

ECE Course #	Author	Title	Edition	ISBN#	Publisher
2020 (also @ Marion campus, Sp)	F. Ulaby and M. Maharbiz	Circuits (required)	3	9781934891223	NTS Press
2027		no text			
2050/2051	J. Proakis and D. Manolakis	Digital Signal Processing (recommended)	4 (any)	9780131873742	Prentice-Hall
2057		no text			
2060/2061 (also @ Marion campus, Sp)	Roth, Jr., Kinney	Fundamentals of Logic Design (required) - either edition is okay	7 OR 7 enhanced	9781133628477 9781337620352	Cengage Learning
2067		no text (done with 2060 text if taking 2067)			
2193		no text			
2300/2301	G. Rizzoni	Principles and Applications of Electrical Engineering (required)	6	9780073529592	McGraw-Hill
2307		no text			
2360	umich.edu MITOCW & edX Weste and Harris	Circuits Analysis and Design: https://cad.eecs.umich.edu/ (free) Foundations of Analog and Digital Electronic Circuits: https://library.ohio-state.edu/record=b9117148~S7 (free) Plus CMOS VLSI: http://pages.hmc.edu/harris/cmsovisi/4e/index.html (free)	1 3	9781558607354 9788131764671	Morgan Kaufmann Pearson
2560	J. Davies	MSP430 Microcontroller Basics (required) http://library.ohio-state.edu/record=b7519548~S7 (free)	1	9780750682763	Newnes (Elsevier)
2998.01		no text			
2998.02		no text			
3010	F. Ulaby, E. Michielssen, and U. Ravaioli	Fundamentals of Applied Electromagnetics (required)	8	9780135199008	Pearson
3020	A. Sedra and K. Smith	Microelectronic Circuits (required)	7 (any)	9780199339136	Oxford Univ. Press
3027		no text			
3030	B. Streetman and S. Banerjee	Solid State Electronic Devices (required)	7	9780133356038	Pearson
3040	M. El-Sharkawi	Electric Energy: An Introduction (required) http://library.ohio-state.edu/record=b8030599~S7 (free)	3	9781466503038	CRC Press
3047		no text			
3050	A. Oppenheim and A. Willsky	Signals and Systems (required)	2	9780138147570	Pearson
3090	J. Lannon and L. Gurak	Technical Communication (required)	15	9780135203224	Pearson
3551	R. Dorf and R. Bishop	Modern Control Systems (required)	14	9780137307258	Pearson
3561	Roth, Jr., Kinney	Fundamentals of Logic Design (required) - either edition is okay	7 OR 7 enhanced	9781133628477 9781337620352	Pearson
3567		no text			
3905	R. Ford and C. Coulston	Design for Electrical and Computer Engineers (recommended)	1	9780073380353	McGraw Hill
3906	R. Ford and C. Coulston J. Lannon and L. Gurak	Design for Electrical and Computer Engineers (recommended) Technical Communication (recommended)	1 15	9780073380353 9780135203224	McGraw Hill Pearson

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4021	T. Carusone, D. Johns, and K. Martin	Analog Integrated Circuit Design (required) - also for 5021 https://library.ohio-state.edu/record=b9143147~S7 (free)	2	9780470770108	Wiley
	R. J. Baker	CMOS Circuit Design, Layout, and Simulation (recommended) https://library.ohio-state.edu/record=b8030298~S7 (free)	3	9780470881323	Wiley
4193		no text			
4567	D. Rose	Enchanted Objects (recommended)	2015	9781476725642	Scribner
	J. Rossman	The Amazon Was on IoT (recommended)	2016	9780692739006	John E. Rossman
	A. Ravulavaru	Enterprise Internet of Things Handbook (recommended)	2018	9781788838399	Packt Publishing
4900/ 4905/4905H	R. Ford and C. Coulston	Design for Electrical and Computer Engineers (recommended)	1	9780073380353	McGraw Hill
4998.01		no text			
4998.01H		no text			
4998.02		no text			
4999.01		no text			
4999.01H		no text			
5000	M. Fitz	Fundamentals of Communications Systems (recommended) https://library.ohio-state.edu/record=b6981475~S7 (free)	2007	9780071482806	McGraw-Hill
	R. Gallager	Principles of Digital Communication (recommended) http://www.mit.edu/~6.450/handouts/6.450book.pdf (free) or https://library.ohio-state.edu/record=b8583908~S7 (free)	2008	9780521879071	Cambridge University Press (MIT OpenCourseWare)
