BS Software Engineering

Semester: Spring 2026			
Course Code	**Course Title**	**Credit Hours**	**Section**
CP103	Introduction to Computing	3	2
CP101	Introduction to Computing - Lab	1	2
GE102	Basic Electronics	3	2
GE101	Basic Electronics - Lab	1	2
ENG110	Functional English	3	2
PAK102	Ideology and Constitution of Pakistan	2	2
AL143	Discrete Structures	3	2
MAT103	Pre-Calculus (Only medical background)	3	1

Semester 1 (row label)

Course Code	**Course Title**	**Credit Hours**	**Section**
CP113	Programming Fundamentals (PF-SE-T) – Theory	3	9
CP111	Programming Fundamentals (PF-SE-L) – Lab	1	9
AR102	Digital Logic and Design	2	9
AR101	Digital Logic and Design - Lab	1	9
ENG211	English II	3	9
CCE201	Civics and Community Engagement	2	9
MAT113	Calculus and Analytical Geometry	3	9
MAT123	Elementary Algebra	3	1

Semester 2 (row label)

Course Code	**Course Title**	**Credit Hours**	**Section**
CP223	Object Oriented Programming	3	1
CP221	Object Oriented Programming Lab	1	1
AR223	Computer Organization and Assembly Language (COAL-SE-T) Theory	3	1
AR221	Computer Organization and Assembly Language (COAL-SE-L) Lab	1	1
MAT253	Probability and Statistics (PROB-SE)	3	1

Semester 3 (row label)

Course Code	Course Title	Credit Hours	Section
SEP203	Professional Practices (PP-SE)	3	1
MAT243	Multivariable Calculus (MVC-SE)	3	1
ENT102	Entrepreneurship (ENT-SE)	2	1

Semester 4

Course Code	Course Title	Credit Hours	Section
CP233	Data Structures	3	1
CP231	Data Structures - Lab	1	1
DB203	Database Systems	2	1
DB201	Database Systems	1	1
SS103	Sociology	2	1
SE203	Software Engineering	3	1
SS102	Fundamentals of Psychology	2	1
MAT233	Linear Algebra	3	1
ISL201	Islamic Studies	3	1

Semester 5

Course Code	Course Title	Credit Hours	Section
SENS3513	Operating Systems (OS-SE-T) Theory	3	1
SENS3511	Operating Systems (OS-SE-L) Lab	1	1
SESE2123	Human Computer Interaction (HCI-SE)	3	1
SEST2613	Business Process Engineering (BPE-SE)	3	1
SESE3143	Web Application Development	3	1
NS312	Information Security – (ISEC-SE)	2	1
NS311	Information Security – Lab	1	1
AR332	Operating Systems	2	1
AR331	Operating Systems - Lab	1	1
SD422	Software Re-engineering – (SREE-SE)	2	1
SD421	Software Re-engineering – Lab	1	1
ENG203	ENGLISH-III	3	1

Course Code	Course Title	Credit Hours	Section
PBD323	WEBE-SE	3	1
PBD313	DMF-SE	3	1

Semester 6

Course Code	Course Title	Credit Hours	Section
SENS3523	Computer Comm. and Networks (CCN-SE-T) Theory	3	6
SENS3521	Computer Comm. and Networks (CCN-SE-L) Lab	1	6
SESD3242	Software Construction and Development (SCD-SE-T) - Theory	2	6
SESD3241	Software Construction and Development (SCD-SE-L) –Lab	1	6
SESE3133	Formal Methods in Software Engineering (FM-SE)	3	6
SECP4063	Advance Web Programming (AWP-SE)	3	6
SEAD3463	Applied using Machine Learning (AML-SE)	3	6

Semester 7

Course Code	Course Title	Credit Hours	Section
SENS4533	Information Security – (ISEC-SE)	3	2
SESM4323	Software Project Management – (SPM-SE)	3	2
SESE4143	Software Re-engineering – (SREE-SE)	3	2
SESD4913	Final Year Project I – (FYP-SE-I)	3	1
SESD3263	Automation Software Testing (AST-SE)	3	2
SEST4663	DevOps Fundamentals (DF-SE)	3	2

Semester 8

Course Code	Course Title	Credit Hours	Section
SEGE3953	Professional Practices	**3**	4
SESM3313	Software Quality Engineering	3	4
SEGE4963	Organazational Behaviour and Culture	3	4
SEGE3993	Fundamentals of Enterprise Resource Planning	3	4
SESD4923	Final Year Project II	3	1
SESS3763	Operation Research	3	2
SESS3753	Stochastic Processes	3	2