



Indra Ganesan

COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NAAC with 'B+' Grade, 2(f) & 12B Status Institution by UGC

IG Valley, Madurai Main Road, Manikandam, Tiruchirappalli - 620012

NAAC DOCUMENTS

QUALITY INDICATOR FRAME WORK

CRITERION – 2

TEACHING-LEARNING AND EVALUATION

SUBMITTED BY

IQAC

INTERNAL QUALITY ASSURANCE CELL
INDRA GANESAN COLLEGE OF ENGINEERING





Criteria2

Teaching-Learning and Evaluation

350

KeyIndicator-2.3.Teaching-Learning Process (40)

2020-2021

PARTICIPATIVE LEARNING
MECHANICAL ENGINEERING

Activity	Number of Students Attended	Page No.
Value Added Course(VAC)	83	3
TOTAL STUDENTS ATTENDED	83	-



Criteria2

Teaching-Learning and Evaluation

350

KeyIndicator-2.3.Teaching-Learning Process (40)

2020-2021

MECHANICAL ENGINEERING

PARTICIPATIVE LEARNING

VALUE ADDED COURSE



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirapalli- 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

Department of Mechanical Engineering

Academic Year 2020-2021 -ODD Semester

Date: 02.12.2020

DEPARTMENT CIRCULAR

Department of Mechanical Engineering of IGCE association with "CADD Centre, Trichy" is going to organize Value Added Course for all II and III, IV year students on "Mater CAM" from 07.12.2020 to 11.12.2020. Certificates will be issued to the eligible participants at the end of the Course


Resource Person Details	<ol style="list-style-type: none">1. Mr. Balaji Trainer CADD centre Trichy2. Mr. Jaya kumar Trainer CADD centre Trichy
Venue	online mode https://meet.google.com/zcm-djnn-mdt


HOD/MECH


PRINCIPAL

Cc:

- Principal office
- IQAC Coordinator
- Class In charges - II, III & IV Year
- Class Rooms - II, III & IV Year
- Office File
- Notice Board


Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
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Value Added Course

“Master CAM”

SYLLABUS

S.NO	TOPIC COVERED	DURATION (in hours)	DATE
1	Introduction to MASTERCAM	3	07.12.2020
2	Basic concepts of CAM (cutters, machines job setup, etc)	3	07.12.2020
3	Creating 2D drawings tool paths	3	08.12.2020
4	Creating 2D tool paths	3	08.12.2020
5	Creating 3D models (Solid)	3	09.12.2020
6	Creating 3D models (Surface)	3	09.12.2020
7	Creating 3D models tool paths	3	10.12.2020
8	Transforming tool paths	3	10.12.2020
9	Converting Solid to Surface, Surface to Solid,	3	11.12.2020
10	Boolean operations	3	11.12.2020
11	Test	1	11.12.2020
Total Hours (Excluding Assessment)		30	


VAC Coordinator


Dr. G. Balakrishnan, M.E., Ph.D.,
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HoD/MECH



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Value Added Course

“Master CAM”

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

STUDENTS PARTICIPATION LIST

S.No.	Reg.No	Student's Name	Year/ Branch
1	811217114001	S.Abdul Yasin	IV/MECH
2	811217114002	R.Ajithkumar	IV/MECH
3	811217114003	S.Anandha Kumar	IV/MECH
4	811217114004	M.Ananth	IV/MECH
5	811217114005	R.Chellaiah	IV/MECH
6	811217114006	C.Devarajan	IV/MECH
7	811217114007	S.Dhamotharan	IV/MECH
8	811217114008	A.Dhanussh	IV/MECH
9	811217114009	C.Dharanidharan	IV/MECH
10	811217114010	N.Dharman	IV/MECH
11	811217114013	M.Hariharasudhan	IV/MECH
12	811217114014	A.Jawagar	IV/MECH
13	811217114015	Karthick S	IV/MECH
14	811217114016	D.Madhan	IV/MECH
15	811217114018	M.Mohammed Faizal	IV/MECH
16	811217114019	S.Mohanraj	IV/MECH
17	811217114020	R.Munishwaran	IV/MECH
18	811217114021	P.Murugan	IV/MECH
19	811217114022	P.Ponnar	IV/MECH
20	811217114023	M.Prakash	IV/MECH
21	811217114025	M.Rajamuni	IV/MECH
22	811217114026	La.Ramanathan	IV/MECH




