Number (old)	Title			
580.689	Computational Personal Genomics			Applications
601.350 (600.340)	Introduction to Genomic Research			Applications
601.365 (600.365)	Knowledge Discovery from Text			Applications
601.414/614 (600.344/444)	Computer Network Fundamentals		Systems	
601.315/415/615 (600.315/415)	Databases (formerly Database Systems)		Systems	
601.317/417/617 (600.337/437)	Distributed Systems		Systems	
601.318/418/618 (600.318/418)	Operating Systems		Systems	
601.320/420/620 (600.320/420)	Parallel Programming		Systems	
601.421/621 (600.321/421)	Object-Oriented Software Engineering		Systems	Applications
601.325/425/625 (600.325/425)	Declarative Methods	Analysis		
601.426/626 (600.426)	Principles of Programming Languages	Analysis		
601.427 (600.430)	Ontologies and Knowledge Representation	Analysis		
601.328/428/628 (600.328/428)	Compilers and Interpreters		Systems	
601.430/630 (600.470)	Combinatorics and Graph Theory in CS	Analysis		
601.433/633 (600.363/463)	Intro Algorithms/Algorithms I	Analysis		
601.434/634 (600.464/664)	Randomized & Big Data Algorithms	Analysis		
601.435/635 (600.469/669)	Approximation Algorithms	Analysis		
601.436/636 (600.473)	Algorithmic Game Theory	Analysis		
601.340/440/640	Web Security		Systems	
601.441/641 (600.451)	Blockchains & Cryptocurrencies	Analysis		
601.442/642 (600.442)	Modern Cryptography	Analysis		
601.443/643 (600.443)	Security & Privacy			Applications
601.444 (600.424)	Network Security		Systems	
601.445/645 (600.454)	Practical Cryptographic Systems		Systems	
601.447/647 (600.439/639)	Computational Genomics: Sequences			Applications
601.448/648 (600.438/638)	Computational Genomics: Data Analysis			Applications
601.452	Computational Biomedical Research	(no area designation)		
601.454/654 (600.484/684)	[Medical] Augmented Reality			Applications
601.455/655 (600.445/645)	Computer Integrated Surgery I			Applications
601.456/656 (600.446/646)	Computer Integrated Surgery II			Applications
601.457/657 (600.357/457)	Computer Graphics			Applications
601.459/659 (600.459/659)	Computational Geometry	Analysis		
601.461/661 (600.361/461/661)	Computer Vision			Applications
601.463/663 (600.336/436/636)	Algorithms for Sensor-Based Robotics	Analysis		

Number (old)	Title			
601.464/664 (600.335/435)	Artificial Intelligence			Applications
601.465/665 (600.465)	Natural Language Processing			Applications
601.466/666 (600.466)	Information Retrieval and Web Agents			Applications
601.468/668 (600.468)	Machine Translation			Applications
601.475/675 (600.475)	Machine Learning	Analysis (added 2016)		Applications
601.476/676 (600.476/676)	Machine Learning: Data to Models (in Complex Domains)	Analysis		Applications
601.477/677 (600.477/677)	Causal Inference	Analysis		
601.479/679 (600.479/679)	Machine Learning: Representation Learning	Analysis		Applications
601.481/681	Machine Learning: Optimization	Analysis		Applications
601.482/682	Machine Learning: Deep Learning			Applications
601.485/685 (600.485)	Probabilistic Models of the Visual Cortex	Analysis		Applications
601.488 (600.488/688/580.688)	Foundations of Computation Biology and Bioinformatics II	Analysis		
601.490/690	Intro to Human-Computer Interaction			Applications
601.491/691	Human-Robot Interaction			Applications
601.631 (600.471)	Theory of Computation	Analysis		
601.658 (600.756)	Introduction to Geometry Processing	(to be determined)		
601.714 (600.644)	Advanced Computer Networks		Systems	
601.717 (600.667)	Advanced Distributed Systems		Systems	
601.718	Advanced Operating Systems		Systems	
601.723 (600.624)	Advanced Topics in Data-Intensive Computing		Systems	
601.730 (600.670)	Pseudorandomness and Combinatorial Constructions	Analysis		
601.742 (600.642)	Advanced Topics in Cryptography (starting Fall 2008)	Analysis		
601.743 (600.643)	Advanced Topics in Computer Security		Systems	Applications
601.745	Advanced Topics in Applied Cryptography	Analysis		Applications
601.749 (600.649)	Computational Genomics: Applied Comparative Genomics			Applications
601.750 (600.640)	Frontiers of Sequencing Data Analysis			Applications
601.760 (600.660)	FFT in Graphics & Vision	Analysis		Applications
601.765 (600.665)	Machine Learning: Linguistic & Sequence Modeling	Analysis		Applications
601.766 (600.666)	Information Extraction			Applications
601.769 (600.625)	Event Semantics in Theory and Practice			Applications
601.775 (600.675)	Statistical Machine Learning	Analysis		Applications
601.778 (600.678)	Adv Topics in Causal Inference	Analysis		
601.779	Machine Learning: Advanced Topics	Analysis		
601.780 (600.692-was 675)	Unsupervised Learning: from Big Data to Low-Dimensional Representations (was Adv Topics in ML: Modeling and			Applications

