Wheaton College 4-year General Engineering Plan

THIS PROGRAM PLAN IS FOR GUIDANCE ONLY. GRADUATION REQUIREMENTS ARE FOUND IN CATALOGS.

54 CATC (3x 2 tags), 30 math & science, 45 ENGR

Engineering Core

Engineering Concentration

Supporting Science & Math

CATC

Distributed Concentration

Fall Semester

Sem	Code	Name	Hrs.
1	MATH 235	Calculus I (AAQR)	4
	PHYS 231	Introductory Physics I (SP)	4
	ENGR 101	Introduction to Engineering	1
	CORE 101	First Year Seminar	4
	ENGW 103	Writing (0-4)	4
		Total	17
3	MATH 237	Calculus III	4
	ENGR 211	Engr. Mechanics I - Statics w lab	3
	ENGR 334	Comp. Modeling of Phys. Syst.	2
	ENGR 351	Analog Electronics w lab	2
	LANG	Language Core Competency I	4
		Total	15
5	CHEM 231	General Chemistry I	4
	ENGR 313	Mechanics of Materials w lab	3
	Concentration	Concentration Course 1	3
	Concentration	Concentration Course 2	3
	LANG	Language Core Competency III	4
		Total	17
7	Elective	Math & Science Elective*	2
	ENGR 451	Senior Design I	4
	Concentration	Concentration Course 5	3
	BITH 315	Christian Thought	4
	SELECT	Visual & Performing Art (2 of 2)	2
		Total	15

Spring Semester

Sem	Code	Name	Hrs.
2	MATH 236	Calculus II	4
	PHYS 232	Introductory Physics II	4
	ENGR 132	Engineering Graphics and CAD	3
	COMM 101	Oral Communication (0-2)	2
	BITH 211	Old Testament Literature	4
		Total	17
4	MATH 333	Differential Equations	4
	ENGR 212	Engr. Mechanics II - Dynamics w lab	3
	ENGR 214	Innovative Design in Engr.	3
	LANG	Language Core Competency II	4
	SELECT	Visual & Performing Art (1 of 2)	2
		Total	16
6	ENGR 302	Engineering Systems Analysis	2
	Concentration	Concentration Course 3	3
	Concentration	Concentration Course 4	3
	SELECT	Thematic Core (1 of 3) (2 tags)	4
	BITH 213	New Testament Literature	4
		Total	16
8	ENGR 452	Senior Design II	2
	ENGR 494	Engineering Ethics Capstone	2
		Apply for FE Exam	0
	CORE 3xx	Advanced Int. Seminar (1 tag)	4
	SELECT	Thematic Core (2 of 3) (2 tags)	4
	SELECT	Thematic Core (3 of 3) (2 tags)	4
		Total	16

