

# PRODUCT CYCLE & DESIGN PROCESS

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Course : Computer Aided Machine Drawing

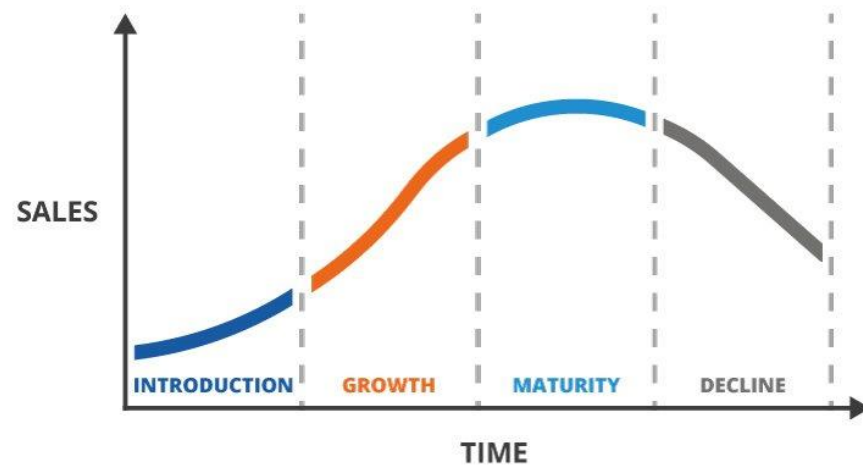
**19ME304**

**Unit -1 Fundamentals of Computer  
Graphics**

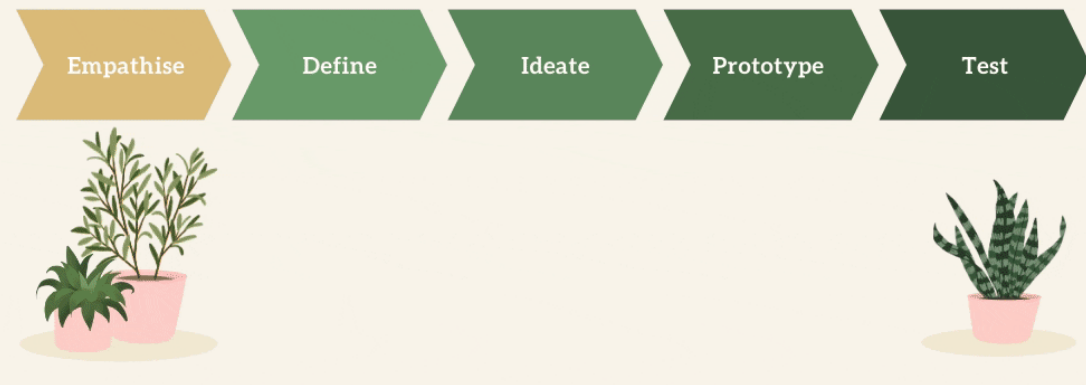
**II Year / III Semester  
Mechatronics and Mechanical  
Engineering (AM)**

