

Date: 01/02/23

To,
Campus Director,
ICEEM
Aurangabad.

Subject: Proposal for Introducing a Course in "Solid Works" for SE MECH Students for the Academic Year 2022-23

Respected Sir,

I am writing to propose the Introducing a Course in "Solid Works" for SE MECH Students for the Academic Year 2022-23

This course explores the basics of Solid Works software. Students will learn to the use of Solid Works software through various sessions during this course.

I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "Solid Works" as a part of the curriculum for the upcoming academic semester.

Thank you for considering my request. I am looking forward to your positive response.

The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,


Prof. S. B. Janjal
Head of Mechanical Department


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Course Objectives:

1. **Introduction to Solid Works:** Familiarizing students with the interface, commands, and tools available in Solid Works.
2. **Drawing and Editing:** Teaching students how to create and modify 2D and 3D drawings using various drawing and editing commands.
3. **Layer Management:** Understanding the concept of layers in Solid Works and learning how to effectively organize drawings using layers.
4. **Dimensioning and Annotation:** Teaching students how to add dimensions and annotations to drawings to convey necessary information.
5. **Blocks and Attributes:** Introducing students to creating and using blocks and attributes to improve drawing efficiency and consistency.
6. **Basic 3D Modeling:** Providing an introduction to 3D modeling techniques in Solid Works, including creating basic 3D shapes and objects.
7. **Rendering and Visualization:** Exploring rendering options and visualization techniques to create realistic representations of 3D models.
8. **Customization:** Allowing students to customize Solid Works settings, tool palettes, and templates to suit specific workflow needs.
9. **Collaboration and Output:** Teaching methods for sharing Solid Works drawings with others, including plotting, publishing, and exporting files in various formats.
10. **Problem Solving and Troubleshooting:** Developing skills in identifying and resolving common issues encountered while using Solid Works.

Course Outline:

By the end of the course, students will be able to:


Effectively use Solid Works as a professional tool for design, drafting, and collaboration in various industries requiring precision and accuracy in technical drawings and 3D modeling.

Benefits to Students:

Studying Solid Works offers several benefits to students such as

1. **Improved Technical Skills:** Mastery of Solid Works software enhances students' technical proficiency in computer-aided design (CAD), allowing them to create precise and detailed drawings efficiently.
2. **Career Readiness:** Solid Works proficiency is a valuable asset in industries such as architecture, engineering, construction, manufacturing, and product design, making students more attractive to employers.

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- 
3. **Increased Employability:** Knowledge of Solid Works opens doors to a wide range of job opportunities, including roles as CAD drafters, designers, technicians, and engineers.
 4. **Efficiency and Productivity:** Solid Works's tools and features streamline the design process, enabling students to produce drawings faster and with greater accuracy compared to traditional methods.
 5. **Enhanced Design Visualization:** Students can create 2D drawings and 3D models that visualize concepts and designs effectively, aiding in communication and presentation of ideas.
 6. **Collaborative Skills:** Solid Works facilitates collaboration among team members by allowing them to work on the same project simultaneously, share files, and manage revisions efficiently.
 7. **Professional Development:** Learning Solid Works enhances students' professional development by preparing them for industry standards and practices, including the ability to adhere to drawing standards and conventions.
 8. **Problem-Solving Abilities:** Solid Works teaches students how to analyze design problems and find solutions using CAD tools and techniques, fostering critical thinking and problem-solving skills.
 9. **Certification Opportunities:** Many Solid Works courses offer preparation for Autodesk certification exams, which can validate students' skills and enhance their credibility in the job market.
 10. **Foundation for Advanced Learning:** Proficiency in Solid Works provides a solid foundation for students interested in pursuing further education or training in specialized areas of CAD software or related fields.

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Solid Works Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

Question 1:

Which feature in SolidWorks is used to create a solid body by revolving a sketch around an axis?

- A) Extrude
- B) Revolve
- C) Sweep
- D) Loft

Answer: B) Revolve

Question 2:

What is the primary purpose of the Fillet feature in SolidWorks?

- A) To create holes in a part
- B) To round the edges of a part
- C) To add material to a part
- D) To create a shell around a part

Answer: B) To round the edges of a part

Question 3:

Which SolidWorks tool would you use to duplicate a part feature along a specified path?

- A) Linear Pattern
- B) Circular Pattern
- C) Sweep
- D) Path Pattern


Answer: C) Sweep

Question 4:

What is the use of the Shell feature in SolidWorks?

- A) To add material to a part
- B) To hollow out a part
- C) To create a fillet
- D) To mirror a part

Answer: B) To hollow out a part


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Question 5:

In SolidWorks, what does the **Mate** feature do in an assembly?

- A) Moves components together
- B) Joins components together with specific relations
- C) Removes material from components
- D) Adds components to an assembly

Answer: B) Joins components together with specific relations

Question 6:

Which command in SolidWorks is used to create a new sketch on a model face?

- A) New Sketch
- B) Edit Sketch
- C) Insert Sketch
- D) Create Sketch

Answer: A) New Sketch

Question 7:

What does the **Loft** feature in SolidWorks allow you to do?

- A) Create a feature by sweeping a profile along a path
- B) Create a feature by revolving a profile around an axis
- C) Create a feature by blending multiple profiles
- D) Create a feature by extruding a profile


Answer: C) Create a feature by blending multiple profiles

Question 8:

Which feature is used to create a helical curve in SolidWorks?

- A) Helix/Spiral
- B) Sweep
- C) Revolve
- D) Extrude

Answer: A) Helix/Spiral


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Question 9:

What is the purpose of the Draft feature in SolidWorks?

- A) To add text to a part
- B) To create an angled surface on a part
- C) To mirror a part
- D) To round off edges

Answer: B) To create an angled surface on a part

Question 10:


In SolidWorks, which tool would you use to measure the distance between two points on a model?

- A) Distance
- B) Measure
- C) Dimension
- D) Evaluate

Answer: B) Measure

Marking Scheme

Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks


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INTERNATIONAL CENTRE OF EXCELLENCE IN ENGINEERING AND MANAGEMENT (ICEEM)

NAAC Accredited



Date: 01/02/2023

To,
Head of Mechanical Engg.
ICEEM
Aurangabad,

Subject: Sanction for the Introduction of the Course "Solid Works" for SE Students for the Academic Year 2022-23

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course " Solid Works " for the SE Mech students in the Mechanical Engg Department for the academic year 2022-23

We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:

Course Title: Solid Works

Department: Mechanical Engg.

Level: UG

Academic Year: 2022-23


Campus Director


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Aurangabad

Certificate Course Distrubtion Record Mech. Year:-2022-2023
Course Name:- Solid Works

Sr No.	Name of Student	Signature
1	AMIRE KRUSHNA ASHOK	Amire
2	BHIVSANE KULDEEP SADU	Kuldeep
3	DABHADE UDDHAV RAOSAHEB	Dabrade
4	DAIMIVAL KRUSHNAKANT VITTHAL	Daimival
5	DEORE PRAJAKTA SATISH	Deore
6	DUDHWADE SHUBHAM VIJAY	Dudhwade
7	GAWADE SHUBHAM SUDAM	Gawade
8	GIRI DIPAK RAJU	Giri
9	HANMANTE DEEPAK HANMANT	Hanmante
10	INGLE PRATIKSHA BHAGWAN	Pratiksha
11	JADHAV ADITYA DINESH	Jadhav
12	JADHAV AKASH SHANKAR	Jadhav
13	JADHAV RUPALI TANHAJI	Rupali
14	JAYASWAL VIKAS KAILASCHANDRA	Jayali
15	JOSHI PRAKASH RADHAKRISHNA	Joshi
16	KAKADE YAMINEE DADARAO	Yaminee
17	KAWADE VEDANT NAVNATH	Kawade
18	KOLTE VAIBHAV KALYAN	Kolte
19	KULKARNI NIKHIL	Kulkarni
20	KULKARNI OMKAR PRAKASH	Kulkarni
21	KULKARNI SHIVAM PRAKASH	Kulkarni
22	MANNA AMIT	Manna
23	MEHTRE DIPAK SAHEBRAO	Mehtre
24	MOHITE SAGAR MADHUKAR	Mohite
25	NIKAM SAISIDDHANT DADASAHEB	Nikam
26	PARSAIYA VINOD SANJAY	Vinod
27	PATHAN ALTAMASH SATTAR	Pathan
28	PAWAR ROSHAN VILAS	Pawar
29	PAWAR SUSHANT SUNIL	Pawar
30	SURASE RAHUL TARACHAND	Surase
31	TRIBHUVAN RUPESH SURESH	Tribhuvan
32	SALVE SANJAY SUDHAKAR	Salve
33	SONAWANE AKASH SANJAY	Sonawane
34	SONAWANE RITESH SURESH	Ritesh
35	SONPASARE GANESH MILIND	Sonpasare

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Aurangabad

Date: 01/02/23

To,
Campus Director,
ICEEM
Aurangabad.

Subject: Proposal for Introducing a Course in "Advance AutoCAD" for TE MECH Students for the Academic Year 2022-23

Respected Sir,

I am writing to propose the Introducing a Course in "Advance AutoCAD" for TE MECH Students for the Academic Year 2022-23

This course explores the basics of Advance AutoCAD software. Students will learn to the use of AutoCAD software through various sessions during this course.

I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "Advance AutoCAD" as a part of the curriculum for the upcoming academic semester.

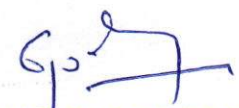
Thank you for considering my request. I am looking forward to your positive response.

The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,



Prof. S. B. Janjal
Head of Mechanical Department



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Course Objectives:

1. **Introduction to Advance AutoCAD:** Familiarizing students with the interface, commands, and tools available in Advance AutoCAD.
2. **Drawing and Editing:** Teaching students how to create and modify 2D and 3D drawings using various drawing and editing commands.
3. **Layer Management:** Understanding the concept of layers in Advance AutoCAD and learning how to effectively organize drawings using layers.
4. **Dimensioning and Annotation:** Teaching students how to add dimensions and annotations to drawings to convey necessary information.
5. **Blocks and Attributes:** Introducing students to creating and using blocks and attributes to improve drawing efficiency and consistency.
6. **Basic 3D Modeling:** Providing an introduction to 3D modeling techniques in Advance AutoCAD, including creating basic 3D shapes and objects.
7. **Rendering and Visualization:** Exploring rendering options and visualization techniques to create realistic representations of 3D models.
8. **Customization:** Allowing students to customize Advance AutoCAD settings, tool palettes, and templates to suit specific workflow needs.
9. **Collaboration and Output:** Teaching methods for sharing Advance AutoCAD drawings with others, including plotting, publishing, and exporting files in various formats.
10. **Problem Solving and Troubleshooting:** Developing skills in identifying and resolving common issues encountered while using Advance AutoCAD.

Course Outline:

By the end of the course, students will be able to:


Effectively use Advance AutoCAD as a professional tool for design, drafting, and collaboration in various industries requiring precision and accuracy in technical drawings and 3D modeling.

Benefits to Students:

Studying Advance AutoCAD offers several benefits to students such as

1. **Improved Technical Skills:** Mastery of Advance AutoCAD software enhances students' technical proficiency in computer-aided design (CAD), allowing them to create precise and detailed drawings efficiently.
2. **Career Readiness:** Advance AutoCAD proficiency is a valuable asset in industries such as architecture, engineering, construction, manufacturing, and product design, making students more attractive to employers.

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3. **Increased Employability:** Knowledge of Advance AutoCAD opens doors to a wide range of job opportunities, including roles as CAD drafters, designers, technicians, and engineers.
 4. **Efficiency and Productivity:** Advance AutoCAD's tools and features streamline the design process, enabling students to produce drawings faster and with greater accuracy compared to traditional methods.
 5. **Enhanced Design Visualization:** Students can create 2D drawings and 3D models that visualize concepts and designs effectively, aiding in communication and presentation of ideas.
 6. **Collaborative Skills:** Advance AutoCAD facilitates collaboration among team members by allowing them to work on the same project simultaneously, share files, and manage revisions efficiently.
 7. **Professional Development:** Learning Advance AutoCAD enhances students' professional development by preparing them for industry standards and practices, including the ability to adhere to drawing standards and conventions.
 8. **Problem-Solving Abilities:** Advance AutoCAD teaches students how to analyze design problems and find solutions using CAD tools and techniques, fostering critical thinking and problem-solving skills.
 9. **Certification Opportunities:** Many Advance AutoCAD courses offer preparation for Autodesk certification exams, which can validate students' skills and enhance their credibility in the job market.
 10. **Foundation for Advanced Learning:** Proficiency in Advance AutoCAD provides a solid foundation for students interested in pursuing further education or training in specialized areas of CAD software or related fields.



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Advance AutoCAD Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

Question 1:

Which command allows you to draw a spline in AutoCAD?

- A) PLINE
- B) SPLINE
- C) LINE
- D) ARC

Answer: B) SPLINE

Question 2:

What is the function of the XREF command in AutoCAD?

- A) To create external references
- B) To create a block
- C) To trim objects
- D) To extend objects

Answer: A) To create external references

Question 3:

How do you create an array of objects in a circular pattern?

- A) ARRAYRECT
- B) ARRAYPOLAR
- C) ARRAYPATH
- D) MIRROR

Answer: B) ARRAYPOLAR

Question 4:

Which command would you use to join multiple line segments into a single polyline?

- A) JOIN
- B) SPLINE
- C) PLINE
- D) PEDIT

Answer: D) PEDIT


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Question 5:

What is the purpose of the PURGE command?

- A) To delete unwanted objects
- B) To clean up the drawing
- C) To reduce file size
- D) All of the above

Answer: D) All of the above

Question 6:

Which command allows you to create a 3D solid by sweeping a 2D profile along a path?

- A) EXTRUDE
- B) REVOLVE
- C) SWEEP
- D) LOFT

Answer: C) SWEEP

Question 7:

What does the UCSICON command do?

- A) Toggles the display of the User Coordinate System icon
- B) Changes the current UCS
- C) Saves the current UCS
- D) Resets the UCS to default

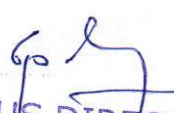
Answer: A) Toggles the display of the User Coordinate System icon

Question 8:

Which layer management tool would you use to isolate a layer for editing?

- A) LAYER FREEZE
- B) LAYER ISOLATE
- C) LAYER LOCK
- D) LAYER THAW

Answer: B) LAYER ISOLATE


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Question 9:

What is the purpose of the MATCHPROP command?

- A) To match properties from one object to another
- B) To create a new layer
- C) To measure the distance between objects
- D) To trim objects

Answer: A) To match properties from one object to another

Question 10:

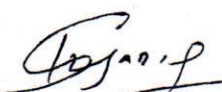
Which command can be used to create a region from a closed polyline or other closed objects?

