



Certification Course on Computer Aided Analysis &
Simulation

Resource Person : Sri U.Pradeep Kumar

Co-ordinator : Sri D. Merwin Rajesh

Date(s) of Event: 24/08/2020 to 11/09/2020

Organizing department: Mechanical Engineering



K.S.R.M.COLLEGE OF ENGINEERING

(UGC-AUTONOMOUS)

Kadapa, Andhra Pradesh, India-516 005

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

Cr./KSRMCE/(Department of ME)/2020-2021

Date: 17/07/2020

To

The Principal,

KSRM College of Engineering,

Kadapa.

Respected Sir

Sub: KSRMCE-(Department of ME) permission to conduct certification course on "Computer Aided Analysis & Simulation"-Request-Reg.

It is brought to your kind notice that, with reference to the cited, the ME department is planning to conduct Certification Course on "Computer Aided Analysis & Simulation" for B.Tech, VI Sem Students from 24 Aug, 2020 to 11 Sep, 2020. In this regard I kindly request you to grant permission to conduct the certification course. This is submitted for your kind perusal.

Thanking you sir,

Yours Faithfully

Sri D. Merwin Rajesh
Asst. Prof, Dept. ME

KSRMCE, Kadapa.

Forwarded to
Principal Sir
W. Sankar

Permitted
U. S. S. Murthy

To the Director for Information
To All Deans/HoD's/IQAC



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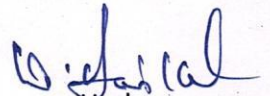
Date: 17/08/2020

Circular


All the B.Tech VI Sem ME students are hereby informed that department of MECHANICAL is going to conduct certificate course on "Computer Aided Analysis & Simulation" interested students may register their names on or before 22-08-2021, 5 PM.

For any queries contact faculty coordinator:

Sri D. Merwin Rajesh, Asst.Prof, Dept.ME, KSRMCE, Kadapa.


Hod

Professor & head
Department of Mechanical Engineering
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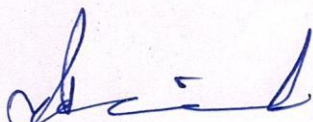
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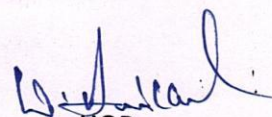
Department of Mechanical Engineering
Certification Course on **Computer Aided Analysis & Simulation**

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Syllabus

Chapter-1

INTRODUCTION TO FEA AND ANSYS:

Introduction to FEA, Key Assumptions in FEA, Types of Analysis, Important terms and Definitions, Setting the Analysis Preferences, Units in ANSYS, Exiting ANSYS, Self-and Evaluation Test.

Chapter-2

BASIC SOLID MODELING:

Solid modeling in ANSYS, Solid modeling methods, Considerations before creating a model for analysis, creating geometric entities, creating and modifying work planes and coordinate systems in ANSYS.

Chapter-3

ADVANCED SOLID MODELING

Advanced Solid Modeling, Creating complex solid models by performing boolean operations, modifying the solid model, Deleting solid model entities, importing solid models, importing the IGES file, importing models from Pro/ENGINEER and importing the model from unigraphics.

Chapter-4

FINITE ELEMENT MODELING:

An overview of the Finite element modeling, element attributes, real constants, material properties, multiple attributes, assigning multiple attributes before meshing, assigning default attributes before meshing, modifying attributes after meshing, verifying assigned attributes and element attributes table.

THERMAL ANALYSIS:

Thermal analysis, important terms used in thermal analysis, types of thermal analysis and performing steady-state thermal analysis.

Chapter-5

SOLUTION AND POSTPROCESSOR:

Solution, defining the new analysis type, restarting the analysis, setting solution controls, setting analysis options, solving the analysis problem and post processing the result.

GENERATING THE REPORT OF ANALYSIS:

Starting the ANSYS report generator, capturing images, animations, tables and lists for the report, compiling the report and changing the default settings of the ANSYS report generator. Error estimation in solution, percentage error in energy norm, element energy error, and element stress deviations, maximum and minimum stress bounds.

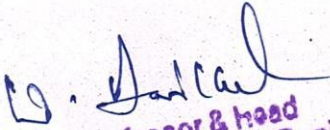
Learning References:

1. <https://www.ansys.com/academic/terms-and-conditions>
2. <https://www.featuredcustomers.com/vendor/ansys/testimonials>
3. <https://www.featuredcustomers.com/vendor/ansys>
4. <http://research.me.udel.edu/~lwang/teaching/MEx81/ansys56manual.pdf>
5. <https://www.afs.enea.it/project/neptunius/docs/fluent/html/ug/node971.htm>
6. <https://www.afs.enea.it/project/neptunius/docs/fluent/html/ug/node332.htm>

Course outcome:

On completion of the course, the student should be able to:

- Learn ANSYS-Analysis Software/Any analysis software.
- Have a good grip on simulations of the models any of the analysis software.
- The student will be able to appreciate the utility of the tools like ANSYS or FLUENT in solving real time problems and day to day problems.
- Use of these tools for any engineering and real time applications.
- Acquire knowledge on utilizing these tools for a better project in their curriculum as well as they will be prepared to handle industry problems with confidence when it matters to use these tools in their employment.


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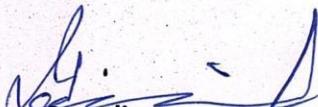
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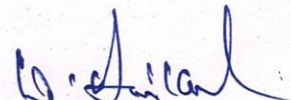
Certification Course on Computer Aided Analysis & Simulation

Schedule

Timing: 4:00pm – 6:00pm

S.No	Date	Course Coordinator	Topic Covered
1	24-08-2020	Sri U. Pradeep Kumar	Introduction to FEA, Key Assumptions in FEA
2	25-08-2020	Sri D. Merwin Rajesh	Types of Analysis, Important terms and Definitions
3	26-08-2020	Sri U. Pradeep Kumar	Setting the Analysis Preferences, Units in ANSYS, Exiting ANSYS
4	27-08-2020	Sri D. Merwin Rajesh	Solid modeling in ANSYS, Solid modeling methods
5	28-08-2020	Sri U. Pradeep Kumar	Considerations before creating a model for analysis
6	29-08-2020	Sri D. Merwin Rajesh	creating and modifying work planes and coordinate systems in ANSYS.
7	01-08-2020	Sri U. Pradeep Kumar	Advanced Solid Modeling, Creating complex solid models by performing boolean operations
8	02-09-2020	Sri D. Merwin Rajesh	importing solid models, importing the IGES file
9	03-09-2020	Sri U. Pradeep Kumar	importing models from Pro/ENGINEER and importing the model from unigraphics.
10	04-09-2020	Sri D. Merwin Rajesh	Advanced Solid Modeling, Deleting solid model entities, importing solid models.
11	05-09-2020	Sri U. Pradeep Kumar	Thermal analysis, important terms used in thermal analysis
12	06-09-2020	Sri D. Merwin Rajesh	types of thermal analysis and performing steady-state thermal analysis
13	08-09-2020	Sri U. Pradeep Kumar	Solution, defining the new analysis type, restarting the analysis
14	10-09-2020	Sri D. Merwin Rajesh	setting solution controls, setting analysis options
15	11-09-2020	Sri U. Pradeep Kumar	solving the analysis problem and post processing the result


Coordinator


HoD

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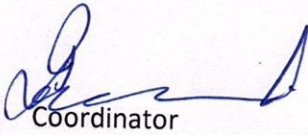
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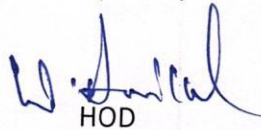
Activity Report

Name of the Event	: Certification Course on Computer Aided Analysis & Simulation
Duration of the Event	: 24/8/20 to 11/09/20
Scheduled Time	: 4.00 to 6.00PM
Target Audience	: B.Tech VII Sem Students
Course Co-ordinator	: D. Merwin Rajesh

Activity Description:

Computer Aided Analysis & Simulation is one of the latest tool for Mechanical students. Department of ME organized a Certificate Course on "**Computer Aided Analysis & Simulation**". Head of the Department, faculty & participants of the Course inaugurated with all good spirit. Resource persons began the first day first session Introduction to FEA, Assumptions in FEA. Finally valedictory. Students were issued participation certificates by Head of the Department.