Total Credit Hours 129

Avg. per semester 16.125

revised: 3/7/2024

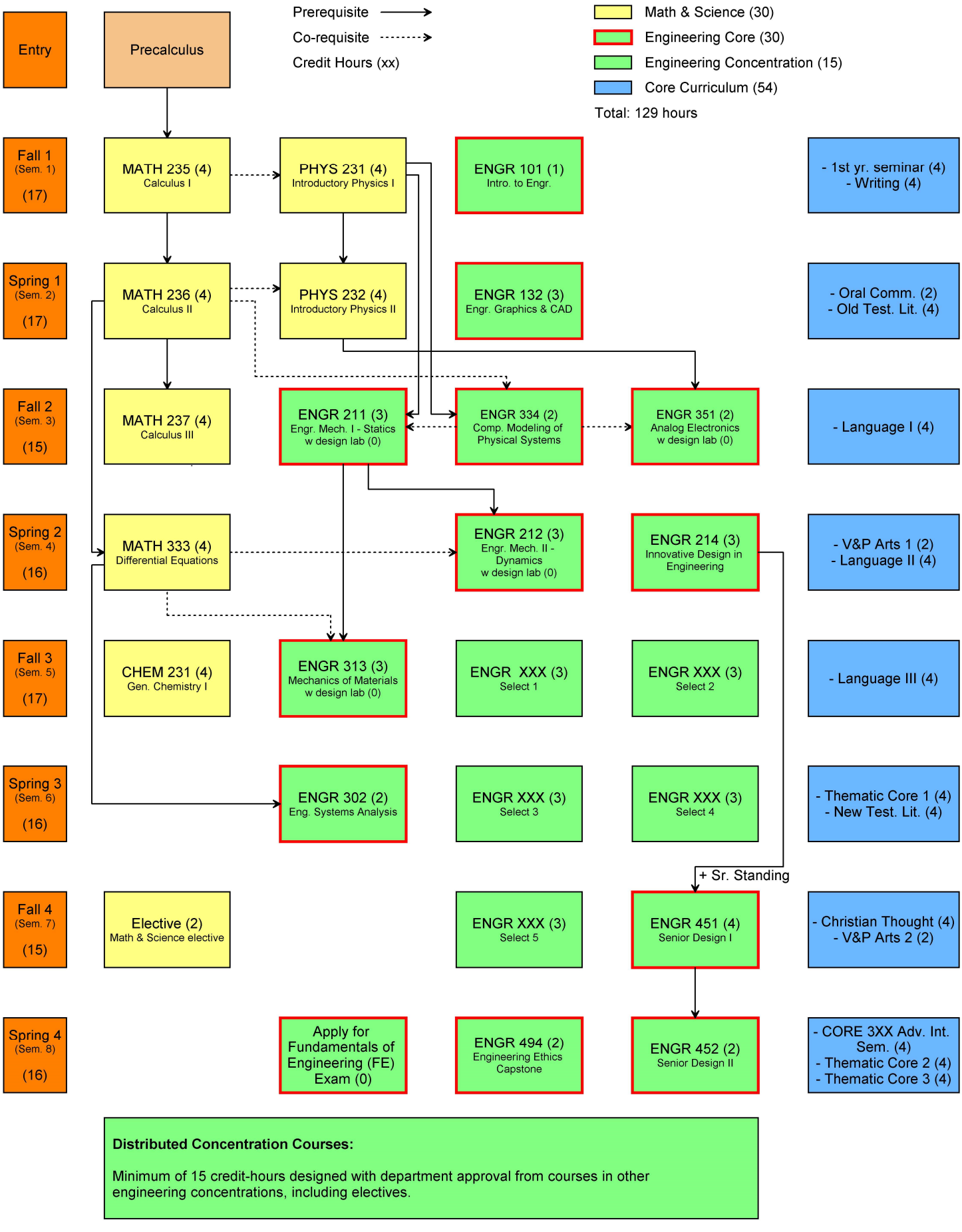
Minimum 15 Credit-hour concentration designed with department approval from courses in other engineering concentrations. Course options currently include:

ENGR 235	Materials Science & Engr.	3
ENGR 323	Design of Machine Elements	2
ENGR 325	Solid Mechanics	2
ENGR 333	Mechatronics	4
ENGR 336	Fluid Mechanics	3
ENGR 338	Thermodynamics & Heat Transfer	3
ENGR 352	Fund. Of Environmental Engr.	3
ENGR 354	Water Resources Engineering	3
ENGR 356	Structural Analysis and Design	3
ENGR 358	Groundwater Hydrology and Well Hydraulics	2
ENGR 359	Geotechnical Engineering	2
ENGR 371	Biomaterials	3
ENGR 372	Cell and Tissue Engineering	3
ENGR 373	Biomechanics	3
ENGR 374	Biomedical Device Design	3
ENGR 375	Biomedical Imaging	3
ENGR 495	Independent Study	1-4

* The Math and Science elective may come from ENGR 271 or courses with prefixes ASTR, BIOL, CHEM, ENVR, GEOL, MATH, and PHYS that are approved by the Physics & Engineering department. Check with your advisor to determine course availability.

Wheaton College Engineering
Distributed Concentration

Updated March 7, 2024



Distributed Concentration Courses:

Minimum of 15 credit-hours designed with department approval from courses in other engineering concentrations, including electives.