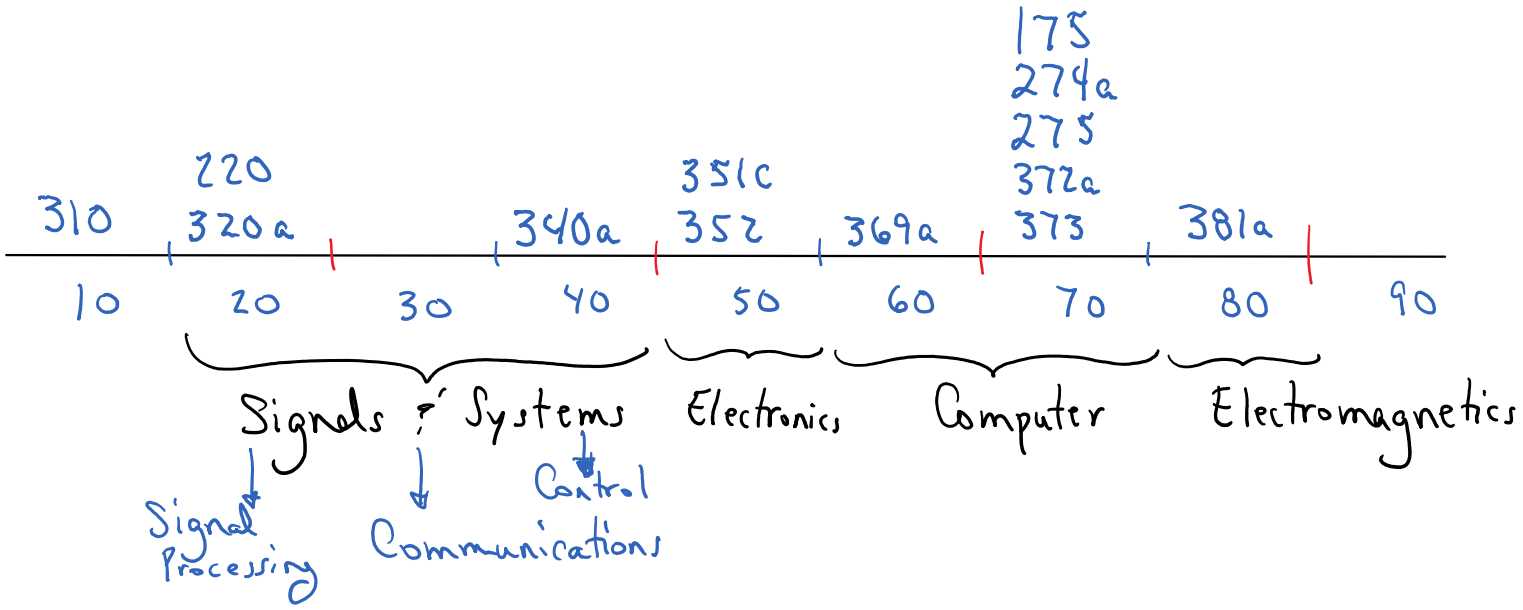
Technical Electives



Spring 2021

Computer Courses:			ECE 330B			Computational Techniques
			ECE 523			Engineering Applications of Machine Learning
			ECE 524			Fundamentals of Cloud Computing
			ECE 4/562			Computer Architecture
			ECE 564			Advanced Computer Networks
			ECE 569			High Performance Computing
			ECE 4/571			Fundamentals of Information and Network Security
			ECE 576B			Embedded System Design and Optimization
			ECE 4/579			Principles of Artificial Intelligence

Electronics/Bio Courses:			ECE 304a			Design of Electronic Circuits
			ECE 352	(CE)		Device Electronics
			ECE 4/507			Digital VLSI System Design
			ECE 517			Measurement & Data Analysis in Biomedical Engineering

Electromagnetics/ Optics Courses:			ECE 381a	(CE)		Introductory Electromagnetics
			ECE 4/503a			Math Methods Optics/Photonic

			ECE 4/514a			Photovoltaic Solar Energy Systems
			ECE 581b			Electromagnetic Field Theory
			ECE 587L			Photonic Communications Lab
			ECE 4/588			Active Circuit Design

Signals & System Courses:			ECE 531			Software Defined Radio
			ECE 533			Digital Image Processing
			ECE 4/535a			Digital Communications Systems
			ECE 4/542			Digital Control Systems
			ECE 635			Error Correction (previously Codes on Graphs)
			ECE 696B 310			Adv. Topics in Machine Learning and Applications
			ECE 696B 311			Intro to Quantum Mechanics (QM) and Quantum Information Processing (QIP)

