

Software Engineering

Institute of Information Technology

Noakhali Science and Technology University

BSSE Course Structure: In order to understand the program structure, the semester wise credit distribution is shown below. To address individual subjects, we have adopted the following course prefixes:

Semester-1

Course Code	Course Title	Theory	Lab
CSE 1101	Structured Programming	1	0
CSE 1102	Structured Programming Lab	0	2
CSE 1103	Discrete Mathematics	3	0
STAT 1105	Probability & Statistics-1	3	0
MATH 1107	Calculus and Analytical Geometry	3	0
GE 1109	Soft Skill Communication	3	0
GE 1111	Technology and Society	2	0
GE 1112	Technology and Society Lab	0	1
SE 1113	Introduction to Software Engineering	3	0
9 Courses		21 Credits	

Semester-2

Course Code	Course Title	Theory	Lab
CSE 1201	Data Structure	1	0
CSE 1202	Data Structure Lab	0	2
CSE 1203	Computer Organization	2	0
CSE 1204	Computer Organization Lab	0	1
STAT 1205	Probability & Statistics for Engineers-2	3	0
MATH 1207	Ordinary Differential Equation	3	0
GE 1209	History of Emergence of Bangladesh	3	0
GE 1211	Bengali Literature	3	0
SE 1213	Object Oriented Concepts 1	2	0
SE 1214	Object Oriented Concepts 1 Lab	0	1
10Courses		21 Credits	

Semester-3

Course Code	Course Title	Theory	Lab
CSE 2101	Algorithm Analysis	2	0
CSE 2102	Algorithm Analysis Lab	0	1
SE 2103	Theory of Computation	2	0
SE 2104	Theory of Computation Lab	0	1
CSE 2105	Computer Networks	2	0
CSE 2106	Computer Networks Lab	0	1
MATH 2107	Numerical Analysis for Engineers	2	0
MATH 2108	Numerical Analysis for Engineers Lab	0	1
SE 2109	Object Oriented Concepts-2	2	0
SE 2110	Object Oriented Concepts-2 Lab	0	1
SE 2112	Software Project Lab 1	0	3
11 Courses		18 Credits	

Semester-4

Course Code	Course Title	Theory	Lab
CSE 2201	Operating System and System Programming	2	0
CSE 2202	Operating System and System Programming Lab	0	1
GE 2203	Business Psychology	3	0
CSE 2205	Information Security	2	0
CSE 2206	Information Security Lab	0	1
CSE 2207	Database Management System-1	2	0
CSE 2208	Database Management System-1 Lab	0	1
SE 2209	Software Requirement Spec. and Analysis	2	0
SE 2210	Software Requirement Spec. and Analysis Lab	0	1
BUS 2211	Business Studies for Engineers	3	0
10 Courses		18 Credits	

Semester-5

Course Code	Course Title	Theory	Lab
SE 3101	Professional Ethics for Information Systems	3	0
CSE 3103	Web Technology	1	0
CSE 3104	Web Technology	0	2
CSE 3105	Data Science and Analytics – DBMS 2	1	0
CSE 3106	Data Science and Analytics – DBMS 2 Lab	0	2
BUS 3107	Business Communication	2	0
BUS 3108	Business Communication Lab	0	1
SE 3109	Design Pattern	2	0
SE 3110	Design Pattern	0	1
SE 3112	Software Project Lab 2	0	3
10 Courses		18 Credits	

Semester-6

Course Code	Course Title	Theory	Lab
CSE 3201	Distributed System	1	0
CSE 3202	Distributed System Lab	0	2
SE 3203	Software Metrics	2	0
SE 3204	Software Metrics I Lab	0	1
SE 3205	Software Security	2	0
SE 3206	Software Security Lab	0	1
CSE 3207	Artificial Intelligence	2	0
CSE 3208	Artificial Intelligence Lab	0	1
SE 3209	Software Testing and Quality Assurance	2	0
SE 3210	Software Testing and Quality Assurance Lab	0	1
SE 3211	Software Design and Architecture	2	0
SE 3212	Software Design and Architecture Lab	0	1
12 Courses		18 Credits	

Semester–7

Course Code	Course Title	Theory	Lab
SE 4100	Internship	0	18
1 Course		18 Credits	

Semester–8

Course Code	Course Title	Theory	Lab
SE 4202	Project	0	6
SE 4203	Software Maintenance	2	0
SE 4204	Software Maintenance Lab	0	1
SE 4205	Software Project Management	2	0
SE 4206	Software Project Management Lab	0	1
SE/CSE 42XX	Elective	2	1
SE/CSE 42XX	Elective	2	1
5 Courses		18 Credits	