AICTE-GTU Sponsored One Week Faculty Development Program on

RECENT TRENDS IN CAD/ CAM

25th-29thMarch, 2019

Organized By

Mechanical Engineering Department

Vishwakarma Government Engineering College

Near Visat Three Roads, Visat-Gandhinagar Highway, Chandkheda, Ahmedabad

Contents

1. Objective of Faculty Development Program (FDP)

This Faculty Development Program (FDP) aims to enhance knowledge and skills of participants in the area of CAD / CAM to highlight the research being carried out and promote further research in these areas. It is also aimed to familiarize the participants with the latest tools and techniques as well as to introduce Micromachining, Rapid Prototyping, CAD / CAM software etc.

This faculty development program will teach the cloud integrated advanced 3D software package (Autodesk Fusion 360). This faculty development program is designed to demonstrate educators, engineers and industrial designers how to use Fusion 360 to model (free-form and parametric modelling), simulate and manufacture their designs. Participants will have opportunity to create FEA & CAM/3D printing hand on practice.

1.1 Inaugural Ceremony

In the auspicious presence of Prof. S. P. Sapre, I/C Principal, VGEC Chandkheda, Dr.Dinesh Rathod, Thapar university- Punjab, Dr. Vijay Gautam, DTU – Delhi and Dr. A. B. Dhruv, HOD-ME, VGEC Chandkheda. The inaugural ceremony of FDP was arranged in J – 205 Block of VGEC – Chandkheda. It was also attended by co coordinators of FDP Dr. D. M. Patel, Professor-ME and Prof. K. R. Patel, Associate Prof.-ME with other faculties of college and participants of FDP.

Dr. A B Dhruv, Coordinator of the FDP delivered opening remarks, briefed about the course contents, objective of the training program and shared his views on recent trends in CAD/ CAM. Prof. S. P. Sapre appreciated the efforts of coordinators for organizing the FDPs.

2. Information broacher about Faculty Development Program (FDP)

Objective

This Faculty Development Program (FDP) aims to enhance knowledge and skills of participants in the area of CAD / CAM To highlight the research being carried out and promote further research in these areas. To familiarize the participants with the latest tools and techniques. To introduce Micromachining, Rapid Prototyping, CAD/ CAM software etc.

This FDP will teach the cloud integrated advanced 3D software package(Autodesk Fusion 360). The FDP is designed to demonstrate educators, engineers and industrial designers how to use Fusion 360 to model (free-form and parametric modeling), simulate and manufacture their designs. Participants will have opportunity to create FEA & CAM/3D printing hand on practice.

Course content

Manufacturing processes: Metal cutting, Metal Forming, Non-traditional Machining, Micromachining
ManufacturingAutomation:CAD/CAM/CIM, Machine Tools, Mechatronics
Tools and techniques: Design of Experiments, Modelling and Optimization
Rapid prototyping and Demonstration of 3D printing techniques, Advanced topics like CAD Software, Geometric Modelling, CAD Database, Manufacturing Applications, Features of some Software Packages along with relevant case studies will be covered in FDP.

Eligibility

Engineers from industry / Faculty of Degree/ Diploma Engineering Institutes having interest in design and manufacturing related subjects are eligible to apply. Faculty of Mechanical/ Production/ Manufacturing/ Automobile engineering fields will be given preference.

How to Apply

Apply in registration link on or before 18-3-19. Provisional selection will be intimated by email, on receipt of which, the applicant has to send the sponsorship certificate in the attached format along with registration fee of Rs 500/-(refundable) by DD drawn in favour of "**Principal, VGEC Chandkheda.**"

RegistrationLink:
https://goo.gl/forms/qtYTnClNMWojStJc2

Number of Participants: **40**

ESTD - 2007

AICTE-GTU Sponsored

One Week Faculty Development Program

on

RECENT TRENDS IN CAD / CAM

25-29 March 2019

Coordinator
Dr. A. B. Dhruv

Organized by

Mechanical Engineering Department

Vishwakarma Government Engineering College
Chandkheda, Ahmedabad – 382 424.

About the Institute:

Vishwakarma Government Engineering College (VGEC) Ahmedabad, was established in August 1994, with an objective of imparting higher education in various fields of engineering and technology. This institute is recognized by All India Council of Technical Education (AICTE), New Delhi. The college is administrated by Directorate of Technical Education, Gujarat State, Gandhinagar and is affiliated with Gujarat Technological University. VGEC shifted to its own campus at Chandkheda, Ahmedabad in the year 2004.

This Institute is located in Chandkheda which is highly developing area. The Institute campus is situated adjacent to Oil and Natural Gas Corporation, Chandkheda. Presently the institute is running 09 under graduate and 02 postgraduate courses of engineering. This Institute is considered among few best Engineering Institutes of the state. More than 700 Engineers are passing out every year from this Institute.

Resourse Persons:

Experts from academic and research Institutes such as various IITs and NITs, Nirma, PDPU, IPR, etc. will be sharing their valuable knowledge with the participants during this one week programme. Experts from Industries will also be invited to share their knowledge and practical experience with the participants. The hands-on session will provide exposure to practical implementation

Patron

- **Dr. R. K. Gajjar**
- **Principal-VGEC**

Coordinator

- **Dr. Anand B.Dhruv**
- **Professor &Head Mech. Dept.**
- **hod_mech@vgecg.ac.in, M: 9428611963**

Co-Cordinators

- **Dr. D.M.Patel/Prof K.R.Patel**
- **Mech Dept., VGEC-Chandkheda**
- **dmpatel@vgecg.ac.in 9825997934**
- **kinturpatel@gmail.com 9427604590**

Application Form

One Week FDP on

"Recent Trends in CAD/CAM"

Duration: 25/03/2019 to 29/03/2019

Name:

Designation:

Highest Qualification:

Institute's Name:

Address:

Experience: (Teaching /Industry):

Contact Details:

1. **Phone No.:**
2. **Email Id:**

Demand Draft Details:

Date **Sign of the participant**

Certificate

This is to certify that Mr./Ms./ Mrs_____is working as a/an _____ in _____ Department of this Institute. He/She will be permitted to attend this one week oriented training programme, if selected.

