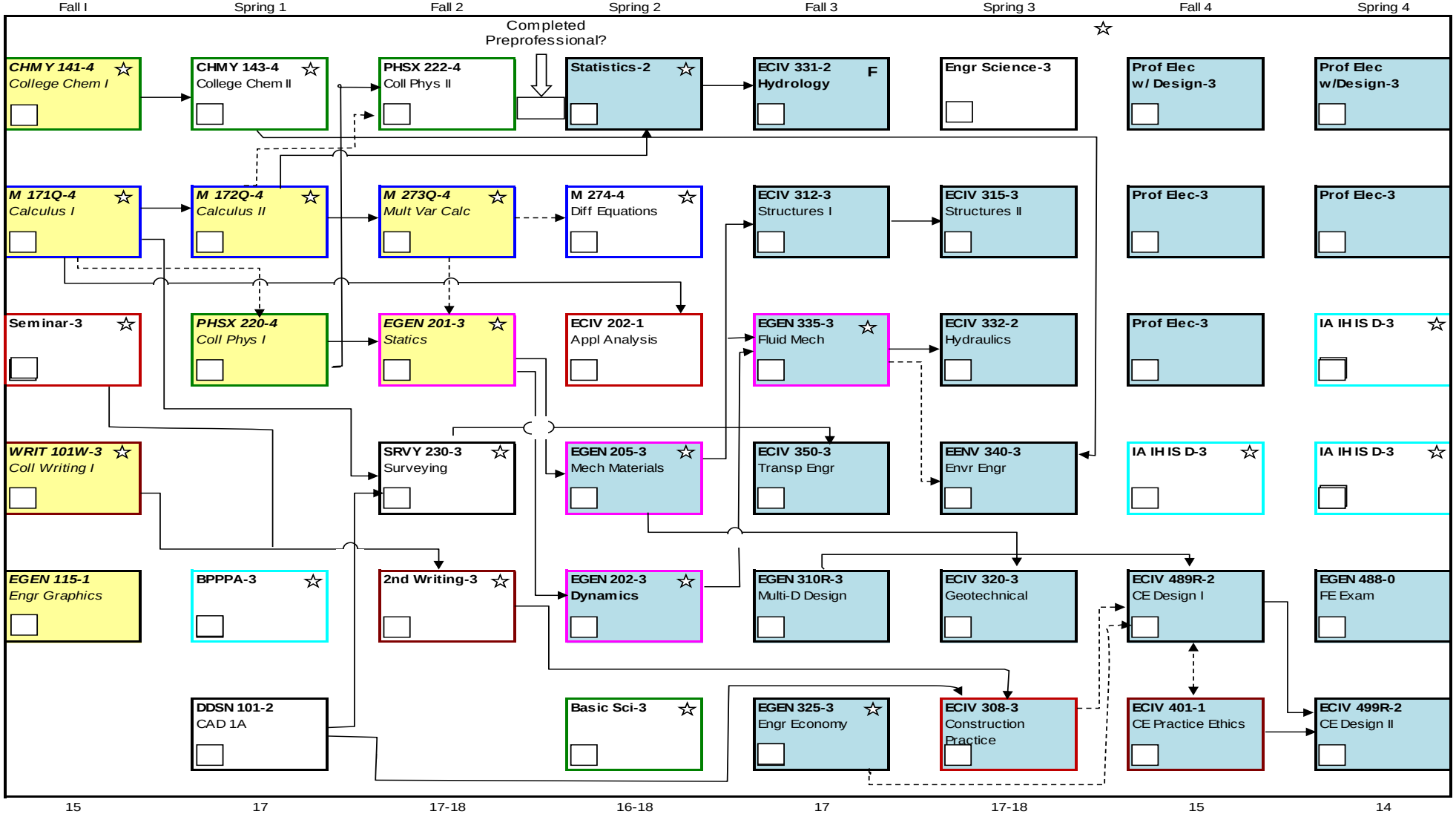
2014 - 2015 Catalog Degree: Civil Engineering

Modified: 2/2014



Ideas for Basic Science Elective: Choose One

BIOB 160 (F,S) Princ Lliv Sys (4) Prereq.: CHMY 141
ENSC 245 (F) Soils (3)
ERTH 101 (F, S) Earth System Science(4)
GPHY 284 (F,S) Intro to GIS Science and Cartography (3)
BIOM 103IN (F,S) Unseen Universe Microbes (3)

