Career Development Centre

DIT
UNIVERSITY
IMAGINE ASPIRE ACHIEVE

Date: 10th August 2020

NOTICE
MECHANICAL DESIGN USING CREO (VAT-17)

Career Development Centre in association with Department of Mechanical Engineering provides an opportunity to our students to learn CREO. PRO E (CREO) is CAD/CAM software developed by PTC, Parametric Technology Corporation. Ro-e will cover the sketching, modelling, assembly, drafting sheet metal and the surface environments of pro-E wildfire. The training will start from 16th August 2020.

Details as follows:

Branch/Year	ME 3rd Year
Organizer Department	Career Development Centre & Department of Mechanical Engineering
Date	Semester Long (5th Semester)
Course Duration	40 Hours
Timings	11:00 AM – 1:00 P.M.
Course Coordinator	Mr. Vibhor Sharma & Mr. Nalin Somani
Venue	Vedanta Computer Lab (2nd floor)

NOTE:

1. The training will run in online mode (till further notice) on MS Team. Students will be assigned batch (as per the schedule) and will be added to their respective MS Teams.
2. It is suggested to all the above-mentioned students to attend the training (detailed schedule will be shared in your respective batch on MS Team).
3. The Department concerned shall notify the details about timings and MS Team batch of the training sessions. In case of any query please contact the Career Development Centre, DIT University.

Gaurav Singh

Head- Career Development Centre

Career Development Cell
DIT University, Dehradun

To:

All Dean / Director / Head of Department
Chairman
Chancellor
Vice Chancellor
Pro Vice Chancellor
Manager Admin
HR Department

For information Please

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VAT-17: Mechanical Design using CREO (Online – MS Team)

Course: B.Tech- ME & ME-AE-3rd Year   **Venue:** Vedanta Computer Lab

Organized by: Department of Mechanical Engineering

Date: 16th August 2020 to 25th October 2020   **Duration:** - 40 Hrs.

Timings: -11:00 AM to 1:00 PM

Objective of Creo Training:

Creo Training at Global Online Trainings makes you more productive than before. It is packed with number of new enhancements and capabilities to help you design the products of the future. Creo Parametric is the new user interface. It allows you to access the commands easily. It allows you to work with your model, define the geometry you want to do and streamlines the design process for you.

While you join for Creo Parametric Online Course, you will learn the core modeling skills &quickly become proficient with Creo Parametric 2.0,3.0,4.0. Topics includes sketching, part modeling, assemblies, drawings, & basic model management techniques. This training course also includes a comprehensive design project that enables you to practice your new skills by creating realistic parts, assemblies, & drawings.

Overview of Creo Training:

Below is the basic overview about Creo Training. The more information will be provided during the Creo Parametric Online course.

PRO E (CREO) is CAD/CAM software developed by PTC, Parametric Technology Corporation. Pro-e will cover the sketching, modeling, assembly, drafting sheet metal and the surface environments of pro-E wildfire. Learn more about Pro E Training at Global Online Trainings.

2D Sketch: Creo Training

To learn about 2D Commands and how to use them, follow the below steps.

Open Creo parametric software. Click on new and select sketch then click on OK button. You will see different command panels like sketching, editing, constrain, dimension tools and inspection tools. You can also find various useful tools like fit view; zoom In, Zoom Out, repaint, and display style and Filters. And you can also find cut, copy and paste commands.

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Why take this course

- This course starts with the basics and slowly takes you into the depth of designing and modelling.

- Almost all-important tools and commands are discussed that are used in industry.

- This course will help you to create your own designs and innovations.

- For any query and trouble, we are always available for you.

Prerequisites to learn Creo Training:

Mechanical/Automobile engineering students can learn Creo Training

Person having knowledge on Auto CAD, Pro -E can learn Creo Training

Any person having designing knowledge can learn Creo Training

Who this course is for:

- Anyone who wants to learn any computer aided designing.
- Individual who wants to learn the Creo/ProE software.
- Mechanical engineers and graduates who are interest is design.
- Working professionals who wants to enhance their skills on CAD software.
- Individuals wanting to get a better job via Creo design skills
- Individuals wanting to list Creo skills in their resume

Training Outcome:

- The students have Learnt how to create 2D sketches using commands such as lines, circles, arcs, rectangles etc.

- Have Learnt how to apply manual and automatic constraints to sketches.

- The students are able to Learn how to edit, move, copy, sketches.

- Created 3D models and shapes using commands such as extrude, revolve, sweep, blend, sweep blend, draft, fillet, chamfer, cutout etc.

- Learnt how to create drawings, projections and drafting of the models.

- Learnt how to assemble and apply constraints to different parts and components

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COURSE FILE

NAME OF COURSE: VAT PROGRAMME-CREO

COURSE CODE: ME333

BRANCH: MECHANICAL Engineering & MECHANICAL Engineering with spec. in Automobile Enggg.

SESSION: 2020-2021

NAME OF FACULTY(S): Dr. Vivek Srivastava

NAME OF COURSE COORDINATOR: Mr. Nalin Somani

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Course Details

Subject Code: ME333

Marks: 100

Number of Lab hours per week: 4

Credits: 0

L-T-P: 0-0-2

Vision & Mission statements of department

Vision of Department

- To established a recognized centre for providing quality technical education.

- To emerge as a research centre addressing the problems related to mechanical engineering.

- To fulfil the requirements of the industry and the society.

- To produces engineers, who prove to be prolific to the industries to attain new heights.