# TOPIC OF THE DAY

## PRODUCT LIFE CYCLE



## The Design Process

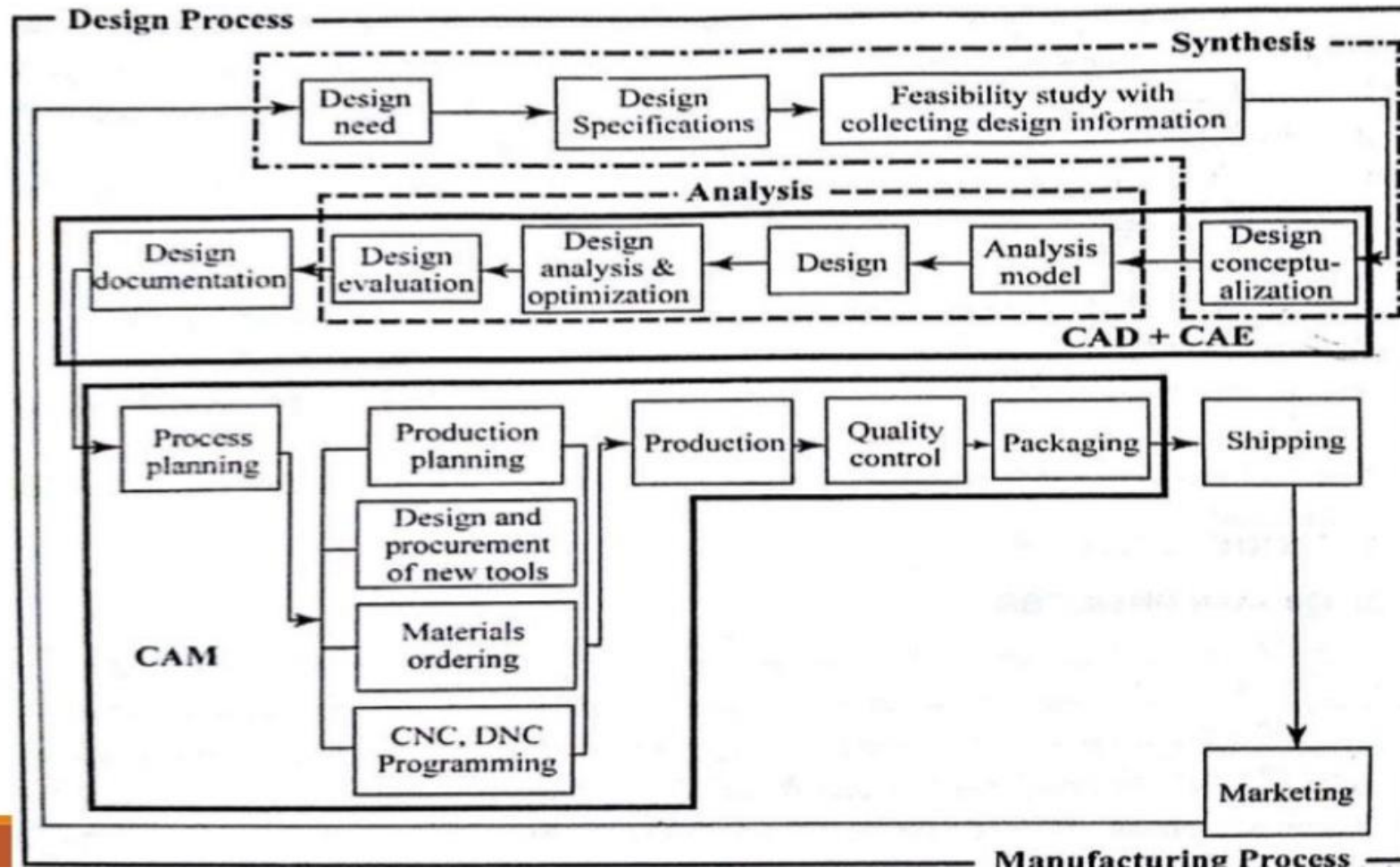




# PRODUCT CYCLE

- The cycle through which a product goes from development to retirement.
- The product cycle starts with developing the product concept, enveloping the design, engineering the product, manufacturing the part, marking and servicing.
- The product undergoes the following processes
  - Design process
  - Manufacturing process

