RAAK

COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi & Affiliated to Pondicherry University)
An ISO 9001:2015 Certified Institution

02/08/2022

From

Mr.V.Athisakthidhasan
Assistant Professor, Mechanical Engineering
RAAK College of Engineering and Technology
Puducherry -110

To

The Principal
RAAK College of Engineering and Technology
Puducherry -110

Respected Sir,

Sub: Requisition for Approval to Conduct Skill Development program / Value added Course on **"22ME01-Integrated Modeling and Analysis using Creo"** - reg.

This is to bring to your kind notice that the Skill Development Team is planning to conduct a Program on **"22ME01-Integrated Modeling and Analysis using Creo"** for Final Year Mechanical Engineering students from 09-08-2022 to 14-08-2022.

The main focus of this program is to provide a better exposure to our students on the Modeling and Drawing capabilities using Creo tool for practical applications.

The syllabus and course plan structured are not listed in the Pondicherry University Curriculum and the same have been verified and approved by the Principal/HoD/Professors and Skill development team.

Hence, I kindly request you to approve event planned. The details and the necessary proofs are attached with this letter.

Thanking you,

Yours faithfully,

V.Athisakthidhasan
AP/MECH

RAAK College of Engineering & Technology

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.
PRINCIPAL
RAAK College of Engineering & Technology
No.1, Muthupillai Palayam Road,
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Puducherry - 605 110

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RAAKCET/PRINCIPAL/CIR/AUG2022 **03/08/2022**

CIRCULAR

This is to inform that the Skill Development Team is planning to conduct a value added course on **"22ME01-Integrated Modeling and Analysis using Creo"** for Final Year Mechanical Engineering students from 09-08-2022 to 14-08-2022.Students are asked to utilize this opportunity and improve their skills.

PRINCIPAL

Circulation to:

1. All Students
2. All Faculty & Staff Members
3. All HoDs

Copy to:

1. All HoDs
2. Office

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.
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DEPARTMENT OF MECHANICAL ENGINEERING
PRESENTS
VALUE ADDED COURSE ON
INTEGRATED MODELING AND ANALYSIS USING CREO

2022-2023

DATE: 09/08/2022 to 13/08/2022

VENUE: RAAKCET

TIME: 09 am to 04 pm

Resource Person:

Dr. P. Jayaseelan
Associate Professor,
Achariya College of Engg & Tech.

For Registration Contact:

Mr. V. Athisakthidhasan AP/ MECH.
8526522048.

HOD

Mr.Krishnakumar.G

RAAK College of Engineering & Technology

PRINCIPAL

Dr. S. Seenuvasamurthi

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.
PRINCIPAL
RAAK College of Engineering & Technology
No. [illegible] Pillai Palayam Road
[illegible] Post

raakengg@mail.com

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VALUE ADDED COURSES

2022-2023

Department of Mechanical Engineering

22ME01-Integrated Modeling and Analysis using Creo

Syllabus

Duration: 36 hours

Course Objective:

- To summarize various features, concepts and mechanism capabilities that associated with Creo.
- To create the mold model and features for different engineering components.
- To create and analysis the various mechanisms to attain the different motions that used in various practical applications.
- To generate the sheet metal molding for various engineering components.

Course Outcome:

Upon successful completion of the course students able to

- Summarize various features, concepts and mechanism capabilities that associated with Creo
- Create the mold model and features for different engineering components.
- Create and analysis the various mechanisms to attain the different motions that used in various practical applications.
- Generate the sheet metal molding for various engineering components.

Module 1: Mold Design **(9 Hours)**

Introduction & Design Model Preparation, Mold Model, Shrinkage & Work pieces ,Mold Volume & Parting Surface Creation, Splitting Mold Volumes & Mold Component Extraction, Mold Features Creation & Opening the Mold

Module 2: Analysis in creo (mechanism design) **(9 Hours)**

Introduction to the mechanism design process .creating mechanism connections, configuring motion and analysis, evaluating analysis results

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Module 3: sheet metal modeling **(9 Hours)**

Introduction to the creo parametric sheet metal design process, sheet metal models and fundamentals creating primary sheet metal wall features, creating secondary sheet, metal wall features ,bending and unbending sheet metal model ,modifying sheet metal models ,sheet metal setup and tools detailing sheet metal designs

