

Course #	Course Title	Text/Ref.	Call #	Title	Author / Editor	Publisher	Note
I111E	Algorithms and Data Structures (E)	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
I116E	Fundamentals of Programming (E)	Ref.	C51.2/ S	Problem Solving & Programming Concepts [9th ed]	Maureen Sprankle and Jim Hubbard	Pearson Education, 2012	
		Ref.	C41.8/ L	Introduction to Programming Using Python	Y. Daniel Liang	Prentice Hall, 2013	
		Ref.	C41.8/ Z	Python Programming : An Introduction to Computer Science [3rd ed]	John Zelle	Franklin-Beedle, 2017	
		Ref.	C41.8/ S	An Introduction to Programming Using Python	David I. Schneider	Pearson, 2016	
		Ref.	C41.8/ D	Python Programming for the Absolute Beginner [3rd ed.]	Michael Dawson	Cengage/Course Technology, 2010	
I211	Mathematical Logic	Ref.	C41/ L	Specification of Abstract Data Types	Jacques Loeckx, Hans-Dieter Ehrich, Markus Wolf	Wiley, 1996	
I217E	Functional Programming (E)	Ref.	-	CafeOBJ			Available on the web http://cafeobj.org/
I223	Natural Language Processing	Ref.	C52.1/ S	Shizen Gengo Shori no Kiso (in Japanese) → 自然言語処理の基礎	N. Okazaki et al.	Ohmsha, 2022	
		Ref.	C45.1/ I / 15	Shizen Gengo Shori (in Japanese) → 自然言語処理	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	
I225	Statistical Signal Processing	Ref.	411.1/ P	Probability, random variables, and stochastic processes [3rd ed]	A. Papoulis	McGraw-Hill, 1991	
		Ref.	C531/ K	Estimation theory (Fundamentals of Statistical Signal Processing ; 1)	Steven M. Kay	Prentice Hall, 1993	
I226E	Computer Networks (E)	Text	C33.1/ T	Computer Networks [5th ed.]	A. S. Tanenbaum, David J. Wetherall	Prentice Hall, 2011	
		Ref.	C33.1/ S	Data and Computer Communications [9th ed., international ed.]	W. Stallings	Pearson, 2011	
		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/ S/ 1	The protocols (TCP/IP Illustrated : v. 1)	W. Richard Stevens	Addison-Wesley Professional. 1994	
		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	
I232	Information Theory	Text	C21.1/ U	An Illustrated Guide to Viewpoint of Information Theory (in Japanese) → イラストで学ぶ 情報理論の考え方	Tomohiko Uematsu	講談社, 2012	
		Ref.	C21.1/ C	Elements of Information Theory [2nd ed.]	Thomas Covers and Joy Thomas	Wiley, 2006	Only available from JAIST network https://onlinelibrary.wiley.com/book/10.1002/047174882X
I237E	Formal Languages and Automata (E)	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	
I238	Computation Theory	Text	C23.2/ S	Introduction to the Theory of Computation [3rd ed]	M. Sipser	Cengage Learning, 2013	
		Ref.	C23.2/ H	Introduction to Automata Theory, Languages, and Computation [3rd ed.]	John E. Hopcroft, Rajeev Motwani, and Jeffrey D. Ullman	Pearson, 2007	
I427	System Control Theory	Ref.	C54.1/ K	Introduction to Linear Control Systems (in Japanese) → 線形システム制御入門	Hiroyuki Kajiwara	Corona Publishing, 2000	
		Ref.	C54.1/ O	Linear Systems Control Theory (in Japanese) → 線形システム制御理論	Akira Ohsumi	Morikita Publishing, 2003	
		Ref.	C54.3/ S	Robot Modeling and Control	Mark W. Spong, Seth Hutchinson, and M. Vidyasagar	Wiley, 2006	
I437E	Coding Theory (E)	Ref.	C21.1/ J	Iterative Error Correction : Turbo, Low-Density Parity-Check and Repeat-Accumulate Codes	Sarah Johnson	Cambridge University Press, 2010	
		Ref.	C21.1/ B	Algebraic Codes for Data Transmission	Richard Blahut	Cambridge University Press, 2003	
I448	Distance Learning System	Ref.	375/ E / 1	Encyclopedia of Distance Learning [2nd ed.] v. 1	P. L. Rogers, J. V. Boettcher, G. A. Berg, and K. Schenk (ed.)	Information Science Reference, 2009	
		Ref.	375/ E / 2	Encyclopedia of Distance Learning [2nd ed.] v. 2	P. L. Rogers, J. V. Boettcher, G. A. Berg, and K. Schenk (ed.)	Information Science Reference, 2009	

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		Ref.	375/ E / 3	Encyclopedia of Distance Learning [2nd ed.] v. 3	P. L. Rogers, J. V. Boettcher, G. A. Berg, and K. Schenk (ed.)	Information Science Reference, 2009	
		Ref.	375/ E / 4	Encyclopedia of Distance Learning [2nd ed.] v. 4	P. L. Rogers, J. V. Boettcher, G. A. Berg, and K. Schenk (ed.)	Information Science Reference, 2009	
		Ref.	R375/ K	Encyclopedia of Educational Technology (in Japanese) → 教育工学事典	Japan Society for Educational Technology (ed.)	Jikkyo Publishing, 2000	Available in Reference books area (2F) <in-Library use only>
		Ref.	375/ K	Handbook of Information and Systems in Education (in Japanese) → 教育システム情報ハンドブック	Japanese Society for Information and Systems in Education (ed.)	Jikkyo Publishing, 2001	Only available from JAIST network https://elib.maruzen.co.jp/elib/html/BookDetail/Id/3000004454
		Ref.	C51.1/ U	e-Learning in Knowledge Society (in Japanese) → 知識社会におけるeラーニング	Maomi Ueno	Baifukan, 2007	
I466	Introduction to International Standardization	Ref.	-	TTC texts for standadization			Available on the web https://www.ttc.or.jp/activities/sdt_text
		Ref.	-	Introduction to standardization practice	METI		Available on the web https://www.meti.go.jp/policy/economy/hyojun-kijun/katsuyo/jitsumunyumon/pdf/2015text_zenbun.pdf
I466S	Advanced Information Security Theory and Application	Text	C21.2/ M	代数学から学ぶ暗号理論	宮地充子	日本評論社, 2012	
		Text	C21.2/ J	情報セキュリティ (IT Text)	宮地充子、菊池浩明編	オーム社, 2003	
		Text	C45.2/ J	抽象によるソフトウェア設計 Alloyではじめる形式手法	Daniel Jackson、中島 震	オーム社, 2011	
		Text	C41/ A	Advanced Topics in Types and Programming Languages	Benjamin C. Pierce編	The MIT Press, 2005	
I489	Advanced Lectures on Public-Key Cryptography	Ref.	-	A Graduate Course in Applied Cryptograph			Available on the web https://crypto.stanford.edu/~dabo/cryptobook/
		Ref.	-	A Decade of Lattice Cryptography			Available on the web https://eprint.iacr.org/2015/939.pdf
I491E	Advanced Machine Learning (E)	Ref.	C51.3/ G	Deep Learning	Ian Goodfellow and Yoshua Bengio and Aaron Courville	MIT press, 2016	
		Ref.	C51.5/ M	Deep Learning on Graphs	Yao Ma and Jiliang Tang	Cambridge University Press, 2021	
		Ref.	C51.3/ D	Deep Reinforcement Learning : Fundamentals, Research, and Applications	Hao Dong, Zihan Ding, Shanghang zhang	Springer Nature, 2020	
		Ref.	C51.3/ D	Deep Reinforcement Learning : Fundamentals, Research, and Applications	Hao Dong, Zihan Ding, Shanghang zhang	Springer Nature, 2020	
I493	Research ethics for AI/humans I	Ref.	C51 / C	AI Ethics (The MIT Press Essential Knowledge series)	Mark Coeckelbergh	The MIT Press, 2020	
I615E	Robotics (E)	Text	C54.3/ C	Introduction to Robotics : Mechanics and Control [4th ed]	J.J. Craig	Pearson, 2018	
		Ref.	C54.3/ L	Modern Robotics : Mechanics, Planning, and Control [Reprint ed.]	K.M. Lynch, F.C. Park	Cambridge University Press, 2019	
		Ref.	C54.1/ C	Robotics, Vision, and Control : Fundamental Algorithms in Matlab [3rd ed.]	P.I. Corke	Springer, 2023	