

BS Software Engineering

Sections:				
	Course Code	Course Title	Sections	
Semester 1	CP103	Introduction to Computing	5	
	CP101	Introduction to Computing - Lab	5	
	GE102	Basic Electronics	5	
	GE101	Basic Electronics - Lab	5	
	ENG110	Functional English	5	
	PAK102	Ideology and Constitution of Pakistan	5	
	AL143	Discrete Structures	5	
	Only for Pre-Med Students			
	MAT103	Pre-Calculus (Only medical background)	2	
Sections:				
	Course Code	Course Title	Sections	
Semester 2	SECP1023	Programming Fundamentals (PF-SE-T) – Theory	10	
	SECP1021	Programming Fundamentals (PF-SE-L) – Lab	10	
	ENG102	Communication & Presentation Skills (ENG-II-SE)	10	
	SEAD1413	Discrete Structures	10	
	SESE1113	Software Engineering	10	
	SESS1713	Calculus and Analytical Geometry	10	
	Only for Pre-Med Students			
	SESS1783	Elementary Algebra	3	
Sections:				
	Course Code	Course Title	Sections	

Semester 3	SECP2033	Object Oriented Programming	3
	SECP2031	Object Oriented Programming Lab	3
	SESD2213	Software Requirements Engineering	3
	SEAD3423	Introduction to Database Systems - Theory	3
	SEAD3421	Introduction to Database Systems – Lab	3
	SESS2743	Linear Algebra	3
	ISL201	Islamic studies	3
Semester 4	Sections		
	Course Code	Course Title	Sections
	SECP2043	Data Structure & Algorithms (DSA-SE-T) – Theory	7
	SECP2041	Data Structure & Algorithms (DSA-SE-L) – Lab	7
	SESD2222	Software Design & Architecture (SDA-SE-T) - Theory	7
	SESD2221	Software Design & Architecture (SDA-SE-L) – Lab	7
	SESD3233	Web Engineering	7
	ENG203	Technical and Business Writing (Eng-III-SE)	7
	SESS2733	Probability and Statistics (PROB-SE)	7
Semester 5	Sections:		
	Course Code	Course Title	Sections
	SENS3513	Operating Systems (OS-SE-T) Theory	5
	SENS3511	Operating Systems (OS-SE-L) Lab	5
	SESE2123	Human Computer Interaction (HCI-SE)	5
	SEST2613	Business Process Engineering (BPE-SE)	5
	SEAD3233	Artificial Intelligence (AI-SE)	2
	SESE4153	Object Oriented Software Engineering (OOSE-SE)	2

Seme	SEAD4493	Data Analysis Techniques (DAT-SE)	1
	SEAD4483	Introduction to Image Processing (IIP-SE)	2
	SESM3363	Software Quality Assurance (SQA-SE)	3
	SEGE2933	Technology Entrepreneurship (T-ENT-SE)	2
	SEGE1913	Introduction to Business (ITOB-SE)	2
	SEGE1973	Financial Accounting (FA-SE)	1
	SEGE3963	Fundamental of Marketing (FOM-SE)	2
	SEGE1923	Human Resource Management	2
Semester 6	Sections:		
	Course Code	Course Title	Sections
	SENS3523	Computer Comm. and Networks (CCN-SE-T) Theory	7
	SENS3521	Computer Comm. and Networks (CCN-SE-L) Lab	7
	SESE3133	Formal Methods in Software Engineering (FM-SE)	7
	SESD3242	Software Construction and Development (SCD-SE-T) - Theory	7
	SESD3241	Software Construction and Development (SCD-SE-L) –Lab	7
	SESM3363	Software Quality Assurance (SQA-SE)	5
	SEST4653	Design Patterns (DP-SE)	2
	SECP3053	Mobile Application Development (MAD-SE) (SE Elective – I)	4
	SEAD4483	Introduction to Image Processing (IIP-SE)	3
	7	Sections:	
Course Code		Course Title	Sections
SENS4533		Information Security – (ISEC-SE)	3
SESM4323		Software Project Management – (SPM-SE)	3
SESD4913		Final Year Project I – (FYP-SE-I)	1

Semester	SESE4143	Software Re-engineering – (SREE-SE)	2
	SEAD3453	Introduction to Machine Learning (IML-SE) (SE Elective – II)	2
	SESD4273	Software Analysis and Design (SAD-SE)	1
	SENS4553	Blockchain Essentials (BCE-SE)	2
	SEAD3443	Introduction to Data Science (IDS-SE)	2
	SEAD4463	Introduction to Natural Language Processing (INLP-SE)	2
Semester 8	Sections:		
	Course Code	Course Title	Sections
	SEGE3953	Professional Practices	9
	SEAD4473	Introduction to Deep Learning (IDL-SE)	2
	SEAD4463	Introduction to Natural Language Processing (INLP-SE)	2
	SECP4083	Big Data Analytics (BDA-SE)	1
	SEST4693	Introduction to Data Warehousing and Mining (IDWM-SE)	2
	SESD4923	Final Year Project II	1
	SECP4073	Programming for Big Data	2
	SECP4083	Big Data Analytics (BDA-SE)	1
	SEST3673	Introduction to Cloud Computing	4
	SESD3253	Software Testing (ST-SE)	5
	SEST4693	Introduction to Data Warehousing and Mining (IDWM-SE)	2
	SEGE3993	Fundamentals of Enterprise Resource Planning	1
	SEGE3963	Fundamental of Marketing (FOM-SE)	5
	SEGE4963	Organizational Behaviour and Culture	6