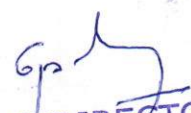
- A) REGION
- B) POLYLINE
- C) BOUNDARY
- D) TRIM

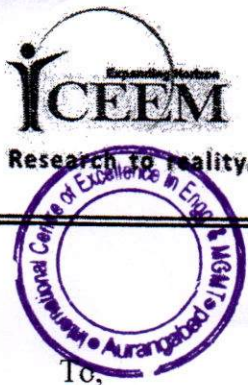
Answer: A) REGION

Marking Scheme

Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks


Head of Mechanical Engineering


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International Centre of
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Aurangabad



Date: 01/02/2023

To,
Head of Mechanical Engg.
ICEEM
Aurangabad,

Subject: Sanction for the Introduction of the Course "Advance AutoCAD" for TE Students for the Academic Year 2022-23

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course " Advance AutoCAD " for the TE Mech students in the Mechanical Engg Department for the academic year 2022-23

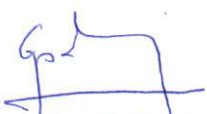
We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:

Course Title: Advance AutoCAD

Department: Mechanical Engg.

Level: UG


Academic Year: 2022-23


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Certificate Course Distrubtion Record Mech. Year:-2022-2023

Course Name:- Advance AutoCAD

Sr No.	Name of Student	Signature
1	ABUJ ASHOK SUKHDEV	Ashub
2	ASWALE SHIVAM BANDU	Shivam
3	BIRAJDAR SHYAMRAO ASHOK	Sunil
4	CHATSE MAMTA MADHAV	Mamta
5	GIRAM DNYANESHWAR VISHNU	Giram
6	KALE KIRAN VIJAY	Kiran
7	KAPURE MAYUR GOVIND	Mayur
8	KHURESHI ZAHIR CHANDPASHA	Zahir
9	KOLHE ABHISHEK ANIL	Abhishek
10	MUNJEWAR HANMANT LAXMAN	Hanmant
11	PANCHAL BALANAND ISHWAR	Balanand
12	RUTUJA SANJEEV MALI	Rutuja
13	SANT SATISH RAMESH	Satish
14	SHELKE GANESH MARIBA	Ganesh
15	SHUBHAM DNYANESHWAR LOHAKANE	Shubham
16	SUMIT VILAS SONWANE	Sumit
17	VAIBHAV SURESH WANKHEDE	Vaibhav
18	WAGHMARE RUSHIKESH RAMESH	Rushikesh
19	LINGAYAT SHUBHAM NEMINATH	Shubham
20	MIRIKAR PARAG SUNIL	Parag
21	NILAJKAR ADARSH ASHOK	Adarsh
22	PATHADE ASHOK GORAKH	Ashok
23	SATPUTE GANESH ABASAHEB	Ganesh
24	WAGHMARE PRANITA RADHAJI	Pranita
25	NIKAM SAISIDDHANT DADASAHEB	Saisiddhant


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Date: 01/02/23

To,
Campus Director,
ICEEM
Aurangabad.

Subject: Proposal for Introducing a Course in "3-D Printing" for BE MECH Students for the Academic Year 2022-23

Respected Sir,

I am writing to propose the Introducing a Course in "3-D Printing" for BE MECH Students for the Academic Year 2022-23

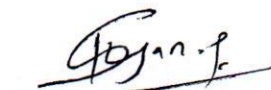
This course explores the basics of 3-D Printing software. Students will learn to the use of 3-D Printing Machine through various sessions during this course.

I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "3-D Printing" as a part of the curriculum for the upcoming academic semester.

Thank you for considering my request. I am looking forward to your positive response.

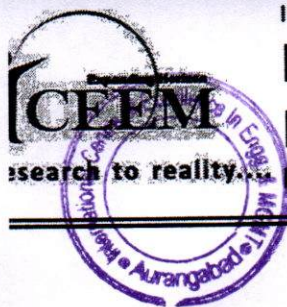
The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,

The signature of Prof. S. B. Janjal is written in blue ink.

Prof. S. B. Janjal
Head of Mechanical Department


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Course Objectives:

- To Gain a thorough understanding of the history, evolution, and current trends in 3D printing.
- To Identify and differentiate between various 3D printing technologies such as Fused Deposition Modeling (FDM), Stereolithography (SLA), Selective Laser Sintering (SLS), and others.
- To Understand the advantages and limitations of different 3D printing methods.
- To Develop skills in 3D design and modeling using industry-standard software such as TinkerCAD, Fusion 360, and Blender.
- To Create and manipulate 3D models, ensuring they are optimized for 3D printing.
- To Apply design principles for additive manufacturing to create functional and aesthetically pleasing objects.

Course Outline:

Module 1: Introduction to 3D Printing

- History and Evolution of 3D Printing
- Types of 3D Printing Technologies (FDM, SLA, SLS, etc.)
- Applications of 3D Printing in Various Industries

Module 2: 3D Printing Hardware and Materials

- Overview of 3D Printers and Their Components
- Understanding Different Printing Materials (PLA, ABS, Resin, etc.)
- Choosing the Right Printer and Material for Your Project

Module 3: 3D Design and Modeling.

- Introduction to 3D Design Software (TinkerCAD, Fusion 360, Blender, etc.)
- Basics of 3D Modeling
- Creating 3D Models for Printing

Module 4: Slicing and Preparing Models for Printing

- Introduction to Slicing Software (Cura, PrusaSlicer, etc.)
- Optimizing Models for 3D Printing
- Setting Up Print Parameters (Layer Height, Infill, Supports, etc.)

Module 5: 3D Printing Process

- Setting Up and Calibrating a 3D Printer
- Loading Filament and Preparing the Print Bed

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- Printing Your First Object
- Troubleshooting Common Printing Issues

Module 6: Post-Processing Techniques

- Removing Supports and Cleaning the Print
- Sanding, Painting, and Finishing Techniques
- Assembling Multi-Part Prints

Module 7: Advanced 3D Printing Techniques

- Dual Extrusion and Multi-Material Printing
- Printing with Flexible and Exotic Materials
- Using 3D Scanning and Photogrammetry

Module 8: Applications and Case Studies

- 3D Printing in Prototyping and Product Development
- Medical and Dental Applications
- Architectural and Engineering Uses
- Customization and Mass Personalization

Module 9: Industry Standards and Best Practices

- Understanding 3D Printing Standards and Certifications
- Ensuring Quality and Consistency in 3D Prints
- Safety Practices and Maintenance of 3D Printers

Module 10: Future Trends and Innovations in 3D Printing

- Emerging Technologies and Materials
- 3D Printing in Space and Extreme Environments
- The Role of 3D Printing in Sustainable Manufacturing

Certification Requirements

- Attendance and Participation in All Modules
- Completion of Hands-On Projects and Assignments
- Passing Final Assessment (Written Exam and Practical Test)
- Submission of a Capstone Project (Design and Print a Complex Object)

Potential Providers

- **Coursera:** Offers various courses in 3D Printing from top universities and companies.
- **Udemy:** Hosts numerous 3D Printing courses that cater to different levels of expertise.
- **LinkedIn Learning:** Provides courses on 3D Printing fundamentals and applications.
- **Local Universities and Technical Schools:** Often have specialized programs or workshops on 3D Printing.

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Benefits of Certification

- Enhanced Knowledge and Skills in 3D Printing
- Practical Experience with Various 3D Printing Technologies and Materials
- Improved Job Prospects in Fields Such as Engineering, Design, and Manufacturing

3-D Printing Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

Question 1:

Which of the following is NOT a common type of 3D printing technology?

- A) Fused Deposition Modeling (FDM)
 - B) Stereolithography (SLA)
 - C) Selective Laser Sintering (SLS)
 - D) Traditional Subtractive Manufacturing (TSM)
- Answer: D) Traditional Subtractive Manufacturing (TSM)**

Question 2:

What material is commonly used in Fused Deposition Modeling (FDM) 3D printers?

- A) PLA
- B) ABS
- C) Resin
- D) All of the above

Answer: D) All of the above

Question 3:

In 3D printing, what does the term "slicing" refer to?

- A) Cutting the model into smaller pieces
 - B) Dividing the model into layers for printing
 - C) Trimming excess material from the print
 - D) Creating support structures
- Answer: B) Dividing the model into layers for printing**

Question 4:

Which 3D printing technology uses a liquid photopolymer that is cured by a UV laser?

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Aurangabad

- A) FDM
- B) SLA
- C) SLS
- D) DLP

Answer: B) SLA

Question 5:

What is the primary function of support structures in 3D printing?

- A) To strengthen the model
- B) To prevent the model from warping
- C) To provide a foundation for overhanging sections of the print
- D) To reduce material usage

Answer: C) To provide a foundation for overhanging sections of the print

Question 6:

Which 3D printing process uses powdered material and a laser to fuse the powder into solid parts?

- A) FDM
- B) SLA
- C) SLS
- D) DLP

Answer: C) SLS

Question 7:

What is the advantage of using PLA over ABS in FDM printing?

- A) Higher melting temperature
- B) More flexibility
- C) Biodegradability and ease of use
- D) Better mechanical strength

Answer: C) Biodegradability and ease of use

Question 8:

In 3D printing, what does the term "infill" refer to?

- A) The outer surface of the print
- B) The internal structure of the print
- C) The first layer of the print
- D) The supports for the print

Answer: B) The internal structure of the print

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Question 9:

Which file format is most commonly used for 3D printing?

- A) .OBJ
- B) .STL
- C) .FBX
- D) .DWG

Answer: B) .STL

Question 10:

What is the purpose of post-processing in 3D printing?

- A) To prepare the model for printing
- B) To enhance the appearance and functionality of the printed object
- C) To slice the model into layers
- D) To load the filament into the printer

Answer: B) To enhance the appearance and functionality of the printed object

Marking Scheme

Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks



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Aurangabad

Date: 01/02/2023

To,
Head of Mechanical Engg.
ICEEM
Aurangabad,

Subject: Sanction for the Introduction of the Course "3-D Printing" for BE Students for the Academic Year 2022-23

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course " 3-D Printing " for the BE Mech students in the Mechanical Engg Department for the academic year 2022-23

We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:


Course Title: 3-D Printing

Department: Mechanical Engg.

Level: UG

Academic Year: 2022-23


Campus Director

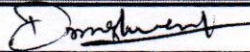
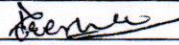

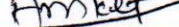

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Aurangabad


Certificate Course Distrubtion Record Mech. Year:-2022-2023

Course Name:- 3-D Printing

Sr No.	Name of Student	Signature
1	AHIRE POOJA SITARAM	Pooja
2	AJAB AMOL TUKARAM	Amol
3	ARBAD AKSHAY GANPAT	Akshay
4	BAMNOTE HARSHAL RAVINDRA	Harshal
5	BHAJIBHAKRE PRATIK	Pratik
6	Bhusare vishal krushana	Vishal
7	DAMBALE KIRAN MADHUKAR	Kiran
8	DAPKE SUMIT	Sumit
9	DIWATE SUYOG KAILAS	Diwate
10	GANGWE DINESH SHIVRAM	Dinesh
11	JAWALE SACHIN ASHOK	Sachin
12	KAMBALE RAHUL RAMESH	Rahul
13	KHANDAGALE MAHESH NILESH	Mahesh
14	KOLI GANESH SOMNATH	Koli
15	LOHAKARE KRUSHNA DATTATRA	Krushna
16	MALI REVATI MANOHAR	Mali
17	MEHRA KANHIYA JOGENDRA	Mehra
18	MESHRAM SHUBHAM DNYANESHWAR	Shubham
19	MIRGE TUSHAR DATTATRAY	Tushar
20	MULE SANKET RAJABHAU	Sanket
21	NAIK MANGESH DADARAO	Mangesh
22	NARKHEDE KAUSHAL JITENDRA	Kaushal
23	NIKAM RUPALI RAJENDRA	Rupali
24	NIMROT AJAY DHANSING	Nimrot
25	PATIL ABHISHEK MAHENDRA	Abhishek
26	PATIL SURAJ DHANAJIRAO	Patil
27	PATIL YOGESH ISHWAR	Yogesh
28	SATDIVE AKASH BHAUSAHEB	Akash
29	SHAIKH SAJID AYAJ	Sajid
30	SHELKE KRISHNA EKNATH	Krishna
31	SHINDE JANARDHAN RAJDHAR	Shinde
32	Shinde mangesh vasantrao	Mangesh
33	SONAWANE ASHISH SUJIT	Ashish
34	SONAWANE HARSHAL VISHAWASRAO	Harshal
35	SONAWANE SAGAR PRAVIN	Sagar
36	SONKAMBLE SHUBHAM MILIND	Shubham

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37	TAMBE DNYANESHWARI SHARAD	
38	VANTALE PRERANA BHASKAR	
39	WAWRE DNYANESHWAR ATMARAM	
40	WAKODE ANIKET DEVIDAS	


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Aurangabad

Date: 25/04/2021

To,
Campus Director,
ICEEM
Aurangabad.

Subject: Proposal for Introducing a Course in "AutoCAD" for SE MECH Students for the Academic Year 2021-22

Respected Sir,


I am writing to propose the Introducing a Course in "AutoCAD" for SE MECH Students for the Academic Year 2021-22

This course explores the basics of AutoCAD software. Students will learn to the use of AutoCAD software through various sessions during this course.


I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "AutoCAD" as a part of the curriculum for the upcoming academic semester. Thank you for considering my request. I am looking forward to your positive response.

The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,



Prof. S. B. Janjal
Head of Mechanical Department



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Course Objectives:

1. **Introduction to AutoCAD:** Familiarizing students with the interface, commands, and tools available in AutoCAD.
2. **Drawing and Editing:** Teaching students how to create and modify 2D and 3D drawings using various drawing and editing commands.
3. **Layer Management:** Understanding the concept of layers in AutoCAD and learning how to effectively organize drawings using layers.
4. **Dimensioning and Annotation:** Teaching students how to add dimensions and annotations to drawings to convey necessary information.
5. **Blocks and Attributes:** Introducing students to creating and using blocks and attributes to improve drawing efficiency and consistency.
6. **Basic 3D Modeling:** Providing an introduction to 3D modeling techniques in AutoCAD, including creating basic 3D shapes and objects.
7. **Rendering and Visualization:** Exploring rendering options and visualization techniques to create realistic representations of 3D models.
8. **Customization:** Allowing students to customize AutoCAD settings, tool palettes, and templates to suit specific workflow needs.
9. **Collaboration and Output:** Teaching methods for sharing AutoCAD drawings with others, including plotting, publishing, and exporting files in various formats.
10. **Problem Solving and Troubleshooting:** Developing skills in identifying and resolving common issues encountered while using AutoCAD.

Course Outline:

By the end of the course, students will be able to:

Effectively use AutoCAD as a professional tool for design, drafting, and collaboration in various industries requiring precision and accuracy in technical drawings and 3D modeling.

Benefits to Students:

Studying AutoCAD offers several benefits to students such as

1. **Improved Technical Skills:** Mastery of AutoCAD software enhances students' technical proficiency in computer-aided design (CAD), allowing them to create precise and detailed drawings efficiently.
2. **Career Readiness:** AutoCAD proficiency is a valuable asset in industries such as architecture, engineering, construction, manufacturing, and product design, making students more attractive to employers.