Authorized signatory

(Principal of the sponsoring Institute)

Stamp and Seal of the Institute

3. Schedule of FDP

Program Schedule

Date and Day	Time	Topic	Expert Faculty
25-03-2019 Monday	09-30 to 10-00	Registration and Hi-Tea	
	10-00 to 10-30	Inauguration	
	10-30 to 12-30	Non conventional Machining with CAD - CAM	Dr. D. M. Patel
	12-30 to 13-30	Lunch	
	13-30 to 15-30	MATLAB for CAD - CAM	Dr. S. S. Pathan
	15-30 to 15-45	Tea Break	
	15-45 to 17-45	Reactor vessel manufacturing	Dr. Dinesh Rathod
26-03-2019 Tuesday	10-00 to 10-30	Breakfast + Tea / Coffee	
	10-30 to 12-30	Fundamentals of CAD – CAM – CIM	Dr. D. S. Patel
	12-30 to 13-30	Lunch	
	13-30 to 15-30	Nano finishing using FIB	Dr. P. R. Rathod
	15-30 to 15-45	Tea Break	
	15-45 to 17-45	Challenges in material and machine design	Dr. Vijay Gautam
27-03-2019 Wednesday	10-00 to 10-30	Breakfast + Tea / Coffee	
	10-30 to 12-30	ANSYS a CAD tool	Mr. Jayesh Parmar
	12-30 to 13-30	Lunch	
	13-30 to 15-30	Battery Joining Process	Dr. Dinesh Rathod
	15-30 to 15-45	Tea Break	
	15-45 to 17-45	Application of Rapid Prototyping in CAD - CAM	Dr. Kaushal Desai
28-03-2019 Thursday	10-00 to 10-30	Breakfast + Tea / Coffee	Mr. Bhaygesh Patel and Mr. Jayesh Patel
	10-30 to 12-30	Fundamentals of FUSION 360 - Autodesk	
	12-30 to 13-30	Lunch	
	13-30 to 15-30	Modelling and assembly with FUSION 360 - Autodesk	
	15-30 to 15-45	Tea Break	
	15-45 to 17-45	Hands on practice with Virtual Reality	Mr. Arpit H. Raghvani
29-03-2019 Friday	10-00 to 10-30	Breakfast + Tea / Coffee	
	10-30 to 12-30	FEA in Manufacturing	Dr. A. B. Dhruv
	12-30 to 13-30	Lunch	
	13-30 to 15-30	Hands on practice with 3 D Printing technology	Prof. K. R. Patel and Prof. D. B. Patel
	15-30 to 15-45	Tea Break	
	15-45 to 17-45	Test and Valedictory Function	

3. Contribution of resource persons in FDP:

Sr. No.	Name of Resource Person	No. of Sessions taken	Whether from Outside/from the Institute.	Total Sessions	%
1	Dr. D M Patel	1	From the Institute.	3	25
2	Dr. A B Dhruv	1	From the Institute.		
2	Prof. K. R. Patel and Prof. D. B. Patel	1	From the Institute.		
5	Dr. S. S. Pathan	1	Outside the Institute.	11	75
6	Dr. Dinesh Rathod	2	Outside the Institute.		
7	Dr. D. S. Patel	1	Outside the Institute.		
8	Dr. P. R. Rathod	1	Outside the Institute.		
9	Dr. Vijay Gautam	1	Outside the Institute.		
10	Mr. Jayesh Parmar	1	Outside the Institute.		
11	Dr. Kaushal Desai	1	Outside the Institute.		
12	Mr. Bhaygesh Patel and Mr. Jayesh Patel	2	Outside the Institute.		
13	Mr. Archit H. Raghvani	1	Outside the Institute.		
		14		14	100

5. About Resource persons:

Dr. A B Dhruv, Course Coordinator Dr. A. B. Dhruv, Ph. D. (IITDelhi), is associated in the research field of CAD-CAM, Manufacturing, FEA and Automobile Engineering having more the 25 years academic and more than 10 years research experience. He has guided 02 M.Tech students and also associated with 15 international and 07 national publications.	
Dr. D. M. Patel, Professor, Mechanical Engineering, VGEC, Chandkheda Dr. D. M. Patel, Ph. D. (Mechanical), is associated in the research field of Unconventional Machining, Integrated manufacturing, Laser processing of materials and Micro manufacturing having more the 21 years academic and more than 10 years research experience. He has guided 36 + M.Tech students and guiding 06 PhD Students and also associated with 36 international and 44 national publications.	
Dr. Dinesh W. Rathod, Assistant Professor, Department of Mechanical Engineering, Thapar Institute of Engineering and Technology He is experienced researcher and academician in welding technology for nuclear applications, characterization and welding metallurgy. He has worked in NNUMAN program at University of Manchester for development of joining technique for proposed Generation III+ nuclear reactors. He has also worked for the Bhabha Atomic Research centre on structural integrity issue in dissimilar-metal welds. He has completed his doctorate on weldability investigations for dissimilar-metal weld joints in nuclear plant applications at IIT Delhi.	
Dr. Vijay Gautam, Professor, Department of Mechanical Engineering, DTU, Delhi He has more than twenty years of teaching experience in the field of Elastic and Plastic Behaviour of Engineering Materials, Manufacturing Processes, Mechanics of Solids, Machine Design-I & II, Metallurgy, Foundry Technology and Plasticity and Metal Forming. He has been teaching these subjects at both Undergraduate and Postgraduate levels. His research areas are focussed in the field of Metal Forming, Machine Design and Design of Automotive Components and Composite laminates and materials. He has guided many under-graduate and post graduate students for various projects. He has published more than 45 research papers as first author in international journals and conferences. Recently, he has won two premier research award of Rs 2 Lakhs in DTU.	

