



University of Split

Department of Professional Studies

COMPUTER BASED DESIGN-TEL

COURSE SYLLABUS

COURSE DETAILS

<i>Type of study programme</i>	Professional study - 180 ECTS	
<i>Study programme</i>	ELECTRONICS	
<i>Course title</i>	Computer Based Design-TEL	
<i>Course code</i>	SEL032	
<i>ECTS (Number of credits allocated)</i>	5	
<i>Course status</i>	Core	
<i>Year of study</i>	Third	
<i>Semester</i>	Sixth (spring)	
<i>Course Web site</i>	http://moodle.oss.unist.hr/	
<i>Total lesson hours per semester</i>	Lectures	30
	Laboratory exercises & practical demonstration	30
<i>Prerequisite(s)</i>	None	
<i>Lecturer(s)</i>	Department of Electrical Engineering faculty: Silvano Jenčić, lecturer	
<i>Language of instruction</i>	Croatian, English	

COURSE DESCRIPTION	
<i>Course Objectives:</i>	<ul style="list-style-type: none"> • interpretation of project drawings and documentation, • using software application tools in designing project drawings and documentation.
<i>Learning outcomes</i> <i>On successful completion of this course, student should be able to:</i>	<ol style="list-style-type: none"> 1. introduce possibilities of using software application tools in project design, 2. describe the ways how to use application tools in designing project documentation, 3. demonstrate how to design project drawings and documentation, 4. verify project design by analysing correctness of electrical connections and examining system errors generated by application tool, 5. create project design according to predefined conditions, 6. recommend steps to achieve optimum project design.
<i>Course content</i>	<p>Introduction to application tool ePLAN 1.9.5. education version.</p> <p>Project management and schematics: Project structure, copying and creating new projects. Data backup. Opening, editing and creating new pages in project. Copying pages between different projects. Graphical editor: Drawing tools, inserting texts, pictures and graphical elements. Printing pages. Editing a schematic. Inserting terminals and potential points. Inserting and connecting symbols. Assigning parts. Devices with additional functionality: Black Boxes and Location Boxes.</p> <p>Forms and Symbols: Drawing and editing cable definition lines and shields. Generating and editing forms (Title Page, Table Content, Plot Frame, Parts List, Bill of Material, Terminal Diagram ...). Project translation: Creating and editing dictionaries. Performing a multi-language translation in a project. System messages and errors. Macro projects: Window macro, Symbol and Page macro. Updating macros. Symbol editor: Creating and editing symbols and symbol libraries.</p> <p>Reports and Panel Layouts: Parts management: creating and editing device data (Manufacturer data, Technical characteristics, Price list...). Generating and updating reports (Bill of material, Cable List, Parts List...). Placing Mounting panels. Placing items on the mounting panel. Generating Legends. Generating project revisions. Editing revision data.</p>

CONSTRUCTIVE ALIGNMENT – Learning outcomes, teaching and assessment methods

Alignment of students activities with learning outcomes		
Activity	Student workload ECTS credits	Learning outcomes
<i>Lectures</i>	30 hours / 1 ECTS	1,2,3,4,5,6
<i>Laboratory work</i>	30 hours / 1 ECTS	1,2,3,4,5,6
<i>Three mid-term exams (preparation and delivery)</i>	20 hours / 0.7 ECTS	1,2,5
<i>Self-study</i>	60 hours / 2 ECTS	1,2,3,4,5,6
<i>Office hours and final exam</i>	10 hours / 0.3 ECTS	1,2,5
TOTAL:	150 hours / 5 ECTS	1,2,3,4,5,6

CONTINUOUS ASSESSMENT		
Continuous testing indicators	Performance A_i (%)	Grade ratio k_i (%)
<i>Class attendance and participation</i>	70 - 100	10
<i>Laboratory work</i>	100	6
<i>First mid-term exam</i>	50 - 100	28
<i>Second mid-term exam</i>	50 - 100	28
<i>Third mid-term exam</i>	50 - 100	28

FINAL ASSESSMENT		
Testing indicators – final exam (first and second exam term)	Performance A_i (%)	Grade ratio k_i (%)
<i>Practical exam (computer work)</i>	50 - 100	80
<i>Previous activities (include all continuous testing indicators)</i>	50 - 100	20
Testing indicators – makeup exam (third and fourth exam term)	Performance A_i (%)	Grade ratio k_i (%)
<i>Practical exam (computer work)</i>	50 - 100	100

PERFORMANCE AND GRADE		
Percentage	Criteria	Grade
od 50% do 61%	<i>basic criteria met</i>	sufficient (2)
od 62% do 74%	<i>average performance with some errors</i>	good (3)
od 75% do 87%	<i>above average performance with minor errors</i>	very good (4)
od 88% do 100%	<i>outstanding performance</i>	outstanding (5)

ADDITIONAL INFORMATION

Teaching materials for students (scripts, exercise collections, examples of solved exercises), teaching record, detailed course syllabus, application of e-learning, current information and all other data are available by MOODLE system to all students (<https://moodle.oss.unist.hr/>).