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S.No.	Reg.No	Student's Name	Year/ Branch
23	811217114027	G.Sairam	IV/MECH
24	811217114028	R.Sankaralingam	IV/MECH
25	811217114030	M.Selvakumar	IV/MECH
26	811217114031	A.Shameer	IV/MECH
27	811217114032	D.Sivakumar	IV/MECH
28	811217114033	A.Sriram	IV/MECH
29	811217114034	S.Thirumurugan	IV/MECH
30	811217114035	A.Vengatesh	IV/MECH
31	811217114036	M.Venkatesh	IV/MECH
32	811217114037	P.Vinayagamoorthy	IV/MECH
33	811217114038	B.Vinothraja	IV/MECH
34	811217114039	D.Yugesh	IV/MECH
35	811217114301	K.Arun	IV/MECH
36	811217114302	K.Santhosh Kumar	IV/MECH
37	811217114303	R.Thirumoorthi	IV/MECH


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HoD/MECH



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S.No.	Reg.No	Student's Name	Year/ Branch	DATE: 07.12.20		DATE: 08.12.20		DATE: 09.12.20		DATE: 10.12.20		DATE: 11.12.20		NO OF SESSIONS ATTENDED	SIGNATURE OF THE STUDENT
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
18	811217114021	P.Murugan	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	Online Mode
19	811217114022	P.Ponnar	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
20	811217114023	M.Prakash	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
21	811217114025	M.Rajamuni	IV/MECH	/	/	/	/	/	/	/	/	/	/	9	
22	811217114026	La.Ramanathan	IV/MECH	/	/	/	/	/	/	/	a	/	/	9	
23	811217114027	G.Sairam	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
24	811217114028	R.Sankaralingam	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
25	811217114030	M.Selvakumar	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
26	811217114031	A.Shameer	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
27	811217114032	D.Sivakumar	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
28	811217114033	A.Sriram	IV/MECH	/	/	/	/	a	a	/	/	/	/	8	
29	811217114034	S.Thirumurugan	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
30	811217114035	A.Vengatesh	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
31	811217114036	M.Venkatesh	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
32	811217114037	P.Vinayagamoorthy	IV/MECH	/	/	/	/	/	/	a	/	/	/	9	
33	811217114038	B.Vinothraja	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
34	811217114039	D.Yugesh	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
35	811217114301	K.Arun	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
36	811217114302	K.Santhosh Kumar	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	
37	811217114303	R.Thirumoorthi	IV/MECH	/	/	/	/	/	/	/	/	/	/	10	


 VAC Coordinator


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 HOD/MECH



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Name of the Student :

Year/Sem:

AU Register Number:

Value Added Course

“Master CAM”

MCQ QUESTIONS (25X4 = 100 Marks)

1. Batch model production lines are most suited to which one of the following production situations:
 - a. Job shop
 - b. Mass production
 - c. Medium production
 - d. All of the above
2. Flexible manufacturing systems and cells are generally applied in which one of the following areas:
 - a High-variety, low-volume production
 - b. low variety
 - c. low volume
 - d. mass production
3. When the flow of materials is variable
 - a. layout by process is most suitable
 - b layout by product is most suitable
 - c. layout by fixed position is most suitable
 - d. line balancing is most suitable
4. What type of process would a paper mill be most likely to use?
 - a. Continuous flow
 - b. Project
 - c. Job shop
 - d. Flow shop
5. What are the two basic types of production systems?
 - a. Automated and manual
 - b. Intermittent and non intermittent process
 - c. Normal and continuous process
 - d. Continuous process and batch

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6. All of the following are current trends in manufacturing, except:
- a. global competition
 - b. worker involvement
 - c. total quality management
 - d. linear work flow
7. Productivity increases when
- a. inputs increase while outputs remain the same
 - b. inputs decrease while outputs remain the same
 - c. outputs decrease while inputs remain the same
 - d. inputs and outputs increase proportionately
8. Quality in design and production includes:
- a. service after sale
 - b. performance
 - c. customer expectations
 - d. all of the above
9. CIM stands for
- a. Computer integrated machine.
 - b. Central integrated machine
 - c. Computer integrated manufacturing
 - d. Central integrated manufacturing
10. Which item best describes a CAM technology?
- a. Numerical control
 - b. Documentation
 - c. Drafting
 - d. Geometric modelling
11. Automation leads to
- a. Increase in productivity.
 - b. Shorter lead time
 - c. Unemployment.
 - d. All of the above
12. Break even analysis consist of
- a. Fixed cost
 - b. Variable cost
 - c. Fixed and variable cost
 - d. None of the above
13. MLT stands for
- a. Manufacturing lead time
 - b. Mean lead time
 - c. Minimum lead time
 - d. None of the above