Kaushal A. Desai, Assistant Professor IIT Jodhpur

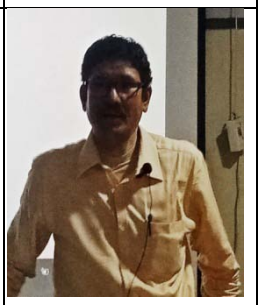
Dr.Kaushal A. Desai, Ph.D. (IIT Delhi) is associated with research projects like Minimizing Deflection Induced Surface Errors in End Milling of Thin-Walled Components, Science And Engineering Research Board (SERB-DST), 2016-2019. Compensation of Cutting-Force Induced and Fixture-Dependant Errors in CNC End Milling, Institute Seed Grant - IIT Jodhpur, 2017-2020. He is also having more then 15 publications in reputed international journals / international conferences.

Shri Jayesh Parmar, ANSYS Analyst through M/s Entuple Technologies

He working as ANSYS Analyst for the different organizations like IPR / ITER / ISRO / DRDO/ VRDE / ARDE / Goa Shipyard etc. He has around 10 years of experience in the Design and Analysis field. His expertise is in the Multiphysics domain andproviding Technical Support for linear, non-linear, Thermo-structural, Fluid, Electronics, Electricals and dynamic simulations using high end CAE software. He has software proficiency in different softwares like ANSYS, Nastran-Patran, Hyperworks, Abaqus, Autodesk Inventor, Autocad, Creo, Solid works, Catia, NX etc.

Prof S.S.Pathan, Associate Professor, Department Of Mechanical Engineering

Dr. S. S. Pathan, Ph. D. (IITBombay), is associated in the research field of MATLAB and CAD - CAM having more the 20 years academic and more than 12 years research experience. He has guided 07 M.Tech students and also associated with 50 international and 25 national publications.



Dr. D. S. Patel, Associate Professor, Sankalchand Patel College of Engineering

Dr. D. S. Patel, Ph. D. (Ganpat University), is associated in the research field of CAD-CAM and FEA having more the 20 years academic and more than 05 years research experience. He has guided 12 M.Tech students and also associated with 27 international and 05 national publications.

Dr. P. R. Rathod, Associate Professor, L. D. College of Engineering

Dr. P. R. Rathod, Ph. D. (IITD), is associated in the research field of Neno manufacturing having more the 28 years academic and more than 12 years research experience. He has guided 11 M.Tech students and also associated with 08 international and 05 national publications.

6. Details of participants:

Sr. No.	Name of Participant	Institute
1	KUMAR KAMALBABU BHATT	GEC DAHOD
2	KARAN A DUTT	Silver Oak Group of Institutes
3	JADEJA DIGVIJAY VIKRAMSINH	Kalol institute of Technology & Research center
4	PRAVIN KUMAR	Silver Oak College of Engineering & Technology
5	VIPAL R PANCHAL	Gandhinagar Institute of Technology
6	MAHENDRA Y PATIL	GEC, Dahod
7	PATEL VIKRAM AMRUTBHAI	Sankalchand Patel College of Engineering
8	AKASH M. SIDDHAPURA	U. V. Patel College of Engineering
9	MAHARSHI PATEL	Sal engineering and technical institute
10	HARDIK G. SONI	SAL Institute of Tech. and Engg. Research
11	RUPAL JANAKKUMAR TANK	SAL Institute of Tech. and Engg. Research
12	JITENDRA J. THAKKAR	Sal engineering and technical institute
13	SANJAY PRAHLADBHAI PATEL	GEC Modada (deputad atACPC Ahmedabad)
14	KHATRI BHARATLAL CHAMPALAL	Government Engineering College, Modasa
15	DIXIT MANIBHAI PATEL	Sal engineering and technical institute
16	SACHINKUMAR PATEL	L C I T , BHANDU
17	RAVI KALOTRA	Sal engineering and technical institute
18	DARSHAN U.PATEL	L C I T , BHANDU
19	DR. DHAVAL MORARBHAI PATEL	VGEC, CHANDKHEDA, AHMEDABAD
20	PATEL KINTU R	VGEC, CHANDKHEDA, AHMEDABAD
21	DABHI JASPALSINH B	VGEC, CHANDKHEDA, AHMEDABAD
22	SANJAY B. PIPALIYA	VGEC, CHANDKHEDA, AHMEDABAD

23	PUJARA AKSHAY ASHVINKUMAR	VGEC, CHANDKHEDA, AHMEDABAD
24	MOHAMMEDYASIN MUSTUFABHAI MODAN	VGEC, CHANDKHEDA, AHMEDABAD
25	MANISH N PARMAR	VGEC, CHANDKHEDA, AHMEDABAD
26	SAPNABEN A SOLANKI	VGEC, CHANDKHEDA, AHMEDABAD
27	DODIYA KULDIP TAKHTASINH	VGEC, CHANDKHEDA, AHMEDABAD
28	PAWAR SWAPNA ANNASAHEB	VGEC, CHANDKHEDA, AHMEDABAD
29	P B PATEL	VGEC, CHANDKHEDA, AHMEDABAD
30	A B DHRUV	VGEC, CHANDKHEDA, AHMEDABAD
31	MUKESH V CHAUHAN	VGEC, CHANDKHEDA, AHMEDABAD
32	CONTRACTOR BHAGYESH C.	VGEC, CHANDKHEDA, AHMEDABAD
33	H B PATEL	VGEC, CHANDKHEDA, AHMEDABAD
34	DR N M PATEL	VGEC, CHANDKHEDA, AHMEDABAD
35	DR. A R PATEL	VGEC, CHANDKHEDA, AHMEDABAD
36	A B PATEL	VGEC, CHANDKHEDA, AHMEDABAD
37	D.B. PATEL	VGEC, CHANDKHEDA, AHMEDABAD
38	DINESH RATHOD	LDRP-ITR
39	SHARMA HAREN DIPAKKUMAR	LDRP-ITR
40	JOSHI HARSH SHAILESH BHAI	LDRP-ITR
41	SHAH TIRTHAK DIPAKBHAI	LDRP ITR

7. Attendance Reports:

All 41 participants are present for all 5 days. Their attendance report is as follow.