5007	L. Potter and Y. Yang	A Digital Communication Laboratory: Acoustic Explorations with a Software-Defined Modem (available via Carmen Course page)	2015		
5010	Levis, Johnson, and Teixeira	Radiowave Propagation: Physics and Applications (required) https://library.ohio-state.edu/record=b9170511~S7 (free - If you cannot find OSU on list of universities, click on "not listed.")	2010	9780470542958	Wiley
5011	C. A. Balanis	Antenna Theory: Analysis and Design (required) http://library.ohio-state.edu/record=b7966422~S7 (free)	4	9781118642061	Wiley
5012	K. Okamoto	Fundamentals of Optical Waveguides (required)-either edition ok http://library.ohio-state.edu/record=b7841671~S7 (free)	3 2	9780128156018 9780125250962	Academic Press
5013		No text (notes provided by instructor)			
5017	D. Pozar	Microwave Engineering (required) https://ebookcentral-proquest-com.proxy.lib.ohio-state.edu/lib/ohiostate-ebooks/detail.action?docID=2064708 (free)	4	9780470631553	Wiley
5020	J. Rabaey, A. Chandrakasan, and B. Nikolic	Digital Integrated Circuits (required)	2	9780130909961	Prentice-Hall
5021	T. Carusone, D. Johns, and K. Martin	Analog Integrated Circuit Design (required) - also for 4021 https://library.ohio-state.edu/record=b9143147~S7 (free)	2	9780470770108	Wiley
	R. J. Baker	CMOS Circuit Design, Layout, and Simulation (recommended) https://library.ohio-state.edu/record=b8030298~S7 (free)	3	9780470881323	Wiley
5022	K. McClaning	Wireless Receiver Design for Digital Communications (required) https://library.ohio-state.edu/record=b8030306~S7 (free)	2	9781891121807	Scitech Publications
5023	F. Maloberti	Data Converters (recommended) https://library.ohio-state.edu/record=b6821966~S8 (free)	2007	ASIN: B011DAZE4C	Springer
5025	Mohan, Undeland, and Robbins	Power Electronics: Converters, Applications, & Design (required)	3	9780471226932	Wiley

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5027	G. Gonzalez	Microwave Transistor Amplifiers (required)	2	9780132543354	Prentice-Hall
5031	S. A. Campbell	Fabrication Engineering at the Micro- and Nanoscale (required) https://library.ohio-state.edu/record=b7086944~S8 (free)	4	9780199861224	Oxford Univ. Press
5033	L. Brillson	An Essential Guide to Electronic Material Surfaces and Interfaces (required) https://library.ohio-state.edu/record=b8027925~S7 (free) OR Surfaces and Interfaces of Electronic Materials (required) https://library.ohio-state.edu/record=b7560642~S7 (free)	2016 2010	9781119027119 9783527409150	Wiley
5037	F. Schubert F. Medjdoub	Light Emitting Diodes https://library.ohio-state.edu/search~S7?/cTK7871.89.L53+.S47+2006eb/ctk+7871.89+I53+s47+2006+eb/-3%2C-1%2C0%2CE/2exact&FF=ctk+7871.89+I53+s47+2006+eb&1%2C2%2C (free) Gallium Nitride (GaN): Physics, Devices, and Technology (Devices, Circuits,	2 1	9780521865388 9781138893351	Cambridge University Press CRC Press
5041	Krause, Wasynczuk, and Pekarek	Electromechanical Motion Devices (required) http://library.ohio-state.edu/record=b7149817~S7 (free)	2	9781118296127	Wiley-IEEE Press
5042	Bergen and Vittal	Power Systems Analysis (required)	2	9780136919902	Prentice-Hall
5043	A.J. Conejo and L. Baringo A. Gomez-Exposito, A. J. Conejo, C. Canizares	Power System Operations (required) https://library.ohio-state.edu/record=b8412654~S8 (free) Electric Energy Systems: Analysis and Operation (recommended)	2018 2	9783319694061 9781138724792	Springer CRC Press
5047		no text			
5050		no text			
5078	T. Byers, R. Dor, and A. Nelson	Technology Ventures: From Idea to Enterprise (required)	5	9781259875991	McGraw-Hill
5101		no text			
5120	Burns and Roberts	An Introduction to Mixed-Signal IC Test and Measurement (required) https://library.ohio-state.edu/record=b7140038~S8 (free)	2	9780199796212	Oxford Univ. Press