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3. **Increased Employability:** Knowledge of AutoCAD opens doors to a wide range of job opportunities, including roles as CAD drafters, designers, technicians, and engineers.
4. **Efficiency and Productivity:** AutoCAD's tools and features streamline the design process, enabling students to produce drawings faster and with greater accuracy compared to traditional methods.
5. **Enhanced Design Visualization:** Students can create 2D drawings and 3D models that visualize concepts and designs effectively, aiding in communication and presentation of ideas.
6. **Collaborative Skills:** AutoCAD facilitates collaboration among team members by allowing them to work on the same project simultaneously, share files, and manage revisions efficiently.
7. **Professional Development:** Learning AutoCAD enhances students' professional development by preparing them for industry standards and practices, including the ability to adhere to drawing standards and conventions.
8. **Problem-Solving Abilities:** AutoCAD teaches students how to analyze design problems and find solutions using CAD tools and techniques, fostering critical thinking and problem-solving skills.
9. **Certification Opportunities:** Many AutoCAD courses offer preparation for Autodesk certification exams, which can validate students' skills and enhance their credibility in the job market.
10. **Foundation for Advanced Learning:** Proficiency in AutoCAD provides a solid foundation for students interested in pursuing further education or training in specialized areas of CAD software or related fields.

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AutoCAD Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

1. What does CAD stand for?

- A. Computer Aided Design
- B. Computer Aided Drafting
- C. Computer Aided Drawing
- D. Computer Aided Dimensioning

Answer: A

2. Which of the following is NOT a typical AutoCAD workspace environment?

- A. Drafting & Annotation
- B. 3D Modeling
- C. Animation
- D. AutoCAD Classic

Answer: C

3. Which AutoCAD command is used to draw a circle?

- A. Line
- B. Rectangle
- C. Circle
- D. Arc

Answer: C

4. What is the purpose of the Trim command in AutoCAD?

- A. To extend a line or object
- B. To remove parts of objects that overlap


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- C. To create multiple copies of an object
- D. To rotate an object around a specified point

Answer: B

5. Which command is used to change the properties of selected objects in AutoCAD?

- A. Properties
- B. Modify
- C. Change
- D. Adjust

Answer: A

6. In AutoCAD, what are layers used for?

- A. To group objects for easy selection
- B. To apply different colors and linetypes to objects
- C. To create 3D objects
- D. To change the drawing scale

Answer: B


7. Which dimensioning command in AutoCAD is used to measure the angle between two lines?

- A. Linear
- B. Aligned
- C. Angular
- D. Radius

Answer: C

8. Which command is used to create a 3D solid box in AutoCAD?

- A. Box
- B. Cube


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C. Extrude

D. Solid

Answer: A

9. What does UCS stand for in AutoCAD?

A. Unified Coordinate System

B. User Coordinate System

C. Universal Coordinate System

D. Uniform Coordinate System

Answer: B

10. Which AutoCAD feature allows you to create and manage custom tools and tool palettes?

A. Tool Manager

B. Tool Organizer

C. Tool Palette

D. Tool Wizard

Answer: C


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Add.: Gut No.4, Opp. Bajaj Auto Ltd. Main Gate, Aurangabad- Pune National Highway, Aurangabad - 431136 (MS), India.

Telephone : 0240 - 2558101 to 10 | Telefax 0240 - 2558111

Website : www.iceemabad.com | E-mail : director@iceemabad.com

Marking Scheme

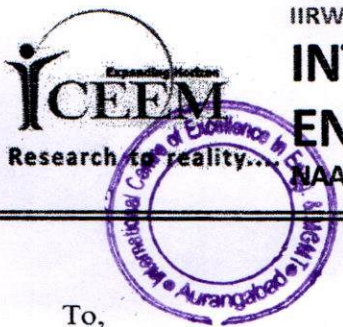
Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks

Kindly, consider it.

Thank you.


Head of Mechanical Department

6.7
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Aurangabad



Date: 28/4/2022

To,
Head of Mechanical Engg.
ICEEM
Aurangabad,

Subject: Sanction for the Introduction of the Course "Auto CAD" for SE Students for the Academic Year 2021-22

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course " Auto CAD " for the SE Mech students in the Mechanical Engg Department for the academic year 2021-22

We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:


Course Title: Auto CAD

Department: Mechanical Engg.

Level: UG

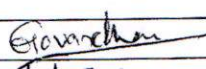
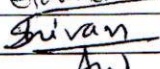
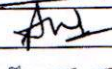
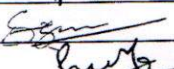
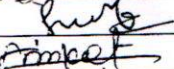
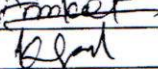
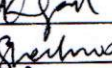
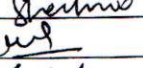
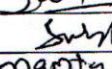
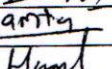
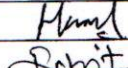
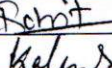
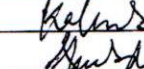
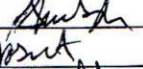
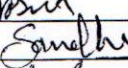
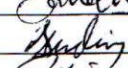
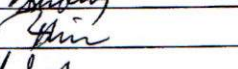
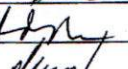


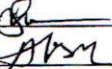

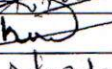

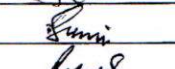
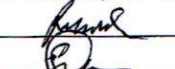
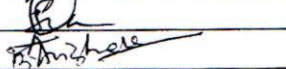
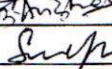
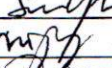
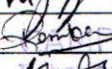
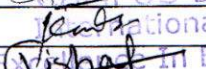
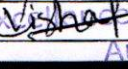
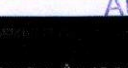
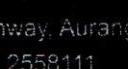

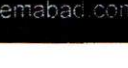
Academic Year: 2021-22


Campus Director


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Aurangabad

Certificate Course Distrubtion Record Mech. Year:-2021-2022

Course Name:- AutoCAD

Sr No.	Name of Student	Signature
1	AKHADE GOVARDHAN SANJAY	
2	ASWALE SHIVAM BANDU	
3	AVHALE SAGAR GORAKH	
4	BAHALSKAR SAINATH WALMIK	
5	SUBHASH SHRAVAN BAKHALE	
6	BANDAL ANIKET DATTATRAY	
7	KAPIL GANGADHAR BEKNALE	
8	BHURBHURE BADRINATH SHESHARAO	
9	BIRAJDAR SHYAMRAO ASHOK	
10	BORULKAR SURESH KISHOR	
11	CHATSE MAMTA MADHAV	
12	CHAUDHARI HARSHAL KAILAS	
13	CHAUDHARI ROHIT VISHNU	
14	CHAVAN KALPESH SHIVDAS	
15	RUSHIKESH SUBHASH CHAVAN	
16	CHINTAMANI VASANT MAHADEV	
17	DABHADE SANDHYA	
18	DHERE AJAY RAJARAM	
19	SIDDHESHWAR BHIMRAO DHOLE	
20	DIXIT AADESH JEEETENDRA	
21	DOIPHODE ADINATH ASHRUJI	
22	DUBILE RAHUL BALU	
23	GAVHANE SACHIN SANJAY	
24	GAWANDE AKSHAY DATTU	
25	GHODKE KIRAN KRASHNAT	
26	GIRAM DNYANESHWAR VISHNU	
27	GIRI AKSHAY AMAR	
28	GOLHAR SACHIN KAILAS	
29	JADHAV RAMESHWAR SURESH	
30	JAWALE SHUBHAM PRAMOD	
31	KAKDE ABHISHEK PAPPU	
32	KALAM SANDEEP AMBADAS	
33	KIRAN VIJAY KALE	
34	KALE RENUKA GORAKH	
35	KALE SHUBHAM ANNASAHAB	
36	KALE VISHAL DNYANESHWAR	

Add.: Gut No.4, Opp. Bajaj Auto Ltd. Main Gate, Aurangabad- Pune National Highway, Aurangabad - 431136 (MS) India.

Telephone : 0240 - 2558101 to 10 | Telefax : 0240 - 2558111

Website : www.iceemabad.com | E-mail : director@iceemabad.com

37	KALE AMAR SHIVRAJ	<i>[Signature]</i>
38	KAMBLE RAVINDRA JALINDAR	<i>[Signature]</i>
39	KAPURE MAYUR GOVIND	<i>[Signature]</i>
40	KATE RUTUJA SANJAY	<i>[Signature]</i>
41	KHAIRE VYANKATESH VITTHAL	<i>[Signature]</i>
42	KHAN SAHIL ARSHAD	<i>[Signature]</i>
43	KHEDKAR AKSHAY PRABHAKAR	<i>[Signature]</i>
44	KHURESHI ZAHIR CHANDPASHA	<i>[Signature]</i>
45	KOLHE ABHISHEK ANIL	<i>[Signature]</i>
46	KUHILE RAHUL BABASAHEB	<i>[Signature]</i>
47	KUTE SURAJ GAJANAN	<i>[Signature]</i>
48	LINGAYAT SHUBHAM NEMINATH	<i>[Signature]</i>
49	LOHAKANE SHUBHAM DNYANESHWAR	<i>[Signature]</i>
50	MALI RUTUJA SANJEEV	<i>[Signature]</i>
51	MEHETRE AKASH DIPAKRAO	<i>[Signature]</i>
52	MESTRY HARSHAD SANJAY	<i>[Signature]</i>
53	MIRIKAR PARAG SUNIL	<i>[Signature]</i>
54	MUNJEWAR HANMANT LAXMAN	<i>[Signature]</i>
55	MURKUTE PRAVIN SURYABHAN	<i>[Signature]</i>
56	NAKHATE DNYANESHWAR DATTATRAY	<i>[Signature]</i>
57	NARWADE RAMDHYANI KISAN	<i>[Signature]</i>
58	NARWADE SHUBHAM SUBHASH	<i>[Signature]</i>
59	RUSHIKESH SADASHIV NAVALE	<i>[Signature]</i>
60	NIKALE MAHESH BALU	<i>[Signature]</i>
61	ADARSH ASHOK NILAJKAR	<i>[Signature]</i>
62	PANCHAL BALANAND ISHWARRAO	<i>[Signature]</i>
63	PATHADE ASHOK GORAKH	<i>[Signature]</i>
64	PATIL PRANAY UMESH	<i>[Signature]</i>
65	PAWAR KISHOR BHAGWAN	<i>[Signature]</i>
67	Phate Rameshwar	<i>[Signature]</i>
68	PHOLANE ANIKET SANJAY	<i>[Signature]</i>
69	JIGNESH ARVIND PRAJAPATI	<i>[Signature]</i>
70	RAHATWAD GANESH VALMIK	<i>[Signature]</i>

CAMPUS DIRECTOR
International Centre of
Excellence In Engg. & MGMT.
Aurangabad

Date: 25/04/2022

To,
Campus Director
ICEEM
Aurangabad.

Subject: Proposal for introducing a Course in "Pro-E" for TE MECH Students for the Academic Year 2021-22

Respected Sir,

I am writing to propose the Introducing a Course in "Pro-E" for TE MECH Students for the Academic Year 2021-22.

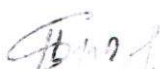
This course explores the basics of Pro-E software. Students will learn to the use of Pro-E software through various sessions during this course.

I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "Pro-E" as a part of the curriculum for the upcoming academic semester.

Thank you for considering my request. I am looking forward to your positive response.

The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,


Head of Mechanical Department


CAMPUS DIRECTOR
International Centre of
Excellence In Engg. & MGMT.
Aurangabad.

Course Objectives:

1. **Introduction to Pro-E:** Familiarizing students with the interface, commands, and tools available in Pro-E.
2. **Drawing and Editing:** Teaching students how to create and modify 2D and 3D drawings using various drawing and editing commands.
3. **Layer Management:** Understanding the concept of layers in Pro-E and learning how to effectively organize drawings using layers.
4. **Dimensioning and Annotation:** Teaching students how to add dimensions and annotations to drawings to convey necessary information.
5. **Blocks and Attributes:** Introducing students to creating and using blocks and attributes to improve drawing efficiency and consistency.
6. **Basic 3D Modeling:** Providing an introduction to 3D modeling techniques in Pro-E, including creating basic 3D shapes and objects.
7. **Rendering and Visualization:** Exploring rendering options and visualization techniques to create realistic representations of 3D models.
8. **Customization:** Allowing students to customize Pro-E settings, tool palettes, and templates to suit specific workflow needs.
9. **Collaboration and Output:** Teaching methods for sharing Pro-E drawings with others, including plotting, publishing, and exporting files in various formats.
10. **Problem Solving and Troubleshooting:** Developing skills in identifying and resolving common issues encountered while using Pro-E.

Course Outline:

By the end of the course, students will be able to:

Effectively use Pro-E as a professional tool for design, drafting, and collaboration in various industries requiring precision and accuracy in technical drawings and 3D modeling.

Benefits to Students:

Studying Pro-E offers several benefits to students such as

1. **Improved Technical Skills:** Mastery of Pro-E software enhances students' technical proficiency in computer-aided design (CAD), allowing them to create precise and detailed drawings efficiently.
2. **Career Readiness:** Pro-E proficiency is a valuable asset in industries such as architecture, engineering, construction, manufacturing, and product design, making students more attractive to employers.

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- Increased Employability:** Knowledge of Pro-E opens doors to a wide range of job opportunities, including roles as CAD drafters, designers, technicians, and engineers.
4. **Efficiency and Productivity:** Pro-E's tools and features streamline the design process, enabling students to produce drawings faster and with greater accuracy compared to traditional methods.
 5. **Enhanced Design Visualization:** Students can create 2D drawings and 3D models that visualize concepts and designs effectively, aiding in communication and presentation of ideas.
 6. **Collaborative Skills:** Pro-E facilitates collaboration among team members by allowing them to work on the same project simultaneously, share files, and manage revisions efficiently.
 7. **Professional Development:** Learning Pro-E enhances students' professional development by preparing them for industry standards and practices, including the ability to adhere to drawing standards and conventions.
 8. **Problem-Solving Abilities:** Pro-E teaches students how to analyze design problems and find solutions using CAD tools and techniques, fostering critical thinking and problem-solving skills.
 9. **Certification Opportunities:** Many Pro-E courses offer preparation for Autodesk certification exams, which can validate students' skills and enhance their credibility in the job market.
 10. **Foundation for Advanced Learning:** Proficiency in Pro-E provides a solid foundation for students interested in pursuing further education or training in specialized areas of CAD software or related fields.