AICTE-GTU Sponsored One Week Faculty Development Program

on RECENT TRENDS IN CAD/ CAM

25-29 March 2019

Attendance Sheet

Sr.No	Name of Participate	Institute	25-03-2019			26-03-2019			27-03-2019		
			S-I	S-II	S-III	S-I	S-II	S-III	S-I	S-II	S-III
1	KUMAR KAMALBABU BHATT	GEC DAHOD									
2	Karan A Dutt	Silver Oak Group of Institutes									
3	JADEJA DIGVIJAY VIKRAMSINH	Kalol institute of Technology & Research center									
4	Pravin Kumar	Silver Oak College of Engineering & Technology									
5	Vipal R Panchal	Gandhinagar Institute of Technology									
6	Mahendra Y Patil	GEC, Dahod									
7	Patel Vikram Amrutbhai	Sankalchand Patel College of Engineering									
8	Akash M. Siddhapura	U. V. Patel College of Engineering									
9	MAHARSHI PATEL	Sal engineering and technical institute									
10	Hardik G. Soni	SAL Institute of Tech. and Engg. Research									
11	RUPAL JANAKKUMAR TANK	SAL Institute of Tech. and Engg. Research									
12	Jitendra J. Thakkar	Sal engineering and technical institute									
13	Sanjay Prahladbhai Patel	GEC Modada (deputad atACPC Ahmedabad)									
14	Khatri Bharatlal Champalal	Government Engineering College, Modasa									
15	DIXIT MANIBHAI PATEL	~~Sal engineering and technical institute~~ Sal College of Engineering									
16	SACHINKUMAR PATEL	L C I T , BHANDU									
17	RAVI KALOTRA	Sal College of Engineering									
18.	Darshan V. Patel	LCIT, Bhandu.									

AICTE-GTU Sponsored One Week Faculty Development Program

on RECENT TRENDS IN CAD/ CAM

25-29 March 2019

Attendance Sheet

Sr.No	Name of Participate	Institute	28-03-2019			29-03-2019		
			S-I	S-II	S-III	S-I	S-II	S-III
1	KUMAR KAMALBABU BHATT	GEC DAHOD						
2	Karan A Dutt	Silver Oak Group of Institutes						
3	JADEJA DIGVIJAY VIKRAMSINH	Kalol institute of Technology & Research center						
4	Pravin Kumar	Silver Oak College of Engineering & Technology						
5	Vipal R Panchal	Gandhinagar Institute of Technology						
6	Mahendra Y Patil	GEC, Dahod						
7	Patel Vikram Amrutbhai	Sankalchand Patel College of Engineering						
8	Akash M. Siddhapura	U. V. Patel College of Engineering						
9	MAHARSHI PATEL	Sal engineering and technical institute						
10	Hardik G. Soni	SAL Institute of Tech. and Engg. Research						
11	RUPAL JANAKKUMAR TANK	SAL Institute of Tech. and Engg. Research						
12	Jitendra J. Thakkar	Sal engineering and technical institute						
13	Sanjay Prahladbhai Patel	GEC Modada (deputad atACPC Ahmedabad)						
14	Khatri Bharatlal Champalal	Government Engineering College, Modasa						
15	DIXIT MANIBHAI PATEL	Sal College of Engg, Ahmedabad Sal engineering and technical institute						
16	SACHINKUMAR PATEL	L C I T , BHANDU						
17	RAVI KALOTRA	Sal College of Engineering						

15. Darshan V. Patel. LCIT, Bhandu.

AICTE-GTU Sponsored One Week Faculty Development Program

on RECENT TRENDS IN CAD/ CAM

25-29 March 2019

Attendance Sheet

Sr.No	Name of Participate	Institute	25-03-2019			26-03-2019			27-03-2019		
			S-I	S-II	S-III	S-I	S-II	S-III	S-I	S-II	S-III
1	PATEL DHAVALKUMAR MORARBHAI	VGEC, CHANDKHEDA, AHMEDABAD									
2	PATEL KINTU R	VGEC, CHANDKHEDA, AHMEDABAD									
3	DABHI JASPALSINH B	VGEC, CHANDKHEDA, AHMEDABAD									
4	SANJAY B. PIPALIYA	VGEC, CHANDKHEDA, AHMEDABAD									
5	Pujara Akshay Ashvinkumar	VGEC, CHANDKHEDA, AHMEDABAD									
6	Mohammedyasin Mustufabhai Modan	VGEC, CHANDKHEDA, AHMEDABAD									
7	Manish N Parmar	VGEC, CHANDKHEDA, AHMEDABAD									
8	Sapnaben A Solanki	VGEC, CHANDKHEDA, AHMEDABAD									
9	Dodiya Kuldip Takhtasinh	VGEC, CHANDKHEDA, AHMEDABAD									
10	Pawar Swapna Annasaheb	VGEC, CHANDKHEDA, AHMEDABAD									
11	P B PATEL	VGEC, CHANDKHEDA, AHMEDABAD									
12	A B DHRUV	VGEC, CHANDKHEDA, AHMEDABAD									
13	Mukesh V Chauhan	VGEC, CHANDKHEDA, AHMEDABAD									
14	Contractor Bhagyesh C.	VGEC, CHANDKHEDA, AHMEDABAD									
15	H B PATEL	VGEC, CHANDKHEDA, AHMEDABAD									
16	Dr N M Patel	VGEC, CHANDKHEDA, AHMEDABAD									
17	Dr. A R PATEL	VGEC, CHANDKHEDA, AHMEDABAD									
18	A B PATEL	VGEC, CHANDKHEDA, AHMEDABAD									
19. D B PATEL		VGEC, Chandkheda, Ahmedabad									

