

# CAD & CAD SYSTEM ARCHITECTURE

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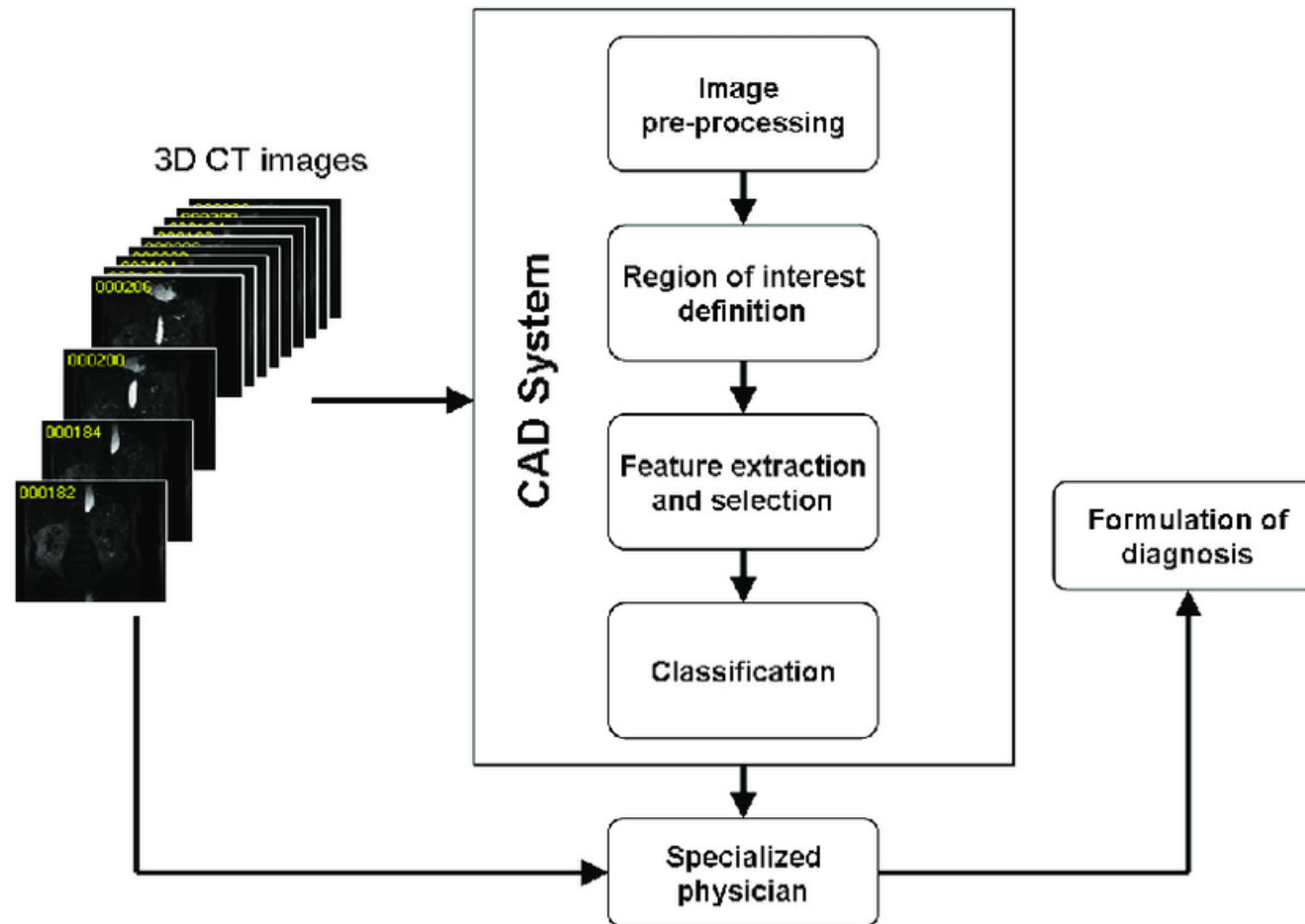
Course : Computer Aided Machine Drawing

