Criteria 2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

The institute has a well-defined organization structure for the experimental, participative and problem solving learning of the students. Experimental learning improves the problem solving abilities of the students and enhances their understanding. Project based learning is the method of experimental learning. The institute has been implemented project based learning from the first year itself. In every semester defined projects are given to the group of students and they come up with their ideas and implementation by pooling resources from various departments. Some co-curricular activities and facilities that provide for experiential learning are discussed later.

The project work carried out by the students generally reflect their learning level during the program and knowledge of all the PO's while implementing their project work on various technical /social challenges of the society. The project work is carried out by group of students and process of distribution of groups and their continuous evaluation is to be ensuring by Internal Quality Assurance Cell (IQAC). Minor and Major Project are per curricular.

- Project exhibition by 1st Year students.
- Technical clubs of students who are working on hardware/software development for example Go-Kart, Drone, Robot, Bot, App development, Cars, modified bikes, solar based vehicles etc. all comes under the category of project based learning.
- Social clubs are also a part of project based learning. JECRC students are teaching to poor students, donating blood, live platelets donation (SDP), facilitate of beneficiary and sanitizing girl students.

Other than curricular prescribed by the university a study centric learning in the area of curricular/ co-curricular activity, where, students exhibit their skills, managing activity, enhancing skills, teach them how to handle a particular task comes under project based learning.

Project Based Learning

| S.no.	Activity under Project based learning
1.	Minor and Major Projects
2.	Hardware/software working model exhibition
3.	Smart India Hackathon internal weekend
4.	Moon riders club (making of Go-karts/cars/bikes etc.)
5.	Embedded system/Robot/Drone
6.	Photography Club
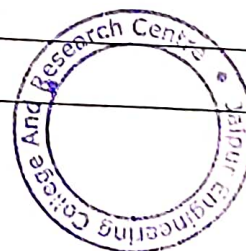
Experimental Learning: - Minor and Major Projects