AICTE-GTU Sponsored One Week Faculty Development Program

on RECENT TRENDS IN CAD/ CAM

25-29 March 2019

Attendance Sheet

Sr.No	Name of Participate	Institute	28-03-2019			29-03-2019		
			S-I	S-II	S-III	S-I	S-II	S-III
1	PATEL DHAVALKUMAR MORARBHAI	VGEC, CHANDKHEDA, AHMEDABAD						
2	PATEL KINTU R	VGEC, CHANDKHEDA, AHMEDABAD						
3	DABHI JASPALSINH B	VGEC, CHANDKHEDA, AHMEDABAD						
4	SANJAY B. PIPALIYA	VGEC, CHANDKHEDA, AHMEDABAD						
5	Pujara Akshay Ashvinkumar	VGEC, CHANDKHEDA, AHMEDABAD						
6	Mohammedyasin Mustufabhai Modan	VGEC, CHANDKHEDA, AHMEDABAD						
7	Manish N Parmar	VGEC, CHANDKHEDA, AHMEDABAD						
8	Sapnaben A Solanki	VGEC, CHANDKHEDA, AHMEDABAD						
9	Dodiya Kuldip Takhtasinh	VGEC, CHANDKHEDA, AHMEDABAD						
10	Pawar Swapna Annasaheb	VGEC, CHANDKHEDA, AHMEDABAD						
11	P B PATEL	VGEC, CHANDKHEDA, AHMEDABAD						
12	A B DHRUV	VGEC, CHANDKHEDA, AHMEDABAD						
13	Mukesh V Chauhan	VGEC, CHANDKHEDA, AHMEDABAD						
14	Contractor Bhagyesh C.	VGEC, CHANDKHEDA, AHMEDABAD						
15	H B PATEL	VGEC, CHANDKHEDA, AHMEDABAD						
16	Dr N M Patel	VGEC, CHANDKHEDA, AHMEDABAD						
17	Dr. A R PATEL	VGEC, CHANDKHEDA, AHMEDABAD						
18	A B PATEL	VGEC, CHANDKHEDA, AHMEDABAD						
19.	D B PATEL	VGEC, Chandkheda, Ahmedabad						

AICTE-GTU Sponsored One Week Faculty Development Program

on RECENT TRENDS IN CAD/ CAM

25-29 March 2019

Attendance Sheet

Sr.No	Name of Participate	Institute	25-03-2019			26-03-2019			27-03-2019		
			S-I	S-II	S-III	S-I	S-II	S-III	S-I	S-II	S-III
1	Dinesh Rathod	LDRP-ITR									
2	SHARMA HAREN DIPAKKUMAR	LDRP-ITR									
3	Joshi Harsh Shaileshbhai	LDRP-ITR									
4	SHAH TIRTHAK DIPAKBHAI	LDRP ITR									
5	DUDHAT VIVEK BHOLABHAI	LDRP-ITR									

AICTE-GTU Sponsored One Week Faculty Development Program

on RECENT TRENDS IN CAD/ CAM

25-29 March 2019

Attendance Sheet

Sr.No	Name of Participate	Institute	28-03-2019			29-03-2019		
			S-I	S-II	S-III	S-I	S-II	S-III
1	Dinesh Rathod	LDRP-ITR						
2	SHARMA HAREN DIPAKKUMAR	LDRP-ITR						
3	Joshi Harsh Shaileshbhai	LDRP-ITR						
4	SHAH TIRTHAK DIPAKBHAI	LDRP ITR						
5	DUDHAT VIVEK BHOLABHAI	LDRP-ITR						

8. Feedback of participants (Samples):

VISHWAKARMA GOVERNMENT ENGINEERING COLLEGE

Mechanical Engineering Department

FDP on "RECENT TRENDS IN CAD/ CAM"

Sponsored by AICTE and GTU
Duration: 25 to 29 March, 2019

FEEDBACK FORM

Please rate your response in the box provided between 1 to 5. Where 5 being the highest and 1 being the lowest.

1. *How do you rate the theory sessions delivered by different experts?* — 4
2. *How do you rate the demonstration sessions delivered by experts?* — 3
3. *How do you rate the overall experience of the FDP?* — 3
4. *Course objectives are well defined and they achieved?* — 4
5. *Please provide three key aspects that you liked about the FDP.*

a. Good topics selection

b. Software sessions are good

c. Lab sessin is effective.

6. *How did this program help you in gaining the knowledge?*

-> Got more information of various softwares.

7. *Please suggest areas we should improve upon for this FDP.*

-> At least one-day Industrial visit must be there.

Please provide following details: (OPTIONAL)

Name: Patel Vikram A. Designation: Asst. prof.

Institute/Organization: SPCE, visnagar Highest Qualification: M.Tech

Email ID: vapatel.mech@spcevng.ac.in Mobile No.: 9824280837

VISHWAKARMA GOVERNMENT ENGINEERING COLLEGE

Mechanical Engineering Department

FDP on "RECENT TRENDS IN CAD/ CAM"

Sponsored by AICTE and GTU
Duration: 25 to 29 March, 2019

FEEDBACK FORM

Please rate your response in the box provided between 1 to 5. Where 5 being the highest and 1 being the lowest.

1. *How do you rate the theory sessions delivered by different experts?* [3]
2. *How do you rate the demonstration sessions delivered by experts?* [3]
3. *How do you rate the overall experience of the FDP?* [4]
4. *Course objectives are well defined and they achieved?* [3]
5. *Please provide three key aspects that you liked about the FDP.*

a. Experts from well reputed Institutes

b. Fusion 360 experience

c. Virtual Reality Demonstration

6. *How did this program help you in gaining the knowledge?*

This Program has its own benifits like experts from Research domain has come & Share their Knowledge & expertise in Recent development

7. *Please suggest areas we should improve upon for this FDP.*

Kindly involve more experts from IIT's NIT's and provide Comfortable environment such as AC's for conducting such FDP's to make the Sessions more involvative & Interesting.

Please provide following details: (OPTIONAL)

Name: _____ Designation: Asst. Prof.

Institute/Organization: _____ Highest Qualification: _____

Email ID: _____ Mobile No.: _____

VISHWAKARMA GOVERNMENT ENGINEERING COLLEGE

Mechanical Engineering Department

FDP on "RECENT TRENDS IN CAD/ CAM"

Sponsored by AICTE and GTU
Duration: 25 to 29 March, 2019

FEEDBACK FORM

Please rate your response in the box provided between 1 to 5. Where 5 being the highest and 1 being the lowest.