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14. . NC contouring is an example of
- a. Continuous path positioning
 - b. Point-to-point positioning
 - c. Absolute positioning
 - d. Incremental positioning
15. The axes of turning machine are:
- a. Z and X-axes
 - b. X and Y-axes
 - c. Z and Y-axes
 - d. X, Y and Z-axes
16. The heart of a computer is:
- a. CPU
 - b. ALU
 - c. Monitor
 - d. Keyboard
17. MCU stands for
- a. Machine control unit.
 - b. Machine center unit
 - c. Mechanical control unit
 - d. Mechanical center unit
18. The lost motion in CNC machine tool is on account of
- a. Backlash in gearing
 - b. Wind-up of drive shafts
 - c. Deflection of machine tool members
 - d. All the above
19. On turning lathes the machine zero point is generally at the:
- a. Head stock of lathe spindle nose face
 - b. Dead center of tail stock
 - c. Tool point mounted on tool post
 - d. none of the above
20. . CAE and CAM are linked through:
- a. A common database and communication system
 - b. NC tape programming and automated design
 - c. Assembly automation and tool production
 - d. Parts production and testing
21. Process layout is employed for
- a. Batch production
 - b. Continuous production
 - c. Effective utilization of machines
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22. for a product layout the material handling equipment
- a. Have full flexibility
 - b. Employ conveyor belts trucks etc.
 - c. Be a general purpose type
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VAC Coordinator



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Value Added Course

“Master CAM”

ANSWER KEY

1	c	6	b	11	d	16	a	21	a
2	a	7	b	12	c	17	a	22	d
3	a	8	d	13	a	18	a	23	b
4	a	9	c	14	a	19	b	24	b
5	b	10	a	15	a	20	a	25	b

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Name of the Student : C. S. Maniadhman

Year/Sem: IV - mech

AU Register Number: 811217114009

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“Master CAM”

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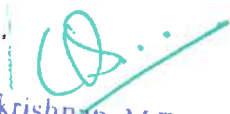


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 - c. Both a. and b.
 - d. None of the above


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Department of Mechanical Engineering

Academic Year 2020-2021 – Odd Semester

VALUE ADDED COURSE ASSESEMENT SHEET

“Master CAM”

S.No.	Reg.No	Student's Name	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100) (50% of A + 50% of B)
				No. of Hours Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
1	811217114001	S.Abdul Yasin	IV/MECH	30	100	20	80	90
2	811217114002	R.Ajithkumar	IV/MECH	30	100	18	72	86
3	811217114003	S.Anandha Kumar	IV/MECH	27	90	20	80	85
4	811217114004	M.Ananth	IV/MECH	30	100	20	80	90
5	811217114005	R.Chellaiah	IV/MECH	24	80	20	80	80
6	811217114006	C.Devarajan	IV/MECH	30	100	22	88	94
7	811217114007	S.Dhamotharan	IV/MECH	30	100	20	80	90
8	811217114008	A.Dhanussh	IV/MECH	30	100	22	88	94
9	811217114009	C.Dharanidharan	IV/MECH	30	100	20	80	90
10	811217114010	N.Dharman	IV/MECH	30	100	19	76	88
11	811217114013	M.Hariharasudhan	IV/MECH	30	100	19	76	88
12	811217114014	A.Jawagar	IV/MECH	30	100	20	80	90
13	811217114015	Karthick S	IV/MECH	27	90	19	76	83
14	811217114016	D.Madhan	IV/MECH	30	100	19	76	88



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S.No.	Reg.No	Student's Name	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100) (50% of A + 50% of B)
				No. of Hours Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
15	811217114018	M.Mohammed Faizal	IV/MECH	30	100	22	88	94
16	811217114019	S.Mohanraj	IV/MECH	24	80	18	72	76
17	811217114020	R.Munishwaran	IV/MECH	30	100	19	76	88
18	811217114021	P.Murugan	IV/MECH	30	100	18	72	86
19	811217114022	P.Ponnar	IV/MECH	30	100	22	88	94
20	811217114023	M.Prakash	IV/MECH	30	100	22	88	94
21	811217114025	M.Rajamuni	IV/MECH	30	100	20	80	90
22	811217114026	La.Ramanathan	IV/MECH	27	90	18	72	81
23	811217114027	G.Sairam	IV/MECH	27	90	19	76	83
24	811217114028	R.Sankaralingam	IV/MECH	30	100	20	80	90
25	811217114030	M.Selvakumar	IV/MECH	30	100	20	80	90
26	811217114031	A.Shameer	IV/MECH	30	100	22	88	94
27	811217114032	D.Sivakumar	IV/MECH	30	100	20	80	90
28	811217114033	A.Sriram	IV/MECH	30	100	22	88	94
29	811217114034	S.Thirumurugan	IV/MECH	24	80	20	80	80
30	811217114035	A.Vengatesh	IV/MECH	30	100	19	76	88
31	811217114036	M.Venkatesh	IV/MECH	30	100	20	80	90
32	811217114037	P.Vinayagamoorthy	IV/MECH	30	100	20	80	90
33	811217114038	B.Vinothraja	IV/MECH	27	90	20	80	85
34	811217114039	D.Yugesh	IV/MECH	30	100	20	80	90
35	811217114301	K.Arun	IV/MECH	24	80	22	88	84
36	811217114302	K.Santhosh Kumar	IV/MECH	30	100	20	80	90
37	811217114303	R.Thirumoorthi	IV/MECH	30	100	18	72	86


