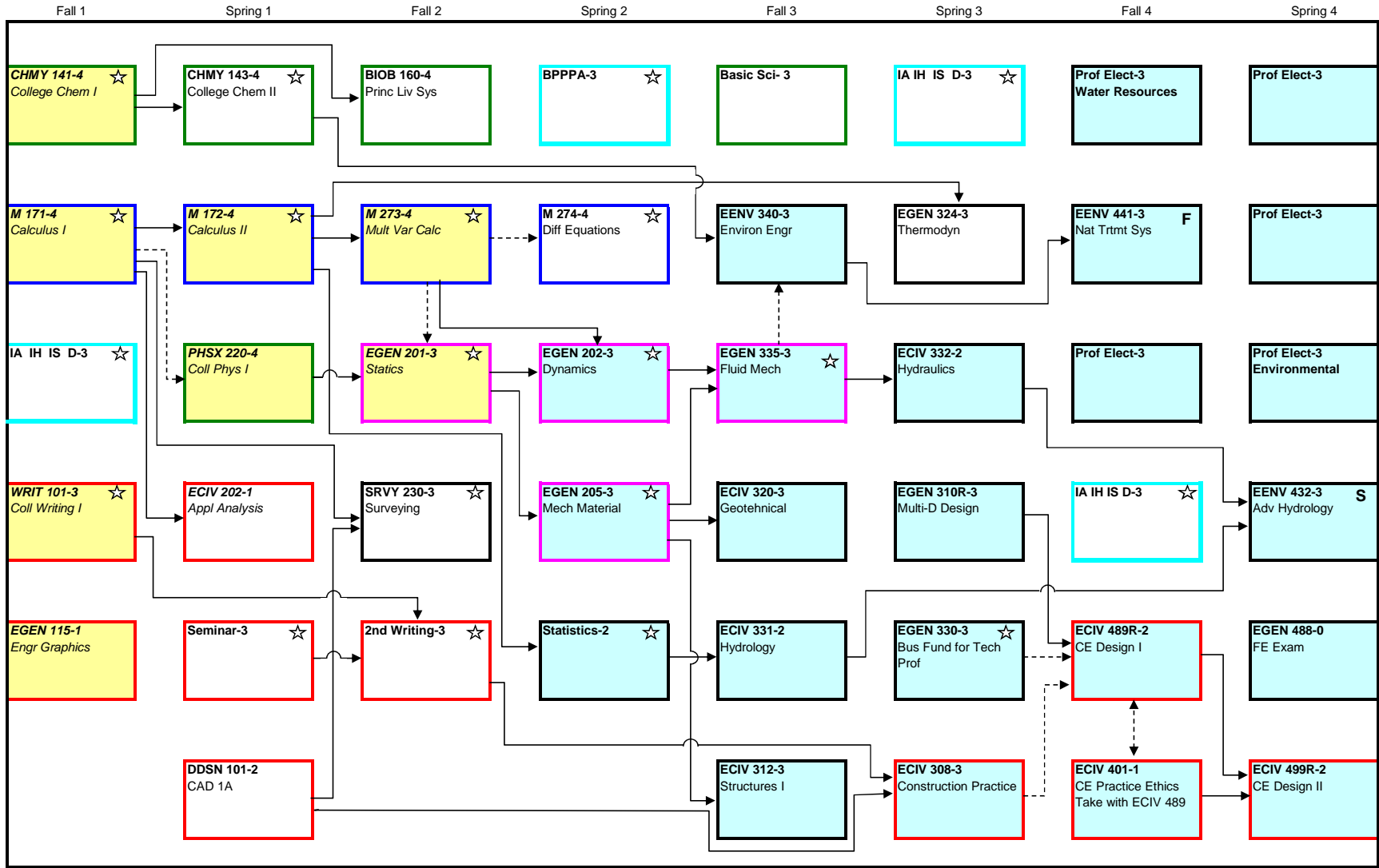


2016 - 2017 Catalog Degree: Civil Engineering Option: Bio-Resources Engineering

Modified: 4/2016



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Basic Science Elective:
 BIOB 170 (F,S) Organismal Biology (4)
 ENSC 245 (F) Soils (3)
 ENSC 272 (F) Water Resources (3)
 GPHY 284 (F,S) Intro to GIS Science and Cartography (3)
 NRSM 240 (F) Natural Resources Ecology (3)
 PHSX 222 (F,S) Physics II (4)
 BIOM 360 (F,S) General Microbiology (5)

