

Bangladesh Army University of Science & Technology (BAUST), Saidpur
B.Sc. Engineering in Computer Science & Engineering (CSE)

List of Courses (Syllabus 2021, Batch 12-Batch 21)

Arts & Science Department			Cr.	Option I (3.0+0.75=3.75 Credits)			Cr.
ENG 1127	English		3.0	CSE 4123	Data Science and Analytics		3.0
ENG 1228	Developing English Skill Sessional		0.75	CSE 4124	Data Science and Analytics Sessional		0.75
HUM 1221	Bengali Language and Literature		2.0	CSE 4127	Big Data and Business Intelligence		3.0
HUM 2221	History of the Emergence of Bangladesh		2.0	CSE 4128	Big Data and Business Intelligence Sessional		0.75
HUM 4123	Engineering Economics		2.0	CSE 4131	Artificial Neural Networks and Fuzzy Systems		3.0
HUM 4273	Financial, Cost and Managerial Accounting		2.0	CSE 4132	Artificial Neural Networks and Fuzzy Systems Sessional		0.75
Basic Science/STEM				CSE 4129	Advanced Algorithms		3.0
PHY 1131	Physics		3.0	CSE 4130	Advanced Algorithms Sessional		0.75
PHY 1132	Physics Sessional		0.75	CSE 4141	Object Oriented Software Engineering		3.0
CHEM 2133	Chemistry		3.0	CSE 4142	Object Oriented Software Engineering Sessional		0.75
MATH 1141	Differential Calculus, Integral Calculus, and Coordinate Geometry		3.0	CSE 4125	Internet of Things (IoT)		3.0
MATH 1243	Ordinary Differential Equations and Partial Differential Equations		3.0	CSE 4126	Internet of Things (IoT) Sessional		0.75
MATH 2145	Vector Calculus, Linear Algebra and Complex Variable		3.0	CSE 4137	Data and Network Security		3.0
MATH 2247	Laplace Transformation and Fourier Analysis		3.0	CSE 4138	Data and Network Security Sessional		0.75
<i>Arts & Science Total Credits</i>			30.5	CSE 4145	Bioinformatics		3.0
Inter-disciplinary department				CSE 4146	Bioinformatics Sessional		0.75
Department of EEE				Option II (3.0+0.75=3.75 Credits)			
EEE 1163	Introduction to Electrical Engineering		3.0	CSE 4121	Digital Signal Processing		3.0
EEE 1164	Introduction to Electrical Engineering Sessional		1.5	CSE 4122	Digital Signal Processing Sessional		0.75
EEE 1269	Electronic Circuits		3.0	CSE 4151	Mobile Computing and Applications		3.0
EEE 1270	Electronic Circuits Sessional		0.75	CSE 4152	Mobile Computing and Applications Sessional		0.75
EEE 2269	Electrical Drives and Instrumentation		3.0	CSE 4139	Machine Learning		3.0
EEE 2270	Electrical Drives and Instrumentation Sessional		0.75	CSE 4140	Machine Learning Sessional		0.75
Department of ME				CSE 4147	Robotics		3.0
ME 3181	Basic Mechanical Engineering		3.0	CSE 4148	Robotics Sessional		0.75
Department of IPE				CSE 4169	Computer Vision		3.0
IPE 4297	Industrial Management		3.0	CSE 4170	Computer Vision Sessional		0.75
Department of CE				CSE 4171	Distributed Algorithms		3.0
CE 1250	Engineering Drawing and CAD Sessional		0.75	CSE 4172	Distributed Algorithms Sessional		0.75
<i>Inter-disciplinary Total Credits</i>			18.75	CSE 4149	Advanced Computer Networks		3.0
Core Courses of CSE Program				CSE 4150	Advanced Computer Networks Sessional		0.75
CSE 1100	Introduction to Computer System Sessional		1.5	CSE 4163	Multimedia Communication		3.0
CSE 1101	Structured Programming Language		3.0	CSE 4164	Multimedia Communication Sessional		0.75