Module 4: **Surfacing,** **(9 Hours)**

Surface modeling overview, basic surfacing tools, boundary blend surfaces, analyzing surface curvature, additional surface analysis tools ,extending and trimming surfaces ,manipulating surfaces ,creating and editing solids using quilts, master model techniques

Courses Designed by **Approved by** **Principal**

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Sulthanpet Post,
Puducherry - 605 110

CO - ATTAINMENT MAPPING

Sl. No	Register Number	Student Name	CO1	CO2	CO3	CO4
1	19TB1201	ABDUL AJEES.M	✓	✓	✓	✓
2	19TB1202	ARUNESHWAR. J	✓	✓	✓	✓
3	19TB1203	DEVA. R	✓	✓	✓	✓
4	19TB1205	MOHANDOSS. A	✓	✓	✓	✓
5	19TB1206	NANTHAKUMAR. S	✓	✓	✓	✓
6	19TB1207	NARAYANA MOORTHI.S	✓	✓	✓	✓
7	19TB1208	PONNAMBALAM. E	✓	✓	✓	✓
8	19TB1209	PRADEEPRAJ.R	✓	✓	✓	✓
9	19TB1211	SILAMBU KALIDASAN. M	✓	✓	✓	✓
10	19TB1212	VASANTHARAJ. R	✓	✓	✓	✓
11	19TBL055	GOUTHAM.N	✓	✓	✓	✓

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VALUE ADDED COURSES

2022-2023

Department of Mechanical Engineering

22ME01-Integrated Modeling and Analysis using Creo

COURSE PLAN

S.no	Date	Hours	Time	Topic	Resource person
1	09.08.22	1.2	9AM -11AM	Introduction & Design Model Preparation, Mold Model, Shrinkage & Work pieces	Mr.J.Jagan & Dr.P.Jayaseelan
2		3,4	11.15AM – 1.15 PM	Mold Volume & Parting Surface Creation,	Mr.J.Jagan
3		5.6	2 PM -4PM	Splitting Mold Volumes & Mold Component Extraction	Dr.P.Jayaseelan
DAY 2					
4	10.08.22	7,8	9AM -11AM	Mold Features Creation & Opening the Mold	Mr.J.Jagan
5		9,10,	11.15AM – 1.15 PM	Introduction to the mechanism design process	Dr.P.Jayaseelan
6		11,12	2 PM -4PM	creating mechanism connections	Mr.J.Jagan
DAY -3					
7	11.08.22	13,14	9AM -11AM	configuring motion and analysis,	Mr.J.Jagan
8		15,16	11.15AM – 1.15 PM	evaluating analysis results	Dr.P.Jayaseelan
9		17,18	2 PM -4PM	Introduction to the creo parametric sheet metal design process, sheet metal models and fundamentals	Mr.J.Jagan
DAY -4					
10	12.08.22	19,20	9AM -11AM	creating primary sheet metal wall features, creating secondary sheet, metal wall features	Dr.P.Jayaseelan

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Sulthanpet Post,
Puducherry - 605 110

11		21,22	11.15AM – 1.15 PM	bending and unbending sheet metal model	Mr.J.Jagan
12		23,24	2 PM -4PM	modifying sheet metal models	Dr.P.Jayaseelan
DAY -5					
13	13.08.22	25,26	9AM -11AM	sheet metal setup and tools detailing sheet metal designs	Mr.J.Jagan
14		27,28	11.15AM – 1.15 PM	Surface modeling overview, basic surfacing tools,	Dr.P.Jayaseelan
15		29,30	2 PM -4PM	boundary blend surfaces	Mr.J.Jagan
DAY -6					
16	14.08.22	31,32	9AM -11AM	analyzing surface curvature, additional surface analysis tools	Dr.P.Jayaseelan
17		33,34	11.15AM – 1.15 PM	extending and trimming surfaces ,manipulating surfaces	Mr.J.Jagan
18		35,36	2 PM -4PM	,creating and editing solids using quilts, master model techniques	Dr.P.Jayaseelan
ASESSMENT EXAM WILL BE CONDUCTED AFTER ONE WEEK OF COURSE COMPLETION *					

