



Shree. Shamrao Patil (Yadravkar) Educational & Charitable Trust's
**SHARAD INSTITUTE OF TECHNOLOGY
COLLEGE OF ENGINEERING**

"A Grade Accredited by NAAC"
NBA Accredited Programs, An Autonomous Institute

DEPARTMENT OF MECHANICAL ENGINEERING 2021-22

APEX

A NEWSLETTER

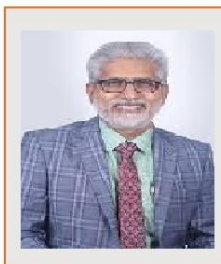
Vol-1, Issue-2



Hon. Dr. Rajendra Patil (Yadravkar)
Chairman
Shri Shamrao Patil (Yadravkar)
Education & Charitable Trust



Hon. Mr. Anil Bagane
Executive Director
Shri Shamrao Patil (Yadravkar)
Education & Charitable Trust



Dr. S.A. Khot
Principal



Dr. P.M. Bhagwat
HOD, Mechanical

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**SHARAD INSTITUTE OF
TECHNOLOGY COLLEGE OF ENGINEERING
YADRAV.
INDIAN SOCIETY OF HEATING
REFRIGERATING AND AIR
CONDITIONING ENGINEERS
Kolhapur-Sangli Subchapter**



K-12 Activity Report

Date – 25th June 2022

Kolhapur Sangli Sub chapter completed K12 activity IN “GOVINDRAO HIGH SCHOOL, ICHALKARANJI”

Date - 25th June 2022

Time –10.30am to 11.30pm

Total No of students: 40 (7th Std Student)

Activity Completed:

Kolhapur Sangli Sub chapter completed K12 activity in “GOVINDRAO HIGH SCHOOL ICHALKARANJI”

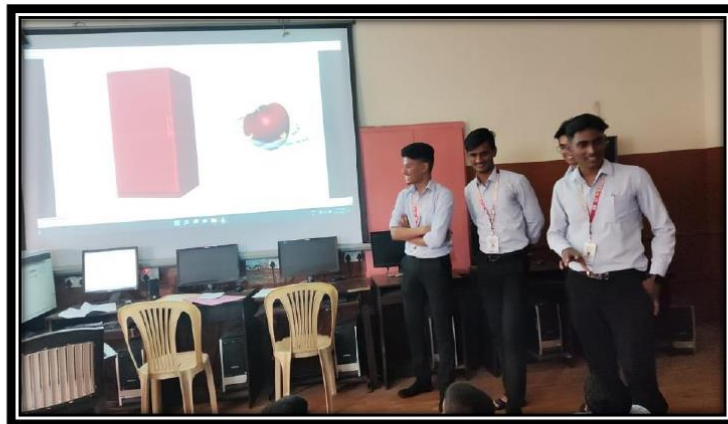
Activities Conducted Were as Follows....

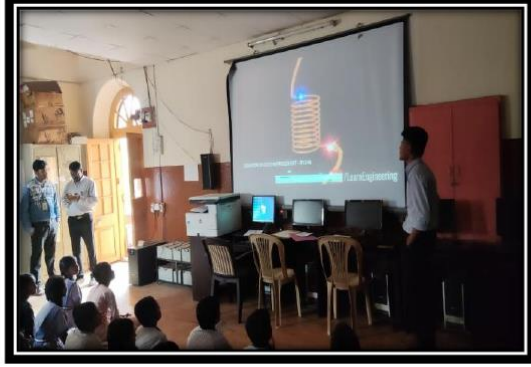
1. Basic Introduction about ISHRAE and Other things in Engineering.
2. Delivered a presentation on Basic of Refrigeration and Air Conditioning and Global Warming.
3. On the occasion of “WORLD REFRIGERATION DAY” we conducted K-12 Activity in Govindrao high school ichalkaranji.
4. In this activity Mr.A.S.N.Husiany and Mr.S.V.Kumbhar sir guide us to make the activity successful.
5. We delivered the presentation on Refrigeration and Air conditioning to students.
6. Students had enjoyed the session. Some of the students also ask their doubts. We show them some of the videos related to the refrigeration and Air conditioning for better understanding.
7. This activity helps us to improve our soft skills.

