## **Wheaton College 4-year General Engineering Plan**

## THIS PROGRAM PLAN IS FOR GUIDANCE ONLY. GRADUATION REQUIREMENTS ARE FOUND IN CATALOGS.

#### 54 CATC (3x 2 tags), 30 math & science, 45 ENGR

**Engineering Core** 

**Engineering Concentration** 

Supporting Science & Math

CATC

5

#### Fall Semester

Sem	Code	Name		Hrs.
1	MATH 235	Calculus I (AAQR)		4
	PHYS 231	Introductory Physics I (SP)		4
	ENGR 101	Introduction to Engineering		1
	CORE 101	First Year Seminar		4
	ENGW 103	Writing (0-4)		4
			Total	17

3	MATH 237	Calculus III		4	
	ENGR 211	Engr. Mechanics I - Statics w lab		3	
	ENGR 334	Comp. Modeling of Phys. Syst.		2	
	ENGR 351	Analog Electronics w lab		2	
	LANG	Language Core Competency I		4	
			Total	15	

CHEM 231	General Chemistry I		4
ENGR 313	Mechanics of Materials w lab		3
ENGR 336	Fluid Mechanics		3
ENGR 352	Fund. Of Environmental Engr.		3
LANG	Language Core Competency III		4
		Total	17

Elective	Math & Science Elective*		2
ENGR 451	Senior Design I		4
ENGR XXX	CEE Engineering Elective		3
BITH 315	Christian Thought		4
SELECT	Visual & Performing Art (2 of 2)		2
JLLLCT	visual & Performing Art (2 of 2)		
		Total	15

Total Credit Hours 129
Avg. per semester 16.125

# Civil/Environmental Engineering Concentration electives:

ENCD 2E0	Groundwater Hydrology and Well	
ENGR 358	Hydraulics	2
ENGR 359	Geotechnical Engineering	2
ENGR 215	Materials Science for Engineering	3
ENGR 344	Thermodynamics & Heat Transfer	3
ENGR 495	Independent Study	1-3

# Civil/Environmental Engineering Concentration

#### Spring Semester

		-10		
Sem	Code	Name		Hrs.
2	MATH 236	Calculus II		4
	PHYS 232	Introductory Physics II		4
	ENGR 132	<b>Engineering Graphics and CAD</b>		3
	COMM 101	Oral Communication (0-2)		2
	BITH 211	Old Testament Literature		4
		-	Total	17

4	MATH 333	Differential Equations		4
	<b>ENGR 212</b>	Engr. Mechanics II - Dynamics w lab		3
	<b>ENGR 214</b>	Innovative Design in Engr.		3
	LANG	Language Core Competency II		4
	SELECT	Visual & Performing Art (1 of 2)		2
			Total	16

		Total	16
BITH 213	New Testament Literature		4
SELECT	Thematic Core (1 of 3) (2 tags)		4
ENGR 356	Structural Analysis and Design		3
ENGR 354	Water Resources Engineering		3
ENGR 302	<b>Engineering Systems Analysis</b>		2

		Total	16
SELECT	Thematic Core (3 of 3) (2 tags)		4
SELECT	Thematic Core (2 of 3) (2 tags)		4
CORE 3xx	Advanced Int. Seminar (1 tag)		4
	Apply for FE Exam		0
ENGR 494	<b>Engineering Ethics Capstone</b>		2
ENGR 452	Senior Design II		2

revised: 3/7/2024

<sup>\*</sup> The Math and Science elective may come from ENGR 271 or courses with prefixes ASTR, BIOL, CHEM, ENVR, GEOL, MATH, and PHYS that are approved by the Physics & Engineering department. Check with your advisor to determine course availability.

# Wheaton College Engineering Civil/Environmental Concentration

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