BREAK TIME: 11.00 TO 11.15 AM **LUNCH BREAK: 1.15 PM TO 2.00 PM**

COURSE DESIGNED BY
Mr.V.ATHISAKTHIDHASAN

APPROVED BY
SKILL DEVELOPMENT TEAM

PRINCIPAL
Dr.S.SEENUVASAMURTHI

RAAK College of Engineering & Technology

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VALUE ADDED COURSES

2022-2023

Department of Mechanical Engineering

EVENT REPORT

Name of the Course: 22ME01-Integrated Modeling and Analysis using Creo

Name of the Instructors: Mr.J.Jagan & Dr.P.Jayaseelan

Year/ Branch: IV/ Mechanical

Duration of Course: 36 Hours (09-08-2022 to 14-08-2022)

Assessment Date: 20.08.2022

Post Event Summary:

The course was inaugurated on 09-08-2022 at 9.30 A.M. by our respectable principal and sessions were continued as per the schedule. Students were enriched their knowledge by attending the course. Finally, the course concluded by vote of thanks.

On 20.08.2022 assessment was conducted and feedbacks were collected from all the participants.

CO - Attainment:

CO1: Ability to summarize various features, concepts and mechanism capabilities that associated with Creo :

CO2: Create the mold model and features for different engineering components

CO3: Create and analysis the various mechanisms to attain the different motions that used in various practical applications.

CO4: Generate the sheet metal molding for various engineering components

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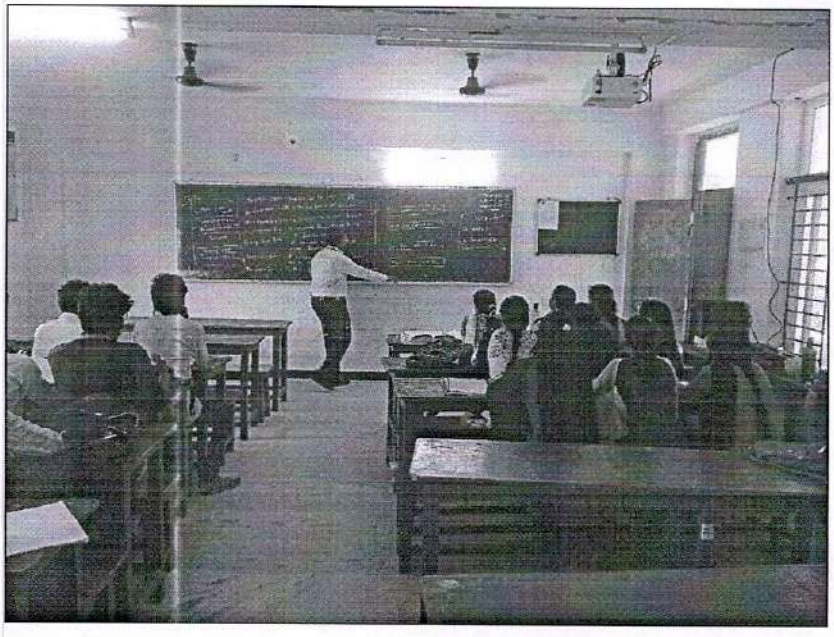
Puducherry - 605 110

Value Added Courses On integrated Modeling and Analysis Using Creo 2022-23



creating primary sheet metal wall features, creating secondary sheet, metal wall features on 12.08.22

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02/08/2022

From

Mr.V.Athisakthidhasan
Assistant Professor, Mechanical Engineering
RAAK College of Engineering and Technology
Puducherry -110

To

The Principal
RAAK College of Engineering and Technology
Puducherry -110

Respected Sir,

Sub: Requisition for Approval to Conduct Skill Development program / Value added Course on **"22ME02-Pollution and control"**- reg.

This is to bring to your kind notice that the Skill Development Team is planning to conduct a Program on **"22ME02-Pollution and control"** for the Third Year Mechanical Engineering students from 09-08-2022 to 13-08-2022.

The main focus of this program is to provide a better exposure to our students on pollution and control for practical applications.

The syllabus and course plan structured are not listed in the Pondicherry University Curriculum and the same have been verified and approved by the Principal/HoD/Professors and Skill development team.

Hence, I kindly request you to approve event planned. The details and the necessary proofs are attached with this letter.