Number (old)	Title			
601.782 (600.682)	Deep Learning for Image Understanding			Applications
601.783 (600.683)	Vision as Bayesian Inference	Analysis		Applications

These older courses will be assigned new numbers when/if they are offered again.				
(600.316/416)	Database Systems (formerly TSP)		Systems	
(600.319/419)	Storage Systems (last offered 2008)		Systems	
(600.323/423)	Data Intensive Computing		Systems	
(600.427)	Data Organization: Storage & External Memory Systems		Systems	
(600.429)	Functional Programming at Work - Haskell & DSLs		Systems	
(600.441/641)	Machine Learning for Genomic Data			Applications
(600.450)	Network Embedded Systems & Sensor Networks		Systems	
(600.460)	Software Vulnerability Analysis			Applications
(600.472)	Theoretical Cryptography	Analysis		
(600.478)	Visual Imaging in Surgery & Medicine			Applications
(600.615)	Big Data,Small Languages, Scalable Systems		Systems	
(600.617)	Data Stream Processing		Systems	
(600.619)	Advanced Storage & Transaction Processing		Systems	
(600.620)	External Memory Data Structures and Algorithms	Analysis	Systems	
(600.629)	Wireless Networks		Systems	
(600.630)	Computer Vision Seminar			Applications
(600.657)	Advanced Topics for Computer Graphics			Applications
(600.658)	Suvery of Methods in Computer Graphics [Shape Analysis & Retrieval]			Applications
(600.663)	Pattern Matching Algorithms	Analysis		
(600.668)	Advanced Topics in Software Security		Systems	
(600.671)	Special Topics on Bio-Nano Computing			Applications
(600.672)	Advances in Computational Complexity	Analysis		
(600.681)	Adv Topics in Computer Vision			Applications

AT MOST ONE OF THE BELOW COURSES MAY BE APPLIED TOWARD THE 6 CORE COURSES REQUIREMENT FOR GRADUATE PROGRAMS (Undergrads should see the "CS other" policy about counting up to 6 credits from this list and others as well.)				
520.447	Introduction to Information Theory	Analysis		
520.412/612	Machine Learning for Signal Processing (added 2018)	Analysis		
520.629	Networked Dynamical Systems	Analysis		
553.761 (550.661)	Non-linear Optimization I (Foundations of Optimization)	Analysis		

Number (old)	Title			
553.762 (550.662)	Non-linear Optimization II (Optimization Algorithms)	Analysis		
553.763 (550.663)	Stochastic Search and Optimization	Analysis		
553.765 (550.665)	Convex Optimization (added 2017)	Analysis		
553.766 (550.666)	Combinatorial Optimization	Analysis		
553.672 (550.672)	Graph Theory	Analysis		