



**UNIVERSITY OF PRIZREN  
FACULTY OF COMPUTER SCIENCE**

PROGRAM: Information and Telecommunication Technology

<b>Curriculum - – SYLLABUS</b>							
<i>Level of studies</i>	Master	<i>Program</i>		<i>Academic year</i>	2018/2019		
<i>SUBJECT</i>	<b>Language Technology</b>						
<i>Year</i>	2019	<i>Status Of the subject</i>	Elective	<i>Code</i>		<i>ECTS credits</i>	6
<i>Semester</i>	II						
<i>Teaching weeks</i>	15		<i>Hours teaching</i>	60	<i>Lectures</i>	<i>Exercises</i>	
					15	15	
<i>Teaching Methodology</i>	Lectures, exercises, seminar papers, consultations, tests, case studies, assignments, etc.						
<i>Consultation</i>	One hour before and one hour after lectures						
<i>The teacher</i>	Assoc. Prof. Dr. Mentor Hamiti	<i>E-mail:</i>	mentor.hamiti@uni-prizren.com				
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<i>Assistant</i>		<i>E-mail:</i>					
		<i>Tel.:</i>					

<b>Study goal and table of content</b>	<b>Benefits of student</b>
Language technology is technology for the analysis and interpretation of natural language, a key component of smart search engines, personal digital assistants, and many other innovative applications. The goal of this course is to provide knowledge on language technology as an application area, as well as to its standard methods. The course focuses on methods that process text and speech.	After successful completion of the course, students will be able to: <ul style="list-style-type: none"> <li>- explain basic methods for the analysis and interpretation of words, sentences, and texts</li> <li>- practically apply language technology methods and systems to texts and text collections</li> <li>- program text to speech application and</li> <li>- evaluate speech recognition application</li> </ul>

<b>Methodology for the implementation of educational topics:</b>		
In class hours, lecture materials will be discussed and discussed about the issues raised. In exercises, different case scenarios will be processed from the life cycle of the projects. Each student will make a presentation of achieving an example, a real project in the field of Language Technology.		
<b>Ways of assessing of the student (in %) :</b>	<b>Evaluation in%</b>	<b>Final grade</b>
• Regular attendance and participation	0	(91-100) - 10
• Projects	30	(81-90) - 9
• Topic Presentation	20	(71-80) - 8
• Research paper	50	(61-70) - 7
<b>Total</b>	<b>100.00 %</b>	(51-60) - 6
		(0 – 50) - 5
<b>Obligations of student:</b>		
<b>Lectures</b>	<b>Exercises</b>	
<ul style="list-style-type: none"> <li>• Participation in lectures</li> <li>• Active participation in discussions during lectures</li> <li>• Participation in tasks and projects</li> </ul>	<ul style="list-style-type: none"> <li>• Participation in exercises</li> <li>• Group work in case studies and assignments.</li> <li>• Participation in discussion on case studies</li> </ul>	

Activities		Hour/ weeks	Days/Weeks	
Lectures		2	15	30
Laboratory exercises		2	15	30
Contacts with teachers / consultations		1	10	10
Practical work		1	10	10
Projects, presentations, etc.		1	10	10
Own study time		1	10	10
Preparation for final exam		5	5	25
Time spent in the assessment (tests, final exam, etc.)		1	15	15
<b>Notice: 1 ECTS credits= 25-hour</b> commitment, e.g. if the subject has 6 ECTS credits student must have 150 hours during the semester commitment.			<b>Total load:</b>	<b>140</b>
Week	Lectures	Hour	Exercises	
	Topic		Topic	
1	Introduction and Course Overview	2		2
2, 3	Language and Speech Technology	4	Paper 1	4
4, 5, 6	Text Analysis	6	Paper 2	6
7, 8, 9	Computer Linguistics	6	Paper 3	6
10,11,12	Speech Recognition	6	Topic Presentation	6
13, 14	Papaer Presentation	4	Research Paper Presentation	4

#### LITERATURE:

1. Natural Language Processing, Krishna Bhavsar and Naresh Kumar, 2017
2. Speech and Language Processing, Daniel Jurafsky and James Martin, second edition, Prentice-Hall, 2008
3. Automatic Speech Recognition, Dong Yu and Li Deng, Springer, 2014
4. Introduction to Linguistics for Natural Language Processing, Ted Briscoe, University of Cambridge, 2010

#### NOTICE:

- In general, lecture presentations will be made through the PowerPoint system, table, use of materials, computer programs and the internet.
- As well, by the professor and the assistant will be provided and other additional materials (scientific papers, publications, national bulletins and discoveries and recent research).
- During each session, a conversation approach and co-participation with students will be organized.

#### Notice for the student:

- Students are required to be regular in the lectures and exercises section.
- The student's contribution in the form of conversation and co-participation with the students will be evaluated.