5127		no text (provided by department)			
5131	J. Verdeyen S. Chuang	Laser Electronics (required) Physics of Photonic Devices (recommended)	3 2	9780137066667 9780470293195	Prentice-Hall Wiley
5132	B.E.A. Saleh and M.C. Teich	Fundamentals of Photonics (required) https://library.ohio-state.edu/record=b7855312~S8 (free)	2	9780471358329	Wiley
5200	A. Oppenheim and R. Schaffer	Discrete-Time Signal Processing (recommended)	3	9780131988422	Prentice-Hall
5206	Z-H. Cho, J Jones, M Singh Gonzalez & Woods	Foundations of Medical Imaging (required) Digital Image Processing	1993 3	9780471545736 9780131687288	Wiley Pearson
5207	A. Rich, L. Potter, and M. Riedl	Real-time Digital Signal Processing: Laboratory Exercises Using Simulink Support for the Raspberry Pi (free via course page)	2015		
5227	R. Erickson and D. Maksimovic Christopher Basso Christopher Basso	Fundamentals of Power Electronics (required) http://library.ohio-state.edu/record=b8030300~S7 (free) Switch-Mode Power Supplies: Spice Simulations and Practical Designs (recommended) Designing Control Loops for Linear and Switching Power Supplies (recommended) https://library.ohio-state.edu/record=b7501221~S7 (free)	2 2 2012	9781475705591 9780071823463 9781608075577	Springer McGraw-Hill Artech House
5237		no text			

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5244	B. Jayant Baliga	Gallium Nitride and Silicon Carbide Power Devices (required) https://library.ohio-state.edu/record=b8920144~S7 (free)	2017	9789813109407	World Scientific Publishing Co.
5307	G. James, D. Witten, T. Hastie, R. Tibshirani	An Introduction to Statistical Learning (recommended) https://library.ohio-state.edu/record=b8033232~S7 (free)	2013	9781461471370	Springer
	C. Albon	Machine Learning with Python Cookbook	1	9781491989388	O'Reilly Media
	E. Stevens and L. Antiga	Deep Learning with PyTorch	1	9781617295263	Manning
	A. Geron	Hands-On Machine Learning with Scikit-Learn, Keras & TensorFlow	2	9781492032649	O'Reilly Media
5362	Hamacher, Vranesic, Zaky and Manjikian	Computer Organization and Embedded Systems (required)	6	9780073380650	McGraw-Hill
5400	C. F. Dagnazo	Fundamentals of Transportation and Traffic Operations (required) https://library.ohio-state.edu/record=b8030301~S7 (free)	1997	9780080427850	Emerald Group Pub
5460	Forsyth and Ponce	Computer Vision: A Modern Approach (required)	2	9780136085928	Pearson
5462	Z. Navabi	VHDL: Modular Design and Synthesis of Cores and Systems (required)	3	9780071475457	McGraw-Hill
5463	K. Lynch and F. Park	Modern Robotics: Mechanics, Planning, and Control (required) http://hades.mech.northwestern.edu/index.php/Modern_Robotics (free)	1	9781107156302	Cambridge University Press
5465	Muhammad Ahr and Kashif	ARM Microprocessor Systems Cortex-M Architecture, Programming, and Interfacing (required) https://library.ohio-state.edu/record=b8762142~S7 (free)	1	9781482259389	CRC Press
5466	M. Wolf	Computers as Components: Principles of Embedded Computing System Design (required) https://library.ohio-state.edu/record=b8924009~S7 (free)	4	9780128053874	Morgan Kaufmann
5500	Dimitri P. Bertsekas	Nonlinear Programming (required)	3	9781886529052	Athena Scientific
5510		no text			
5530	J. Davies	The Physics of Low-Dimensional Semiconductors (required) https://library.ohio-state.edu/record=b8407926~S7 (free)	2009	9780521484916	Cambridge University Press
5550		no text			
5551	Franklin, Powell, and Workman	Digital Control of Dynamic Systems (required) Students may purchase at EllisKaglePress.com for discount using code: FPWSU\$50	3	9780979122613	Ellis-Kagle Press
5553	U. Ozguner, T. Acarman, K. Redmill	Autonomous Ground Vehicles	2012	9781608071920	Artech House
