Wheaton College - Illinois Tech Joint Dual-degree Program THIS PROGRAM PLAN IS FOR GUIDANCE ONLY. SEE CATALOG FOR OFFICIAL REQUIREMENTS.

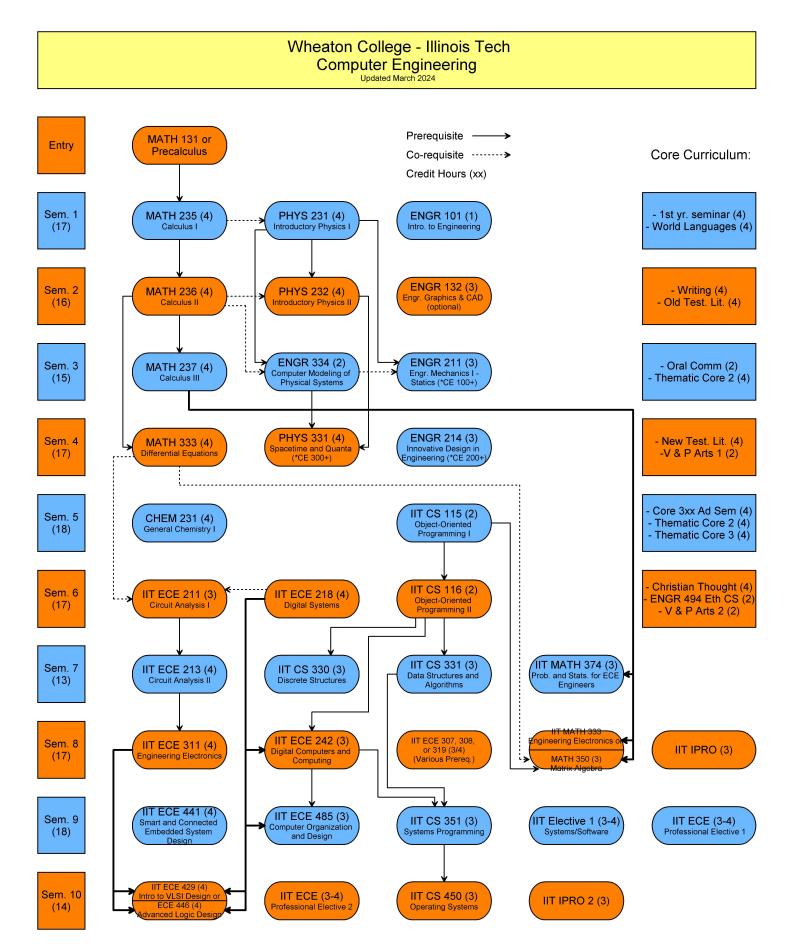
Engineering Major General Education

Computer Engineering

		Fall Semester				Spring Semester	
em	Code	Name	Hrs.	Sem	Code	Name	Hrs.
1	MATH 235	Calculus I	4	2	MATH 236	Calculus II	4
	PHYS 231	Introductory Physics I	4		PHYS 232	Introductory Physics II	4
	ENGR 101	Introduction to Engineering	1		ENGR 132	Engineering Graphics & CAD (3 - optional)	
	CORE 101	First Year Seminar	4		ENGW	Writing (0-4)	4
	LANG	World Languages	4		BITH	Old Testament Literature	4
		Total	17			Total	16
3	MATH 237	Calculus III	4	4	MATH 333	Differential Equations	4
	PHYS 334	Computer Modeling of Physical Systems	2		PHYS 331	Spacetime and Quanta (*CE 300+)	4
	ENGR 211	Engr. Mechanics I - Statics (*CE 100+)	3		ENGR 214	Innovative Design in Engr. (*CE 200+)	3
	COMM	Oral Communication (0-2)	2		BITH	New Testament Literature	4
	SELECT	Thematic Core (1 of 3)	4		SELECT	Visual & Performing Arts (1 of 2)	2
ŀ		Total	15			Total	17
5	CHEM 231	General Chemistry I	4	6	IIT CS 116	Object-Oriented Programming II	2
-	IIT CS 115	Object-Oriented Programming I	2	Ŭ	IIT ECE 211	Circuit Analysis 1	3
	CORE 3xx	Advanced Seminar (with 1 Thematic Core tag)	4		IIT ECE 218	Digital Systems	4
	SELECT	Thematic Core (2 of 3)	4		ENGR 494	Ethics Capstone	2
		Thematic Core (3 of 3)	4		BITH	Christian Thought	4
	SELECT		4		DITT		
	SELECT	memale core (3 or 3)	4		SELECT	5	2
	SELECT	Total	4			Visual & Performing Arts (2 of 2) Total	
	SELECT					Visual & Performing Arts (2 of 2)	
	SELECI	Total years 1 - 3 credit hours =	18 100	e are based on o		Visual & Performing Arts (2 of 2)	
, [CS 330	Total years 1 - 3 credit hours =	18 100	e are based on o	SELECT	Visual & Performing Arts (2 of 2) Total	
,		Total years 1 - 3 credit hours = All courses belo	18 100 w this lin		SELECT	Visual & Performing Arts (2 of 2)	17
,		Total years 1 - 3 credit hours = All courses belo	18 100 w this lin		SELECT completion at IIT ECE 242	Visual & Performing Arts (2 of 2) Total Digital Computers & Computing	17
7	CS 330	Total years 1 - 3 credit hours = All courses belo Discrete Structures	18 100 w this lin 3		SELECT completion at IIT ECE 242 ECE 307, ECE 308, or	Visual & Performing Arts (2 of 2) Total Digital Computers & Computing Electrodynamics (4) Signals and Systems (3)	3
7	CS 330 CS 331	Total years 1 - 3 credit hours = All courses belo Discrete Structures Data Structures & Algorithms	18 100 w this lin 3 3		SELECT completion at IIT ECE 242 ECE 307, ECE 308, or ECE 319	Visual & Performing Arts (2 of 2) Total Digital Computers & Computing Electrodynamics (4) Signals and Systems (3) Fundamentals of Power Engr (4) Engineering Electronics Matrix Algebra/Complex Variables or	17 3 4
7	CS 330 CS 331 ECE 213	Total years 1 - 3 credit hours = All courses belo Discrete Structures Data Structures & Algorithms Circuit Analysis 2 Probability & Statistics for Electrical &	18 100 www.this.lin 3 3 4		SELECT completion at IIT ECE 242 ECE 307, ECE 308, or ECE 319 ECE 311 MATH 333 or	Visual & Performing Arts (2 of 2) Total Digital Computers & Computing Electrodynamics (4) Signals and Systems (3) Fundamentals of Power Engr (4) Engineering Electronics	17 3 4 4
