

Information Booklet for Undergraduate Studies



**Department of
Computer Science and Engineering**
Dhaka University of Engineering & Technology,
Gazipur

2011



Department of Computer Science and Engineering

Summary of Courses

1st Year 1st Semester (Exempted)

Sl. No.	Course No.	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1	Math-1411	Mathematics-I	3	0	3.00
2	Ph-1413	Physics-I	3	0	3.00
3	Ph-1414	Physics-I Sessional	0	3	1.50
4	Ch-1415	Chemistry-I	3	0	3.00
5	Ch-1416	Chemistry-I Sessional	0	3	1.50
6	CSE-1811	Computer Fundamentals	3	0	3.00
7	CSE-1812	Computer Fundamentals Sessional	0	3	1.50
8	Hum-1417	Government and Sociology	4	0	4.00
Total			16	9	20.50

Contact Hours: $16T + 9S = 25$ hrs/ week

Total credits: 20.5

No. of Theory Courses: 5

No. of Lab / Sessional courses: 3

Summary of Courses

1st Year 2nd Semester

Sl. No.	Course No.	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1	CSE-1121	Structured Programming Language	4	0	4.00
2	CSE-1122	Structured Programming Language Sessional	0	3	1.50
3	CSE-1823	Digital Logic Design	3	0	3.00
4	CSE-1824	Digital Logic Design Sessional	0	3/2	0.75
5	CSE-1124	Drawing & CAD Project Sessional	0	3/2	0.75
6	Math-1421	Mathematics – II	4	0	4.00
7	Ph-1423	Physics – II	4	0	4.00
8	Ph-1424	Physics – II Sessional	0	3/2	0.75
9	Hum-1427	English and Economics	3	0	3.00
Total			18	7.5	21.75

Contact Hours: $18T + 7.5 S = 25.50$ hrs/week

Total credits: 21.75

No. of Theory Courses: 5

No. of Lab / Sessional courses: 4

Summary of the Courses

2nd Year 1st Semester

Sl. No.	Course No.	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1.	CSE-2110	Visual Programming Sessional	0	3	1.50
2.	CSE-2111	Object Oriented Programming	4	0	4.00
3.	CSE-2112	Object Oriented Programming Sessional	0	3	1.50
4.	EEE-2813	Electronic Devices & Circuits	3	0	3.00
5.	EEE-2814	Electronic Devices & Circuits Sessional	0	3/2	0.75
6.	Math-2411	Mathematics-III	4	0	4.00
7.	Ch-2415	Chemistry – II	3	0	3.00
8.	Ch-2416	Chemistry - II Sessional	0	3/2	0.75
9.	Hum-2413	Industrial Management & Accounting	4	0	4.00
Total			18	9	22.50

Contact Hours: $18T + 9S = 27$ hrs/week

Total credits: 22.5

No. of Theory Courses: 5

No. of Lab / Sessional courses: 4

Summary of the Courses

2nd Year 2nd Semester

Sl. No.	Course No.	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1.	CSE-2122	Software & Hardware Project	0	3/2	0.75
2.	CSE-2521	Data Structure	3	0	3.00
3.	CSE-2522	Data Structure Sessional	0	3/2	0.75
4.	EEE-2823	Electrical Drives and Instrumentation	3	0	3.00
5.	EEE-2824	Electrical Drives and Instrumentation Sessional	0	3/2	0.75
6.	Math-2421	Mathematics-IV	4	0	4.00
7.	CSE-2124	Numerical Methods Sessional	0	3	1.50
8.	CSE-2821	Digital Electronics & Pulse Technique	3	0	3.00
9.	CSE-2822	Digital Electronics & Pulse Technique Sessional	0	3/2	0.75
10.	CSE-2523	Discrete Mathematics	3	0	3.00
Total			16	9	20.50

Contact Hours: $16T + 9S = 25$ hrs/week

Total credits: 20.5

No. of Theory Courses: 5

No. of Lab / Sessional courses: 5

Summary of the Courses

3rd Year 1st Semester

Sl. No.	Course No.	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1.	CSE-3511	Algorithm Design & Analysis	3	0	3.00
2.	CSE-3512	Algorithm Design & Analysis Sessional	0	3	1.50
3	CSE-3311	Database Systems	3	0	3.00
4.	CSE-3312	Database Systems Sessional	0	3/2	0.75
5.	Math-3411	Mathematics-V	4	0	4.00
6.	CSE-3211	Theory of Computation	3	0	3.00
7.	CSE-3811	Microprocessor and Assembly Language	3	0	3.00
8.	CSE-3812	Microprocessors and Assembly Language Sessional	0	3/2	0.75
9.	CSE-3110	Internet Programming Sessional	0	3	1.50
Total			16	9	20.50