Home Security system based on IOT and face recognition major project develop by the student of Computer Science and Paper shredder machine developed by the student of Mechanical student.
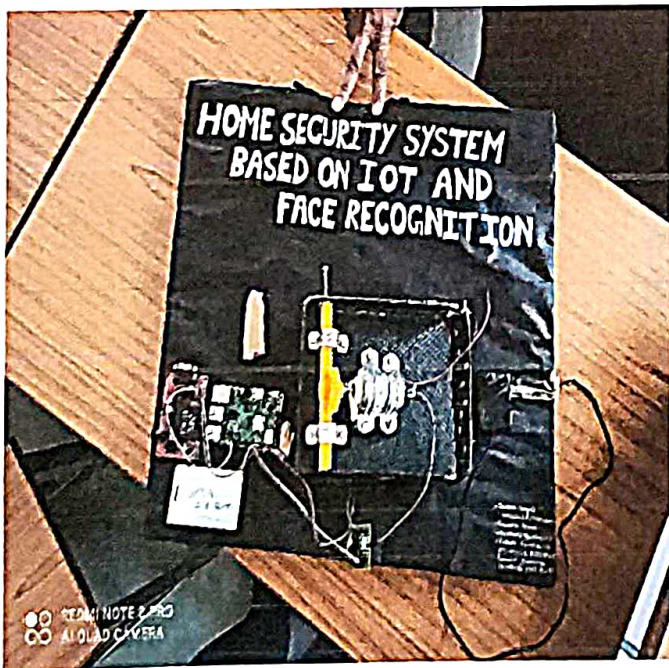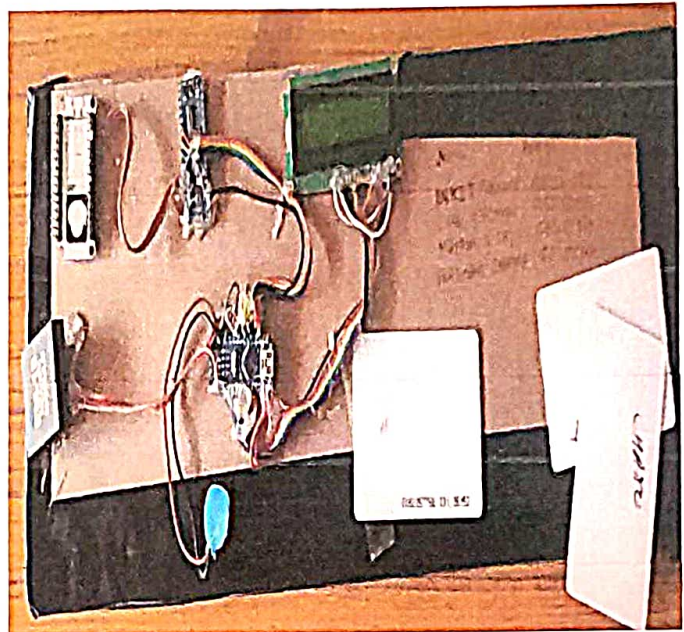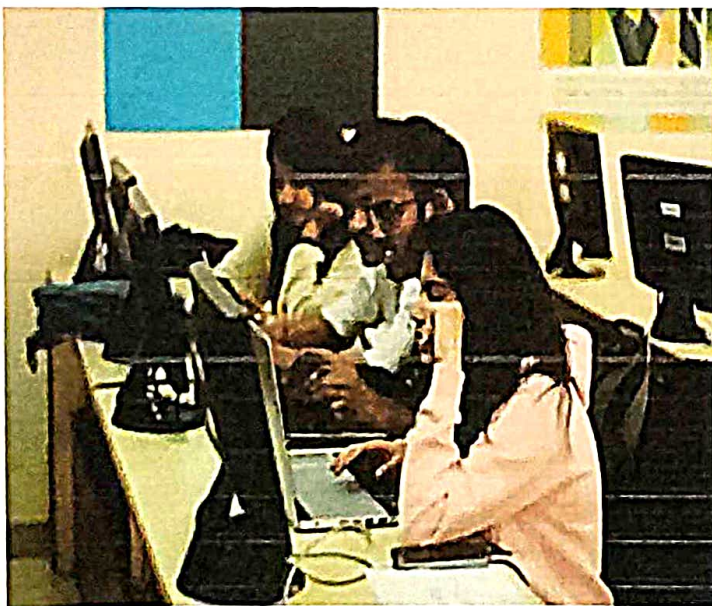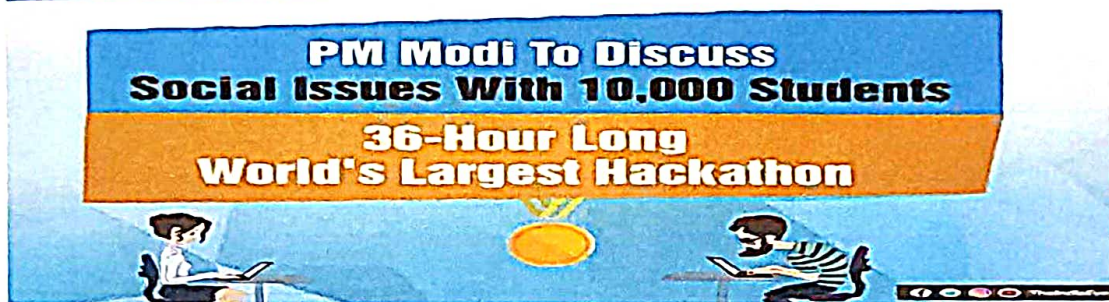
Problem Solving Methodology: - Hackathon

