

Au*	Sp*	Su*	ECE Course #	Author	Title	Edition	ISBN#	Publisher
x	x		2020 (also @ Marion campus, Sp)	F. Ulaby and M. Maharbiz	Circuits (required)	3	9781934891223	NTS Press
			2021	F. Ulaby and M. Maharbiz	Circuits (required)	3	9781934891223	
x	x		2027	F. Ulaby and M. Maharbiz	Circuits (required)	3	9781934891223	NTS Press
x	x		2050/2051	J. Proakis and D. Manolakis	Digital Signal Processing (recommended)	4 (any)	9780131873742	Prentice-Hall
			2057					
x	x		2060/2061 (also @ Marion campus, Sp)	Roth, Jr., Kinney	Fundamentals of Logic Design (required)	7	9781133628477	Cengage Learning
x	x		2067	Roth, Jr., Kinney	Fundamentals of Logic Design (required)	7	978 1133 62847 7	Cengage Learning
x	x	x	2193		no text			
x	x		2300/2301	G. Rizzoni	Principles and Applications of Electrical Engineering (required)	6	9780073529592	McGraw-Hill
			2307					
x	x		2560	J. Davies	MSP430 Microcontroller Basics (required) http://library.ohio-state.edu/record=b7519548~S7 (free)	1	978 0750682763	Newnes (Elsevier)
x	x	x	2998.01		no text			
x	x	x	2998.02		no text			
x	x		3010	F. Ulaby and U. Ravaioli	Fundamentals of Applied Electromagnetics (required)	8	9780136731801	Prentice-Hall
x	x		3020	A. Sedra and K. Smith	Microelectronic Circuits (required)	7 (any)	9780199339136	Oxford Univ. Press
x	x		3027		https://download.mikroe.com/documents/specials/educational/ask-pro/ask-pro-manual-v103.pdf%20 (free)			mikroe.com
x	x		3030	B. Streetman and S. Banerjee	Solid State Electronic Devices (required)	7	9780133356038	Pearson
x	x		3040	M. El-Sharkawi	Electric Energy: An Introduction (required) http://library.ohio-state.edu/record=b8030599~S7 (free)	3	9781466503038	CRC Press
x	x		3047		no text			
x	x		3050	A. Oppenheim and A. Willsky	Signals and Systems (required)	2	978 0138147570	Prentice-Hall
x	x		3090	J. Lannon and L. Gurak	Technical Communication (required)	15	9780135203255	Pearson
x	x		3551	R. Dorf and R. Bishop	Modern Control Systems (required)	13	9780134407623	Prentice-Hall
x	x		3557	S. Yurkovich (K. Passino)	Control Systems Laboratory (required)	2013	9781256614760	Pearson Custom Pub
x	x		3561	Roth, Jr., Kinney	Fundamentals of Logic Design (required)	7	978 1133 62847 7	Pearson
x	x		3567		no text			
x	x		3900/3905	R.M. Ford and C.S. Coulston	Design for Electrical and Computer Engineers: Theory, Concepts, and Practice (required)	2008	9780073380353	McGraw-Hill
x			4021	T. Carusone, D. Johns, and K. Martin R. J. Baker	Analog Integrated Circuit Design (required) - also for 5021 https://library.ohio-state.edu/record=b7514852~S8 (free) CMOS Circuit Design, Layout, and Simulation (recommended) https://library.ohio-state.edu/record=b8030298~S7 (free)	2 3	9780470770108 9780470881323	Wiley Wiley
x	x	x	4193		no text			