VAC Coordinator


HOD MECH



Indra Ganesan

COLLEGE OF ENGINEERING

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Report on Value Added Course

Title:	Master CAM				
Resource Person:	Mr. Jayakumar, Mr. Balaji, Trainer; CADD centre, Trichy				
Date of conduct from :	07.12.2020	To:	11.12.2020	Duration:	30 Hours
Organized Department :	MECHANICAL ENGINEERING				
Participant Year:	4	No. of Students Registered :	37		
Venue:	Online mode - https://meet.google.com/zcm-djnn-mdt				

Outcome of Value Added Course (VAC): At the end of the Course, Students can able to

- Know to explain the MASTERCAM 2D drawings & 3D models.
- Know how to create 2D & 3D tool paths.
- Students are expected to learn the special operations like hole milling, slot milling and helical milling tool paths.
- Know to recall Assembling with Extrude, Revolve, Fillet, Chamfer, Sweep, Thicken, Ruled
They receive required training on Animating Assemblies, Surface modeling tools.

Assessment Process

- Students, who are securing **more than 70% on total score** and secured more than 75% in attendance is eligible to receive the certificate for the VAC course conducted
- Total Score = $(0.5 * \text{Attendance in VAC out of 100 percentage} + 0.5 * \text{Test mark in VAC out of 100 marks})$


VAC Coordinator


HoD MECH


Principal

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



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Sample Photo of Value Added Course

Title:	Master CAM			
Resource Person:	1. Mr. Jayakumar 2. Mr. Balaji Trainer CADD centre Trichy			
Date of conduct from :	07.12.2020	To:	11.12.2020	Duration: 30 Hours
Organized Department :	MECHANICAL ENGINEERING			
Participant Year:	4	No. of Students Registered :	37	
Venue:	Online mode - https://meet.google.com/zcm-djnn-mdt			

Sample Photo


VAC Coordinator


H&D MECH


Principal

Dr. G. Balakrishnan, N.I.L. 2021
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620

CADD[®]
CENTRE

CADD CENTRE

Premier Plaza, No-122, II Floor, 5&44, Bharathiar Salai, Cantonment, Tiruchirappalli,

CERTIFICATE OF PARTICIPATION

This is to certify that Mr.S.Mohan Raj of IV Year MECH has successfully completed the value added course on Master CAM organized by Department of Mechanical Engineering and IQAC of our institution in association with CADD centre from 07 December 2020 to 11 December 2020 (5 days) during the Academic year 2020-2021.

Dr. G. Balakrishnan, M.E., Ph.D.,
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IG Valley, Madurai Main Road
Manikandam. Trichy-620 012.

Mr. P. Jayakumar
CADD Centre



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Department of Mechanical Engineering

Academic Year 2020-2021 – Even Semester

Date: 02.06.2021

DEPARTMENT CIRCULAR

Department of Mechanical Engineering and IQAC of IGCE in Association with CADD centre, Trichy is going to organize Value added course for all III, IV Year students on “Application of NX CAD” From 07.06.2021 to 11.06.2021, certificates will be issued to be eligible participants at the end of the course.


Resource Person Details	1.Mr.Balaji Trainer CADD Centre Trichy 2.Mr.Sundaramoorthi Trainer CADD Centre Trichy
Venue	GOOGLE MEET Online mode – meet.google.com/hiw-apof-uic


HOD/MECH


PRINCIPAL

Cc:

- Principal office
- IQAC Co-Ordinator
- Mechanical Faculties Staff Room
- III & IV-Year MECH Students class room
- Office File
- Notice Board.


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Value Added Course

“Application of NX CAD”

SYLLABUS

S.NO	TOPIC COVERED	DURATION (in hours)	DATE
1	Introduction of NX-CAD	3	07.06.2021
2	Basic of NX –CAD and its application.	3	07.06.2021
3	Creating fundamentals curves	3	08.06.2021
4	Creating dimensions, notes and labels	3	08.06.2021
5	Creating and editing curves	3	09.06.2021
6	Editing free form features	3	09.06.2021
7	Plotting drawings	3	10.06.2021
8	Basic assembly concepts	3	10.06.2021
9	Creating assembly and positioning assembly	5	11.06.2021
12	Exam	1	11.06.2021
Total Hours		30	

G. Deepa
VAC Coordinator

P. Ravi
HoD/MECHANICAL

(Signature)
Dr. G. Balakrishnan, M.E., Ph.D.,
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Value Added course