5554	Jurgen	Automotive Electronics (recommended)	1994	9780070331891	McGraw-Hill
	Franklin, Powell, and Workman	Digital Control of Dynamic Systems (required) <i>Students may purchase at EllisKaglePress.com for discount using code: FPWSU\$50</i>	3	9780979122613	Ellis-Kagle Press
5555		no text			
5560	K.K. Parhi	VLSI Digital Signal Processing Systems: Design and Implementation (required)	1999	9780471241867	Wiley
5561		no text			
5567.01		no text			
5567.02		no text			
5570		no text			

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5832	O. Isabella, K. Jager, A. Smets, R. vanSwaaij, M. Zeman	Solar Energy: The Physics and Engineering of Photovoltaic Conversion Technologies and Systems (required) Available for free via Amazon Kindle.	2016	9781906860325 ASIN: B01CPN481G	UIT Cambridge Ltd. or Amazon Digital Services (free Kindle)
5833	G. Nisato, D. Lupo, and S. Ganz	Organic and Printed Electronics: Fundamentals and Applications (required) https://library.ohio-state.edu/record=b8030303~S7 (free)	2016	9789814669740	Pan Stanford
6001	D. Bertsekas and J. Tsitsiklis	Introduction to Probability (required)	2	9781886529236	Athena Scientifica
6010	C. A. Balanis	Advanced Engineering Electromagnetics (required)	2	9780470589489	Wiley
6011	C. Furse, D. Christensen, C. Durney, and J. Nagel	Basic Introduction to Bioelectromagnetics (required) https://library.ohio-state.edu/record=b8484092~S7 (free)	3	9781498780018	CRC Press
6070	K. Schwalbe The Project Management Institute	An Introduction to Project Management, Revised (recommended) A Guide to the Project Management Body of Knowledge - PMBOK guide (recommended) https://library.ohio-state.edu/record=b8539240~S7 (free)	4 5	9780982800331 9781935589679	
6101	M. Schwartz A. Leon-Garcia and I. Widjaja	Telecommunication Networks: Protocols, Modeling and Analysis (required) Communication Networks: Fundamental Concepts and Key Architectures (required)	1987 2	978 0201164237 978 0072463521	Prentice-Hall McGraw Hill
6102		no text			
6193		no text			
6202	M. Hayes	Statistical Digital Signal Processing and Modeling (recommended)	1996	9780471594314	Wiley
6244		no text			
6500	S. Boyd and L. Vandenberghe S. Bubeck M. Neely D. Bertsekas	Convex Optimization (required) http://www.stanford.edu/~boyd/cvxbook (free) Convex Optimization: Algorithms and Complexity Stochastic network optimization with application to communication and queueing systems Convex Optimization Algorithms	2004 2015 2010 1	9780521833783 9781601988607 9781608454556 9781886529281	Cambridge University Press Now Publishers Inc Morgan & Claypool Publishers Athena Scientific
6511	R. Boyd	Nonlinear Optics (required) https://library.ohio-state.edu/record=b7519811~S8 (free)	3	9780123694706	Elsevier Science
6531	U. Mishra and J. Singh	Semiconductor Device Physics and Design (required) https://library.ohio-state.edu/record=b6568915~S7 (free)	2008	9781402064807	Springer
6532	M. Ventra, S. Evoy, J.R. Heflin	Introduction to Nanoscale Science and Technology (required) https://library.ohio-state.edu/record=b7624984~S8 (free)	2004	9781402077203	Springer
6533	E.L. Dereniak and G.D. Boreman	Infrared Detectors and Systems (required)	1996	9780471122098	Wiley
6535	P. Bhattacharya	Semiconductor Optoelectronic Devices (required)	2	9780134956565	Pearson
6541	G. Masters	Renewable and Efficient Electric Power Systems (required)-either edition ok https://library.ohio-state.edu/record=b8030305~S7 (free)	2 3	9781118140628 9781119847106	Wiley-IEEE Press
6750	Antsaklis and Michel	A Linear Systems Primer (required) https://library.ohio-state.edu/record=b6523062~S7 (free)	2007	9780817644604	Birkhauser
6754	H.K. Khalil	Nonlinear Systems (required)	3	9780130673893	Prentice-Hall