Coordinator


HOD


Principal

Professor & Head
Department of Mechanical Engineering
K.S.R.M. College of Engineering
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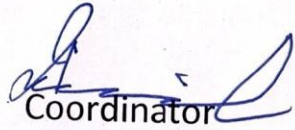
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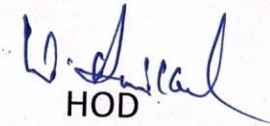
Certificate Course on “ *Computer Aided Analysis & Simulation* ”

24/08/2020 to 11/09/2020

Organized by
DEPARTMENT
OF
MECHANICAL ENGINEERING

54	M PRANAVA ADITHYA	189Y5A0327	✓	✓	✓	✓	✓	✓	✓	A	✓	✓	✓	✓	✓	✓	✓
55	M SHANMUKHASUNDAR	189Y5A0328	✓	✓	✓	A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
56	MANGALI KRISHNAMOHAN	189Y5A0329	✓	✓	✓	✓	A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
57	MIRAPAKAYALA RAKESH	189Y5A0330	✓	✓	✓	✓	✓	✓	✓	✓	A	✓	✓	A	✓	✓	✓
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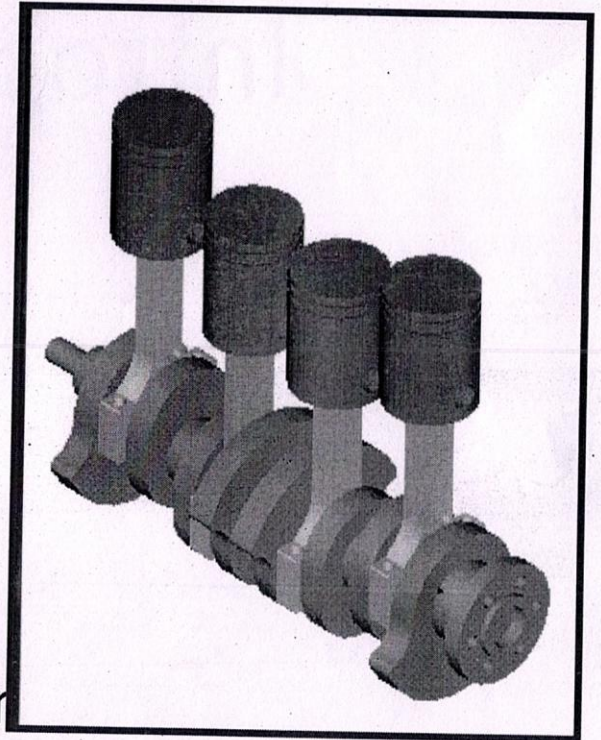

Coordinator


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**Introduction to Computer Aided
Design & Analysis
ME 308**

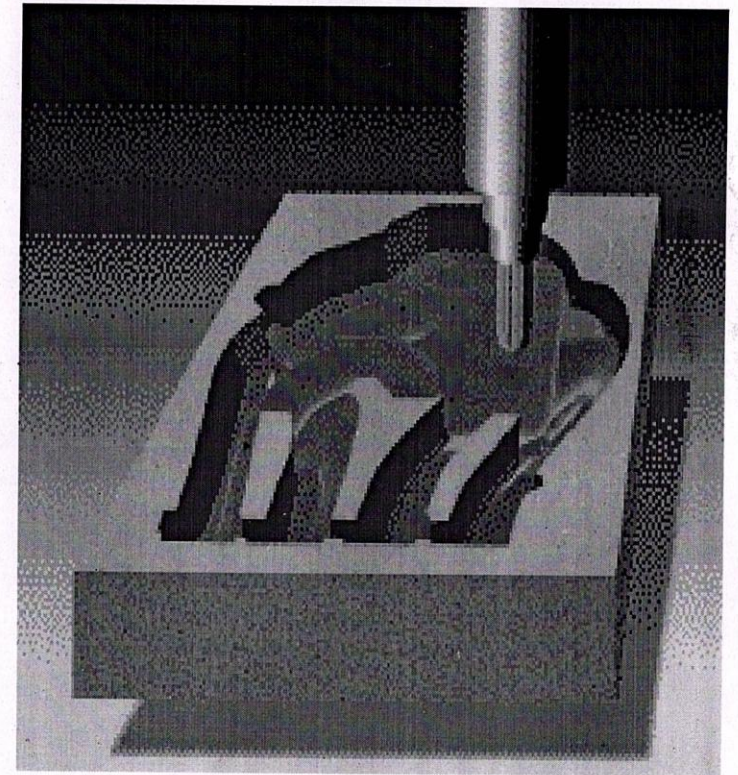
Computer-Aided Design (CAD)

- Use of computer systems to assist in the creation, modification, analysis, and optimization of a design
- Typical tools:
 - Tolerance analysis
 - Mass property calculations
 - Finite-element modeling and visualization
- Defines the geometry of the design

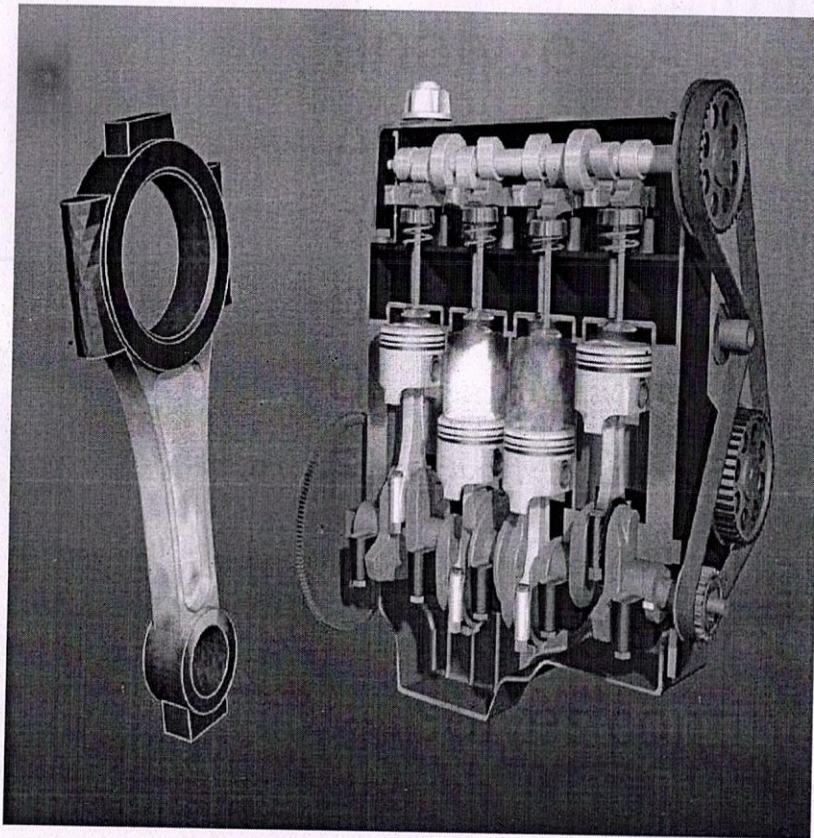


Computer-Aided Manufacturing (CAM)

- Use of computer systems to plan, manage, and control manufacturing operations
- Direct or indirect computer interface with the plant's production resources
- Numerical control of machine tools
- Programming of robots



Computer-Aided Engineering (CAE)

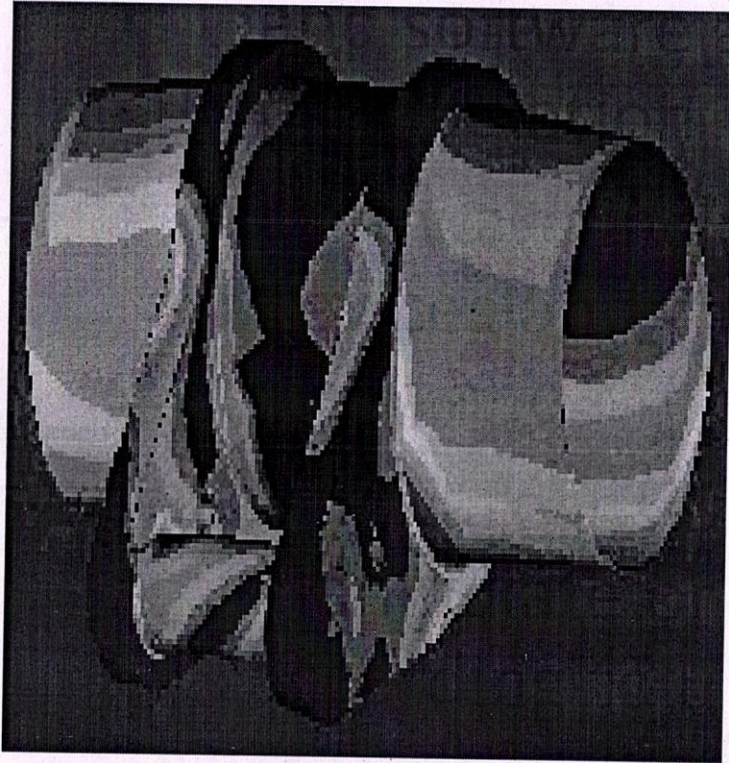


- Use of computer systems to analyze CAD geometry
- Allows designer to simulate and study how the product will behave, allowing for optimization
- Finite-element method (FEM)
 - Divides model into interconnected elements
 - Solves continuous field problems

Computer-Aided Design Process

- Two types of activities: synthesis and analysis
- Synthesis is largely qualitative and hard to capture on computer
- Analysis can be greatly enhanced with computers
- Once analysis is complete, design evaluation-rapid prototyping
- Software packages for design optimization

Components of CAD/CAM/CAE Systems



- Major component is hardware and software allowing shape manipulation
- Hardware includes graphic devices and their peripherals for input and output operations
- Software includes packages that manipulate or analyze shapes according to user interaction

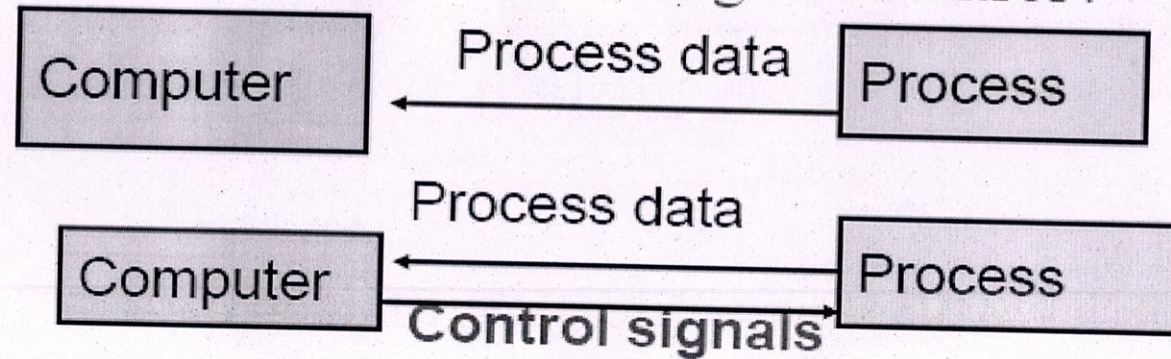
The Product Cycle and CAD/CAM

In order to establish the scope and definition of CAD/CAM in an engineering environment and identify existing and future related tools, a study of a typical product cycle is necessary. The following Figure shows a flowchart of such a cycle.