Au*	Sp*	Su*	ECE Course #	Author	Title	Edition	ISBN#	Publisher
			4567	D. Rose J. Rossman A. Ravulavaru	Enchanted Objects (recommended) The Amazon Way on IoT (recommended) Enterprise Internet of Things Handbook (recommended)	2015 2016 2018	9781476725642 9780692739006 9781788838399	Scribner John E. Rossman Packt Publishing
x	x		4900/ 4905/4905H	R.M. Ford and C.S. Coulston	Design for Electrical and Computer Engineers: Theory, Concepts, and Practice (required)	2008	9780073380353	McGraw-Hill
x	x	x	4901	R.M. Ford and C.S. Coulston	Design for Electrical and Computer Engineers: Theory, Concepts, and Practice (required)	2008	9780073380353	McGraw-Hill
x	x	x	4998.01		no text			
x	x	x	4998.01H		no text			
x	x	x	4998.02		no text			
x	x	x	4999.01		no text			
x	x	x	4999.01H		no text			
x	x		5000	M. Fitz R. Gallager	Fundamentals of Communications Systems (recommended) https://library.ohio-state.edu/record=b6981475~S7 (free) 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)	2007 2008		McGraw-Hill Cambridge University Press (MIT OpenCourseWare)
	x		5007	L. Potter and Y. Yang	A Digital Communication Laboratory: Acoustic Explorations with a Software-Defined Modem (free .pdf at Lulu.com)	2015		.pdf available free at Lulu.com
x			5010	Levis, Johnson, and Teixeira	Radiowave Propagation: Physics and Applications (required) http://library.ohio-state.edu/record=b7487590~S7 (free)	2010	9780470542958	Wiley
	x		5011	C. A. Balanis	Antenna Theory: Analysis and Design (required) http://library.ohio-state.edu/record=b7966422~S7 (free)	4	9781118642061	Wiley
	x		5012	K. Okamoto	Fundamentals of Optical Waveguides (required) http://library.ohio-state.edu/record=b7841671~S7 (free)	2	9780125250962	Academic Press
	x		5013	M. Richards, J. Scheer, and W. Holm	Principles of Modern Radar: Basic Principles (required) http://library.ohio-state.edu/record=b7086524~S7 (free)	2010	9781891121524	SciTech (Stylus) Publishing
x			5017	D. Pozar	Microwave Engineering (required) https://library.ohio-state.edu/record=b8118203~S8 (free)	4	9780470631553	Wiley
x			5020	J. Rabaey, A. Chandrakasan, and B. Nikolic	Digital Integrated Circuits (required)	2	9780130909961	Prentice-Hall
x			5021	T. Carusone, D. Johns, and K. Martin R. J. Baker	Analog Integrated Circuit Design (required) - also for 4021 https://library.ohio-state.edu/record=b7514852~S8 (free) CMOS Circuit Design, Layout, and Simulation (recommended) https://library.ohio-state.edu/record=b8030298~S7 (free)	2 3	9780470770108 9780470881323	Wiley Wiley
x			5022	K. McClaning	Wireless Receiver Design for Digital Communications (required) https://library.ohio-state.edu/record=b8030306~S7 (free)	2	9781891121807	Scitech Publications
	x		5023	F. Maloberti	Data Converters (recommended) https://library.ohio-state.edu/record=b6821966~S8 (free)	2007	ASIN: B011DAZE4C	Springer
x			5025	Mohan, Undeland, and Robbins	Power Electronics: Converters, Applications, & Design (required)	3	9780471226932	Wiley
	x		5027	G. Gonzalez	Microwave Transistor Amplifiers (required)	2	9780132543354	Prentice-Hall
	x		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
	xo		5033	L. Brillson	An Essential Guide to Electronic Material Surfaces and Interfaces (required) https://library.ohio-state.edu/record=b8027925~S7 (free)	2016	9781119027119	Wiley
x			5037	S. A. Campbell	Fabrication Engineering at the Micro- and Nanoscale (required) https://library.ohio-state.edu/record=b7086944~S8	4	9780199861224	Oxford Univ. Press

Au*	Sp*	Su*	ECE Course #	Author	Title	Edition	ISBN#	Publisher
	x		5041	Krause, Wasynczuk, and Pekarek	Electromechanical Motion Devices (required) http://library.ohio-state.edu/record=b7149817~S7 (free)	2	9781118296127	Wiley-IEEE Press
x			5042	Bergen and Vittal	Power Systems Analysis (required)	2	9780136919902	Prentice-Hall
	x		5043	A.J. Conejo and L. Baringo	Power System Operations (required) https://library.ohio-state.edu/record=b8412654~S8 (free)	2018	9783319694061	Springer
	x		5047		no text			
	x		5050		no text			
xe			5070		no text			
	x		5078	T. Byers, R. Dor, and A. Nelson	Technology Ventures: From Idea to Enterprise (required)	4	9780073523422	McGraw-Hill
	x		5101		no text			
	xo		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
x			5127		no text			
	xe		5131	J. Verdeyen	Laser Electronics (required)	3	978 0137066667	Prentice-Hall
xe			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
			5194.09	S. L. Chuang E. F. Schubert	Physics of Photonic Devices (recommended) <i>This text has been authorized for purchase of e-version by library. Will post URL when available.</i> Light-Emitting Diodes (recommended) https://library.ohio-state.edu/record=b7087196~S8 (free)	2 2	9780470293195 9780521865388	Wiley Cambridge University Press
			5194.11		no text			
			5194.14	S. K. Schroder	Semiconductor Material and Device Characterization (required) https://library.ohio-state.edu/record=b8118156~S8 (free)	3	9780471739067	
x	x		5200	A. Oppenheim and R. Schaffer	Discrete-Time Signal Processing (recommended)	3	9780131988422	Prentice-Hall
	x		5206	Z-H. Cho	Foundations of Medical Imaging (required)	1993	9780471545736	Wiley
	x		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		
	x		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
	x		5237		no text			
x			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.
x	x		5307	S. Raschka G. James, D. Witten, T. Hastie, R. Tibshirani	Python Machine Learning (recommended) https://library.ohio-state.edu/record=b8920146~S7 (free) An Introduction to Statistical Learning (recommended) https://library.ohio-state.edu/record=b8033232~S7 (free)	2019 2013	9781789955750 9781461471370	Packt Publishing - ebooks Account Springer
x	x		5362	Hamacher, Vranesic, Zaky and Manjikian	Computer Organization and Embedded Systems (required)	6	9780073380650	McGraw-Hill
xe			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

