

Course Offering  
Semester: Fall 2019  
Program:BS Computer Science

S.#	Code	Course Title	Status	Section	Pre-Req.	Co-Req.	Semester	Remarks
1.	CS1133	Introduction to Programming	Core	2	Nil	Nil	1	<a href="#">Click here to enter text.</a>
2.	CS1131	Introduction to Programming Lab	Core	3	Nil	CS1133	1	<a href="#">Click here to enter text.</a>
3.	HMCS1002	Pakistan Studies	Humanity	2	Nil	Nil	1	<a href="#">Click here to enter text.</a>
4.	HMCS1013	English-1	English	2	Nil	Nil	1	<a href="#">Click here to enter text.</a>
5.	MTCS1013	Calculus and Analytical Geometry	Required	2	Nil	Nil	1	<a href="#">Click here to enter text.</a>
6.	PHCS1013	Applied Physics	Required	2	Nil	Nil	1	<a href="#">Click here to enter text.</a>
7.	CS1143	Object Oriented Programming	Core	2	CS1133	Nil	2	<a href="#">Click here to enter text.</a>
8.	CS1141	Object Oriented Programming Lab	Core	2	CS1131	CS1143	2	<a href="#">Click here to enter text.</a>
9.	HMCS1012	Islamic Studies/Ethics	Humanity	2	Nil	Nil	2	<a href="#">Click here to enter text.</a>
10.	HMCS1023	English-II	English	2	HMC1013	Nil	2	<a href="#">Click here to enter text.</a>
11.	HMCS2063	Introduction to Sociology	Humanity	2	Nil	Nil	2	<a href="#">Click here to enter text.</a>
12.	CS2053	Discrete Structures	Required	3	Nil	Nil	2	<a href="#">Click here to enter text.</a>
13.	MTCS1033	Linear Algebra	Required	2	MTC1013	Nil	2	<a href="#">Click here to enter text.</a>
14.	HMCS2033	Technical Report Writing	Humanity	3	HMC1013	Nil	3	<a href="#">Click here to enter text.</a>
15.	HMCS2213	Chinese Language	Humanity	2	Nil	Nil	3	<a href="#">Click here to enter text.</a>
16.	HMCS2223	French Language	Humanity	1	Nil	Nil	3	<a href="#">Click here to enter text.</a>
17.	CS2313	Introduction to Database Systems	Core	2	CS1133	Nil	3	<a href="#">Click here to enter text.</a>
18.	CS2311	Introduction to Database Systems Lab	Core	4	CS1131	CS2313	3	<a href="#">Click here to enter text.</a>
19.	CS2143	Data Structures	Core	2	CS1133	Nil	3	<a href="#">Click here to enter text.</a>

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20.	CS2141	Data Structures Lab	Core	4	CS1131	CS2143	3	Click here to enter text.
21.	MTCS3063	Probability & Statistics	Required	4	MTCS1013	Nil	3	Click here to enter text.
22.	CS2053	Discrete Structures	Required	0	Nil	Nil	4	Share with Semester 02.
23.	CS2512	Digital Logic Design	Core	1	Nil	Nil	4	Click here to enter text.
24.	CS2511	Digital Logic Design Lab	Core	2	Nil	CS2512	4	Click here to enter text.
25.	CS2223	Software Engineering-I	Core	1	CS1123	Nil	4	Click here to enter text.
26.	CS3073	Numerical Computing	Required	1	CS1123	Nil	4	Click here to enter text.
27.	CS3413	Operating Systems	Core	3	CS2143	Nil	4	Click here to enter text.
28.	CS3411	Operating Systems Lab	Core	4	CS2141	CS3413	4	Click here to enter text.
29.	CS3772	Computer Comm. and Networks	Core	3	CS1133	Nil	4	Click here to enter text.
30.	CS3771	Computer Comm. and Networks Lab	Core	4	Nil	Nil	4	Click here to enter text.
31.	MTCS2043	Applied Differential Equations	Required	2	MTCS1013	Nil	5	Click here to enter text.
32.	CS3163	Design and Analysis of Algorithms	Core	2	CS2143	Nil	5	Click here to enter text.
33.	CS3413	Operating Systems	Core	0	CS2143	Nil	5	Click here to enter text.
34.	CS3411	Operating Systems Lab	Core	0	CS2141	CS3413	5	Click here to enter text.
35.	CS3513	Computer Architecture	Core	2	CS2512	Nil	5	Click here to enter text.
36.	CS3772	Computer Comm. and Networks	Core	0	CS1133	Nil	5	Click here to enter text.
37.	CS3771	Computer Comm. and Networks Lab	Core	0	Nil	Nil	5	Click here to enter text.
38.	CS3613	Theory of Automata & Formal Lang.	Core	1	MTC2053	Nil	6	Click here to enter text.
39.	CS3213	Object Oriented Analysis and Design	Core	1	SE2223	Nil	6	Click here to enter text.
40.	CS3272	Human Computer Interaction	Core	1	SE2223	Nil	6	Click here to enter text.
41.	CS3271	Human Computer Interaction Lab	Core	1	Nil	CS3272	6	Click here to enter text.
42.	CS3193	Web Application Development	Elective	1	CS1133	Nil	6	Click here to enter text.
43.	CS3191	Web Application Development Lab	Elective	1	CS1131	CS3193	6	Click here to enter text.

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44.	CS4883	Introduction to Data Science	Elective	1	MTC1033	Nil	6	Click here to enter text.
45.	CS3713	Introduction to Information Security and Forensics	Elective	1	Nil	Nil	6	Click here to enter text.
46.	ACCS2003	Principles of Accounting-I	G. Edu	1	Nil	Nil	7	Click here to enter text.
47.	CS4622	Compiler Construction	Core	1	CS3613	Nil	7	Click here to enter text.
48.	CS4621	Compiler Construction Lab	Core	2	CS3613	Nil	7	Click here to enter text.
49.	CS4912	Design Project (Part-I)	Core	1	Nil	Nil	7	Click here to enter text.
50.	CS3183	Enterprise Application Development	Elective	1	CS1133	Nil	7	Click here to enter text.
51.	CS3181	Enterprise Application Development Lab	Elective	2	CS1131	CS3183	7	Click here to enter text.
52.	CS4193	Mobile Application Development	Elective	1	CS1133	Nil	7	Click here to enter text.
53.	CS4191	Mobile Application Development Lab	Elective	2	CS1133	Nil	7	Click here to enter text.
54.	CS4812	Artificial Intelligence	Core	1	CS2143	Nil	7	Click here to enter text.
55.	CS4811	Artificial Intelligence Lab	Core	2	Nil	Nil	7	Click here to enter text.
56.	CS4273	Software Project Management	Elective	1	Nil	Nil	7	Click here to enter text.
57.	CS4873	Malware Analysis	Elective	1	Nil	Nil	7	Click here to enter text.
58.	CS4873	Malware Analysis	Elective	1	Nil	Nil	8	Click here to enter text.
59.	CS4743	Internet of the Things	Elective	1	Nil	Nil	8	Click here to enter text.
60.	CS4924	Design Project (Part-II)	Core	1	CS4912	Nil	8	Click here to enter text.
61.	MGCS1003	Introduction to Management	G. Edu	1	Nil	Nil	8	Click here to enter text.
62.	CS4573	Blockchain Technology	Elective	1	Nil	Nil	8	Click here to enter text.