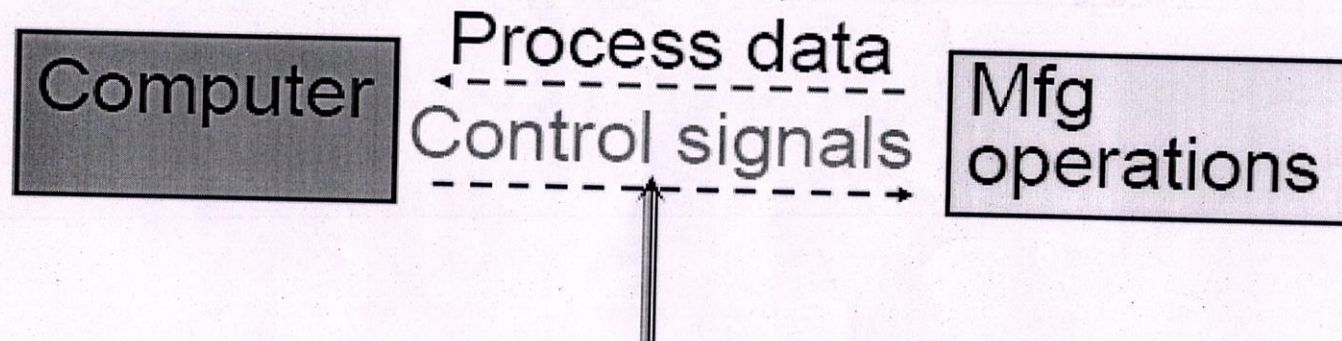
Evolution of CAD/CAM and CIM

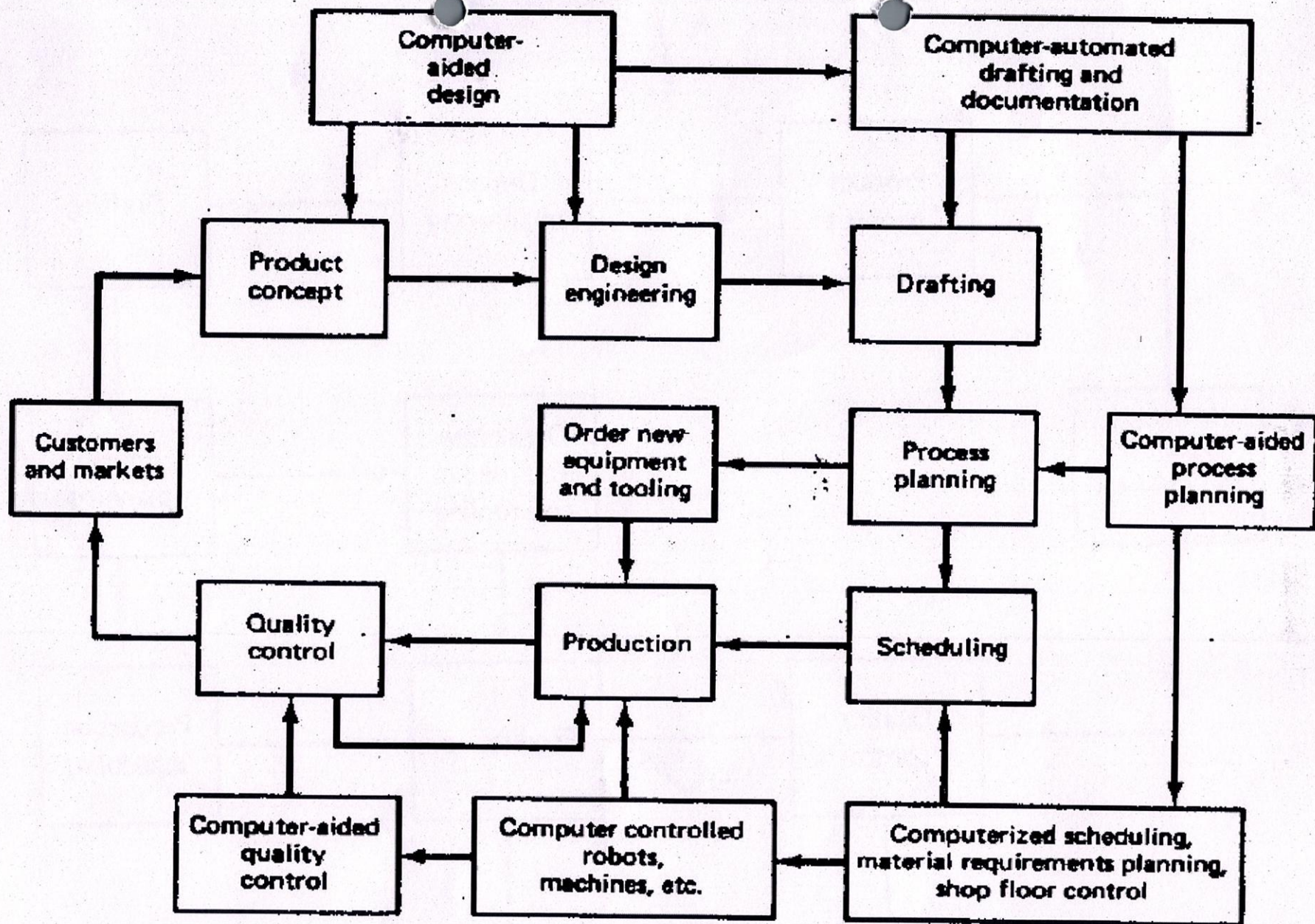
From CAM definition, the application of CAM falls into two broad categories:

1. Computer monitoring and control .

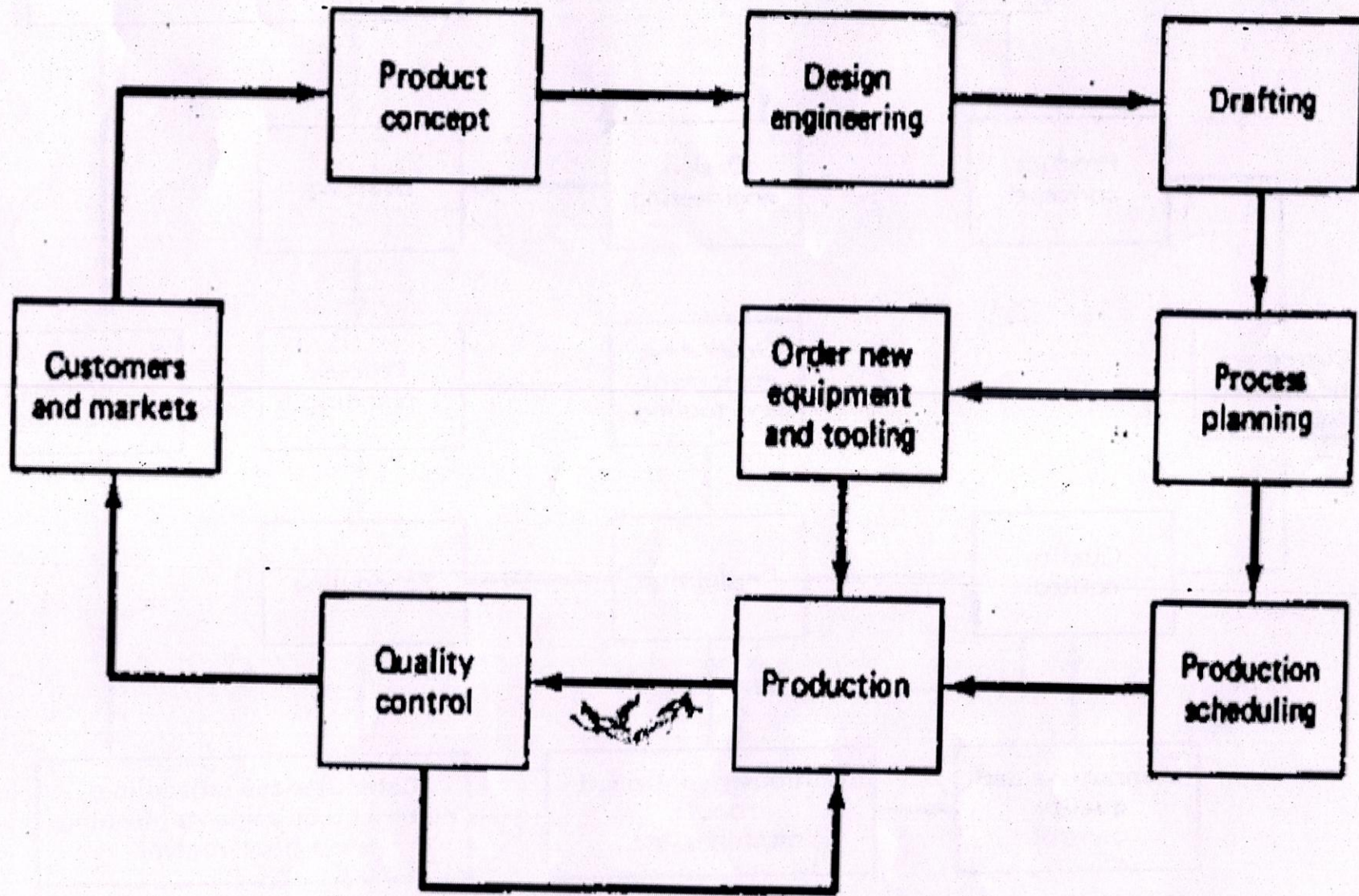


2. Manufacturing support application .





Product cycle revised with CAD/CAM overlaid.