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Pro-E Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

1 What is the primary purpose of Pro/Engineer (Creo Parametric)?

- A) Web development
- B) Mechanical design
- C) Graphic design
- D) Database management

Answer: B) Mechanical design

2 Which feature in Pro/Engineer allows you to create 3D models from 2D sketches?

- A) Extrude
- B) Render
- C) Draft
- D) Sweep

Answer: A) Extrude

3 What is a 'datum' in Pro/Engineer?

- A) A reference point or axis
- B) A type of 3D model
- C) A rendering technique
- D) A CAD file format

Answer: A) A reference point or axis

4 Which module in Pro/Engineer is used for creating assemblies of multiple parts?

- A) Sketcher
- B) Part
- C) Assembly
- D) Sheet metal

Answer: C) Assembly

5 What is the purpose of 'regeneration' in Pro/Engineer?

- A) To restart the software
- B) To update the geometry based on feature changes
- C) To save files in different formats
- D) To create animations

Answer: B) To update the geometry based on feature changes


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6 Which tool in Pro/Engineer allows for the creation of complex curved surfaces?

- A) Extrude
- B) Sweep
- C) Blend
- D) Chamfer

Answer: C) Blend

7 What does the 'feature tree' in Pro/Engineer represent?

- A) A list of software bugs
- B) A hierarchical list of model features
- C) A collection of textures
- D) A database of part numbers

Answer: B) A hierarchical list of model features

8 Which file format is typically used to save Pro/Engineer models?

- A) .exe
- B) .jpg
- C) .prt
- D) .doc

Answer: C) .prt

9 What is the primary function of 'assemblies' in Pro/Engineer?

- A) To organize files on disk
- B) To create complex parts
- C) To combine multiple parts into a single design
- D) To analyze stress in materials

Answer: C) To combine multiple parts into a single design

10 Which of these is NOT a primary feature of Pro/Engineer?

- A) Sheet metal design
- B) Finite element analysis
- C) Web development
- D) Mold design

Answer: C) Web development

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Aurangabad

Marking Scheme

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Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks

Signature

Signature
CAMPUS DIRECTOR
 International Centre of
 Excellence In Engg. & MGMT.
 Aurangabad

Add.: Gut No.4, Opp. Bajaj Auto Ltd. Main Gate, Aurangabad- Pune National Highway, Aurangabad - 431136 (MS) India.

Telephone : 0240 - 2558101 to 10 | Telefax 0240 - 2558111

Website : www.iceemabad.com | E-mail : director@iceemabad.com



Date: 28/04/2022

To,
Head of Mechanical Engg.
ICEEM
Aurangabad,

Subject: Sanction for the Introduction of the Course "Pro-E" for TE Students for the Academic Year 2021-22

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course " Pro-E " for the TE Mech students in the Mechanical Engg Department for the academic year 2021-22


We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:


Course Title: Pro-E

Department: Mechanical Engg.

Level: UG

Academic Year: 2021-22


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Aurangabad


Campus Director

Certificate Course Distrubtion Record Mech. Year:-2021-2022
Course Name:- Pro-E

Sr No.	Name of Student	Signature
1	AHIRE POOJA SITARAM	Pooja
2	Ajab Amol Tukaram	Ajab
3	ALSATWAR RAHUL NARAYAN	Rahul
4	AMBHORE AMOL PARMESHWAR	Amol
5	Arbad Akshay G	Akshay
6	Bamnote Harshal Ravindra	Harshal
7	BANSODE AKASH BHANUDAS	Akash
8	BHAJIBHAKRE PRATIK MAHENDRA	Pratik
9	BHARTI SUNIL BABAN	Bharti
10	BHUSARE VISHAL KRUSHNA	Vishal
11	Dambale Kiran Madhukar	Kiran
12	DAPKE SUMIT MACHINDRANATH	Sumit
13	Desale Vaibhav Satyendra	Desale
14	DIVATE ATHARAW SANDEEP	Atharav
15	Diwate Suyog Kailas	Suyog
16	DUDE ABHISHEK GAJANAN	Dude
17	GAGARE MANGESH TABAJI	Mangesh
18	GANGWE DINESH SHIVRAM	Dinesh
19	GARDE NIKHIL RAJESH	Garde
20	GOMTE ADITYA VIJAYKUMAR	Gomte
21	Hampole Somesh Pandurang	Somesh
22	JADHAV RAMESHWAR PURANDAR	Rameshwar
23	Jawale Sachin Ashok	Sachin
24	Jivrakh Nikhil Vinayak	Jivrakh
25	KAKLIJ SOPAN MEGHRAJ	Sopan
26	KALE NAKUL EKNATHRAO	Nakul
27	KAMBLE RAHUL RAMESH	Rahul
28	KASBE SWAPNIL BHAGWAN	Kasbe
29	KHANDAGLE MAHESH NILESH	Mahesh
30	KHILLARE NIKHIL BHUJANGRAO	Nikhil
31	Koli Ganesh Somnath	Koli
32	LAHANE SIDDHANT JAGANNATH	Siddhant
33	Lande Akshay Rohidas	Lande
34	LOHAKARE KRUSHNA DATTATRAY	Krushna
35	MAKHARE AMOL DAMODHAR	Amol
36	MALI REWATI MANOHAR	Rewati

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International Centre
Excellence In Engg. & Mgt
Aurangabad

Add.: Gut No 4, Opp. Bajaj Auto Ltd. Main Gate, Aurangabad- Pune National Highway, Aurangabad - 431136 (MS), India.

Telephone 0240 - 2558101 to 10 | Telefax 0240 - 2558111

Website : www.iceemabad.com | E-mail : director@iceemabad.com

37	Matsagar Rahul Balu	
38	Mehra Kanhaiya Jogendra	Mehra
39	Meshram Shubham Dnyaneshwar	Shubham
40	MESHRAM SUMIT BUDDHAGHOSH	Sumit
41	Mirge Tushar Dattatreya	Mirge
42	Mohd Matiuddin Mohd Masihuddin	Tushar
43	MORALWAR ANIKET DNYANESHWAR	Aniket
44	MORALWAR ABHISHEK DNYANESHWAR	Morale
45	Mule Sanket Rajabhau	Sanket
46	Naik Mangesh Dadarao	Mangesh
47	Kaushal Narkhede	Kaushal
48	Nikam Aditya Dnyanwshwar	Aditya
49	Nikam Rupali Rajendra	Rupali
50	Ajay dhansing nimrot	Ajay
51	Pakhare Ashish Sainath	Ashish
52	PATIL ABHISHEK MAHENDRA	Patil
53	Patil Suraj Dhanajirao	Suraj
54	Patil Yogesh Ishwar	Yogesh
55	Pawar Dipak Shivram	Dipak
56	PAWAR PRAGATI SANJAY	Pragati
57	Pawar Suraj Balasaheb	Suraj
58	Pote Yogesh Prakash	Yogesh
59	Rahatwad Ajay V	Rahatwad
60	RATHOD YOGESH SAMPAT	Rathod
61	RAUT PRAVIN SAHEBRAO	Raut
62	Salunke Shahadev Savta	Salunke
63	Sasemahal Nilkanth Dadarao	Sasemahal
64	Satdive Akash Bhausaheb	Satdive
65	Sayyad Abuzar Sayed Zakir	Sayyad
67	SHAIKH SAJID AYAJ	Sajid
68	SHELKE KRISHNA EKNATH	Selke
69	SHINDE ASHISH ANIL	Shinde
70	Deshpande Malhar Purshottamrao	Shinde
71	INGLE KOMAL BALAJI	Komal
72	Jadhav Komal Sunil	Komal
73	KADAM SIDDHANT MADAN	Siddhant
74	Kalambarkar Vaibhav Pandharinath	Vaibhav
75	Lonkar Mayur Gorakh	Mayur

MANOJ S. DIXIT
DIRECTOR
International Centre of
Excellence In Engg. & MGM
Aurangabad



Date: 25/04/2022

To,
Campus Director,
ICEEM
Aurangabad.

Subject: Proposal for Introducing a Course in "3-D modelling" for BE MECH Students for the Academic Year 2021-22

Respected Sir,

I am writing to propose the Introducing a Course in "3-D modelling" for BE MECH Students for the Academic Year 2021-22

This course explores the basics of 3-D modelling software. Students will learn to the use of 3-D modelling software through various sessions during this course.

I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "3-D modelling" as a part of the curriculum for the upcoming academic semester.

Thank you for considering my request. I am looking forward to your positive response.

The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,



Prof. S. B. Janjal
Head of Mechanical Department

Gp 
CAMPUS DIRECTOR
International Centre of
Excellence In Engg. & MGMT.
Aurangabad

Course Objectives:

1. **Introduction to 3-D modelling:** Familiarizing students with the interface, commands, and tools available in 3-D modelling.
2. **Drawing and Editing:** Teaching students how to create and modify 2D and 3D drawings using various drawing and editing commands.
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Benefits to Students:

Studying 3-D modelling offers several benefits to students such as

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3-D modelling Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

Question 1:

Which software is commonly used for 3D modeling in the entertainment industry? A) AutoCAD

B) SolidWorks

C) Blender

D) SketchUp

Answer: C) Blender

Question 2:

What is a polygon in 3D modeling? A) A 3D shape with curved surfaces

B) A flat shape with straight sides

C) A vertex in a 3D model

D) A type of texture mapping

Answer: B) A flat shape with straight sides

Question 3:

Which file format is typically used to export 3D models for printing? A) .STL

B) .JPEG

C) .MP4

D) .PDF

Answer: A) .STL

Question 4:

In 3D modeling, what is the process of creating a smooth transition between two surfaces called? A)

Extrusion

B) Boolean operation

C) Filletting

D) Chamfering

Answer: C) Filletting

Question 5:

Which term refers to the point where two edges of a 3D model meet? A) Edge

B) Face

C) Vertex

D) Polygon

Answer: C) Vertex

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Aurangabad

Question 6:

- What is the purpose of UV mapping in 3D modeling? A) To create animations
B) To apply textures to a 3D model
C) To build a skeleton for a model
D) To simulate lighting effects

Answer: B) To apply textures to a 3D model

Question 7:

- Which of the following is a commonly used 3D modeling technique? A) Rasterization
B) Vectorization
C) Sculpting
D) Filtering

Answer: C) Sculpting

Question 8:

- In 3D modeling, what is a "mesh"? A) A single line in a model
B) A collection of vertices, edges, and faces that define the shape of a 3D object
C) A type of material used in rendering
D) A lighting effect

Answer: B) A collection of vertices, edges, and faces that define the shape of a 3D object

Question 9:

- What is the function of a "modifier" in 3D modeling software like Blender? A) To change the color of the model
B) To alter the geometry of a model in a non-destructive way
C) To export the model
D) To apply lighting effects

Answer: B) To alter the geometry of a model in a non-destructive way

Question 10:

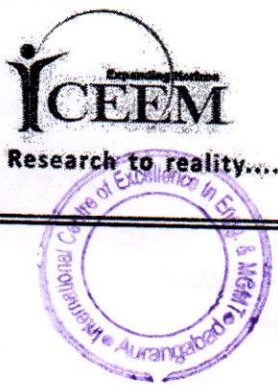
- Which software is known for its parametric modeling capabilities, often used in engineering and architecture? A) Blender
B) AutoCAD
C) SolidWorks
D) ZBrush

Answer: C) SolidWorks

Marking Scheme

Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks

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INTERNATIONAL CENTRE OF EXCELLENCE IN ENGINEERING AND MANAGEMENT (ICEEM)

NAAC Accredited



To,
Head of Mechanical Engg.
ICEEM
Aurangabad,

Date: 08/04/2022

Subject: Sanction for the Introduction of the Course "3-D Modelling" for BE Students for the Academic Year 2021-22

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course " 3-D Modelling " for the BE Mech students in the Mechanical Engg Department for the academic year 2021-22


We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:

Course Title: 3-D Modelling

Department: Mechanical Engg.

Level: UG

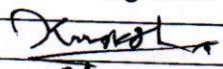
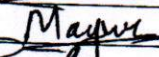
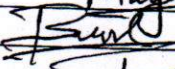
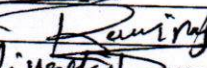

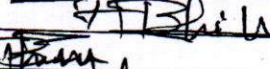
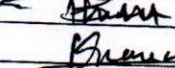
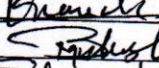
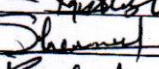
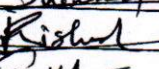
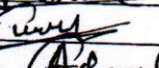
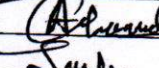
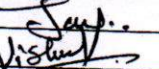
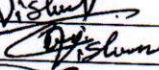
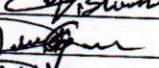

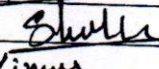
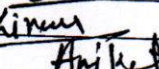
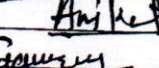
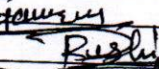
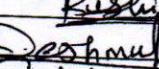
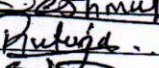

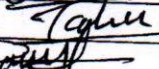
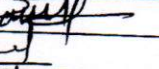
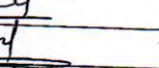
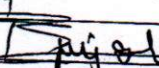
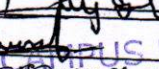
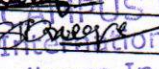
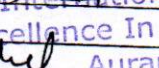
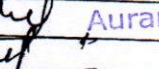





Academic Year: 2021-22


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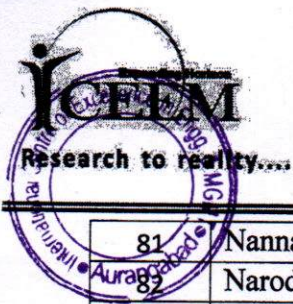
Certificate Course Distrubtion Record Mech. Year:-2021-2022

Course Name:- 3-D Modelling

Sr No.	Name of Student	Signature
1	Awalekar Karnesh	
2	Bajode Mayur	
3	BARIDE KISHOR SANJAY	
4	Thorat Raviraj M	
5	Devkar Vivek A	
6	Bhalerao Abhilesh	
7	Bharad Prakash Harichandra	
8	Bhutekar Kunal Hari	
9	Birajdar Mahesh	
10	Bodade Shailesh Jitendra	
11	Bodkhe Kishor Dynashewar	
12	Chakurkar Pradumn Shriram	
13	Charhate Akash Dashrath	
14	Chaudhari Jay Mahendra	
15	Chavan Vishal Gulabrao	
16	Chire Vishwajeet Indrajeet	
17	Dahale Ganesh Shivajirao	
18	Debare Vipul Gajanan	
19	Deokar Shubham	
20	Deshmane Kiran Somnath	
21	Deshmukh Aniket	
22	Deshmukh Gaurav Eknath	
23	Deshmukh Rushikesh Subhashrao	
24	Deshmukh Saurabh	
25	Deshpande Rutuja	
26	Dhanedhar Shubhash Laxman	
27	Dhuliyawala Taha Hussain	
28	Doud Akshay Sheshrao	
29	Dubule Rushikesh Magan	
30	Dugane Saraswati	
31	Dukare Rajesh Eknath	
32	Dukare Sudhanshu	
33	Durge Shrushti Kishor	
34	Fepale Uday Sunil	
35	Fulzade Atish Bhagawat	
36	Gaikwad Jagdish Sanjay	

