



**Denmark**

Title	CAD/CAM CNC Module		
Reference class			
Working hours	30	Implementation Period	February –..... 2010
Competence at the end of this module	To make a solid wood shield, with the participant's logos engraved.		
Skills	Knowledge	Involved Subjects	
To make drawings in CAD software. To execute sketches and dimensioned surveys. To understand different file formats to exchange information's between CAD and CAM software. To make a working schedule using proper technical language. To execute calculation of tool rotation and forward speed To define tools, make tool library in CAM software To add tool lanes into a drawing To use a postprocessor to translate tool lanes to machine codes "ISO"	UNI/ISO regulations for technical drawing Two-dimensional graphic representation methods Dimensioning standards and rules. Proportion and reduction scales Technical drawing instruments and technical writing Representation techniques with information systems (CAD/CAM) Technical sector documentation: technical handbooks, catalogues and price lists.	DRAWING PRODUCTION TECHNIQUE	



	<p>Technical sector terminology</p> <p>Product cards</p>	
<p>To mount tools in tool holders.</p> <p>To measure tool length and diameter.</p> <p>To register tool data into the machine control.</p> <p>To mount fixture on the machine table.</p> <p>To register zero point X, Y, Z into the machine control.</p> <p>To transfer CNC programme between computer and machine control.</p> <p>To start up the milling process on the CNC controlled machine.</p> <p>To make quality control, and make changes in the CNC programme if necessary.</p>	<p>Measure instruments specially designed to measure cutting tools.</p> <p>Choosing right tools suitable to the operating task.</p> <p>Choosing fixture fitting into the operating task and machine construction.</p> <p>Measure technique using different measuring tools.</p> <p>Programming methods including head programs and sub programs.</p> <p>Working with profiled tools.</p> <p>Programming and working in 3 axes X, Y, Z at the same time.</p>	<p><i>WOODWORKING          LABORATORY          PRODUCTION          TECHNIQUE</i></p>

Competence verification method
<p>1° Carrying out of the object (Diploma shield with engraved logos)</p> <p>2° Correspondence between the object and what is decided in the project</p> <p>3° Operating autonomy</p> <p>4° Ability to identify and to work out operating problems</p>

Edited by \_\_\_\_\_ Date \_\_\_\_\_



**I.S.I.S. - I.P.S.I.A. "G. Meroni"**  
*Legno, Mobile e Arredamento - Design*  
*Gestione Aziendale - Servizi Turistici*



# WoodPort DIPLOMA

Logo Logo Logo  
Logo Logo  
Logo Logo  
Logo