

Textbooks & Reference books list
(Summer Intensive Courses)

Course #	Course Title	Text/Ref.	Location Area	Call #	Title	Author / Editor	Publisher	Note
I473	Hardware/Software Codesign	Text	Information Sci.	-	若林一敏. ソフトウェアプログラムからハードウェア記述を合成する高位合成技術. Fundamentals Review. 2012, 6(1), p. 37-50			Available on the web https://www.istage.ist.go.jp/article/essfr/6/1/6_37/_pdf
		Ref.	Information Sci.	C31.2/ M	Synthesis and Optimization of Digital Circuits [International ed]	Givanni De Mecheli	McGraw-Hill, 1994	
		Ref.	Information Sci.	C31.2/ M	Synthesis and Optimization of Digital Circuits	Givanni De Mecheli	McGraw-Hill, 1994	
		Ref.	Information Sci.	C45.2/ C	Codesign : computer-aided software/hardware engineering	Jerzy Rozenblit and Klaus Buchenrieder (ed.)	IEEE Press, 1994	
		Ref.	Information Sci.	C31.3/ H /	Hardware/ Software Co-design	G.De Micheli, M.Sami (ed.)	Kluwer Academic, 1996	
K245	Knowledge Science and AI	Ref.	Knowledge Sci.	C21/ K	Understanding the digital world: What you need to know about computers, the Internet, privacy, and security [2nd ed.]	Kernighan, B. W.	Princeton University Press, 2021	
		Ref.	Knowledge Sci.	C62/ H	Tools for thought: The history and future of mind-expanding technology [First MIT Press ed.]	Rheingold, H.	MIT press, 2000	
		Ref.	Knowledge Sci.	361.4/ M	Understanding Media: The Extensions of Man [1st MIT Press ed.]	McLuhan, M.	The MIT Press, 1994	
		Ref.	Knowledge Sci.	002/ P	The Tacit Dimension	Polanyi, M.	Doubleday & Company, 1966	
		Ref.	Knowledge Sci.	002/ P	The Tacit Dimension	Polanyi, M.	University of Chicago Press, 2009	
		Ref.	Knowledge Sci.	116/ S	Logic [3rd ed.](Prentice-Hall foundations of philosophy series)	Salmon, W. C.	Prentice-Hall, 1984	
		Ref.	Knowledge Sci.	335/ N	The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation	Nonaka, I., & Takeuchi, H.	Oxford University Press, 1995	
		Ref.	Knowledge Sci.	336.1/ D	The innovator's DNA: Mastering the five skills of disruptive innovators	Dyer, J., Gregersen, H., & Christensen, C. M.	Harvard Business Press, 2011	
		Ref.	Knowledge Sci.	C51.3/ L	Deep Learning: Learning Machines - Yan LeCun on Artificial Intelligence (in Japanese) → ディープラーニング 学習する機械 ヤン・ルカン、人工知能を語る	Yan LeCun (Author), Yutaka Matsuo (Translator, Editor), Koichi Ogawa (Translator)	Kodansha, 2021	
		Ref.	Knowledge Sci.	-	Artificial Intelligence and the Future of Work	National Academies of Sciences, Engineering, and Medicine	The National Academies Press, 2025	Available on the web https://www.nationalacademies.org/read/27644
		Ref.	Knowledge Sci.	C51/ B	Teaching with AI: A Practical Guide to a New Era of Human Learning [2nd ed.]	Bowen, J. A., Watson, C. E.	Johns Hopkins, 2026	
		Ref.	Knowledge Sci.	002.7/ E	AI-Powered Scholar : a beginner's guide to artificial intelligence for academic writing & research	Eager, B.	Routledge, 2025	
		Ref.	Knowledge Sci.	C51/ N	The AI Product Playbook: Strategies, Skills, and Frameworks for the AI-Driven Product Manager	Nika, M., Granados, D.	John Wiley & Sons, 2025	
		Ref.	Knowledge Sci.	C45.1/ S	Seisei AI ni yoru sofutowea kaihatsu [Software development with generative AI] (in Japanese) → 生成AIによるソフトウェア開発：設計からテスト、マネジメントまでをすべて変革するLLM活用の実践体系	Washizaki, H. (Ed. and Author), Iemura, K., et al. (Co-authors), Information Processing Society of Japan	Ohmsha, 2025	
		Ref.	Knowledge Sci.	-	Prompt engineering: 基本から応用まで、実践プロンプトテクニック	Boonstra, L. 著, Kuma Arakawa 訳	Google, 2024	Available on the web https://services.google.com/fh/files/misc/promptengineeringwhitepaper.pdf
		Ref.	Knowledge Sci.	-	Shah, C. From prompt engineering to prompt science with humans in the loop. Communications of the ACM. 2025. 68(6). p.54 –61.			Available on the web https://dl.acm.org/doi/pdf/10.1145/3709599
		Ref.	Knowledge Sci.	C22.2/ D	Engines of Logic: Mathematicians and the Origin of the Computer	Davis, M.	W.W. Norton, 2001	
		Ref.	Knowledge Sci.	-	Kay, A., Goldberg, A. (1977). Personal dynamic media. Computer, 10(3), 31-41.			Only available from JAIST network https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1646405
		Ref.	Knowledge Sci.	C61.2/ W	Computer Power and Human Reason: From Judgment to Calculation [New ed.]	Weizenbaum, J.	W.H. Freeman, 1976	
		Ref.	Knowledge Sci.	M69/ A	Nou, kokolo, jinko chino (zoho-ban): Suri de nou wotokiakasu [Brain, mind, and artificial intelligence [expanded ed.]: Unraveling the brain through mathematics]. (in Japanese) → 脳・心・人工知能 [増補版]	Amari, S.	Kodansha, 2025	
		Ref.	Knowledge Sci.	C51.5/ F84	Shinkei kairo to joho shori [Neural networks and information processing]... (in Japanese)→神経回路と情報処理	Fukushima, K.	Asakura Shoten, 1989	
		Ref.	Knowledge Sci.	504/ D	Engines of creation: The coming era of nanotechnology	Drexler, E.	Anchor, 1987	
		Ref.	Knowledge Sci.	C51/M	Mind Children: The Future of Robot and Human Intelligence	Moravec, H.	Harvard University Press, 1988	
K492	Entrepreneurship and Innovation	Ref.	Knowledge Sci.	335/ B	The four steps to the epiphany: successful strategies for products that win [5th ed.]	Blank, S.	[Steve Blank], 2013	
		Ref.	Knowledge Sci.	335.1/ P /	The portable MBA in entrepreneurship [4th ed.]	Bygrave, W. D., & Zacharakis, A.	Wiley, 2010	Only available from JAIST network https://onlinelibrary.wiley.com/doi/book/10.1002/978111
		Ref.	Knowledge Sci.	335/ A	Introduction to Entrepreneurship (Revised ed.)(in Japanese)→アントレプレナーシップ入門：ベンチャーの創造を学ぶ [新版]	K.Kutsuna, H.Hasegawa, N.Takahashi, S.Igarashi, J.Yamada	Yuhikaku Publishing Co., Ltd., 2022	

