

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	Asano, Wada, 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	Fundamentals of Computer Systems and AI	Ref.	C46.1/ O	LaTeX2e [9th ed.] (in Japanese) → LATEX美文書作成入門	H. Okumura and Y. Kuroki	Gijutsuhyouronsya, 2023	
		Ref.	C43.1/ V /	Python Data Science Handbook [2nd ed.]	Jake VanderPlas	O'Reilly Media, 2022	
		Ref.	C33.1/ M / 1	Mastering TCP/IP : Introduction [6th ed.] (in Japanese) → マスタリングTCP/IP ; 入門編	N. Inoue et al.	Ohmsha, 2019	
		Ref.	C44.1/ A /	Docker Textbook for Programmers [2nd ed.] (in Japanese) → プログラマのためのDocker教科書	S. Asa	Shyoeisya, 2018	
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	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, 2021	
		Ref.	C31.3/ H /	Digital Design and Computer Architecture [2nd ed.]	David Money Harris and Sarah L. Harris	Morgan Kaufmann, 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.	412.5/ K /	データ解析のための数理統計入門	久保川達也	共立出版, 2023	
		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	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	
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	Benjamin/Cummings Publishing Company	
		Ref.	C52.1/M /	Foundations of Statistical Natural Language Processing	C.D. Manning and H. Schutze	MIT-press, 1999	
I225E	Statistical Signal Processing (E)	Ref.	411.1/ P /	Probability, Random Variables, and Stochastic Processes [4th ed.]	A. Papoulis and S. U. Pillai	McGraw-Hill, 2002	
		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

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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, 2009	
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	
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, an Introduction			Available on the web https://www.researchgate.net/publication/226390713_Multiparty_Computation_an_Introduction
		Ref.	-	Ben-Or, M.; Goldwasser, S.; Wigderson, A.; "Completeness Theorems for Non-Cryptographic Fault-Tolerant Distributed Computation". STOC88, p. 1-10.			Available on the web https://dl.acm.org/doi/pdf/10.1145/62212.62213
		Ref.	-	Cramer, Ronald; Damgaard, Ivan; Maurer, Ueli M.; "General Secure Multi-party Computation from any Linear Secret-Sharing Scheme". EUROCRYPT2000, p. 316-334.			Only available from JAIST network https://link.springer.com/chapter/10.1007/3-540-45539-6_22
		Ref.	-	Cramer, Ronald; Damgaard, Ivan; Ishai, Yuval; "Share Conversion, Pseudorandom Secret-Sharing and Applications to Secure Computation". TCC2005, p342-362.			Only available from JAIST network https://link.springer.com/chapter/10.1007/978-3-540-30576-7_19
I494	Data Science Practical Exercise I	Ref.	C41.8/ M	Python for data analysis : data wrangling with pandas, NumPy, and Jupyter [3rd ed.]	Wes McKinney	O'Reilly Media, 2022	
		Ref.	C51.1/ E	Introduction to Data Visualization: Techniques for Turning Data into Insights, Starting from the Design of Indicators and Features (in Japanese) → 指標・特徴量の設計から始めるデータ可視化学入門：データを洞察につなげる技術	Takahiro Ezaki	Socym, 2023	
		Ref.	412.5/ S	Introduction to Statistics from Examples [2nd ed.] (in Japanese) → 例題で学ぶ初歩からの統計学 [第2版]	Tetsuya Shirasago	Nippon Hyoron Sha, 2015	