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37	Gajakosh Ganesh	Ganesh
38	Ganraj Lokesh Kishor	Ganraj
39	Garad Rahul Laxman	Rahul
40	Ghodke Sapna Rajesh	Sapna
41	Ghule Mangesh Sanjay	Ghule
42	Hambarde Ratnakar	Hambarde
43	Hirole Shashikant Narayan	Shashikant
44	Hivale Pravin Sudhakar	Pravin
45	Hiwale Suraj Shriram	Suraj
46	Ingle Shubham Sheshrao	Shubham
47	Jadhav Ajay Vijay	Ajay
48	Jadhav Bankat Shivaji	Bankat
49	Jadhav Pradip Shivraj	Pradip
50	Jadhav Priya Damodar	Priya
51	Jadhav Sagar	Sagar
52	Jadhav Swapnil	Swapnil
53	Jagtap Vrushali	Vrushali
54	Jaiwal Saurabh	Saurabh
55	Jamdhade Supriya	Supriya
56	Janjal Rohit Bhagwan	Rohit
57	Kadam Vaibhav	Vaibhav
58	Kade Dnyaneshwar	Dnyaneshwar
59	Kale Pallavi Rameshwar	Pallavi
60	Kamble Ganesh	Ganesh
61	Kamble Kiran Bhikaji	Kiran
62	Kamble Prashik narayan	Prashik
63	Kanade Nikhil Kulbhushan	Nikhil
64	Khade Saurabh Raju	Saurabh
65	KHAN MUSHARRF MOHD KHAN GULAM MOHD	Musharrf
67	Khandagale Anand Dilip	Anand
68	Khedkar Gaurav Ramesh	Gaurav
69	Kolnure Sanjay Hanmantrao	Sanjay
70	Kulkarni Siddhesh	Siddhesh
71	Lachuriye Kanchan Mangesh	Kanchan
72	Lambole Yashwant Prakash	Yashwant
73	Lende Vikas Bhujangrao	Vikas
74	Lokhande Rohit	Rohit
75	Lokhande Shubham Ganesh	Shubham
76	Madakwar Hemraj Shriram	Hemraj
77	Magar Rushali Vaijinath	Rushali
78	Mane Akash Manohar	Akash
79	Nagre Anish Anil	Anish
80	Nandagavli Dhammpal Suhir	Dhammpal



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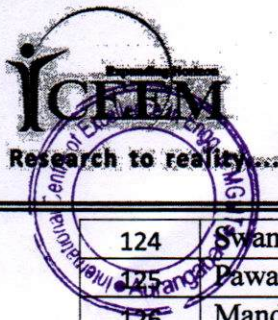
81	Nannaware Hrishikesh Dattatray	Harsh
82	Narode Yogesh Janardan	Yogesh
83	Navthar Sachin Rohidas	Sachin
84	Padalikar Kashinath Shripad	Padalikar
85	Padalwar Rishikesh Nagnathrao	Rishi
86	Pagar Pooja	Pagar
87	Panchal Ganesh	Ganesh
88	Patil Gaurav Bhagawat	Gaurav
89	Pawar Shivani Sudhir	S.P.
90	Pendhare Akash Suresh	Akash
91	Pinjari Imran Gulab	Imran
92	Pujari Anuja	Anuja
93	Pundge Akash Bapurao	Akash
94	Rajankar Pratik Ganesh	Pratik
95	Rajebhosle Mangesh Subhashrao	Mangesh
96	Rajput Shudip Yadvendrasingh	Shudip
97	Rathod Ajay Gajanan	Ajay
98	Rathod Vishnu Machindra	Vishnu
99	Raut Abhijit Shriram	Abhi
100	Bansode Prashant	Prashant
101	Raut Prajwal	Prajwal
102	Salve Komal	Komal
103	Sangole Ram Pramod	Ram
104	Sarje Jayanand Hanmant	Jay
105	Saurabh Dhok pundalik	Dhok
106	SHAIKH ALFARHAN MUKHTAR AHMED	Alfarhan
107	Shaikh Naeem Abdulraheman	Naeem
108	Shaikh Sailani Magdum	Sailani
109	Sharma Dhirajkumar	Dhiraj
110	Shelke Vivek Ashok	Vivek
111	Khune Swapnil M.	Swapnil
112	Shirale Shubham Sanjay	Shubham
113	Shunkrawar Gangaprasad Shivaji	Shivaji
114	Sultane Yogesh Chandrabhan	Yogesh
115	Suryawanshi Aniket Balu	Aniket
116	Tandale Ravindra Rangnath	Ravindra
117	WAGH ISHWAR SATYAVIJAY	Ishwar
118	Wagh Kamini Ramesh Rao	Kamini
119	Waghchaure Sandip Uttamrao	Sandip
120	Waratkar Shubham	Shubham
121	Yadav Pravin	Pravin
122	Zinjurke Kirankumar Sitaram	Kirankumar
123	Shinde Akshay	Akshay

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Telephone 0240-2558101 to 10 | Telefax 0240-2558111

Website : www.iceemabad.com | E-mail : director@iceemabad.com




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124	Swami Sungmeshwar Omkar	Swami
125	Dawar Ramdas Navnath	Ramdas
126	Mandavkar amol	Amol
127	ADHAV ROHAN SUNIL	Adhav
128	AMBHORE VISHNU DHARMARAJ	Vishnu
129	AMBHORE VITTHAL SATYANARAYAN	Vitthal
130	ASWALE UTTAM NIVRUTTI	Uttam


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Telephone : 0240 - 2558101 to 10 | Telefax : 0240 - 2558111

Website : www.iceemabad.com | E-mail : director@iceemabad.com



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Tel.: 0240-2558101-10, Fax: 0240-2558111; E-mail: director@iceemabad.com, Website: www.iceemabad.com

Date: 5/7/19

To,

Director,

ICEEM

Aurangabad.

Subject: Proposal for Introducing a Course in "AutoCAD" for SE MECH Students for the Academic Year 2019-2020

Respected Sir,

I am writing to propose the Introducing a Course in "AutoCAD" for SE MECH Students for the Academic Year 2019-2020

This course explores the basics of AutoCAD software. Students will learn to the use of AutoCAD software through various sessions during this course.

I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "AutoCAD" as a part of the curriculum for the upcoming academic semester.

Thank you for considering my request. I am looking forward to your positive response.

The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,

Head of Mechanical Department

6/7/19
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Tel.: 0240-2558101-10, Fax: 0240-2558111; E-mail: director@iceemabad.com, Website: www.iceemabad.com

Course Objectives:

1. **Introduction to AutoCAD:** Familiarizing students with the interface, commands, and tools available in AutoCAD.
2. **Drawing and Editing:** Teaching students how to create and modify 2D and 3D drawings using various drawing and editing commands.
3. **Layer Management:** Understanding the concept of layers in AutoCAD and learning how to effectively organize drawings using layers.
4. **Dimensioning and Annotation:** Teaching students how to add dimensions and annotations to drawings to convey necessary information.
5. **Blocks and Attributes:** Introducing students to creating and using blocks and attributes to improve drawing efficiency and consistency.
6. **Basic 3D Modeling:** Providing an introduction to 3D modeling techniques in AutoCAD, including creating basic 3D shapes and objects.
7. **Rendering and Visualization:** Exploring rendering options and visualization techniques to create realistic representations of 3D models.
8. **Customization:** Allowing students to customize AutoCAD settings, tool palettes, and templates to suit specific workflow needs.
9. **Collaboration and Output:** Teaching methods for sharing AutoCAD drawings with others, including plotting, publishing, and exporting files in various formats.
10. **Problem Solving and Troubleshooting:** Developing skills in identifying and resolving common issues encountered while using AutoCAD.

Course Outline:

By the end of the course, students will be able to:

Effectively use AutoCAD as a professional tool for design, drafting, and collaboration in various industries requiring precision and accuracy in technical drawings and 3D modeling.

Benefits to Students:

Studying AutoCAD offers several benefits to students such as

1. **Improved Technical Skills:** Mastery of AutoCAD software enhances students' technical proficiency in computer-aided design (CAD), allowing them to create precise and detailed drawings efficiently.
2. **Career Readiness:** AutoCAD proficiency is a valuable asset in industries such as architecture, engineering, construction, manufacturing, and product design, making students

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more attractive to employers.

3. **Increased Employability:** Knowledge of AutoCAD opens doors to a wide range of job opportunities, including roles as CAD drafters, designers, technicians, and engineers.
4. **Efficiency and Productivity:** AutoCAD's tools and features streamline the design process, enabling students to produce drawings faster and with greater accuracy compared to traditional methods.
5. **Enhanced Design Visualization:** Students can create 2D drawings and 3D models that visualize concepts and designs effectively, aiding in communication and presentation of ideas.
6. **Collaborative Skills:** AutoCAD facilitates collaboration among team members by allowing them to work on the same project simultaneously, share files, and manage revisions efficiently.
7. **Professional Development:** Learning AutoCAD enhances students' professional development by preparing them for industry standards and practices, including the ability to adhere to drawing standards and conventions.
8. **Problem-Solving Abilities:** AutoCAD teaches students how to analyze design problems and find solutions using CAD tools and techniques, fostering critical thinking and problem-solving skills.
9. **Certification Opportunities:** Many AutoCAD courses offer preparation for Autodesk certification exams, which can validate students' skills and enhance their credibility in the job market.
10. **Foundation for Advanced Learning:** Proficiency in AutoCAD provides a solid foundation for students interested in pursuing further education or training in specialized areas of CAD software or related fields.


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AutoCAD Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

1. What does CAD stand for?

- A. Computer Aided Design
- B. Computer Aided Drafting
- C. Computer Aided Drawing
- D. Computer Aided Dimensioning

Answer: A

2. Which of the following is NOT a typical AutoCAD workspace environment?

- A. Drafting & Annotation
- B. 3D Modeling
- C. Animation
- D. AutoCAD Classic

Answer: C

3. Which AutoCAD command is used to draw a circle?

- A. Line


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B. Rectangle

C. Circle

D. Arc

Answer: C

4. What is the purpose of the Trim command in AutoCAD?

A. To extend a line or object

B. To remove parts of objects that overlap

C. To create multiple copies of an object

D. To rotate an object around a specified point

Answer: B

5. Which command is used to change the properties of selected objects in AutoCAD?

A. Properties

B. Modify

C. Change

D. Adjust

Answer: A

6. In AutoCAD, what are layers used for?


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- A. To group objects for easy selection
- B. To apply different colors and line types to objects
- C. To create 3D objects
- D. To change the drawing scale

Answer: B

7. Which dimensioning command in AutoCAD is used to measure the angle between two lines?


- A. Linear
- B. Aligned
- C. Angular
- D. Radius

Answer: C

8. Which command is used to create a 3D solid box in AutoCAD?

- A. Box
- B. Cube
- C. Extrude
- D. Solid

Answer: A


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9. What does UCS stand for in AutoCAD?


- A. Unified Coordinate System
- B. User Coordinate System
- C. Universal Coordinate System
- D. Uniform Coordinate System

Answer: B

10. Which AutoCAD feature allows you to create and manage custom tools and tool palettes?

- A. Tool Manager
- B. Tool Organizer
- C. Tool Palette
- D. Tool Wizard

Answer: C


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Marking Scheme

Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks

Kindly, consider it.

Thank you.

Head of Mechanical Department

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Date: 10/7/19

To,

Head of Mechanical Engg.

ICEEM

Aurangabad,

Subject: Sanction for the Introduction of the Course " AutoCAD" for SE Students for the Academic Year 2019-20

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course " AutoCAD " for the SE Mech students in the Mechanical Engg Department for the academic year 2019-20

We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:

Course Title: AutoCAD

Department: Mechanical Engg.

Level: UG

Academic Year: 2019-20


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Tel.: 0240-2558101-10, Fax: 0240-2558111; E-mail: director@iceemabad.com, Website: www.iceemabad.com**Certificate Course Distribution Record Mech. Year:-2019-2020****Course Name:- AutoCAD**

Sr No.	Name of Student	Signature
1	Birajdar Mahesh	
2	Deshmukh Saurabh	
3	Deshmukh Gaurav Eknath	
4	Sharma Dhirajkumar	
5	Adhav Anil Bhaurao	
6	Awalekar Karnesh	
7	Awez Mujawar Mohd Ishaq Mujawar	
8	Bambratkar Sidhanshu Dnyaneshwar	
9	Bankat Shivaji jadhav	
10	Bhagure Pratiksha Tarachand	
11	Bharad Prakash Harichandra	
12	Bilwal Rahul Devisingh	
13	Bodade Shailesh Jitendra	
14	Chakurkar Pradumn Shriram	
15	Chaudhari Jay Mahendra	
16	Chavan Vishal Gulabrao	
17	Chire Vishwajeet Indrajeet	
18	Dahale Ganesh Shivajirao	
19	Debare Vipul Gajanan	
20	Deshmane Kiran Sōmnath	
21	Deshmukh Rushikesh Subhashrao	
22	Dhammpal Suhir Nandagavli	
23	Dharshan Nashikkar Subhash	
24	Dhuliyawala Taha Hussain	
25	Dombe Komal Baburao	
26	Doud Akshay Sheshrao	
27	Dubule Rushikesh Magan	
28	Durge Shrushti Kishor	
29	Fepale Uday Sunil	
30	Fulzade Atish Bhagawat	
31	Gaikwad Jagdish Sanjay	
32	Ganesh Shevrao Bhabad	

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33	Ganraj Lokesh Kishor	
34	Ghodke Sapna Rajesh	
35	Ghonsikar Vyankatesh Girishrao	
36	Ghule Mangesh Sanjay	
37	Hivale Pravin Sudhakar	
38	Hiwale Suraj Shriram	
39	Ingle Shubham Sheshrao	
40	Jadhav Pradip Shivraj	
41	Janjal Rohit Bhagwan	
42	Kamble Kiran Bhikaji	
43	Kamble Prashik narayan	
44	Karore Abhishek Vijay	
45	Khade Saurabh Raju	
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51	Kotkar Satish Jivanaji	
52	Kulkarni Siddhesh	
53	Lalit Pramodrao Dhavane	
54	Lambole Yashwant Prakash	
55	Lokhande Shubham Ganesh	
56	Magar Rushali Vaijinath	
57	Mahale Sachin Narayan	
58	Mali Kunal Abhiman	
59	Malusare Sachin Ramesh	
60	Mandal Abhay Parameshwar	
61	Musharrf Mohd Khan Gulam Mohd Khan	
62	Nagre Anish Anil	
63	Nannaware Hrishikesh Dattatray	
64	Narode Yogesh Janardan	
65	Navthar Sachin Rohidas	
66	Padalwar Rishikesh Nagnathrao	
67	Patil Gaurav Bhagawat	
68	Pawar Shivani Sudhir	
69	Pinjari Imran Gulab	
70	Pundge Akash Bapurao	

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Date: 5/7/19

To,

Director,

ICEEM

Aurangabad.

Subject: Proposal for Introducing a Course in "Advance AutoCAD" for TE MECH Students for the Academic Year 2019-20.

Respected Sir,

I am writing to propose the Introducing a Course in "Advance AutoCAD" for TE MECH Students for the Academic Year 2019-20

This course explores the basics of Advance AutoCAD software. Students will learn to the use of AutoCAD software through various sessions during this course.