BPPPA: Choose One

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

Seminar: US 101 , CLS 101, COM 110, HONR 201

2nd Writing: BMGT 205, WRIT 201, WRIT 221 , HONR 202

Statistics: EGEN 350-2, STAT 332-3

Program Completed: Sign and Date

Advisor _____

Department _____

Engineering Science Elective: Choose One

EMAT 251 (F,S) Matrl Struc & Prop (3)PreReq CHMY 141
CoReq M 171
EELE 250 (F,S) Circuits (4) PreReq M 172
EMEC 320 (F,S) Thermodynamics I (3) PreReq M 273
EGEN 324 (F,S) Applied Thermodynamics (3) PreReq M 273

Student _____ ID _____-_____

Prerequisite →

Corequisite - - - - → **F** (Fall Only)

Transfer From: _____

Evaluator Sig. & Date: _____

PROFESSIONAL ELECTIVE COURSES - CIVIL ENGINEERING

Course		Semester Title	Credits	Design Intensive Course	F14	S15	Su	F15	S16
ECIV	307	Construction Estimating & Bidding (CE 307)	3		X	X		X	X
ECIV	309	Building Information Modeling in Constr.	2		X			X	
ECIV	404	Heavy Constr. Equipment & Methods (CE 404)	3		X	X		X	X
ECIV	405	Constr. Proj. Planning & Scheduling (CE 405)	3		X	X		X	X
ECIV	414	Steel Design (CE 414)	3	*				X	
ECIV	415	Design of Masonry Structures (CE 415)	3	*					X
ECIV	416	Design of Wood and Timber Structures (CE 416)	3	*		X			
ECIV	484	Reinforced Concrete Design (CE 413)	3	*	X				
ECIV	420	Earth & Foundation Engineering (CE 420)	3	*		X			X
ECIV	425	Geotechnical Structures (CE 425)	3	*	X			X	
ECIV	431	Open Channel Hydraulic (CE 431)	3	*	X			X	
ECIV	435	Closed-Conduit Hydraulics (CE 435)	3	*		X			X
ECIV	451	Highway Pavements (CE 451)	3	*					X
ECIV	452	Traffic Engineering & ITS (CE 452)	3	*				X	
ECIV	454	Transportation Planning (CE 454)	3	*		X			
ECIV	456	Highway Geometric Design (CE 456)	3	*	X			X	
ECIV	490	Undergraduate Research (CE 490)	1-4		X	X	X	X	X
ECIV	492	Independent Study (CE 470)	1-3		X	X	X	X	X
ECIV	498	Career Internship (CE 476)	2		X	X	X	X	X
EENV	432	Advanced Engineering Hydrology (BREN 432)	3	*		X			X
EENV	434	Groundwater Supply & Remediation (BREN 434)	3	*		X			X
EENV	440	Water Chemistry for Envir. Engineers (ENVE 440)	3		X			X	
EENV	441	Natural Treatment Systems (BREN 441)	3	*	X			X	
EENV	443	Air Pollution Control (ENVE 443)	3	*	X				
EENV	445	Hazardous Waste Treatment (ENVE 445)	3	*				X	
EENV	447	Hazardous Waste Management (ENVE 444)	3	*		X			X
EGEN	415	Advanced Mechanics of Solids (EM 415)	3		X			X	
EGEN	435	Fluid Dynamics (EM 435)	3			X			X
SRVY	355	Surveying Calculations (CE 363)							
SRVY	361	Intro to Legal Principles in Surveying (CE 361)	3		X				
SRVY	362	Public Land Survey Systems (CE 362)	3					X	
SRVY	375	Analyt Phot/Remote Sensing (CE 463)	2					X	
SRVY	474	Project Design in Surveying (CE 464)	3	*		X			

Note: Other 300- & 400-level courses may be approved as analytical electives with the consent of the adviser and the department head.

Rules

- Two design intensive courses (indicated w/ an *) are required.
- A maximum of 3 credit-hours may be included from a completed MSU minor, a prior or concurrent BS/BA degree in another major, or courses in a completed MSU Honors Program.
- No more than 2 credit-hours of ECIV 498 (Career Internship).
- Student may petition to include other senior or graduate level courses consistent with the degree program but not listed here (requires Academic Advisor and Department Head approval).

2.0 CORE REQUIREMENTS - UNIVERSITY & COLLEGE OF ENGINEERING/CE

University CORE requirements include Humanities Inquiry-IH (3 credits), Social Sciences Inquiry-IS (3 credits), Arts Inquiry-IA (3 credits), and Diversity-D (3 credits**)**. University 2.0 Core requirements for Contemporary Issues in Science (CS) and Natural Sciences (IN) and department requirements are met by completing CHMY 141 and PHSX 220. Civil Engineering majors are required to take one course, and strongly recommended to take two courses, from a list of Business, Public Policy, and Public Administration (BPPPA) Univ. Core Electives (see front of check sheet for list). The complete 2.0 Core listing can be found in the 2014-15 MSU Bulletin.