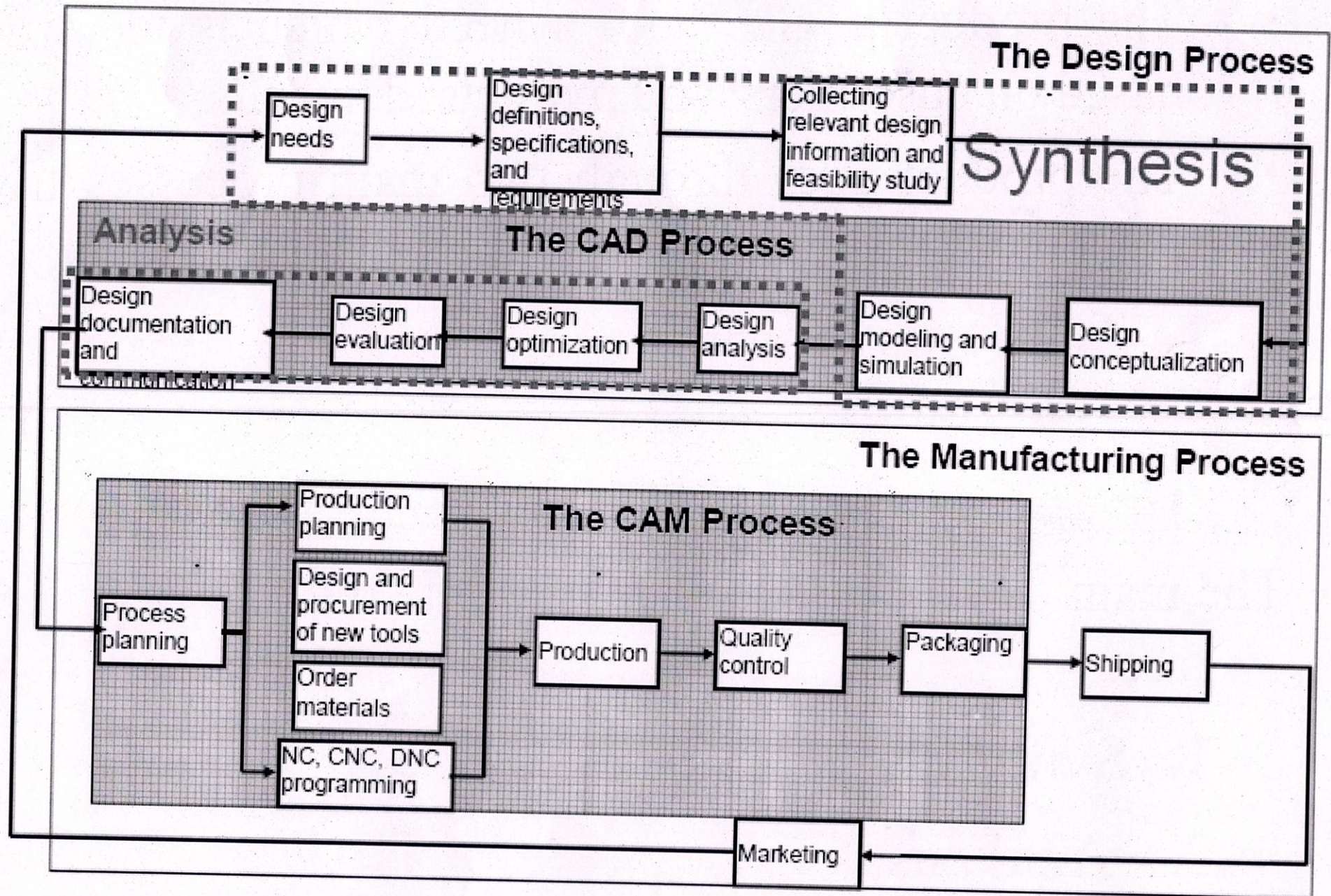


- The product begins with a need which is identified based on customers' and markets' demands.
- The product goes through two main processes from the idea conceptualization to the finished product:
 1. The design process.
 2. The manufacturing process.

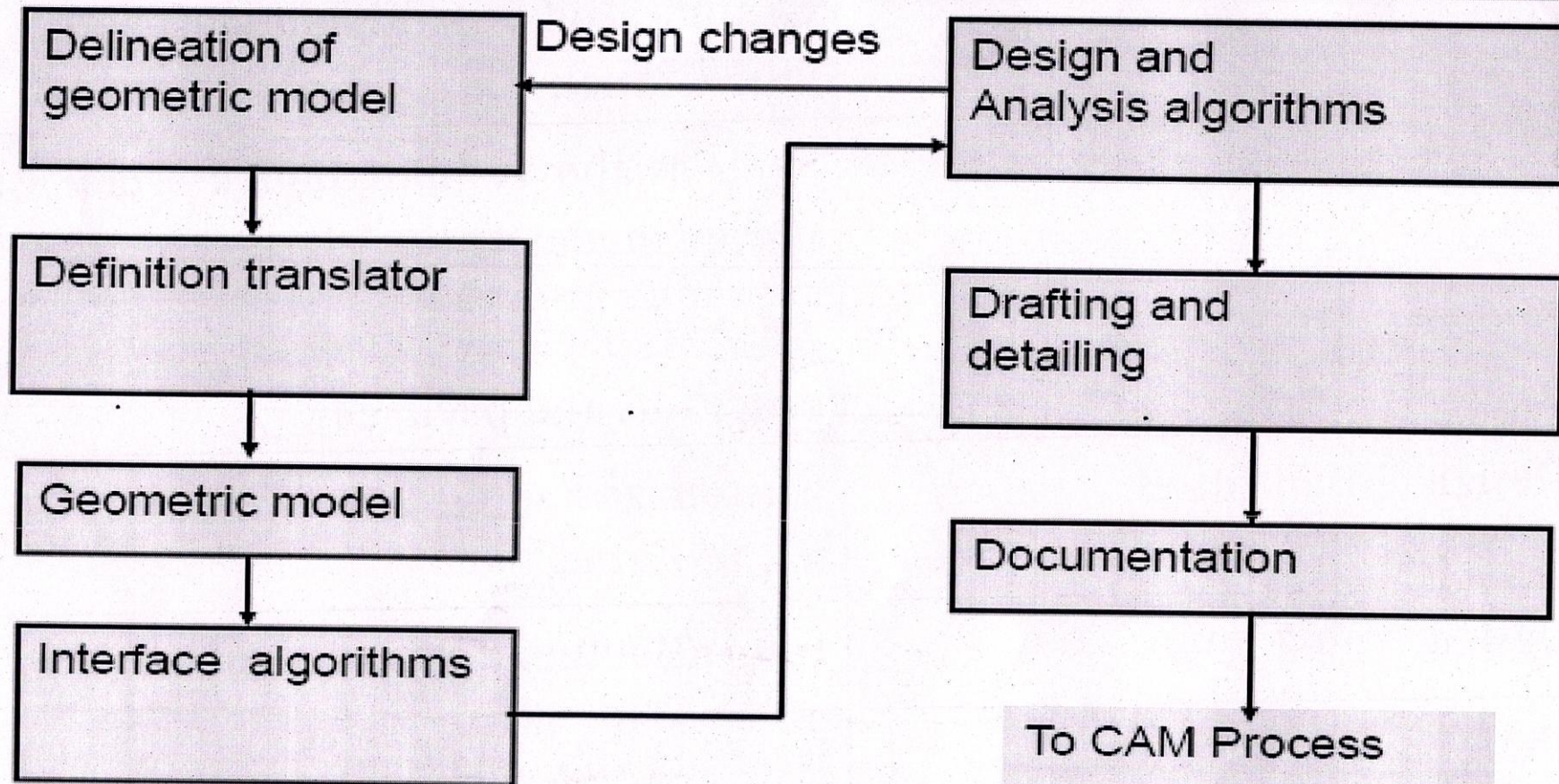
The main sub-processes that constitute the design process are:

