Western S Engineering

Electrical Engineering (Option A)

September 2019 (for students who entered first year in September 2018)

<u>Year 2</u>		NOTES:	
Term A			
AM 2270A	Applied Mathematics for Engineering II	Non-technical ele	ctives:
CS 1027A	Computer Science Fundamentals II	Please choose 1.0 credits (one 1.0-credit or two 0.5-credit courses) from the 1000 level and one 0.5-credit course from	
ECE 2205A	Electric Circuits I		
ECE 2277A	Digital Logic Systems	the 2000 (or high	er) level.
ECE 2240A	Electrical Laboratory		
Writ 2130F	Building Better (Communication) Bridges: Rhetoric &		
	Professional Communication for Engineers		
Term B			
AM 2276B	Applied Mathematics for Elec. & Mech. Engineering III		
ECE 2231B	Introduction to Electronics		
ECE 2233B	Circuits and Systems		
ECE 2236B	Magnetic Circuits and Transmission Lines		
ECE 2242B	Principles of Design in Electrical Engineering		
MME 2234B	Heat Transfer and Dynamics		
Year 3			
Term A			
AM 3415A	Applied Math for Electrical Engineering		
ECE 3330A	Control Systems		
ECE 3332A	Electric Machines		
ECE 3337A	Electronic Circuits		
		Technical Elective	25
SS 2141A Applied Probability and Statistics for Engineers One 0.5-credit non-technical elective from approved list (either term)		Some technical electives may not be offered in a given	
One 0.5-creat	non-technical elective nom approved list (either term)	academic year. Co	onsult the Department for accurate listing.
Term B		ECE 3349A/B	Introduction to VLSI
ECE 3331B	Introduction to Signal Processing	ECE 3380A/B	Advanced Digital Systems
ECE 3333B	Electric Power Systems I	ECE 4430A/B	Selected Topics in Electrical Engineering I
ECE 3336B	Electromagnetic Theory	ECE 4431A/B	Selected Topics in Electrical Engineering II
ECE 3370B	Communication Electronics I	ECE 4432A/B	Radiation and Propagation
ECE 3375B	Microprocessors and Microcomputers	ECE 4433A/B	Digital Communications Systems
ECE 3399B	Principles and Practices of Design of Electronic Systems	ECE 4436A/B	Networking: Principles, Protocols and
			Architecture
Year 4		ECE 4438A/B	Advanced Image Processing & Analysis
		ECE 4438A/B ECE 4439A/B	Conventional, Renewable & Nuclear Energy
Term A		ECE 4439A/B ECE 4445A/B	
ECE 4416	Electrical/Computer Engineering Project	ECE 4445A/B ECE 4451A/B	Introduction to Digital Image Processing
ECE 4429A	Advanced Digital Signal Processing		Advanced Topics in Wireless Communications
ECE 4437A	Communications Theory		Biomedical Systems Analysis
	non-technical elective from approved list	ECE 4455A/B	· · · · ·
Two 0.5-credit technical electives		ECE 4456A/B	Power Systems Protection Power Electronics
		ECE 4457A/B	
Term B		ECE 4460A/B	Real-Time Embedded Systems
ECE 4416	Electrical/Computer Engineering Project	ECE 4464A/B	Electric Power Systems II
ES 4498G	Engineering Ethics, Sustainable Development & the	ECE 4468A/B	Systems Optimization
	Law	ECE 4469A/B	Applied Control Systems
One 0.5-credit non-technical elective from approved list		MME 4452A/B	Robotics and Manufacturing Automation
Three 0.5-credit technical electives		MME 4473A/B	Computer Integrated Manufacturing
		MME 4482A/B	Fundamentals of MEMS
		MME 4487A/B	Mechatronic System Design