Course title		Code	semester	T+U	credit	ECTS
Natural Language Processing			8	3+ 0	3	4

Prerequisite Courses	
Language of the Course	English
Type of Course	Compulsory
Course Coordinator	
Instructors	
Course Assistants	
The aim of lesson	To show students how written and spoken language can be understood by computers, to show how the obtained information is applied in areas such as information extraction, machine translation, automatic summary, automatic response. The course will also conduct cognitive analysis of languages in terms of grammar, meaning and context, using both linguistics and statistical techniques.
Course Learning Outcomes	**At the end of this course, the student;** **1.** How is the language written and spoken by computers learns to be understood. **2.** Information extraction, machine translation, automatic summary, automatic response information obtained in the fields of granting can use. **3.** Knowledge of linguistics and cognitive analysis of languages in terms of
Course Content	Introduction / Natural languages and artificial languages / N-Grams and language models / Sentence separation / Context-free grammars / Context-free grammars and natural languages / Mana analysis / Word ambiguity analysis / Summarization / Pronoun resolution / Natural language generation / Machine translation

Weeks	Topics
one	Entrance
2	Natural and Artificial Languages
3	N-Grams and Language Models
4	Separating Sentence Elements
5	Context Free Grammars
6	Context Free Grammars
7	Natural Languages
8	Mana Analysis
9	Word Ambiguity Analysis
10	Summarizing
11th	Pronoun Solution
12	Natural Language Generation
13	Machine Translation
14	Machine Translation

General Qualifications
Learns how to understand written and spoken language by computers.

resources
Daniel J., & James H. (2012). *Speech and Language Processing* .

Evaluation system
The dates, days and hours of the Midterm Exam, Quiz, Final Exam and Evaluations will be announced later, according to the decision of the Faculty Administrative Board.

		WITH PROGRAM LEARNING OUTCOMES COURSE LEARNING OUTCOMES RELATIONSHIP TABLE									
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**
LO1	5	5	5	5	4	4	4	2	2	2	2
LO2	5	4	4	4	4	3	3	3	3	3	3
LO3	5	5	5	4	4	4	4	2	2	2	2
LO: Learning Outcomes OP: Program Outcomes											
Contribution level	**1 Very Low**		**2 Low**		**3 Medium**		**4 High**		**5 Very High**		

Relation of Program Outcomes and Related Course

Less	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**
Natural Language	5	5	5	4	4	4	4	2	2	2	2