“Application of NX-CAD”

STUDENTS PARTICIPATION LIST

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

S.No.	Reg.No	Student's Name	Year/ Branch
1	811217114001	S.Abdul Yasin	IV/MECH
2	811217114002	R.Ajithkumar	IV/MECH
3	811217114003	S.Anandha Kumar	IV/MECH
4	811217114004	M.Ananth	IV/MECH
5	811217114005	R.Chellaiah	IV/MECH
6	811217114006	C.Devarajan	IV/MECH
7	811217114007	S.Dhamotharan	IV/MECH
8	811217114008	A.Dhanussh	IV/MECH
9	811217114009	C.Dharanidharan	IV/MECH
10	811217114010	N.Dharman	IV/MECH
11	811217114013	M.Hariharasudhan	IV/MECH
12	811217114014	A.Jawagar	IV/MECH
13	811217114015	Karthick S	IV/MECH
14	811217114016	D.Madhan	IV/MECH
15	811217114018	M.Mohammed Faizal	IV/MECH
16	811217114019	S.Mohanraj	IV/MECH
17	811217114020	R.Munishwaran	IV/MECH
18	811217114021	P.Murugan	IV/MECH
19	811217114022	P.Ponnar	IV/MECH
20	811217114023	M.Prakash	IV/MECH
21	811217114025	M.Rajamuni	IV/MECH
22	811217114026	La.Ramanathan	IV/MECH
23	811217114027	G.Sairam	IV/MECH
24	811217114028	R.Sankaralingam	IV/MECH



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S.No.	Reg.No	Student's Name	Year/ Branch
26	811217114031	A.Shameer	IV/MECH
27	811217114032	D.Sivakumar	IV/MECH
28	811217114033	A.Sriram	IV/MECH
29	811217114034	S.Thirumurugan	IV/MECH
30	811217114035	A.Vengatesh	IV/MECH
31	811217114036	M.Venkatesh	IV/MECH
32	811217114037	P.Vinayagamoorthy	IV/MECH
33	811217114038	B.Vinothraja	IV/MECH
34	811217114039	D.Yugesh	IV/MECH
35	811217114301	K.Arun	IV/MECH
36	811217114302	K.Santhosh Kumar	IV/MECH
37	811217114303	R.Thirumoorthi	IV/MECH
38	811219114001	Aathilingam V	III/ MECH
39	811219114002	Abimanyu C	III/ MECH
40	811219114003	Ajay S	III/ MECH
41	811219114004	Christy Lourthu Samy A	III/ MECH
42	811219114006	Periyasamy P	III/ MECH
43	811219114008	Saravana Kumar V	III/ MECH
44	811219114010	Siriyac Selva A	III/ MECH
45	811219114011	Suriyaganesh M	III/ MECH
46	811219114012	Vaithiyalingam M	III/ MECH

G. D. Deepankumar
VAC Coordinator

Dr. G. Balakrishnan
Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
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IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

P. Ravi
HoD/MECHANICAL



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REPORT ON VALUE ADDED COURSE

Title: "Application of NX-CAD"

Resource Person1: Mr. Balaji
Trainer
CADD centre
Trichy

Mr. Sundara Moorthi
Trainer
CADD centre
Trichy

Date of conduct from : 07.06.2021 To: 11.06.2021 Duration: 30 Hours

Organized Department : Mechanical Engineering

Participant Year: 3,4 No. of Students Registered : 46

Venue: GOOGLE MEET
Online mode – meet.google.com/hiw-apof-uic

Outcome of Value Added Course (VAC): At the end of the Course, Students can able to

- Know to explain the Application of NX CAD 2D drawings & 3D models.
- Know how to create 2D & 3D tool path and curves
- Demonstrate Dimensioning and features of NX CAD
- Students are Learn the software of NX CAD and its application.
- Students can able to draw the modeling and analyse the Unigraphics drawings.

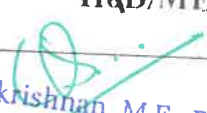
Assessment Process

- Students, who are securing more than 70% on total score and secured more than 75% in attendance is eligible to receive the certificate for the VAC course conducted
- Total Score = $(0.5 * \text{Attendance in VAC out of 100 percentage} + 0.5 * \text{Test mark in VAC out of 100 marks})$


VAC Coordinator


HOD/MECH


Principal


Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
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Manikandam, Trichy-620 012.