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L221	Ethical Issues in Science	Ref.	General Edu.	407/ K	科学の健全な発展のために：誠実な科学者の心得 [第2版]	日本学術振興会「科学の健全な発展のために」編集委員会編	丸善出版，2025	Available on the web https://www.isps.go.jp/i-kousei/rinri.html
		Ref.	General Edu.	407/ K	科学者をめざす君たちへ：研究者の責任ある行動とは	米国科学アカデミー（編）池内了（訳）	化学同人, 2010	
L228	Generative AI	Text	General Edu.	C61.2/ I	生成AIで世界はこう変わる	今井翔太	SBクリエイティブ, 2024	
		Ref.	General Edu.	C51.3/ M/ 1	基礎と線形モデル（確率的機械学習：入門編1）	Kevin P. Murphy著、持橋大地、鈴木大慈ほか訳	朝倉書店, 2025	
		Ref.	General Edu.	C51.3/ M/ 2	非線形モデル(確率的機械学習：入門編2)	Kevin P. Murphy著、持橋大地、鈴木大慈ほか訳	朝倉書店, 2025	
		Ref.	General Edu.	C51.3/ O	深層学習 [改訂第2版]	岡谷貴之 著	講談社, 2022	
		Ref.	General Edu.	C51.3/ S	強化学習 [第2版]	R.Sutton、A. Barto著、鈴木雅大、奥村エルネスト純、今井翔太ほか訳	森北出版, 2022	
		Ref.	General Edu.	C52.1/ S	自然言語処理の基礎	岡崎直観ほか著	オーム社, 2022	Available in IS textbooks area
		Ref.	General Edu.	C51/ K	基盤モデルとロボットの融合：マルチモーダルAIでロボットはどう変わるのか	河原塚健人、松嶋達也 著	講談社, 2025	
		Ref.	General Edu.	C61.2/ T	LIFE3.0：人工知能時代に人間であるということ	Max Tegmark 著、水谷淳 訳	紀伊國屋書店, 2020	
M225	Instrumental Analytical Chemistry	Ref.	Materials Sci.	M56/ S	Principles of Instrumental Analysis [6th ed.]	Douglas A. Skoog, F.James Holler, Stanley R.Crouch	Thomson Brooks/Cole, 2007	
M431	Evaluation of Properties of Materials	Ref.	Materials Sci.	M93/ B	CONTROLLED RELEASE OF BIOLOGICALLY ACTIVE AGENTS	R. W. Baker	Wiley, 1987	
M432E	Evaluation of Functions of Materials (E)	Ref.	Materials Sci.	M84/ G	Catalytic Chemistry	B. C. Gates	Wiley, 1992	
		Ref.	Materials Sci.	M43/ D	Sustainable Energy [SI ed.]	R. A. Dunlap	Cengage Learning, 2015	
		Ref.	Materials Sci.	M43/ D	Sustainable Energy [2nd ed. SI ed.]	R. A. Dunlap	Cengage, 2019	
		Ref.	Materials Sci.	M43/ B	Biomass Processing Technologies	V. Strezov and T. J. Evans	CRC Press/Taylor & Francis, 2015	