I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "Advance AutoCAD" as a part of the curriculum for the upcoming academic semester.

Thank you for considering my request. I am looking forward to your positive response.

The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,

Head of Mechanical Department

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Tel.: 0240-2558101-10, Fax: 0240-2558111; E-mail: director@iceemabad.com, Website: www.iceemabad.com

Course Objectives:

1. **Introduction to Advance AutoCAD:** Familiarizing students with the interface, commands, and tools available in Advance AutoCAD.
2. **Drawing and Editing:** Teaching students how to create and modify 2D and 3D drawings using various drawing and editing commands.
3. **Layer Management:** Understanding the concept of layers in Advance AutoCAD and learning how to effectively organize drawings using layers.
4. **Dimensioning and Annotation:** Teaching students how to add dimensions and annotations to drawings to convey necessary information.
5. **Blocks and Attributes:** Introducing students to creating and using blocks and attributes to improve drawing efficiency and consistency.
6. **Basic 3D Modeling:** Providing an introduction to 3D modeling techniques in Advance AutoCAD, including creating basic 3D shapes and objects.
7. **Rendering and Visualization:** Exploring rendering options and visualization techniques to create realistic representations of 3D models.
8. **Customization:** Allowing students to customize Advance AutoCAD settings, tool palettes, and templates to suit specific workflow needs.
9. **Collaboration and Output:** Teaching methods for sharing Advance AutoCAD drawings with others, including plotting, publishing, and exporting files in various formats.
10. **Problem Solving and Troubleshooting:** Developing skills in identifying and resolving common issues encountered while using Advance AutoCAD.

Course Outline:


By the end of the course, students will be able to:

Effectively use Advance AutoCAD as a professional tool for design, drafting, and collaboration in various industries requiring precision and accuracy in technical drawings and 3D modeling.

Benefits to Students:

Studying Advance AutoCAD offers several benefits to students such as

1. **Improved Technical Skills:** Mastery of Advance AutoCAD software enhances students'


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technical proficiency in computer-aided design (CAD), allowing them to create precise and detailed drawings efficiently.

2. **Career Readiness:** Advance AutoCAD proficiency is a valuable asset in industries such as architecture, engineering, construction, manufacturing, and product design, making students more attractive to employers.
3. **Increased Employability:** Knowledge of Advance AutoCAD opens doors to a wide range of job opportunities, including roles as CAD drafters, designers, technicians, and engineers.
4. **Efficiency and Productivity:** Advance AutoCAD's tools and features streamline the design process, enabling students to produce drawings faster and with greater accuracy compared to traditional methods.
5. **Enhanced Design Visualization:** Students can create 2D drawings and 3D models that visualize concepts and designs effectively, aiding in communication and presentation of ideas.
6. **Collaborative Skills:** Advance AutoCAD facilitates collaboration among team members by allowing them to work on the same project simultaneously, share files, and manage revisions efficiently.
7. **Professional Development:** Learning Advance AutoCAD enhances students' professional development by preparing them for industry standards and practices, including the ability to adhere to drawing standards and conventions.
8. **Problem-Solving Abilities:** Advance AutoCAD teaches students how to analyze design problems and find solutions using CAD tools and techniques, fostering critical thinking and problem-solving skills.
9. **Certification Opportunities:** Many Advance AutoCAD courses offer preparation for Autodesk certification exams, which can validate students' skills and enhance their credibility in the job market.
10. **Foundation for Advanced Learning:** Proficiency in Advance AutoCAD provides a solid foundation for students interested in pursuing further education or training in specialized areas of CAD software or related fields.


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Advance AutoCAD Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

Question 1:

Which command allows you to draw a spline in AutoCAD?

- A) PLINE
- B) SPLINE
- C) LINE
- D) ARC

Answer: B) SPLINE

Question 2:


What is the function of the XREF command in AutoCAD?

- A) To create external references
- B) To create a block
- C) To trim objects
- D) To extend objects

Answer: A) To create external references

Question 3:

How do you create an array of objects in a circular pattern?


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- A) ARRAYRECT
- B) ARRAYPOLAR
- C) ARRAYPATH
- D) MIRROR

Answer: B) ARRAYPOLAR

Question 4:

Which command would you use to join multiple line segments into a single polyline?

- A) JOIN
- B) SPLINE
- C) PLINE
- D) PEDIT

Answer: D) PEDIT

Question 5:

What is the purpose of the PURGE command?

- A) To delete unwanted objects
- B) To clean up the drawing
- C) To reduce file size
- D) All of the above

Answer: D) All of the above

Question 6:

Which command allows you to create a 3D solid by sweeping a 2D profile along a path?

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A) EXTRUDE

B) REVOLVE

C) SWEEP

D) LOFT

Answer: C) SWEEP

Question 7:

What does the UCSICON command do?

A) Toggles the display of the User Coordinate System icon

B) Changes the current UCS

C) Saves the current UCS

D) Resets the UCS to default

Answer: A) Toggles the display of the User Coordinate System icon

Question 8:

Which layer management tool would you use to isolate a layer for editing?

A) LAYER FREEZE

B) LAYER ISOLATE

C) LAYER LOCK

D) LAYER THAW

Answer: B) LAYER ISOLATE

Question 9:

What is the purpose of the MATCHPROP command?


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- A) To match properties from one object to another
- B) To create a new layer
- C) To measure the distance between objects
- D) To trim objects

Answer: A) To match properties from one object to another

Question 10:

Which command can be used to create a region from a closed polyline or other closed objects?

- A) REGION
- B) POLYLINE
- C) BOUNDARY
- D) TRIM

Answer: A) REGION

Marking Scheme

Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks

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[Signature]

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Date: 10/7/19

To,

Head of Mechanical Engg.

ICEEM

Aurangabad,

Subject: Sanction for the Introduction of the Course "Advanced AutoCAD" for TE Students for the Academic Year 2019-20

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course "Advanced AutoCAD" for the TE Mech students in the Mechanical Engg Department for the academic year 2019-20

We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:

Course Title: Advanced AutoCAD

Department: Mechanical Engg.

Level: UG

Academic Year: 2019-20


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Certificate Course Distribution Record Mech. Year:-2019-2020

Course Name:- Advance AutoCAD

Sr No.	Name of Student	Signature
1	CHANDEWAR PRIJETA YOGRAJ	
2	DAMDHAR AKSHAY RAMESH	
3	DEVKAR VIVEK ARVIND	
4	DHAGE PANKAJ PRALHAD	
5	FERAN SHIVAM ASHOKRAO	
6	HIWRALE JAYSHRI RAVBA	
7	JADHAV VISHAL YASHWANT	
8	JAWALE KHUSHAL AVINASH	
9	KADLAG RAHUL SOMNATH	
10	KAKADE SACHIN NARAYAN	
11	KHUNE SWAPNIL MAHESH	
12	KOLI CHAITALI SANJAY	
13	KOMBADE KRISHNAKANT DAYARAM	
14	KUTE KAVITA VIJAY	
15	MORE ARJUN NANDU	
16	MORE DEEPAK SURESH	
17	NANDANE VINAYAK RAMRAO	
18	NIMBOLKAR YOGESH PURUSHOTTAM	
19	PADEKAR PRADIP BHAUSAHEB	
20	PATIL CHHAYA DILIP	
21	PATIL GAURAV	
22	PRASHAR MAHESH RAJESH.	
23	RAUT PRAJWAL ASHOK	
24	SHELKE BHUPENDRA HARISHCHANDRA	
25	SONAWANE NIKHIL SATILAL	
26	SWAMI NAGNATH OMKAR	
27	WAGHMARE GOVIND NIVRUTI	
28	KINGE PRAJAKTA PRAFULLA	
29	SATAO KUNAL RAJESH	
30	CHANDANSE PRAVIN SUBHASH	
31	DAHAKLE SUNIL AAPPAJI	
32	RATHOD SAIPRASAD EKNATH	

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33	VISHWAKARMA SHUBHAM RAMJI	Shubham V.
34	THOKAL SHANKAR BHAUSAHEB	Shankar
35	DEV DHE GAURAV TATYASAHEB	Gaurav

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Date: 5/7/19

To,

Director,

ICEEM

Aurangabad.

Subject: Proposal for Introducing a Course in "Master Cam" for BE MECH Students for the Academic Year 2019-20

Respected Sir,

I am writing to propose the Introducing a Course in "Master Cam" for TE MECH Students for the Academic Year 2019-20

This course explores the basics of Master Cam software. Students will learn to the use of Master CAM software through various sessions during this course.

I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "Master Cam" as a part of the curriculum for the upcoming academic semester.

Thank you for considering my request. I am looking forward to your positive response.

The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,

Head of Mechanical Department

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Course Objectives:

1. **Proficiency in CAM Software:** Gain proficiency in using Mastercam software to create, simulate, and optimize toolpaths for CNC machining.
2. **Understanding CAD/CAM Integration:** Learn to integrate CAD (Computer-Aided Design) models with CAM processes to generate accurate machining instructions.
3. **Toolpath Creation and Optimization:** Develop skills in creating efficient toolpaths for various machining operations, including milling, turning, and multi-axis machining.
4. **Simulation and Verification:** Gain the ability to simulate and verify machining operations to detect and prevent errors before actual machining.
5. **Post-Processing:** Understand the process of post-processing CAM outputs to generate machine-specific G-code for CNC machines.
6. **Advanced Machining Techniques:** Explore advanced machining techniques such as 3D milling, 5-axis machining, and high-speed machining.
7. **Application in Industry:** Apply Mastercam skills to real-world manufacturing scenarios, understanding industry standards and best practices.
8. **Problem-solving and Troubleshooting:** Develop problem-solving skills to troubleshoot CAM-related issues and optimize machining processes.
9. **Safety and Efficiency:** Learn to prioritize safety measures and optimize machining efficiency through CAM software capabilities.
10. **Project-Based Learning:** Engage in project-based learning to apply Mastercam skills in designing and machining actual parts, enhancing practical experience.

Course Outline:

By the end of the course, students will be able to:

Effectively use Master Cam as a professional tool for design, drafting, and collaboration in various industries requiring precision and accuracy in technical drawings and 3D modeling.

Benefits to Students:


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Studying Master Cam offers several benefits to students such as

1. **Improved Technical Skills:** Mastery of Master Cam software enhances students' technical proficiency in computer-aided design (CAD), allowing them to create precise and detailed drawings efficiently.
2. **Career Readiness:** Master Cam proficiency is a valuable asset in industries such as architecture, engineering, construction, manufacturing, and product design, making students more attractive to employers.
3. **Increased Employability:** Knowledge of Master Cam opens doors to a wide range of job opportunities, including roles as CAD drafters, designers, technicians, and engineers.
4. **Efficiency and Productivity:** Master Cam's tools and features streamline the design process, enabling students to produce drawings faster and with greater accuracy compared to traditional methods.
5. **Enhanced Design Visualization:** Students can create 2D drawings and 3D models that visualize concepts and designs effectively, aiding in communication and presentation of ideas.
6. **Collaborative Skills:** Master Cam facilitates collaboration among team members by allowing them to work on the same project simultaneously, share files, and manage revisions efficiently.
7. **Professional Development:** Learning Master Cam enhances students' professional development by preparing them for industry standards and practices, including the ability to adhere to drawing standards and conventions.
8. **Problem-Solving Abilities:** Master Cam teaches students how to analyze design problems and find solutions using CAD tools and techniques, fostering critical thinking and problem-solving skills.
9. **Certification Opportunities:** Many Master Cam courses offer preparation for Autodesk certification exams, which can validate students' skills and enhance their credibility in the job market.
10. **Foundation for Advanced Learning:** Proficiency in Master Cam provides a solid foundation for students interested in pursuing further education or training in specialized areas of CAD software or related fields.


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Master Cam Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

1 What is Mastercam primarily used for?

- A) Computer-aided design (CAD)
- B) Computer-aided manufacturing (CAM)
- C) 3D animation
- D) Web development

Answer: B) Computer-aided manufacturing (CAM)

2 Which module in Mastercam is used to create toolpaths for CNC machining?


- A) CAD
- B) Simulation
- C) Toolpath
- D) Rendering

Answer: C) Toolpath

3 What does CAM stand for in the context of Mastercam?

- A) Computer-aided modeling
- B) Computer-aided machining
- C) Computer-aided measurement
- D) Computer-aided management

Answer: B) Computer-aided machining


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4 Which feature in Mastercam allows you to simulate the machining process to detect errors?

- A) Verify
 - B) Render
 - C) Draft
 - D) Assemble
- Answer: A) Verify

5 In Mastercam, what does the term 'post-processing' refer to?


- A) Finalizing CAD models
 - B) Optimizing toolpaths
 - C) Generating G-code for CNC machines
 - D) Rendering 3D images
- Answer: C) Generating G-code for CNC machines

6 Which toolpath strategy in Mastercam is used for machining complex 3D shapes?

- A) 2D milling
 - B) 3D milling
 - C) Turning
 - D) Wire EDM
- Answer: B) 3D milling

7 What is the purpose of Mastercam's 'Verify' function?

- A) To check the spelling of tool names


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B) To simulate toolpaths and verify machining operations

C) To render high-quality images

D) To measure distances between features

Answer: B) To simulate toolpaths and verify machining operations

8 Which file format is commonly used for saving toolpath data in Mastercam?

A) .exe

B) .jpg

C) .nc

D) .doc

Answer: C) .nc

9 What role does Mastercam play in the manufacturing process?

A) Designing prototypes

B) Programming CNC machines

C) Testing software applications

D) Analyzing market trends

Answer: B) Programming CNC machines

10 Which of the following is NOT a primary feature of Mastercam?


A) 3D modeling

B) Multi-axis machining

C) Finite element analysis

D) High-speed machining

Answer: C) Finite element analysis


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Marking Scheme

Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks

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Date: 10/7/19

To,

Head of Mechanical Engg.

ICEEM

Aurangabad,

Subject: Sanction for the Introduction of the Course "Master Cam" for BE Students for the Academic Year 2019-20

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course " Master Cam " for the BE Mech students in the Mechanical Engg Department for the academic year 2019-20

We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:

Course Title: Master Cam

Department: Mechanical Engg.

Level: UG

Academic Year: 2019-20


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Director



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Certificate Course Distribution Record Mech. Year:-2019-2020

Course Name:- Master Cam

Sr No.	Name of Student	Signature
1	GANRAJ MANOJ SUBHASH	Ganraj
2	LAGHANE MAHESH NANDKUMAR	M.L.
3	MANDAL ARINDAM RABINDRA	Mandal
4	MUNDHE GANESH ANKUSH	Mundhe
5	RATHOD SACHIN LAXMAN	Rathod
6	RATHOR VIKAS RAMDAS	Vikas
7	SABBANWAR BAJRANG RAMESH	Bajrang
8	SILLODE NITESH RAMESH	Nitesh
9	WANKHEDE SANKET SANJAY	Sanket
10	YADAV KAPIL DEO	Kapil
11	BAJAJ RAVI MAHESHKUMAR	Bajaj
12	BEMBDE BALAJI BABAN	Balaji
13	BHARATE DINESH RAJU	Dinesh
14	BONDE KESHAV SUNIL	Keshav
15	GANGOTRI GANESH NARAYAN	Gangotri
16	JADHAV SACHIN KESHAVRAO	Sachin
17	KOLTE BHAGYASHRI ANIL	Kolte
18	MISHRA NIHAL MANMOHAN	Nihal
19	NAKOD ANURADHA VIJAY	Nakod
20	PAWAR ASHVINI GAJANAN	Ashvini


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Date: 4/1/19

To,

Director,

ICEEM

Aurangabad.

