

1.3.2 Details of value-added courses for imparting transferable and life skills offered during the year:

1.3.3 Number of students enrolled in the courses under 1.3.2

Name of the value-added courses (with 30 or more contact hours) offered	Course Code, if any	No. of times offered during the year	Duration of course (in hours)	Number of students enrolled during the year	1.3.3 Number of students who completed the course during the year
VALUE ADDED COURSE- PROCESS SIMULATION SOFTWARE"	22PCT01	1	30	25	25





## EXCEL ENGINEERING COLLEGE

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(2f & 12B)

KOMARAPALAYAM - 637303

Department of Petrochemical Technology

### CIRCULAR

Ref.No: EEC/PCT/22-23/VAC-01

Date: 01-03-2023

We are conducting Value Added Course on "PROCESS SIMULATION SOFTWARE" from 04.03.2023 to 10.04.2023 at MAT LAB (3<sup>rd</sup> floor).

In this regard, third year students are informed to attend this course utilizing this opportunity and improve the software skills.

**VENUE: MAT LAB (3<sup>rd</sup> floor), ECET**

**DATE : 04.03.2023 to 10.04.2023**

Course Coordinator

HOD/PC

CC to:

1. File
2. Overall Activity Coordinator
3. Director-Academic, Admin and Technical
4. Executive Director
5. Chairman/Vice Chairman
6. Dept. Notice Board





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## Date

4/3/2023

10/4/2023

## Time

9.30am-4.30pm

## DEPARTMENT OF PETROCHEMICAL TECHNOLOGY

### Organizing a



## VALUE ADDED COURSE- Process Simulation Software

**Venue: Mat Lab (3rd floor)**

### Program Co-ordinator:

Mr.A.Meenakshi Sundar

### Head of the Department:

Dr.E.R.Sivakumar

### Activity Co-ordinator:

Mr.P.Santhosh





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KOMARAPALAYAM – 637303

DEPARTMENT OF PETROCHEMICAL TECHNOLOGY

ACADEMIC YEAR 2022-23

VALUE ADDED COURSE ON "PROCESS SIMULATION SOFTWARE"

## SCHEDULE

Day 1 - (04.03.2023) Full day	Basics of Modeling, Simulation approach for steady state process	Mr.P.Sivakumar Mr.C.S.Arvinth kumar
Day 2 - (07.03.2023) Full day	Multi component flash drum, steady state single stage and two stage solvent extraction	Mr.P.Sivakumar
Day 3- (11.03.2023) Full day	Forward and backward feed triple effect evaporator, Crystallization process and Sedimentation	Mr.N.Yasvanth Rajan
Day 4 - (14.03.2023) Full day	Modeling of Reactors	Mr.C.Harshavardhan
Day 5- (04.04.2023) Full day	Isothermal and Non-Isothermal CSTR, Continuous stirred tank bioreactor,	Mr.A.Meenakshi Sundar
Day 6 - (10.04.2023) Full day	Monolith reactor, Written test	Mr. A.Meenakshi Sundar

Course Coordinator

HOD/PCT



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### **Syllabus**

#### **MODULE I**

Basics of Modeling, Simulation approach for steady state process

#### **MODULE II**

Multi component flash drum, steady state single stage and two stage solvent extraction

#### **MODULE III**

Forward and backward feed triple effect evaporator, Crystallization process and  
Sedimentation

#### **MODULE IV**

Modeling of Reactors, Isothermal and Non-Isothermal CSTR, Continuous stirred tank  
bioreactor, Monolith reactor,



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### DEPARTMENT OF PETROCHEMICAL TECHNOLOGY

#### Course Objective and Course Outcome

#### 22PCT01- PROCESS SIMULATION SOFTWARE

They will also acquire knowledge on the fundamental concepts of recent techniques in process simulation.

#### Course objective

The course is intended to

1. To make the students knowledgeable in different aspects of modeling Petrochemical process systems.
2. Familiarizes with the numerical simulation of models in fluid flow operations, separation processes and reactors.
3. Knowledge on the fundamental concepts of recent techniques in process simulation.

