BS in Civil Engineering

2016-2017 Bulletin Revised 29 January 2016





Students are required to meet with their academic advisor each semester about course planning.							
Complete the follow	ing Program Admission Courses	Credits					
ENG 101	Composition	4					
MATH 121	Calculus I	4					
MATH 122	Calculus II	4					
MATH 223	Calculus III	4					
MATH 321	Differential Equations	4					
CHEM 201	General Chemistry I	5					
PHYS 121	General Physics I	4					
CIVE 201	Introduction to Problem Solving and Civil Engineering	Design 2					
ME 212	Statics	3					
ME 214	Dynamics	3					
ME 223	Mechanics of Materials	3					
ME 291	Engineering Analysis	3					
Complete the follow	ing support courses.						
ENG 271W	Technical Communication	4					
Either		_					
ME 299	Thermal Analysis	2					
Or		- 2					
ME 241	Thermodynamics	3					
Either		_					
PHYS 222	General Physics II	3					
PHYS 232	General Physics II Lab	1					
Or		- 4					
PHYS 223	General Physics III	3					
PHYS 233	General Physics III Lab	1]					
Complete the following Major Courses							
CIVE 101	Introduction to Civil Engineering	2					
CIVE 145	CAD for Civil Engineering	2					
CIVE 235	Properties of Civil Engineering Materials	3					
CIVE 271	Civil Engineering Measurements	2					
CIVE 321	Fluid Mechanics	3					
CIVE 340	Structural Analysis	3					
CIVE 350	Hydraulics and Hydrology	4					
CIVE 360	Geotechnical Engineeringg	4					
CIVE 370W	Transportation Engineering	4					
CIVE 380	Environmental Engineering	3					
CIVE 401	Civil Engineering Design I	2					
CIVE 402	Civil Engineering Design II	3					

				_			
CIVE 435	Civil Engineer	ring Experimentation I		2			
CIVE 436	Civil Engineer	ring Experimentation II		2			
GEOL 121	Physical Geol	ogy		4			
	·						
Either			_				
CIVE 446	Reinforced Co	oncrete Design	3				
Or			┝	3			
CIVE 448	Steel Design		3				
	· ·						
CIVE 4XX	Civil Enginee	ring Elective		3			
CIVE 4XX	Civil Engineer	ring Elective		3			
CIVE 4XX	Civil Enginee			3			
Technical Ele	_		2				
			_				
i ecnnicai Eie	ctive or Civil Elec		3				
Complete the following Compret Education Courses							
Complete the following General Education Courses							
ECON 201 or 202		Micro or Macro Economics		3			
Social Science	es (2 courses)	Choose from list of approved courses		6			
Humanities (2	` '	Choose from list of approved courses		6			
i iuiiiaiiilles (2	L Courses)	choose from list of approved courses					

Planning Worksheet 2016-2017 Name: 1. Label the years correctly, and then <u>drag and drop</u> each course *and* associated credit hours into the appropriate location. 2. If courses are completed, drag and drop course and credit hours into the completed column. **Instructions:** 3. Please **consult the flowsheet** to make sure you take courses and prerequisites in the correct order. 4. Ensure each course is offered in the semester planned. Many CIVE courses are only taught either in the Fall or the Spring. 6. WARNING: If you change your plan, visit with your advisor. Incorrect planning may result in delaying your graduation. Semester Credits Offered Courses MATH AND SCIENCE COURSES Fall 2016 Spring 2017 Summer 2017