1. Synthesis.
2. Analysis.

Typical Product Life Cycle



Implementation of a Typical CAD Process on a CAD/CAM system



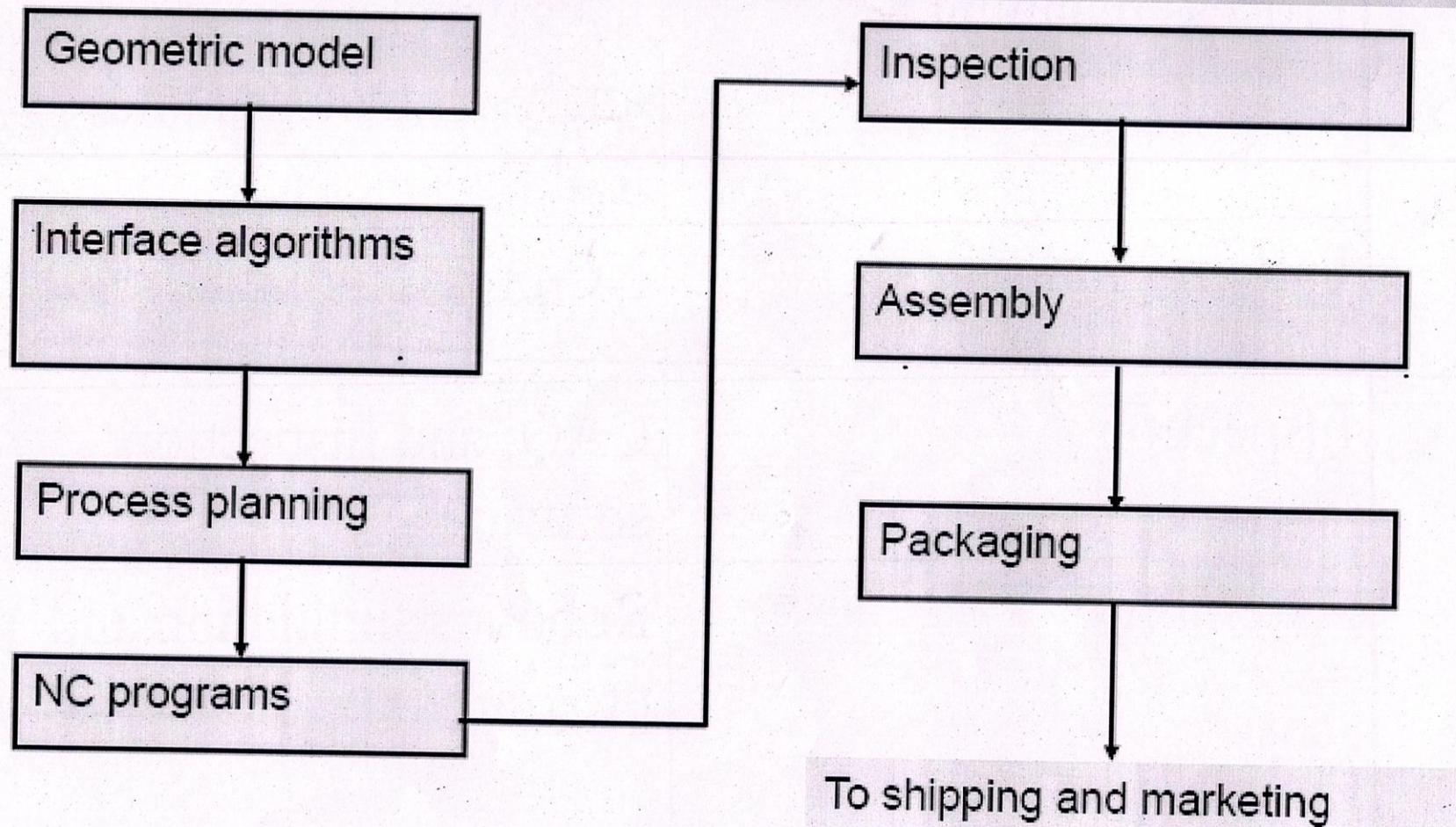
CAD Tools Required to Support the Design Process

Design phase	Required CAD tools
Design conceptualization	Geometric modeling techniques; Graphics aids; manipulations; and visualization
Design modeling and simulation	Same as above; animation; assemblies; special modeling packages.
Design analysis	Analysis packages; customized programs and packages.
Design optimization	Customized applications; structural optimization.
Design evaluation	Dimensioning; tolerances; BOM; NC.
Design communication and documentation	Drafting and detailing...

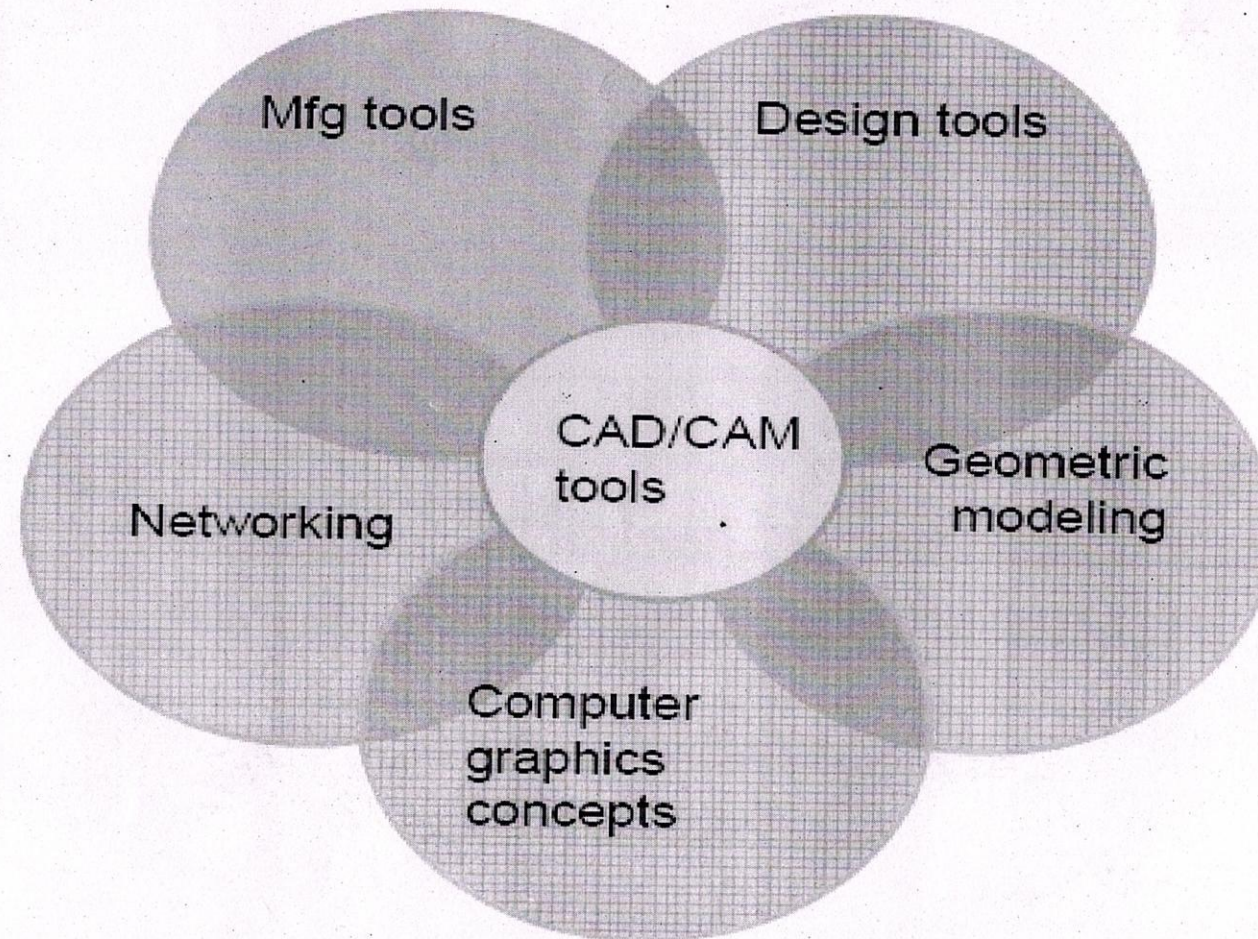
CAM Tools Required to Support the Design Process

Manufacturing phase	Required CAM tools
Process planning	CAPP techniques; cost analysis; material and tooling specification.
Part programming	NC programming
Inspection	CAQ; and Inspection software
Assembly	Robotics simulation and programming