1. *How do you rate the theory sessions delivered by different experts?* 4
2. *How do you rate the demonstration sessions delivered by experts?* 4
3. *How do you rate the overall experience of the FDP?* 5
4. *Course objectives are well defined and they achieved?* 4
5. *Please provide three key aspects that you liked about the FDP.*

a. Completed All kind of Commitment (Which mentioned

b. Extraordinary Expert lectures

c.

6. *How did this program help you in gaining the knowledge?*

I got Min 4 Research TOPIC & I will utilized These TOPICS For my PhD of self & guide me Students

7. *Please suggest areas we should improve upon for this FDP.*

Please provide following details: (OPTIONAL)

Name: Dixit Manibhai Patel Designation: ASST. PROFESSOR

Institute/Organization: SAL college of Engg Highest Qualification: M.Tech (CAD/CAM)

Email ID: dixit.patel@sal.edu.in Mobile No.: 9725227883

9. Examinations and Results

Evaluation was carried out on the base of presentation and hands on session carried out during faculty development programme. The question paper is:

Question Paper Date: 29/3/2019

Name of the participant:

1. What does Matlab stand for?

a) Math Laboratory b) Matrix Laboratory c) Mathworks d) Nothing e) none of the above

2. This Matlab command clears all data and variables stored in memory:

a) clc b) clear c) delete d) deallocate e) none of the above

3. A memory for sparse matrix is dedicated by the _____ command.
a) spalloc b) sparsealloc c) allocspar d) no such command

4. If the natural frequency of a system increases, the rise time _____
a) Increases b) Decreases c) Doubles d) Halves

5. The settling time is a measure of _____

a) The speed of reaching stead state b)The speed of reaching maximum overshoot c)The speed of reaching second overshoot d)Nothing

6. If the poles of a system transfer function are equal and imaginary, the system is _____
a) Undamped b) Critically damped c) Over damped d) Negatively damped
7. The pattern generated by the spy command is a measure of the number of zeros in the input matrix. a) True b) False

8. In unfired pressure vessels, category A consists of _____

a. joints connecting flanges and flat heads b. welded joints connecting nozzles with main shell

c. circumferential welded joints joints d. longitudinal welded joints

9) The Laser Beam Machining process can be carried out, when the media for energy transfer between tool and workpiece is

a) air b) liquid c) vacuum d).any of the above medium

10.) Which of the following is not a media of energy transfer on which the advanced machining processes are classified?

a) Reactive atmosphere b) Electrons c) Electrolyte d) Chemical ablation

11.Which of the following are different types of lasers used in Laser beam machining?
a) Solid - stateion b) Neutralgas c) Semiconductor d) All of the mentioned
12.What is the wavelength value of neutral gas laser used in LBM?
a) 633nm b) 694nm c) 856nm d) 1064nm

13. EDM is generally preferred for

Non-ferrous materials b)Non-metallic compounds c)Polymers d)Hard Materials

14. The material in extrusion base technologies must be in semi-solid state when it comes out of the nozzle

a. True b. False c. can’t say

15. Nozzle diameter is not generally kept constant for a particular build in FDM

a. True b. False c. can’t say

16. Spot size is smaller in

a) Fused Deposition Modelling b) Stereolithography Apparatus c) Both these offer same spot size d) Can't say

17. Extruder movement is essentially a significant process factor in:

a) Fused Deposition Modelling b) Stereolithography Apparatus c) Both these don't have extruder movement d) Can't say

18.Which of the following is the most popular extrusion-based material?

Acrylonitrile Butadiene Styrene b) Acrylonitrile c) Butadiene Styrene d) None of these

19. When trying to fully define a sketch, you can use dimensions or what?

A) Constraints B) References C) Locations D) Relations

20. To create a swept solid you must have a profile and what else?

A) Path B) Thickness C) Direction D) Line

21. True/False: Once an appearance is applied it can't be edited.

A) True B) False

22. What file type is exported for 3D printing?

A) .STL B) .IGES C) .PNG D) .X

23. A motion link can be applied before joints it is controlling.

A) True B) False

24. What type of joint would you add to keep two components stuck together during motion?

A) Rigid B) Glue C) Fixed D) Stuck

25. List applications of Rapid Prototyping.

26. Which equipment is used for VR demonstration

a) htc vive b) oculus rift c) both of this d) non of this

27. Which of the following process has the highest metal removal rate?

a) Ultrasonic machining b) Abrasive machining

c) Chemical machining d) Electron beam machining

28. Vacuum Environment is required in

a) Ultrasonic welding b) Laser beam welding

c) Plasma arc welding d) Electron beam welding

29. Nickel when added to copper increases

a) Strengthb) Hardnessc) Strength and Hardness d) Strength and Ductility

30. Plastic can be welded by the following process

a) TIG welding b) MIG welding c) Electron beam welding d) Ultrasonic welding

Their individual marks in percentage are as follows:

Result: Date: 29/3/2019

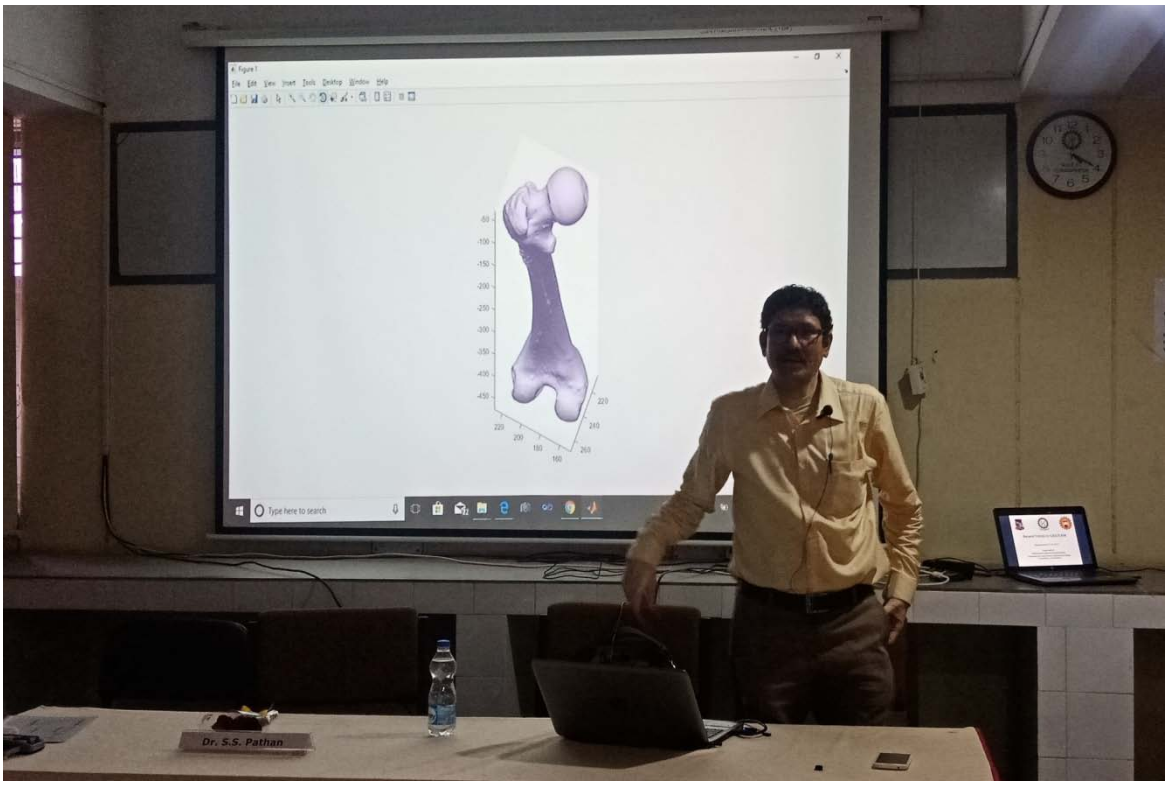
Sr. No.	Name of Participant	Institute	Marks obtained
1	KUMAR KAMALBABU BHATT	GEC DAHOD	78 %

2	KARAN A DUTT	SILVER OAK GROUP OF INSTITUTES	75 %
3	JADEJA DIGVIJAY VIKRAMSINH	KALOL INSTITUTE OF TECHNOLOGY & RESEARCH CENTER	68 %
4	PRAVIN KUMAR	SILVER OAK COLLEGE OF ENGINEERING & TECHNOLOGY	69 %
5	VIPAL R PANCHAL	GANDHINAGAR INSTITUTE OF TECHNOLOGY	70 %
6	MAHENDRA Y PATIL	GEC, DAHOD	72 %
7	PATEL VIKRAM AMRUTBHAI	SANKALCHAND PATEL COLLEGE OF ENGINEERING	78 %
8	AKASH M. SIDDHAPURA	U. V. PATEL COLLEGE OF ENGINEERING	70 %
9	MAHARSHI PATEL	SAL ENGINEERING AND TECHNICAL INSTITUTE	69 %
10	HARDIK G. SONI	SAL INSTITUTE OF TECH. AND ENGG. RESEARCH	71 %
11	RUPAL JANAKKUMAR TANK	SAL INSTITUTE OF TECH. AND ENGG. RESEARCH	72 %
12	JITENDRA J. THAKKAR	SAL ENGINEERING AND TECHNICAL INSTITUTE	75 %
13	SANJAY PRAHLADBHAI PATEL	GEC MODADA (DEPUTAD ATACPC AHMEDABAD)	73 %
14	KHATRI BHARATLAL CHAMPALAL	GOVERNMENT ENGINEERING COLLEGE, MODASA	65 %
15	DIXIT MANIBHAI PATEL	SAL ENGINEERING AND TECHNICAL INSTITUTE	74 %
16	SACHINKUMAR PATEL	L C I T , BHANDU	71 %
17	RAVI KALOTRA	SAL ENGINEERING AND TECHNICAL INSTITUTE	70 %
18	DARSHAN U.PATEL	L C I T , BHANDU	70 %
19	DR. DHAVAL MORARBHAI PATEL	VGEC, CHANDKHEDA, AHMEDABAD	78 %
20	PATEL KINTU R	VGEC, CHANDKHEDA, AHMEDABAD	75 %
21	DABHI JASPALSINH B	VGEC, CHANDKHEDA, AHMEDABAD	72 %
22	SANJAY B. PIPALIYA	VGEC, CHANDKHEDA, AHMEDABAD	74 %
23	PUJARA AKSHAY ASHVINKUMAR	VGEC, CHANDKHEDA, AHMEDABAD	78 %

24	MOHAMMEDYASIN MUSTUFABHAI MODAN	VGEC, CHANDKHEDA, AHMEDABAD	76 %
25	MANISH N PARMAR	VGEC, CHANDKHEDA, AHMEDABAD	72 %
26	SAPNABEN A SOLANKI	VGEC, CHANDKHEDA, AHMEDABAD	76 %
27	DODIYA KULDIP TAKHTASINH	VGEC, CHANDKHEDA, AHMEDABAD	74 %
28	PAWAR SWAPNA ANNASAHEB	VGEC, CHANDKHEDA, AHMEDABAD	72 %
29	P B PATEL	VGEC, CHANDKHEDA, AHMEDABAD	75 %
30	A B DHRUV	VGEC, CHANDKHEDA, AHMEDABAD	78 %
31	MUKESH V CHAUHAN	VGEC, CHANDKHEDA, AHMEDABAD	79 %
32	CONTRACTOR BHAGYESH C.	VGEC, CHANDKHEDA, AHMEDABAD	70 %
33	H B PATEL	VGEC, CHANDKHEDA, AHMEDABAD	73 %
34	DR N M PATEL	VGEC, CHANDKHEDA, AHMEDABAD	75 %
35	DR. A R PATEL	VGEC, CHANDKHEDA, AHMEDABAD	72 %
36	A B PATEL	VGEC, CHANDKHEDA, AHMEDABAD	66 %
37	D.B. PATEL	VGEC, CHANDKHEDA, AHMEDABAD	78 %
38	DINESH RATHOD	LDRP-ITR	62 %
39	SHARMA HAREN DIPAKKUMAR	LDRP-ITR	64 %
40	JOSHI HARSH SHAILESH BHAI	LDRP-ITR	68 %
41	SHAH TIRTHAK DIPAKBHAI	LDRP ITR	65 %

