

B.Sc. in CSE Program Structure

1st Year 1st Semester			
Sl	Course Code	Course Title	Credits
1	ENG 1101	Communicative English	3.0
2	PHY 1102	Modern Physics	3.0
3	PHY 1103	Modern Physics Lab	1.0
4	CHE 1104	Chemistry	3.0
5	CHE 1105	Chemistry Lab	1.0
6	EEE 1106	Electrical Circuits	3.0
7	EEE 1107	Electrical Circuits Lab	1.0
8	MAT 1108	Differential and Integral Calculus	3.0
Total			18.0

1st Year 2nd Semester			
Sl	Course Code	Course Title	Credits
1	ENG 1201	Developing English Skills	1.0
2	HUM 1202	History of the Emergence of Independent Bangladesh	3.0
3	EEE 1203	Electronic Devices	3.0
4	EEE 1204	Electronic Devices Lab	1.0
5	CSE 1205	Structured Programming Language	3.0
6	CSE 1206	Structured Programming Language Lab	1.0
7	CSE 1207	Discrete Mathematics	3.0
8	CSE 1208	Digital Logic Design	3.0
9	CSE 1209	Digital Logic Design Lab	1.0
Total			19.0
2nd Year 1st Semester			
Sl	Course Code	Course Title	Credits
1	SOC 2101	Industrial Sociology	3.0
2	HUM 2102	Professional Ethics and Environmental Protection	3.0
3	CSE 2103	System Analysis and Design	3.0
4	EEE 2104	Digital Electronics and Pulse Technique	3.0
5	EEE 2105	Digital Electronics and Pulse Technique Lab	1.0
6	CSE 2106	Data Structure and Algorithm	3.0
7	CSE 2107	Data Structure and Algorithm lab	1.0
8	CSE 2108	Operating System	3.0
9	CSE 2109	Operating System Lab	1.0
Total			21.0

2nd Year 2nd Semester			
Sl	Course Code	Course Title	Credits
1	ECO 2201	Engineering Economics	2.0
2	CSE 2202	Object Oriented Programming	3.0
3	CSE 2203	Object Oriented Programming Lab	1.0
4	CSE 2204	Software Engineering	3.0
5	CSE 2205	Software Engineering Lab	1.0
6	CSE 2206	Database Management System	3.0
7	CSE 2207	Database Management System Lab	1.0
8	CSE 2208	Computer Architecture	2.0
10	MAT 2209	Linear Algebra	3.0
Total			19.0

3rd Year 1st Semester			
Sl	Course Code	Course Title	Credits
1	MAT 3101	Numerical Methods	3.0
2	CSE 3102	Computer Networking	3.0
3	CSE 3103	Computer Networking Lab	1.0
4	CSE 3104	Microprocessor and Assembly Language	3.0
5	CSE 3105	Microprocessor and Assembly Language lab	1.0
6	EEE 3106	Digital Signal Processing	3.0
7	EEE 3107	Digital Signal Processing Lab	1.0
8	CSE 3108	Data Communication	3.0
9	CEE 3109	Engineering Drawing	1.0
Total			19.0

3rd Year 2nd Semester			
Sl	Course Code	Course Title	Credits
1	MAT 3201	Applied Mathematics	3.0
2	CSE 3202	Machine Learning	3.0
3	CSE 3203	Machine Learning Lab	1.0
4	CSE 3204	Compiler Design	3.0
5	CSE 3205	Compiler Design Lab	1.0
6	CSE 3206	Theory of Computation	3.0
7	CSE 3207	Cyber Security and Computer Forensics	3.0
Total			17.0

4th Year 1st Semester			
Sl	Course Code	Course Title	Credits
1		Elective 01	3.0
2		Elective 02	3.0
3	CSE 4110	Digital Image Processing	3.0
4	EEE 4111	Microprocessor Interfacing	3.0
5	EEE 4112	Microprocessor Interfacing Lab	1.0
6	BUS 4113	Software Project Management	3.0
7	CSE 4114	Engineering Ethics and Cyber Law	3.0
Total			19.0

4th Year 2nd Semester			
Sl	Course Code	Course Title	Credits
1		Elective 03	3.0
2		Elective 04	3.0
3	CSE 4210	Artificial Intelligence	3.0
4	CSE 4211	Artificial Intelligence Lab	1.0
5	CSE 4212	Web Engineering (Lab)	1.0
6	CSE 4213	Computer Graphics	3.0
7	CSE 4214	Computer Graphics Lab	1.0
8	CSE 4215	Project / Thesis	4.0
Total			19.0

Elective Courses

Sl	Course Code	Elective Courses	Credits
1	CSE 4101	Big Data Analysis	3.0
2	CSE 4102	Cloud Computing	3.0
3	CSE 4103	Robotics and Automation	3.0
4	CSE 4104	Micro-controller and Control Systems	3.0
5	CSE 4201	Computer Vision and Pattern Recognition	3.0
6	CSE 4202	Network Security	3.0
7	MIS 4203	Management Information System	3.0
8	CSE 4204	Software Testing and Quality Assurance	3.0
9	CSE 4205	Mobile Application Development	3.0