

Critical Requirements: Students who follow the 2008-2009 catalog year and are entering ASU as either a first-time freshman or transfer from any Arizona public university or Arizona community college must complete critical requirements.

Major Map: Civil Engineering (Construction Engineering) – Bachelor of Science in Engineering (B.S.E.)

Ira A. Fulton School of Engineering, Tempe Campus Catalog Year: 2008-2009

			Completed AT		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	1110.	Division	Course, Grade	required	Additional Critical recommendations
ASU 101: The ASU Experience	1				Complete CHM 114 or 116; MAT 265 with a
CEE 100: Intro to Civil and Environmental Engineering OR	1	J			minimum grade of "C"
ECN 211/212 (SB): Macroeconomic Principles/ Microeconomic	2 or			Grade of C in	An SAT, ACT, Accuplacer, or TOEFL score
Principles or ECN 201: Economic Issues & Analysis (SB)	3			CEE 100	determines placement into first-year composition courses
CHM 114: General Chemistry for Engineers (SQ) OR	4				ASU Math Placement Exam score determines
CHM 116: General Chemistry II* (SQ)	4	<u> </u>		0 1 60	placement in Mathematics course
MAT 265: Calculus for Engineers I	3			Grade of C	*CHM 113 is a prerequisite and does not apply
ENG 101 or 102: First-Year Composition OR ENG 105: Advanced First-Year Composition** OR					toward degree credit. **If ENG 105 a 3 hr applicable elective must also be
ENG 103. Advanced First-Teal Composition FOR ENG 107 or 108: English for Foreign Students	3			Grade of C	taken prior to graduation. See Advisor.
TERM TWO: 16-30 CREDIT HOURS			,		
CEE 100: Intro to Civil and Environmental Engineering OR					 Complete CEE 100; MAT 242, 266; PHY
ECN 211/212 (SB): Macroeconomic Principles/ Microeconomic	2 or	l _		Grade of C in	121 & 122 each with a minimum grade of
Principles or ECN 201: Economic Issues & Analysis (SB)	3			CEE 100	"C"
MAT 242: Elementary Linear Algebra	2			Grade of C	
MAT 266: Calculus for Engineers II	3			Grade of C	
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	3			Grade of C	
	2			Condo of C	Complete CEE 210; MAT 267, 275, PHY 131
CEE 210: Engineering Mechanics: Statics	3			Grade of C	& 132 each with a minimum grade of "C"
MAT 267: Calculus for Engineers III	3			Grade of C	Complete First Year Composition requirement:
MAT 275: Modern Differential Equations (MA) PHY 131/132: University Physics II: Electricity and Magnetism/	3			Grade of C	ENG 101 & 102 or ENG 107 & 108 or ENG
Laboratory II (SQ)	3/1			Grade of C	105
TERM FOUR: 46-60 CREDIT HOURS	5/1			Grade of C	
CEE 212: Engineering Mechanics: Dynamics	3				Complete CEE 212
	3			Crada of C	Complete CEE 213 with a minimum grade of
CEE 213: Introduction to Deformable Solids				Grade of C	"C"
EEE 202: Circuits I Humanities, Fine Arts & Design (HU) OR Social & Behavioral Science	4				
(SB), AND Cultural Diversity in the US (C) or Global Awareness (G):	3				
Basic Science Elective:	3				
TERM FIVE: 61-75 CREDIT HOURS					
TERM FIVE: 61-75 CREDIT HOURS # CEE 384: Numerical Methods for Engineers (CS)	3	M			# Designates Major Course: A minimum cumulative
# CEE 384: Numerical Methods for Engineers (CS) Select 3	3				GPA of 2.30 required in all CEE 3XX courses, a
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs)	3				GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs)	3				GPA of 2.30 required in all CEE 3XX courses, a
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs)	3	⊠			GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs)	3	⊠			GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs)	3 10 or				GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 301: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs)	10 or 12	⊠			GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 301: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs)	10 or				GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 301: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving TERM SIX: 76-90 CREDIT HOURS	10 or 12	⊠			GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses.
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving TERM SIX: 76-90 CREDIT HOURS Select remaining 4	10 or 12	⊠			GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 370: Probability and Statistics for Engineering Problem Solving TERM SIX: 76-90 CREDIT HOURS Select remaining 4 # CEE 300: Engineering Business Practice(L) (3 hrs)	10 or 12	⊠			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all # Designates Major Course: A minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 301: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving TEM SIX: 76-90 CREDIT HOURS Select remaining 4 # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs)	10 or 12	⊠			GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 301: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving **TERM SIX: 76-90 CREDIT HOURS** Select remaining 4 # CEE 301: Structural Analysis and Design (4 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs)	10 or 12	⊠			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving TERM SIX: 76-90 CREDIT HOURS Select remaining 4 # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 351: Civil Engineering Materials (3 hrs)	10 or 12 3	⊠			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 301: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 380: Probability and Statistics for Engineering Problem Solving # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs)	10 or 12 3	X X			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving **TERM SIX: 76-90 CREDIT HOURS** Select remaining 4 # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs)	10 or 12 3	⊠			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving TERM SIX: 76-90 CREDIT HOURS Select remaining 4 # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs)	10 or 12 3	X X			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses.
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving **TERM SIX: 76-90 CREDIT HOURS** Select remaining 4 # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs)	10 or 12 3	X X			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 372: Select 4 # CEE 281: Surveying (3 hrs) # CEE 412: Pavement Analysis and Design (3 hrs) OR # CEE 483:	10 or 12 3	X X			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 301: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving **TERM SIX: 76-90 CREDIT HOURS** Select remaining 4 # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) **TERM SEVEN: 91-105 CREDIT HOURS* Select 4 # CEE 281: Surveying (3 hrs) # CEE 412: Pavement Analysis and Design (3 hrs) OR # CEE 483: Highway Materials, Construction and Quality (3 hrs)	10 or 12 3	X X			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses.
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 380: Probability and Statistics for Engineering Problem Solving # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 301: Structural Analysis and Design (4 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 412: Pavement Analysis and Design (3 hrs) OR # CEE 483: Highway Materials, Construction and Quality (3 hrs) # CEE 420: Steel Structures (3 hrs) OR # CEE 421: Concrete	10 or 12 3	X X			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 301: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving **TERM SIX: 76-90 CREDIT HOURS** Select remaining 4 # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) **TERM SEVEN: 91-105 CREDIT HOURS* Select 4 # CEE 281: Surveying (3 hrs) # CEE 412: Pavement Analysis and Design (3 hrs) OR # CEE 483: Highway Materials, Construction and Quality (3 hrs)	10 or 12 3	X X			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 381: Surveying (3 hrs) # CEE 281: Surveying (3 hrs) # CEE 412: Pavement Analysis and Design (3 hrs) OR # CEE 483: Highway Materials, Construction and Quality (3 hrs) # CEE 420: Steel Structures (3 hrs) OR # CEE 421: Concrete Structures (3 hrs) # CEE 452: Foundation (3 hrs) # CEE 452: Foundation (3 hrs) # CEE 481: Civil Engineering Project (3 hrs)	10 or 12 3	⊠ ⊠			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 301: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 380: Probability and Statistics for Engineering Problem Solving # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 301: Structural Analysis and Design (4 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 412: Pavement Analysis and Design (3 hrs) OR # CEE 483: Highway Materials, Construction and Quality (3 hrs) # CEE 420: Steel Structures (3 hrs) OR # CEE 421: Concrete Structures (3 hrs) # CEE 451: Civil Engineering Project (3 hrs) # CEE 481: Civil Engineering Project (3 hrs) # Approved technical elective (3 hrs)	10 or 12 3	X X			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all
# CEE 384: Numerical Methods for Engineers (CS) Select 3 # CEE 300: Engineering Business Practice (L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 341: Fluid Mechanics for Civil Engineers (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) IEE 380: Probability and Statistics for Engineering Problem Solving # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 300: Engineering Business Practice(L) (3 hrs) # CEE 321: Structural Analysis and Design (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 351: Geotechnical Engineering (4 hrs) # CEE 353: Civil Engineering Materials (3 hrs) # CEE 361: Introduction to Environmental Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 372: Transportation Engineering (4 hrs) # CEE 381: Surveying (3 hrs) # CEE 281: Surveying (3 hrs) # CEE 412: Pavement Analysis and Design (3 hrs) OR # CEE 483: Highway Materials, Construction and Quality (3 hrs) # CEE 420: Steel Structures (3 hrs) OR # CEE 421: Concrete Structures (3 hrs) # CEE 452: Foundation (3 hrs) # CEE 452: Foundation (3 hrs) # CEE 481: Civil Engineering Project (3 hrs)	10 or 12 3	⊠ ⊠			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses. # Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all