Hackathon is a computer oriented coding event which includes computer programming, software development, graphic designing, interface designing, app development, website designing, video game development etc. It is a day long time event. Winning teams are awarded.
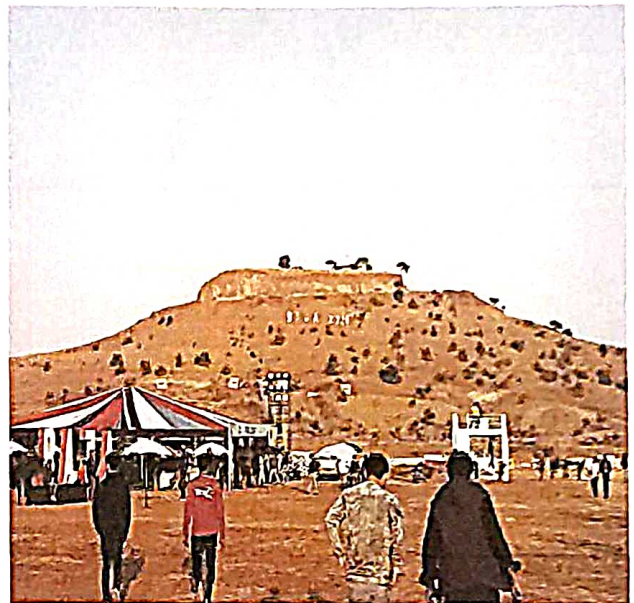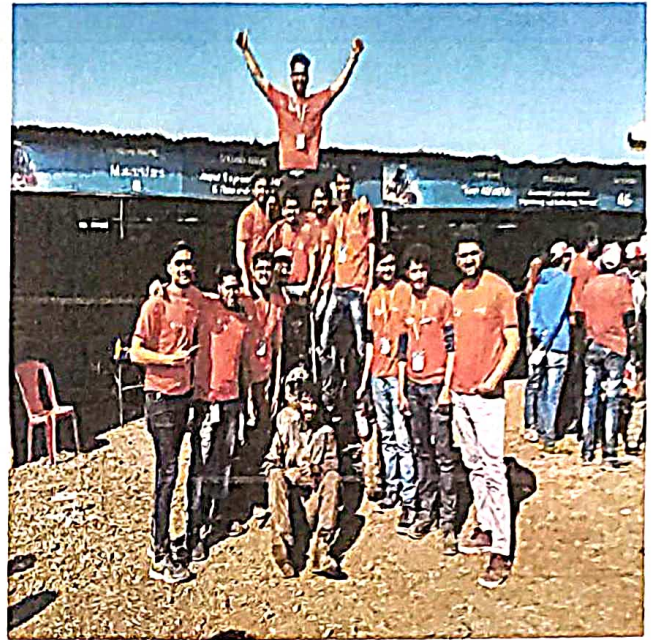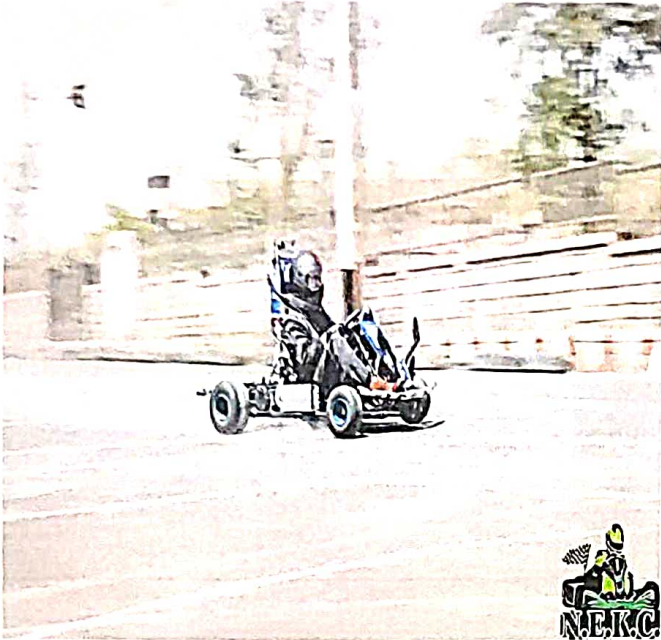
<u>Project Based Learning: Moon Rider Club</u>