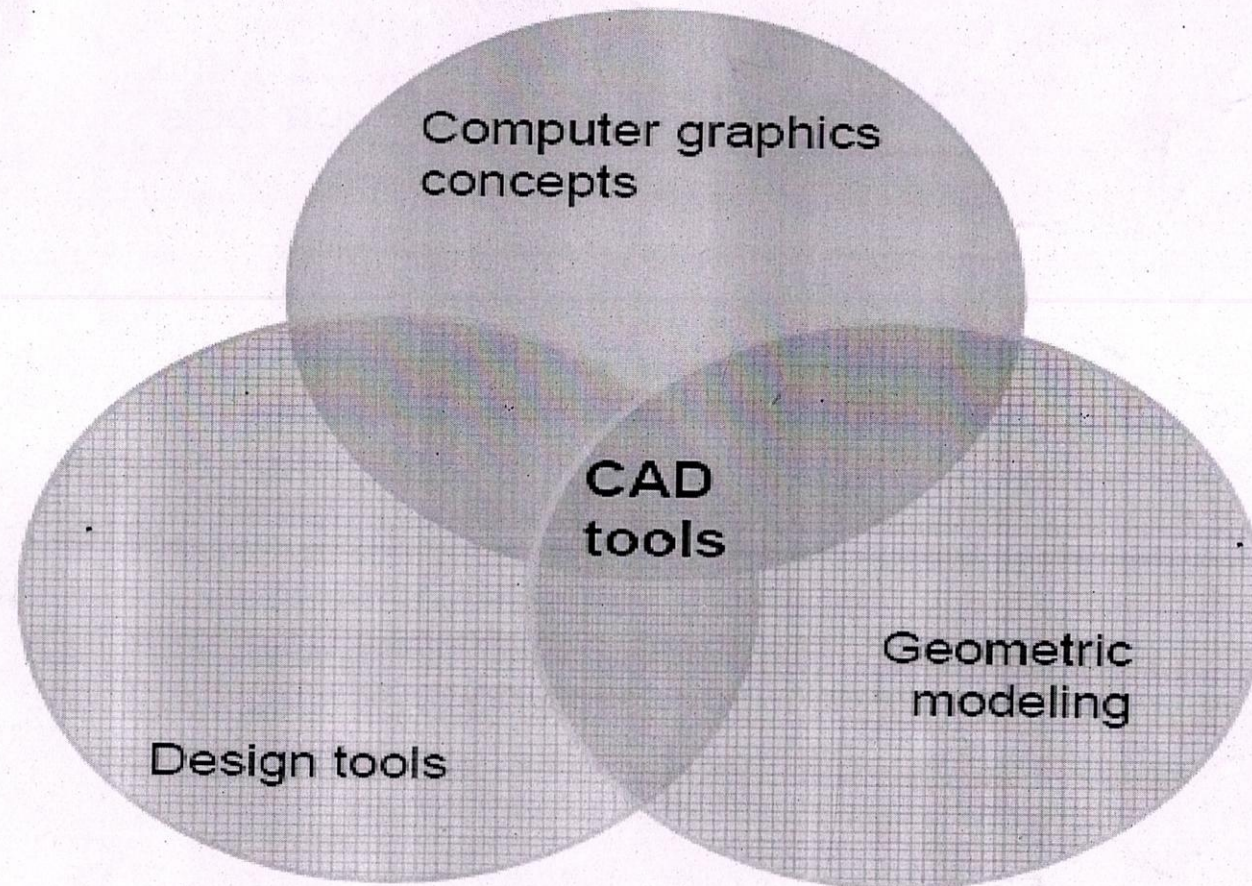
Implementation of a Typical CAM Process on a CAD/CAM system



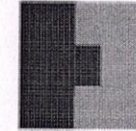
Definitions of CAD/CAM Tools Based on Their Constituents



Definitions of CAD Tools Based on Their Constituents

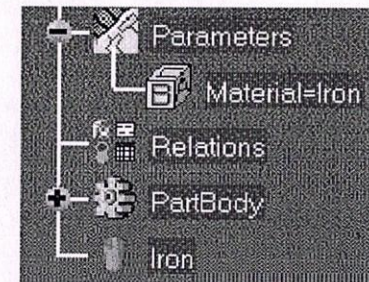


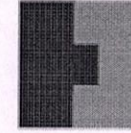
Assigning Materials



- To Assign a material click on the **Materials** Icon on the toolbar
- Select a material from the material library
- Click on the part you wish to assign the material to, then click on **Apply Material** and **OK**: The material will appear on the properties branch in the spec tree
- Note: You may need to change the option settings
To make the parameters branch of the specification tree visible. To do this select

Tools->Options->Infrastructure->Product Structure
Specification Tree -> Parameters

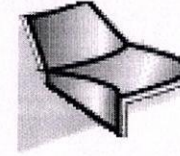




Calculating Mass Properties

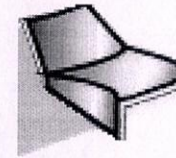
- Select the node of the part you want to analyse in the specification tree
- Click on the **Measure Inertia** icon
- Or
- Select **Properties** from the popup menu on the right mouse button to see the properties form, select the **Mass** tab and view the properties:

Properties		
Current selection: <input type="text" value="Stiftener"/>		
Mechanical Mass Product		
General		Center of Gravity
Density:	<input type="text" value="0kg_m3"/>	x: <input type="text" value="-0.389mm"/>
Volume:	<input type="text" value="1.566e-004m3"/>	y: <input type="text" value="-4.873mm"/>
Mass:	<input type="text" value="0kg"/>	z: <input type="text" value="18.367mm"/>
Surface:	<input type="text" value="0.03m2"/>	
Inertia Matrix		
Ixx:	<input type="text" value="0gmm2"/>	Ixy: <input type="text" value="0gmm2"/>
Iyy:	<input type="text" value="0gmm2"/>	Iyz: <input type="text" value="0gmm2"/>
Izz:	<input type="text" value="0gmm2"/>	Izx: <input type="text" value="0gmm2"/>



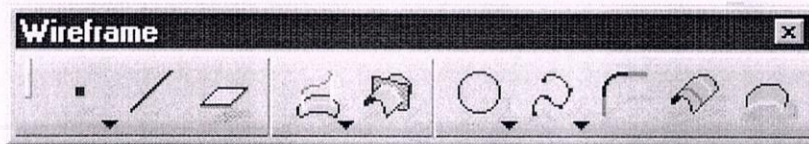
Wireframe and Surface

- The Wireframe and Surface task provides a more traditional CAD 3D modelling environment
- The Wireframe functionality allows you to create Wireframe points, lines and curves in 3D space, without using the constraint based approach of the sketcher
- The Surface functionality allows you to create smooth freeform surfaces by sweeping Wireframe curves through 3D space
- Wireframe and Surface is integrated with the other CATIA applications allowing for hybrid surface and solid modelling



Wireframe and Surface

- Wireframe Toolbar



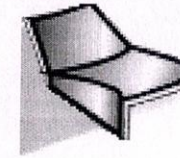
- Create Point
- Create Line
- Create Plane
- Create Projections
- Create Intersections
- Create Circle
- Create Spline
- Corner
- Create Parallel Curves
- Create Boundary Curves

- Surface Toolbar



- Extrude Surfaces
- Surface of Revolution
- Offset Surface
- Sweep Surface
- Create Filling Surface
- Loft Surface
- Blend Surface
- Extract Geometry

Wireframe and Surface

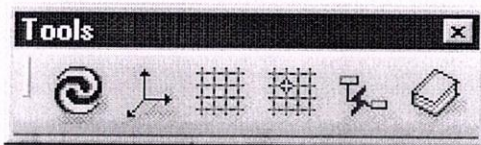


- Operations Toolbar



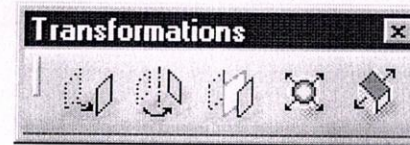
- Join
- Split, Trim
- Transform

- Tools Toolbar



- Update
- Axis
- Work with Support
- Snap to Point
- Create Datum (deactivate History)

- Transformations Toolbar

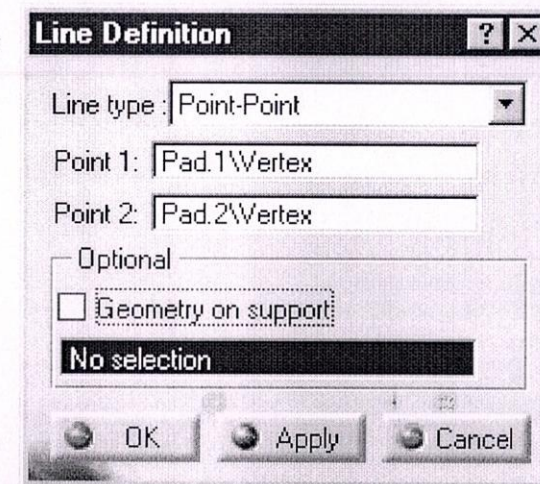


- Translate
- Rotate
- Create Symmetry
- Scale
- Affinity (irregular scaling)

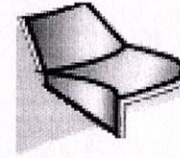


Creating Wireframe Geometry

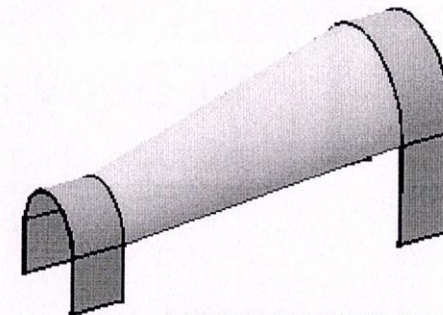
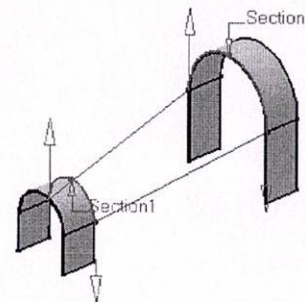
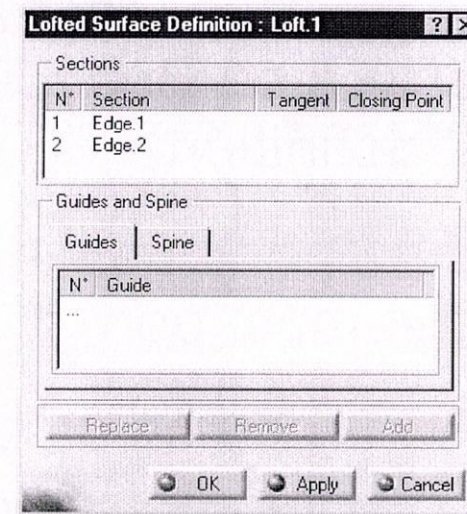
- Wireframe geometry can be created in 3D space, or on a 2D plane (using a support)
- Each wireframe function has a number of different methods (e.g. a line can be created from point to point, or parallel to an existing line, or many other ways).
- Existing geometry can be selected by picking on the screen or selecting from the spec. tree
- Additional options may be available by pressing the right mouse button over the input box