Mission of Department

M1: To impart quality education to the graduates to enhance their skills and capacity that makes them competitive mechanical engineers globally.

M2: To develop research facilities that stimulates faculty, staff and students with opportunities to utilize the technical knowledge.

M3: To develop research facilities in order to contribute in the knowledge creation for serving betterment of society.

M4: To provide the students with academic environment of excellence, leadership, ethical guidelines and lifelong learning needed for a bright career.

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PEO, PO and PSO

Program Educational Objectives (PEOs)

PEO1: To provide foundation in the mathematical, scientific and engineering fundamentals necessary for professional developments of students in mechanical engineering.

PEO2: To provide ability to analyze, interpret apply engineering proficiency for the solutions of real life mechanical engineering problem.

PEO3: To develop skills to analyze and design the mechanical system used in industries for better employability.

PEO4: To develop the leadership and innovation qualities among students for lifelong learning.

PEO5: To instill the professional attitude towards team work and multidisciplinary approach to solve the social problems.

Program Outcomes (PO): - {For B. Tech Program}

PO 1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 2: Problem analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO 4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

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PO 5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO 6: The Engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO 7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO 8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO 12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSOs)

Name of Program: - {B. Tech. ME}

PSO1: Graduate can able to design mechanical components as per the desired specifications and requirements.

PSO2: Apply the knowledge of different manufacturing technologies in various industries.

PSO3: Execute the knowledge of thermal system design in process industries and power systems.

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Course Objectives and Outcomes

Course Objective

The Value Added Courses aim to provide additional learner centric graded skill oriented technical training, with the primary objective of improving the employability skills of engineering students.

Course Outcomes:

CO1: To provide students an understanding of the expectations of industry.

CO2: To improve employability skills of students of DITU.

CO3: To bridge the skill gaps and make students industry ready.

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List of Registered Students

P-1 Group

S.No	Student roll no	Student	Tel number	Email
1	180101011	MUKESH NEGI	8475064748	mukkidinu59@gmail.com
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P-2 Group

S.No	Student roll	Student	Tel	Email

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	no		number	
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Time Table

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TIME TABLE ODD SEM 2020-21
DEPARTMENT OF MECHANICAL ENGINEERING
DIT UNIVERSITY

CLASS COORDINATOR Dr. Vivek Srivastava

YEAR: 3RD SEMESTER: V ROOM NO: 24 SECTION A

Periods	I	II	III	IV	V	VI	
Days	9:00 - 9:50	10.00 - 10.50	11.00 - 11.50	12.00 - 12:50	01.00 - 02:00	02.00 - 02.50	03.00 - 03.50
MON	ME347-24/ ME348-25	ME301	ME301(P1)			ME302	ME342(T1)-25/ ME345-24
TUE	ME342-24/ ME345-25	ME301	ME342(T2)	ME347(T2)-24/ ME348(T2)-25		ME302	ME301(P2)
WED	ME347-24/ ME348-25	ME301	ME303(P1)	ME302(P2)		HS301	HS385
THU		ME301(T2)	ME303(P2)	ME302(P1)		HS301	HS385
FRI	ME347-24/ ME348-25	ME342-24/ ME345-25	ME332(P1)	ME333(P1)		HS301	
SAT	HS382	ME347(T1)-24/ ME348(T1)-25		HS382		ME302	ME301(T1)

Subject Code & Name	L T P	Teachers Name
HS301: APTITUDE AND SOFT SKILLS 3 (Vth Sem)	3 0 0	
ME301 Heat Transfer	3 1 2	Dr Manoj Kumar(L+T)/Dr Anil Patil(P1+P2)
ME302 Manufacturing Technology	3 0 2	Mr. Nalin Somani
ME303 Fluid Machinery - Lab Course	0 0 2	Mr. Pankaj Singh Chandel
ME342 Composite Materials	2 1 0	Mr. Pankaj Singh Chandel
ME345 Industrial Engineering & Management	3 0 0	Dr. Vivek Srivastava
ME347 Advanced Theory of Machine	3 1 0	Mohammad Aftab Azam
ME348 Advanced Design of Machine Element	3 1 0	Mohammad Faraz Azeem
ME332 Electro Discharge Machining	0 0 2	Mr. Nalin Somani
ME333 CREO Design Software	0 0 2	Dr. Vivek Srivastava
HS382 Literature, Language and Society	2 0 0	
HS3825 Engineering Economics	2 0 0	

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TIME TABLE ODD SEM 2020-21
DEPARTMENT OF MECHANICAL ENGINEERING
DIT UNIVERSITY

CLASS COORDINATOR   Dr. Anil Patil

| YEAR: 3RD | | | SEMESTER: V | | ROOM NO: | 25 | SECTION | B |

Periods	I	II	III	IV	V	VI	
Days	9:00 - 9:50	10.00 - 10.50	11.00 - 11.50	12.00 - 12:50	01.00 - 02:00	02.00 - 02.50	03.00 - 03.50
MON	ME348	ME301	ME368	ME368(T1)		ME302	ME342(T1)-25/ ME345-24
TUE	ME342-24/ ME345-25	ME301	ME342(T2)	ME348(T2)-25		ME302	HS301
WED	ME348	ME368		ME303(P1)			HS385
THU	ME302(P1)		ME301(P1)	HS301		ME301	HS385
FRI	ME348	ME342-24/ ME345-25	ME332(P1)	ME333(P1)		ME301(T1)	HS301
SAT	HS382	ME348(T1)-25	ME368	HS382		ME302	