8. Our ISHRAE members involved in this activity:

- Samir N. Momin.
- Abhishek M. Funde.
- Omkar S. Chougule.
- Sanmesh S. Shinde.
- Prathamesh U. Jadhav.
- Sanket B. Kinekar.
- Rushikesh U. Pujari.
- Adinath R. Umrani.

ISHRAE MEMBERS AND STUDENTS INVOLVED IN K-12 ACTIVITY





Sharad Institute of Technology, College of Engineering, Yadrav-Ichalkaranji

An Autonomous Institute

SMART INDIA INTERNAL HACKATHON-2022

SIH is the World's Biggest Hackathon and Open Innovation model, an initiative by Ministry of HRD. Smart India Hackathon 2020 is a nationwide initiative to provide students a platform to solve some of the pressing problems we face in our daily lives. Students across India compete creatively to solve problems of Ministries, Departments and Industries to give solutions Harness. Talented youngsters from all over the country offer out of the box solutions to problems (Hardware and Software) .To inculcate a culture of product innovation and a mindset of problem solving. For nominating the finalized teams 8 from Hardware edition and 2 from Software and 2 are in waiting., Sharad institute of technology college of engineering Yadrav conducted internal hackathon in one phases on 10th March 2022 at college premises through hybrid mode.

Ministry of Education
Government of India

75
Azadi Ka
Amrit Mahotsav

MoE's
INNOVATION CELL
(GOVERNMENT OF INDIA)

Persistent

SHARAD INSTITUTE OF TECHNOLOGY,
COLLEGE OF ENGINEERING, YADRAV
(AN AUTONOMOUS INSTITUTE)
Conducting Internal
Hackathon for SIH 2022
10 March 2022
Thursday 2 PM Onwards

SMART INDIA
HACKATHON
2022

**Internal Hackathon for
Both Software & Hardware Edition**

<https://www.facebook.com/sitcoeic>

https://twitter.com/sitcoe_ic

https://www.instagram.com/sitcoe_ic

SIH2020 Internal Hackathon Committee:

Sr No	Name	Role	Profile
1	Dr. Kalyanbrata Ghosh	Judge for internal hackathon	Name: Dr. Kalyanbrata Ghosh Designation: Associate Professor Qualification: Ph. D (IIT Dhanbad) Area of specialization: RF and Microwave Antenna Teaching Experience: 10.5 Years Industrial Experience: 3 Years E mail: ghosh.kalyanbrata@gmail.com Phone: 9734620432
2	Mr. A. S. N. Husainy	Judge for internal hackathon	Name: Mr. A. S. N. Husainy Designation: Assistant Professor, Member Secretary R&D Qualification: BE (Mech), M E(Heat Power), Ph.D(Pursuing) (Shivaji University) Area of specialization: Heat Power Engineering Teaching Experience: 9 Years Industrial Experience: 1 Years E mail: avesahemad@sitcoe.org.in Contact Number: 8007005860
3	Mrs Dhanashri M Biradar	SPOC and Judge for internal hackathon	Name: Mrs Dhanashri M Biradar Designation: Assistant Professor Qualification: M. Tech (Embedded Systems), Ph. D (Pursuing) Area of specialization: Embedded Systems Teaching Experience: 8.5 Years Industrial Experience: Nil E mail: dhanashri@sitcoe.org.in Contact: 8803338282

About Internal Hackathon

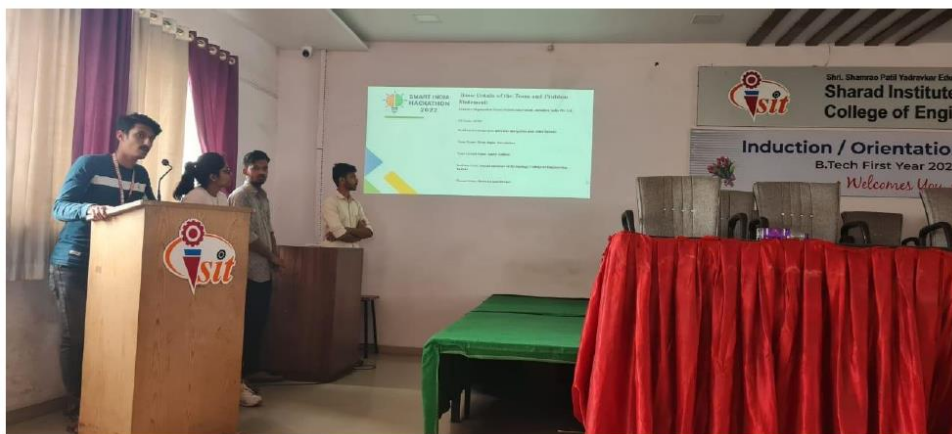
This hackathon was conducted by the SITCOE, Yadrav to encourage the students and drive the spirit of various hardware and software technologies in miscellaneous, health care, clean water, agricultural for software and hardware edition. All the students were given 8 hours' time to develop and demonstrate their Project/Model, and the model developed is evaluated by external jury members. The 3 jury members split into two groups of two members each and evaluated all the teams works. There were 2 short rounds before lunch and 1 main round and the same after the lunch.