CSE 1102	Structured Programming Language Sessional		1.5	Option III (3.0+0.75=3.75 Credits)			
CSE 1201	Discrete Mathematics		3.0	CSE 4223	Cyber Security and Blockchain		3.0
CSE 1203	Object Oriented Programming Language I		3.0	CSE 4224	Cyber Security and Blockchain Sessional		0.75
CSE 1204	Object Oriented Programming Language I Sessional		1.5	CSE 4237	Cloud Computing		3.0
CSE 1208	Numerical Methods Sessional		1.5	CSE 4238	Cloud Computing Sessional		0.75
CSE 2100	Software Development Project I		0.75	CSE 4239	High Performance Computing		3.0
CSE 2101	Digital Logic Design		3.0	CSE 4240	High Performance Computing Sessional		0.75
CSE 2102	Digital Logic Design Sessional		1.5	CSE 4227	Pattern Recognition		3.0
CSE 2103	Data Structures and Algorithm I		3.0	CSE 4228	Pattern Recognition Sessional		0.75
CSE 2104	Data Structures and Algorithm I Sessional		1.5	CSE 4245	Digital Image Processing		3.0
CSE 2105	Applied Statistics for Computer Science		3.0	CSE 4246	Digital Image Processing Sessional		0.75
CSE 2108	Object Oriented Programming Language II Sessional		1.5	CSE 4233	Simulation and Modelling		3.0
CSE 2201	Data Structures and Algorithm II		3.0	CSE 4234	Simulation and Modelling Sessional		0.75
CSE 2202	Data Structures and Algorithm II Sessional		1.5	Option IV (3.0+0.75=3.75 Credits)			
CSE 2203	Theory of Computation		3.0	CSE 4231	Information Theory and Coding		3.0
CSE 2205	Database Management Systems		3.0	CSE 4232	Information Theory and Coding Sessional		0.75
CSE 2206	Database Management Systems Sessional		1.5	CSE 4235	Network Programming		3.0
CSE 3100	Software Development Project II		0.75	CSE 4236	Network Programming Sessional		0.75
CSE 3101	Software Engineering		3.0	CSE 4253	Quantum Computing		3.0
CSE 3102	Software Engineering Sessional		0.75	CSE 4254	Quantum Computing Sessional		0.75
CSE 3103	Microprocessors, Microcontrollers and Embedded Systems		3.0	CSE 4247	Deep Learning		3.0
CSE 3104	Microprocessors, Microcontrollers and Embedded Systems Sessional		0.75	CSE 4248	Deep Learning Sessional		0.75
CSE 3105	Computer Architecture		3.0	CSE 4251	Data Warehousing and Data Mining		3.0
CSE 3107	Data Communication		3.0	CSE 4252	Data Warehousing and Data Mining Sessional		0.75
CSE 3109	Compiler		3.0	CSE 4243	Control Systems		3.0
CSE 3110	Compiler Sessional		0.75	CSE 4244	Control Systems Sessional		0.75
CSE 3200	Web Engineering Project		1.5	CSE 4249	VLSI Design		3.0
CSE 3201	Artificial Intelligence		3.0	CSE 4250	VLSI Design Sessional		0.75
CSE 3202	Artificial Intelligence Sessional		0.75	Total Credits 161.0			
CSE 3203	Operating System		3.0	ID:			
CSE 3204	Operating System Sessional		1.5				
CSE 3205	Computer Networks		3.0	Student Name:			
CSE 3206	Computer Networks Sessional		1.5				
CSE 3207	Mathematical Analysis for Computer Science		3.0	Contact No:			
CSE 3209	Information System Design		3.0				
CSE 3210	Information System Design Sessional		0.75				
CSE 4100	Industrial Training		1.0				
CSE 4101	Computer Security		3.0				
CSE 4102	Computer Security Sessional		0.75				
CSE 4103	Computer Graphics		3.0				
CSE 4104	Computer Graphics Sessional		0.75				
CSE 4215	Professional Issues and Ethics for Computer Science		2.0				
CSE 4000	Project / Thesis		6.0				
<i>Core Total Credits</i>			96.75				