Subject Code & Name	L T P	Teachers Name
HS301: APTITUDE AND SOFT SKILLS 3 (Vth Sem)	3 0 0	
ME301 Heat Transfer	3 1 2	Dr Anil Patil
ME302 Manufacturing Technology	3 0 2	Mr. Bipin Kishor
ME303 Fluid Machinery - Lab Course	0 0 2	Mr. Bipin kumar
ME342 Composite Materials	2 1 0	Mr. Pankaj Singh Chandel
ME345 Industrial Engineering & Management	3 0 0	Dr. Vivek Srivastava
ME348 Advanced Design of Machine Element	3 1 0	Mohammad Faraz Azeem
ME368 Automotive Transmission Systems	3 1 0	Mohammad Aftab Azam
ME332 Electro Discharge Machining	0 0 2	Mr. Nalin Somani
ME333 CREO Design Software	0 0 2	Dr. Vivek Srivastava
HS382 Literature, Language and Society	2 0 0	
HS3825 Engineering Economics	2 0 0	

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SYLLABUS / LESSON PLAN

Session: 2020 - 21		Subject Code:ME 333	Semester: V	Credit : 3
Unit No	Planned topic	Scheduled Day(s)	Lecture/Lab	Delivery Method
1	Introduction	Friday, August 28, 2020	L1	ICT
2	Sketching	Friday, September 04, 2020	L2	ICT
3	Parts	Friday, September 11, 2020	L3	ICT
4	Editing tools	Friday, September 18, 2020	L4	ICT
5	Assembly creation	Friday, September 25, 2020	L5	ICT
6	Drawing View & Mechanism	Friday, October 09, 2020	L6	ICT
7	Sheet Metal	Friday, November 06, 2020	L7	ICT
8	Format Mark up and weld mate	Friday, November 20, 2020	L8	ICT
9	Creo Stimulation & Analysis	Friday, November 27, 2020	L9	ICT

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List of Practical

1. Create 2D sketches using commands such as lines, circles, arcs, rectangles etc

2. Apply manual and automatic constraints to sketches.

3. Apply edit, move, copy, sketches.

4. Create 3D models and shapes using commands such as extrude, revolve, sweep, blend, sweep blend, draft, fillet, chamfer, cutout etc.

5. Create drawings, projections and drafting of the models.

6. Assemble and apply constraints to different parts and components.

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Evaluation Scheme and Guidelines

Evaluation Instrument	Weightage
FINAL EXAM	100 %

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NOTES

Quick Start Guide for Creo Elements/Pro 5.0

W. Durfee, September 2011

Introduction

This is a quick start guide for the Creo Elements/Pro CAD application from Parametric Technologies (PTC). It was inspired by the "Beginner's Guide to Pro/ENGINEER" written by Professor Tom Chase, Department of Mechanical Engineering, University of Minnesota, that covered Creo version 2000i2. Creo Wildfire was released in February, 2003, Wildfire 2.0 in 2004, Wildfire 3.0 in 2006 and additional versions since. In 2011, Creo was rebranded to Creo, the umbrella name for all PTC product lifecycle management applications. Creo Elements/Pro 5.0 is essentially the same as Creo Wildfire 5.0. The Quick Start Guide was written for students in course ME 2011 Introduction to Engineering at the University of Minnesota. Others may find it useful as a means for getting going with Creo. This document along with other Creo resource material is available on-line at www.me.umn.edu/courses/me2011/

The Quick Start Guide takes you through the creation of a rectangular block with a hole (cubic part), a pin that fits in the hole (pin part"), an assembly of the pin fitted into the hole, and an engineering drawing for the cubic part. The assembly looks like this, although your colors may and should be different.

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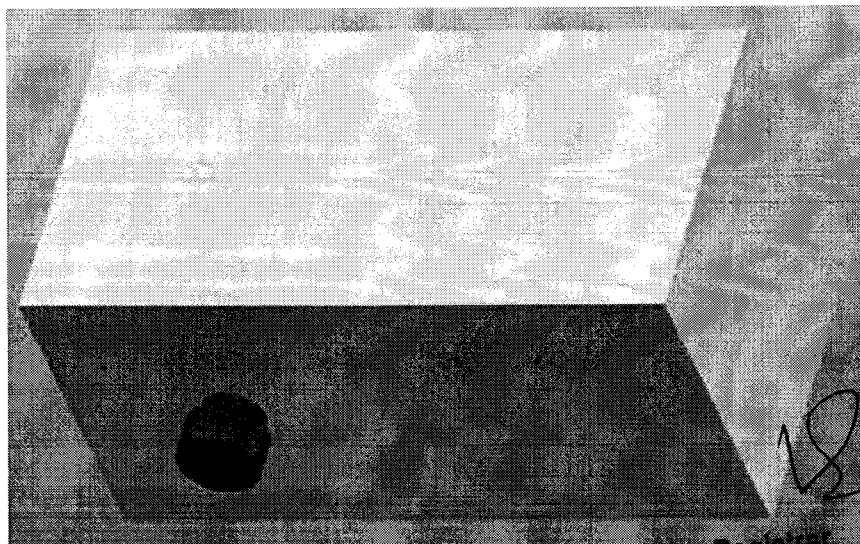
Suggested strategy for completing the Quick Start Guide

Before starting Creo, skim this document to get a sense of what you have to do. Then start Creo and have it and this document side-by-side on your screen as you progress through the tutorial.

