

Course #	Course Title	Text/Ref.	Call #	Title	Author / Editor	Publisher	Note
I111	Algorithms and Data Structures	Text	C42.1/ A	Theory of Algorithms (in Japanese) → アルゴリズム論	T. Asano, K. Wada, T. Masuzawa	Ohm Publishing Co., 2003	
		Text	C42.1/ U	First Course in Algorithms Through Puzzles	R. Uehara	Springer, 2019	Only available from JAIST network https://doi.org/10.1007/978-981-13-3188-6
I112	Basics of Computer Systems	Ref.	C44.2/ Y99	User's UNIX (in Japanese) → ユーザーズUNIX	N. Saitoh (ed.)	Iwanami, 1988	
		Ref.	C44.2/ L	Learning GNU Emacs [3rd ed.]	Debra Cameron et al.	O'Reilly, 2004	
		Ref.	C46.1/ O	LaTeX2e [5th ed.] (in Japanese) → LaTeX2e美文書作成入門	H. Okumura	Gijutsuhyouronsya, 2010	
		Ref.	C44.2/ K	The UNIX Programming Environment	B. W. Kernighan, Rob Pike	Prentice-Hall, 1984	
I114	Fundamental Mathematics for Information Science	Ref.	410.3/ A	Calculus : Schaum's outlines [6th ed.]	Frank Ayres, Jr. and Elliot Mendelson	McGraw-Hill, 2013	
		Ref.	410.9/ L	Schaum's Outline of Linear Algebra [5th ed.]	Seymour Lipschutz and Marc Lipson	McGraw-Hill, 2013	
		Ref.	410.3/ M / 1	Calculus : 1 [2nd ed.]	Jerrold Marsden and Alan Weinstein	Springer-Verlag, 1985	
		Ref.	410.9/ L	Introduction to Linear Algebra [2nd ed.]	Serge Lang	Springer-Verlag, 1986	
I115	Digital Logic and Computer Design	Text	C31.3/ P	Computer Organization and Design: The Hardware/Software Interface [MIPS, 6th ed.]	David A.Patterson and John L. Hennessy	Morgan Kaufmann Publishers, 2021	
		Ref.	C31.3/ H	Digital Design and Computer Architecture [2nd ed.]	David Money Harris and Sarah L. Harris	Morgan Kaufmann Publishers, 2013	Only available from JAIST network https://www.sciencedirect.com/science/book/9780123944245
I119	Statistics for Data Analytics	Ref.	412.5/ J	Statistics: Principles and Methods [7th ed.]	Johnson R.A., Bhattacharyya G.K.	Wiley, 2014	
		Ref.	410.9/ A	Linear Algebra Done Right [3rd ed.]	Axler, S.	Springer, 2015	
		Ref.	410.2/ K	楽しもう！数学を	河添健、林邦彦	日本評論社, 2002	
		Ref.	410.2/ H	直観でわかる数学 [正]	畑村洋太郎	岩波書店, 2004	
		Ref.	412.5/ T	統計学入門	東京大学教養学部統計学教室 (編集)	東京大学出版会, 1991	
		Ref.	412.5/ I	数理統計学 [改訂版]	稲垣宣生	裳華房, 2003	
		Ref.	411.1/ F	確率と確率過程 (金融工学の基礎 ;3)	伏見正則	朝倉書店, 2004	
I120	Fundamentals of Logic and Mathematics	Text	C22.3/ I	Shomeisakuho (in Japanese) → 証明作法：論理の初歩から証明の実践へ	H. Ishihara	Kyoritsu Shuppan, 2023	
		Ref.	C22.3/ N	Logic and sets (in Japanese) → ろんりと集合	N. Nakauchi	Nihonhyouronsha, 2009	
		Ref.	C22.3/ T	Techniques of Logical Analysis for Information Science (in Japanese) → 情報科学のための論理分析テクニック	S. Toda	Baihukan, 2007	
		Ref.	C22.4/ M	Introduction to Sets (in Japanese) → 集合序説	N. Motohashi	Baihukan, 2003	
I211E	Mathematical Logic (E)	Text	C22.3/ D	Logic and Structure [5th ed.]	Dirk van Dalen	Springer, 2013	
I212	Analysis for Information Science	Ref.	C53.1/ O	Signals and Systems [2nd ed.]	Alan Oppenheim, Alan Willsky	Prentice Hall, 1997	
I214	System Optimization	Ref.	C23.1/ F	Algorithmic Principles of Mathematical Programming (Kluwer texts in the mathematical sciences ; v. 24)	Ulrich Faigle, W. Kern, G. Still	Kluwer Academic, 2002	
		Ref.	412.6/ O	TokyoTech Be-TEXT Mathematical Programming (in Japanese) → 数理計画法(TokyoTech Be-TEXT)	W. Ogata	Ohm-sya, 2010	
		Ref.	412.6/ Y	Mathematical Programming (IEICE Lecture Series ; C-4) (in Japanese) → 数理計画法 (電子情報通信レクチャーシリーズ ; C-4)	N. Yamashita, M. Fukushima	Corona-sya, 2008	
		Ref.	412.6/ Y	Foundation of Engineering Optimization and its applications (in Japanese) → 最適化とその応用 : 工学基礎	H. Yabe	Suuri-kougakusya, 2006	
		Ref.	412.6/ F	Introduction to Mathematical Programming (System-Control-Information Library ; 15) (in Japanese) → 数理計画入門 (システム制御情報ライブラリー ; 15)	M. Fukushima	Asakura Shoten, 1996	
I225E	Statistical Signal Processing (E)	Ref.	411.1/ P	Probability, random variables, and stochastic processes [3rd ed.]	A. Papoulis	McGraw-Hill, 1991	
		Ref.	C53.1/ K	Estimation theory (Fundamentals of Statistical Signal Processing ; v.1)	Steven M. Kay	Prentice Hall, 1993	
I232E	Information Theory (E)	Ref.	C21.1/ C	Elements of Information Theory [2nd ed.]	Thomas Cover and Joy Thomas	Wiley, 2006	Only available from JAIST network https://onlinelibrary.wiley.com/book/10.1002/047174882X
I233	Operating Systems	Text	C44.1/ T	Modern Operating Systems [2nd ed.]	Andrew S. Tanenbaum	Prentice Hall, 2001	
		Text	C44.1/ S	Operating System Concepts [8th ed.]	Abraham Silberschatz, Peter Baer Galvin, Greg Gagne	John Wiley & Sons, Inc., 2009	

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I235	Game Informatics	Ref.	C53.3/ B	Pattern Recognition and Machine Learning	Christopher M. Bishop	Springer, 2006	
		Ref.	C51 / Y	Artificial Intelligence and Games	Georgios N. Yannakakis and Julian Togelius	Springer, 2018	Only available from JAIST network https://doi.org/10.1007/978-3-319-63519-4
I237	Formal Languages and Automata	Ref.	C23.2/ K	Automata and Computability	Dexter C. Kozen	Springer, 1997	
		Ref.	C23.2/ H	Introduction to Automata Theory, Languages, and Computation [3rd ed.]	J. E. Hopcroft, R. Motowani, J. D. Ullman	Addison-Wesley, 2007	
		Ref.	C23.2/ S	Introduction to the Theory of Computation [3rd ed.]	M. Sipser	Cengage Learning, 2013	
		Ref.	C23.2/ S	Introduction to the Theory of Computation [3rd ed., international ed.]	M. Sipser	Cengage Learning, 2013	
I486S	Multi-Party Computation	Ref.	C21.2/ C	Secure Multiparty Computation and Secret Sharing	Ronald Cramer, Ivan Bjerre Damgård, and Jesper Buus Nielsen	Cambridge University Press, 2015	
		Ref.	-	R. Cramer, I. Damgaard, J. Nielsen "Multiparty computation, Introduction"			Available on the web https://www.researchgate.net/publication/226390713_Multiparty_Computation_an_Introduction#full-text
		Ref.	-	M. Ben-Or, S. Goldwasser and A. Wigderson "Completeness Theorems for Non-Cryptographic Fault-Tolerant Distributed Computation" in STOC88, pp. 1-10			Only available from JAIST network https://dl.acm.org/doi/pdf/10.1145/62212.62213
		Ref.	-	Ronald Cramer, Ivan Damgaard and Ueli M. Maurer "General Secure Multi-party Computation from any Linear Secret-Sharing Scheme" in EUROCRYPT2000, pp 316-334			Only available from JAIST network https://link.springer.com/chapter/10.1007/3-540-45539-6_22
		Ref.	-	Ronald Cramer, Ivan Damgaard and Yuval Ishai "Share Conversion,Pseudorandom Secret-Sharing and Applications to Secure Computation", in TCC2005, pp 342-362			Available on the web https://www.iacr.org/cryptodb/archive/2005/TCC/3618/3618.pdf