

Computer Science Program at HUST
Academic Catalog 2023-2024
(extracted from Troy Undergraduate Catalog)

No	Code	Course title	Credits	Pre-requisites
General studies				
1	TROY 1101	University Orientation	1	
2	ENG 1101	English Composition 1	3	unconditional status
3	ART 1133	Visual Art	2	
4	HIS 1122	World History to 1500	3	
5	HIS 1123	World History after 1500	3	
6	MUS 1131	Music Appreciation	2	
7	SPH 2241/COM 2	Fundamentals of Speech	3	
8	ENG 1102	Composition and Modern English II	3	ENG 1101 with C
9	ENG 2205/6	World Literature II	3	ENG 1112 with C
10	ECO 2251	Macroeconomics	3	
11	ECO 2252	Microeconomics	3	
12	PHY L 2520	General Physics and Lab	4	None
13	CHM/L1142	General Chemistry and Lab I	4	None
14	MTH 1125	Calculus I	4	MTH 1114 with C
15	MTH 1126	Calculus II	4	MTH 1125
Required major courses				
16	CS 2220	Numerical Methods in Computing	3	MTH 1112
17	CS 2250	Computer Science I	3	MTH 1112 with C
18	CS 2255	Computer Science II	3	CS 2250
19	CS 3310	Foundations of Computer Science	3	MTH 1112 with C
20	CS 3323	Data Structures	3	CS 2255 and MTH 1125
21	CS 3329	Analysis of Algorithms	3	CS 3323
22	CS 3332	Software Engineering I	3	CS 3323
23	CS 3360	Concepts of Object-Oriented Programming	3	CS 2255
24	CS 3365	Architectures	3	CS 3310
25	CS 3370	Nature of Programming Languages	3	CS 3323
26	CS 3372	Formal Languages and the Theory of Computation	3	CS 3323
27	CS 4420	Introduction to Database Systems	3	CS 3323
28	CS 4445	Data Communication and Networking	3	CS 3323
29	CS 4448	Operating Systems	3	CS 3323
30	MTH 2210	Applied Statistics	3	MTH 1112 with C
31	MTH 2215	Applied Discrete Mathematics	3	MTH 1112 with C
Major electives (Choose two or three of the following courses)				
32	CS 4447	Systems Analysis and Design	3	CS 3323
33	CS 3331	Fundamentals of Artificial Intelligence	3	CS 3323
34	CS 4451	Computer Security	3	CS 3323
35	CS 4443	Web Based Development	3	CS 3323
36	CS 4410	Introduction to Machine Learning	3	CS 3323

Free Electives (Choose 7 courses of the following courses)				
37	MTH 1112	Pre-Calculus Algebra	3	
38	MTH 1114	Pre-Algebra Trigonometry	3	MTH 1112 with C
39	MGT 3300	Principles of Management	3	None
40	IS 2241	Computer Concepts & Applications	3	None
41	MGT 4471	Leadership and change	3	MGT 3330
42	MKT 3361	Principles of Marketing	3	None
43	MGT 4460	Project Management	3	MGT 3330
44	BIO/L 1110	Principles of Biology and Lab	4	None
45	MGT 4440	Building and leading effective teams)	3	MGT 3330
46	HRM 3375	Human Resource Management	3	MGT 3330