Registrations: 24 Nominations came from various departments' students for this event. Out which 10 are from software and 12 from Hardware.

- CSE- 3 Software
- ETC- 4 Software and 2 Hardware
- EEE- 2 Hardware
- Civil - 3 Software and 1 Hardware
- MECH- 6 Hardware, 3 software

Out of them 8 teams are shortlisted for hardware and 2 teams are shortlisted for software and 1 team (Hardware) is kept in waiting.

Glimpses of Program



Faculty Publications 2021-22

Name of the Author(s)	Title of the Paper	Name of the Journal	ISSN
Mr. Suyog S Patil	Optimization of maintenance strategies for steam boiler system using reliability-centered	International Journal of Quality & Reliability	Scopus ISSN: 0265-671X https://doi.org/10.1108/IJQRM-07-2021-0216
Mr.A.S.N.Husainy	Improving Cooling Performance of Deep Freezer by Incorporating Graphene Oxide Nanoparticles Mixed with Phase Change Materials During a Power Outage	Techno-Societal 2020 Springer	ISBN: 978-3-030-69925-3
Mr.A.S.N.Husainy	Profound Approach towards rural Empowerment with the Aid of Solar Drying Technology	Techno-Societal 2020 Springer	ISBN: 978-3-030-69925-3
Mr.P.H.Yadav	Fluid Elastic instability and vortex induced vibration parameters in finned tube array with P/D ratio 1.79	World journal of Engineering	Scopus jISSN:1708-5284
MR Suyog Patil	Availability Analysis of a Steam Boiler in Textile Process Industries Using Failure and Repair Data: A Case Study	ASME J. Risk Uncertainty Part B	Scopus ISSN: 2332-9017
Mr. P H Yadav	Investigation on vibration parameters in Aluminum finned tube arrays subjected to water cross flow.	Journal of Vibration Engineering and Technologies	
Mr. B B Sangame	Analyzing the effect of inoculant addition on the solidification of ductile cast iron using thermal analysis.	Journal of Thermal Analysis and Calorimetry	
Mr. B B Sangame	Applications of thermal analysis to study the effect of inoculation on the solidification of ductile cast iron	Lecture notes in Mechanical Engineering-Springer	
Mr. S V Kumbhar	Experimental investigation of vapour compression refrigeration system using EHD effect	International Conference on Advances	
Mr.A.S.N.Husainy	Emerging Agriculture Applications of Silver Nanoparticles	ES Food Agrofor,2021,3,17-22	ES Food Agroforestry

Students Publications 2021-22

Sr. No	Name of Student	Title of Research Paper	Name of Journal/Conference	Volume/Issue, Year of Publication	Scopus/SCI /UGC/DOI
1	Rupesh Ingale, Shradha Mahadik.	Study of air Purification system for HVAC Applications to Fight Virus to Maintain indoor Quality(IAQ)	JARMET	Volume 8, Issue 1-2021, page No-23-31	Peer Reviewed ISSN:2454-8650
2	Rohitdyama, sanket bapat	Performance Improvement of Solar still with &without use of PCM	Journal of Alternative and Renewable Energy Sources	Volume 7, Issue 2-2021, page No-39-43	Peer Reviewed e-ISSN:2581-6969
3	Madake Hrutuja, Abhishek Patil	A Review on state of Art of smart material for Defense Applications	MAT		Peer Reviewed e-ISSN:2581-6969
4	Asiya Pendari	Profound Approach towards rural Empowerment with the Aid of Solar Drying Technology	Conference	(Book Chapter)	Techno-Societal 2020, https://doi.org/10.1007/978-3-030-69925-3_80
5	Suraj Hawal, Rohit Dayma	Building Cooling by using phase change material for Human Comfort	International journal of scientific research and Engineering Trends	Volume-7, Issue-3, 2021	Peer Reviewed ISSN:2395-566X