,	CS 330 CS 331 ECE 213	Total years 1 - 3 credit hours = All courses belo Discrete Structures Data Structures & Algorithms Circuit Analysis 2 Probability & Statistics for Electrical &	18 100 www.this.lin 3 3 4		SELECT completion at IIT ECE 242 ECE 307, ECE 308, or ECE 319 ECE 311 MATH 333 or MATH 350	Visual & Performing Arts (2 of 2) Total Digital Computers & Computing Electrodynamics (4) Signals and Systems (3) Fundamentals of Power Engr (4) Engineering Electronics Matrix Algebra/Complex Variables or Intro Computational Mathematics	177 3 4 4 3 3
	CS 330 CS 331 ECE 213 MATH 374	Total years 1 - 3 credit hours = All courses belo Discrete Structures Data Structures & Algorithms Circuit Analysis 2 Probability & Statistics for Electrical & Computer Engineers	18 100 www.this.lin 3 3 4 3 4 3	8	SELECT completion at IIT ECE 242 ECE 307, ECE 308, or ECE 319 ECE 311 MATH 333 or MATH 350 IPRO	Visual & Performing Arts (2 of 2) Total Digital Computers & Computing Electrodynamics (4) Signals and Systems (3) Fundamentals of Power Engr (4) Engineering Electronics Matrix Algebra/Complex Variables or Intro Computational Mathematics IPRO Elective 1 Total	177 3 4 4 3 3 177
	CS 330 CS 331 ECE 213 MATH 374 CS 351	Total years 1 - 3 credit hours = All courses belo Discrete Structures Data Structures & Algorithms Circuit Analysis 2 Probability & Statistics for Electrical & Computer Engineers Total Systems Programming	18 100 www.this.lin 3 4 3 4 3 13 3		SELECT completion at IIT ECE 242 ECE 307, ECE 308, or ECE 319 ECE 311 MATH 333 or MATH 350 IPRO	Visual & Performing Arts (2 of 2) Total Digital Computers & Computing Electrodynamics (4) Signals and Systems (3) Fundamentals of Power Engr (4) Engineering Electronics Matrix Algebra/Complex Variables or Intro Computational Mathematics IPRO Elective 1 Total Operating Systems	177 3 4 4 3 3 177 3
	CS 330 CS 331 ECE 213 MATH 374	Total years 1 - 3 credit hours = All courses belo Discrete Structures Data Structures & Algorithms Circuit Analysis 2 Probability & Statistics for Electrical & Computer Engineers	18 100 www.this.lin 3 3 4 3 4 3	8	SELECT completion at IIT ECE 242 ECE 307, ECE 308, or ECE 319 ECE 311 MATH 333 or MATH 350 IPRO	Visual & Performing Arts (2 of 2) Total Digital Computers & Computing Electrodynamics (4) Signals and Systems (3) Fundamentals of Power Engr (4) Engineering Electronics Matrix Algebra/Complex Variables or Intro Computational Mathematics IPRO Elective 1 Total	177 3 4 4 3 3 177
	CS 330 CS 331 ECE 213 MATH 374 CS 351	Total years 1 - 3 credit hours = All courses belo Discrete Structures Data Structures & Algorithms Circuit Analysis 2 Probability & Statistics for Electrical & Computer Engineers Total Systems Programming Smart and Connected Embedded	18 100 www.this.lin 3 4 3 4 3 13 3	8	SELECT completion at IIT ECE 242 ECE 307, ECE 308, or ECE 319 ECE 311 MATH 333 or MATH 350 IPRO CS 450 ECE 429 or	Visual & Performing Arts (2 of 2) Total Digital Computers & Computing Electrodynamics (4) Signals and Systems (3) Fundamentals of Power Engr (4) Engineering Electronics Matrix Algebra/Complex Variables or Intro Computational Mathematics IPRO Elective 1 Total Operating Systems Introduction to VLSI Design	177 3 4 4 3 3 177 3
