## Wheaton College - Illinois Tech Joint Dual-degree Program

## THIS PROGRAM PLAN IS FOR GUIDANCE ONLY. SEE CATALOG FOR OFFICIAL REQUIREMENTS.

## Engineering Major General Education

#### Fall Semester

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Sem	Code	Name		Hrs.
1	MATH 235	Calculus I		4
	PHYS 231	Introductory Physics I		4
	ENGR 101	Introduction to Engineering		1
	CORE 101	First Year Seminar		4
	CORE 131	Holistic Human Flourishing		1
	LANG	World Languages		4
			Total	18

3	MATH 237	Calculus III	4
	ENGR 334	Computer Modeling of Physical Systems	2
	ENGR 211	Engr. Mechanics I - Statics	3
	BITH 211	Old Testament Literature	4
	SELECT	Visual & Performing Arts (1 of 2)	2
		Total	15

5	ENGR 313	Mechanics of Materials	3
	CHEM 231	General Chemistry	4
	SELECT	Thematic Core (1 of 3)	4
	CORE 3xx	Advanced Seminar (with 1 Thematic Core tag)	4
		Total	15
		4 0 114 1	

#### years 1 - 3 credit hours = 9

## **Civil Engineering**

## Spring Semester

Sem	Code	Name		Hrs.
2	MATH 236	Calculus II		4
	PHYS 232	Introductory Physics II		4
	<b>ENGR 132</b>	<b>Engineering Graphics and CAD</b>		3
	ENGW	Writing (0-4)		4
			Total	15

4	MATH 333	Differential Equations	4
	ENGR 212	Engineering Mechanics II - Dynamics	3
	ENGR 214	Innovative Design in Engr.	3
	BITH	New Testament Literature	4
	COMM	Oral Communication (0-2)	2
		Total	16

ENGR 494	Engineering Ethics Capstone		2
BITH	Christian Thought		4
SELECT	Visual & Performing Arts (2 of 2)		2
SELECT	Thematic Core (2 of 3)		4
SELECT	Thematic Core (3 of 3)		4
		Total	16

## All courses below this line are based on completion at IIT

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7	CAE 105	Geodetic Science (Surveying)		3
	ENVE 201 or CAE 221 or BIOL 105 or PHYS 360	Earth Environ Sci 3 Engineering Geology Intro. to Biology Intro. to Astrophysics		3
	CAE 302	Fluid Mechanics & Hydraulics		3
	CAE 304	Structural Analysis 1		3
	CAE 315	Materials of Construction		3
			Total	15

9	CAE 419	Transportation Engineering & Design	3
	CAE 431	Steel Design	3
	CAE 457	Geotechnical Foundation Design	3
	CAE 470	Construction Methods & Cost Estimating	3
	ENVE 401	Intro. to Water Resources Engineering	3
		Total	15

years 4 - 5 credit hours =	63
TOTAL credit hours =	158

	IPRO 400+	Engineering IPRO Elective 1 CAE, ENVE or EG Elective 1	3 3 3
		0	
	OAL 323	Engineering	3
	CAE 323	Introduction to Geotechnical	
	CAE312	Engineering Systems Analysis	3
	CAE 307	Structural Design 2	3
8	CAE 303	Structural Design 1	3

			Total	15
	CAE 496	Fundamentals of Engineering Preparation		0
	IPRO	IPRO Elective 2		3
	CAE 495	Senior Capstone		3
	400+ 400+	CAE, ENVE or EG Elective 2 CAE, ENVE or EG Elective 3		3
10	CAE 432	Concrete & Foundation Design		3

last updated 8/7/2024

# Wheaton College - Illinois Tech Civil Engineering

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