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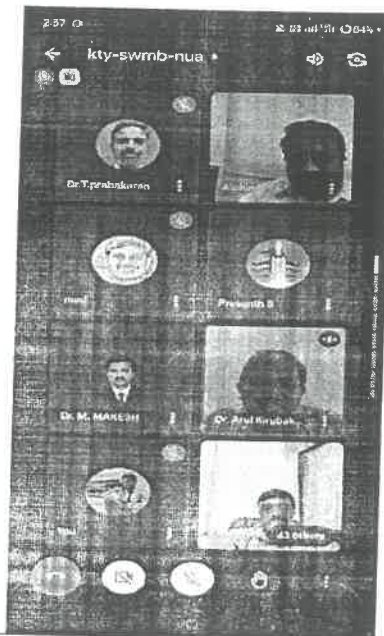
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SAMPLE OF VALUE ADDED COURSE

Title:	"Application of NX-CAD"				
Resource Persons:	Mr. Balaji Trainer CADD centre Trichy		Mr. Sundara Moorthi Trainer CADD centre Trichy		
Date of conduct from :	07.06.2021	To:	11.06.2021	Duration	30 Hours
Organized Department :	Mechanical Engineering				
Participant Year:	3,4		No. of Students Registered	46	
Venue:	GOOGLE MEET Online mode – meet.google.com/hiw-apof-uic				

SAMPLE PHOTO



Dr. G. Balakrishnan, M.E.
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main
Manikandam, Trichy-620

C. Deepakumar
VAC Coordinator

P. P. Ram
HOD/MECH

Principal



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Name of the Student:

Year/Sem:

AU Register Number:

Value Added Course

“Application of NX CAD”

MCQ QUESTIONS (25X4 = 100 Marks)

1. CAD is a
 - a. Software tool
 - b. Hardware tool
 - c. Both software and hardware tools
 - d. None

2. CAD prepares 2D and 3 D drawings which are
 - a. Non digital
 - b. Digital
 - c. Both digital and non digital
 - d. None

3. CAD is
 - a. Computer aided drafting
 - b. Computer aided design
 - c. Both drafting and design
 - d. None

4. CAD prepares models with computer which are
 - a. Dynamic patterns
 - b. Static patterns
 - c. Geometric patterns
 - d. None

5. Types of CAD software in existence
 - a. 6
 - b. 9
 - c. 3
 - d. None


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6. CADD stands for
 - a. Firstly Computer aided drawing and design
 - b. Secondly Computer aided design and drawing
 - c. Computer aided design and drafting
 - d. None


7. EDA stands for
 - a. Electric design automation
 - b. Electronic design automation
 - c. Both (a) & (b)
 - d. None

8. CAD technology is used in the design of
 - a. Tools and machines
 - b. All types of buildings
 - c. Both (a) & (b)
 - d. None

9. DPD stands for
 - a. Design product development
 - b. Digital product development
 - c. Both (a) & (b)
 - d. None

10. PLM related to CAD stands for
 - a. Product life management
 - b. Product lifecycle management
 - c. Both (a) & (b)
 - d. None

11. CAE related to Cad stands for
 - a. Firstly Computer aided electronics
 - b. Secondly Computer aided engineering
 - c. Computer aided electrical
 - d. None


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12. FEM related CAD stands for
- Final analysis mechanics
 - Finite element analysis
 - Full analysis machines
 - None
13. FEM related to CAD stands for
- Final element manufacturing
 - Finite element Machine
 - Finite element method
 - None
14. PDM in CAD stands for
- Product development management
 - Product data management
 - Both (a) & (b)
 - None
15. How many types of solids modeling?
- 6
 - 2
 - 4
 - None
16. Most of the CAD require a
- One special hardware
 - No special hardware
 - Two special hardware
 - None
17. CAGD in CAD stands for
- Firstly Computer aided geo design
 - Secondly Computer aided geological design
 - Computer aided geometric design
 - None

Dr. G. Balakrishnan, M.E., Ph.D.
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18. Computer Aided Manufacturing (CAM) is
- The use of software to automate a manufacturing process
 - The use computer aided machinery to automate a manufacturing process
 - Both (a) & (b)
 - None
19. Identify the fact
- CAM can work without CAD
 - CAD can work without CAM
 - Both (a) & (b)
 - None
20. CAM is computer aided manufacturing which is
- Manual
 - Semi-automatic
 - Fully automatic
 - None
21. CAM is a
- Fast process
 - Slow process
 - Mixture of slow and fast process
 - None
22. Components manufactured by CAM needs
- Further machining to achieve the final product
 - No further machining required
 - Very light machining is required
 - None
23. A CNC machine translates
- CAD into CAM
 - CAM into CAD
 - Both (a) & (b)
 - None


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24. Computer Aided Manufacturing is
- Firstly Computer aided modeling
 - Secondly Computer aided machining
 - Both (a) & (b)
 - None
25. Energy requirements with CAM is
- > than conventional machining
 - < than conventional machining
 - = conventional machining
 - None

VAC Coordinator

HOD/Mech

Dr. G. Balakrishnan, M.E., Ph.D.
Principal

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Manikandam, Trichy-620 012



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Name of the Student: C. Devanajan

Year/Sem: IV - mech.