Contact Hours: $16T + 9S = 25$ hrs/week

Total credits: 20.5

No. of Theory Courses: 5

No. of Lab / Sessional courses: 4

Summary of the Courses

3rd Year 2nd Semester

Sl. No.	Course No.	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1.	CSE-3122	Software Development Project	0	3	1.50
2.	CSE-3221	Operating System	3	0	3.00
3.	CSE-3222	Operating System Sessional	0	3/2	0.75
4.	CSE-3223	Compiler Design	3	0	3.00
5.	CSE-3224	Compiler Design Sessional	0	3/2	0.75
6.	CSE-3821	Computer Architecture	3	0	3.00
7.	CSE-3421	Data Communication	3	0	3.00
8.	CSE-3422	Data Communication Sessional	0	3/2	0.75
9.	CSE-3621	Information System Analysis & Design	3	0	3.00
10.	CSE-3622	Information System Analysis & Design Sessional	0	3/2	0.75
Total			15	9	19.50

Contact Hours: $15T + 9S = 24$ hrs/week

Total credits: 19.5

No. of Theory Courses: 5

No. of Lab / Sessional courses: 5

Summary of the Courses

4th Year 1st Semester

Sl. No.	Course No.	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1.	CSE-4000	Project and Thesis	0	3	1.50*
2.	CSE-4811	Digital System Design	3	0	3.00
3.	CSE-4812	Digital System Design Sessional	0	3/2	0.75
4.	CSE-4813	Peripherals & Interfacing	3	0	3.00
5.	CSE-4814	Peripherals & Interfacing Sessional	0	3/2	0.75
6.	CSE-4411	Computer Networks	3	0	3.00
7.	CSE-4412	Computer Networks Sessional	0	3/2	0.75
8.	Option – I		3	0	3.00
9	Option – I Laboratory		0	3/2	0.75
10.	Option – II		3	0	3.00
Total			15	9	18.00

Contact Hours: 15T + 9S =24 hrs/week

No. of Theory Courses: 5

Total credits: 18

No. of Lab / Sessional courses: 5

* Credit Transferred to 2nd Semester

List of Optional Courses:

Option – I (One Subject should be selected from the following courses):

<i>Sl. No.</i>	<i>Course No.</i>	<i>Course Title</i>	<i>Theory hrs/week</i>	<i>Sessional hrs/week</i>	<i>Credits</i>
1.	CSE-4511	Computational Geometry	3	0	3.00
2.	CSE-4512	Computational Geometry Sessional	0	3/2	0.75
3.	CSE-4815	VLSI Design	3	0	3.00
4.	CSE-4816	VLSI Design Sessional	0	3/2	0.75
5.	CSE-4711	Simulation & Modeling	3	0	3.00
6.	CSE-4712	Simulation & Modeling Sessional	0	3/2	0.75
7.	CSE-4311	Geographical Information System	3	0	3.00
8.	CSE-4312	Geographical Information System Sessional	0	3/2	0.75

Option-II (One Subject should be selected from the following courses):

<i>Sl. No.</i>	<i>Course No.</i>	<i>Course Title</i>	<i>Theory hrs/week</i>	<i>Sessional hrs/week</i>	<i>Credits</i>
1.	CSE-4513	Graph Theory & Algorithm	3	0	3.00
2.	CSE-4817	Digital Signal Processing	3	0	3.00
3.	CSE-4611	Human Computer Interaction	3	0	3.00
4.	CSE-4613	Pattern Recognition	3	0	3.00

Summary of the Courses

4th Year 2nd Semester

Sl. No.	Course No.	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1.	CSE-4000	Project & Thesis	0	3	3.00*
2.	CSE-4621	Computer Graphics & Multimedia	4	0	4.00
3.	CSE-4622	Computer Graphics & Multimedia Sessional	0	3/2	0.75
4	CSE-4623	Artificial Intelligence	3	0	3.00
5	CSE-4624	Artificial Intelligence Sessional	0	3/2	0.75
6.	CSE-4721	Software Engineering	3	0	3.00
7.	Option – I		3	0	3.00
8.	Option – II		3	0	3.00
Total			16	6	20.50*

Contact Hours: 16T + 6S = 22 hrs/week	No. of Theory Courses: 5
Total credits: 20.5	No. of Lab / Sessional courses: 3

*1.5 Credit transfer from 1st semester

Option-I & II : 2 Courses should be selected from the following courses:

Sl. No.	Course No.	Course Title	Theory hrs/week	Sessional hrs/week	Credits
1	CSE-4625	Neural Networks & Fuzzy System	3	0	3.00
2.	CSE-4521	Parallel & Distributed Processing	3	0	3.00
3.	CSE-4627	Robotics and Computer Vision	3	0	3.00
4.	CSE-4821	Advanced Computer Architecture	3	0	3.00
5.	CSE-4723	Decision Support System	3	0	3.00
6.	CSE-4629	Machine Learning	3	0	3.00
7.	CSE-4725	Fault Tolerant System	3	0	3
8.	CSE-4727	Information System Management	3	0	3
9.	CSE-4641	Knowledge Engineering	3	0	3