

Course Title	Analysis of Algorithms
Course Code	CMP-412
Credit Hours	3
Category	Computing
Prerequisite	None
Co-Requisite	CMP-410: Data Structures and Algorithms
Follow Up	None
Syllabus	Topics: Role of Algorithm in Computing, Analyzing Algorithms, Designing Algorithms, Growth of Functions, Asymptotic Notations, Sorting Algorithms, Time Complexity of Recursive Algorithms, Dynamic Programming, Greedy Algorithms, String Matching, Graphs, DFS, BFS, Minimum Spanning Trees, Shortest Path Algorithms, NP Completeness, Polynomial Time Algorithm, Polynomial Time verification.
Text Book(s)	Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest and Clifford Stein, Introduction to Algorithms, 3 rd Edition, The MIT Press, 2009, ISBN-10: 0262033844, ISBN-13: 978-0262033848