Thanking you,

Yours faithfully,

V.Athisakthidhasan
AP/MECH

RAAK College of Engineering & Technology

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RAAKCET/PRINCIPAL/CIR/AUG2022 **03/08/2022**

CIRCULAR

This is to inform that the Skill Development Team is planning to conduct a value added course on **"22ME02-Pollution and control"** for all the Third Year Mechanical Engineering students from 09-08-2022 to 13-08-2022.Students are asked to utilize this opportunity and improve their skills

PRINCIPAL

Circulation to:

1. All Students
2. All Faculty & Staff Members
3. All HoDs

Copy to:

1. All HoDs
2. Office

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.
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An ISO 9001:2015 Certified Institution

DEPARTMENT OF MECHANICAL ENGINEERING PRESENTS

VALUE ADDED COURSE ON

POLLUTION AND CONTROL

2022-2023

DATE: 09/08/2022 to 13/08/2022

VENUE: RAAKCET

TIME: 09 am to 04 pm

Resource Person:

Dr. P. Jayaseelan
Associate Professor,
Achariya College of Engg & Tech.

For Registration Contact:

Mr. V. Athisakthidhasan, AP/ MECH.
8526522048.

HOD

Mr.Krishnakumar.G

RAAK College of Engineering & Technology

PRINCIPAL

Dr. S. Seenuvasamurthi

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.
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VALUE ADDED COURSES
2022-2023
Department of Mechanical Engineering
22ME02-Pollution and control

Syllabus

Duration: 30 hours

Course Objective:

- To impart knowledge on the atmosphere and eco-legislations
- To classify air, water and land pollutants and sources
- To understand hazardous waste management
- To learn pollution sampling and analysis
- To study the various methods of controlling pollution

Course outcome:

At the end of the course student will be able to

- Classify and identify the sources of air pollutants and predict the effects of air pollutant on human health and environment.
- Apply and relate the significance of various air pollution dispersion models.
- Analyze the air quality and relate with air pollution regulation 4. Design various air pollution control equipment and evaluate its use.

Module 1: **(6 Hours)**

Air pollution–sources, concentration and effects, Air quality management-indoor air quality. Measurement and control of air pollution-emission standards. Atmospheric dispersal of pollutants and modeling of air pollution.

Module 2: **(6 Hours)**

Water pollution - sources of contamination - water quality and standards - chemical pollution of the aquatic environment - regulation of direct discharge - sewage treatment processes - sludge treatment and disposal. Sources and types of toxic wastes - treatment of toxic wastes - disposal of toxic wastes. Pollution in marine environment-sources, movement and behavior of pollutants.

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Module 3: **(6 Hours)**

Soil pollution and Land contamination - sources - properties - consequences of soil pollution – solid waste management - recycling and reuse. Radioactivity in environment - types of radiation - effects of radiation-radio active waste treatments and disposal.

Module 4: **(6 Hours)**

Noise pollution-sources and effects-Noise level measurement and analysis. Noise emission standards - Industries-Automotive. Active and Passive Noise Control.

Module 5: **(6 Hours)**

Clean technologies-Integrated design for pollution prevention and control-case studies-Legal control of pollution –trends and issues.

Course Designed by

Approved by

Principal

RAAK College of Engineering & Technology

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CO - ATTAINMENT MAPPING

Sl. No	Register Number	Student Name	CO1	CO2	CO3	CO4
1	20TB0301	ABINESH.A	✓	✓	✓	✓
2	20TB0302	AMARESH.V	✓	✓	✓	✓
3	20TB0303	HARISUDHAN.D	✓	✓	✓	✓
4	20TB0304	KAPILDEV.S	✓	✓	✓	✓
5	20TB0305	RAJENDIRAN.P	✓	✓	✓	✓
6	20TB0306	SURESH KUMAR.R	✓	✓	✓	✓
7	20TBL175	HARIHARAN V	✓	✓	✓	✓
8	20TBL176	JEROSIN.D	✓	✓	✓	✓
9	20TBL177	KISHORE.K	✓	✓	✓	✓
10	20TBL178	MADHAVAN.G.K	✓	✓	✓	✓
11	20TBL180	PRAVIN.I	✓	✓	✓	✓
12	20TBL181	RAGHUL RAJ.K	✓	✓	✓	✓
13	20TBL182	RITHEESH KUMAR.R	✓	✓	✓	✓
14	20TBL183	THAMIZH ELAKIYAN.S	✓	✓	✓	✓

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VALUE ADDED COURSES
2022-2023
Department of Mechanical Engineering
22ME02-Pollution and control