10. Some Glimpse of FDP:

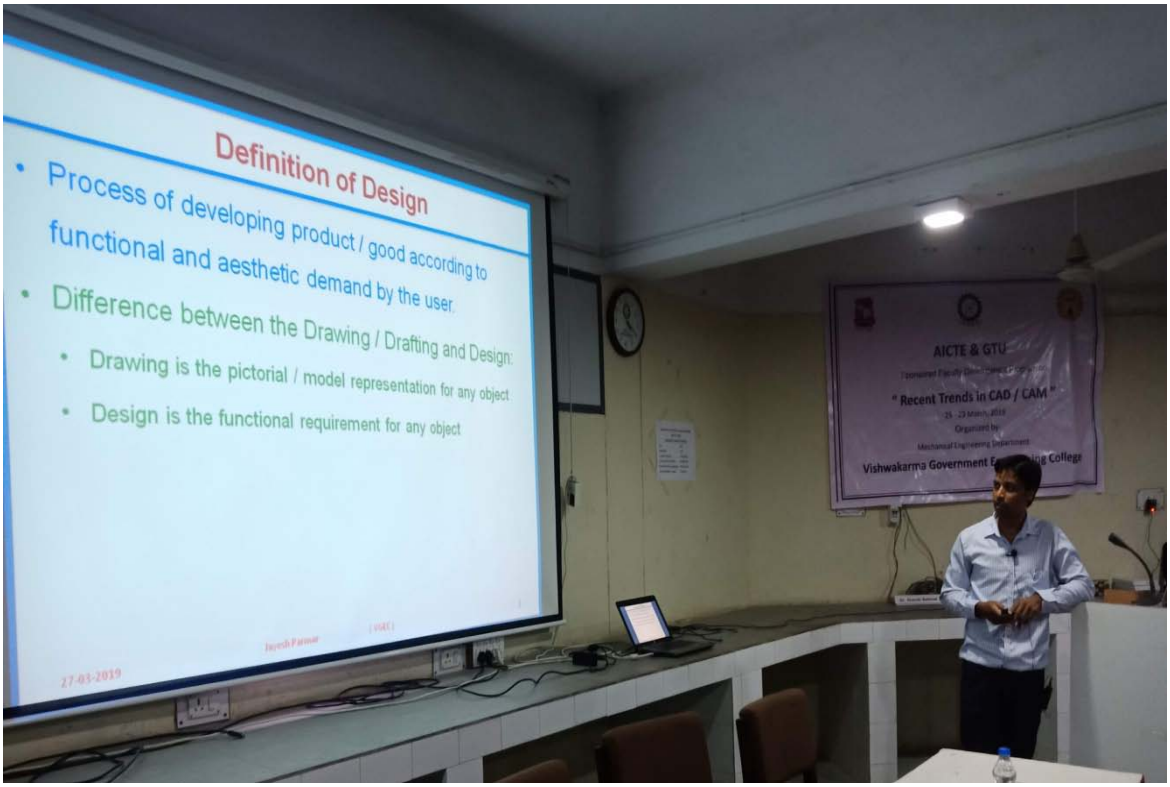

DMP
LASER BEAM MACHINING
Dr. D.M. Patel


Dr. S.S. Pathan


Component Materials for Li-Ion Batteries
Cell Type
Cylindrical
Solid-container Prismatic
Pouch Prismatic
Anode electrode
Copper
Copper
Copper
Negative Tab
Aluminum, Nickel
Aluminum, Nickel
Copper
Cathode electrode
Aluminum
Aluminum
Aluminum
Positive Tab
Aluminum, Nickel
Aluminum, Nickel
Aluminum
Enclosure case / cover (i.e., container and top plate)
Steels, Stainless Steels and Aluminum alloys
@ Ref-2, Ref-3
Materials Weldability
Aluminum (T_m-660°C) to Aluminum = Fair – electrode sticking
Aluminum to Copper (T_m-1080°C) = Difficult – low joint strength / electrode sticking
Aluminum to Nickel (T_m-1450°C) = Difficult – low joint strength
Copper (T_m-1080°C) to Copper = Good
Copper to Nickel = Fair – low joint strength
Nickel to Nickel = Excellent
@ Ref-4


AICTE & GTU
" Recent Trends in CAD / CAM "
Vishwakarma Government Engineering College


AICTE & GTU
Sponsored Faculty Development Program on
" Recent Trends in CAD / CAM "
25 - 29 March, 2019
Organized by
Mechanical Engineering Department


Definition of Design
Process of developing product / good according to functional and aesthetic demand by the user.
Difference between the Drawing / Drafting and Design:
Drawing is the pictorial / model representation for any object.
Design is the functional requirement for any object.
27-03-2019
AICTE & GTU
" Recent Trends in CAD / CAM "


Recent Trends in CAD/CAM
Sponsored by GTU & AICTE
Organized by
Mechanical Engineering Department
Vishwakarma Government Engineering College
Chandkheda, Ahmedabad
AICTE

11. Valedictory

The FDP was concluded with the valedictory function in which the participants were issued participation certificates in presence of Dr. Rajul K.Gajjar (Principal, VGEC, Chandkheda), Dr. A. B. Dhruv (Coordinator of FDP) and Co coordinators Dr. D. M. Patel, Professor-ME and Prof. K. R. Patel, Associate Prof.-ME with HoD's of all departments, faculty members of college and participants of FDP.

Dr. Rajul K.Gajjar gave brief summary of activities carried out during FDP and implementation of gained knowledge in future. She also mentioned about important role of FDP in providing quality training programmes to faculties of technical institutions to update their knowledge and skills in their fields of activity. Prof. K. K. Bhatt and Prof. Dixit Patel have given their feedback regarding FDP and hospitalities. Session ended with vote of thanks to all contributors who had made this FDP successful.