

Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
INF400	Compilation	7	3	0	0	3	5
Prerequisites	INF103						
Admission Requirements	INF103						
Language of Instruction	Turkish						
Course Type	Compulsory						
Course Level	Bachelor Degree						
Objective	Acquire formalisms, concepts methods and tools used in the design of compilers						
Content	Introduction, Lexical analysis, Language and grammar, Introduction to lex/flex, Parse Trees, Syntax analysis: introduction, Syntax analysis: Top-Down Parsing, Syntactic analysis: Bottom-Up Parsing, Introduction to YACC/javaCC, Semantic analysis, Syntax-Directed Translation, Type checking and Symbol-Table Management, Code Generation, Code Optimization						
References	- Compilateurs : principes, techniques et outils – A. Aho, R Sethi, J Ullman – InterEditions - Compilateurs – D. Grune, H. Bal, V. Jacobs, K. Langendoen, Dunod.						

Theory Topics

Week	Weekly Contents
1	Introduction
2	Lexical analysis
3	Language and grammar
4	Introduction to lex/flex
5	Parse Trees
6	Syntax analysis: introduction
7	Syntax analysis: Top-Down Parsing
8	Syntactic analysis: Bottom-Up Parsing
9	Introduction to YACC / javaCC
10	Semantic analysis
11	Syntax-Directed Translation
12	Type checking and Symbol-Table Management
13	Code Generation
14	Code Optimization