

Faculty of Information Technology

Semester: Spring 2022

BS Software Engineering:

<u>S #</u>	<u>Course Code</u>	<u>Course Title</u>	<u>Sections</u>	<u>Semester</u>
1	SECP1013	Introduction to Computing	3	1
2	SECP1011	Introduction to Computing Lab	3	1
3	SEHU1833	English Composition & Comprehension	3	1
4	SEHU1823	Islamic and Religious Studies	3	1
5	SESS1723	Basic Electronics	3	1
6	SEHU1813	Pakistan Studies	3	1
7	SESS1773	Pre-calculus (Only medical background)	3	1
8	SECP1023	Programming Fundamentals	9	2
9	SECP1021	Programming Fundamentals Lab	9	2
10	SEHU1863	Communication & Presentation Skills	9	2
11	SEAD1413	Discrete Structures	9	2
12	SESE1113	Software Engineering	9	2
13	SESS1713	Calculus and Analytical Geometry	9	2
14	SESS1783	Elementary Algebra	9	2
15	SECP2033	Object Oriented Programming	3	3
16	SECP2031	Object Oriented Programming Lab	3	3
17	SESD2213	Software Requirements Engineering	3	3

18	SEAD3423	Introduction to Database Systems - Theory	3	3
19	SEAD3421	Introduction to Database Systems – Lab	3	3
20	SESS2743	Linear Algebra	3	3
Uni- Elective Select any 1 course from the following:				
21	SEGE1913	Introduction to Business (ITOB-SE)	2	3
22	SEGE3963	Fundamental of Marketing (FOM-SE)	1	3
23	SECP2043	Data Structure & Algorithms (DSA-SE-T) – Theory	9	4
24	SECP2041	Data Structure & Algorithms (DSA-SE-L) – Lab	9	4
25	SESD2222	Software Design & Architecture (SDA-SE-T) - Theory	9	4
26	SESD2221	Software Design & Architecture (SDA-SE-L) – Lab	9	4
27	SEST2613	Business Process Engineering (BPE-SE) (SE Supporting - I)	9	4
28	SEHU2873	Technical and Business Writing (Eng-III-SE)	9	4
29	SESS2733	Probability and Statistics (PROB-SE)	9	4
30	SENS3513	Operating Systems (OS-SE-T) Theory	3	5
31	SENS3511	Operating Systems (OS-SE-L) Lab	3	5
32	SEAD3423	Introduction to Database Systems (DB-SE-T) Theory	3	5
33	SEAD3421	Introduction to Database Systems (DB-SE-L) Lab	3	5
34	SESD3233	Web Engineering (WEB-E-SE)	3	5
35	SESE3133	Formal Methods in Software Engineering (FM-SE) – (SE Supporting - II)	3	5

	Uni- Elective Select any 1 course from the following:			
36	SEGE2933	Technology Entrepreneurship (T-ENT-SE)	3	5
37	SESM3313	Software Quality Engineering (SQE-SE)	4	6
38	SENS3523	Computer Comm. and Networks (CCN-SE-T) Theory	4	6
39	SENS3521	Computer Comm. and Networks (CCN-SE-L) Lab	4	6
40	SESD3241	Software Construction and Development (SCD-SE-L) - Lab	4	6
41	SESD3242	Software Construction and Development (SCD-SE-T) –Theory	4	6
	SE- Elective:			
42	SECP3053	Mobile Application Development (MAD-SE) (SE Elective – I)	4	6
	Supporting Courses:			
43	SESS3753	Stochastic Processes(SE Supporting)	2	6
44	SESS3763	Operations Research (OR-SE) (SE Supporting – III)	2	6
45	SENS4533	Information Security – (ISEC-SE)	1	7
46	SESM4323	Software Project Management – (SPM-SE)	1	7
47	SESD4913	Final Year Project I – (FYP-SE-I)	1	7
48	SESE4143	Software Re-engineering – (SREE-SE)	1	7
	SE- Elective:			
49	SECP4063	Advance Web Programming (AWP-SE) (SE Elective – III)	1	7
50	SEAD3453	Introduction to Machine Learning (IML-SE) (SE Elective – II)	1	7

51	SEGE3953	Professional Practices	1	8
52	SESD4923	Final Year Project II	1	8
SE- Elective:				
53	SECP4073	Programming for Big Data	1	8
54	CSAL4333	Introduction to Deep Learning	1	8
55	CSNC3443	Blockchain Essentials	1	8
56	SEAD4463	Introduction to Natural Language Processing	1	8
Uni- Elective:				
57	SEGE4963	Organizational Behaviour and Culture	1	8
58	CSMG4913	Fundamentals of Enterprise Resource Planning	2	8