



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagammal Campus

S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near **VIRUDHUNAGAR**).

DEPARTMENT OF MECHANICAL ENGINEERING

Value Added Course

on

CATIA

Academic Year : 2023-2024 (ODD Semester)

Date : 31.07.2023 to 05.08.2023

Duration : 45 Hours

Organized by : Inventatec, Chennai

m.e.h
Coordinator

S.P.G.C. Nagar
08/08/23
HoD/Mech

N.S - San
2023
Dean (Academic Courses)

KAMARAJ

COLLEGE OF ENGINEERING & TECHNOLOGY



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DEPARTMENT OF MECHANICAL ENGINEERING

Content	Details
Academic Year	2023-2024 (ODD Semester)
Date	31.07.2023 to 05.08.2023
Name of the Value-added course	CATIA
Duration	45 Hours
No of Credit	2 Credit
Category	Theory (15 Hours) and Lab (30 hours)
Organized by	Inventatec, Chennai
External Coordinator	Er. Jaffar T, Application Engineer, Inventatec, Chennai.
Three Member Committee Members	1. Dr. S. Thanga Kasi Rajan, ASP& HoD/Mech 2. Er.R.Sakthivel Murugan, AP/Mech 3. Er. N.R. Madhan, AP/Mech
Internal Coordinators	Er. N.R. Madhan, AP/Mech

N.R. Madhan
Coordinator

J. Jaffar T
08/08/23
HoD/Mech

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S.P.G.C. Nagar, K. Vellakulam - 625 701, (Near Virudhunagar), Madurai District.

Submitted to the SECRETARY for approval through the PRINCIPAL

Book No.

MECH

Date 15.06.2023

SL No

61

VALUE ADDED COURSE | CATIA. | III YEAR STUDENTS.

Organised by : INVENTATEQ, CHENNAI.

Date : 10.07.2023 to 15.07.2023
[6 DAYS]

No of students : 42.

Course fee : Rs 72,000 | Rs 1715/student

Advance amount : 50% of Rs 72,000

Required : Accommodation [6days] & Food & Snacks.

Enclose : Comparative statement & Quotation.

Approval may please sanctioned above amount & permit us to conduct the programme

Signature of Faculty

N.S.P. MADHAN, AP/MECH


HOD


PRINCIPAL 16/6/23

OFFICE USE

- 1) Account Head
- 2) Budget allotted
- 3) Amount committed / Spent sofar
- 4) Balance available

Value Added Course Exp

OM 

Treasurer 


Secretary

Value Added Course | CATIA |

Madhan.N.R <madhanmech@kamarajengg.edu.in>

Mon 7/31/2023 10:17 AM

To:21UME <21ume@kamarajengg.edu.in>

Dear students,

Our department is planned to organise value added course on "CATIA" from 31.07.2023 to 05.08.2023. You are instructed to avoid absenteeism and make use of this opportunity effectively. Trainer from Inventatec, Chennai is going to deliver his lecturer.

Thanking you.

With Regards,

Madhan N R,

Assistant Professor,

Mechanical Department,

KAMARAJ

College of Engg and Tech,

Virudhunagar.

Department of Mechanical Engineering

Title of the Program : Value Added Course on "CATIA"

Date: 31.07.2023 to 05.08.2023

Participants : III year (2021 – 2025 Batch)

Academic Year: 2023 - 2024

Conducted by : Inventatec, Chennai

Venue : KCER-MECH-CAD Lab

Syllabus

Introduction

Creating Construction – Standard Element Applying Geometrical – Dimensional Constraints Understanding User Selection Filter toolbar; Understanding Visualization Toolbar - Cut part by Sketch Plane - 3D Element visualization - 2D Element visualization – Diagnostics.

Sketcher Mode

Dimensional Constraints - Geometrical Constraints - Editing Profile using Corner – Chamfer - Re-limitations – Transformation - 3D Geometry - Understanding Constraints Constraints - Constraint Creation - Contact Constraint - Fix together - Auto Constraint - Animate Constraint - Edit Multi Constraint Sketch Analysis

Part Modelling

Creating Sketch - Based Features - Pad Definition - Drafted Filleted Pad Definition - Pocket Definition - Drafted Filleted Pocket - Shaft Definition - Groove Definition - Hole Definition - Creating Reference Element - Plane Definition - Rib Definition - Slot Definition - Stiffener Definition - Solid Combine Definition - Applying Dress-Up Features - Edge Fillet Definition - Variable Fillet Definition - Chordal Fillet Definition - Face-Face Fillet Definition - Tritangent Fillet Definition - Chamfer Definition - Multi-Sections Solid Definition - Removed Multi-Section Solid Definitions

Part Editing

Applying Dress-Up Features - Edge Fillet Definition - Variable Fillet Definition - Chordal Fillet Definition - Face-Face Fillet Definition - Tritangent Fillet Definition - Chamfer Definition - Multi-Sections Solid Definition - Removed Multi-Section Solid Definition - Draft Definition - Draft Reflect Line Definition - Variable Angle Draft Definition – Shell Definition - Thickness Definition - Thread/Tap Definition - Remove/Replace Face Definition

