# 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

### **Electrical Engineering**

**Spring Semester** 

		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
			Total	17

3	MATH 333	Differential Equations	4
	PHYS 334	Computer Modeling of Physical Systems	2
	ENGR 201	Engr. Mechanics I - Statics (*CE 100+)	4
	SELECT	Thematic Core (1 of 3)	4
	SELECT	Thematic Core (2 of 3)	4
		Total	18

5	ENGR 204 CHEM 231	Innovative Design in Engr. (*CE 200+) General Chemistry I	4
	IIT CS 115	Object-Oriented Programming I	2
	SELECT	Thematic Core (3 of 3)	4
	CORE 3xx	Advanced Seminar (with 1 Thematic Core tag)	4
		Total	18
		years 1 - 3 credit hours =	102

Sem	Code	Name	Hrs.
2	MATH 236	Calculus II	4
	PHYS 232	Introductory Physics II	4
	ENGR 130	Engineering Graphics & CAD (4 - optional)	
	ENGW	Writing (0-4)	4
	BITH	Old Testament Literature	4
		Total	16

4	MATH 237 PHYS 331	Calculus III Spacetime and Quanta (*CE 300+)	4
	SELECT	Visual & Performing Arts (1 of 2)	2
	BITH COMM	New Testament Literature Oral Communication (0-2)	4
	CONIN	Oral Communication (0-2)	
		Total	16

6	IIT CS 116	Object-Oriented Programming II	2
	IIT ECE 211	Circuit Analysis 1	3
	IIT ECE 218	Digital Systems	4
	ENGR 394	Engineering Ethics Capstone	2
	BITH	Christian Thought	4
	SELECT	Visual & Performing Arts (2 of 2)	2
		Total	17

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

7	MATH 333 ECE 213	Matrix Algebra & Complex Variables Circuit Analysis 2	3 4
	ECE 242	Digital Computers & Computing	3
	IPRO	IPRO Elective 1	3
		Total	13

9	ECE 307	Electrodynamics	4
	SELECT	*Career Elective 400+	3
	ECE 400+ P	Professional ECE Elective 1	4
	ECE 400+ P	Professional ECE Elective 2	3
		Total	14

years 4 - 5 credit hours =	54
TOTAL credit hours =	156

	WATTI 074	Electrical & Computer Engineers	3
	MATH 374	Probability & Statistics for	3
	ECE 311 ECE 319	Engineering Electronics Fundamentals of Power Engineering	4
8	ECE 308	Signals & Systems	3

10	ECE 400+ P	Professional ECE Elective 3	4
	ECE 400+ P	Professional ECE Elective 4	3
	ECE 400+ P	Professional ECE Elective 5	3
	IPRO	IPRO Elective 2	3
	EXAM	Fundamentals of Engineering (Passing is not required)	
		Total	13

last updated 8/21/2023

Professional ECE Electives: At 400+ level, Total = 17-20 credit hours

<sup>\*</sup>Career Electives (CE): Advisor-approved course from engineering, science, math, computer science, business, and law at the indicated level.

## Wheaton College - Illinois Tech Electrical Engineering

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