9	CS 330 CS 331 ECE 213 MATH 374 CS 351 ECE 441	Total years 1 - 3 credit hours = All courses belo Discrete Structures Data Structures & Algorithms Circuit Analysis 2 Probability & Statistics for Electrical & Computer Engineers Total Systems Programming Smart and Connected Embedded System Design	18 100 w this lin 3 4 3 4 3 13 4 3 4	8	SELECT Completion at IIT ECE 242 ECE 307, ECE 308, or ECE 319 ECE 311 MATH 333 or MATH 350 IPRO CS 450 ECE 429 or ECE 446	Visual & Performing Arts (2 of 2) Total Digital Computers & Computing Electrodynamics (4) Signals and Systems (3) Fundamentals of Power Engr (4) Engineering Electronics Matrix Algebra/Complex Variables or Intro Computational Mathematics IPRO Elective 1 Total Operating Systems Introduction to VLSI Design Advanced Logic Design (3-4)	177 3 4 4 3 3 177 3 4
	CS 330 CS 331 ECE 213 MATH 374 CS 351 ECE 441 ECE 485	Total years 1 - 3 credit hours = All courses below Discrete Structures Data Structures & Algorithms Circuit Analysis 2 Probability & Statistics for Electrical & Computer Engineers Total Systems Programming Smart and Connected Embedded System Design Computer Organization and Design	18 100 w this lin 3 3 4 3 4 3 13 3 4 3 4 3	8	SELECT Completion at IIT ECE 242 ECE 307, ECE 308, or ECE 319 ECE 311 MATH 333 or MATH 350 IPRO CS 450 ECE 429 or ECE 429 or ECE 446 ECE 400+	Visual & Performing Arts (2 of 2) Total Total Digital Computers & Computing Electrodynamics (4) Signals and Systems (3) Fundamentals of Power Engr (4) Engineering Electronics Matrix Algebra/Complex Variables or Intro Computational Mathematics IPRO Elective 1 Total Operating Systems Introduction to VLSI Design Advanced Logic Design (3-4) Professional ECE elective 2 (3-4)	17 3 4 4 3 3 3 17 3 4 4
	CS 330 CS 331 ECE 213 MATH 374 CS 351 ECE 441 ECE 485 SELECT	Total years 1 - 3 credit hours = All courses below Discrete Structures Data Structures & Algorithms Circuit Analysis 2 Probability & Statistics for Electrical & Computer Engineers Total Systems Programming Smart and Connected Embedded System Design Computer Organization and Design Computer Sys/Software Elective (3-4)	18 100 w this lin 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4	8	SELECT Completion at IIT ECE 242 ECE 307, ECE 308, or ECE 319 ECE 311 MATH 333 or MATH 350 IPRO CS 450 ECE 429 or ECE 446 ECE 400+ IPRO	Visual & Performing Arts (2 of 2) Total Digital Computers & Computing Electrodynamics (4) Signals and Systems (3) Fundamentals of Power Engr (4) Engineering Electronics Matrix Algebra/Complex Variables or Intro Computational Mathematics IPRO Elective 1 Total Operating Systems Introduction to VLSI Design Advanced Logic Design (3-4) Professional ECE elective 2 (3-4) IPRO Elective 2 Fundamentals of Engineering	17 3 4 4 3 3 3 17 3 4 4 4

*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



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