Industry Sponsored Projects 2021-22

Sr.No	Name of Student	Project Title	Sponsorship Company
1	LOHAR SHUBHAM SURESH	Design ,Development & Fabrication of Laddu making Machine.	Bluestar Automobiles,Ichalkaranji
	KATE TUSHAR SHRIKANT		
	MADANE SHUBHAM RAVIKANT		
	SALUNKHE SOURABH ANIL		
2	CHAVAN ARIHANT ARUN	Designing & modeling of In-pipe Inspection Robot.	OM Technology,Khanjire Industrial Estate
	KURHADE SWAPNIL RAMCHANDRA		
	KOKANE RUSHIKESH SANJAY		
	UPADHYE CHINTAMANI RAJENDRA		
3	HOGADE MAYURESH SACHIN	Design & Manufacturing of cookies making machine using wire cut frame method.	Monotech Baker's King,Mangur
	BHUJAWADKAR VAIBHAV PRAKASH		
	DAVANE AKSHAY RAJU		
	KOSHTI NITIN ARVIND		
4	BENADIKAR SHUBHAM SARJERAO	Study and development of software of foundary process for its tooling	Technocraft Industry, Hatkanangale
	KHOT SOURABH VIJAYKUMAR		
	RAJ SAMYEK SHASHIKANT		
	KAMBLE PRATIK SUDHAKAR		
5	BAGAL VARDHAN SANDIP	Pick & PlaceRobot for Impact Testing Machine using IOT for aerospaceing.	Fuel Research Institute, Ichalkaranji.
	DHALE ANIKET ANIL		
	DHALE ANIRUDHA SHASHIKANNT		
	PUJARI VARUN DATTATRAY		
6	SAWANT ROHAN BALASAHEB	Pick & PlaceRobot for Impact Testing Machine.	Fuel Research Institute, Ichalkaranji.
	SHRIDHAR CHANDRAKANT SUTAR		
	UGALE YASHWANT SHANKAR		

7	*HOGADE SHIVANI DHANANJAY	Design and manufacturing of hydraulic fixture for mounting bracket with automatic clamp and de-clamp	Carline solutions engg.and counsultancy service,sangli naka behind balajibakers,ichalkaranji
	*MHAKAN SRUSHTEE SANJAY		
	HARSH JEETENDRA CHAVAN		
	KAMATE TANMAY		
8	AMBI ANIKET	Design and manufacturing of hydraulic fixture for rocker arm with automatic clamp and de clamp	Aarti Industries, Yadrav
	AMBI MILIND SHEKHAR		
	CHOUGULE SHRIJEET VARDHAMAN		
	DUDHANE NIKHIL ANANDA		
9	JATIN KABURE	Fabrication of Screw Conveyor.	Tyloseal Industry MIDC Miraj
	PATIL ANIKET ARUN		
	KUSHTE PAWAN RAJENDRA		
	NANDANE RUPESH RAJENDRAKUMAR		
10	MAGDUM VAIBHAV BASGONDA	Design & Development of resin washer.	Happy food equipments, Tanagfata
	PATIL RUSHIKESH RANGRAO		
	PATIL SURAJ VASANT		
	SHEDBALE BHUSHAN SUBHASH		
11	KHADAKE SUSHIL SURESH	Sponsered Project on Designing and Development of Fixture for Drilling and Tapping of Lock vise By using Hydarulic Cylinder	Atharva Enterprises,Jaysingpur
	RANADIVE ANISH SHASHANK		
	RUKADIKAR SIDDHARTH VINAYAK		
	SURAJ DHANANJAY MAGDUM		
12	KURANE SALMAN	Design & Manufacturing of Hydraulic Fixture for Drilling.	Atharva Enterprises,Jaysingpur
	PATIL ROHIT SAMBHAJI		
	PATIL SHRIRAJ HEMANT		
	PATIL VRUSHABH AJIT		
13	KAMBLE SANKET SURESH	Hydraulic Operated multi spindle drilling machine	Sonic Industries,Kagal MIDC
	PATIL GOURAV DIPAK		
	PAWAR ABHISHEK BALASAHEB		
	POWAR RUTWIK RAJIV		
14	KOLI VIVEK DATTATRAY	Perfomance investigation of split	Patil Uas rop vatika, A.Lat
	MHAKAN VISHAL SACHIN		