**19ME304**

**Unit -1 Fundamentals of Computer  
Graphics**

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

# TOPIC OF THE DAY





# COMPUTER AIDED DESIGN (CAD)

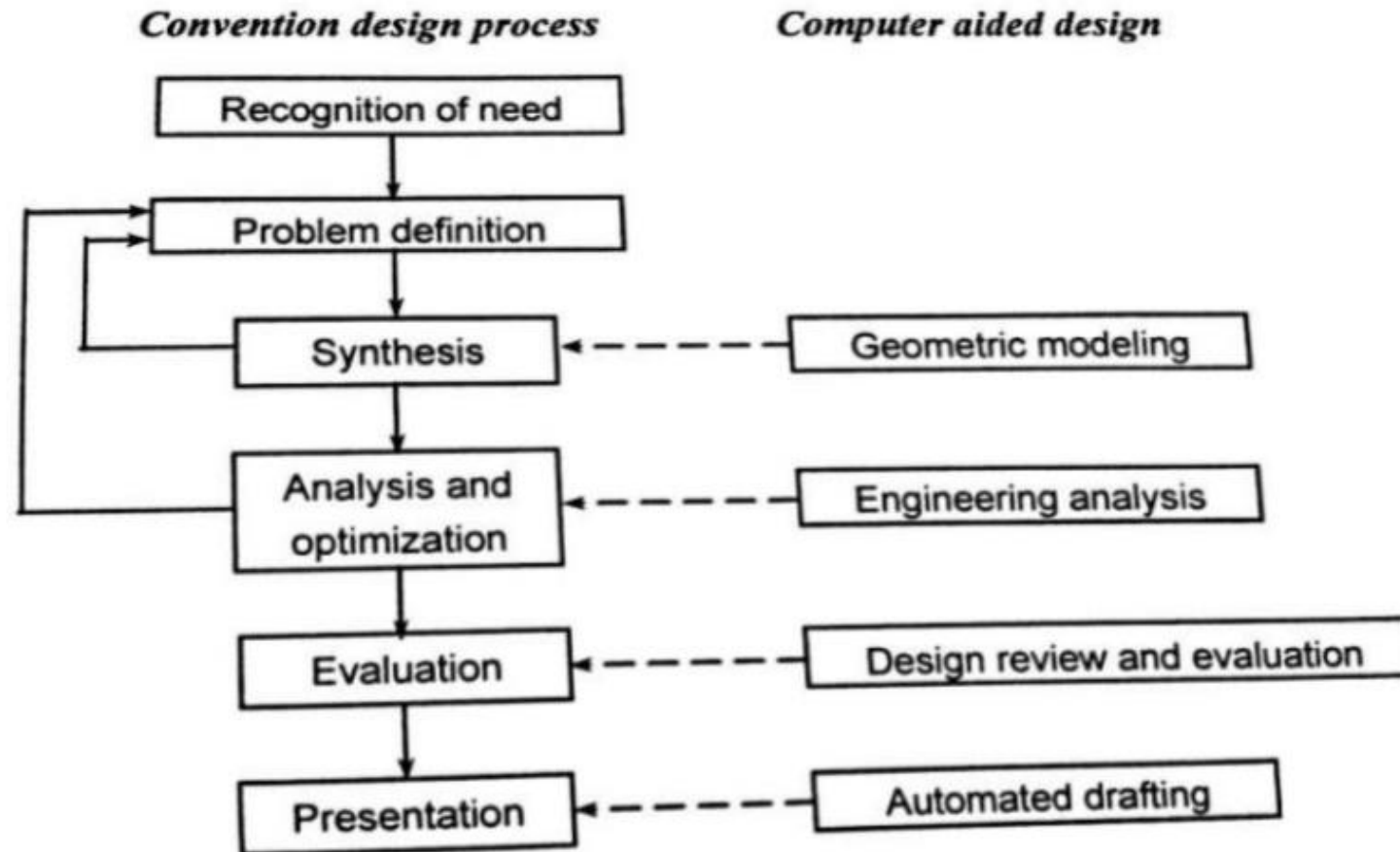
- According to Groover and Zimmer “CAD is the technology concerned with the use of computer systems to assist the creation, modification, analysis and optimization of a design.