Team MOONRIDERS is the SAE Collegiate Club of JECRC Jaipur. The club participates in various National Motorsports events in which a racing vehicle is designed and fabricated under the Moonriders Lab, which competes with teams coming from different parts of India.
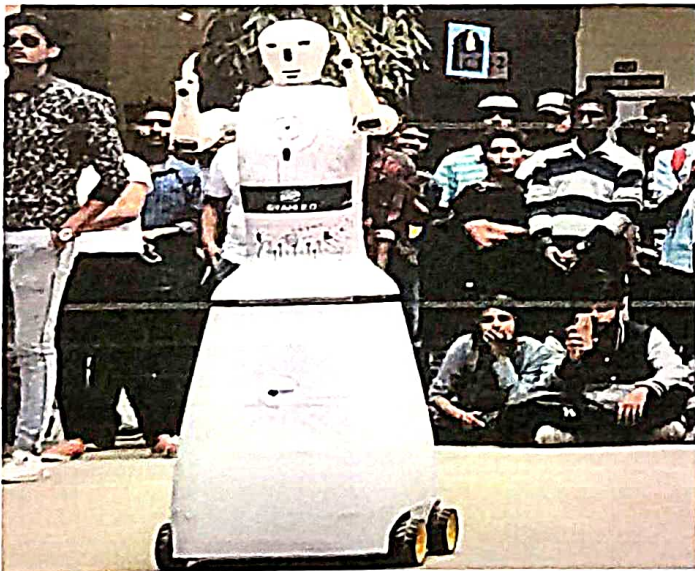
JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE

Project Based Learning: - Embedded system/Robot/drone

Robot and drone were developed by the student of Computer Science. A car is assembled by the students of Mechanical Department. Hydraulic crane by civil department students.
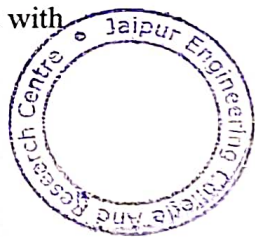
Experimental Learning: Workshop

Workshop Conducted by Department of Information and Technology on Angular JS node with the association of DVS Industrial Hub Technology on 18 Feb 2020.

"One day hands-on practice workshop
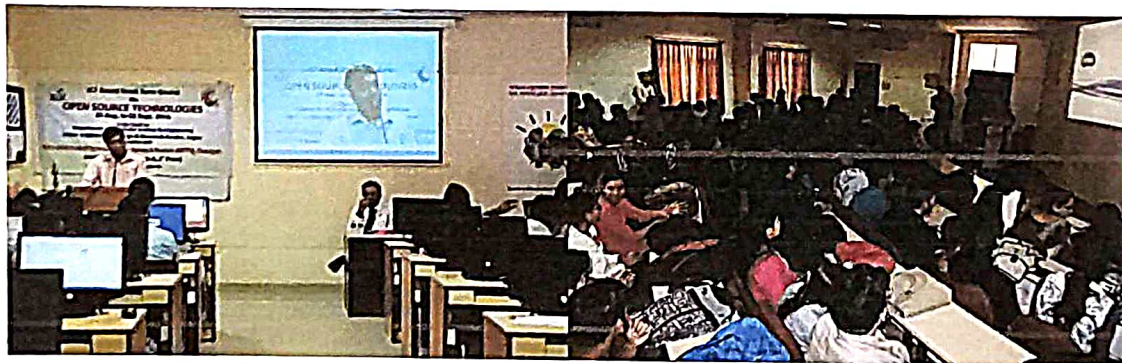on
Angular JS node"