18-19

BPPPA:
 ECNS 101IS (F,S) Economic Way of Thinking
 BGEN 242D (F,S) Intro. to International Business
 PSCI 210IS (F, S, Su) Introduction to American Government
 PSCI 214IS (F) Principles of Political Science
 PSCI 230D (F) Introduction to International Relations

17-18

Seminar: US 101 , CLS 101, COMX 111, HONR 201
 2nd Writing: BMGT 205, WRIT 201, WRIT 221 , HONR 202
 Statistics: EGEN 350-2, STAT 332-3
 ☆ Indicates Summer Offering

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Student _____
 ID _____
 Prerequisites: → F Fall Only
 Corequisites: - - - - - S Spring Only

17-19

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2016-17 Bio-Resources Option Professional Electives (Total of 15 cr-hrs required) Revised 10/16

	Rubric	Number	Cr Hrs	Title	Offered	Prerequisite	
At least one of these.	[	ECIV	431	3	Open Channel Hydraulics	F	ECIV 332 Hydraulics
		EENV	434	3	Groundwater Supply and Remediation	S	EGEN 335 Fluid Mechanics
		ECIV	435	3	Closed Conduit Hydraulics	S	ECIV 332 Hydraulics
		EGEN	435	3	Fluid Dynamics	S	EGEN 335 Fluid Mechanics
At least one of these.	[	EENV	440	3	Water Chemistry for Environmental Engineers	F	EENV 340 Introduction to Environmental Engineering
		EENV	443	3	Air Pollution Control	F even	EENV 340 Introduction to Environmental Engineering
		EENV	445	3	Hazardous Waste Treatment	F odd	EENV 340 Introduction to Environmental Engineering
		EENV	447	3	Hazardous Waste Management	S	EGEN 335 Fluid Mechanics
		BIOE	370	3	General Ecology	S	BIOB 170 Organismal Biology
		ECIV	309	3	Building Information Modeling in Construction	F	ECIV 308 Constr Practice (Co-Req)
		ECIV	315	3	Structures II	F,S	ECIV 312 Structures I
		ECIV	350	3	Transportation Engineering	F,S	
		ECIV	406	3	Sustainability in Construction	S	ECIV 308
		ECIV	420	3	Earth and Foundation Engineering	S	ECIV 320 Geotechnical Engineering
		ECIV	425	3	Geotechnical Structures	F	ECIV 320 Geotechnical Engineering
		ECIV	455	3	Srvy Data Collection & Analysis for Transpo Engrg	S even	EGEN 350 or EIND 354
		ECIV	461	3	Cold Regions Infrastructure Engineering	S	ECIV 320 & EGEN 335 Co-Req. of ECIV 308
		ENSC	460	3	Soil Remediation	S	ENSC 245 Soils
		ENSC	461	3	Restoration Ecology	F	BIOB 170 Organismal Biology
		GPHY	384	3	Advanced GIS and Spatial Analysis	F,S	GPHY 284 Introduction to GIS Science and Cartography
		SRVY	375	3	Analyt Photo/Remote Sensing	F odd	SRVY 230 Surveying
		ENSC	353	3	Environmental Biogeochemistry	F	CHYMY 143 and ENSC 245
		ENSC	444	3	Watershed Hydrology	F	ENSC 245 Soils
		ENSC	448	3	Stream Restoration Ecology	F	BIOB 170 and NRSM 240 or BIOE 370
		EENV	490	1-4	Undergraduate Research	F,S,Su	
		ECIV	492	1-4	Independent Study	F,S,Su	
		ECIV	498	2 max	Career Internship	Su	
		EGEN	498	3 max	Engineering Internship (EWB)	Su	
Max 3 cr total.	[						A petitioned course.
							A course from a completed minor.
							A course from a prior/concurrent BS/BA degree.
							A course from a completed Honors program.