Notation

1. L-click means click with the left mouse button, C-click and R-click mean center and right button clicks.
2. Mouse over means move the pointer over the object without clicking
3. dddd > eeee > ffff > ... means action dddd followed by eeee and so on. Typically this is a sequence of menu selections or options in a dialog box.
4. Select means left-click. Items selected in the graphics window will turn red. You will have to un-train yourself from double-clicking as Creo is a single click application.

Starting Creo

This guide assumes you are running Creo Elements/Pro Schools Edition under Windows on your own computer. Startup details for other computers may differ.

To start Creo, Windows Start button > Creo Elements/ProDepending on your computer configuration, it can take up to one minute to load. The Creo startup screen is shown below, although you may have some variation in the embedded browser window.
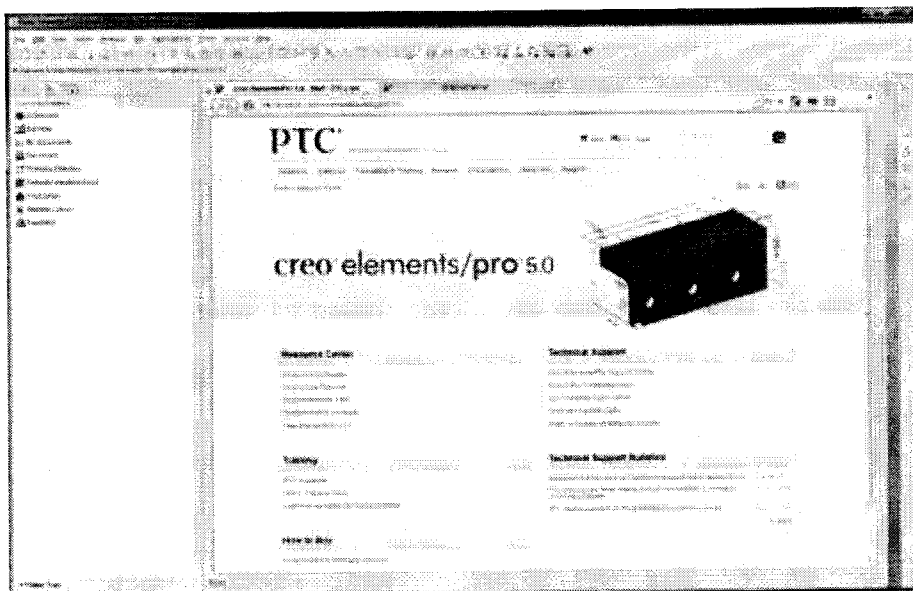
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In the navigator area on the left with the folders, double click on your home directory folder, then in the folder window, right click to create a new folder called Proe. Open that folder then create another folder inside called Guide (or whatever other name you want to give this assignment). It is good practice to have a separate folder for each Creo assignment.

Right click on the Guide folder, and select Set Working Directory. (Or File > Set Working Directory, then select a directory). Now all new and saved files will go to that directory.
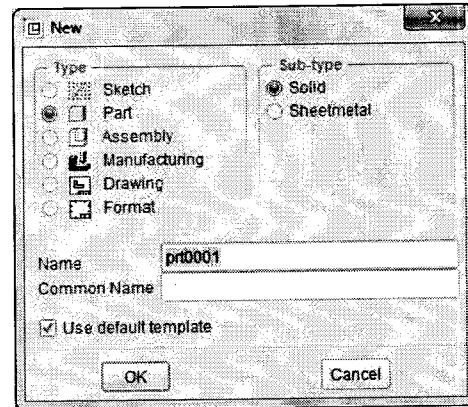
Note: If you are running Creo on your own computer and on startup you get odd dialog boxes or Creo quits after showing its startup screen, try connecting to the Internet and then running Creo. This has to do with how Creo handles your license.

Create the cubic part

To start a new part, File > New. You'll get the dialog box shown at the right. Select Part, then in the Name box enter "cubic". Keep the Use default template option checked. Hit OK.

A set of default datum planes will appear, marked FRONT, TOP, and RIGHT as shown in the next figure.
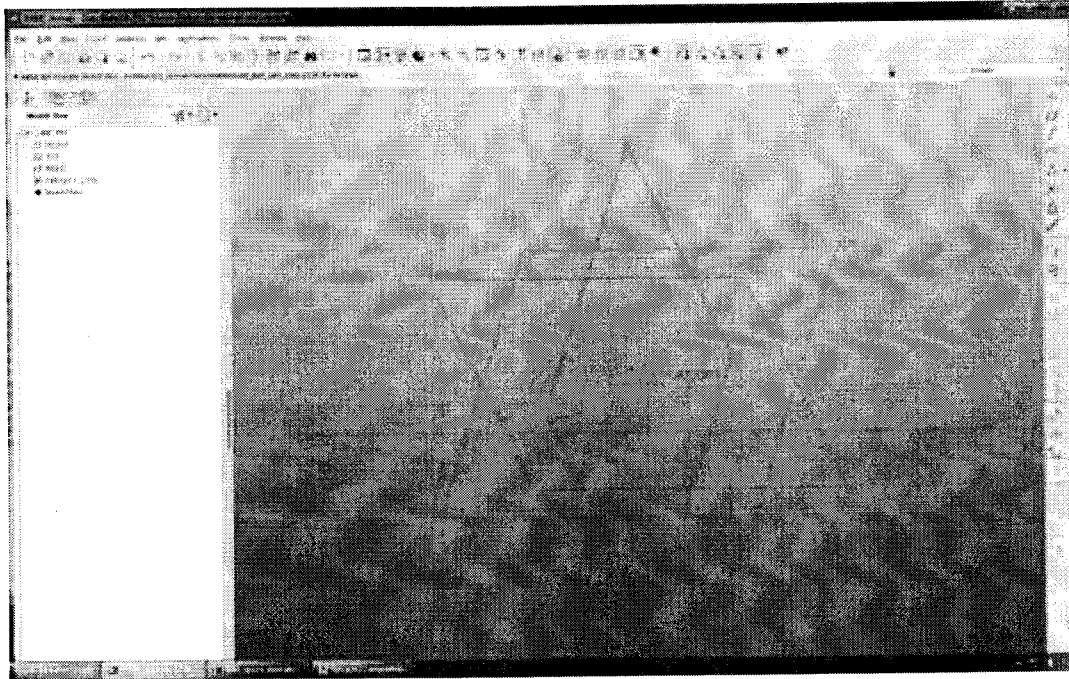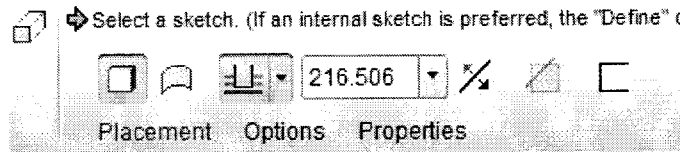
Note that as you mouse over the planes without clicking, they will turn blue to indicate they are highlighted and ready to select. Depending on the speed of your computer, you may have to hold the mouse over the feature before it turns blue. When a feature is selected with a left mouse click, it will turn red. Get in the habit of whenever you are about to click on something in the drawing window confirm that it has turned blue, otherwise it is easy to select the wrong item.

