



Arab Academy for Science and Technology & Maritime Transport  
 College of Computing and Information Technology  
 Department of Computer Science, Cairo

University/Academy: Arab Academy for Science and Technology & Maritime Transport  
 Faculty/Institute: College of Computing and Information Technology  
 Program: Computer Science

Course title	Compiler
Course code	CS441

Form no. (11A)  
 Knowledge and skills matrix for a course

Course content	Week study	Knowledge	Intellectual skills	Professional skills	General skills
Introduction	1	K18.Understand the fundamental topics in Computer Science, including hardware and software architectures, software engineering principles and methodologies, operating systems, compilers, parallel and distributed computing, systems and software tools.	I11. Perform comparisons between (algorithms, methods, techniques...etc). I17. Identify a range of solutions and critically evaluate and justify proposed design solutions.	P14. Specify, design, and implement computer-based systems.  P15. Evaluate systems in terms of general quality attributes and possible tradeoffs presented within the given problem.	G1. Demonstrate the ability to make use of a range of learning resources and to manage one's own learning. G7. Show the use of general computing facilities.
A Simple Syntax-Directed Translator	2				
A Simple Syntax-Directed Translator	3				
Lexical Analysis	4				
Lexical Analysis	5				
Syntax Analysis	6				
7 <sup>th</sup> week Exam	7				

Course content	Week study	Knowledge	Intellectual skills	Professional skills	General skills
Syntax-Directed Translation	8	K18.Understand the fundamental topics in Computer Science, including hardware and software architectures, software engineering principles and methodologies, operating systems, compilers, parallel and distributed computing, systems and software tools.	I11. Perform comparisons between (algorithms, methods, techniques...etc). I17. Identify a range of solutions and critically evaluate and justify proposed design solutions.	P14. Specify, design, and implement computer-based systems.  P15. Evaluate systems in terms of general quality attributes and possible tradeoffs presented within the given problem.	G1. Demonstrate the ability to make use of a range of learning resources and to manage one's own learning. G7. Show the use of general computing facilities.
Syntax-Directed Translation	9				
Intermediate-Code Generation	10				
Run-Time Environments	11				
12 <sup>th</sup> week Exam	12				
Code Generation	13				
Code Generation	14				
Revision	15				

Course Instructor:

Head of Department:

Program Manager: