

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
<b>06037150</b>	Scientific Research Methodologies	3
<b>06037130</b>	Advanced Software Engineering	3
<b>06037131</b>	Advanced Requirements Engineering	3
<b>06037132</b>	Software Architecture Design and Design Patterns	3
<b>06037233</b>	Advanced Software Testing	3
<b>06037251</b>	Advanced IT Project Management	3
<b>06037234</b>	Service-Oriented Architecture	3
<b>06037220</b>	Advanced Database Management Systems	3

B- Elective Courses (9) Credit Hours

Course Number	Course Title	Credit Hours
<b>06037335</b>	Component-Based Design	3
<b>06037336</b>	Object-Oriented Design (OOD)	3
<b>06037337</b>	Software Engineering for Web Applications	3
<b>06037310</b>	Cloud Computing	3
<b>06037338</b>	Formal Methods	3
<b>06037321</b>	Data Science and Big Data Engineering	3
<b>06037339</b>	Advanced Software Quality Assurance	3
<b>06037352</b>	Artificial Intelligence and Machine Learning	3
<b>06037340</b>	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
<b>06037150</b>	Scientific Research Methodologies	3
<b>06037130</b>	Advanced Software Engineering	3
<b>06037131</b>	Advanced Requirements Engineering	3
<b>06037132</b>	Software Architecture Design and Design Patterns	3
<b>06037233</b>	Advanced Software Testing	3

B- Elective Courses (9) Credit Hours

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

C- Master Thesis (9) Credit Hours

Course Number	Course Title	Credit Hours
<b>06037390</b>	<b>Thesis</b>	<b>9</b>