### 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

Sem	Code	Name		Hrs.	
1	MATH 235	Calculus I		4	
	PHYS 231	Introductory Physics I		4	
	ENGR 101	Introduction to Engineering		1	
	CHEM 231	General Chemistry I		4	
	CORE 101	First Year Seminar		4	
			Total	17	

3	ENGR 334	Computer Modeling of Physical Systems		2
	CHEM 341	Organic Chemistry I		4
	SELECT	Old Testament Literature		4
	LANG	World Languages		4
	SELECT	Thematic Core (1 of 3)		4
			Total	18

5	MATH 237	Calculus III	4
	CHEM 371	Physical Chemistry I	4
	IIT CHE 202	Material Energy Balance (online option)	3
	SELECT	Christian Thought	4
	SELECT	Visual & Performing Arts (2 of 2)	2
		Total	17

years 1 - 3 credit hours = 103

### **Chemical Engineering**

### Spring Semester

Sem	Code	Name		Hrs.
2	MATH 236	Calculus II		4
	PHYS 232	Introductory Physics II		4
	CHEM 232	General Chemistry II		4
	ENGW	Writing (0-4)		4
	COMM	Oral Communication (0-2)		2
			Total	18

4	MATH 333	Differential Equations	4
	CHEM 342	Organic Chemistry II	4
	BITH	New Testament Literature	4
	SELECT	Visual & Performing Arts (1 of 2)	2
	CORE 3xx	Advanced Seminar (with Thematic Core tag)	4
		Total	18

CHEM 372	Physical Chemistry II		2
IIT CHE 301	Fluid Mechanics		3
ENGR 494	Engineering Ethics Capstone		2
SELECT	Thematic Core (2 of 3)		4
SELECT	Thematic Core (3 of 3)		4
		Total	15

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

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7	ECE 218	Digital Systems	4
	CHE 302	Heat & Mass Transfer Operations	3
	CHE 311	Foundations of Biological Science for Engineering	3
	CHE 351	Thermodynamics 1	3
	IPRO	IPRO Elective 1	3
		Total	16

CHE 418	Chemical & Biological Engineering Laboratory 2	2
CHE 423	Chemical Reaction Engineering	3
CHE 435	Process Control	3
CHE 494	Process Design 1	3
IPRO	IPRO Elective 2	3
	Tot	al 14

years 4 - 5 credit hours = 56 TOTAL credit hours = 159

	Total	14
SELECT	Technical Elective 1	3
CHE 451	Thermodynamics 2	3
CHE 433	Process Modeling & System Theory	3
CHE 317	Chemical & Biological Engineering Laboratory 1	2
CHE 239	Mathematical and Computational Methods	3

	CHE 406	Transport Phenomena		3
	CHE 496	Process Design 2		3
	SELECT	Technical Elective 2		3
	SELECT	Technical Elective 3		3
	EXAM	Fundamentals of Engineering (Passing is not required)		
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			Total	12

last updated 3/7/2024

## Wheaton College - Illinois Tech Chemical Engineering

Updated March 2024

