

Engineering Major  
General Education

Computer Engineering

Fall Semester

Spring 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	World Languages	4
Total			17

Sem	Code	Name	Hrs.
2	MATH 236	Calculus II	4
	PHYS 232	Introductory Physics II	4
	ENGR 132	Engineering Graphics & CAD (3 - optional)	
	ENGW	Writing (0-4)	4
	BITH	Old Testament Literature	4
Total			16

3	MATH 237	Calculus III	4
	PHYS 334	Computer Modeling of Physical Systems	2
	ENGR 211	Engr. Mechanics I - Statics (*CE 100+)	3
	COMM	Oral Communication (0-2)	2
	SELECT	Thematic Core (1 of 3)	4
Total			15

4	MATH 333	Differential Equations	4
	PHYS 331	Spacetime and Quanta (*CE 300+)	4
	ENGR 214	Innovative Design in Engr. (*CE 200+)	3
	BITH	New Testament Literature	4
	SELECT	Visual & Performing Arts (1 of 2)	2
Total			17

5	CHEM 231	General Chemistry I	4
	IIT CS 115	Object-Oriented Programming I	2
	CORE 3xx	Advanced Seminar (with 1 Thematic Core tag)	4
	SELECT	Thematic Core (2 of 3)	4
	SELECT	Thematic Core (3 of 3)	4
Total			18

6	IIT CS 116	Object-Oriented Programming II	2
	IIT ECE 211	Circuit Analysis 1	3
	IIT ECE 218	Digital Systems	4
	ENGR 494	Ethics Capstone	2
	BITH	Christian Thought	4
	SELECT	Visual & Performing Arts (2 of 2)	2
Total			17

years 1 - 3 credit hours = 100

All courses below this line are based on completion at IIT

7	CS 330	Discrete Structures	3
	CS 331	Data Structures & Algorithms	3
	ECE 213	Circuit Analysis 2	4
	MATH 374	Probability & Statistics for Electrical & Computer Engineers	3
Total			13

8	ECE 242	Digital Computers & Computing	3
	ECE 307,	Electrodynamics (4)	
	ECE 308, or	Signals and Systems (3)	4
	ECE 319	Fundamentals of Power Engr (4)	
	ECE 311	Engineering Electronics	4
	MATH 333 or	Matrix Algebra/Complex Variables	
MATH 350	or	3	
	Intro Computational Mathematics		
IIPRO	IIPRO Elective 1	3	
Total			17

9	CS 351	Systems Programming	3
	ECE 441	Smart and Connected Embedded System Design	4
	ECE 485	Computer Organization and Design	3
	SELECT	Computer Sys/Software Elective (3-4)	4
	ECE 400+	Professional ECE elective 1 (3-4)	4
Total			18

10	CS 450	Operating Systems	3
	ECE 429 or	Introduction to VLSI Design	
	ECE 446	Advanced Logic Design (3-4)	4
	ECE 400+	Professional ECE elective 2 (3-4)	4
	IIPRO	IIPRO Elective 2	3
EXAM	Fundamentals of Engineering (Passing is not required)		
Total			14

years 4 - 5 credit hours = 62

TOTAL credit hours = 162

last updated 3/7/2024

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

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

# Wheaton College - Illinois Tech Computer Engineering

Updated March 2024



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