AU Register Number: 811217114006

Value Added Course

"Application of NX CAD"

MCQ QUESTIONS (25X4 = 100 Marks)

22
25
Q3

- CAD is a
 - Software tool
 - Hardware tool
 - Both software and hardware tools
 - None
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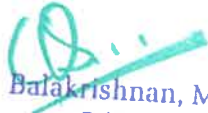
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12. FEM related CAD stands for
- ~~Final analysis mechanics~~
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 - Finite element method
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- b. The use computer aided machinery to automate a manufacturing process
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- a. > than conventional machining
 - b. < than conventional machining
 - c. = conventional machining
 - d. None

Dr. Deepa

VAC Coordinator

P. Pany

HoD/Mech

(Signature)
Dr. G. Balakrishnan, M.E., Ph.D.
Principal
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IG Valley, Madurai Main Road
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Value Added Course

“Application of NX CAD”

ANSWER KEY

1	a	6	c	11	b	16	b	21	a
2	b	7	b	12	b	17	c	22	b
3	c	8	c	13	c	18	c	23	a
4	c	9	b	14	b	19	b	24	c
5	b	10	b	15	b	20	c	25	b


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G. Devarajam,
VAC Coordinator



Indra Ganesan

COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
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S.No.	Reg.No	Student's Name	Year/ Branch	DATE: 07.06.21		DATE: 08.06.21		DATE: 09.06.21		DATE: 10.06.21		DATE: 11.06.21		DATE: 12.06.21		NO OF SESSIONS ATTENDED	SIGNATURE OF THE STUDENT
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
				15	811217114018	M.Mohammed Faizal	IV/MECH	/	/	/	/	/	/	/	/		
16	811217114019	S.Mohanraj	IV/MECH	/	/	/	a	/	/	/	/	/	/	/	/	9	
17	811217114020	R.Munishwaran	IV/MECH	/	/	/	/	/	a	/	/	/	/	/	/	10	
18	811217114021	P.Murugan	IV/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
19	811217114022	P.Ponnar	IV/MECH	/	a	/	/	/	/	/	/	/	/	/	/	9	
20	811217114023	M.Prakash	IV/MECH	/	a	/	/	/	/	/	/	/	/	/	/	9	
21	811217114025	M.Rajamuni	IV/MECH	/	/	/	/	/	/	/	a	/	/	/	/	9	
22	811217114026	La.Ramanathan	IV/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
23	811217114027	G.Sairam	IV/MECH	/	/	/	/	a	/	/	/	/	/	/	/	9	
24	811217114028	R.Sankaralingam	IV/MECH	a	/	/	/	/	/	/	/	/	/	/	/	9	
25	811217114030	M.Selvakumar	IV/MECH	/	/	/	/	/	/	/	a	/	/	/	/	9	
26	811217114031	A.Shameer	IV/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
27	811217114032	D.Sivakumar	IV/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
28	811217114033	A.Sriram	IV/MECH	/	/	a	/	/	/	/	/	/	/	/	/	9	
29	811217114034	S.Thirumurugan	IV/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
30	811217114035	A.Vengatesh	IV/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
31	811217114036	M.Venkatesh	IV/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
32	811217114037	P.Vinayagamorthy	IV/MECH	/	a	/	/	/	/	/	/	/	/	/	/	9	
33	811217114038	B.Vinothraja	IV/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
34	811217114039	D.Yugesh	IV/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
35	811217114301	K.Arun	IV/MECH	/	/	/	/	/	a	/	/	/	/	/	/	9	
36	811217114302	K.Santhosh Kumar	IV/MECH	/	/	/	/	/	/	a	/	/	/	/	/	9	
37	811217114303	R.Thirumoorthi	IV/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
38	811219114001	Aathilingam V	III/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	

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				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
39	811219114002	Abimanyu C	III/MECH	/	/	/	/	a	a	/	/	/	/	/	/	8	Online Mode
40	811219114003	Ajay S	III/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
41	811219114004	Christy Lourthu Samy A	III/MECH	/	/	/	/	/	a	/	/	/	/	/	/	9	
42	811219114006	Periyasamy P	III/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
43	811219114008	Saravana Kumar V	III/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
44	811219114010	Siriyac Selva A	III/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	
45	811219114011	Suriyaganesh M	III/MECH	/	/	/	/	a	/	/	/	/	/	/	/	9	
46	811219114012	Vaithiyalingam M	III/MECH	/	/	/	/	/	/	/	/	/	/	/	/	10	

Dr. G. Balakrishnan, M.E., Ph.D.,
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VAC Coordinator

HOD/MECH



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Department of Mechanical Engineering

