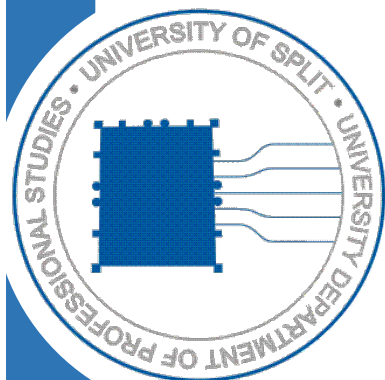


# Course syllabus

## Technical English Language for Electrical Engineering



## COURSE DETAILS

<b><i>Type of study programme</i></b>	Undergraduate professional study programme - 180 ECTS	
<b><i>Study programme</i></b>	Electronics, Power Engineering	
<b><i>Course title</i></b>	Technical English Language	
<b><i>Course code</i></b>	SEN/SEL 015	
<b><i>ECTS (Number of credits allocated)</i></b>	3	
<b><i>Course status</i></b>	Core	
<b><i>Year of study</i></b>	Second/Third	
<b><i>Course Web site</i></b>	<a href="http://moodle.oss.unist.hr/">http://moodle.oss.unist.hr/</a>	
<b><i>Total lesson hours per semester</i></b>	Lectures	10
	Seminars	0
	Auditory exercises	20
<b><i>Prerequisite(s)</i></b>	B2 level	
<b><i>Lecturer(s)</i></b>	Petra Grgičević Bakarić, senior lecturer	

## COURSE DESCRIPTION

<b><i>Course Objectives:</i></b>	<ul style="list-style-type: none"> <li>• preparing students to use English language correctly and appropriately, development and improvement of all language skills (speaking, listening, reading and writing with special emphasis ) needed in modern Electrical engineering.</li> <li>• acquisition of relevant grammatical and lexical structures of English for Electrical Engineering at intermediate level</li> </ul>
<b><i>Learning outcomes</i></b>  <b><i>On successful completion of this course, student should be able to:</i></b>	<ol style="list-style-type: none"> <li>1. define terms, functions and symbols of basic electronic elements, concepts from the area of electrostatics, electrodynamics, magnetism, telecommunications, generation, transmission and distribution of electricity</li> <li>2. describe diagrams, schemes, mathematical and algebraic formulas,</li> <li>3. present professional topics to a broader audience,</li> <li>4. develop skills such as writing summaries, reports and professional papers.</li> <li>5. actively participate in communication in the target language</li> </ol>
<b><i>Course content</i></b>	<p>History of electricity. Nikola Tesla, the man who lit up the world. Components and their symbols. Electronic components and their functions. Mathematical and algebraic expressions. Component value codes: resistors, capacitors and diodes. Semiconductors- extrinsic and intrinsic. Transistors. Diagrams: circuit and block. Electrostatics. Electricity and the electron, electrical charges and conductivity. Electrodynamics. Electromagnetism and electromagnetic induction. Metal detector. Telecommunications. The internet. Local area and wide area networks. Computer vocabulary. Turbines, generators and power plants. Transmission systems. The distribution grid. Renewable sources of energy vs. conventional sources. Mechatronics. Automation. Technical texts. Multiword lexical units. How to read an English technical text. Six principles of technical writing. Abstract writing guidelines.</p>

## CONSTRUCTIVE ALIGNMENT – Learning outcomes, teaching and assessment methods

Alignment of students activities with learning outcomes		
Activity	Student workload ECTS credits	Learning outcomes
Lectures and auditory exercises	30 hours / 1 ECTS	1,2,3,4
Portfolio and presentation	20 hours / 0,6 ECTS	3,4
Mid-term exams (delivery)	10 hours / 0,3 ECTS	1,2,3,4
Self-study	20 hours / 0,8 ECTS	1,2,3,4
Office hours and final exam	10 hours / 0,3 ECTS	1,2,3,4
<b>TOTAL:</b>	<b>90 hours / 3 ECTS</b>	<b>1,2,3,4</b>

CONTINUOUS ASSESSMENT		
Continuous testing indicators	Performance $A_i$ (%)	Grade ratio $k_i$ (%)
<i>Class attendance and participation</i>	<b>70-100</b>	<b>10</b>
<i>Presentation</i>	<b>50-100</b>	<b>10</b>
<i>Portfolio</i>	<b>50-100</b>	<b>20</b>
<i>First mid-term exam</i>	<b>50-100</b>	<b>30</b>
<i>Second mid-term exam</i>	<b>50-100</b>	<b>30</b>

FINAL ASSESSMENT		
Indicators checks - final exam (first and second examination date)	Performance $A_i$ (%)	Grade ratio $k_i$ (%)
<i>Theoretical exam (written)</i>	50 - 100	60
<i>Previous activities (include all continuous testing indicators)</i>	0 - 100	40
Indicators checks - final exam (third and fourth examination date)	Performance $A_i$ (%)	Grade ratio $k_i$ (%)
<i>Theoretical exam (written)</i>	50 - 100	60
<i>Previous activities (include all continuous testing indicators)</i>	0 - 100	40

PERFORMANCE AND GRADE		
Percentage	Criteria	Grade
50% - 62,4%	<i>basic criteria met</i>	<i>sufficient (2)</i>
62,5% - 74,9%	<i>average performance with some errors</i>	<i>good (3)</i>
75% - 87,4%	<i>above average performance with minor errors</i>	<i>very good (4)</i>
87,5% - 100%	<i>outstanding performance</i>	<i>outstanding (5)</i>

### ADDITIONAL INFORMATION

- knowledge of general English language at B2 level is needed
- at least 70% attendance for full-time students and 50% for part-time students is required.