Subject: Proposal for Introducing a Course in "AutoCAD" for SE MECH Students for the Academic Year 2018-2019

Respected Sir,

I am writing to propose the Introducing a Course in "AutoCAD" for SE MECH Students for the Academic Year 2018-2019

This course explores the basics of AutoCAD software. Students will learn to the use of AutoCAD software through various sessions during this course.


I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "AutoCAD" as a part of the curriculum for the upcoming academic semester.

Thank you for considering my request. I am looking forward to your positive response.

The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,

Head of Mechanical Department


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Course Objectives:

1. **Introduction to AutoCAD:** Familiarizing students with the interface, commands, and tools available in AutoCAD.
2. **Drawing and Editing:** Teaching students how to create and modify 2D and 3D drawings using various drawing and editing commands.
3. **Layer Management:** Understanding the concept of layers in AutoCAD and learning how to effectively organize drawings using layers.
4. **Dimensioning and Annotation:** Teaching students how to add dimensions and annotations to drawings to convey necessary information.
5. **Blocks and Attributes:** Introducing students to creating and using blocks and attributes to improve drawing efficiency and consistency.
6. **Basic 3D Modeling:** Providing an introduction to 3D modeling techniques in AutoCAD, including creating basic 3D shapes and objects.
7. **Rendering and Visualization:** Exploring rendering options and visualization techniques to create realistic representations of 3D models.
8. **Customization:** Allowing students to customize AutoCAD settings, tool palettes, and templates to suit specific workflow needs.
9. **Collaboration and Output:** Teaching methods for sharing AutoCAD drawings with others, including plotting, publishing, and exporting files in various formats.
10. **Problem Solving and Troubleshooting:** Developing skills in identifying and resolving common issues encountered while using AutoCAD.

Course Outline:

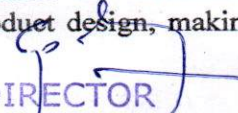
By the end of the course, students will be able to:

Effectively use AutoCAD as a professional tool for design, drafting, and collaboration in various industries requiring precision and accuracy in technical drawings and 3D modeling.

Benefits to Students:

Studying AutoCAD offers several benefits to students such as

1. **Improved Technical Skills:** Mastery of AutoCAD software enhances students' technical proficiency in computer-aided design (CAD), allowing them to create precise and detailed drawings efficiently.
2. **Career Readiness:** AutoCAD proficiency is a valuable asset in industries such as architecture, engineering, construction, manufacturing, and product design, making students


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more attractive to employers.

3. **Increased Employability:** Knowledge of AutoCAD opens doors to a wide range of job opportunities, including roles as CAD drafters, designers, technicians, and engineers.
4. **Efficiency and Productivity:** AutoCAD's tools and features streamline the design process, enabling students to produce drawings faster and with greater accuracy compared to traditional methods.
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9. **Certification Opportunities:** Many AutoCAD courses offer preparation for Autodesk certification exams, which can validate students' skills and enhance their credibility in the job market.
10. **Foundation for Advanced Learning:** Proficiency in AutoCAD provides a solid foundation for students interested in pursuing further education or training in specialized areas of CAD software or related fields.


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AutoCAD Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

1. What does CAD stand for?

- A. Computer Aided Design
- B. Computer Aided Drafting
- C. Computer Aided Drawing
- D. Computer Aided Dimensioning

Answer: A

2. Which of the following is NOT a typical AutoCAD workspace environment?

- A. Drafting & Annotation
- B. 3D Modeling
- C. Animation
- D. AutoCAD Classic

Answer: C

3. Which AutoCAD command is used to draw a circle?

- A. Line

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B. Rectangle

C. Circle

D. Arc

Answer: C

4. What is the purpose of the Trim command in AutoCAD?

A. To extend a line or object

B. To remove parts of objects that overlap

C. To create multiple copies of an object

D. To rotate an object around a specified point

Answer: B

5. Which command is used to change the properties of selected objects in AutoCAD?

A. Properties

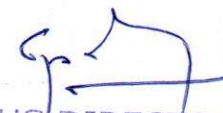
B. Modify

C. Change

D. Adjust

Answer: A

6. In AutoCAD, what are layers used for?


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Tel.: 0240-2558101-10, Fax: 0240-2558111: E-mail: director@iceemabad.com, Website: www.iceemabad.com

- A. To group objects for easy selection
- B. To apply different colors and line types to objects
- C. To create 3D objects
- D. To change the drawing scale

Answer: B

7. Which dimensioning command in AutoCAD is used to measure the angle between two lines?


- A. Linear
- B. Aligned
- C. Angular
- D. Radius

Answer: C

8. Which command is used to create a 3D solid box in AutoCAD?

- A. Box
- B. Cube
- C. Extrude
- D. Solid

Answer: A


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9. What does UCS stand for in AutoCAD?


- A. Unified Coordinate System
- B. User Coordinate System
- C. Universal Coordinate System
- D. Uniform Coordinate System

Answer: B

10. Which AutoCAD feature allows you to create and manage custom tools and tool palettes?

- A. Tool Manager
- B. Tool Organizer
- C. Tool Palette
- D. Tool Wizard

Answer: C


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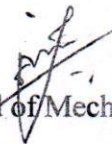
Tel.: 0240-2558101-10, Fax: 0240-2558111: E-mail: director@iceemabad.com, Website: www.iceemabad.com


Marking Scheme

Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks

Kindly, consider it.

Thank you.


Head of Mechanical Department


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Tel.: 0240-2558101-10, Fax: 0240-25581111: E-mail: director@iceemabad.com, Website: www.iceemabad.com

Date: 09/01/2019

To,

Head of Mechanical Engg.

ICEEM

Aurangabad,

Subject: Sanction for the Introduction of the Course "Auto CAD" for SE Students for the Academic Year 2018-19

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course " Auto CAD " for the SE Mech students in the Mechanical Engg Department for the academic year 2018-19

We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:

Course Title: Auto CAD

Department: Mechanical Engg.

Level: UG

Academic Year: 2018-19

Director

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Tel.: 0240-2558101-10, Fax: 0240-2558111: E-mail: director@iceemabad.com, Website: www.iceemabad.com**Certificate Course Distribution Record Mech. Year:-2018-2019****Course Name:- AutoCAD**

Sr No.	Name of Student	Signature
1	CHANDANSE PRAVIN SUBHASH	Purvi
2	DAHAKLE SUNIL AAPPAJI	Sunil
3	RATHOD SAIPRASAD EKNATH	Saiprasad
4	VISHWAKARMA SHUBHAM RAMJI	Vishwakarma
5	APTURKAR MONIKA	Monika
6	BAHAD PRATEEK	Prateek
7	BAJODE MAYUR	Mayur
8	BAPMARE GOVIND	Govind
9	BARIDE KISHOR	Kishor
10	BHADAIT ARUN	Arun
11	BHALERAO ABHILESH	Abhilesh
12	BIRAJDAR KRANTI	Kranti
13	BORDE ANAND	Anand
14	CHAKOTKAR GANESH	Ganesh
15	CHANDEWAR PRIJETA	Prijeta
16	CHARATE AKASH	Akash
17	DAMDHAR AKSHAY	Akshay
18	DEOKAR SHUBHAM	Shubham
19	DESHMUKH ANIKET	Aniket
20	DESHPANDE DEVDATTA	Devdatta
21	DESHPANDE RUTUJA	Rutuja
22	DEVKAR VIVEK	Vivek
23	DHAGE PANKAJ	Pankaj
24	DHANEDHAR SUBHASH	Subhash
25	FASATE PINKESHWAR	Pinkeshwar
26	FERAN SHIVAM	Shivam
27	GAIKWAD SATISH	Satish
28	GAJAKOSH GANESH	Ganesh
29	GAJBHIYE SHUBAM	Shubham
30	GARAD RAHUL	Rahul
31	GONGE PRATIK	Pratik
32	HARI BHUTEKAR KUNAL	Kunal

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33	HIWRALE JAYASHRI	Jayashri
34	HUZEFA BANARSI	Huze
35	JADHAV AJAY LAXMAN	Ajay
36	JADHAV AJAY VIJAY	Ajay
37	JADHAV RUTIK	Rutik
38	JADHAV SHUDDHAMATI	Shuddhamati
39	JADHAV VISHAL	Vishal
40	KADLAG RAHUL	Rahul
41	KAKDE SACHIN	Sachin
42	KALE PALLAVI	Pallavi
43	KHARAD DHANANJAY	Dhananjay
44	KHUNE SWAPNIL	Swapnil
45	KOLI CHAITALI	Chaitali
46	KURE SUNIL	Sunil
47	KUTE KAVITA	Kavita
48	LACHURIYE KANCHAN	Kanchan
49	LENDE VIKAS	Vikas
50	LOKHANDE ROHIT	Rohit
51	MANDAVKAR AMOL	Amol
52	MANE AAKASH	Aakash
53	MORE ARJUN	Arjun
54	MORE DEEPAK	Deepak
55	MOURYA DEEPAK	Deepak
56	NIMROT AJAY	Ajay
57	NIMBOLKAR YOGESH	Yogesh
58	PADALIKAR KASHINATH	Kashinath
59	PAGAR POOJA	Pooja
60	PATHAN AAREF	Aaref
61	PATIL CHHAYA DILIP	Chhaya
62	PATIL SUMIT	Sumit
63	POUL SANDIP	Sandip
64	PUJARI ANUJA	Anuja
65	RAHATWAD AJAY	Ajay
66	RATHOD VISHNU	Vishnu
67	RAUT AKSHAY	Akshay
68	RAUT PRAJWAL	Prajwal
69	SHELKE BHUPENDRA	Bhupendra
70	SONAWANE NIKHIL	Nikhil

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Date: 4/1/19

To,

Director,

ICEEM

Aurangabad.

Subject: Proposal for Introducing a Course in "Ansys" for TE MECH Students for the Academic Year 2018-19

Respected Sir,

I am writing to propose the Introducing a Course in "Ansys" for TE MECH Students for the Academic Year 2018-19

This course explores the basics of Ansys software. Students will learn to the use of ANSYS software through various sessions during this course.


I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "Ansys" as a part of the curriculum for the upcoming academic semester.

Thank you for considering my request. I am looking forward to your positive response.

The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,

Head of Mechanical Department


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Course Objectives:

1. **Introduction to ANSYS:** Gain familiarity with ANSYS software suite, its interface, and capabilities.
2. **Finite Element Analysis (FEA):** Learn fundamental concepts of FEA and how to apply them using ANSYS for structural, thermal, and fluid dynamics simulations.
3. **Simulation Workflow:** Understand the workflow of setting up, solving, and post-processing simulations in ANSYS.
4. **Structural Analysis:** Develop skills in performing static, dynamic, and modal analysis of mechanical components and assemblies.
5. **Thermal Analysis:** Learn to simulate heat transfer phenomena such as conduction, convection, and radiation using ANSYS.
6. **Fluid Dynamics Analysis:** Gain proficiency in simulating fluid flow and heat transfer using ANSYS CFD (Computational Fluid Dynamics).
7. **Multiphysics Simulations:** Explore capabilities for coupled-field analysis, such as fluid-structure interaction (FSI) or thermal-electrical coupling.
8. **Optimization and Design Exploration:** Utilize ANSYS tools for design optimization and exploring design alternatives based on simulation results.
9. **Verification and Validation:** Understand methods for verifying and validating simulation results against experimental data or analytical solutions.
10. **Industry Applications:** Apply ANSYS skills to real-world engineering problems across various industries, such as aerospace, automotive, biomedical, and manufacturing.
11. **Project Work:** Engage in hands-on projects to apply ANSYS simulations to solve complex engineering problems and demonstrate proficiency.
12. **Best Practices and Efficiency:** Learn best practices for setting up simulations, optimizing computational resources, and interpreting results effectively.


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Course Outline:

Module 1: Introduction to ANSYS

- Overview of ANSYS software suite
- Introduction to simulation-driven product development
- Understanding the user interface and navigation in ANSYS Workbench

Module 2: Fundamentals of Finite Element Analysis (FEA)

- Basics of finite element method (FEM)
- Introduction to FEA concepts and terminology
- Hands-on: Setting up a simple FEA model in ANSYS

Module 3: Structural Analysis with ANSYS Mechanical

- Static structural analysis
- Modal analysis (Eigenvalue analysis)
- Dynamic analysis (Transient and harmonic)
- Fatigue analysis and durability studies

Module 4: Thermal Analysis with ANSYS Mechanical

- Conduction heat transfer analysis
- Convection heat transfer analysis
- Radiation heat transfer analysis
- Thermal stress analysis

Module 5: Fluid Dynamics Analysis with ANSYS Fluent

- Introduction to computational fluid dynamics (CFD)
- Flow simulation basics
- Turbulent flow modeling
- Heat transfer in fluids

Module 6: Multiphysics Simulations

- Fluid-structure interaction (FSI)
- Thermal-electrical coupling
- Thermal-structural coupling


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Module 7: Optimization and Design Exploration

- Design optimization techniques
- Parametric studies
- Response surface methodology (RSM)

Module 8: Introduction to ANSYS Workbench

- Workflow management in ANSYS Workbench
- Integration of different ANSYS modules (Mechanical, Fluent, etc.)
- Project organization and data management

Module 9: Verification and Validation

- Methods for verifying simulation results
- Validation against experimental data or analytical solutions
- Uncertainty quantification and sensitivity analysis

Module 10: Advanced Topics

- Nonlinear structural analysis
- Multiphase flow simulation
- Acoustic and electromagnetic simulations

Module 11: Industry Applications

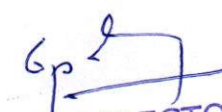
- Case studies from aerospace, automotive, biomedical, and other industries
- Application of ANSYS in real-world engineering problems

Module 12: Project Work

- Hands-on projects to apply ANSYS simulations to solve complex engineering problems
- Presentation of project results and findings

Module 13: Best Practices and Efficiency

- Best practices for setting up simulations
- Optimizing computational resources
- Interpreting simulation results effectively


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Module 14: Certification Preparation (Optional)

- Review sessions for ANSYS certification exams
- Practice tests and quizzes

Module 15: Conclusion and Future Trends

- Summary of key learnings
- Emerging trends in engineering simulation and ANSYS technology


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Ansys Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

1 What does ANSYS primarily facilitate?

- A) Computer-aided design (CAD)
- B) Computer-aided manufacturing (CAM)
- C) Engineering simulation and analysis
- D) 3D printing

Answer: C) Engineering simulation and analysis

2 Which module in ANSYS is used for structural analysis?

- A) Fluent
- B) Mechanical
- C) CFX
- D) DesignModeler

Answer: B) Mechanical

3 What is the main purpose of using ANSYS Fluent?

- A) Structural analysis
- B) Thermal analysis
- C) Fluid dynamics simulation
- D) Optimization

Answer: C) Fluid dynamics simulation


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4 Which type of analysis does ANSYS Mechanical specialize in?