	MORE SHUBHAM DILIP NAGARALE PRAJWAL RAMCHANDRA	air conditioner using eco-friendly Refrigerant	
15	MOHITE AKASH MUKUND PAWAR SANSKAR BHARAT KAMBLE PRABUDDHA RAJENDRA KHABADE SHIMON SHAMUVEL	Practical Analysis of sleeve BKT (500/7) used to reduce the dimeter of the cylindrical bores using adstefan simulation software.	Mahabal metal pvt. ltd,Miraj
16	SAVEKAR SURAJ SAMBHAJI KANGANE RUSHIKESH MANSING PRUTHVIRAJ CHOUGULE UKIRDE RUSHIKESH RAJU	Design & Development of Shot Separator Machine.	Saroj Precision, 5 star MIDC,Kagal.
17	BHOSALE AKSHAY ARUNKUMAR GEJAGE AMOL ASHOK HATPAKI PRASAD RAJENDRA JADHAV VILAS KUMAR	Design & Development of Khari Sheeter by using Ratchet Mechanism.	Monotech Baker's King,Chikodi
18	*ADAMAPURE AMRUTA SATAPPA PEERZADE SAYYADNAIMBUKHARI TALIBALI ADMUTHE PRANAV DILIP KOLI OMKAR SHRIKANT	Design & Manufacturing of Hydraulic pallett Lifter Machine.	The Sky Industries Parvati industrial Estate, Yadrav
19	AGALAVE AMRUTESH BANSODE SANYAM SUNIL BHANDAGE PRASHANT SANDIPAN CHOTHE SAURABH SHEKHAR	Design & Manufacturing of Rotary Dust Collector in Textile Industry	Ashok Industries, Ichalkaranji
20	*BHAGATE AKSHATA SUNIL *CHAKOTE KOMAL SANJAY *MANE NIKITA SHITAL	Analysis of different properties with different heat treatment process for martensite stainless steel grade SS410	Delta Metalurgical Laboratory Sangli
21	JAGTAP BHUSHAN BHANUDAS JADHAV PRATIK SAMBHAJI NIKHIL BANDA HATALGE	Design & Fabrication of Eco Friendly Road Cleaner.	Tara Industries,Jaysingpur

Guest Lecture 2021-22 SEM-II

Sr. No.	Title of Expert Lecture	Class	Expert Lecture conducted Date	Name of Expert Resource person	Designation	Company /Institute
1	Computer added design using CREO	SE,TE	30/03/2022	Mr. Sourabh M. Pandit	CAE Engineer	ELEATION Pvt. Ltd
2	Importance of computer language for mechanical engineers	SE,TE	4/8/2022	Mr. M.D.Jamadar	CEO,	Qsective solution pvt.ltd.
3	How to plan for start up and my success	SE,TE	4/1/2022	Mr. Vinay k. Magdum	MD	Siddha engineering pvt. Ltd.
4	sci lab software	SE,TE	16/04/2022	Mr.Pnkaj Patil	Software manager	IIT Bombay
5	opportunities for engineers in government sectors through competitive exam	BE	3-May-22	Mr Shailesh K. Kokate	Director	sidhaanti IAS academy, Ichalkaranji.
6	Energy Sustainability and Green Initiatives	SE,TE	4/6/22	Dr. Mahesh Wagh	Faculty PCRA	PCRA ,Kolhapur





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Sharad Institute of Technology College of Engineering
YADRAV (ICHALKARNJD)-416121

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SHARAD STARTUP CENTRE

3 Days Workshop on Entrepreneurship Report

2.0

Date & Time of Webinar	7,9,11 April, 2022
Number of Beneficiaries	115
Name of Expert	Mr Sachin Kumbhoje, Opex Accel. Mr Nikhil Padate, Jangs Industries Mr Suresh Umap, Reg.Mngr, MCED Mr Rakesh Chopra, EDII Ahemdabad Mr Suhas Kulkarni, CA

Topics covered in Workshop

1. Why Entrepreneurship
2. How to Start SSI Unit and Financial aspects
3. Identification of Business Opportunities
4. Schemes & funding available from Govt Agencies
5. Preparation of Project Proposal
6. Factory Visit and Interaction with Successful Entrepreneur.