#### Course outcomes

On successful completion of the course, students will be able to		
CO. No	Course Outcome	Bloom's Level
CO 1	Understand the basic concepts of mathematical modeling and simulation	Understand
CO 2	Build up mathematical models for distillation and separation columns	Apply
CO 3	Derive mathematical models for various reactors	Apply

Course coordinator

HOD



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## Department of Petrochemical Technology


### VALUE ADDED COURSE - PROCESS SIMULATION SOFTWARE

S.NO	REGISTER NUMBER	STUDENT NAME	ATTENDANCE													
			04.03.2023 (FN)	04.03.2023 (AN)	07.03.2023 (FN)	07.03.2023 (AN)	11.03.2023 (FN)	11.03.2023 (AN)	14.03.2023 (FN)	14.03.2023 (AN)	04.04.2023 (FN)	04.04.2023 (AN)	07.04.2023 (FN)	07.04.2023 (AN)		
1	730921239001	ABDUL RAHIMAN	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	730921239002	ADWAITHA JOSE	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	730921239004	AKASH DHARAN.D.S	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	730921239003	AKASH.C.T	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	730921239005	AMAL RENNY	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	730921239006	AMARPREETH KAROLIL	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	730921239008	ASWAJITH KAVETH	/	/	/	/	/	/	/	/	AB	AB	/	/	/	/
8	730921239009	CHRISTO BABY	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	730921239010	CHRISTO PAUL	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	730921239011	JAMEEL MAJID	/	/	/	/	/	/	/	/	AB	AB	/	/	/	/
11	730921239012	MITHUN.A.S	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	730921239013	MOHAMMED SINAN	/	/	/	/	/	/	/	/	/	/	/	/	/	/
13	730921239014	MUHAMMED AATHIL.N	/	/	/	/	/	/	/	/	/	/	/	/	/	/
14	730921239015	MUHAMMED FADIL.M	/	/	/	/	/	/	/	/	/	/	/	/	/	/
15	730921239016	MUHAMMED RAZAL	/	/	/	/	/	/	/	/	/	/	/	/	/	/
16	730921239017	MUHAMMED SUHAIL.S	/	/	/	/	/	/	/	/	/	/	/	/	/	/
17	730921239019	RAJA SETHUPATHIR	/	/	/	/	/	/	/	/	/	/	/	/	/	/
18	730921239022	SIVADEV.S	/	/	/	/	/	/	/	/	/	/	/	/	/	/
19	730921239023	SOURAV.V	/	/	/	/	/	/	/	/	/	/	/	/	/	/
20	730921239024	SUNDHAR.M	/	/	/	/	/	/	/	/	/	/	/	/	/	/
21	730921239025	YASEEN.J	/	/	/	/	/	/	/	/	/	/	/	/	/	/
22	730921239301	ANTONY AKASH A.	/	/	/	/	/	/	/	/	/	/	/	/	/	/
23	730921239302	SANJAY KUMAR V	/	/	/	/	/	/	/	/	/	/	/	/	/	/
24	730921239303	SRIRAM B	/	/	/	/	/	/	/	/	/	/	/	/	/	/
25	730921239304	SURYA PRASATH V	/	/	/	/	/	/	/	/	/	/	/	/	/	/

