Simulations CAD CAM Design

**Computer-aided design** (**CAD**) is the use of computer systems (or workstations) to aid in the creation, modification, analysis, or of a design.

CAD tools are mainly used to make detailed designs of engineering systems.

**Computer-aided manufacturing** (**CAM**) is the use of software to control machine tools and related ones in the manufacturing of workpieces.

CAM tools simply help control the manufacturing process after CAD has been completed and the model is at hand.

Tools -

CAD - classified as 2D CAD tools, 3D CAD tools (**Wire-frame models** – they create skeleton like models with lines and arcs and **Surface models** – unlike wire frames, these models are created by joining 3D surfaces)

2D CAD - LibreCAD, DraftSight

3D CAD - AutoCAD, SolidWorks, FreeCAD

CAM - Siemens NX, PowerMILL, WorkNC

**Computer Aided Three-dimensional Interactive Application (CATIA)** is a multi-platform software suite for computer-aided design, computer-aided manufacturing, computer-aided engineering, PLM and 3D, developed by the French company Dassault Systèmes.

