

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

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

Engineering Major  
General Education

### Civil Engineering

#### Fall Semester

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
	LANG.	Foreign Language	4
<i>Total</i>			17

3	MATH 333	Differential Equations	4
	PHYS 334	Computer Modeling of Physical Systems	2
	ENGR 201	Engr. Mechanics I - Statics	4
	BITH 211	Old Testament Literature	4
	SELECT	Visual & Performing Arts (1 of 2)	2
<i>Total</i>			16

5	ENGR 204	Innovative Design in Engr.	4
	ENGR 223	Strength of Materials	4
	CHEM 231	General Chemistry	4
	CORE 3xx	Advanced Seminar (with 1 Thematic Core tag)	4
<i>Total</i>			16

years 1 - 3 credit hours = 99

#### Spring Semester

Sem	Code	Name	Hrs.
2	MATH 236	Calculus II	4
	PHYS 232	Introductory Physics II	4
	ENGR 131	Engineering Graphics and CAD	4
	ENGW	Writing (0-4)	4
<i>Total</i>			16

4	MATH 237	Calculus III	4
	ENGR 202	Engineering Mechanics II - Dynamics	4
	SELECT	Thematic Core (1 of 3)	4
	BITH	New Testament Literature	4
	COMM	Oral Communication (0-2)	2
<i>Total</i>			18

6	ENGR 394	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
<i>Total</i>			16

All courses below this line are based on completion at IIT

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	
	<i>Total</i>			15

8	CAE 303	Structural Design 1	3
	CAE 307	Structural Design 2	3
	CAE312	Engineering Systems Analysis	3
	CAE 323	Introduction to Geotechnical Engineering	3
	IPRO	IPRO Elective 1	3
	400+	CAE, ENVE or EG Elective 1	3
<i>Total</i>			18

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
	<i>Total</i>		

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

years 4 - 5 credit hours = 63  
TOTAL credit hours = 162

last updated 8/21/2023

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Updated August 2023