  
Activity Coordinator

  
110.11



 GPS Map Camera

**Pallakkapalayam, Tamil Nadu, India**

CQW9+FMR, Pallakkapalayam, Tamil Nadu

638008, India

Lat 11.446623°


Long 77.769028°

04/03/23 10:15 AM GMT +05:30



Google



 GPS Map Camera

**Pallakkapalayam, Tamil Nadu, India**

CQW9+FMR, Pallakkapalayam, Tamil Nadu

638008, India

Lat 11.446623°

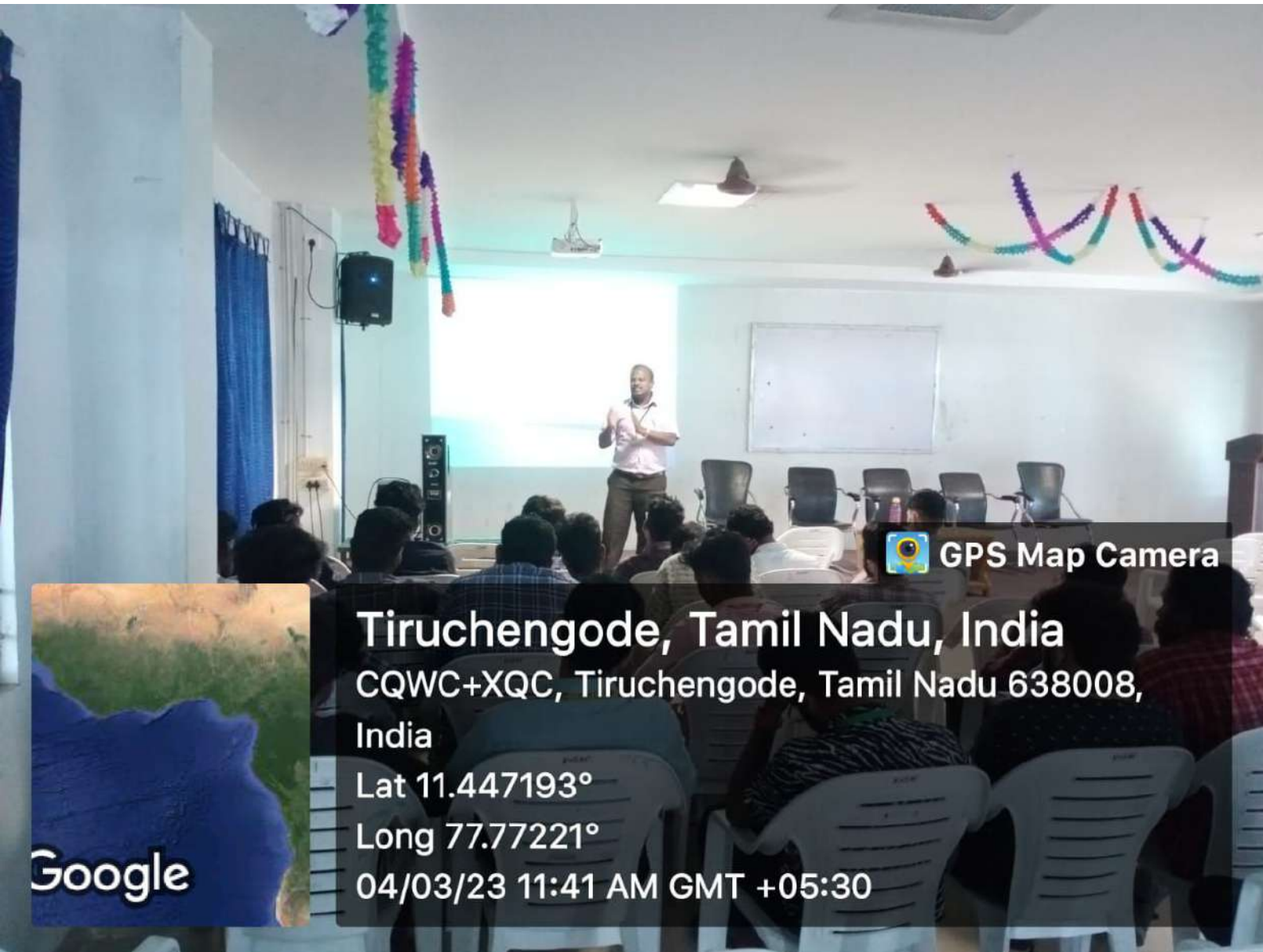
Long 77.769028°


04/03/23 10:15 AM GMT +05:30



Google





 GPS Map Camera

**Tiruchengode, Tamil Nadu, India**

CQWC+XQC, Tiruchengode, Tamil Nadu 638008,  
India

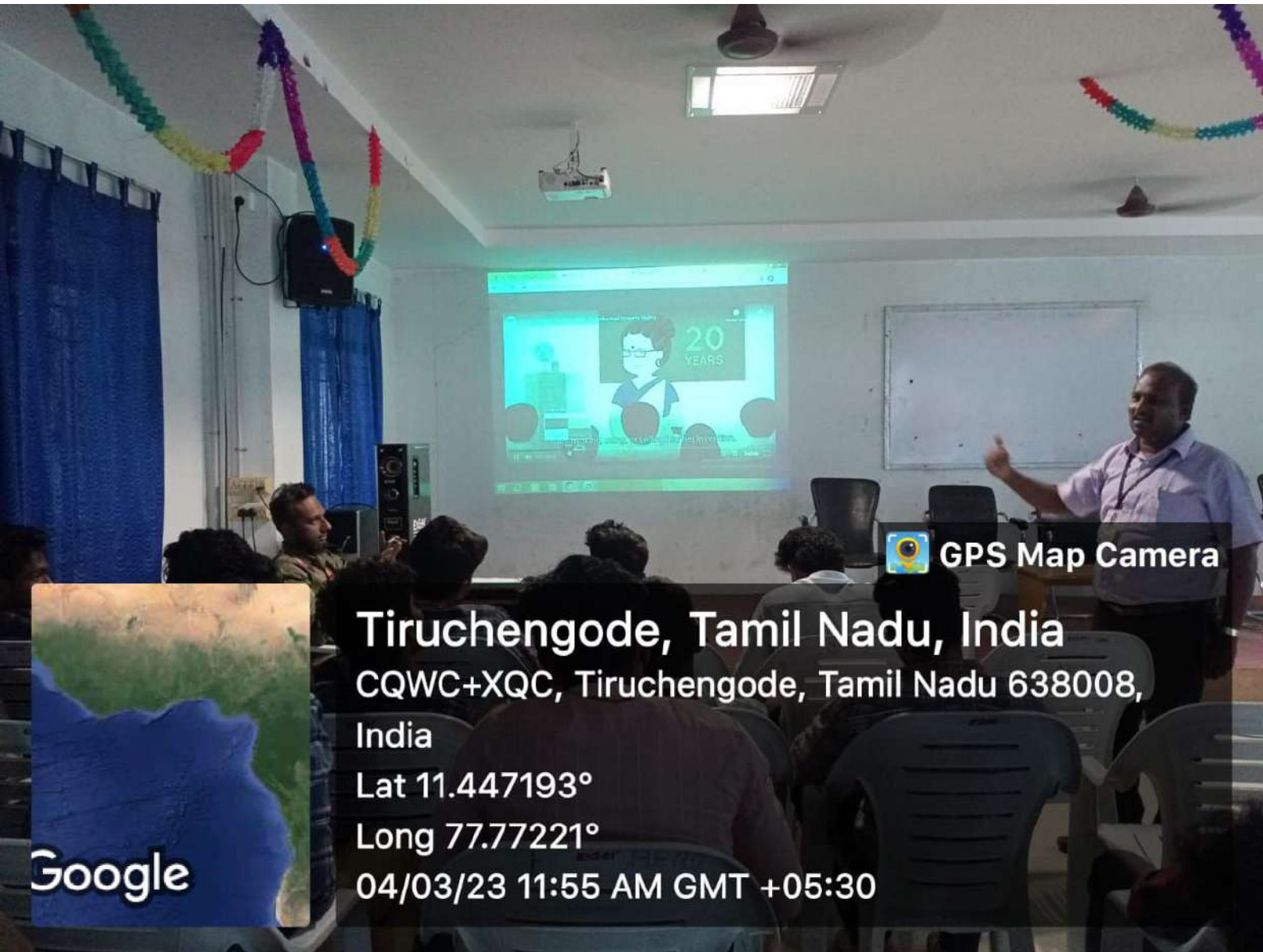
Lat 11.447193°


Long 77.77221°

04/03/23 11:41 AM GMT +05:30



Google



 GPS Map Camera

**Tiruchengode, Tamil Nadu, India**

CQWC+XQC, Tiruchengode, Tamil Nadu 638008,  
India


Lat 11.447193°

Long 77.77221°

04/03/23 11:55 AM GMT +05:30





 **GPS Map Camera**

**Pallakkapalayam, Tamil Nadu, India**

CQW9+FMR, Pallakkapalayam, Tamil Nadu

638008, India

Lat 11.446038°

Long 77.76927°

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Komarapalayam – 637303

## Department of Petrochemical Technology

### VALUE ADDED COURSE - PROCESS SIMULATION SOFTWARE

#### Assesment Marks

S.No.	Register Number	Name	Marks
1	730921239001	ABDUL RAHIMAN	51
2	730921239002	ADWAITHA JOSE	63
3	730921239004	AKASH DHARAN.D.S	78
4	730921239003	AKASH.C.T	30
5	730921239005	AMAL RENNY	60
6	730921239006	AMARPREETH KAROLIL	65
7	730921239008	ASWAJITH KAVETH	38
8	730921239009	CHRISTO BABY	56