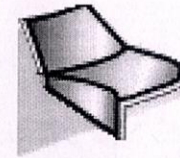
Creating Surface Geometry



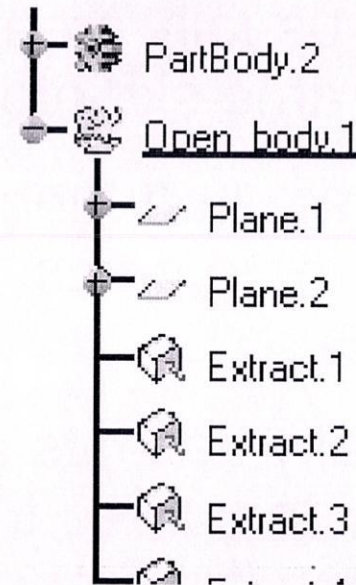
- Surfaces are usually created using a wireframe skeleton
- For example the Loft function requires 2 or more cross section curves
- It also optionally accepts a number of guide curves that extend between the cross curves
- A spine curve can be used to define the shape of the loft



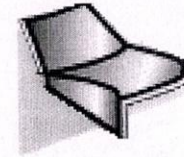
Using the Specification Tree with Wireframe and Surface



- Wireframe and Surface Geometry is created in an “Open Body” within the Part definition
- Geometry in the open body is not “attached” to the main part
- New Open bodies can be created using the Insert -> Open Body command
- A part can contain both Open Body and Part Body information



Wireframe and Surface – Hints and Tips



- If you want to repeatedly use the same function (e.g. to create multiple points) *double-click* on the icon. The dialogue will remain open after you click on OK.
- It can be very useful to create planes to use as a support when creating geometry.
- When creating surfaces take care that the underlying wireframe geometry is consistent, and curve endpoints are all matched
- When creating surfaces ensure that curve orientations are consistent



Solid – Surface Integration

- The Part Design Application provides a Surface Based Features toolbar to allow you create solid bodies from surface models.
- Solids created from surfaces are generally more difficult to modify than solids generated in part design
- The solid part maintains associativity to the surfaces it was generated from

- Surface Based Features



- Split – Uses a surface to split a solid object
- Thicken – Creates a solid body by “thickening” an existing surface
- Close Surface – Creates a Solid body from a closed set of surfaces
- Sew Surface – Joins a surface to a solid body

Interactive Drafting

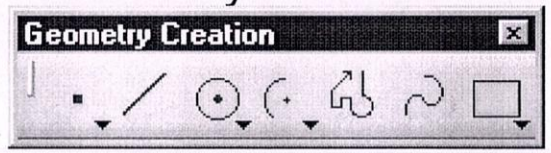


- Allows you to create engineering drawings without first creating a 3D part
- Provides 2D drawing functionality to create geometry layouts
- Provides dimension and dress-up facilities for drawing annotation
- Can be used to add additional information to a drawing created using Generative Drafting



Interactive Drafting

- Geometry Creation



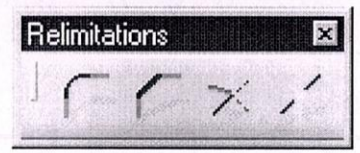
- Point
- Line
- Circle
- Arc
- Profile
- Curve
- Pre-Define Profiles

- Transformations Toolbar



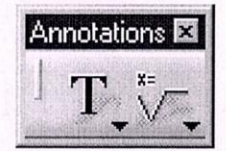
- Translate, Rotate, Scale, Mirror

- Relimitations Toolbar



- Corner
- Chamfer
- Trim
- Break

- Annotation

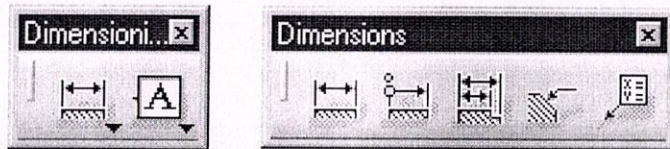


- Text
- Symbols



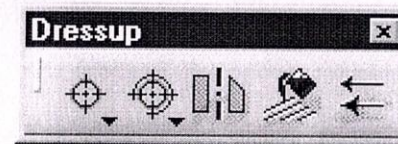
Interactive Drafting

- Dimensions Toolbar



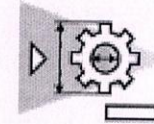
- Create Dimension
- Create Tolerance

- Dress up Toolbar

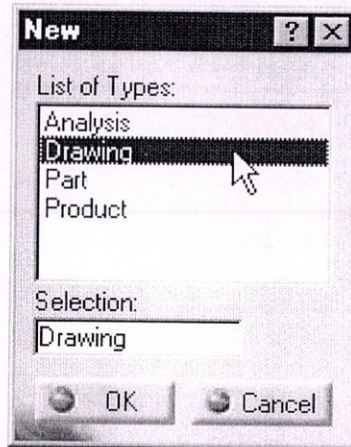


- Centreline
- Thread
- Axis
- Fill
- Arrow

Drafting Example

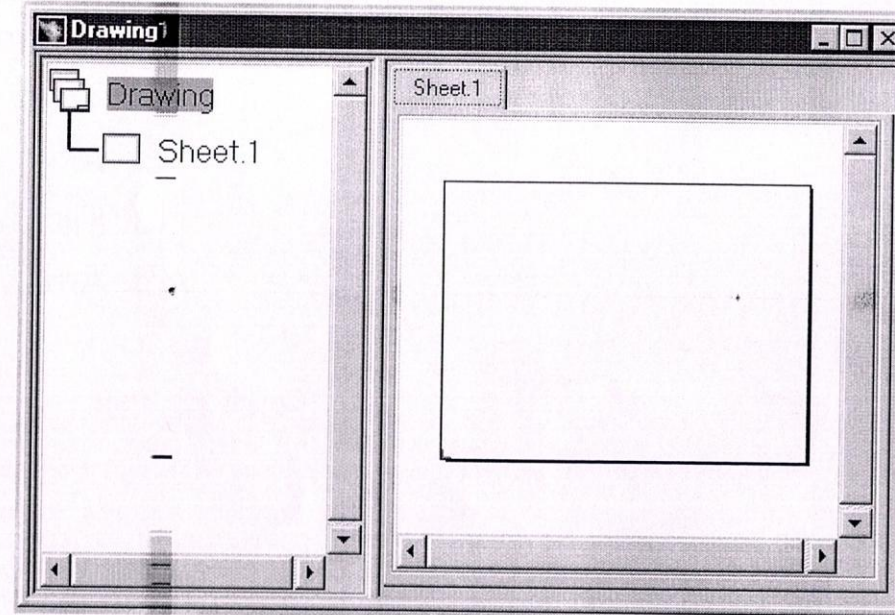
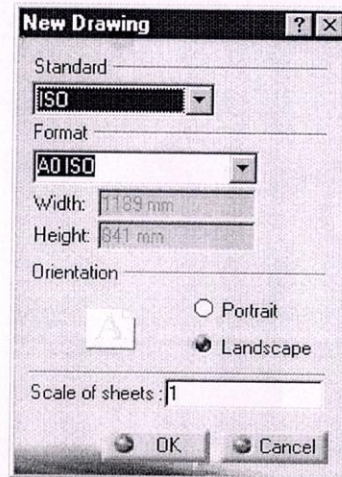


- Create a new Drawing using File -> New...

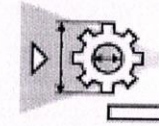


- The drawing sheet will appear on the screen

- Select the drawing Format and Scale



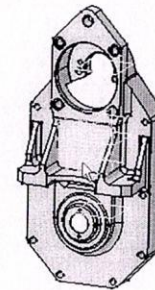
Drafting Example



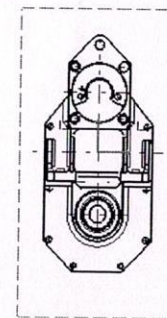
- Use File -> Open... to open the 3D part you want to generate a drawing from
- It is useful to arrange the screen so that you can see both views before continuing
- Use the View Creation toolbar to create a new view

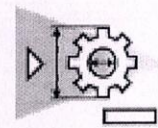


- Click on the Front View icon, then select a plane on the 3D model to specify the view orientation



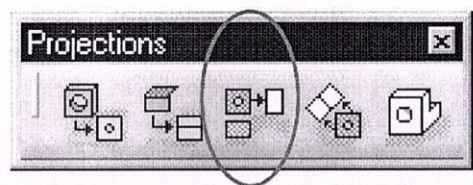
- A preview of the view will appear in the corner of the 3D window
- Click on the drawing sheet to generate the view



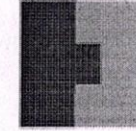


Drafting Example

- You can generate orthographic projects from an existing view using the Projection View icon
- Sections and detail views can also be generated from existing views

