



DEPARTMENT OF COMPUTER SOFTWARE ENGINEERING

LIST OF ELECTIVE COURSES

S. No.	Course Code	Course Title	Credit Hours
1.	SE-604	Advanced Software Project Management	3
2.	SE-605	Software Measurement and Metrics	3
3.	SE-606	Component Based Software Engineering	3
4.	SE-607	Empirical Software Engineering	3
5.	SE-608	Agile Software Development Methods	3
6.	SE-609	Advanced Formal Methods	3
7.	SE-610	Advanced Human-Computer Interaction	3
8.	SE-611	Software Configuration Management	3
9.	SE-612	Software Design Patterns	3
10.	SE-613	Software Risk Management	3
11.	SE-614	Software Engineering Ontology	3
12.	SE-615	Advanced Web Engineering	3
13.	SE-616	Model Driven Software Development	3
14.	SE-617	Agent Based Modeling	3
15.	SE-618	Bio-Inspired Computation	3
16.	SE-619	Data Mining	3
17.	SE-620	Introduction to Machine Learning	3
18.	SE-621	Advanced Topics in Artificial Intelligence	3
19.	SE-622	Design and Analysis of Network System	3
20.	SE-623	Complex Networks	3
21.	SE-624	Information System Security	3
22.	SE-625	Research Methods	3
23.	SE-626	Software Case Tools & Applications	3
24.	SE-627	Data Warehousing	3

25.	SE-628	Reliability Engineering	3
26.	SE-629	Internet of Things	3
27.	SE-801	Service Oriented Software Architecture	3
28.	SE-802	Advanced Semantic based Software Engineering	3
29.	SE-803	Advanced Software Engineering Ontologies	3
30.	SE-804	Advanced Machine Learning: Theory and Methods	3
31.	SE-805	Mathematical Foundations of Machine Learning	3
32.	SE-806	Probabilistic Graphical Models in Machine Learning	3
33.	SE-807	Machine Learning Applications in Software Engineering	3
34.	SE-808	Deep Learning	3
35.	SE-809	Intelligent System Design	3
36.	SE-810	Advanced Text Analytics	3
37.	SE-811	Advanced Natural Language Processing	3
38.	SE-812	Sensor Networks	3
39.	SE-813	Advanced Computer Networks	3
40.	SE-814	Cyber-Physical Systems	3
41.	SE-815	Cyber Security	3
42.	SE-816	Advanced Information System Security	3
43.	SE-817	Advanced Data Visualization	3
44.	SE-818	Blockchain Technologies	3
45.	SE-819	Advanced Cloud Computing	3
46.	SE-820	Convex Optimization	3
47.	SE-821	Simulation and Modelling	3
48.	SE-822	Special Topics Related to Software Engineering	3