Bangladesh Army University of Science & Technology (BAUST), Saidpur

B.Sc. Engineering in Computer Science & Engineering (CSE)

Level and Term Wise Courses (Syllabus 2021, Batch 12-Batch 21)

Level 1, Term I			Level 1, Term II		
CSE 1100	Introduction to Computer System Sessional	1.5	CSE 1201	Discrete Mathematics	3.0
CSE 1101	Structured Programming Language	3.0	CSE 1203	Object Oriented Programming Language I	3.0
CSE 1102	Structured Programming Language Sessional	1.5	CSE 1204	Object Oriented Programming Language I Sessional	1.5
EEE 1163	Introduction to Electrical Engineering	3.0	CSE 1208	Numerical Methods Sessional	1.5
EEE 1164	Introduction to Electrical Engineering Sessional	1.5	EEE 1269	Electronic Circuits	3.0
MATH 1141	Differential Calculus, Integral Calculus, and Coordinate Geometry	3.0	EEE 1270	Electronic Circuits Sessional	0.75
PHY 1131	Physics	3.0	ENG 1228	Developing English Skill Sessional	0.75
PHY 1132	Physics Sessional	0.75	MATH 1243	Ordinary Differential Equations and Partial Differential Equations	3.0
ENG 1127	English	3.0	CE 1250	Engineering Drawing and CAD Sessional	0.75
		Semester Total Credits: 20.25	HUM 1221	Bengali Language and Literature	2.0
					Semester Total Credits: 19.25
Level 2, Term I			Level 2, Term II		
CSE 2100	Software Development Project I	0.75	CSE 2201	Data Structures and Algorithm II	3.0
CSE 2101	Digital Logic Design	3.0	CSE 2202	Data Structures and Algorithm II Sessional	1.5
CSE 2102	Digital Logic Design Sessional	1.5	CSE 2203	Theory of Computation	3.0
CSE 2103	Data Structures and Algorithm I	3.0	CSE 2205	Database Management Systems	3.0
CSE 2104	Data Structures and Algorithm I Sessional	1.5	CSE 2206	Database Management Systems Sessional	1.5
CSE 2105	Applied Statistics for Computer Science	3.0	EEE 2269	Electrical Drives and Instrumentation	3.0
CSE 2108	Object Oriented Programming Language II Sessional	1.5	EEE 2270	Electrical Drives and Instrumentation Sessional	0.75
CHEM 2133	Chemistry	3.0	MATH 2247	Laplace Transformation and Fourier Analysis	3.0
MATH 2145	Vector Calculus, Linear Algebra and Complex Variable	3.0	HUM 2221	History of the Emergence of Bangladesh	2.0
		Semester Total Credits: 20.25			Semester Total Credits: 20.75
Level 3, Term I			Level 3, Term II		
CSE 3100	Software Development Project II	0.75	CSE 3200	Web Engineering Project	1.5
CSE 3101	Software Engineering	3.0	CSE 3201	Artificial Intelligence	3.0
CSE 3102	Software Engineering Sessional	0.75	CSE 3202	Artificial Intelligence Sessional	0.75
CSE 3103	Microprocessors, Microcontrollers and Embedded Systems	3.0	CSE 3203	Operating System	3.0
CSE 3104	Microprocessors, Microcontrollers and Embedded Systems Sessional	0.75	CSE 3204	Operating System Sessional	1.5
CSE 3105	Computer Architecture	3.0	CSE 3205	Computer Networks	3.0
CSE 3107	Data Communication	3.0	CSE 3206	Computer Networks Sessional	1.5
CSE 3109	Compiler	3.0	CSE 3207	Mathematical Analysis for Computer Science	3.0
CSE 3110	Compiler Sessional	0.75	CSE 3209	Information System Design	3.0
ME 3181	Basic Mechanical Engineering	3.0	CSE 3210	Information System Design Sessional	0.75
		Semester Total Credits: 21.00			Semester Total Credits: 21.00
Level 4, Term I			Level 4, Term II		
CSE 4000	Project/Thesis*	3.0	CSE 4000	Project/Thesis*	3.0
CSE 4100	Industrial Training	1.0	HUM 4273	Financial, Cost and Managerial Accounting	2.0
CSE 4101	Computer Security	3.0	IPE 4297	Industrial Management	3.0
CSE 4102	Computer Security Sessional	0.75	CSE 4215	Professional Issues and Ethics for Computer Science	2.0
CSE 4103	Computer Graphics	3.0	CSE 42XX	CSE Option III	3.0
CSE 4104	Computer Graphics Sessional	0.75	CSE 42XX	CSE Option III Sessional	0.75
HUM 4123	Engineering Economics	2.0	CSE 42XX	CSE Option IV	3.0
CSE 41XX	CSE Option I	3.0	CSE 42XX	CSE Option IV Sessional	0.75
CSE 41XX	CSE Option I Sessional	0.75			
CSE 41XX	CSE Option II	3.0			
CSE 41XX	CSE Option II Sessional	0.75			
		Semester Total Credits: 21.00			Semester Total Credits: 17.5
					Total Credits: 161.0

ID:

Student Name:

Contact No: