

Course #	Course Title	Text/Ref.	Call #	Title	Author / Editor	Publisher	Note
I116	Fundamentals of Programming	Ref.	-	Python Website			Available on the web https://www.python.org/
I213	Discrete Signal Processing	Ref.	C54.2/ C	Linear System Theory and Design [International 4th ed.]	Chi-Tsong Chen	Oxford University Press, 2013	
		Ref.	C53.1/ O	Discrete-Time Signal Processing (Prentice Hall signal processing series) [2nd ed.]	Alan V. Oppenheim, Ronald W. Schafer, and John R. Buck	Prentice-Hall, 1999	
I217	Functional Programming	Ref.	-	CafeOBJ website			Available on the web http://cafeobj.org/
I218	Computer Architecture	Text	C31.3/ P	Computer Organization and Design -- The Hardware/Software Interface [6th ed.]	David A.Patterson and John L.Hennessy	Morgan Kaufmann Pub., 2021	
I219	Software Design Methodology	Ref.	C42.3/ B	The Unified Modeling Language User Guide (The Addison-Wesley object technology series) [2nd ed.]	G. Booch, et.al	Addison-Wesley, 2005	
		Ref.	C42.3/ R	The Unified Modeling Language Reference Manual (The Addison-Wesley object technology series)	J. Rumbaugh, et.al	Addison-Wesley, 2005	
		Ref.	C42.3/ F	UML Distilled: A Brief Guide to the Standard Object Modeling Language (The Addison-Wesley object technology series) [3rd ed.]	M. Fowler	Addison-Wesley, 2004	
		Ref.	C45.2/ D	Design Patterns: Elements of Reusable Object-Oriented Software	E. Gamma, et.al	Addison-Wesley, 1995	
		Ref.	C33.1/A	Java Programming Language (The Java series) [4th ed.]	K. Arnold, et.al	Prentice Hall, 2006	
I223E	Natural Language Processing (E)	Ref.	C45.1/ I /15	Shizen Gengo Shori (in Japanese) → 自然言語処理 (岩波講座ソフトウェア科学 ; 15)	M. Nagao et al.	Iwanami Publishers, 1996	
		Ref.	C52.1/ A	Natural Language Understanding [2nd ed.]	J. Allen	The Benjamin/Cummings Publishing Company, 1995	
		Ref.	C52.1/ M	Foundations of Statistical Natural Language Processing	C.D. Manning and H. Schutze	MIT-press, 1999	
I226	Computer Networks	Text	C33.1/ T	Computer Networks [6th ed.]	Andrew S. Tanenbaum, Nick Feamster, David J. Wetherall	Pearson, 2021	
		Ref.	C33.1/ S	Data and Computer Communications [10th ed.]	W. Stallings	Peason, 2014	
		Ref.	C33.1/ T	Basic Information Network (in Japanese) → 情報ネットワークの基礎	Shuji Tasaka	Mathematical Engineering Inc., 2003	
		Ref.	C33.1/ F / 1	The Protocols (TCP/IP Illustrated ; vol. 1) [2nd ed.]	K.R. Fall and W.R. Stevens	Addison-Wesley Professional, 2012	
		Ref.	C33 / O	Introduction to Computer Network: TCP/IP Protocol Suite and Security (in Japanese) → コンピュータネットワーク入門 - TCP/IP プロトコル群とセキュリティ	Masato Oguchi	Computer Science Library, 2007	
I238E	Computation Theory (E)	Text	C23.2/ S	Introduction to the Theory of Computation [3rd ed.]	M. Sipser	Cengage Learning, 2013	
I239	Machine Learning	Ref.	C53.3/ B	Pattern recognition and machine learning (Information science and statistics)	Christopher M. Bishop	Springer, 2006	
		Ref.	C51.3/ M	Machine Learning: A Probabilistic Perspective (Adaptive Computation and Machine Learning series)	Kevin P. Murphy	MIT press, 2012	
		Ref.	C51.3/ G	Deep Learning (Adaptive computation and machine learning)	Ian Goodfellow and Yoshua Bengio and Aaron Courville	MIT press, 2016	
I413E	Theoretical Computer Science (E)	Text	410.5/ H	Lambda-Calculus and Combinators	J.R. Hindley and J.P. Seldin	Cambridge University Press, 2008	
		Ref.	C23.1/ B	Term Rewriting and All That [1st paperback ed.]	F. Baader and T. Nipkow	Cambridge University Press, 1999	
		Ref.	410.5/ B	The Lambda Calculus. Its Syntax and Semantics (Studies in Logic)	H. Barendregt	College Publications, 2012	
I419	Image Information Science	Ref.	C53.5/ S	Digital Image Processing (in Japanese) → デジタル画像処理 (デジタルテクノロジーシリーズ ; 7)	Masao Saito	Tokai Univ. Pub., 1986	
		Ref.	C53.5/ A	Image Processing and Recognition (in Japanese) → 画像の処理と認識	Takeshi Agui, Tomoharu Nagao	Shokodo Pub., 1992	
I439	Speech Information Processing	Ref.	C53.2/ F	Speech analysis, synthesis and perception	Jim Flanagan	Springer-Verlag., 1972	
		Ref.	C53.2/ R	Fundamentals of Speech Recognition	Lawrence Rabiner and Biing-Hwang Juang	Prentice-Hall, 1993	
		Ref.	C52.1/ H	Spoken Language Processing: A Guide Theory, Algorithm, and System Development	X. Huang, A. Acero, H.-W. Hon	Prentice Hall, 2001	
		Ref.	C52.1/ J	Speech and Language Processing : an introduction to natural language processing, computational linguistics, and speech recognition [2nd ed.]	Daniel Jurafsky and James Martin	Prentice-Hall, 2009	
		Ref.	C52.1/ J	Speech and Language Processing : an introduction to natural language processing, computational linguistics, and speech recognition [2nd ed.]	Daniel Jurafsky and James Martin	Prentice-Hall, 2009	
I441	Advanced Computer Networks	Ref.	C33.1/ S / 1	The Protocols (TCP/IP Illustrated ; vol.1)	W. R. Stevens	Addison-Wesley Pub., 1994	
		Ref.	C33.1/ T	Computer Networks [3rd ed.]	A. S. Tanenbaum	Prentice Hall, 1996	
I657E	Quantum/Materials informatics (E)	Ref.	C53.3/ B	Pattern Recognition and Machine Learning (Information Science and Statistics)	Christopher M. Bishop	Springer, 2006	

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		Ref.	C23.2/ Q	Quantum Annealing and Related Optimization (Methods Lecture notes in physics 639)	Arnab Das and Bikas K. Chakrabarti eds.	Springer, 2005	
		Ref.	C23.2/ N	Quantum Computation and Quantum Information [10th Anniversary ed.]	Michael A. Nielsen, Isaac L. Chuang	Cambridge University Press, 2010	