

Curriculum

□ Undergraduate

Classification	Subject No.	Code	Subject Name	Lecture:Lab.:Credit (assignment)	Semester	Remark
Mandatory Major Course	CS204	36.204	Discrete Mathematics	3:0:3(8)	Spring, Fall	*MAS275
	CS206	36.206	Data Structure	3:0:3(6)	Spring, Fall	
	CS300	36.300	Introduction to Algorithms	3:0:3(8)	Fall	
	CS311	36.311	Computer Organization	3:0:3(3)	Spring	*EE312
	CS320	36.320	Programming Languages	3:0:3(3)	Spring	
	CS330	36.330	Operating Systems and Lab.	3:3:4(12)	Fall	
	CS408	36.408	Computer Science Project	1:6:3	Spring, Fall	
Elective Major Course	CS202	36.202	Problem Solving	2:3:3(15)	Spring, Fall	
	CS211	36.211	Digital System and Lab.	3:3:4(10)	Spring	
	CS220	36.220	Programming Principles	3:0:3(6)	Spring or Fall	
	CS230	36.230	System Programming	3:0:3(4)	Spring or Fall	
	CS270	36.270	Intelligent robot design and programming	2:3:3	Spring	
	CS310	36.310	Embedded computer systems	3:3:4(10)	Fall	
	CS322	36.322	Formal Languages and Automata	3:0:3(6)	Fall	
	CS324	36.324	Programming for computational finance	3:0:3	Spring	
	CS350	36.350	Introduction to Software Engineering	3:0:3(2)	Spring	
	CS360	36.360	Introduction to Database	3:0:3(8)	Spring, Fall	
	CS362	36.362	File Structures	2:3:3(6)	Fall	
	CS370	36.370	Symbolic Programming	2:3:3(6)	Spring	
	CS402	36.402	Introduction to Logic for Computer Science	3:0:3(6)	Spring or Fall	
	CS406	36.406	Mathematics for Computer Science	3:0:3	Fall	
	CS410	36.410	Introduction to VLSI Design	3:0:3(4)	Spring or Fall	
	CS420	36.420	Compiler Design	3:0:3(6)	Spring	
	CS422	36.422	Computation Theory	3:0:3(8)	Spring or Fall	
	CS440	36.440	Data Communication	3:0:3(6)	Spring	
	CS441	36.441	Introduction to Computer Network	3:0:3(9)	Spring or Fall	
	CS442	36.442	Advanced Computer Network	3:0:3(6)	Fall	
	CS446	36.446	Mobile Applications Development	2:3:3(5)	Spring	
	CS448	36.448	Introduction to Information Security	3:0:3(1)	Spring	
	CS451	36.451	IT Service Engineering	3:1:3(6)	Spring	
	CS453	36.453	Formal Software Verification Techniques	3:0:3(6)	Fall	
	CS455	36.455	Software Project	2:3:3(4)	Fall	
	CS457	36.457	Web-based Software Development	3:0:3	Spring	
	CS470	36.470	Introduction to Artificial Intelligence	3:0:3(8)	Spring	
	CS472	36.472	Human-Computer Interaction	3:1:3	Spring	
	CS474	36.474	Text Mining	3:0:3	Fall	
	CS478	36.478	Financial Data Analysis and Mining	3:0:3	Fall	
CS480	36.480	Introduction to Computer Graphics	3:3:4(6)	Spring		
CS482	36.482	Computer Animation	2:3:3(6)	Spring or Fall		
CS489	36.489	Computer Ethic & Social Issues	3:0:3(2)	Fall		
CS492	36.492	Special Topics in Computer Science	3:0:3(6)	Spring or Fall		
Research	CS490	36.490	Research in Computer Science	0:6:3	Spring, Fall	
	CS495	36.495	Individual Study	0:6:1	Spring, Fall	
	CS496	36.496	Seminar	0:2:1	Spring, Fall	

※ The "*" mark represents a course that can be substituted

400-level courses are recognizable in both bachelor's and master's programs.