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Date- 05/04/2022



SHARAD STARTUP CENTRE

Notice

Institute has established the state of the art "Sharad Startup Centre" with an objective to boost the economy, open up job opportunities, restarting turned off industries, encourage entrepreneurship on a large scale and leverage startups globally.

All the students are hereby informed that Sharad Start Up Center under EDC is **3 Days Workshop on Entrepreneurship 2.0** is scheduled on 7-9th April 2022. Those who have registered they can go through schedule and attend accordingly.

Mr S S Patil
Head, Sharad Startup Centre

Mr. S G Bardiya
Head, Sharad Startup Centre

Department Coordinators

- | | |
|---------------------------------|-------------------------------|
| 1. Computer Science & Engg & AI | Mr S B Gurav 8698305250 |
| 2. Electronics & Tele Comm Engg | Mrs Halunde Mam 7620181744 |
| 3. Civil Engg | Mr Sandip Chougule 9975003984 |
| 4. Electrical Engg. | Mr Vishal Wadkar 9028400639 |
| 5. Mechanical & Mechatronics | Mr Suyog Patil 8149623108 |

Topics covered in Workshop

1. Startup & Entrepreneurship Opportunities for Engineers
2. How to Start SSI Unit and Financial aspects
3. Programming Self
4. Schemes & funding available from Govt Agencies
5. Preparation of Project Proposal
6. Factory Visit and Interaction with Successful Entrepreneur.



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 COLLEGE OF ENGINEERING, YADRAV**
 AN AUTONOMOUS INSTITUTE

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3 Days Workshop on **Entrepreneurship 2.0**

Organized By



EDC- Startup Club
 In Association With
Institute Innovation Council

Scheduled Date: 07-09th April 2022

Highlights:

- Startup and Entrepreneurship Opportunities for Engineers
- Expanding Happiness & Freedom Through Entrepreneurship
- How To Start SSI Unit ?
- Financial Schemes & Assistance From Govt. Agencies & Subsidy
- Entrepreneurial Qualities
- How To Prepare Project Proposal?
- Programming Self
- Industrial Visit & Interaction with Successful Entrepreneur

Organizing | Mr. S. G. Bardiya | Dr. S. S. Tamboli | Dr. Sanjay A. Khot | Hon. Mr. Anil Bagane

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3 Days Workshop on Entrepreneurship 2.0 (Day 1)

Sr. No	Date	Time	Name of Faculty	Subject
		09.30am - 10.00am		Inauguration
1	07/04/2022	10.00am - 11.30am	Mr. Nikhil Padate Jang's Technologies Ichalkaranji	How to start SSI unit.
2		11.30am - 12.00am		Long Break
3		12.00am - 02.00pm	Mr Sachin Kumbhoje Opex Accelerator, Kolhapur	Startup & Entrepreneurship Opportunities for Engineers
4		02.00pm - 02.15pm		Short Break
5		02.15pm - 04.00pm	Mr. Suhas Kulkarni CFO, Synergy Green Industries	How to Write a Project Proposal for Funding

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3 Days Workshop on Entrepreneurship 2.0 (Day 2)

Sr. No	Date	Time	Name of Faculty	Subject
1	08/04/2022	09.30am - 11.30am	Mr. Suresh Umap Regional Manger MCED Mumbai	Schemes & support available from government agencies
2		11.30am - 12.00am	Long Break	
3		12.00am - 02.00pm	Mr. Suresh Umap Regional Manger MCED Mumbai	Schemes & support available from government agencies
4		02.00pm - 02.15pm	Short Break	
5		02.15pm - 04.00pm	Entrepreneurship GETT Test	

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3 Days Workshop on Entrepreneurship 2.0 (Day 3)

Sr. No	Date	Time	Name of Faculty	Subject
1	09/04/2022	09.30am - 11.30am	Mr. R.K. Chopra EDII Ahmedabad	Programming self
2		11.30am - 12.00am	Long Break	
3		12.00am - 02.00pm	Mr. R.K. Chopra EDII Ahmedabad	Programming self
4		02.00pm - 02.15pm	Short Break	
5		02.15pm - 04.00pm	Industrial visit to FIE Pvt Ltd, Ichalkaranji	





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Gat No. 525, 473/A, Behind Omkareshwar Temple, Yadrav-Ichalkaranji
Tal: Shirol. Dist: Kolhapur, Maharashtra, India