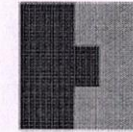


Importing Geometry from External Systems



- CATIA provides import translators for many standard geometry formats including
 - ❑ IGES, STEP AP203, DXF/ DWG,
- Use **File -> Open** to import an external file
- The options to control the import parameters are available in
 - ❑ Tools -> Options -> Product -> External Formats (check)
- Imported CAD geometry does not contain any history information
- Check the online help for more information about the types of entities that can be translated

Exporting CATIA geometry to other CAD systems



- CATIA provides export translators for a number of standard formats including:
 - IGES, STEP AP203, DXF/ DWG, VRML, CGM
- Use **File -> Save As...** , then select the desired type in the **Save As Type** box to export a file in an external format
- Exported geometry does not have any history associated with it
- Check the online help for more information about the types of entities that can be translated



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KADAPA, AP - 516 005

Certificate of Completion

This is to certify that

Mr/Ms. K. DINESH KUMAR

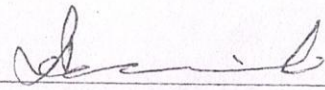
Bearing the Roll No 179Y1A0326

has Successfully completed certification course on

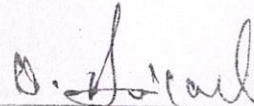
COMPUTER AIDED ANALYSIS & SIMULATION

From 24/8/2020 to 11/9/2020, Organized by Department of

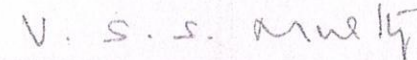
MECHANICAL ENGINEERING



Coordinator



Head Of Department



Principal



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V. S. S. Murthy

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K.S.R.M. COLLEGE OF ENGINEERING
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Kadapa, Andhra Pradesh, India-516 005

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

Department of Mechanical Engineering


Certification Course on Computer Aided Analysis & Simulation

S.No	Name of the Student	Roll List	Is the Course content meet your expectation	Is the lecture sequence well planned	Is the level of course high	Is the course exposed you to the new knowledge and practices	Rate the Knowledge of the Speaker	Rate the value of Course in increasing your skills	Any Issues
1	ACHUKATLA SHAIK FAZAL	179Y1A0301	yes	Agree	Strongly Ag	Yes	4	5	Nil
2	ALAMURI IMAMBASHA	179Y1A0302	yes	Agree	Agree	Yes	5	5	Need extra Explana
3	BASIREDDY RAVI JYOTHI KUMAR REDDY	179Y1A0303	yes	Agree	Agree	Yes	4	5	Nil
4	BAYANA BOINA SURENDRA YADAV	179Y1A0305	yes	Agree	Agree	Yes	5	5	Nil
5	BELLAM MAHESH	179Y1A0306	yes	Agree	Agree	Yes	5	5	Provide PPT
6	BODIGARI RAMA KRISHNA REDDY	179Y1A0307	yes	Agree	Agree	Yes	5	4	Nil
7	BOLLINENI HARIKRISHNA	179Y1A0308	yes	Agree	Agree	Yes	5	4	Nil
8	BOYA NAVEEN	179Y1A0309	yes	Agree	Agree	Yes	4	5	Nil
9	CHANDRAGIRI NARENDRA REDDY	179Y1A0310	yes	Agree	Agree	Yes	5	5	Nil
10	CHIMMANI PAVAN KUMAR	179Y1A0311	yes	Agree	Agree	Yes	5	5	Nil

11	DOLA PURNA VISESH SAGAR	179Y1A0312	yes	Agree	Agree	Yes	5	5	Nil
12	DUDEKULA RIYAZ	179Y1A0313	yes	Agree	Agree	Yes	5	5	Nil
13	EPPARLA SARATH CHANDRA	179Y1A0314	yes	Agree	Agree	Yes		5	Nil
14	GANESHAM HANUMANTHA REDDY	179Y1A0316	yes	Agree	Agree	Yes	5	5	Nil
15	GANGIREDDY VEERASIVA REDDY	179Y1A0317	yes	Agree	Agree	Yes	5	5	Nil
16	GAVIREDDYGARI YASWANTHREDDY	179Y1A0318	yes	Agree	Agree	Yes	5	5	Nil
17	GURAJALA VENKATA DILIP KUMAR REDDY	179Y1A0319	yes	Agree	Agree	Yes	5	5	Nil
18	GURRAMPATI NITHIN	179Y1A0320	yes	Agree	Agree	Yes	4	5	Nil
19	INDLA VENKATA HARI PRASAD REDDY	179Y1A0321	yes	Agree	Agree	Yes	5	5	Nil
20	J PAVAN KUMAR	179Y1A0322	yes	Agree	Agree	Yes	5	5	Nil
21	KALLA VASU	179Y1A0323	yes	Agree	Agree	Yes	5	5	Nil
22	KAMBHAM SREENATH REDDY	179Y1A0324	yes	Agree	Agree	Yes	5	5	Nil
23	KONDA LOKESWAR REDDY	179Y1A0325	yes	Agree	Agree	Yes		5	Nil
24	KOTAPATI DINESH KUMAR	179Y1A0326	yes	Agree	Agree	Yes	5	5	Nil
25	KUMMITHI MADDILETI REDDY	179Y1A0327	yes	Agree	Agree	Yes	5	5	Nil
26	LOMATI VEERA LOKESH REDDY	179Y1A0328	yes	Agree	Agree	Yes	5	5	Nil
27	MACHIREDDY MAHESH REDDY	179Y1A0329	yes	Agree	Agree	Yes	5	5	Nil
28	MANGALI SRINIVASULU	179Y1A0330	yes	Agree	Agree	Yes		5	Nil
29	BALAVENKATAGARI SIVA REDDY	189Y5A0301	yes	Agree	Agree	Yes	5	5	Nil
30	BARIKA EERANNA	189Y5A0302	yes	Agree	Agree	Yes	5	5	Nil
31	BEDADHALA AMARNATH REDDY	189Y5A0303	yes	Agree	Agree	Yes	5	5	Nil
32	BELLALA VENKATA CHAITANYA KUMAR	189Y5A0304	yes	Agree	Agree	Yes	5	5	Nil
33	BODI PRADEEP	189Y5A0305	yes	Agree	Agree	Yes	4	5	Nil
34	BOYA MADHU	189Y5A0306	yes	Agree	Agree	Yes	5	5	Nil
35	CHENNURU MOULA	189Y5A0307	yes	Agree	Agree	Yes	5	5	Nil
36	CHINNABOINA MAHESH	189Y5A0308	yes	Agree	Agree	Yes	5	5	Nil

37	DERA ASHOK KUMAR	189Y5A0310	yes	Agree	Agree	Yes	5	5	Nil
38	EADIGA PAPAYA GOUD	189Y5A0311	yes	Agree	Agree	Yes	4	5	Nil
39	GANDLURU GURRAPP	189Y5A0312	yes	Agree	Agree	Yes	5	5	Nil
40	GANDRA BIRAVA VENKATA SURENDRA	189Y5A0313	yes	Agree	Agree	Yes	5	5	Nil
41	GANGAVARAM PAVAN KUMAR REDDY	189Y5A0314	yes	Agree	Agree	Yes	5	5	Nil
42	GUJJULA SISINDRIREDDY	189Y5A0315	yes	Agree	Agree	Yes	5	5	Nil
43	GURRAM CHINNA GIDDAIAH	189Y5A0316	yes	Agree	Agree	Yes	4	5	Nil
44	GUVVALA SUDHEERKUMAR REDDY	189Y5A0317	yes	Agree	Agree	Yes	5	5	Nil
45	JAGGILI MAHENDRA	189Y5A0318	yes	Agree	Agree	Yes	5	5	Nil
46	KAKANURU UDAY KUMAR REDDY	189Y5A0319	yes	Agree	Agree	Yes	5	5	Nil
47	KARDHAM NARASIMHA PRASAD	189Y5A0320	yes	Agree	Agree	Yes	5	5	Nil
48	KARUMANCHI HARSHAVARDHAN BABU	189Y5A0321	yes	Agree	Agree	Yes	4	5	Nil
48	KATARU VEERA HEMANTH KUMAR	189Y5A0322	yes	Agree	Agree	Yes	5	5	Nil
50	KONETI NAGARJUNA	189Y5A0323	yes	Agree	Agree	Yes	5	5	Nil
51	KONIREDDY SANDEEP KUMAR REDDY	189Y5A0324	yes	Agree	Agree	Yes	5	5	Nil
52	KOTTAPALLI VAMSHIDHAR REDDY	189Y5A0325	yes	Agree	Agree	Yes	5	5	Nil
53	LAVANURU SIVA KESAVA REDDY	189Y5A0326	yes	Agree	Agree	Yes	5	5	Nil
54	M PRANAVA ADITHYA	189Y5A0327	yes	Agree	Agree	Yes	4	5	Nil
55	M SHANMUKHASUNDAR	189Y5A0328	yes	Agree	Agree	Yes	5	5	Nil
56	MANGALI KRISHNAMOHAN	189Y5A0329	yes	Agree	Agree	Yes	5	5	Nil
57	MIRAPAKAYALA RAKESH	189Y5A0330	yes	Agree	Agree	Yes	5	5	Nil
58	MUDE SRIKANTH NAIK	189Y5A0331	yes	Agree	Agree	Yes	5	5	Nil


Coordinator


Professor & Head
Department of Medical Engineering
K.S.R.M. College of Engineering
KADAPA - 516 003.