Faculty of Computers and Information Technology

Analysis and Design of Algorithms

Information :

Course Code :	CSC312	**Level** :	Undergraduate	**Course Hours :**	3.00- Hours

Department :	Faculty of Computers and Information Technology

Instructor Information :

Title	Name	Office hours
Associate Professor	Wael Hassan gomaa Mohamed Abuzaid	1
Teaching Assistant	IBRAHIM AYMAN IBRAHIM AHMED TAGEN	

Description :

The course provides the fundemntals of algorithm design and analysis, the basics of analyzing algorithms for correctness , time and space bounds. Up-completeness theory, the notion of intractable problems, approximation measures, polynomial time approximation, and algorithm complexity . Topics covered in this course are analyzing and designing algorithms (sorting algorithms), complexity types and analysis, recurrence equations iteration methods , heap property function and operations, search algorithms, raph concepts and operations, general greedy method., branch & bound algorithms, dynamic programming and string and pattern matching. Hands-on experience is provided through a series of exercises, assignments, and projects.