Weekly Schedule (Spring 2021)					
Time	Mon	Tues	Wed	Thurs	Fri
8:00 AM		ECE 304A Lab		ECE 4/517	
8:30 AM		ECE 304A Lab		ECE 4/517	
9:00 AM	ECE 304A ECE 4/562	ECE 340A Lab ECE 517	ECE 304A ECE 4/562	ECE 4/517	ECE 304A ECE 4/562
9:30 AM	ECE 304A ECE 4/562	ECE 304A Lab ECE 4/517 ECE 569 ECE 4/579	ECE 304A ECE 4/562	ECE 4/517 ECE 569 ECE 4/579	ECE 304A ECE 4/562
10:00 AM	ECE 523	ECE 304A Lab ECE 4/517 ECE 569 ECE 4/579	ECE 523	ECE 4/517 ECE 569 ECE 4/579	ECE 523
10:30 AM	ECE 523	ECE 304A Lab ECE 4/517 ECE 569 ECE 4/579	ECE 523	ECE 4/517 ECE 569 ECE 4/579	ECE 523
11:00 AM		ECE 330B ECE 352 ECE 576B ECE 4/588		ECE 330B ECE 352 ECE 576B ECE 4/588	
11:30 AM		ECE 330B ECE 352 ECE 576B ECE 4/588		ECE 330B ECE 352 ECE 576B ECE 4/588	
12:00 PM		ECE 330B ECE 352 ECE 576B ECE 4/588	ECE 381a R	ECE 330B ECE 352 ECE 576B ECE 4/588	
12:30 PM	ECE 4/503A	ECE 533 ECE 696B 311	ECE 381a R ECE 4/503A	ECE 533 ECE 696B 311	
1:00 PM	ECE 4/503A ECE 517 ECE 4/571 ECE 581B	ECE 533 ECE 696B 311	ECE 4/503A ECE 4/571 ECE 581B	ECE 533 ECE 696B 311	ECE 4/571 ECE 581B
1:30 PM	ECE 4/503A ECE 517 ECE 4/571 ECE 581B	ECE 533 ECE 696B 311	ECE 4/503A ECE 4/571 ECE 581B	ECE 533 ECE 696B 311	ECE 4/571 ECE 581B
2:00 PM	ECE 4/507 ECE 4/535a		ECE 4/507 ECE 4/535a		ECE 4/507 ECE 4/535a
2:30 PM	ECE 4/507 ECE 4/535a		ECE 4/507 ECE 4/535a		ECE 4/507 ECE 4/535a
3:00 PM	ECE 381a ECE 635		ECE 381a ECE 635		ECE 381a ECE 635
3:30 PM	ECE 381a ECE 564 ECE 635	ECE 696B 310	ECE 381a ECE 564 ECE 635	ECE 696B 310	ECE 381a ECE 635
4:00 PM	ECE 4/514a ECE 531 ECE 564	ECE 524 ECE 696B 310	ECE 4/514a ECE 531 ECE 564	ECE 696B	ECE 4/514a
4:30 PM	ECE 4/514a ECE 531 ECE 564	ECE 524 ECE 696B 310	ECE 4/514a ECE 531 ECE 564	ECE 696B	ECE 4/514a
5:00 PM	ECE 531	ECE 524	ECE 531		
5:30 PM	ECE 4/542	ECE 524	ECE 4/542		
6:00 PM	ECE 4/542	ECE 524	ECE 4/542		
6:30 PM	ECE 4/542		ECE 4/542		

Fall 2021 (Anticipated)

Computer Courses:			ECE 369a	(EE)		Fundamentals of Computer Architecture
			ECE 373	(EE)		Object Oriented Software Design
			ECE 4/511			Numeric Modelling of Physics & Biological Systems
			ECE 4/513			Web Development and Internet of Things
			ECE 4/572			Design, Modeling, and Simulation for High Tech Sys in Medicine
			ECE 4/574a			Computer-Aided Logic Design
			ECE 4/578			Fundamentals of Computer Networks
			ECE 509			Cyber Security: Concept, Theory, Practice
			ECE 677			Distributed Computing Systems

Electronics/Bio Courses:			ECE 4/515			Microelectronic Manufacturing and Environment
			ECE 434			Electrical and Optical Properties of Materials
			ECE 4/550			Analog Integrated Circuits

Electromagnetics/ Optics Courses:			ECE 4/586			Microwave Engr I: Passive Circuits
			ECE 4/559			Fundamentals of Optics for Electrical Engineers
			ECE 527			Holography and Diffractive Optics
			ECE 581a			Electromagnetic Field Theory

Signals & System Courses:			ECE 4/529			Digital Signal Processing
			ECE 4/530			Optical Communications Systems
			ECE 4/541a			Automatic Control Systems
			ECE 501b			Advanced Linear System Theory
			ECE 503			Probability and Random Processes for Engr Applications
			ECE 532			Digital Image Analysis
			ECE 537			Digital Communications Systems II
			ECE 538			Radar Signal Processing
			ECE 632			Advanced Optical Communications Systems

McGuire Center for Entrepreneurship (2 Semester Sequence, Conflicts with ENGR 498a/b)

McGuire New			ENTR 487			Venture Development I (Fall), Available to ECE Juniors

Venture Dev:						
			ENTR 484			Venture Development II (Spring), Available to ECE Juniors

Weekly Schedule (Fall 2021, Tentative)					
Time	Mon	Tues	Wed	Thurs	Fri
8:00 AM		ECE 373 ECE 576A		ECE 373 ECE 576A	
8:30 AM		ECE 373 ECE 576A		ECE 373 ECE 576A	
9:00 AM	ECE 4/541a	ECE 373 ECE 576A	ECE 4/541a	ECE 373 ECE 576A	ECE 4/541a
9:30 AM	ECE 4/541a	ECE 4/511 ECE 4/586	ECE 4/541a	ECE 4/511 ECE 4/586	ECE 4/541a
10:00 AM	ECE 369a ECE 4/546	ECE 4/511 ECE 4/586	ECE 369a ECE 4/546	ECE 4/511 ECE 4/586	ECE 369a ECE 4/546
10:30 AM	ECE 369a ECE 4/546	ECE 4/511 ECE 4/586	ECE 369a ECE 4/546	ECE 4/511 ECE 4/586	ECE 369a ECE 4/546
11:00 AM	ECE 503	ECE 4/529 ECE 4/574A	ECE 503	ECE 4/529 ECE 4/574A	ECE 503
11:30 AM	ECE 503	ECE 4/529 ECE 4/574A	ECE 503	ECE 4/529 ECE 4/574A	ECE 503
12:00 PM		ECE 4/529 ECE 4/574A		ECE 4/529 ECE 4/574A	
12:30 PM		ECE 4/530 ECE 4/578		ECE 4/530 ECE 4/578	
1:00 PM	ECE 4/550 ECE 696B	ECE 4/530 ECE 4/578	ECE 4/550 ECE 4/572 ECE 696B	ECE 4/530 ECE 4/578	ECE 4/550 ECE 696B
1:30 PM	ECE 4/550 ECE 696B	ECE 4/530 ECE 4/578	ECE 4/550 ECE 4/572 ECE 696B	ECE 4/530 ECE 4/578	ECE 4/550 ECE 696B
2:00 PM	ECE 369a a Lab ECE 537 ECE 581A	ECE 527	ECE 369a a Lab ECE 537 ECE 4/572 ECE 581A	ECE 527	ECE 537 ECE 581A
2:30 PM	ECE 369a a Lab ECE 537 ECE 581A	ECE 527	ECE 369a a Lab ECE 537 ECE 4/572 ECE 581A	ECE 527	ECE 537 ECE 581A
3:00 PM	ECE 369a a Lab ECE 4/513	ECE 527	ECE 369a a Lab ECE 4/513 ECE 4/572	ECE 527	ECE 4/513
3:30 PM	ECE 369a b Lab ECE 4/513 ECE 564	ECE 532	ECE 369a b Lab ECE 4/513 ECE 564	ECE 532	ECE 4/513
4:00 PM	ECE 369a b Lab ECE 434 ECE 501b ECE 564 ECE 677	ECE 509 ECE 532	ECE 369a b Lab ECE 434 ECE 501b ECE 564	ECE 532	
4:30 PM	ECE 369a b Lab ECE 434 ECE 501b ECE 564 ECE 677	ECE 509 ECE 532	ECE 369a b Lab ECE 434 ECE 501b ECE 564	ECE 532	
5:00 PM	ECE 369a c Lab ECE 434 ECE 501b ECE 632 ECE 677	ECE 509 ECE 538	ECE 369a c Lab ECE 434 ECE 501b ECE 632	ECE 538	
5:30 PM	ECE 369a c Lab ECE 632 ECE 677	ECE 509 ECE 538	ECE 369a c Lab ECE 632	ECE 538	
6:00 PM	ECE 369a c Lab ECE 632 ECE 677	ECE 509 ECE 538	ECE 369a c Lab ECE 632	ECE 538	

THE UNIVERSITY OF ARIZONA.

Electrical and Computer Engineering-Accelerated Master's Program

(ECE-AMP)

The Accelerated Master's Program (AMP) is designed to allow undergraduate seniors to concurrently work toward a master's degree. This option is appropriate for exceptional undergraduate students who would also like to pursue a graduate degree. By counting a limited number of courses toward both degrees, students can earn a M.S. degree much quicker. The M.S. degree provides knowledge, technical skills and research skills for career advancement.

Admission Requirements

- Be an ECE undergraduate junior or senior
- Have a 3.3 cumulative undergraduate GPA
- Waive GRE requirement for admission to ECE Master of Science Degree (M.S.)
- Demonstration of the maturity necessary for success in an accelerated, highly competitive program.

Admission Application Process

- Submit Graduate College Application upon completion of a minimum of 75 undergraduate credit hours, second semester Junior year.

Coursework Requirements

- Select an ECE Faculty advisor who will guide the student's research or development work towards the completion of a thesis. The ECE-AMP program also has a Non-Thesis Option.
- Meet with the ECE Graduate Academic Advisor for assistance in the course selection of the 12 credits of Technical Electives

90+ Units

Ms. Tami Whelan

gradadvisor@ece.arizona.edu