# DESIGN PROCESS

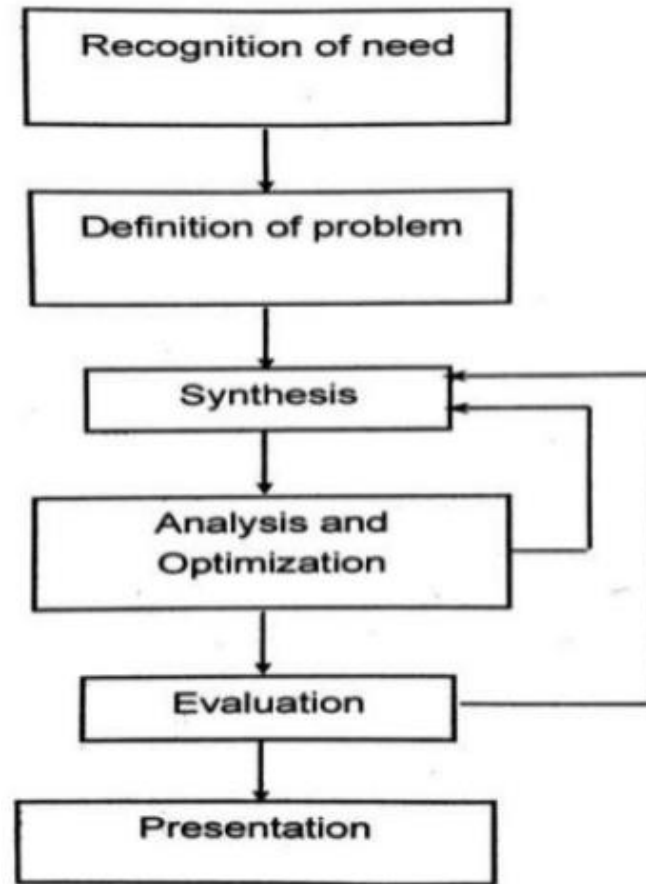




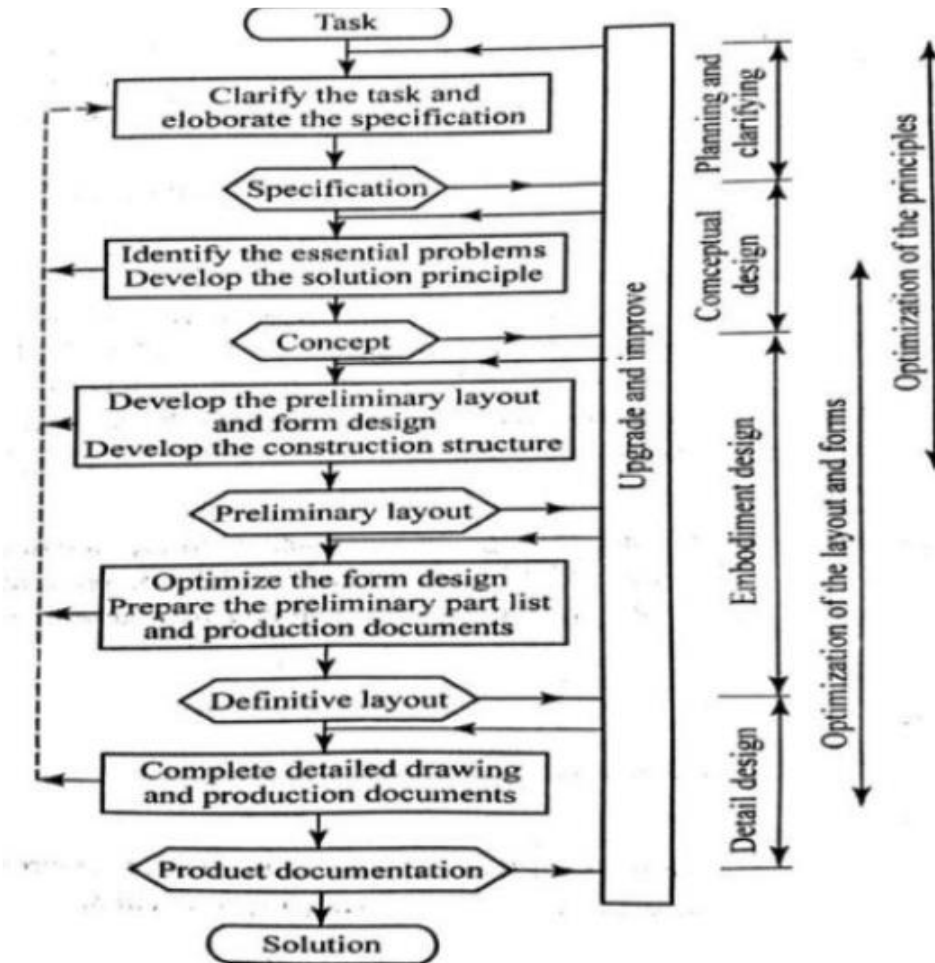
# DESIGN PROCESS

- Design is the activity that needs to be well organized and should take into account all influences.
- The following models are considered for design purpose:
  - Shingley
  - Pahl and Beitz
  - Ohsuga
  - Earle