Au*	Sp*	Su*	ECE Course #	Author	Title	Edition	ISBN#	Publisher
x			5460	Forsyth and Ponce	Computer Vision: A Modern Approach (required)	2	9780136085928	Pearson
x			5462	Z. Navabi	VHDL: Modular Design and Synthesis of Cores and Systems (required)	3	9780071475457	McGraw-Hill
xe			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
	x		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
	x		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
x			5510		no text			
x			5530	J. Davies	The Physics of Low-Dimensional Semiconductors (required) https://library.ohio-state.edu/record=b8407926~S7 (free)	2009	978052148491 6	Cambridge University Press
xe			5550		no text			
x			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
	xe		5553		no text			
	xo		5554	Jurgen Franklin, Powell, and Workman	Automotive Electronics (recommended) Digital Control of Dynamic Systems (required)	1994 3	9780070331891 9780979122613	McGraw-Hill Ellis-Kagle Press
x			5555		no text			
			5557 (in limbo)		no text			
x			5560	K.K. Parhi	VLSI Digital Signal Processing Systems: Design and Implementation (required)	1999	9780471241867	Wiley
			5561		no text			
	x		5567.01		no text			
	x		5567.02		no text			
	x		5570		no text			
x			5759	D. Bertsekas	Nonlinear Programming (required)	3	9781886529052	Athena Scientifica
xo			5832	O. Isabella, K. Jager, A. Smets, R. vanSwaaij, M. Zeman	Solar Energy: The Physics and Engineering of Photovoltaic Conversion Technologies and Systems - available via Kindle (free) or paperback (required) https://www.amazon.com/Solar-Energy-Engineering-Photovoltaic-Technologies-ebook-dp-B01CPN481G/dp/B01CPN481G/ref=mt_kindle?_encoding=UTF8&me=&qid=1559225095	2016	9781906860325 ASIN: B01CPN481G	UIT Cambridge Ltd. or Amazon Digital Services (free Kindle)
	xo		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
x			6001	D. Bertsekas and J. Tsitsiklis	Introduction to Probability (required)	2	9781886529236	Athena Scientifica
x			6010	C. A. Balanis	Advanced Engineering Electromagnetics (required)	2	9780470589489	Wiley
xo			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
	xe		6030		no text			
x	x		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	

