



Government Polytechnic, Rajkot

SSIP CELL

Date: 05/04/2023

Report

Seminar on

"Recent Trends in CAD/CAM" Seminar for final year diploma students at
Government Polytechnic, Rajkot

Organized by

SSIP CELL, G P RAJKOT

Theme of Program:

" Recent Trends in CAD/CAM"

Date of Program: 05/04/2023 (12:00 a.m. to 2:00 p.m.)

Organized by: SSIP CELL, MECHANICAL DEPARTMENT, GP Rajkot

Attendees: Final year Diploma students of all branches

Number of Participants: 51

Venue: CAD/CAM LAB MECH DEPT

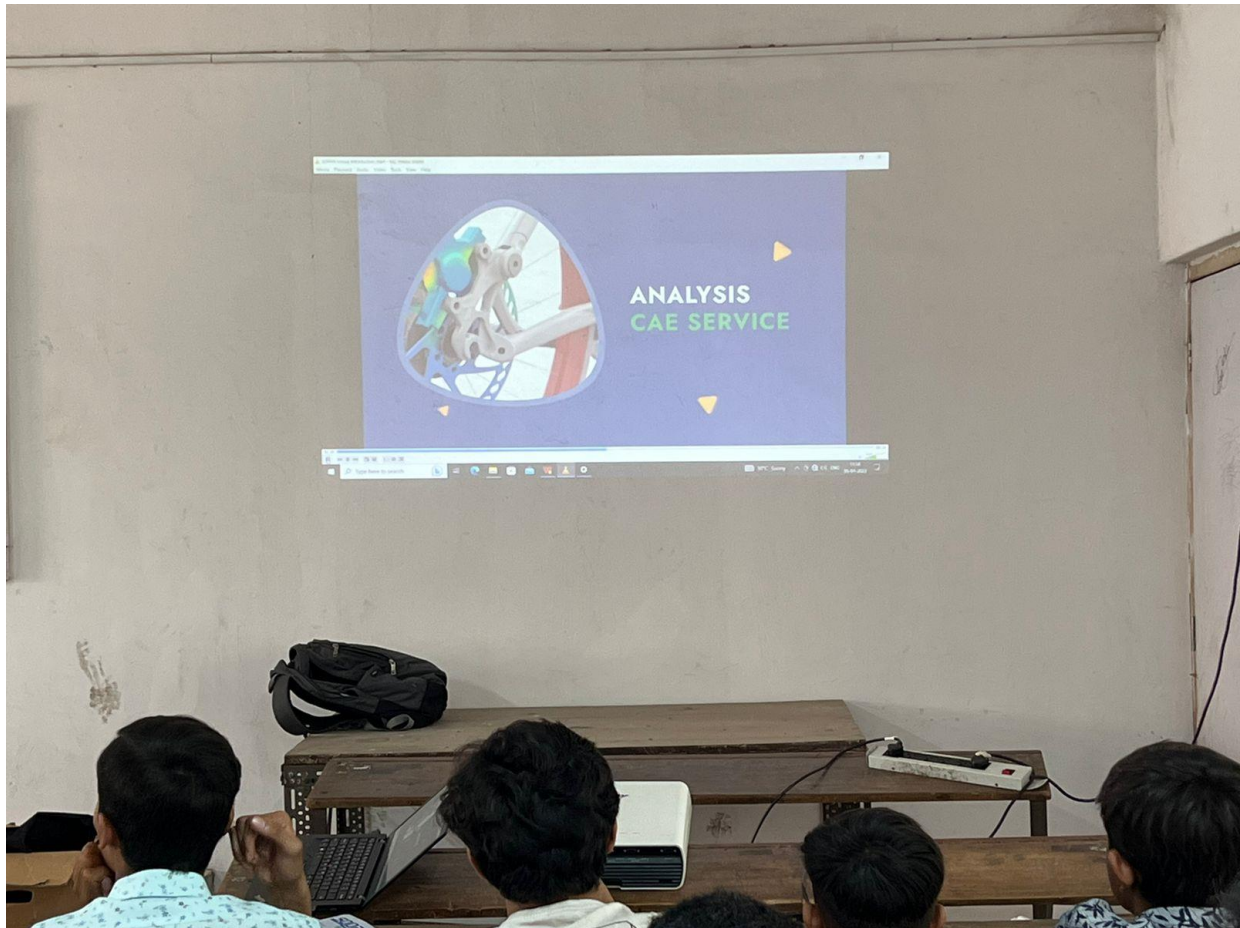
Experts:

1. Ketan Mistry- Sopan Infotech
2. Asif Makwana- Sopan Infotech
3. Shri. C P Kalariya, Lecturer Mechanical

Following are the glimpses of the program







Outcome of the Event:

Introduction: CAD and CAM technologies have become integral to product development and manufacturing processes, streamlining workflows, reducing errors, and enhancing overall efficiency. Recent developments have further expanded their capabilities, making them indispensable tools for businesses worldwide.

Key Trends in CAD:

Generative Design: Generative design is a groundbreaking approach that uses algorithms and artificial intelligence (AI) to optimize designs based on defined constraints and objectives. It enables engineers to explore numerous design possibilities quickly, resulting in more innovative and efficient products.

Cloud-Based CAD: Cloud-based CAD solutions offer accessibility from anywhere with an internet connection. This trend promotes collaboration among global teams and ensures seamless updates and data synchronization.