Angular JS

Date : 18 feb 2020 Time : 9:00am to -3:30 pm

Organized by : Department of Information Technology

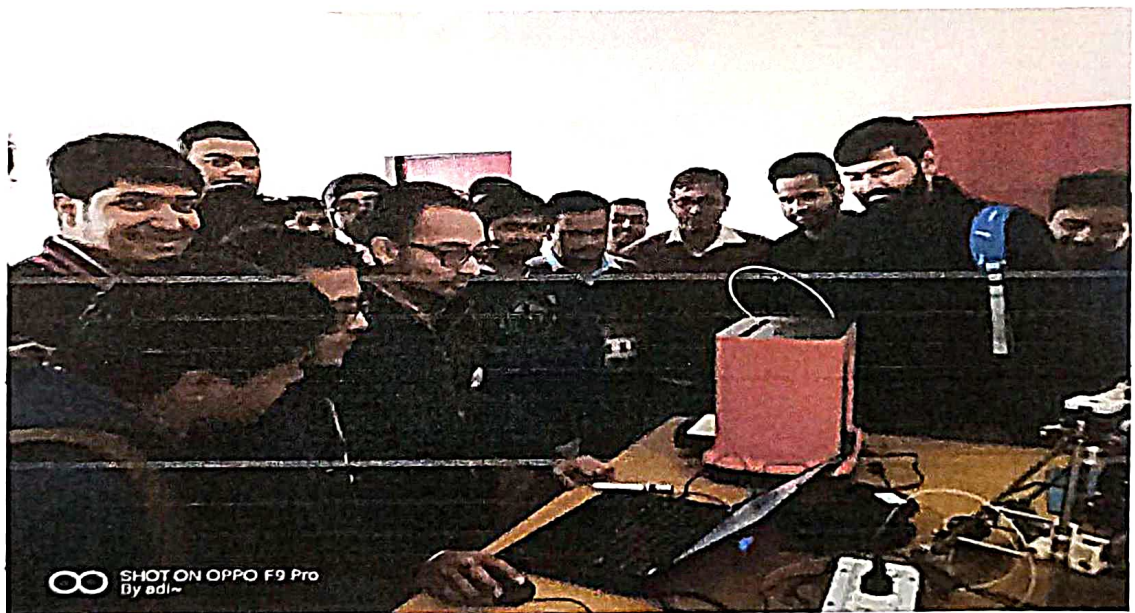In Association with : DVS Industrial Hub Technology

Powered by:

Experimental Learning: - Lab Experiments

Lab experiments play vital role for engineering students of all branches in each semesters. Labs are taken by first year students in computer lab and electronics students.
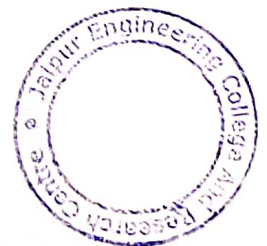
Experimental Learning: - Survey Camp

Survey Camp conducted by Department of Civil Engineering for B.Tech 2nd year students from 4th February to 8th February, 2020 at Sheetla Mata Temple, Chaksu and Sewad Mata Temple, Chandwaji, Jaipur, Rajasthan. This camp was aimed to groom civil engineering students with essential knowledge of various instruments and exposure to the real work, and to encourage leadership and teamwork skills. This survey camp resulted in encouraging and supporting students, emerging as leaders in several areas of academic provision.

Participative Learning: - Industrial Visit

An Industrial trip was conducted for the student of engineering at Microtek Chandigarh, Punjab. Visual learning is more effective than theoretical learning. Microtek is the country's largest power products manufacturing company. It manufacture products like line interactive ups, online ups etc. Few pictures of Microtek visiting are below.
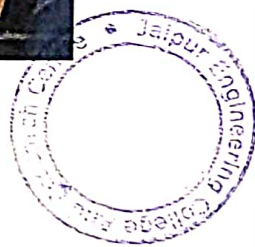
Experimental Learning: - Virtual Lab

A one-day workshop on virtual labs was organized on 20 August 2019 for faculty members and students by Virtual Labs team, IIT Delhi. Virtual lab mentors were Mr. Ashish Ranjan and Mr. Rajat Kumar Jha. Use of Virtual labs is encouraged and online courses.