Au*	Sp*	Su*	ECE Course #	Author	Title	Edition	ISBN#	Publisher
x			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
xo			6102		no text			
x	x	x	6193		no text			
			6194.05		no text			
			6194.08		no text			
			6194.09	N. Kimizuka, S. Yamazaki	Physics and Technology of Crystalline Oxide Semiconductor CAAC-IGZO: Fundamentals (required) https://library.ohio-state.edu/record=b8082508~S7 (free)	2016	9781119247401	Wiley
			6194.10	L. Coldren, S. Corzine, and M. Masanovic	Diode Lasers and Photonic Integrated Circuits (required) https://library.ohio-state.edu/record=b7128505~S7 (free)	2	9780470484128	Wiley
	xo		6202	M. Hayes	Statistical Digital Signal Processing and Modeling (recommended)	1996	9780471594314	Wiley
	x		6244		no text			
xo			6511	R. Boyd	Nonlinear Optics (required) https://library.ohio-state.edu/record=b7519811~S8 (free)	3	978 0123694706	Elsevier Science
	x		6531	U. Mishra and J. Singh	Semiconductor Device Physics and Design (required) https://library.ohio-state.edu/record=b6568915~S7 (free)	2008	9781402064807	Springer
	xe		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
xe			6533	E.L. Dereniak and G.D. Boreman	Infrared Detectors and Systems (required)	1996	9780471122098	Wiley
	x		6535	P. Bhattacharya	Semiconductor Optoelectronic Devices (required)	2	9789332587410	Pearson
	x		6541	G. Masters	Renewable and Efficient Electric Power Systems (required) https://library.ohio-state.edu/record=b8030305~S7 (free)	2	9781118140628	Wiley-IEEE Press
	x		6750	Antsaklis and Michel	A Linear Systems Primer (required) https://library.ohio-state.edu/record=b6523062~S7 (free)	2007	9780817644604	Birkhauser
x			6754	H.K. Khalil	Nonlinear Systems (required)	3	978 0130673893	Prentice-Hall
x	x	x	6999		no text			
	x		7001	V. Poor	An Introduction to Signal Detection and Estimation (required) https://library.ohio-state.edu/record=b8920145~S7 (free)	2010	9781441928375	Springer
xo			7003	D. Tse and P. Viswanath	Fundamentals of Wireless Communication (required)	2005	9780521845274	Cambridge University Press
	xo		7005	T. Cover and J. Thomas	Elements of Information Theory (required) https://library.ohio-state.edu/record=b7841669~S8 (free)	2	9780471241959	Wiley-Interscience
	x		7010		no text			
	xe		7011		no text			
	xe		7013 (in limbo)	F. Gini, A. DeMaio and L. Patton P. Stoica and J. Li	Waveform Design and Diversity for Advanced Radar Systems https://library.ohio-state.edu/record=b7176011~S7 (free) MIMO Radar Signal Processing https://library.ohio-state.edu/record=b8572640~S7 (free)	2011 2008	9781849192651 9780470178980	IET Wiley-IEEE Press
xe			7020	M. Pelgrom	Analog-to-Digital Conversion (required) https://library.ohio-state.edu/record=b8138595~S7 (free)	3	9783319449708	Springer
	x		7022	T. Lee	The Design of CMOS Radio-Frequency Integrated Circuits (required)	2	9780521835398	Cambridge University Press
	xe		7023		no text			

Au*	Sp*	Su*	ECE Course #	Author	Title	Edition	ISBN#	Publisher
	xo		7027	F. Maloberti Carusone, Johns, and Martin	Data Converters (required) https://library.ohio-state.edu/record=b6821966~S7 (free) Integrated Circuit Design (recommended)	1 2	9780387324852 9780470770108	Springer Wiley
	xe		7032		no text			
	xo		7100		no text			
	xe		7103	R. Gallager	Stochastic Processes: Theory for Applications (required)	2014	9781107039759	Cambridge University Press
	xe		7200	M. Vetterli, J. Kovacevic, and V. Goyal J. Kovacevic, V. Goyal, and M. Vetterli	Foundations of Signal Processing, and; Fourier and Wavelet Signal Processing (required) http://fourierandwavelets.org (free)			
x	x		7202		no text			
xo			7531	U. Pohl	Epitaxy of Semiconductors: Introduction to Physical Principles (required) https://library.ohio-state.edu/record=b7201207~S7 (free)	2013	9783642329692	Springer
xo			7811	C. R. Paul	Introduction to Electromagnetic Compatibility (required) https://library.ohio-state.edu/record=b7966462~S7 (free)	2	9780471755005	Wiley
xe			7813	C. A. Balanis	Antenna Theory: Analysis and Design (required) http://library.ohio-state.edu/record=b7966422~S7 (free)	4	9781118642061	Wiley
	xo		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
xo			7821		no text			
xo			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
xe			7831	P. Roblin	High Speed Heterostructure Devices (required) https://library.ohio-state.edu/record=b7560606~S7 (free)	2006	9780521024235	Cambridge University Press
xe			7841		no text			
xe			7842		no text			
	xe		7843		no text			
	xe		7850		no text			
xo			7854	H.K. Khalil	Nonlinear Systems (required)	3	9780130673893	Prentice-Hall
xe			7855 (in limbo)		no text			
	xe		7858		no text			
	xo		7859	Utkin, Guldner, and Shi	Sliding Mode Control in Electromechanical Systems (required)	2	9781420065602	CRC Press
xe			7861 (in limbo)		no text			
	xo		7864		no text			
xe			7866		no text			
	xe		7868		no text			
	x18		8001		no text			
	xo		8019		no text			
			8101		no text			
x	x	x	8193		no text			
			8194.03	M. Wolf	Computers as Components: Principles of Embedded Computing System Design (required) https://library.ohio-state.edu/record=b8552292~S7 (free)	3	9780123884367	Morgan Kaufman

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			8194.04		no text			
			8201		no text			
	xe		8250	D. Kirk	Optimal Control Theory; An Introduction (required) https://library.ohio-state.edu/record=b7391147~S7 (free)	2004	9780486434841	Dover
xo	xo		8851		no text			
	xo		8861 (in limbo)		no text			
			8862		no text			
x	x	x	8891		no text			
x	x	x	8898		no text			
x	x	x	8999		no text			