From the right tool bar select the Extrude tool button . You are telling Creo that you want to extrude a part whose cross-section you will sketch.

The Extrusion dashboard will appear at the top of the drawing area

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⇨ Select a sketch. (If an internal sketch is preferred, the "Define" (

216.506

Placement   Options   Properties

Select Placement then Define. The Sketch dialog box will pop up at the top right.

Hover the mouse over the FRONT datum plane until it turns blue, then left click to select. This lets Creo know you want to sketch the cross-section of the extrusion on the front datum plane.

Click the Sketch button in the Sketch dialog box.

You are now in the sketcher, ready to create the 2-D cross section of your part. The sketcher has a main drawing window and a collection of drawing tools to the right as shown below.
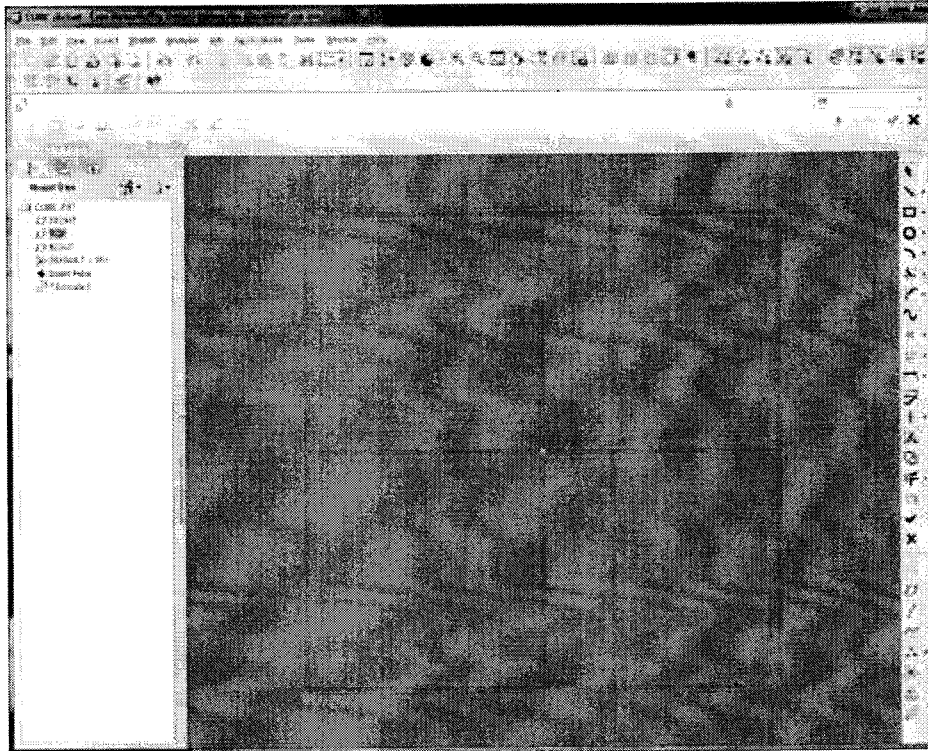
Draw the rectangular cross section of the cubic part using the line tool ![line tool icon] selected from the right tool bar. Left click at the origin to place the first corner, then move right along the horizontal axis and left click to place the second corner, then up and click to create corner three, then back to the vertical axis to place corner four, then finally back to the origin and left click. Move away, then center click to end.
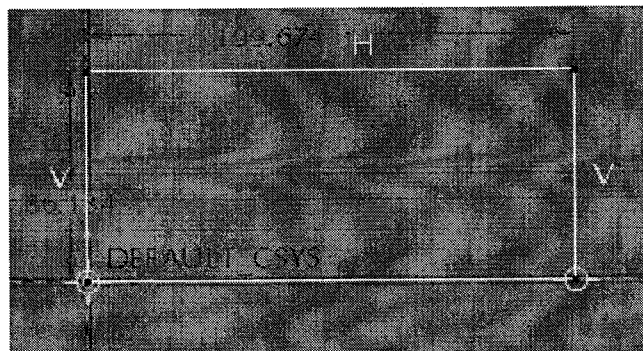
Notice that as you draw, letters may flash up near the lines. This is the Creo Intent Manager working in the background, guessing what you are intending to create. For example, the 'H' indicates that the line will be constrained to be horizontal. If 'L1' appears in two places, the Intent Manager believes...

