

### Electrical Engineering Historical Offerings:

This is a list of courses that were scheduled for online delivery over the last several years. The academic department determines which courses are scheduled for online delivery each semester. If you have questions about course availability, please [contact the department](#).

Course descriptions are available in the [University of Idaho General Catalog](#) and in the [EO course listings](#) if offered recently.

	<b>ANALOG</b>	<b>F17</b>	<b>S18</b>	<b>F18</b>	<b>S19</b>	<b>F19</b>	<b>S20</b>
ECE 210	Electrical Circuits I	x	x	x	x	x	x
ECE 211	Electrical Circuits I Lab	x	x	x	x	x	x
ECE 212	Electrical Circuits II	x	x	x	x	x	x
ECE 213	Electrical Circuits II Lab	x	x	x	x	x	x
ECE 310	Microelectronics I (Fundamentals of Electronics)	x		x	x	x	x
ECE 311	Microelectronics I Lab (Fundamentals of Electronics Lab)	x				x	
ECE 404-MC/504-MC	ST: Modern Circuit Synthesis Algorithms						x
ECE 410	Microelectronics II (Advanced Electronics)	x	x		x		x
ECE 413/513	Radio-Frequency IC Design			x			
ECE 415/515	Analog Integrated Circuit Design	x				x	x
ECE 417/517	Mixed Signal IC Design		x				
ECE 418/518	Introduction to Electronic Packaging		x			x	
ECE 460	Semiconductor Devices			x		x	
ECE 462/562	Semiconductor Theory		x		x		x
ECE 465/565	Introduction to Microelectronics Fabrication	x		x	x		x
ENGR 240	Introduction to Electrical Circuits						x

	<b>COMMUNICTAION and CONTROL SYSTEMS</b>	<b>F17</b>	<b>S18</b>	<b>F18</b>	<b>S19</b>	<b>F19</b>	<b>S20</b>
ECE 350	Signals and Systems I	x					
ECE 359	Background Study in Signals and Systems	x					
ECE 404-AF/ 504-AF	ST: Advanced Frequency-Domain Control		x				
ECE 404-AR/ 504-AR	ST: Antennas and RF Circuits for 5G Mobile Communications					x	
ECE 404-FW/504-FW	ST: Fundamentals of Wireless Communication						x
ECE 404-PL/504-PL	ST: PLL and High-Speed Link Design		x		x		
ECE 419/516	Image Sensors and Systems						x
ECE 444/544	Supervisory Control and Critical Infrastructure Systems		x				x
ECE 450	Signals and Systems II	x				x	
ECE 452	Communications Systems		x		x	x	x
ECE 455	Information and Coding Theory					x	x
ECE 470/ME 481	Control Systems			x		x	
ECE 571	Estimation Theory for Signal Processing, Communications and Control						x
ECE 578	Neural Network Design						x
ECE 579/ ME 413/513	Engineering Acoustics	x	x	x	x		

	<b>DIGITAL</b>	<b>F17</b>	<b>S18</b>	<b>F18</b>	<b>S19</b>	<b>F19</b>	<b>S20</b>
ECE 240	Digital Logic	x	x	x			
ECE 241	Logic Circuit Lab	x	x	x			
ECE 349	Background Study in Digital Logic	x	x	x	x	x	x
ECE 404-QC/ 504-QC	Quantum Computing					x	
ECE 440	Digital Systems Engineering		x		x		x
ECE 441/541/ CS 451/551	Advanced Computer Architecture			x		x	
ECE 445	Introduction to VLSI Design	x	x	x	x		x
ECE 449/549/ CS 449/549	Fault-Tolerant Systems	x			x		

	<b>ELECTROMAGNETICS</b>	<b>F17</b>	<b>S18</b>	<b>F18</b>	<b>S19</b>	<b>F19</b>	<b>S20</b>
ECE 330	Electromagnetic Theory	x	x				
ECE 404-CE /504-CE	ST: Computational Electromagnetics				x		
ECE 430	Microwave and Millimeter Wave Circuits		x		x		x
ECE 432	Propagation of Wireless Signals	x		x		x	
ECE 434	Antenna Principles and Design	x		x			
ECE 530	Advanced Electromagnetic Theory	x		x			
ECE 531	Advanced Electromagnetic Theory II		x				

	<b>POWER</b>	<b>F17</b>	<b>S18</b>	<b>F18</b>	<b>S19</b>	<b>F19</b>	<b>S20</b>
ECE 320	Energy Systems I						x
ECE 329	Background Study in Energy Systems						x
ECE 420	Energy Systems II		x	x	x	x	x
ECE 421	Introduction to Power Systems	x		x		x	
ECE 422	Power Systems Analysis		x		x		x
ECE 427	Power Electronics		x		x		
ECE 521	Power System Stability	x			x		
ECE 522	Induction Machines					x	
ECE 523	Symmetrical Components	x				x	
ECE 524	Transients in Power Systems		x				x
ECE 525	Power System Protection and Relaying			x			
ECE 526	Protection and Power Systems II				x		
ECE 527	Dynamics and Control of AC Drives	x					
ECE 528	Understanding Power Quality			x			
ECE 529	Utility Applications of Power Electronics				x		x

*Revised May 2020*