

E-Activity 7

How CAD is used in the industry

Aerospace – This high-tech industry manufactures everything from space vehicles to satellites, aircraft to missiles. The price tag on any single aerospace product can be several million dollars so CAD software plays an integral role in the initial design process. Before the product is built, every detail will be thoroughly planned using the design software.

Architecture – When creating something as large and as expensive as a building, flawless planning is a must. CAD software is used to design 2D floor plans and 3D schematics of houses, office buildings and other commercial structures. Aside from the actual architecture and layout of a structure, the software is used to determine proper specifications including measurements, volumes and weights before construction even begins.

Automotive – Sophisticated design software is used in every aspect of auto design. It's used to create prototypes of new body styles and to design auto components such as tires, engines, circuitry boards, upholstery and more.

Landscaping – Landscapers use CAD software to conceptualize stunning outdoor creations and determine the best placement of various landscaping components such as trees, fences, gardens, patios and more.

Notes about CAM

- **speed:** CAM is faster because machining speeds are higher
- **greater accuracy**
- **greater consistency:** every finished product is the same
- **efficiency:** production can run 24 hours a day, 7 days a week
- **sophistication:** CAM is able to machine difficult shapes, eg tracks on a circuit boards