6999		no text			
7001	V. Poor	An Introduction to Signal Detection and Estimation (required) https://library.ohio-state.edu/record=b8920145~S7 (free)	2010	9781441928375	Springer

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7003	D. Tse and P. Viswanath	Fundamentals of Wireless Communication (required - possibly recommended)	2005	9780521845274	Cambridge University Press
7005	T. Cover and J. Thomas	Elements of Information Theory (required) https://library.ohio-state.edu/record=b7841669~S8 (free)	2	9780471241959	Wiley-Interscience
7010	W. Chew	Waves and Fields in Inhomogeneous Media (recommended)	1999	9780780347496	Wiley-IEEE Press
	R. Collin	Field Theory of Guided Waves (recommended)	2	9780879422370	Wiley-IEEE Press
	J. Kong	Electromagnetic Wave Theory (recommended) https://engineering.purdue.edu/wcchew/ece604f19/Supplementary%20Texts/KONG_JA_Electromagnetic_Wave_Theory-revised.pdf (free)□			
7011		no text			
7020	M. Pelgrom	Analog-to-Digital Conversion (required) https://library.ohio-state.edu/record=b8138595~S7 (free)	3	9783319449708	Springer
7022	T. Lee	The Design of CMOS Radio-Frequency Integrated Circuits (required)	2	9780521835398	Cambridge University Press
7023		no text			
7027	F. Maloberti	Data Converters (required) https://library.ohio-state.edu/record=b6821966~S7 (free)	1	9780387324852	Springer
	Carusone, Johns, and Martin	Integrated Circuit Design (recommended)	2	9780470770108	Wiley
7032		no text			
7080		no text			
7103	R. Gallager	Stochastic Processes: Theory for Applications (required)	2014	9781107039759	Cambridge University Press
7202		no text			
7402		no text			
7531	U. Pohl	Epitaxy of Semiconductors: Introduction to Physical Principles (required) https://library.ohio-state.edu/record=b7201207~S7 (free)	2013	9783642329692	Springer
7811	C. R. Paul	Introduction to Electromagnetic Compatibility (required) https://library.ohio-state.edu/record=b7966462~S7 (free)	2	9780471755005	Wiley
7813	C. A. Balanis	Antenna Theory: Analysis and Design (required) http://library.ohio-state.edu/record=b7966422~S7 (free)	4	9781118642061	Wiley
7814	A. Ishimaru	Wave Propagation and Scattering in Random Media (required) https://library.ohio-state.edu/record=b8118332~S7 (free)	1999	9780780347175	Wiley-IEEE Press
7821		no text			
7822	P. Roblin	Nonlinear RF Circuits and Nonlinear Vector Network Analyzers (required) http://library.ohio-state.edu/record=b7560618~S7 (free)	2011	9780521889957	Cambridge University Press
7831	P. Roblin	High Speed Heterostructure Devices (required) https://library.ohio-state.edu/record=b7560606~S7 (free)	2006	9780521024235	Cambridge University Press
7841		no text			
7842		no text			
7843		no text			
7854	H.K. Khalil	Nonlinear Systems (required)	3	9780130673893	Prentice-Hall
7855 (in limbo)		no text			

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7858		no text			
7859	Utkin, Guldner, and Shi	Sliding Mode Control in Electromechanical Systems (required)	2	9781420065602	CRC Press
7861 (in limbo)		no text			
7866		no text			
8001		no text			
8019		no text			
8101		no text			
8193		no text			
8201		no text			
8250		no text			
8850	G. Dullered and F. Paganini K. Zhou, J. Doyle, and K. Glover B. Hassibi, A.Sayed, and T. Kailath	A course in Robust Control Theory: A Convex Approach Robust and Optimal Control Indefinite-Quadratic Estimation and Control: A Unified Approach to H2 and H-infinity Theories (Studies in Applied and Numerical Mathematics, Series Number 16)	2005 1 1987	9780387989457 9780134565675 9780898714111	Springer Pearson Society for Industrial & Applied Mathematics
8851		no text			
8861 (in limbo)		no text			
8862		no text			
8891		no text			
8898		no text			
8998.01		no text			
8998.02		no text			
8999		no text			