# ROLES OF CAD IN DESIGN

- Accurately generated and easily modifiable.
- User can nearly view the actual product on the screen and also make modification.
- The following analysis user can perform:
  - Static, dynamic and natural frequency analysis
  - Fluid flow analysis
  - Heat transfer analysis
  - Plastic analysis

# CAD PROCESS





# APPLICATIONS OF CAD

- Mechanical engineering
- Civil engineering
- Electrical and electronics engineering
- Textile engineering



# ADVANTAGES OF CAD

- Easy editing
- Quality drawings
- Compact storage
- 3D drawing



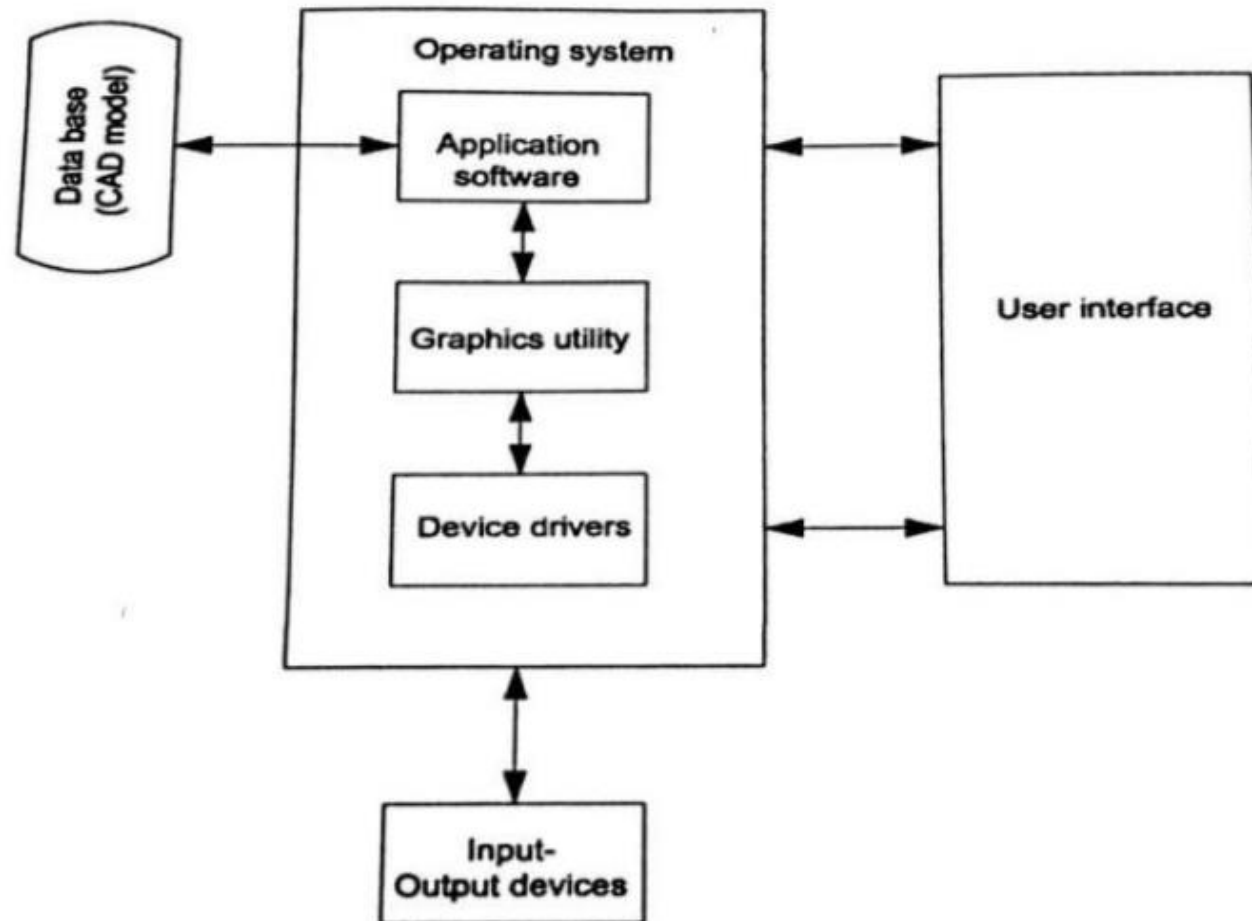
# CAD SYSTEM ARCHITECTURE

The CAD system consists of the following major components

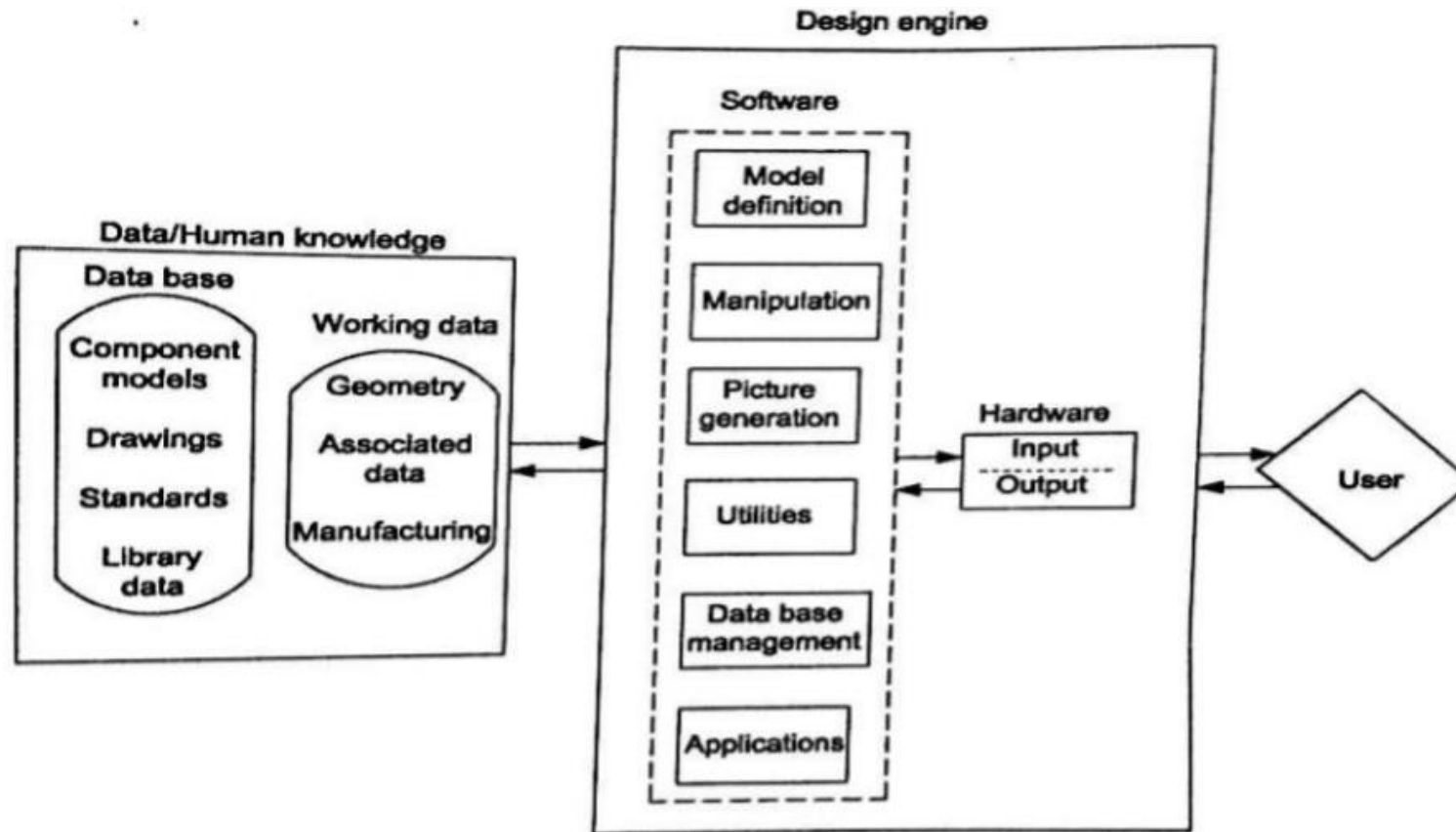
1. Database
2. Operating system'
3. Input/output devices
4. User interface



# CAD ARCHITECTURE



# ADVANCED CAD SYSTEM ARCHITECTURE





# 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.