Virtual Labs Workshop Students Attendance Form

Institute Name: JECRC Jaipur
Date: 20/8/19

S.No	Name	Branch	Email ID
1	Sourav Sharma	CSE	katrav8harma5@gmail.com
2	Saumya Sharma	CSE	Sharmasaumya 2818@gmail.com
3	Aakash Rajesh	CSE	aakash Rajesh 14@gmail.com
4	Rahul Tyagi	CSE	Rahul Tyagi 1302@gmail.com
5	Shubham Khandelwal	CSE	shubhamkhandelwal 16102001@gmail.com
6	Shresth Agarwal	CSE	Shresh 265.0476@gmail.com
7	Sachin Nehra	I.T	Sachinnehra 0024@gmail.com
8	Ravi Kumar Jat	CS	ravikumarjat@gmail.com
9	Dinesh	IT	dineshsh.soc0@gmail.com
10	Sahid Khan	CSE	Sahid Khan 1414@gmail.com
11	Pulkit Dadich	ECE	pulkit2023dadich@gmail.com
12	Jai Prakash Vikrant	EE	jai.balmot.2001@gmail.com
13	Kiran	EE	cikkaav 7052@gmail.com
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15	Shivam	C.S	shivammahajan8 fznb@gmail.com
16	Priyanshu Singhal	EC	priyanshusinghal 9109@gmail.com
17	Raj Bhatnagar	EC	rajbhatnagar.445@gmail.com
18	Raghav Trivedi	EC	raghavtrivedi 5151@gmail.com
19	Sanskar Soni	CSE	Sanskar.soni.81@gmail.com
20	Sujarsh Saini	CSE	shivamsaini.imail@gmail.com
21	Sankit Jain	CSE	sankitjain1302@gmail.com
22	Saurabh Gupta	CSE	guptasaurabh 130m@gmail.com
23	Milan Parita	EE	milanparita 117@gmail.com
24	Ashish suman	EE	ashish suman 154@gmail.com
25	Lalit Parita	EE	lalithparita 33rd0@gmail.com
26	Kunal sharma	EE	lalu Kunal 1430@gmail.com
27	Ayush Marwal	CSE	ayushmarwal462@gmail.com
28	Devesh Garg	CSE	devesh garg9829@gmail.com
29	Devanshu Bishnoi	CE	devanshubishnoi209@gmail.com
30	Jaiprerdan Kalwa	CE	kalwajaiprerdan@gmail.com
31	Jaish Mehta	CSE	171148876@gmail.com
32	Divyesh Gupta	CSE	Divyesh6162@gmail.com

Field Engineer   Signature of Head of Institution

Virtual Labs Workshop Students Attendance Form

Institute Name: JECRC Jaipur
Date: 20/8/2019

| S.No	Name	Branch	Email ID
1	Karthika Ajkumar	IT	
2	Bhoomi Jaiswal	IT	Bhoomijaiswal@gmail.com
3	Prajwalli Vankit	IT	prajwalli8@gmail.com
4	Jyoti Poddar	EC	poddarjyoti 272@gmail.com
5	Hitesha	EC	22hitesha@gmail.com
6	Riya Jain	CS	riya71912@gmail.com
7	Pallika Goyal	CS	pallikagoyalipradeela@gmail.com
8	Sakshi Agarwal	CS	sakshiagarwal522@gmail.com
9	Sakthi Kalra	CS	sakthikalra.29@gmail.com
10	Megha Kumari	EC	meghakumari.sus@gmail.com
11	Diya Poswal	EC	diyaposwal.2001@gmail.com
12	Priyanka Agrawal	ECE	agrawalpriyanka.b@gmail.com
13	Pushkar Prajapati	ECE	pushpajpati@gmail.com
14	Praveen Gupta	ECE	praveenbhardwaj112@gmail.com
15	Astha Upadhyay	ECE	asthaupadhyay500@gmail.com
16	Maudik Singh Punit	ECE	Ravimaudik@gmail.com
17	Ashish Garg	CSE	Aggarashish@gmail.com
18	Vasin Bansal	CSE	bhawanbansal 7816@gmail.com
19	Darshan Jain	CSE	jaindarshan.jn@gmail.com
20	Praveen Jain	ECE	praveenjain.013@gmail.com
21	Harsh Gurjar	ECE	raynharsh.04@gmail.com
22	Harsh Vardhan Singh	EC	harshvardhansingh@gmail.com
23	Avik Jain	CSE	avikjain2019@gmail.com
24	Harish Kumar	CSE	harishaswal 5151@gmail.com
25	Arjan Verma	IT	arjanverma806@gmail.com
26	Deepak Meena	CE	deepakmeena@gmail.com
27	Bhupendra Singh Sisodiya	CE	bhupendra 9320@gmail.com
28	Mayur Bishal	CE	mayurbishal@gmail.com
29	Kuldeep Sahran	CE	
30	Ankit	CE	ankitsinghrajpoot122@gmail.com
31		CE	
32			