- A) Thermal
- B) Structural
- C) Electromagnetic
- D) Acoustic

Answer: B) Structural

5 What is the function of ANSYS Workbench?

- A) Creating CAD models
- B) Integrating different ANSYS modules
- C) Generating G-code for machining
- D) Performing mathematical calculations

Answer: B) Integrating different ANSYS modules


6 Which analysis type is NOT typically performed using ANSYS software?

- A) Fluid dynamics
- B) Circuit simulation
- C) Thermal analysis
- D) Electromagnetics

Answer: B) Circuit simulation

7 What does the 'verification' process in ANSYS involve?

- A) Checking simulation setup for errors


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B) Checking the spelling of tool names

C) Rendering high-quality images

D) Analyzing market trends

Answer: A) Checking simulation setup for errors

8 Which file format is commonly used for importing geometry into ANSYS?

A) .exe

B) .stp

C) .jpg

D) .doc

Answer: B) .stp

9 What role does ANSYS play in the product development cycle?

A) Manufacturing prototypes

B) Optimizing toolpaths

C) Simulating and analyzing product performance

D) Creating marketing materials

Answer: C) Simulating and analyzing product performance

10 Which of the following is NOT a primary feature of ANSYS?


A) 3D modeling

B) Multi-physics simulations

C) Thermal analysis

D) Web development

Answer: D) Web development


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Marking Scheme

Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks

60
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Date: 09/01/2019

To,

Head of Mechanical Engg.

ICEEM

Aurangabad,

Subject: Sanction for the Introduction of the Course "Ansys" for TE Students for the Academic Year 2018-19

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course " Ansys " for the TE Mech students in the Mechanical Engg Department for the academic year 2018-19


We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:

Course Title: Ansys

Department: Mechanical Engg.

Level: UG

Academic Year: 2018-19


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Director



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Certificate Course Distribution Record Mech. Year:-2018-2019

Course Name:- ANSYS

Sr No.	Name of Student	Signature
1	Sanket S. Wankhede	Sanket
2	Laghane Mahesh Nandkumar	M.L.
3	Kale Satish S.	Kale
4	Nitesh Sillode	Nitesh
5	Ganesh Mundhe	Mundhe
6	Rathod Vikas R.	Vikas
7	Kingaonkar Abhijeet J.	Abhijeet
8	Rathod Sachin L.	Sachin
9	Sabbanwar Bajrang Ramesh	Bajrang
10	Wade Vyanktesh	Wade
11	Arindam Mandal	Mandal
12	Shelke Radhakishan Tukaram	Radhakishan
13	Kolte Bhagyashree A	Kolte
14	Jadhav Sachin	Sachin
15	Bharate Dinesh	Dinesh
16	Kapre Rameshwar	Rameshwar
17	Arun Chaubey	Chaubey
18	Deshmukh Rahul	Rahul
19	Vaidya Mangesh S	Mangesh
20	Harshad Deshpande	Harshad
21	Bembde Balaji B	Balaji
22	Sachin Birajdar	Birajdar
23	Yerne Dipak S	Yerne
24	Kathore Nitin	Nitin
25	Patil Pravin	Pravin
26	Rathi Dipali	Dipali
27	Toke Pritam	Toke
28	Pawar Ashwini	Ashwini
29	Bajaj Ravi	Bajaj
30	Khandagle Kajal	Kajal

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31	Kiran Arsul	<i>Arsul</i>
32	Bhavar Amol S	<i>Amol</i>
33	Lade Samir	<i>Bhavar</i>
34	Nihal Mishra	<i>Nihal</i>
35	Fasate Mukund	<i>Mukund</i>
36	Sigarkanti Gurusharan H	<i>Gurusharan</i>
37	Patil Harshali Dilip	<i>Harshali</i>
38	Bhimrot Shubham Khupchand	<i>Shubham</i>
39	Shinde Mahesh Dattu	<i>Mahesh</i>
40	Pawar Shrikishn Subhash	<i>Shrikishn</i>
41	Gangotri Ganesh Narayan	<i>Gangotri</i>
42	Kharate Amaraja Rajesh	<i>Amaraja</i>
43	Nakod Anuradha Vijay	<i>Nakod</i>
44	Kajale Rushikesh Abasaheb	<i>Rushikesh</i>
45	Bhagat Amit Govindrao	<i>Amit</i>
46	Mule Hanumant	<i>Hanumant</i>
47	Gaurav Warpe	<i>Warpe</i>
48	Dhande Ajay Shaligram	<i>Dhande</i>
49	Deshmukh Shripad	<i>Shripad</i>
50	Dhore Rajashri	<i>Rajashri</i>

gp
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Date: 4/1/19

To,

The Director,

ICEEM

Aurangabad.

Subject: Proposal for Introducing a Course in "3-D modelling" for BE MECH Students for the Academic Year 2018-19

Respected Sir,

I am writing to propose the Introducing a Course in "3-D modelling" for BE MECH Students for the Academic Year 2018-19

This course explores the basics of 3-D modeling software. Students will learn to the use of 3-D modeling software through various sessions during this course.

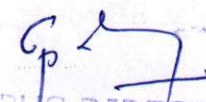
I believe that introducing this course will significantly benefit our students and enhance the academic standards of our Mechanical Department. I kindly request you to consider this proposal and approve the introduction of "3-D modeling" as a part of the curriculum for the upcoming academic semester.

Thank you for considering my request. I am looking forward to your positive response.

The course Objectives, Course outline and Marking Scheme with Assessment are attached herewith this application.

Yours sincerely,

Head of Mechanical Department


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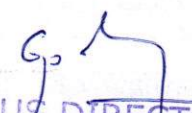
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Tel.: 0240-2558101-10, Fax: 0240-2558111; E-mail: director@iceemabad.com, Website: www.iceemabad.com

Course Objectives:

1. **Introduction to 3-D modelling:** Familiarizing students with the interface, commands, and tools available in 3-D modelling.
2. **Drawing and Editing:** Teaching students how to create and modify 2D and 3D drawings using various drawing and editing commands.
3. **Layer Management:** Understanding the concept of layers in 3-D modelling and learning how to effectively organize drawings using layers.
4. **Dimensioning and Annotation:** Teaching students how to add dimensions and annotations to drawings to convey necessary information.
5. **Blocks and Attributes:** Introducing students to creating and using blocks and attributes to improve drawing efficiency and consistency.
6. **Basic 3D Modeling:** Providing an introduction to 3D modeling techniques in 3-D modelling, including creating basic 3D shapes and objects.
7. **Rendering and Visualization:** Exploring rendering options and visualization techniques to create realistic representations of 3D models.
8. **Customization:** Allowing students to customize 3-D modelling settings, tool palettes, and templates to suit specific workflow needs.
9. **Collaboration and Output:** Teaching methods for sharing 3-D modelling drawings with others, including plotting, publishing, and exporting files in various formats.
10. **Problem Solving and Troubleshooting:** Developing skills in identifying and resolving common issues encountered while using 3-D modelling.


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International Centre of Excellence in Engineering and Management

Gut No.4, Opposite Bajaj Auto Ltd, Aurangabad-Pune Highway, Aurangabad 431136. (M.S.)

Tel.: 0240-2558101-10, Fax: 0240-2558111; E-mail: director@iceemabad.com, Website: www.iceemabad.com

Course Outline:

By the end of the course, students will be able to:

Effectively use 3-D modeling as a professional tool for design, drafting, and collaboration in various industries requiring precision and accuracy in technical drawings and 3D modeling.

Benefits to Students:

Studying 3-D modeling offers several benefits to students such as

1. **Improved Technical Skills:** Mastery of 3-D modelling software enhances students' technical proficiency in computer-aided design (CAD), allowing them to create precise and detailed drawings efficiently.
2. **Career Readiness:** 3-D modelling proficiency is a valuable asset in industries such as architecture, engineering, construction, manufacturing, and product design, making students more attractive to employers.
3. **Increased Employability:** Knowledge of 3-D modelling opens doors to a wide range of job opportunities, including roles as CAD drafters, designers, technicians, and engineers.
4. **Efficiency and Productivity:** 3-D modelling's tools and features streamline the design process, enabling students to produce drawings faster and with greater accuracy compared to traditional methods.
5. **Enhanced Design Visualization:** Students can create 2D drawings and 3D models that visualize concepts and designs effectively, aiding in communication and presentation of ideas.
6. **Collaborative Skills:** 3-D modelling facilitates collaboration among team members by allowing them to work on the same project simultaneously, share files, and manage revisions efficiently.
7. **Professional Development:** Learning 3-D modelling enhances students' professional development by preparing them for industry standards and practices, including the ability to adhere to drawing standards and conventions.
8. **Problem-Solving Abilities:** 3-D modelling teaches students how to analyze design problems and find solutions using CAD tools and techniques, fostering critical thinking and problem-solving skills.

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9. **Certification Opportunities:** Many 3-D modelling courses offer preparation for Autodesk certification exams, which can validate students' skills and enhance their credibility in the job market.
10. **Foundation for Advanced Learning:** Proficiency in 3-D modelling provides a solid foundation for students interested in pursuing further education or training in specialized areas of CAD software or related fields.

3-D modeling Assessment

Multiple-Choice Questions (MCQs) Test Paper

(20 Marks)

Question 1:

Which software is commonly used for 3D modeling in the entertainment industry? A) AutoCAD

B) SolidWorks

C) Blender

D) SketchUp

Answer: C) Blender

Question 2:

What is a polygon in 3D modeling? A) A 3D shape with curved surfaces

B) A flat shape with straight sides

C) A vertex in a 3D model


D) A type of texture mapping

Answer: B) A flat shape with straight sides

Question 3:

Which file format is typically used to export 3D models for printing? A) .STL

B) .JPEG


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C) .MP4

D) .PDF

Answer: A) .STL

Question 4:

In 3D modeling, what is the process of creating a smooth transition between two surfaces called? A)

Extrusion

B) Boolean operation

C) Filletting

D) Chamfering

Answer: C) Filletting

Question 5:

Which term refers to the point where two edges of a 3D model meet? A) Edge

B) Face

C) Vertex

D) Polygon

Answer: C) Vertex

Question 6:


What is the purpose of UV mapping in 3D modeling? A) To create animations

B) To apply textures to a 3D model

C) To build a skeleton for a model

D) To simulate lighting effects

Answer: B) To apply textures to a 3D model


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Question 7:

Which of the following is a commonly used 3D modeling technique? A) Rasterization

B) Vectorization

C) Sculpting

D) Filtering

Answer: C) Sculpting

Question 8:

In 3D modeling, what is a "mesh"? A) A single line in a model

B) A collection of vertices, edges, and faces that define the shape of a 3D object

C) A type of material used in rendering

D) A lighting effect

Answer: B) A collection of vertices, edges, and faces that define the shape of a 3D object

Question 9:

What is the function of a "modifier" in 3D modeling software like Blender? A) To change the color of the model

B) To alter the geometry of a model in a non-destructive way

C) To export the model

D) To apply lighting effects

Answer: B) To alter the geometry of a model in a non-destructive way

Question 10:

Which software is known for its parametric modeling capabilities, often used in engineering and architecture? A) Blender

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- B) AutoCAD
- C) SolidWorks
- D) ZBrush

Answer: C) SolidWorks

Marking Scheme

Sr. No.	Assessment Component	Marks Allocation
1	Multiple-Choice Questions (MCQ)	20 marks
2	Total	20 marks

Head of Department

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Date: 09/01/2019

To,

Head of Mechanical Engg.

ICEEM

Aurangabad,

Subject: Sanction for the Introduction of the Course "3-D Modelling" for BE Students for the Academic Year 2018-19

Dear Sir,

I am pleased to inform you that the College Development Committee has reviewed and approved your proposal to introduce the course " 3-D Modelling " for the BE Mech students in the Mechanical Engg Department for the academic year 2018-19


We commend your initiative in proposing this course, which aligns with the college's commitment to providing our students with up-to-date and relevant educational opportunities. Approved Course Details:

Course Title: 3-D Modelling

Department: Mechanical Engg.

Level: UG

Academic Year: 2018-19


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Director



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Tel.: 0240-2558101-10, Fax: 0240-2558111: E-mail: director@iceemabad.com, Website: www.iceemabad.com**Certificate Course Distribution Record Mech. Year:-2018-2019****Course Name:- 3-D Modelling**

Sr No.	Name of Student	Signature
1	NIRMAL SAMSON LAMUEL	<i>Samson</i>
2	SHARIFF ATEEQ GALIB	<i>Galib</i>
3	BHOGE VINOD SANTARAM	<i>Vinod</i>
4	LOKHANDE AKSHAY ANAND	<i>Akshay</i>
5	KANKUTE KALIDAS GOVIND	<i>Kalidas</i>
6	MOTE SHUBHAM BABAN	<i>Shubham</i>
7	TAKE PRASHANT BHAUSAHEB	<i>Prakash</i>
8	TUPE MAHESH RAJENDRA	<i>Mahesh</i>
9	GAVALI ATUL KACHARU	<i>Atul</i>
10	THORAT MAHESH SAVALIRAM	<i>Thorat</i>
11	BHOKRE RAJRAJESHWAR BHIMRAO	<i>Bhimrao</i>
12	TIWARY MANGALES ANGAD	<i>Mangal</i>
13	CHANGHTE DIPAK DADAPATIL	<i>Dipak</i>
14	JOSHI ANIKET SHARAD	<i>Aniket</i>
15	KHANDEBHARAD AKASH PRAKASH	<i>Akash</i>
16	KANADE DHANANJAY NARAYAN	<i>Dhananjay</i>
17	NIMGAONKAR SANTOSH RAJENDRA	<i>Santosh</i>
18	BALATKAR NILIMA DNYANOBA	<i>Nilima</i>
19	DABHADE RUSHIKESH SHRIRAM	<i>Rushikesh</i>
20	GAWAI SUSHIL KARBHARI	<i>Sushil</i>
21	MANE SACHIN NAGENDRA	<i>Sachin</i>
22	BHAWAR PRATIK KARBHARI	<i>Pratik</i>
23	MALI SHISHIR	<i>Shishir</i>
24	GAIKWAD SWAPNIL KAKASAHEB	<i>Swapnil</i>
25	SHENGULE KRISHNA	<i>Krishna</i>
26	GAJBHAR NAGESH	<i>Nagesh</i>
27	SONUNE PAWAN	<i>Pawan</i>
28	TALURI NARSIMHA	<i>Narsimha</i>
29	MISHRA CHETAN Y	<i>Chetan</i>
30	THORAT MAHESH SAVALIRAM	<i>Mahesh</i>

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