9	730921239010	CHRISTO PAUL	56
10	730921239011	JAMEEL MAJID	32
11	730921239012	MITHUN.A.S	65
12	730921239013	MOHAMMED SINAN	74
13	730921239014	MUHAMMED AATHIL.N	55
14	730921239015	MUHAMMED FADIL.M	57
15	730921239016	MUHAMMED RAZAL	32
16	730921239017	MUHAMMED SUHAIL.S	45
17	730921239019	RAJA SETHUPATHI.R	74
18	730921239022	SIVADEV.S	52
19	730921239023	SOURAV.V	52
20	730921239024	SUNDHAR.M	61
21	730921239025	YASEEN.J	31
22	730921239301	ANTONY AKASH A	47
23	730921239302	SANJAY KUMAR V	32
24	730921239303	SRIRAM B	46
25	730921239304	SURYA PRASATH V	53

Activity Coordinator


  
HOD



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Register Number	730921239004			
Name of the student	AKASH DHARAN . D . S			
Degree / Branch	B.Tech / Petrochemical Technology			
Subject Code	22 PCT01			
Subject Title	Process Simulation Software			
Semester	IV			
Date / Session	10.4.2023			
Signature of Superintendent				
Question Number	Marks	Question Number	Marks	Total
1.	2	11.	16	
2.	2	12.		
3.	2	13.		
4.	2	14.		
5.	2	15.		$\frac{39}{50}$
6.	3	$\frac{78}{100}$		
7.	2			
8.	3			
9.	3			
10.	2			



Signature of the candidate



Signature of Examiner



Signature of HOD



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KOMARAPALAYAM - 637303

## DEPARTMENT OF PETROCHEMICAL TECHNOLOGY

ACADEMIC YEAR 2022-23

VALUE ADDED COURSE ON "PROCESS SIMULATION SOFTWARE"

### SUMMARY REPORT

Department	Petrochemical Technology
Name of the Event	Value added course on - "Process Simulation Software"
Date of the Event	04.03.2023 to 10.04.2023
Venue	MAT LAB (3rd floor), ECET
Name of the Coordinators	Mr.A.Meenakshi Sundar, Assistant Professor Department of Petrochemical Technology
No of Participants	25
General Remarks	We are delighted to announce that the Petrochemical Technology department organized a Value added course on "Process simulation software" training event on 04.03.2023 to 10.04.2023. The event was a great success, with a fantastic turnout from students. PRO SIM Software is a widely used software tool for engineers and scientists, providing them with an extensive set of mathematical, numerical, and graphical functions. The aim of this training was to equip participants with the necessary skills and knowledge to work efficiently with PRO SIM Software, enhancing their problem-solving abilities. The training session was led by our esteemed faculty members, who have a wealth of experience in PRO SIM software programming and its applications. The event was well received by all participants, who expressed their appreciation for the informative and engaging training session. The participants were also excited to use the skills and knowledge gained from the training to solve real-world problems. We hope to continue organizing such events in the future, providing our students with the necessary skills and knowledge to excel in their chosen field. This Value added course is useful for all students, who need to have simulated the PRO SIM software.