Project Based Learning: - Incubator

The offshoot of research is the formation of Technology Incubation and Entrepreneurship Development Centre. The center's ambitious initiative is to attract students to develop their entrepreneurship. The Centre encourages the students to develop new ideas and innovative products. The Centre also mobilizes resources for product designing and undertakes feasibility study on commercial ventures for the products.

Rural Technology Business Incubator (RTBI), JECRC Foundation

List of Incubates

| S.no.	Name of Start-up	Leader
1.	Oscorp	Pragyan Vashisht
2.	Heron	Ritik Kumar
3.	Marble Mandi	Mohammad Rizwan
4.	Life Nest	Mukul Jain
5.	Tejas	Saurabh Jangid
6.	4Fox Graphics	Sahil Khan
7.	Craft-e-Choco	Rounak Grag
8.	Neophytes	Khyati Jha
9.	Dexterio	Arpit Khattar
10.	Inferno	Ashish Mahwar
11.	FeMo	Aakanksha Sharma
12.	The Elites	Nitin Mathur
13.	Innovasia	Rohit Ghiya
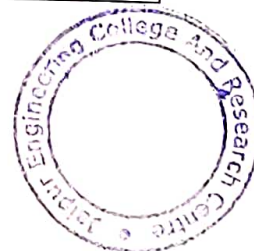
Project Based Learning: - Incubator

List of incubator for year 2019-2020

Rural Technology Business Incubator, JECRC Foundation

List of Incubates (2019-20)

S.no.	Name of Start-up	Team Leader
1.	Tejas	Saurabh Jangid
2.	4Fox Graphics	Sahil Khan
3.	Wed Vyah	Deepak chhipa
4.	ED Apply	Keshav Jangid
5.	ButikBazar	Nitin Mathur
6.	Vishi Shop	Piyush Mantri
7.	Medi Hops	Hardik Tiwari
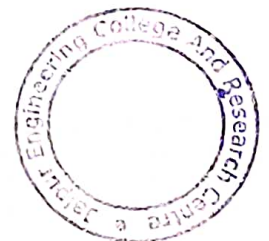
Project Based Learning: - Cultural Activities

Cultural Activities like solo dance, group dance, singing, and guitar are performed by students of all years.

Project Based Learning: - Social Activities

Learning with the help of social activities are part of project based learning. SOCH- "Kuch Kar Dikhane ki" is a cleanliness camp conducted by the students of JECRC. Blood donation camp and visit to Orphanage are the part of social activity.

