## University of Baghdad\ Collage of Science\ Computer Department Educational Subject for Postgraduate Studies 2024-2025

### Ph.D. Materials

#### 1. First Semester

No.	Subject	No. of Units
1	Cloud Computing	3
2	Advanced Artificial Intelligence	3
3	Advanced Topics in Cryptography	2
4	Applied Mathematics	2
5	Elective Course	2
6	English Language	2

#### 2. Second Semester

No.	Subject	No. of Units
1	Cyber Security	3
2	Big Data Analysis	2
3	Distributed Operating System	2
4	Multimedia System	2
5	Elective Course	2
6	Research Methodology	2

#### **Elective Subjects**

No.	Subject
1	Bioinformatics
2	Intelligent Robotics
3	Computational Linguistics
4	Fuzzy Logic Control
5	Metaheuristics
6	Internet of Things
7	Deep Learning
8	Deep Web
9	Mobile Computing
10	Advances in Image Processing and Analysis
11	Pattern Recognition
12	Computer Vision

# **Master Degree Materials**

### 1. First Semester

No.	Subject
1	Advanced Topics in Operating Systems
2	Advanced Topics in Computer Network
3	Cloud Computing
4	Data Mining
5	Statistical Analysis and Probability
6	Mobile Computing
7	English Language

### 2. Second Semester

No.	Subject
1	Advanced Topics in Networks Security
2	Digital Image Processing and Analysis
3	Big Data
4	Advanced Topics in Artificial Intelligence
5	Pattern Recognition
6	Research Methodology

## Higher Diploma Equivalent to a Master's Degree / Cybersecurity

#### 1. First Semester

No.	Subject	No. of Units
1	Computer Networks	3
2	Cyber Security Fundamentals	3
3	Advanced Cryptography	3
4	Information Security Management	3
5	English Language	2

#### 2. Second Semester

No.	Subject	No. of Units
1	Machine Learning for Security	3
2	Ethical Hacking and Penetration Test	3
3	Web Security	3
4	Digital Forensics	3
5	Research Methodology	2