Completed Courses

WATTAND GOILNOL GOO	HOLC	,	1 all 2010		Spring 2017	Summer	2017	Completed Cours	,63
MATH 121 - Calc 1	4	F/Sp/Su							
MATH 122 - Calc 2	4	F/Sp/Su							
MATH 223 - Calc 3	4	F/Sp							
MATH 321 - Diff Eq	4	F/Sp/Su							
CHEM 201 - Chem 1	5	F/Sp							
PHYS 121 - Physics 1	4	F/Sp							
PHYS 223 - Physics 3	3	Sp							
PHYS 233 - Physics 3 Lab	1	Sp	Credit	s 0	Credits 0	Cre	edits 0		
Alternative to PHYS 223+233	!	•			-	•	•		
PHYS 222 - Physics 2	3	F/Sp	1						1
PHYS 232 - Physics 2 Lab	1	F/Sp	Fall 2017		Spring 2018	Summer 2	2018		+
GEOL 121 - Geology	4	F/Sp							+
ENGINEERING COURSES		'		+					+-
CIVE 101 - Intro to Civil	2	ĪF		++					+
CIVE 145 - CAD	2	F/Sp		+					+
CIVE 201 - Intro to Design	2	F/Sp	-	+					+
ME 212 - Statics	3	F/Sp/Su*		+					+
			1	+	\vdash				+
ME 214 - Dynamics ME 223 - Mechanics	3	F/Sp/Su*	Credit		Credits 0	C**	edits 0		+
	_	F/Sp/Su*	Credit	s 0	Credits 0	L Cre	edits 0		+
CIVE 235 - Materials Sci.	3	Sp							+
CIVE 271 - Surveying	2	F			0 : 0040		20.40		┿
ME 291 - Eng. Analysis	3	F/Sp/Su*	Fall 2018		Spring 2019	Summer :	2019		┿
ME 299 - Thermal Analysis	2	Sp	 	\perp					_
CIVE 321 - Fluids	3	F		\bot					_
CIVE 340 - Structures	3	F		\bot					
CIVE 350 - Hydro.	4	Sp							
CIVE 360 - Geotech	4	Sp							
CIVE 370W - Transportation	4	F		Ш					
CIVE 380 - Environmental	3	F							
CIVE 401W - Senior Design 1	2	F	Credit	s 0	Credits 0	Cre	edits 0		
CIVE 402W - Senior Design 2	3	Sp							
CIVE 435 - Experimentation 1	2	F							
CIVE 436 - Experimentation 2	2	Sp	Fall 2019		Spring 2020	Summer 2	2020		
CIVE 446 - Reinf. Conc.	3	Alt Sp							
or CIVE 448 - Steel		Alt Sp							
CIVE 4XX - Civil Elective	3	F/Sp							T
CIVE 4XX - Civil Elective	3	F/Sp							T
CIVE 4XX - Civil Elective	3	F/Sp							1
Alternative to ME 299			1						1
ME 241 - Thermodynamics	3	F							T
SUPPORT COURSES			Credit	s 0	Credits 0	Cre	edits 0		+
ENG 271W - Tech. Comm.	4	F/Sp	- Credit	<u>- </u>	Ciculto 0		, dito 0		+
Technical Elective 1	3	F/Sp	-						+
Technical Elective 2	2	F/Sp	Fall 2020		Spring 2021	Summer 2	2021		+
		<u> </u>	Fall 2020		Spillig 2021	Suffiller	2021		+
GENERAL EDUCATION CO			4	+					4
ENG 101 - Composition	4	F/Sp/Su	-	+	<u> </u>				4
ECON 201 or 202 - Economics	3	F/Sp	-	\bot			-		\bot
Humanties Elective 1	3	F/Sp/Su*		\bot					
Humanties Elective 2	3	F/Sp/Su*		\perp					
Social Science Elective 1	3	F/Sp/Su*							$oxed{oxed}$
Social Science Elective 1	3	F/Sp/Su*	Credit	s 0	Credits 0	Cre	edits 0		

Planning Wor	ksheet	2016-2017	Name:			
	1. Label the years cor	rectly, and then drag and drop	each course and associated	credit hours into the appropriat	te location.	
	2. If courses are completed, drag and drop course and credit hours into the completed column.					
Instructions:	3. Please consult the flowsheet to make sure you take courses and prerequisites in the correct order.					
		e is offered in the semester plan			or the Spring.	
		change your plan, visit with your	•	· · · · · ·		
	Semester			<u>-, , , , , , , , , , , , , , , , , , , </u>		
Courses	Credits Offered					
MATH AND SCIENCE CO	URSES	Fall 2016	Spring 2017	Summer 2017	Completed Courses	
	F/Sp/Su	MATH 121 - Calc 4	MATH 122 - Calc 4			
	F/Sp/Su	CHEM 201 - Chen 5	PHYS 121 - Physi 4			
	F/Sp	ENG 101 - Compd 4	CIVE 145 - CAD 2			
	F/Sp/Su	CIVE 101 - Intro to 2	CIVE 201 - Intro to 2			
	F/Sp		Humanties Electiv 3			
	F/Sp					
	Sp Sp	Credits 15	Credits 15	Credits 0		
Alternative to PHYS 223+233						
PHYS 222 - Physics 2	3 F/Sp					
PHYS 232 - Physics 2 Lab	1 F/Sp	Fall 2017	Spring 2018	Summer 2018		
,	F/Sp	MATH 321 - Diff E 4	MATH 223 - Calc 4			
ENGINEERING COURSES		GEOL 121 - Geold 4	ME 214 - Dynamid 3			
	F	ME 212 - Statics 3	ME 223 - Mechani 3			
	F/Sp	CIVE 271 - Survey 2	ME 299 - Thermal 2			
	F/Sp	ME 291 - Eng. An. 3	ENG 271W - Tech 4			
	F/Sp/Su*	IVIL 231 - Elig. Ali 3	LING ZI IVV - TECH 4			
	F/Sp/Su*					
	F/Sp/Su*	Credits 16	Credits 16	Credits 0		
	Sp	Credits 10	Credits 10	Credits 0		
	Ε					
	F/Sp/Su*	Fall 2018	Spring 2019	Summer 2019		
		CIVE 321 - Fluids 3	CIVE 350 - Hydro. 4	Summer 2019		
	Sp F	CIVE 340 - Structu 3	CIVE 360 - Geote 4	-		
	F	CIVE 370W - Tran 4	CIVE 446 or 448 3	-		
		CIVE 380 - Enviro 3	CIVE 235 - Materil 3			
	Sp Sp	ECON 201 or 202 3	Humanties Electiv 3			
	F	201 201 01 202 3	Turnanties Liectiv 5			
	F					
	F	Credits 16	Credits 17	Credits 0		
	Sp	Credits 10	Credits 17	Credits 0		
	F					
	Sp	Fall 2019	Spring 2020	Summer 2020		
	Alt Sp	CIVE 401W - Sen 2	CIVE 402W - Sen 3	Guillillei 2020		
or CIVE 448 - Steel	Alt Sp	CIVE 435 - Experi 2	CIVE 436 - Experi 2			
31 317 2 440 - 31861	F/Sp	CIVE 4XX - Civil E 3	CIVE 4XX - Civil E 3			
	F/Sp	Technical Elective 3	CIVE 4XX - Civil E 3			
	F/Sp	Social Science Ele 3	Technical Elective 2			
Alternative to ME 299	170ρ	PHYS 223 - Physi 3	Social Science Ele 3			
ME 241 - Thermodynamics	3 F	PHYS 233 - Physi 1	Oddiai odiciloc Elt o			
SUPPORT COURSES	J	Credits 17	Credits 16	Credits 0		
COLL COURSES	F/Sp	Credits 17	Credits 10	Credits 0		
	F/Sp					
	F/Sp	Fall 2020	Spring 2021	Summer 2021		
CENERAL EDUCATION O	•	I all 2020	Opining 2021	Julillel 2021		
GENERAL EDUCATION C						
	F/Sp/Su	\square	\vdash			
	F/Sp					
	F/Sp/Su*		\square			
	F/Sp/Su*					
	F/Sp/Su*					
	F/Sp/Su*	Credits 0	Credits 0	Credits 0		