रक्तदाता सम्मान सामारोह का आयोजन, बच्चों को मोमेंटोस देकर किया सम्मान

Participative Learning: - Sports

Physical activities play very important role in physical and mental fitness. Mental fitness is very important for students. So, sports like basketball, cricket, chess, and carom play major role in project based learning.
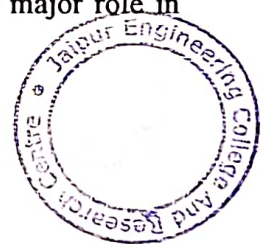
JECRC
JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE
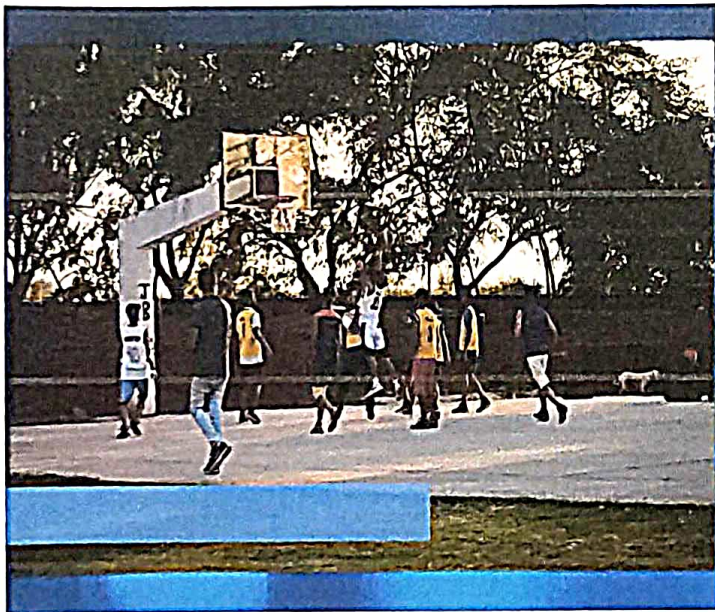

Participative Learning: - Guest Lectures

Guest lectures were taken by Col. Rajvardhan Singh Rathore, Union Minister of India. There was an interactive session with Prof. Niko Phillips, Group director of Oxford College. There was
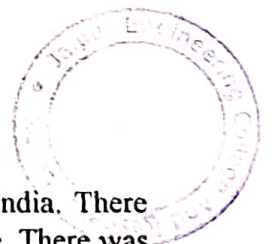
a special interactive session for the students with Dr. Sanjeev Ohri, Vice Principal of Dudley College of Engineering. Guest lecture by Mr. Faisal Hoda on, "Basic of natural gas and the role of GAIL in Rajasthan" at 9th Februrary 2019.
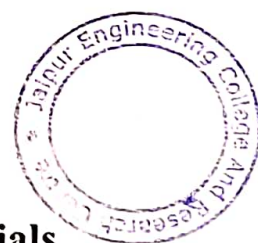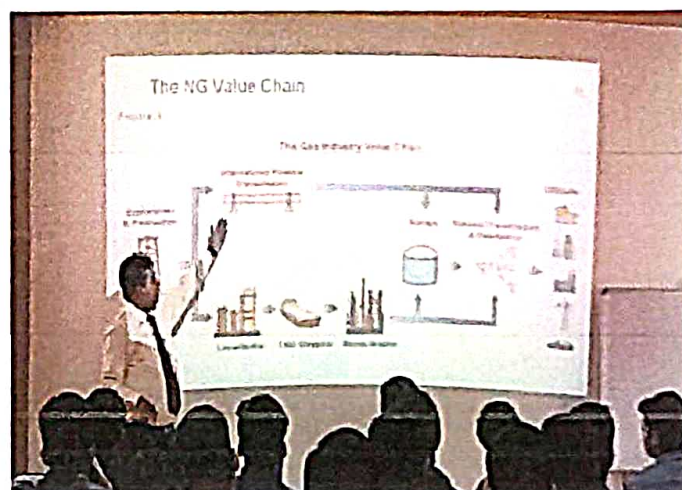
Problem Solving Methodology: - Assignments & Tutorials

Google classrooms are used by faculty members for the online classes. Lectures are taken by faculty members and problem are solved by faculties on google classroom. Assignments are also uploaded for the students for their practice.