Assembly Design

Understanding Top Down & Bottom Up Approach Understanding Product Structure Tools - New Component - New Product - New Part - Existing Component - Existing Component with Positioning Understanding Constraints Toolbar - Coincidence Constraints - Contact Constraints - Offset Constraints - Angle Constraints - Fix Component - Fix Together - Quick Constraint - Flexible/Rigid Sub-Assembly - Change Constraint - Reuse Pattern Understanding Move Toolbar - Manipulation - Snap/Smart Move - Explode - Stop Manipulate on Clash Understanding Product Structure Tools - Replace Component - Graph tree Reordering - Generate Numbering - Selective Load - Manage Representations - Multi Instantiation


Coordinators


HOD/Mech

Department of Mechanical Engineering

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Approval of Board of Study Meeting

Board of Study Meeting: VI

Mode: hybrid mode

Date & Timing: 11.03.2023 & 10.00 AM

Page No: 15 of 16

006.06.00: Information about the (Points Discussed in the following)


Item No.	Description	Suggestions / Comments from the BoS Members
006.06.01	Anna University New Amendment (Honours / Honours in same discipline / Minor)	Dr.S. Thangakasirajan, AP/Mech Presented the new amendment given by Anna University. Bos members accepted the amendments.
006.06.02	Pass Percentage of students	Dr.B. Balavairavan, AP/Mech Presented the Pass percentage year wise and course wise. Bos members accepted the results.
006.06.03	Value Added Courses offered/ Planned for the academic year: 2023 - 2024	Mr. N.R. Madhan, AP/Mech Presented the Value-added course planned for the academic year 2022 - 2023. BoS members suggested some value-added courses for next academic year: LabVIEW, Computational fluid dynamics, Image processing and coding, Deep learning in Metallurgy, NX CAD, CATIA and SolidWorks.


Coordinators
HOD/Mech

DEPARTMENT OF MECHANICAL ENGINEERING

Three-member committee meeting for value added course selection

Agenda		Value Added Course Selection Meeting
Date	:	19/07/2023
Time	:	09.10 AM
Venue	:	E14 Hall, Academic Block Four, Third Floor
Members Present	:	<p>Three Member Committee Members</p> <ol style="list-style-type: none"> 1. Dr. S. Thanga Kasi Rajan, ASP& HoD/Mech 2. Er.R.Sakthivel Murugan, AP/Mech 3. Er. N.R. Madhan, AP/Mech <p>Chairperson</p> <ol style="list-style-type: none"> 1. Er. N.R. Madhan, AP/Mech <p>Domain Experts</p> <ol style="list-style-type: none"> 1. Dr. P. Narayanasamy, ASP/Mech 2. Dr. M. Prithiviraj, AP/Mech 3. Er. N.R. Madhan, AP/Mech <p>Class representative (2021 – 2025 Batch)</p> <ol style="list-style-type: none"> 4. Mr. Hariharan.N (21ume011), II Year/ Student 5. Mr. Thirumurugan.P (21ume020), II Year/ Student 6. Ms. Alitia B Almeda (21ume029), II Year/ Student 7. Mr. Kishore.S (21ume033), II Year/ Student
Minutes of the Meeting	:	<p>It is optional to complete a Value-Added Course for Regulation 2021. In this regard a three-member committee has been formed and a meeting is organized to select the course for registration.</p> <ul style="list-style-type: none"> • Meeting started by 09.10 AM. Dr. S. Thanga Kasi Rajan, Associate Professor & Head of the Department, welcome the gathering. He has advised to maintain SOP for value added course. • Er. N. R. Madhan, Assistant Professor & Chairperson of 2021-2025 batch has proposed course offered by <ul style="list-style-type: none"> ○ Inventatec, Chennai, offering CATIA. • Based on the suggestion given by the Subject Experts, 2021-2025 Batch Chairperson, 3 committee members for Value added course and student representative, “CATIA” course is agreed to take this V semester for 2021-2025 Batch students. Courses was selected by the students based on their interested.

	<p>Justification for the Courses selection: The justification for the course selection were as follows</p> <ol style="list-style-type: none"> i. These courses will be useful for her project work ii. It is a 45-hour courses (2 Credits) iii. These courses are useful to meet the Industrial Needs iv. These courses are in emerging areas.
<p>Proof</p>	

S. Thanga Kasi Rajan
n.a.h

Three Member Committee Members
Dr. S. Thanga Kasi Rajan, ASP & HoD/Mech
Er. R. Sakthivel Murugan, AP/Mech
Er. N.R. Madhan, AP/Mech