Page 1 of 2 Updated: 10/13/08



Critical Requirements: Students who follow the 2008-2009 catalog year and are entering ASU as either a first-time freshman or transfer from any Arizona public university or Arizona community college must complete critical requirements.

Major Map: Civil Engineering (Construction Engineering) – Bachelor of Science in Engineering (B.S.E.)

Ira A. Fulton School of Engineering, Tempe Campus Catalog Year: 2008-2009

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					
Select remaining 2 # CEE 281: Surveying (3 hrs) # CEE 412: Pavement Analysis and Design (3 hrs) OR # CEE 483: Highway Materials, Construction and Quality (3 hrs) # CEE 420: Steel Structures (3 hrs) OR # CEE 421: Concrete Structures (3 hrs) # CEE 452: Foundation (3 hrs) # CEE 481: Civil Engineering Project (3 hrs) # Approved technical elective (3 hrs)	6	\boxtimes			# Designates Major Course: A minimum cumulative GPA of 2.30 required in all CEE 3XX courses, a minimum cumulative GPA of 2.30 required in all CEE 4XX courses.
#CEE 400: Earth Systems Engineering and Management (HU, H) OR Social & Behavioral Science (SB) AND Cultural Diversity in the US (C) or Global Awareness (G) if CEE 400 completed	3				
# CEE 486: Integrated Civil Engineering Design (L)	4				
Humanities, Fine Arts & Design (HU) AND Cultural Diversity in the US (C) or Global Awareness (G)	3				

Graduation Requirements Summary:

Total Hours Regular Curriculum (120)	Total Hrs at ASU (30 min)	Hrs Resident Credit for Academic Recognition (56 min)	Major GPA (2.30 Min. CUM GPA in CEE 3XX, 2.30 min CUM GPA in CEE 4XX)	Total UD Hrs (45 min)	Total Comm. College Hrs. (64 Max)

General University Requirements: Legend

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

Additional Notes:

Page 2 of 2 Updated: 10/13/08