

**Faculty of Electrical Engineering / ELECTRONICS, TELECOMMUNICATIONS AND COMPUTERS / CODING AND INFORMATION THEORY**

<b>Course:</b>	CODING AND INFORMATION THEORY			
<b>Course ID</b>	<b>Course status</b>	<b>Semester</b>	<b>ECTS credits</b>	<b>Lessons</b> (Lessons+Exercises+Laboratory)
1646	Mandatory	5	4.5	3+1+0
<b>Programs</b>	ELECTRONICS, TELECOMMUNICATIONS AND COMPUTERS			
<b>Prerequisites</b>				
<b>Aims</b>				
<b>Learning outcomes</b>	After passing this course student will be familiarized with basic concepts of the information and coding theory, source modeling and channel modeling, entropy coders (Huffman code with variants), auxiliary codes in source coding. In addition students will be able to create and realize codes for channel coding like Hamming codes, BCH codes. Students will learn arithmetic coding theory.			
<b>Lecturer / Teaching assistant</b>				
<b>Methodology</b>				
<b>Plan and program of work</b>				
Preparing week	Preparation and registration of the semester			
I week lectures				
I week exercises				
II week lectures				
II week exercises				
III week lectures				
III week exercises				
IV week lectures				
IV week exercises				
V week lectures				
V week exercises				
VI week lectures				
VI week exercises				
VII week lectures				
VII week exercises				
VIII week lectures				
VIII week exercises				
IX week lectures				
IX week exercises				
X week lectures				
X week exercises				
XI week lectures				
XI week exercises				
XII week lectures				
XII week exercises				
XIII week lectures				
XIII week exercises				
XIV week lectures				
XIV week exercises				

XV week lectures						
XV week exercises						
<b>Student workload</b>						
<b>Per week</b>		<b>Per semester</b>				
<b>4.5 credits x 40/30=6 hours and 0 minuts</b> 3 sat(a) theoretical classes 0 sat(a) practical classes 1 excercises <b>2 hour(s) i 0 minuts</b> of independent work, including consultations		Classes and final exam: <b>6 hour(s) i 0 minuts x 16 =96 hour(s) i 0 minuts</b> Necessary preparation before the beginning of the semester (administration, registration, certification): <b>6 hour(s) i 0 minuts x 2 =12 hour(s) i 0 minuts</b> Total workload for the subject: <b>4.5 x 30=135 hour(s)</b> Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) <b>27 hour(s) i 0 minuts</b> Workload structure: <b>96 hour(s) i 0 minuts (cources), 12 hour(s) i 0 minuts (preparation), 27 hour(s) i 0 minuts (additional work)</b>				
<b>Student obligations</b>						
<b>Consultations</b>						
<b>Literature</b>						
<b>Examination methods</b>						
<b>Special remarks</b>						
<b>Comment</b>						
<b>Grade:</b>	F	E	D	C	B	A
<b>Number of points</b>	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points