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constrain the two dimensions to be equal. The Intent Manager is convenient and frustrating at the same time. Learn not to fight the Intent Manager because generally its guesses are pretty good. The trick is to draw an exaggerated shape and then fix later by fine-tuning the dimensions. For example if you want to draw a line that is three degrees from vertical, draw it well off vertical, then later go back in and dimension the three degrees. If you try and draw it actually at three degrees, the Intent Manager will snap the line to vertical. For the cubic cross section, draw the width wider than the height or else the Intent Manager will assume you are trying to draw a square.

To summarize, L-click to set the points. (No dragging with the button held down.) After closing the rectangle, pull the cursor away from the last point and C-click to end.

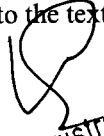Click the Select tool from the right toolbar.

The dimensions of the rectangle will appear in light gray. Double click on any dimension to change. The width should be 8.00 and the height 4.00. The drawing will regenerate to the new dimensions after each entry.

If the object gets squished into a small area of the screen, hit the Refit button located at the top toolbar.

Tip: If you accidentally tip the sketch plane so that it is no longer flat to the display, you can reorient with the Sketch Orientation button found on the top tool bar.

When the dimensions are correct, click the Accept button at the bottom of the right toolbar to complete the sketch.

Back in the Extrude dashboard at the bottom left, enter 4.0, the depth of the part, into the text box just to the right of the Depth Specifications Options.

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Placement   Options   Properties
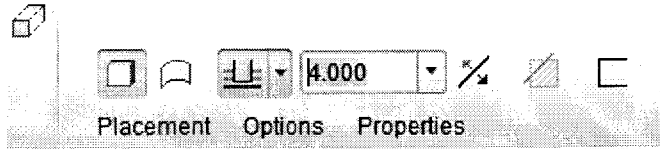
Click the Accept button ☑ (the check mark) at the far right of the Extrude dashboard to finish the extrude process.

Your part is complete. It is a rectangular block 8.00 wide by 4.00 tall by 4.00 deep.

Save your part by File > Save. Click OK in the Save Object dialog box.

Hint: If you find yourself clicking and clicking with nothing happening, look at the top message area of the screen. Creo may be asking you for something.

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::: Forms ME333_CREO Design ME333 (ME333_CREO Desig... - Saved   ? (vs)

| ATISHEY SINGH   ∨ | Time to complete: 01:01   Points: 6/10

1. Mouse is an input device   1   / 1 pt
                                                       Auto-graded

| ◉ Yes   ✓ |

○ No

○ Some times

○ Most of the times

2. Full form of CPU is   1   / 1 pt
                                                       Auto-graded

| ◉ Central Processing Unit   ✓ |

○ Color parrot Unit

○ Color Polar Uber

○ Central Public Unit

3. Solid modeling requires heavy hardware as compared to   1   / 1 pt
wireframe modeling   *Auto-graded*

| ◉ Yes   ✓ |

○ No

○ Some times

○ Most of the times

4. Digitizer is an input device   0   / 1 pt

○ Yes

◉ No

○ Some times

○ Most of the times

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5. To create a CAD drawing, commands are frequently selected from a/an:

0 / 1 pt
Auto-graded

- ⦿ Directory.   ✕
- ◯ Appendix.
- ◯ Table of contents.
- ◯ Toolbar.   ✓

6. CAD can NOT be used in which of the following engineering fields? Select that apply.

1 / 1 pt
Auto-graded

- ◯ civil
- ◯ mechanical
- ⦿ chemical   ✓
- ◯ elecrtical

7. "The process of designing consists of -------------------- identifiable steps."

0 / 1 pt
Auto-graded

- ⦿ 8   ✕
- ◯ 5
- ◯ 4
- ◯ 6   ✓

8. The resolution of an image is defined by?

0 / 1 pt
Auto-graded

- ◯ AVI
- ⦿ JPG   ✕
- ◯ GIF
- ◯ DPI   ✓

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9. Producing photo-realistic images and the ability to use millions of colors in an image is an advantage of?

    1   / 1 pt
    Auto-graded

- ○ Vector based graphics
- ◉ Raster based graphics   ✓
- ○ In-line illustrations
- ○ Option 4Framing graphics

10. Full form of LCD is

    1   / 1 pt
    Auto-graded

- ◉ Liquid Crystal Display   ✓
- ○ Liquid Color Display
- ○ Lamp Color Display
- ○ Latest Color Display

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:::   Forms(https://www.office...ME333_EndTerm_Lab_Perform...ME333_CREO Design Sof...   ?   (VS)

       ⊙   Preview   ☺   Theme   Share   •••

Questions   Responses   39

ME333_EndTerm_Lab_Performance (ME333_CREO Design Software_5_P2_Odd_sem_2020) (20 Points)

The time allowed for the quiz is 10 minutes and 15 Minutes for the Subjective Write-up. 5 Minutes is for the submission. Pls submit in time.

Section 1   •••

1. 3D SCANNING IS A *
(1 Point)

    ◯   Computation

    ◯   printing

    ◯   Digitization ✓

    ◯   Reverse Engineering

ME333_EndTerm_Lab_Performance (ME333_CREO Design Software_5_P2_Odd_sem_2020)

The time allowed for the quiz is 10 minutes and 15 Minutes for the Subjective Write-up. 5 Minutes is for the submission. Pls submit in time.

