

السنة الدراسية الثانية/ الفصل الدراسي الثاني						
الوحدات المعتمدة	الاضافي	العملي	المحاضرات النظرية	رمز المقرر	نوع المقرر	اسم المقرر
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Essential book

- Context-Free Languages
 - Context-free Grammars.
 - Formal definition of a context-free grammar.
 - Examples of context-free grammars.
 - Designing context-free grammars.
 - Ambiguity.
 - Chomsky normal form.
- Pushdown Automata
 - Formal definition of a pushdown automaton . . .
 - Examples of pushdown automata
 - Equivalence with context-free grammars
 - ٢,٣ Non-context-free Languages
 - The pumping lemma for context-free languages.
 - Exercises, Problems, and Solutions
- Computability Theory
 - ٣ The Church-Turing Thesis
 - ٣,١ Turing Machines
 - Formal definition of a Turing machine
 - Examples of Turing machines
 - Equivalence with other models

Supporting Books

[Introduction to Theory of Computation of Theory](#), Second Edition, Michael Sipser Massachusetts Institute of Technology, ٢٠٠٦.

