

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

Computer Engineering

Fall Semester

Sem	Code	Name	Hrs.
1	MATH 231	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	4
	SELECT	Thematic Core (1 of 3)	4
	SELECT	Thematic Core (2 of 3)	4
Total			18

5	ENGR 204	Innovative Design in Engr.	4
	CHEM 231	General Chemistry I	4
	CS 115	Object-Oriented Programming I	2
	CORE 3xx	Advanced Seminar (with 1 Thematic Core tag)	4
Total			14

years 1 - 3 credit hours = 102

Spring Semester

Sem	Code	Name	Hrs.
2	MATH 232	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
	AHS 101	Wellness (0-2)	2
	Total		18

4	MATH 331	Vector Calculus	2
	PHYS 331	Spacetime and Quanta	4
	SELECT	Thematic Core (3 of 3)	4
	SELECT	Visual & Performing Arts (1 of 2)	2
	BITH	New Testament Literature	4
	COMM	Oral Communication (0-2)	2
	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 394	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	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
	SELECT	Science Elective Choose from: BIOL 105, BIOL 114, CHEM 126, OR MS 201	3
Total			16

9	CS 351	Systems Programming	3
	ECE 441	Microcomputers	4
	ECE 485	Engineering Electronics	3
	SELECT	Computer Sys/Software Elective (3 or 4)	4
	ECE 400+	Professional ECE elective 1 (3 or 4)	4
Total			18

years 4 - 5 credit hours = 65

TOTAL credit hours = 167

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

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

last updated 8/2/2021

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