  
Course Coordinator

  
Activity Coordinator

  
HOD



# **EXCEL ENGINEERING COLLEGE (AUTONOMOUS)**

## **DEPARTMENT OF PETROCHEMICAL TECHNOLOGY**

THIS CERTIFICATE IS AWARDED TO

**Mr.D.S.Akash Dharan**

FOR COMPLETING VALUE ADDED COURSE

ON

**"PROCESS SIMULATION SOFTWARE"**

WITH CONSOLIDATED SCORE OF 78 %

**Mr.A.MEENAKSHI SUNDAR**  
Coordinator



**Dr.P. SIVA KUMAR**  
HOD/PCT



# **EXCEL ENGINEERING COLLEGE (AUTONOMOUS)**

## **DEPARTMENT OF PETROCHEMICAL TECHNOLOGY**

THIS CERTIFICATE IS AWARDED TO

**Mr.R.Raja Sethupathi**

FOR COMPLETING VALUE ADDED COURSE

ON

**"PROCESS SIMULATION SOFTWARE"**

WITH CONSOLIDATED SCORE OF 74 %

**Mr.A.MEENAKSHI SUNDAR**  
Coordinator



**Dr.P. SIVA KUMAR**  
HOD/PCT





# **EXCEL ENGINEERING COLLEGE (AUTONOMOUS)**

## **DEPARTMENT OF PETROCHEMICAL TECHNOLOGY**

THIS CERTIFICATE IS AWARDED TO

**Mr.M.Sundhar**

FOR COMPLETING VALUE ADDED COURSE

ON

**"PROCESS SIMULATION SOFTWARE"**

WITH CONSOLIDATED SCORE OF 61 %

**Mr.A.MEENAKSHI SUNDAR**  
Coordinator



**Dr.P. SIVA KUMAR**  
HOD/PCT



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Document ID:	2022-23/EEC/VAC-01	Document Name:	Feedback Form
Programme :	B.Tech	Branch	PCT
Academic Year :	2022-23	Date:	10.04.2023

## FEEDBACK FORM

Name of Student: *Adwaita Jose*

**Course Title: "Process Simulation Software"**

For each of the following areas, please indicate your reaction:

S.No	Questions	Grading Level			
		4	3	2	1
1	The instructor was well prepared for class				
2	The instructor was organized, well prepared and use class time efficiently	✓			
3	The instructor presented course material in a clear manner that facilitated understanding	✓			
4	This class has increased my interest in the field of study		✓		
5	The readings were appropriate to the goals of the course		✓		
6	I have put a great deal of effort into advancing my learning in this course	✓			
7	I would highly recommend this course to other students	✓			
8	The grading practices were fair.	✓			

Grading Level 4:Very Good, 3:Good,2:Fair,1: Satisfactory

Any Other Suggestion:

*Program. was presented in a good way*



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Document ID:	2022-23/EEC/VAC-01	Document Name:	Feedback Form
Programme :	B.Tech	Branch	PCT
Academic Year :	2022-23	Date:	10.04.2023

### FEEDBACK FORM

Name of Student: AKASH DHARAN . D . S

Course Title: "Process Simulation Software"

For each of the following areas, please indicate your reaction:

S.No	Questions	Grading Level		
		4	3	2
1	The instructor was well prepared for class			
2	The instructor was organized, well prepared and use class time efficiently	✓		
3	The instructor presented course material in a clear manner that facilitated understanding	✓		
4	This class has increased my interest in the field of study	✓		
5	The readings were appropriate to the goals of the course		✓	
6	I have put a great deal of effort into advancing my learning in this course	✓		
7	I would highly recommend this course to other students	✓		
8	The grading practices were fair.	✓		

Grading Level 4:Very Good, 3:Good,2:Fair,1: Satisfactory

**Any Other Suggestion:**

The Course Conducted was very useful.



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Document ID:	2022-23/EEC/VAC-01	Document Name:	Feedback Form
Programme :	B.Tech	Branch	PCT
Academic Year :	2022-23	Date:	10.04.2023

## FEEDBACK FORM

Name of Student: R. RAJASETHUPATHI

**Course Title: "Process Simulation Software"**

For each of the following areas, please indicate your reaction:

S.No	Questions	Grading Level			
		4	3	2	1
1	The instructor was well prepared for class				
2	The instructor was organized, well prepared and use class time efficiently	✓			
3	The instructor presented course material in a clear manner that facilitated understanding	✓			
4	This class has increased my interest in the field of study		✓		
5	The readings were appropriate to the goals of the course	✓			
6	I have put a great deal of effort into advancing my learning in this course	✓			
7	I would highly recommend this course to other students	✓			
8	The grading practices were fair.	✓			

Grading Level 4:Very Good, 3:Good,2:Fair,1: Satisfactory

**Any Other Suggestion:**

useful to future development.