Augmented Reality (AR) and Virtual Reality (VR): Integration of AR and VR into CAD allows designers to interact with 3D models in immersive environments. This enhances design visualization, reduces errors, and improves the design review process.

Parametric Modeling: Parametric modeling enables the creation of dynamic, changeable 3D models. Users can define parameters and relationships, making it easier to adapt designs to evolving requirements.

Sustainability and Eco-Friendly Design: CAD software increasingly incorporates tools

for assessing the environmental impact of designs. This supports the growing emphasis on sustainable and eco-friendly product development

Key Trends in CAM:

Additive Manufacturing (3D Printing): CAM software has evolved to support a wide range of additive manufacturing techniques, including 3D printing. This allows for the production of complex and customized parts with greater precision and speed.

Multi-Axis Machining: CAM systems now support multi-axis machining, which is essential for manufacturing complex and intricate parts. These advancements improve surface finish and reduce cycle times.

Simulation and Verification: CAM software incorporates simulation and verification features to detect and rectify errors in toolpaths before manufacturing. This minimizes scrap and rework.

Toolpath Optimization: AI-driven toolpath optimization algorithms are increasingly used to enhance machining efficiency, extend tool life, and reduce energy consumption.

Integration with IoT and Industry 4.0: CAM systems are integrating with the Internet of Things (IoT) and Industry 4.0 technologies, allowing for real-time monitoring and control of machining processes. This leads to greater automation and efficiency.

For SSIP Seminar on Recent Trends in CAD/CAM

Government Polytechnic Rajkot
Mechanical Engineering Department

Industry Name: Sopan Infotech Date: 5-4-2023
About Industry: Education / Sales & service in CAD/CAM/CAE

Name of Faculty: 1. Ketan Mistry 2. Asif Makhwana
Semester: 6th Division: All

Attendance Sheet

Sr. No.	Enrollment No.	Name of Student	Sign
31	206200319110	KACHHADIYA AMAN M.	Aman
32	206200319003	Romak Dudhugama	R.D.J
33	206200319042	Kintun Sapovadiya	Kintun
34	206200319056	Kotak Harsh G.	H.G.Kotak
35	206200319010	Bhatnagar Bhuvan R.	Bhatnagar
36	206200319028	Dekuradiya Seelk H.	S.H.Dekuradiya
37	206200319036	Jani Anshok	Jani
38	206200319039	Banshu Dhruvnik	Banshu D.H.
39	196200319123	Thakkar Prem D	Prem
40	206200319015	Khimsuriya Harsh D	Harsh
41	206200319077	Joshi Jay	Joshi
42	206200319065	Saini Sourav Kumar	Saini
43	206200319083	Nakum Niteen L	Nakum
44	206200319095	CHAVIA Jay R.	Jay
45	206200319073	Solanki Meet C.	meet Solanki
46	176208319015	Parman Jay R	Jay
47	206200319120	Lakhtariya Mitesh M.	Mitesh
48	206200319082	Bhatl Varsh R.	VB
49	196200319077	Nagler Hiren M	H.M.Nagler
50	196200319121	Sekani Aditya R.	Aditya
51	206200319131	VATSOG KAKAD	KAKAD

For SSIP Seminar on Recent Trends
in CAD/CAM

Government Polytechnic Rajkot
Mechanical Engineering Department

Industry Name: Sopari Infotech

Date: 5-4-2023

About Industry: Education, sales & service in CAD/CAM/CAE

Name of Faculties: 1. Ketan Mistry 2. Asif Makwana

Semester: 6th Division: All

Attendance Sheet

Sr. No.	Enrollment No.	Name of Student	Sign
1	206200319003	Soida Kartik. P	Soida K.P.
2	206200319051	Shigwan Akshay A	S. Akshay
3	206200319024	Murkade Saurabh J.	S. J. Murkade
4	206200319030	Amelkumar Uttam.	Amelkumar
5	206200319009	Ashok Koli	Ashok Koli
6	206200319098	Mokasana Dhasmik. D	D. Mokasana
7	206200319017	Kanjaniya Dhanishil. S.	D. Kanjaniya
8	206200319112	Khambhati Anatik. J	J. Anatik
9	206200319045	Pasmasi Dhasmik. A.	A. Pasmasi
10	206200319124	Chavda Meet. D	M. Chavda
11	206200319079	Pikudiya Anil K	A. Pikudiya
12	196200319087	Parmar Bhavesh B.	P. B. Parmar
13	206200319102	Singh Dipendrakumar. B	D. Singh
14	196200319179	Sarvaiya Vivek J.	V. Sarvaiya
15	196200319528	Cahel Jaydip D	J. Cahel
16	196200319529	Cahel Nikunj K.	N. Cahel
17	196200319716	Vasa Parth P.	P. Vasa
18	206200319508	Vijay Bhanuben V.	V. Vijay
19	196200319124	Shinde Nikunj G.	G. Shinde
20	206200319007	Jadav Bhavesh R	R. Jadav
21	206200319038	Thakar Jitlik	J. Thakar
22	206200319001	Khogay Pathak	P. Khogay
23	206200319049	Devil Talharia	T. Devil
24	206200319011	Dhruvshil Meheta	M. Dhruvshil
25	206200319034	Neer Ravichandra	R. Neer
26	206200319018	Vinay Pundve	V. Vinay
27	206200319006	Vandya Dhruv	D. Vandya
28	206200319113	Dhruvel Kamsuru	K. Dhruvel
29	206200319127	Smit Sidhpura	S. Smit
30	206200319132	Cradhner Hanishil B.	B. Cradhner