

#	Code	Name	Type	
1	CS161	Introduction to Computer Science I	Compulsory	CS
2	CS162	Introduction to Computer Science II	Compulsory	CS
3	CS163	Data Structures	Compulsory	CS
4	CS201	Computer Systems Programming	Compulsory	CS
5	CS202	Programming Systems	Compulsory	CS
6	CS250	Discrete Structures I	Compulsory	CS
7	CS251	Discrete Structures II	Compulsory	CS
8	CS300	Elements of Software Engineering	Compulsory	CS
9	CS305	Social, Ethical, and Legal Issues	Compulsory	CS
10	CS311	Computational Structures	Compulsory	CS
11	CS321	Languages and Compiler Design I	Compulsory	CS
12	CS322	Languages and Compiler Design II	Compulsory	CS
13	CS333	Introduction to Operating Systems	Compulsory	CS
14	CS350	Algorithms and Complexity	Compulsory	CS
15	CS386	Introduction to Database Systems	Compulsory	CS
16	CS404	Internship	Compulsory	CS
17	CS487	Software Engineering Capstone I	Compulsory	CS
18	CS488	Software Engineering Capstone II	Compulsory	CS
19	LV	Thesis	Compulsory	CS1
20	MTH251	Calculus I	Compulsory	Math
21	MTH252	Calculus II	Compulsory	Math
22	MTH253	Calculus III	Compulsory	Math
23	STAT451	Applied Statistics for Engineers and Scientists	Compulsory	Math
24	CM101	Communication Management	Compulsory	N-CS
25	ECE341	Computer Hardware	Compulsory	N-CS
26	QS001	Military Education (Theory)	Compulsory	N-CS
27	QS002	Military Education (Practice)	Compulsory	N-CS
28	SC203	Scientific Method	Compulsory	N-CS
29	TC001	Physical Education	Compulsory	N-CS
30	WR227	Technical Writing	Compulsory	N-CS
31	CTH001	Fundamental principles of Marxism and Leninism	Compulsory	N-CS1
32	CTH002	Revolution Directions of the Vietnam Communist Party	Compulsory	N-CS1
33	CTH003	Ho Chi Minh's Ideology	Compulsory	N-CS1
34	PH221	General Physics I	Compulsory	Phys
35	PH222	General Physics II	Compulsory	Phys
36	PH223	General Physics III	Compulsory	Phys
37	CS410	Wireless Network	Elective	CS
38	CS411	Computer Graphics	Elective	CS
39	CS412	Computer Vision	Elective	CS
40	CS414	Machine Learning	Elective	CS
41	CS415	Optimization	Elective	CS
42	CS416	Data Modeling and Integration	Elective	CS
43	CS417	Game Theory, Multi-Agents and Social Algorithms	Elective	CS
44	CS421	Software Requirement	Elective	CS
45	CS422	Software Analysis and Design	Elective	CS
46	CS423	Software Testing	Elective	CS

47	CS424	Web Application Development	Elective	CS
48	CS426	Mobile Device Application Development	Elective	CS
49	CS427	3D Visualization and Game Development	Elective	CS
50	CS431	Wireless Network	Elective	CS
51	CS434	Computer Security	Elective	CS
52	CS494	Internetworking Protocols	Elective	CS
53	MTH261	Introduction to Linear Algebra	Elective	Math
54	MTH344	Group Theory	Elective	Math
55	MTH346	Number Theory	Elective	Math
56	STAT452	Applied Statistics for Engineers and Scientists 2	Elective	Math
57	DTV001	Fundamental Electronics	Elective	Science
58	DTV003	Digital Circuit	Elective	Science
59	CS407	Technology Innovation and Leadership	Elective	Upper Div
60	CS408	Computational Finance	Elective	Upper Div
61	CS409	Entrepreneurship	Elective	Upper Div
62	KT006	Macro economics	Elective	Upper Div