COURSE PLAN

S.no	Date	Hours	Time	Topic	Remarks
DAY -1					
1	09.08.22	1.2	9AM -11AM	Air pollution–sources, concentration and effects, Air quality management	Dr.P.Jayaseelan & Mr.J.Jagan
2		3,4	11.15AM – 1.15 PM	Indoor air quality. Measurement and control of air pollution-emission standards,	Mr.J.Jagan
3		5.6	2 PM -4PM	Atmospheric dispersal of pollutants and modeling of air pollution.	Dr.P.Jayaseelan
DAY 2					
4	10.08.22	7,8	9AM -11AM	Water pollution - sources of contamination - water quality and standards - chemical pollution of the aquatic environment	Mr.J.Jagan
5		9,10,	11.15AM – 1.15 PM	regulation of direct discharge - sewage treatment processes - sludge treatment and disposal. Sources and types of toxic wastes	Dr.P.Jayaseelan
6		11,12	2 PM -4PM	treatment of toxic wastes - disposal of toxic wastes. Pollution in marine environment- sources, movement and behavior of pollutants.	Mr.J.Jagan
DAY -3					
7	11.08.22	13,14	9AM -11AM	Soil pollution and Land contamination - sources – properties -	Dr.P.Jayaseelan

RAAK College of Engineering & Technology

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Puducher - 6[illegible]

				consequences of soil pollution,	
8		15,16	11.15AM – 1.15 PM	Solid waste management - recycling and reuse. Radioactivity in environment	Mr.J.Jagan
9		17,18	2 PM -4PM	Types of radiation - effects of radiation- radioactive waste treatments and disposal.	Mr.J.Jagan
DAY -4					
10	12.08.22	19,20	9AM -11AM	Noise pollution-sources and effects	Dr.P.Jayaseelan
11		21,22	11.15AM – 1.15 PM	Noise level measurement and analysis. Noise emission standards	Mr.J.Jagan
12		23,24	2 PM -4PM	Industries- Automotive. Active and Passive Noise Control.	Dr.P.Jayaseelan
DAY -5					
13	13.08.22	25,26	9AM -11AM	Clean technologies- Integrated design for pollution prevention and control-case studies	Mr.J.Jagan
14		27,28	11.15AM – 1.15 PM	Legal control of pollution	Dr.P.Jayaseelan
15		29,30	2 PM -4PM	trends and issues.	Dr.P.Jayaseelan
ASESSMENT EXAM WILL BE CONDUCTED AFTER ONE WEEK OF COURSE COMPLETION *					

BREAK TIME: 11.00 TO 11.15 AM **LUNCH BREAK: 1.15 PM TO 2.00 PM**

COURSE DESIGNED BY
Mr.V.ATHISAKTHIDHASAN

APPROVED BY
SKILL DEVELOPMENT TEAM

PRINCIPAL
Dr.S.SEENUVASAMURTHI

RAAK College of Engineering & Technology

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.
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VALUE ADDED COURSES

2022-2023

Department of Mechanical Engineering

EVENT REPORT

Name of the Course: 22ME02-Pollution and control

Name of the Instructors: Dr.P.Jayaseelan & Mr.J.Jagan

Year/ Branch: III/ Mechanical

Duration of Course: 30 Hours (09-08-2022 to 13-08-2022)

Assessment Date: 20.08.2022

Post Event Summary:

The course was inaugurated on 09-08-2022 at 9.30 A.M. by our respectable principal and sessions were continued as per the schedule. Students were enriched their knowledge by attending the course. Finally, the course concluded by vote of thanks.

On 20.08.2022 assessment was conducted and feedbacks were collected from all the participants.

CO - Attainment:

CO1: To impart knowledge on the atmosphere and eco-legislations:

CO2: To classify air, water and land pollutants and sources

CO3: To understand hazardous waste management

CO4: To learn pollution sampling and analysis and to study the various methods of controlling pollution

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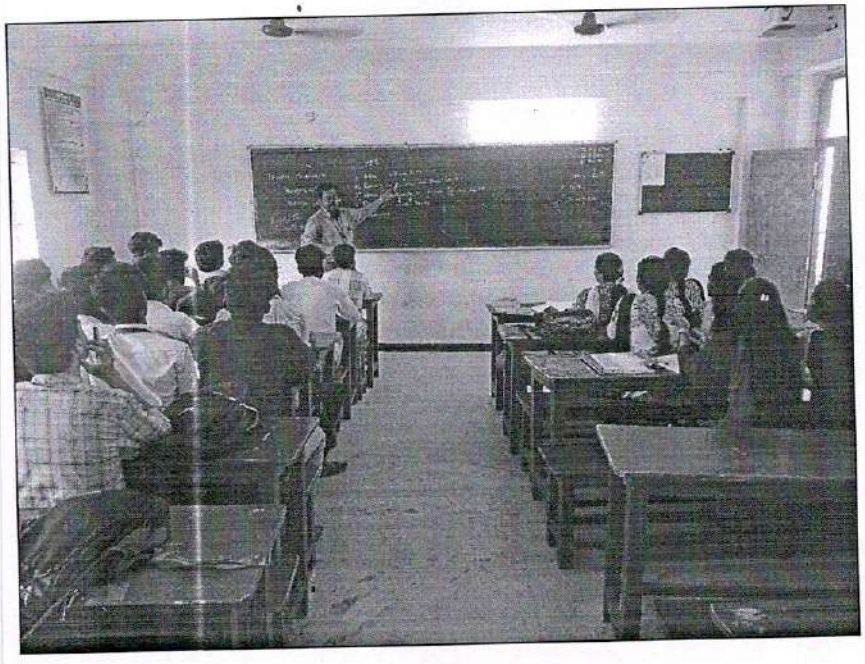
Value Added Courses Pollution And Control 2022-23



Clean technologies-Integrated design for pollution prevention and control-case studies on 13.08.22

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.,
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02/08/2022

From

Mr.V.Athisakthidhasan
Assistant –Professor, Mechanical Engineering
RAAK College of Engineering and Technology
Puducherry -110

To

The Principal
RAAK College of Engineering and Technology
Puducherry -110

Respected Sir,

Sub: Requisition for Approval to Conduct Skill Development program / Value added Course on **"ME2203 3D Printing"** - reg.

This is to bring to your kind notice that the Skill Development Team is planning to conduct a Program on "**ME2203 3D Printing**" for Second year Mechanical Engineering students from 09-08-2022 to 13-08-2022.

The main focus of this program is to provide a better exposure to our students on the 3D Printing for practical applications.

The syllabus and course plan structured are not listed in the Pondicherry University Curriculum and the same have been verified and approved by the Principal/HoD/Professors and Skill development team.

Hence, I kindly request you to approve event planned. The details and the necessary proofs are attached with this letter.

Thanking you,

Yours faithfully

V.Athisakthidhasan
AP/MECH

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RAAKCET/PRINCIPAL/CIR/AUG2022 **03/08/2022**

CIRCULAR

This is to inform that the Skill Development Team is planning to conduct a value added course on "**ME2203-3D Printing**" for the second Year Mechanical Engineering students from 09-08-2022 to 13-08-2022. Students are asked to utilize this opportunity and improve their skills.

PRINCIPAL

Circulation to:

1. All Students
2. All Faculty & Staff Members
3. All HoDs

Copy to:

1. All HoDs
2. Office

RAAK

DEPARTMENT OF MECHANICAL ENGINEERING
PRESENTS
VALUE ADDED COURSE ON
3D PRINTING

2022-2023

DATE: 09/08/2022 to 13/08/2022

VENUE: RAAKCET

TIME: 09 am to 04 pm

Resource Person:

Mr. V. Rubachandran
Assistant Professor,
Christ Institute of Engg & Tech.

For Registration Contact:

Mr. V. Athisakthidhasan, AP/ MECH.
8526522048

HOD

Mr.Krishnakumar.G

PRINCIPAL

Dr. S. Seenuvasamurthi

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VALUE ADDED COURSES
2022-2023
Department of Mechanical Engineering
ME2203 -3D Printing

Syllabus

Duration: 30 hours

Course Objective:

- Demonstrate knowledge of key historical factors that have shaped manufacturing over the centuries
- Explain current and emerging 3D printing applications in a variety of industries
- Describe the advantages and limitations of each 3D printing technology
- Evaluate real-life scenarios and recommend the appropriate use of 3D printing technology and Identify opportunities to apply 3D printing technology for time and cost savings

Course Outcome:

- Describe the advantages and limitations of each 3D printing technology
- Evaluate real-life scenarios and recommend the appropriate use of 3D printing technology
- Identify opportunities to apply 3D printing technology for time and cost savings
- Discuss the economic implications of 3D printing including its impact on startup businesses and supply chains .Design and print objects containing moving parts without assembly

Module 1: Introduction **(6 Hours)**

Introduction to Design, Prototyping fundamentals. Introduction to 3D printing, its historical development, advantages. Commonly used terms, process chain, 3D modelling, Data Conversion, and transmission, Checking and preparing, Building, Post processing, RP data formats, Classification of 3D printing process, Applications to various fields.

Module 2: Liquid Based 3d Printing **(6 Hours)**

Stereo lithography apparatus (SLA): Models and specifications, process, working principle, photopolymers, photo polymerization, layering technology, laser and laser scanning, applications, advantages and disadvantages, case studies.

Solid ground curing (SGC): Models and specifications, process, working ,principle, applications, advantages and disadvantages, case studies

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Module 3: Solid Based 3d Printing **(6 Hours)**

Laminated object manufacturing (LOM): Models and specifications, Process, Working principle, Applications, Advantages and disadvantages, Case studies. Fused Deposition Modeling (FDM): Models and specifications, Process, Working principle, Applications, Advantages and disadvantages, Case studies, practical demonstration

Module 4: Rapid Manufacturing Process Optimization **(6 Hours)**

Factors influencing accuracy, data preparation errors, part building errors, errors in finishing, influence of part build orientation.

Module V: Medical And Bio Additive Manufacturing **(6 Hours)**

Customized implants and prosthesis: Design and production. Bio-Additive Manufacturing, Computer Aided Tissue Engineering (CATE) and their Case Studies.

Course Designed by

Approved by

Principal

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CO – ATTAINMENT MAPPING

Sl. No	Register Number	Student Name	CO1	CO2	CO3	CO4
1	21TB0111	ARASUKUMAR S	✓	✓	✓	✓
2	21TB0113	DHIVAGAR G	✓	✓	✓	✓
3	21TB0114	HARIHARAN S	✓	✓	✓	✓
4	21TB0115	KARAN P	✓	✓	✓	✓
5	21TB0117	ROHIT BRUNO K	✓	✓	✓	✓
6	21TBL071	LOKESWARAN. R	✓	✓	✓	✓

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VALUE ADDED COURSES
2022-2023
Department of Mechanical Engineering
ME2203 -3D Printing
COURSE PLAN

S.no	Date	Hours	Time	Topic	Resource person
DAY -1					
1	09.08.22	1.2	9AM -11AM	Introduction to Design, Prototyping fundamentals. Introduction to 3D printing, its historical development, advantages.	: Mr.V.Rubachandran & Mr.J.Jagan
2		3,4	11.15AM – 1.15 PM	Commonly used terms, process chain, 3D modelling, Data Conversion, and transmission, Checking and preparing, Building, Post processing, RP data formats,	Mr.J.Jagan
3		5.6	2 PM -4PM	Classification of 3D printing process, Applications to various fields.	Mr.V.Rubachandran
DAY 2					
4	10.08.22	7,8	9AM -11AM	Stereo lithography apparatus (SLA): Models and specifications, process, working principle, photopolymers, photo polymerization,	Mr.J.Jagan
5		9,10,	11.15AM – 1.15 PM	layering technology, laser and laser scanning, applications, advantages and disadvantages, case studies	Mr.V.Rubachandran
6		11,12	2 PM -4PM	Solid ground curing (SGC): Models and specifications, process, working ,principle, applications,	Mr.J.Jagan

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				advantages and disadvantages, case studies	
DAY -3					
7	11.08.22	13,14	9AM -11AM	Laminated object manufacturing (LOM): Models and specifications, Process, Working principle, Applications, Advantages and disadvantages	Mr.J.Jagan
8 .		15,16	11.15AM – 1.15 PM	Case studies. Fused Deposition Modeling (FDM): Models and specifications, Process,	Mr.V.Rubachandran
9		17,18	2 PM -4PM	Working principle, Applications, Advantages and disadvantages, Case studies, practical demonstration	Mr.J.Jagan
DAY -4					
10	12.08.22	19,20	9AM -11AM	Factors influencing accuracy, data preparation errors,	Mr.V.Rubachandran
11		21,22	11.15AM – 1.15 PM	part building errors, errors in finishing,	Mr.J.Jagan
12		23,24	2 PM -4PM	influence of part build orientation.	
DAY -5					
13	13.08.22	25,26	9AM -11AM	Customized implants and prosthesis: Design and production	Mr.V.Rubachandran
14		27,28	11.15AM – 1.15 PM	Bio-Additive Manufacturing	Mr.J.Jagan
15		29,30	2 PM -4PM	Computer Aided Tissue Engineering (CATE) and their Case Studies.	Mr.V.Rubachandran