□ Graduate

Classification		Subject No.	Code	Subject Name	Lecture:Lab.:Credit (assignment)	Semester	Remark
Mandatory General Course	Mandatory	CC010	11.010	Special Lecture on Leadership	1:0:0	Fall	
		CC020	11.020	Ethics and Safety I	1AU	Spring/Fall	
	Choose 1	CC511	11.511	Probability and Statistics	2:3:3	Spring/Fall	
		CC512	11.512	Introduction to Materials and Engineering	3:0:3	Spring/Fall	
		CC513	11.513	Engineering Economy and Cost Analysis	3:0:3	Fall	
		CC522	11.522	Introduction to Instruments	2:3:3	Fall	
		CC530	11.530	Entrepreneurship and Business Strategies	3:0:3	Fall	
CC532	11.532	Collaborative System Design and Engineering	4:0:4	Spring			
Elective Major Course (Essential)	CS500	36.500	Design and Analysis of Algorithms	3:0:3(6)	Spring	**	
	CS504	36.504	Computational Geometry	3:0:3(8)	Spring	**	
	CS510	36.510	Computer Architecture	3:0:3(6)	Spring	**	
	CS520	36.520	Theory of Programming Languages	3:0:3(6)	Fall	**	
	CS522	36.522	Theory of Formal Languages and Automata	3:0:3(6)	Spring	**	
	CS530	36.530	Operating System	3:0:3(6)	Spring/Fall	**	
	CS540	36.540	Network Architecture	3:0:3(9)	Spring/Fall	**	
	CS542	36.542	Internet Systems Technology	3:0:3(9)	Fall	**	
	CS546	36.546	Wireless Mobile Internet	3:0:3(5)	Fall	**	
	CS548	36.548	Advanced Information Security	3:0:3(6)	Spring	**	
	CS550	36.550	Software Engineering	3:0:3(4)	Spring	**	
	CS552	36.552	Models of Software Systems	3:0:3(10)	Fall	**	
	CS554	36.554	Designs for Software and Systems	2:3:3(4)	Fall	**	
	CS560	36.560	Database System	3:0:3(6)	Spring	**	
	CS562	36.562	Database Design	3:0:3(6)	Fall	**	
	CS570	36.570	Artificial Intelligence	3:0:3(6)	Spring/Fall	**	
	CS572	36.572	Intelligent Robotics	3:0:3(6)	Spring/Fall	**	
	CS574	36.574	Natural Language Processing I	3:0:3(6)	Fall	**	
	CS576	36.576	Computer Vision	3:0:3(8)	Spring/Fall	**	
	CS578	36.578	Bionic Human-Robot Interaction	3:0:3	Spring	**	
CS579	36.579	Computational Linguistics	3:0:3(6)	Spring	**		
CS580	36.580	Interactive Computer Graphics	3:2:3(10)	Spring	**		
CS590	36.590	Semantic Web	3:0:3(6)	Spring/Fall	**		
CS591	36.591	Software Ecosystem	3:0:3(5)	Fall	**		
Elective Major Course (Elective)	CS600	36.600	Graph Theory	3:0:3(6)	Fall		
	CS610	36.610	Parallel Processing	3:0:3(8)	Spring	*EE611	
	CS612	36.612	Social network-aware ubiquitous computing	3:0:3	Spring		
	CS620	36.620	Theory of Compiler Construction	3:0:3(2)	Fall		
	CS632	36.632	Embedded Operating Systems	3:0:3(6)	Fall		
	CS642	36.642	Distributed Processing Systems	3:0:3(3)	Spring		
	CS644	36.644	Ubiquitous Networking	3:0:3(6)	Fall		
	CS650	36.650	Advanced Software Engineering	3:0:3(6)	Fall		
	CS652	36.652	Software & Systems Product Line Engineering	3:0:3(12)	Spring/Fall		
	CS654	36.654	Software Process	3:0:3(12)	Spring/Fall		
	CS655	36.655	System Modeling and Analysis	3:0:3(6)	Spring	*EE612	
	CS656	36.656	Software Engineering Economics	3:0:3	Spring		
	CS660	36.660	Information Storage and Retrieval	3:0:3(6)	Spring		
	CS662	36.662	Distributed Database	3:0:3(6)	Spring		
	CS664	36.664	Advanced Database System	3:0:3(6)	Fall		
CS670	36.670	Fuzzy and Intelligent System	3:0:3(6)	Spring			
CS671	36.671	Machine Learning	3:0:3(6)	Spring/Fall			
CS672	36.672	Reinforcement Learning	3:0:3(2)	Spring/Fall			

Classification	Subject No.	Code	Subject Name	Lecture:Lab.:Credit (assignment)	Semester	Remark
Elective Major Course (Elective)	CS674	36.674	Natural Language Processing II	3:0:3(6)	Fall	*EE634
	CS676	36.676	Pattern Recognition	3:0:3(3)	Fall	
	CS680	36.680	Advanced Computer Graphics	3:0:3(6)	Fall	
	CS682	36.682	Digital Storytelling	3:0:3(3)	Spring	
	CS684	36.684	Human-Computer Interaction	3:0:3(5)	Fall	
	CS700	36.700	Topics in Computation Theory	3:0:3(8)	Spring/Fall	
	CS710	36.710	Topics in Computational Architecture	3:0:3(6)	Spring/Fall	
	CS712	36.712	Topics in Parallel Processing	3:0:3(6)	Fall	
	CS720	36.720	Topics in Programming Languages	3:0:3(2)	Spring/Fall	
	CS730	36.730	Topics in Operating Systems	3:0:3(6)	Spring/Fall	
	CS744	36.744	Topics in System Architecture	3:0:3(9)	Spring/Fall	
	CS748	36.748	Topics on Information Security	3:0:3(3)	Fall	
	CS750	36.750	Topics in Software Engineering	2:3:3(6)	Spring/Fall	
	CS760	36.760	Topics in Database System	3:0:3(6)	Spring/Fall	
	CS770	36.770	Topics in Computer Vision	3:0:3(8)	Spring/Fall	
	CS772	36.772	Topics in Natural Language Processing	3:0:3(6)	Spring/Fall	
	CS774	36.774	Topics in Artificial Intelligence	3:0:3(6)	Spring/Fall	
	CS776	36.776	Topics in Cognitive Science	3:0:3(6)	Spring/Fall	
	CS780	36.780	Topics in Interactive Computer Graphics	2:3:3(10)	Spring/Fall	
CS788	36.788	Topics on Human-Computer Interaction	3:0:3(6)	Spring/Fall		
CS790	36.790	Technical Writing for Computer Science	2:3:3(6)	Spring-Fall		
Research	CS960	36.960	M.S. Thesis Research		Spring-Fall	
	CS965	36.965	Individual Study in M.S.		Spring-Fall	
	CS966	36.966	Seminar	1:0:1	Spring-Fall	
	CS980	36.980	Ph.D. Dissertation Research		Spring-Fall	
	CS986	36.986	Seminar	1:0:1	Spring-Fall	

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