

Major Map: Electrical Engineering (Electric Power and Energy Systems) – Bachelor of Science in Engineering (B.S.E.) Ira A. Fulton School of Engineering, Tempe Campus Catalog Year: 2009-2010

			Completed ATP		Completed AGEC: Yes No			
Course Subject and Title (courses in bold/shading are critical)	Hrs.	Upper Division	Transfer Course/Grade	Minimum Grade if Required	Additional Critical Requirement Notes			
TERM ONE: 0-15 CREDIT HOURS								
ASU 101-FSE: The ASU Experience	1				Complete MAT 265 with a minimum grade of			
CHM 114: General Chemistry for Engineers OR					 "C" ASU 101-FSE should be completed first semester. An SAT, ACT, Accuplacer, or TOEFL score 			
CHM 116: General Chemistry II *	4							
# CSE 100: Principles of Programming with C++ (CS) OR # EEE 120: Digital Design Fundamentals	3							
# EEE 101: Introduction to Engineering Design OR	2 or				determines placement into first-year composition			
BME 111: Engineering Perspectives on Biological Systems	3				 Courses ASU Math Placement Exam score determines placement in Mathematics course * CHM 113 is a prerequisite and does not apply termedia decomposition 			
MAT 265: Calculus for Engineers I	3			Grade of C				
					towards degree credit **If ENG 105 a 3 hr applicable elective must also be			
ENG 101 or 102: First-Year Composition OR					taken prior to graduation. See Advisor.			
ENG 105: Advanced First-Year Composition** OR	2			0 1 60	# Designates Major course: A minimum cumulative			
ENG 107 or 108: English for Foreign Students	3			Grade of C	GPA of 2.0 required.			
TERM TWO: 16-30 CREDIT HOURS # CSE 100: Principles of Programming with C++ (CS) OR					Complete EEE 101			
# EEE 120: Digital Design Fundamentals	3				Complete MAT 266; PHY 121 & 122 each with			
# EEE 101: Introduction to Engineering Design OR	2 or				a minimum grade of "C"			
BME 111: Engineering Perspectives on Biological Systems	3				# Designates Major Course: A minimum cumulative GPA of 2.0 required.			
MAT 266: Calculus for Engineers II	3			Grade of C	GFA 01 2.0 lequiled.			
PHY 121/122: University Physics I/ Laboratory I (SQ)	3/1			Grade of C	-			
ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition** OR								
ENG 107 or 108: English for Foreign Students	3			Grade of C				
TERM THREE: 31-45 CREDIT HOURS								
# EEE 202: Circuits I	4				• Complete EEE 202; MAT 267, 274 or 275 and			
MAT 267: Calculus for Engineers III	3			Grade of C	PHY 131, 132 with a minimum grade of "C"			
MAT 274: Elementary Differential Equations (MA) OR					 Complete First Year Composition requirement: ENG 101 & 102 or ENG 107 & 108 or ENG 105 			
MAT 275: Modern Differential Equations (MA)	3			Grade of C	# Designates Major Course: A minimum cumulative			
PHY 131/132: University Physics II Electricity and Magnetism/ Laboratory II (SQ)	3/1			Grade of C	GPA of 2.0 required.			
TERM FOUR: 46-60 CREDIT HOURS	0,2		1					
# EEE 203: Signals and Systems I	3				Complete EEE 203 and EEE 241			
# EEE 241: Fundamentals of Electromagnetics	3				# Designates Major Course: A minimum cumulative			
MAT 342: Linear Algebra OR					GPA of 2.0 required.			
MAT 343: Applied Linear Algebra	3			Grade of C	-			
PHY 241: University Physics III	3			Grade of C	-			
Humanities, Fine Arts & Design (HU) AND Cultural Diversity in the	3							
US (C), or Historical Awareness (H) TERM FIVE: 61-75 CREDIT HOURS	5							
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	3				# Designates Major Course: A minimum cumulative GPA of 2.0 required.			
TERM FIVE: 61-75 CREDIT HOURS # EEE 230: Computer Organization and Assembly Language								
TERM FIVE: 61-75 CREDIT HOURS # EEE 230: Computer Organization and Assembly Language Programming	3							
TERM FIVE: 61-75 CREDIT HOURS # EEE 230: Computer Organization and Assembly Language Programming # EEE 334: Circuits II	3 4							
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TERM FIVE: 61-75 CREDIT HOURS # EEE 230: Computer Organization and Assembly Language Programming # EEE 334: Circuits II # EEE 350: Random Signal Analysis # EEE 360: Energy Systems and Power Electronics TERM SIX: 76-90 CREDIT HOURS ECN 211/212 (SB): Macroeconomic Principles/Microeconomic	3 4 3 4				 GPA of 2.0 required. Area Pathway Courses: (choose 3) EEE 304, 333, 			
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Course Subject and Title (courses in bold/shading are critical)	Hrs.	Upper Division	Transfer Course/Grade	Minimum Grade if Required	Additional Critical Requirement Notes
TERM EIGHT: 106-120 CREDIT HOURS					
# EEE 489: Senior Design Laboratory II (L)	3	\boxtimes			See Degree Audit Reporting System (DARS) for
Select 1 not previously selected:					approved list of Technical Electives # Designates Major Course: A minimum cumulative
# EEE 460: Nuclear Concepts for the 21 st Century (3 hrs) # EEE 463: Electrical Power Plant (3 hrs)					GPA of 2.0 required.
# EEE 470: Electric Power Devices (3 hrs)					
# EEE 471: Power System Analysis (3 hrs)					
# EEE 473: Electrical Machinery (3 hrs) # EEE 498: Pro-Seminar (Power Elec.) (3 hrs)					
# EEE 498: Pro-Seminar (Solar Energy) (3 hrs)	3	\boxtimes			
# Technical Elective	3	\boxtimes			
# Technical Elective	3	\boxtimes			
Humanities, Fine Arts & Design (HU) OR Social & Behavioral Science (SB)	3				

Graduation Requirements Summary:

Total Hours Regular Curriculum (120)	Total UD Hrs (45 min)	Total Hrs at ASU (30 min)	Cumulative GPA (2.00 minimum)	Major GPA (2.00 minimum GPA)	Hrs Resident Credit for Academic Recognition (56 min)	Total Comm. College Hrs. (64 Max)

General University Requirements: Legend

- General Studies Core Requirements:
 - Literacy and Critical Inquiry (L)
 - Mathematical Studies (MA)
 - Computer/Statistics/Quantitative applications (CS)
 - Humanities, Fine Arts, and Design (HU)
 - Social and Behavioral Sciences (SB)
 - Natural Science-Quantitative (SQ)
 - Natural Science-General (SG)
- General Studies Awareness Requirements
 - Cultural Diversity in the US (C)
 - Global Awareness (G)
 - Historical Awareness (H)
- First-Year Composition

Additional Notes:

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