* Required

* This form will record your name, please fill your name.

1. 3D SCANNING IS A *
   (1 Point)

   ○ Computation

   ○ printing

   ○ Digitization

   ○ Reverse Engineering

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2. A COORDINATE MEASURING MACHINE (CMM) *
(1 Point)

○ Non-Contact type Scanner

○ Continuous type Scanner

○ Contact type Scanner

○ All of the above

3. POINT CLOUD IN 3D SCANNING IS *
(1 Point)

○ Accumulation of X, Y, Z points

○ scattering of X, Y, Z points

○ Clustering of X, Y, Z Points

○ All of the above

4. 3D SCANNING DATA COLLECTED IS *
(1 Point)

○ Shape

○ Color

○ Lines & Curves

○ All of the above

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5. A LASER SCANNER AT A TIME CAN *
(1 Point)

○ Scan only one line

○ Scan only two line

○ Scan only three line

○ Scan only Points

6. What is Digital Fabrication? *
(1 Point)

○ process of translating a digital design developed on a computer into a physical object

○ Graphics

○ Printing

○ All of the above

7. The computer communicates with the user via: *
(1 Point)

○ CPU

○ CRT

○ Graphics

○ Display button

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8. Which is a solid modeling method *
(1 Point)

○ Spatial Occupancy Enumeration

○ Octree

○ Quadtree

○ All of the above

9. To create a CAD drawing, commands are frequently selected from a/an: *
(1 Point)

○ Directory.

○ Appendix.

○ Table of contents.

○ Toolbar.

10. CAD can NOT be used in which of the following engineering fields? Select that apply. *
(1 Point)
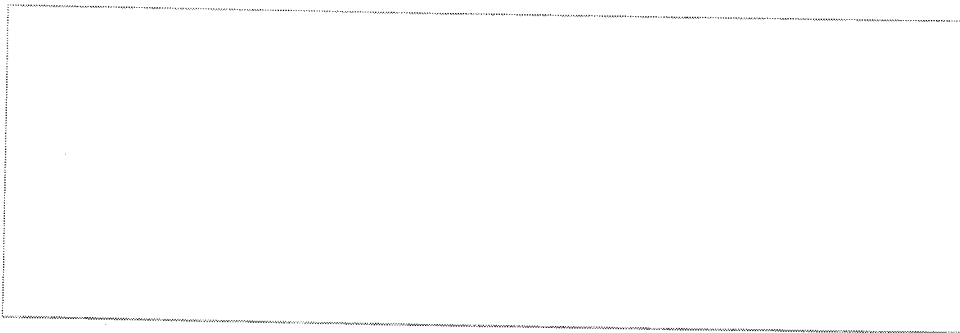
○ civil

○ mechanical

○ chemical

○ elecrtical

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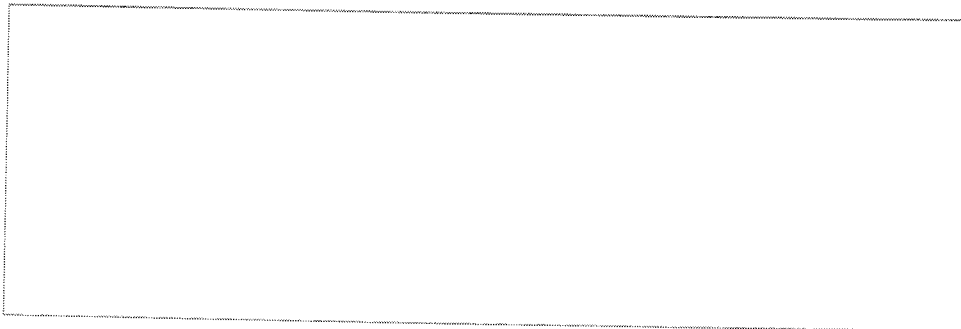
Lab Performance- Subjective

The time allowed for the quiz is 10 minutes and 15 Minutes for the Subjective Write-up. 5 Minutes is for the submission. Pls submit in time. No Separate file is required to be uploaded. Answer has to be given in the space provided only.

11. What would be the steps of designing and modeling a part? *
(5 Points)

12. Your company has asked to purchase a CAD software for the company. How you will select the appropriate CAD/software? *
(5 Points)

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Annexure - II

Value added course Details (Academic Year: 2020-21)

VAT Course Name: Mechanical Design using CREO
VAT Code: VAT 17
Duration in Hours: 32
Number of Students Enrolled: 85
Number of Students Completed: 81