P. Narayanasamy
Just
n.a.h

Domain Experts
Dr. P. Narayanasamy, ASP/Mech
Dr. M. Prithiviraj, AP/Mech
Er. N.R. Madhan, AP/Mech

n.a.h

Chairperson
Er. N.R. Madhan, AP/Mech

S. Thanga Kasi Rajan
n.a.h

HoD/Mech

A.S. — San
9/8/23

Dean Academics

Department of Mechanical Engineering

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HOD/Mech

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Summary report

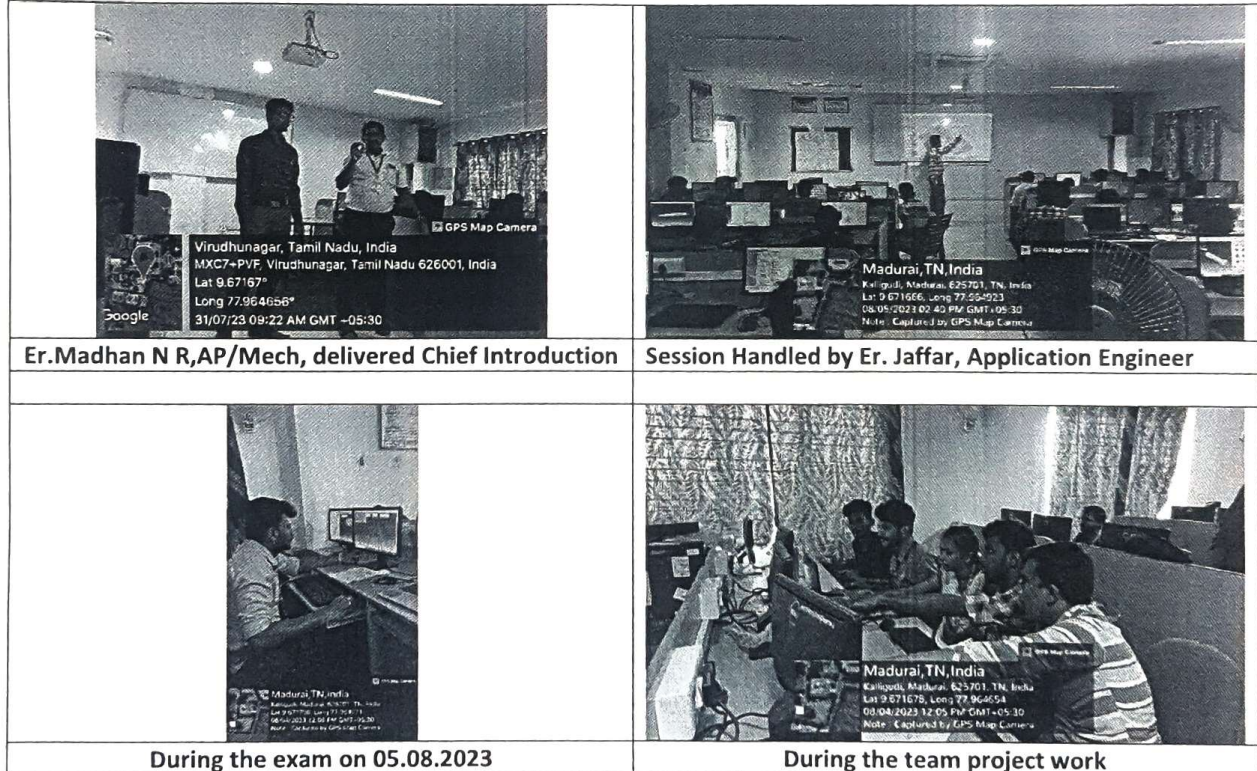
On **31.07.2023**, the programme was started by 9.10 AM. Basics of Sketching mode in CATIA was taught by the trainer Er. Jaffar, Application Engineer, Chennai. During the afternoon, students was practicing the same using software.

On **01.08.2023, 02.08.2023 and 03.08.2023**, 3D Modelling mode was taught by the trainer in CATIA. During the afternoon, 3D Assembly in NX-CAD was taught and simultaneously they were practicing the module.

On **04.08.2023**, Students were practicing the assembly model which was given by the trainer, doubt from the students were clarified by them.

On **05.08.2023**, Assessment was given to the students and output was evaluated by the trainer.

Photos



M.e.h
Coordinators

J. Jaffar
HoD/Mech



INVENTATEQ TRAINING INSTITUTE
(Enter as Trainees... Exit as Professionals)
Velachery – Chennai – 600 042

CERTIFICATE

Certificate No:901

This is to certify that

MURALI KRISHNAN.R

Miss/Mr.....

Kamaraj College of Engineering and Technology, Virudhunagar

Has successfully completed the training program titled

CATIA

PARAMETRIC DESIGN USING CATIA for PART DESIGN, ASSEMBLY DESIGN and DRAFTING WORKBENCH

CONDUCTED BY: INVENTATEQ TRAINING INSTITUTE from 31.07.2023 to 05.08.2023

Date: 07.08.2023



T-J-F.

COURSE COORDINATOR

K. Anilkumar

CENTRE HEAD