Planning Worksheet 2016-2017 Name: 1. Label the years correctly, and then **drag and drop** each course *and* associated credit hours into the appropriate location. 2. If courses are completed, drag and drop course and credit hours into the completed column. Instructions: 3. Please consult the flowsheet to make sure you take courses and prerequisites in the correct order. 4. Ensure each course is offered in the semester planned. Many CIVE courses are only taught either in the Fall or the Spring. WARNING: If you change your plan, visit with your advisor. Incorrect planning may result in delaying your graduation. Semester Credits Offered MATH AND SCIENCE COURSES Fall 2016 Summer 2017 **Completed Courses** Spring 2017 F/Sp/Su MATH 115 - Preca MATH 121 - Calc F/Sp/Su CHEM 104 CHEM 201 - Chem 5 ENG 101 - Compo CIVE 145 - CAD F/Sp 4 F/Sp/Su PHYS 101 3 Humanties Elective F/Sp F/Sp Sp Sp Credits 14 Credits 14 Credits Alternative to PHYS 223+233 PHYS 222 - Physics 2 F/Sp 3 PHYS 232 - Physics 2 Lab F/Sp Fall 2017 Spring 2018 Summer 2018 MATH 321 - Diff E 4 F/Sp MATH 122 - Calc 2 4 **ENGINEERING COURSES** CIVE 101 - Intro to 2 GEOL 121 - Geold PHYS 121 - Physic CIVE 201 - Intro to F/Sp CIVE 271 - Survey ENG 271W - Tech 4 F/Sp F/Sp/Su* F/Sp/Su* Credits 12 Credits 14 F/Sp/Su* Credits Sp F/Sp/Su* Fall 2018 Spring 2019 Summer 2019 ME 212 - Statics MATH 223 - Calc (Sp ME 214 - Dynamic ME 291 - Eng. Ana ECON 201 or 202 ME 223 - Mechani CIVE 235 - Materia Technical Elective Sp Humanties Elective 3 ME 299 - Thermal 2 Credits 15 Credits 15 Credits 0 Sp Fall 2019 Sp Spring 2020 Summer 2020 Alt Sp CIVE 321 - Fluids CIVE 350 - Hydro. 4 or CIVE 448 - Steel Alt Sp CIVE 340 - Structu CIVE 360 - Geoted 3 F/Sp CIVE 370W - Tran CIVE 446 or 448 F/Sp CIVE 380 - Enviro CIVE 4XX - Civil E F/Sp Social Science Ele Technical Elective Alternative to ME 299 ME 241 - Thermodynamics 3 SUPPORT COURSES Credits 16 Credits 16 Credits F/Sp F/Sp F/Sp Fall 2020 Summer 2021 Spring 2021 GENERAL EDUCATION COURSES CIVE 401W - Seni CIVE 402W - Seni CIVE 436 - Experir F/Sp/Su CIVE 435 - Experii F/Sp CIVE 4XX - Civil E CIVE 4XX - Civil E 3 F/Sp/Su* PHYS 223 - Physic Social Science Ele F/Sp/Su* PHYS 233 - Physic F/Sp/Su^ F/Sp/Su* Credits 11 Credits 11 Credits