



## ON-LINE Training for CAD-CAM Technicians



### 3D MODELLING - EMBC3DEN

**Tridimensional Modelling:  
Wireframe, Solids and Surfaces.**

#### Teaching Method :

- > **On-line** course made of different parts each ending with testing and evaluating summing questionnaires.
- > **Mastercam** software in its demo version to handle the guided drills and test the learnt notions.
- > Technical **Helpdesk** available by e-mail.

#### Length :

**25 hours** - corresponding to **50 hours** of a traditional in class training

#### Maximum available on-line time :

**2 month**

#### Requirements :

- > Computer with CD-Rom reader and Windows technology.
- > Internet connection.
- > E-mail address.

#### Needed knowledges :

- > How to use an internet browser.
- > How to use e-mails.
- > How to use the Mastercam Interface.
- > How to work in the CAD 2D drawing environment of Mastercam.

#### Contents :

- > Handling of the spatial working environment with necessary building plans.
- > Creation of 3D models with Wireframe modelling.
- > Creation of 3D models with Surfaces modelling.
- > Modelling of compound and derived surfaces.
- > Creation of 3D models with Solids corps modelling.
- > Handling of operations with solid modelling.
- > Boolean operations between solids.
- > Hibrid modelling: interaction between solids and surfaces.
- > Visualization of created models.
- > Analysis of the models physical characteristics: weight, volume, barycentre, etc.
- > Groundings of dies studying and planning.
- > Reverse Engeneering, scanning and rapid prototyping of virtual models.

#### Released qualification :

**EduC@M Qualified** Certificate