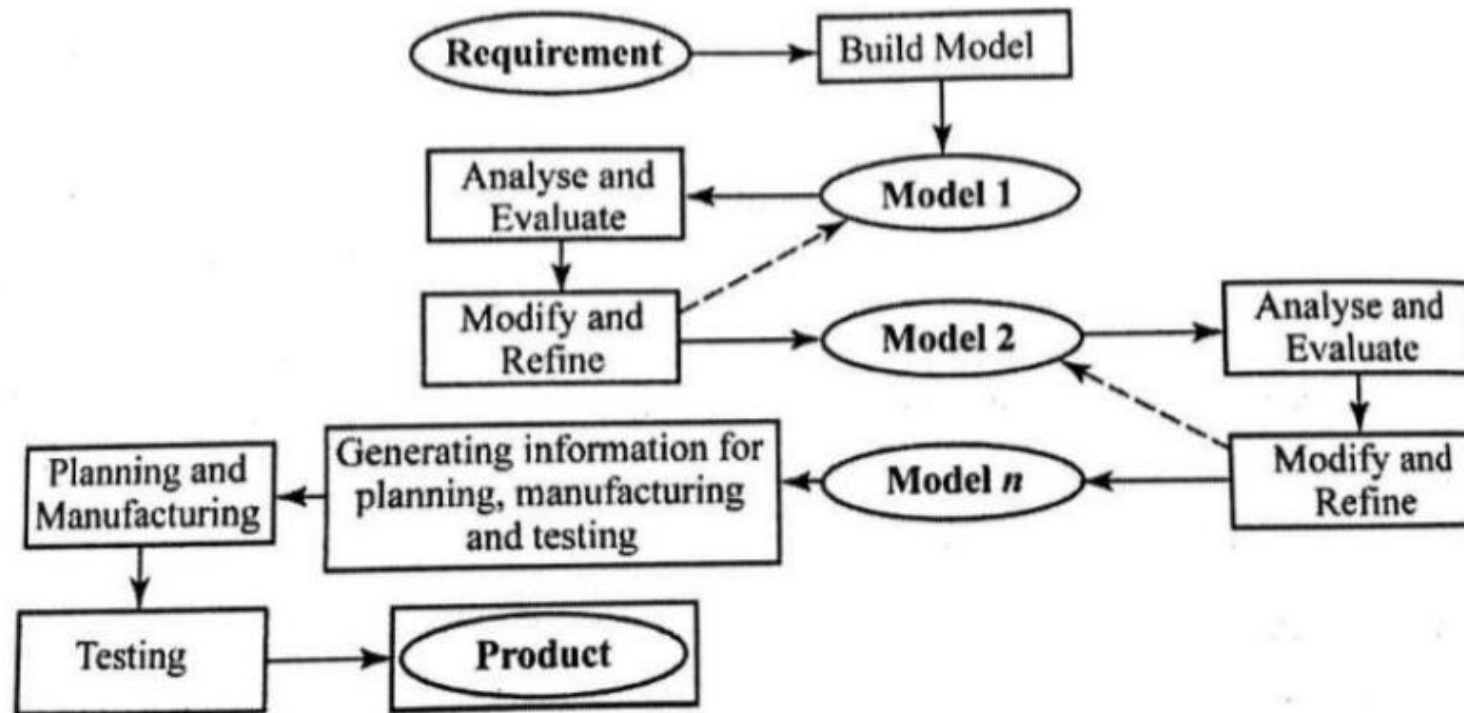
# SHINGLEY'S DESIGN PROCESS



# PHAL AND BEITZ DESIGN PROCESS

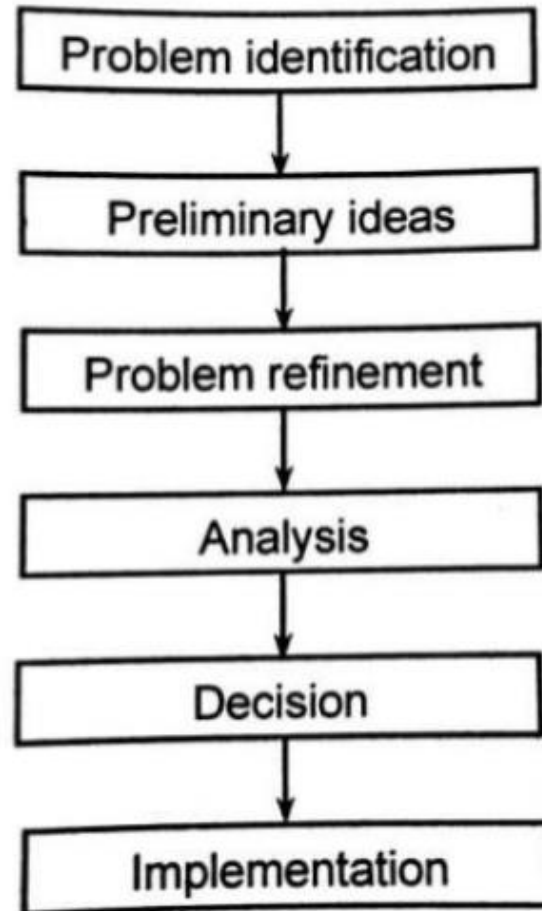


# OHSUGA DESIGN PROCESS





# EARLE DESIGN PROCESS





# REFERENCES

1. Ibrahim Zeid “Mastering CAD CAM” Tata McGraw-Hill Publishing Co.2007.
2. Radhakrishnan P, Subramanyan S. and Raju V., “CAD/CAM/CIM”, 2nd Edition, New Age International (P) Ltd, New Delhi, 2000.

