20.	YASH MIGLANI	Instrumentation And Control (B.TECH)	II	Netaji Subhas University of Technology (NSUT)	IOT2162
21.	Aman Chaudhary	B.sc electronic (hons)	I	Sri Venkateswara College, University of Delhi	IOT2011
22.	Amritansh singh	B.sc hons electronics	II	Hansraj College, University of Delhi	IOT2175
23.	Anmol Gupta	Electronics and Communication	II	Model Institue OF Engineering And Technolgy, Jammu	ЮТ2019
24.	Arjit Brahma	BSc (H) Electronics	II	Sri Venkateswara College, University of Delhi	ЮТ2024
25.	Atul kumar	Bsc.(h) electronics	П	Hansraj College, University of Delhi	IOT2177
26.	AYUSH KUMAR	B.Sc(H) ELECTRONICS	П	Hansraj College, University of Delhi	IOT2037
27.	Daksh Mathur	mechanical	Ш	MAIT	IOT2043
28.	Harsh Singh	Bsc (hons) Electronics	I	Zakir Hussain Delhi College, University of Delhi	ЮТ2066
29.	Jugantar Sensua	B.Sc Electronics hons	II	Acharya Narendra Dev College University of Delhi	ЮТ2075
30.	Nikunj Goel	Information Technology	IV	MAHARAJA AGLASEN INSTITUTE OF TECHNOLOGY	IOT2110
31.	Tarun Gahlot	ICE	I	Netaji Subhas University of Technology (NSUT)	IOT2151
32.	Devraj	B.Sc Physical science with Computer science	III	Deen Dayal Upadhyaya College, University of Delhi	IOT2051
33.	Drishti	Bsc electronics hons	II	Acharya Narendra Dev College University of Delhi	ЮТ2056
34.	Kaaraj Wadhwa	Information Technology		MAIT	IOT2076
35.	Kartik singh	Bsc(H) Electronics	II	Hansraj College, University of Delhi	IOT2176
36.	Mayank	Bsc h electronics	III	Delhi university	IOT2093
37.	Shivam bisht	B.Sc electronics (hons)	II	Hansraj College, University of Delhi	IOT2170
38.	sudhanshu kumar	Bsc hons electronic	I	Acharya Narendra Dev College University of Delhi	IOT2144