Grades:	G= GOOD ; S = Satifactory ; P = Poor ; W = Withdraw			
Student ID	Student Name	Program/Course	Year	Passing Grade
190106911	HIMANSHU SEMWAL	BTME	3rd Year	G
190106918	MOHD AADIL	BTME	3rd Year	G
180106055	SURYA PRAKASH	BTME	3rd Year	S
190106912	NIPUN BHARDWAJ	BTME	3rd Year	S
180101011	MUKESH NEGI	BTME	3rd Year	S
180106016	KARAN TIWARI	BTME	3rd Year	S
190106915	BIPUL KUMAR	BTME	3rd Year	G
190106917	NAVEEN NEGI	BTME	3rd Year	G
190106910	DEVENDRA SINGH KARKI	BTME	3rd Year	P
180106031	MILIND SAXENA	BTME	3rd Year	S
180113028	APURV RAJ	BTME-AE	3rd Year	G
180113021	KULDEEP SINGH	BTME-AE	3rd Year	G
180113023	SURAJ KUMAR	BTME-AE	3rd Year	S
180106013	SHUBHAM PANCHAL	BTME	3rd Year	S
180106043	CHIRAG SHRIVASTAVA	BTME	3rd Year	G
180106008	AMAN MAMGAIN	BTME	3rd Year	S
180106003	AHMAD ATHAR	BTME	3rd Year	S
190106916	DEEPAK YADAV	BTME	3rd Year	G
180106017	SHREY KUKRETI	BTME	3rd Year	G
180113010	NAMAN RAWAT	BTME-AE	3rd Year	S
180113025	RAKSHIT SINGH	BTME-AE	3rd Year	S
180106027	ATISHEY SINGH	BTME	3rd Year	S
190113902	SUNIL PANWAR	BTME-AE	3rd Year	G
180113019	MRINAL THAKURI	BTME-AE	3rd Year	P
180106049	ANUJ GUPTA	BTME	3rd Year	S
190106913	SHIVAM JOSHI	BTME	3rd Year	S
180113001	SHREYASH KUMAR SINGH	BTME-AE	3rd Year	G
180106051	PURNENDU KUMAR SINGH	BTME	3rd Year	G
180106005	GAURAV GUPTA	BTME	3rd Year	S
180106032	SUNDARAM BARTHWAL	BTME	3rd Year	S
180113014	SATYAM BARTHWAL	BTME-AE	3rd Year	G
180106036	RAJAT JOSHI	BTME	3rd Year	S
180101020	SURUCHI CHAUHAN	BTME	3rd Year	S
180106047	ASHISH BISHT	BTME	3rd Year	G
180113013	VAIBHAV SINGH RAWAT	BTME-AE	3rd Year	G
180106018	NITIN SEMWAL	BTME	3rd Year	P
180106010	RITURAJ SHARMA	BTME	3rd Year	S
180106034	AYUSH SRIVASTAVA	BTME	3rd Year	G
180106029	SARTHAK SAINI	BTME	3rd Year	G

180106038	ANSHUL JOSHI	BTME	3rd Year	S
180113026	BHAWESH KHATRI	BTME-AE	3rd Year	S
180113002	MILJOT SINGH GAMBHIR	BTME-AE	3rd Year	G
180113031	SANCHIT AGARWAL	BTME-AE	3rd Year	G
180113011	VINAYAK AGRAWAL	BTME-AE	3rd Year	S
180106002	APURAV GUPTA	BTME	3rd Year	P
190106900	ANUPAM KIMOTHI	BTME	3rd Year	G
180106001	PRASOON TRIPATHI	BTME	3rd Year	S
180106037	BHARAT THAKUR	BTME	3rd Year	S
180113029	YASH CHAUDHARY	BTME-AE	3rd Year	G
180113008	ABHINAV PAL	BTME-AE	3rd Year	G
180106046	AYUSH SHRIVASTAV	BTME	3rd Year	S
180113017	PIYUSH MITTAL	BTME-AE	3rd Year	S
180113003	DASHMESH SINGH SURI	BTME-AE	3rd Year	G
180106044	ANKIT KUMAR SINGH	BTME	3rd Year	G
180106015	UJJAWAL BHANDAARI	BTME	3rd Year	S
180106030	KARTIK BHATT	BTME	3rd Year	S
180106022	SUNIDHI SHARMA	BTME	3rd Year	G
180106011	ABHISHEK RAWAT	BTME	3rd Year	G
180113024	PIYUSH GUPTA	BTME-AE	3rd Year	S
180113004	NIKHIL NEGI	BTME-AE	3rd Year	S
180106050	RAHUL RAJ	BTME	3rd Year	G
180106023	MOHD RAGHIB	BTME	3rd Year	S
180113007	SYED BILAL AHMAD	BTME-AE	3rd Year	S
180106035	SUMEDHA BAIDYA	BTME	3rd Year	G
180113020	ROHIT NEGI	BTME-AE	3rd Year	G
180106057	AJAY BHAN	BTME	3rd Year	S
180106009	ADITYA RAWAT	BTME	3rd Year	S
180113030	KANWAL SINGH	BTME-AE	3rd Year	G
180106053	PIYUSH GAUR	BTME	3rd Year	G
180106004	SURYANSH GOYAL	BTME	3rd Year	S
180106028	PRABHAT KUMAR JHA	BTME	3rd Year	S
180106019	PRASHANT JOSHI	BTME	3rd Year	G
180106041	SAHIL RAJ	BTME	3rd Year	G
180106012	PRAJJWAL CHHIMWAL	BTME	3rd Year	S
190113900	RISHAV SINGH	BTME	3rd Year	S
180113018	AMIT RAWAT	BTME-AE	3rd Year	G
180106054	AYUSH NEGI	BTME	3rd Year	S
180113022	ROHAN VYAS	BTME-AE	3rd Year	S
180113012	ANKIT NEGI	BTME-AE	3rd Year	G
180106014	SAGAR SUNIL BHATT	BTME	3rd Year	G
180113009	ANIL SINGH KUNWAR	BTME-AE	3rd Year	S
180106024	RITIK OJHA	BTME	3rd Year	S
180106021	ANKIT SINGH PANWAR	BTME	3rd Year	G
180106052	HIMANI SINGH	BTME	3rd Year	G
180113006	OJAS RATURI	BTME-AE	3rd Year	S

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