Academic Year 2020-2021 – EVEN Semester

VALUE ADDED COURSE ASSESEMENT SHEET

“Application of NX-CAD”


Dr. G. Balakrishnan, M.E., Ph.D.
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IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

S.No.	Reg.No	Student's Name	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100) (50% of A + 50% of B)
				No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
1	811217114001	S.Abdul Yasin	IV/MECH	30	100	20	80	90
2	811217114002	R.Ajithkumar	IV/MECH	27	90	18	72	81
3	811217114003	S.Anandha Kumar	IV/MECH	30	100	20	80	90
4	811217114004	M.Ananth	IV/MECH	27	90	20	80	85
5	811217114005	R.Chellaiah	IV/MECH	30	100	20	80	90
6	811217114006	C.Devarajan	IV/MECH	27	90	22	88	89
7	811217114007	S.Dhamotharan	IV/MECH	30	100	20	80	90
8	811217114008	A.Dhanussh	IV/MECH	27	90	22	88	89
9	811217114009	C.Dharanidharan	IV/MECH	30	100	20	80	90
10	811217114010	N.Dharman	IV/MECH	24	80	19	76	78
11	811217114013	M.Hariharasudhan	IV/MECH	30	100	19	76	88
12	811217114014	A.lawagar	IV/MECH	27	90	20	80	85
13	811217114015	Karthick S	IV/MECH	30	100	19	76	88



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S.No.	Reg.No	Student's Name	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100) (50% of A + 50% of B)
				No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
14	811217114016	D.Madhan	IV/MECH	30	100	19	76	88
15	811217114018	M.Mohammed Faizal	IV/MECH	27	90	22	88	89
16	811217114019	S.Mohanraj	IV/MECH	30	100	18	72	86
17	811217114020	R.Munishwaran	IV/MECH	27	90	19	76	83
18	811217114021	P.Murugan	IV/MECH	30	100	18	72	86
19	811217114022	P.Ponnar	IV/MECH	27	90	22	88	89
20	811217114023	M.Prakash	IV/MECH	27	90	22	88	89
21	811217114025	M.Rajamuni	IV/MECH	27	90	20	80	85
22	811217114026	La.Ramanathan	IV/MECH	30	100	18	72	86
23	811217114027	G.Sairam	IV/MECH	27	90	19	76	83
24	811217114028	R.Sankaralingam	IV/MECH	27	90	20	80	85
25	811217114030	M.Selvakumar	IV/MECH	30	100	20	80	90
26	811217114031	A.Shameer	IV/MECH	27	90	22	88	89
27	811217114032	D.Sivakumar	IV/MECH	30	100	20	80	90
28	811217114033	A.Sriram	IV/MECH	27	90	22	88	89
29	811217114034	S.Thirumurugan	IV/MECH	30	100	20	80	90
30	811217114035	A.Vengatesh	IV/MECH	30	100	19	76	88
31	811217114036	M.Venkatesh	IV/MECH	30	100	20	80	90
32	811217114037	P.Vinayagamoorthy	IV/MECH	27	90	20	80	85
33	811217114038	B.Vinothraja	IV/MECH	30	100	20	80	90
34	811217114039	D.Yugesh	IV/MECH	30	100	20	80	90
35	811217114301	K.Arun	IV/MECH	27	90	22	88	89
36	811217114302	K.Santhosh Kumar	IV/MECH	27	90	20	80	85

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				No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
37	811217114303	R.Thirumoorthi	IV/MECH	30	100	18	72	86
38	811219114001	Aathilingam V	III/MECH	30	100	20	80	90
39	811219114002	Abimanyu C	III/MECH	24	80	22	88	84
40	811219114003	Ajay S	III/MECH	30	100	20	80	90
41	811219114004	Christy Lourthu Samy A	III/MECH	27	90	22	88	89
42	811219114006	Periyasamy P	III/MECH	30	100	20	80	90
43	811219114008	Saravana Kumar V	III/MECH	30	100	19	76	88
44	811219114010	Siriyac Selva A	III/MECH	30	100	20	80	90
45	811219114011	Suriyaganesh M	III/MECH	27	90	20	80	85
46	811219114012	Vaithiyalingam M	III/MECH	30	100	20	80	90

G. Deepan
VAC Coordinator

[Signature]
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Principal
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[Signature]
HoD/MECH



CERTIFICATE OF PARTICIPATION

UNIQUE
MEP


This is certify that Mr. Name of the student, IV year, Mechanical has successfully completed the value added course on "Application of NX CAD" organized by Department of Mechanical engineering and IQAC of our institution in association with UNIQUE CAD from 07.06.2021 to 11.06.2021 (5Days) during the academic Year 2020-2021


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Mr. BALAJI
UNIQUE MEP




PRINCIPAL
IGCE