ASESSMENT EXAM WILL BE CONDUCTED AFTER ONE WEEK OF COURSE COMPLETION *

BREAK TIME: 11.00 TO 11.15 AM **LUNCH BREAK: 1.15 PM TO 2.00 PM**

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COURSE DESIGNED BY
Mr.V.ATHISAKTHIDHASAN

APPROVED BY
SKILL DEVELOPMENT TEAM

PRINCIPAL
Dr.S.SEENUVASAMURTHI

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VALUE ADDED COURSES

2022-2023

Department of Mechanical Engineering

EVENT REPORT

Name of the Course: 22ME03-3D PRINTING

Name of the Instructors: Mr.V.Rubachandran & Mr.J.Jagan

Year/ Branch: II/ Mechanical

Duration of Course: 30 Hours (09-08-2022 to 13-08-2022)

Assessment Date: 20.08.2022

Post Event Summary:

The course was inaugurated on 09-08-2022 at 9.30 A.M. by our respectable principal and sessions were continued as per the schedule. Students were enriched their knowledge by attending the course. Finally, the course concluded by vote of thanks.

On 20.08.2022 assessment was conducted and feedbacks were collected from all the participants.

CO - Attainment:

CO1: Demonstrate knowledge of key historical factors that have shaped manufacturing over the centuries

:

CO2: Explain current and emerging 3D printing applications in a variety of industries

CO3: Describe the advantages and limitations of each 3D printing technology

CO4: Evaluate real-life scenarios and recommend the appropriate use of 3D printing technology and Identify opportunities to apply 3D printing technology for time and cost savings

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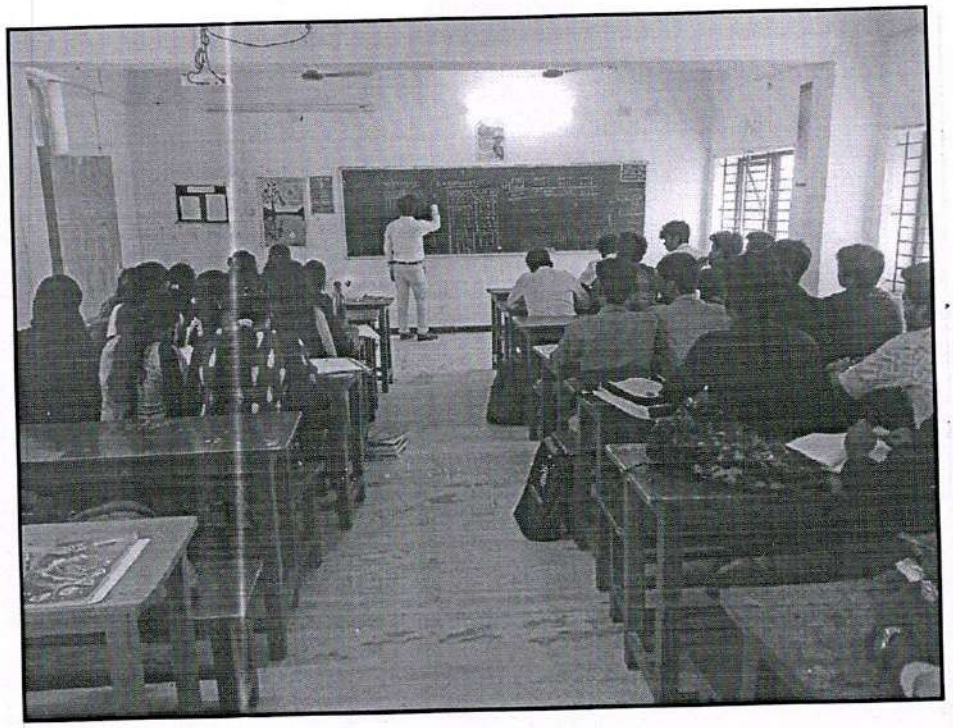
VALUE ADDED COURSES on 3D Printing



Computer Aided Tissue Engineering (CATE) and their Case Studies on 13.08.22

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