

Faculty of Computers and Artificial Intelligence
Department of Computer Science
Post-Graduate (Master Degree)

Entrance Exam Topics:

▪ **Image Processing**

1. Digital Image Fundamentals
2. Image Enhancement in the Spatial Domain and Frequency Domain
3. Image Restoration

▪ **Operating Systems**

1. Operating Systems Fundamentals
2. Multiprocessor Systems
3. Synchronization

▪ **Algorithms and Data Structures**

1. Complexity Analysis
2. Asymptotic notation and Standard notations and common functions
3. Divide and Conquer Method
4. Binary Search, Merge Sort, Quick Sort, Selection Sort and Insertion Sort

▪ **Artificial Intelligence**

1. Introduction, and History of AI. Define the problem as a state space search
2. Breadth First Search, Depth First Search, Bidirectional Search and Uniform Path Cost Search.
3. Best First Search, A* Search, Hill Climbing, Simulated Annealing