



**INGA 3D - Creative transfer of competence in 3D footwear
CAD to VET professionals**

LLP-LdV-ToI/2013-RO-024

MODULE II : 3D CAD – APPLICATIONS TO BASIC FOOTWEAR CONSTRUCTIONS

Training Program

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MODULE II : 3D CAD –APPLICATIONS TO BASIC FOOTWEAR CONSTRUCTIONS		
Total Teaching Hours – Lectures and Activities in class: 25 hours		
Individual Study: 25 hours		
ECVET : 2		
<p>Objectives</p> <ul style="list-style-type: none"> • To apply the 3D CAD technology powered by Icad3D+ software for designing basic footwear constructions types • To practice the 3D modelling process to a range of different footwear styles, characteristics and features which are compatible with design requirements and expectations • To develop skills and competences in producing detailed virtual models of women’s, men’s and children’s footwear 		
UNIT 1: 3D CAD – Basic Constructions for Women’s Footwear (10 Hrs)		
<p>Knowledge</p> <ul style="list-style-type: none"> • Understand the 3D designing process applied to the basic construction types for Women’s footwear • Know how to produce 3D CAD models for Women’s footwear 	<p>Skills</p> <ul style="list-style-type: none"> • To apply knowledge of design requirements translated into technical 3D designs to basic construction types for Women’s footwear • To be able to produce 3D designs for basic constructions of Women’s footwear by following the predefined Icad3D+ modelling steps 	<p>Competences</p> <ul style="list-style-type: none"> • To demonstrate an ability to design highly refined 3D CAD prototypes and renderings for basic construction types of Women’s shoes, sandals and boots
<p>Lesson 1.1. Women’s Court Shoe</p> <p>Lesson 1.2. Women’s Sandals</p> <p>Lesson 1.3. Women’s Boots</p> <p>Unit 1 covers the 3D modelling steps and commands for completing basic models for women’s , footwear by: processing the lasts, designing 3D model lines, transferring and controlling 3D lines with 2D drawings, creating panels (pieces), adding texture, stitches and decorative elements, 3D modelling of sole/heel, rendering) etc.</p> <p>Activities in class: This unit introduces practical lessons which are based on the learning outcomes accumulated by students in Module 1. Each lesson is designed as a tutorial, giving students the skills they need to build a certain type of footwear for women: court shoe, sandal and boot . The student will practice in class, in front of his/her computer that has installed the Icad3+ software, being guided by tutors to following the steps indicated in lessons.</p>		

UNIT 2: 3D CAD – Basic Constructions for Men’s Footwear (10 Hrs)		
<p>Knowledge</p> <ul style="list-style-type: none"> Understand the 3D designing process applied to the basic construction types for Men’s footwear Know how to produce 3D CAD models for Men’s footwear 	<p>Skills</p> <ul style="list-style-type: none"> To apply knowledge of design requirements translated into technical 3D designs to basic construction types for basic constructions of Men’s shoes To be able to produce 3D designs for basic constructions of Men’s shoes by following the predefined Icad3D+ modelling steps 	<p>Competences</p> <ul style="list-style-type: none"> To demonstrate an ability to design highly refined 3D CAD prototypes and renderings for basic construction types of Men’s casual and sport shoes
<p>Lesson 2.1. Men’s Casual Shoe – Derby style</p> <p>Lesson 2.2. Men’s Casual Shoe –Oxford style</p> <p>Lesson 2.3. Sport/ Training Shoe</p> <p>Unit 2 covers the 3D modelling steps and commands for completing basic models for men’s , footwear by: processing the lasts, designing 3D model lines, transferring and controlling 3D lines with 2D drawings, creating panels (pieces), adding texture, stitches and decorative elements, 3D modelling of sole/heel, rendering) etc.</p> <p>Activities in class: This unit introduces practical lessons which are based on the learning outcomes accumulated by students in Module 1. Each lesson is designed as a tutorial, giving students the skills they need to build a certain type of footwear for men: Derby, Oxford, and sport shoe. The student will practice in class, in front of his/her computer that has installed the Icad3+ software, being guided by tutors to following the steps indicated in lessons.</p>		
UNIT 3: 3D CAD – Basic Constructions for Children’s Footwear (5 Hrs)		
<p>Knowledge</p> <ul style="list-style-type: none"> Understand the 3D designing process applied to the basic construction types for Children’s footwear Know how to produce 3D CAD models for Children’s footwear 	<p>Skills</p> <ul style="list-style-type: none"> To apply knowledge of design requirements translated into technical 3D designs to basic construction types for Children’s footwear To be able to produce complete virtual models for Children’s footwear by following the predefined Icad3D+ modelling steps 	<p>Competences</p> <ul style="list-style-type: none"> To demonstrate an ability to design highly refined 3D CAD prototypes and renderings for basic construction types of Children’s shoes and boots
<p>Lesson 3.1. Children’s Shoe</p> <p>Lesson 3.2. Children’s Boots</p> <p>Unit 3 covers the 3D modelling steps and commands for completing basic models for children’s , footwear by: processing the lasts, designing 3D model lines, transferring and controlling 3D lines</p>		

with 2D drawings, creating panels (pieces), adding texture, stitches and decorative elements, 3D modelling of sole/heel, rendering) etc.

Activities in class: This unit introduces practical lessons which are based on the learning outcomes accumulated by students in Module 1. Each lesson is designed as a tutorial, giving students the skills they need to build a certain type of footwear for children: shoe and boot. The student will practice in class, in front of his/her computer that has installed the Icad3+ software, being guided by tutors to following the steps indicated in lessons.