

Isra University
Faculty of Information Technology
Master Program in Software Engineering
Comprehensive Exam Track
2020-2019
Number of Credit Hours:33

A- Mandatory Requirements (24) Credit Hours

Course Number	Course Title	Credit Hours
06037150	Scientific Research Methodologies	3
06037130	Advanced Software Engineering	3
06037131	Advanced Requirements Engineering	3
06037132	Software Architecture Design and Design Patterns	3
06037233	Advanced Software Testing	3
06037251	Advanced IT Project Management	3
06037234	Service-Oriented Architecture	3
06037220	Advanced Database Management Systems	3

B- Elective Courses (9) Credit Hours

Course Number	Course Title	Credit Hours
06037335	Component-Based Design	3
06037336	Object-Oriented Design (OOD)	3
06037337	Software Engineering for Web Applications	3
06037310	Cloud Computing	3
06037338	Formal Methods	3
06037321	Data Science and Big Data Engineering	3
06037339	Advanced Software Quality Assurance	3
06037352	Artificial Intelligence and Machine Learning	3
06037340	Advanced Selected Topics in Software Engineering	3

Isra University
Faculty of Information Technology
Master Program in Software Engineering
Thesis Track
2019/2020
Number of Credit Hours:33

A- Mandatory Requirements (15) Credit Hours

Course Number	Course Title	Credit Hours
06037150	Scientific Research Methodologies	3
06037130	Advanced Software Engineering	3
06037131	Advanced Requirements Engineering	3
06037132	Software Architecture Design and Design Patterns	3
06037233	Advanced Software Testing	3

B- Elective Courses (9) Credit Hours

Course Number	Course Title	Credit Hours
06037251	Advanced IT Project Management	3
06037234	Service-Oriented Architecture	3
06037220	Advanced Database Management Systems	3
06037335	Component-Based Design	3
06037336	Object-Oriented Design (OOD)	3
06037337	Software Engineering for Web Applications	3
06037310	Cloud Computing	3
06037338	Formal Methods	3
06037321	Data Science and Big Data Engineering	3
06037339	Advanced Software Quality Assurance	3
06037352	Artificial Intelligence and Machine Learning	3
06037340	Advanced Selected Topics in Software Engineering	3

C- Master Thesis (9) Credit Hours

Course Number	Course Title	Credit Hours
06037390	Thesis	9