



CARROLL COLLEGE
B.S. Engineering Science
4-Year Plan for Admission in 2017-2018

Freshman

<u>Fall</u>		<u>Spring</u>	
ENGR/PHYS 155 Robotics	3	ENGR 104 Computer Aided Design (CAD)	3
ENGR 105 Intro to Engineering	1	CHEM 111 Essentials of Chemistry	4
BI 102 Human Biology – <i>CORE</i>	4	MA 131 Single Variable Calculus	4
MA 141 Intro to Math Modeling - <i>CORE</i>	4	TH 101 Theology - <i>CORE</i>	3
LAS 101 Alpha Seminar - <i>CORE</i>	<u>3</u>	CO 101 Communications - <i>CORE</i>	<u>3</u>
	15(4)		17(3)

Sophomore

MA 233 Multivariable Calculus	4	ENGR 302 Engr Mechs I: Statics	3
PHYS 205 Engineering Physics I	4	MA 334 Diff Eqs & Linear Algebra II	4
ENWR 102 College Composition - <i>CORE</i>	4	PHYS 206 Engineering Physics II	4
<i>CORE (History)</i>	<u>3</u>	EC 203 Project Management Econ - <i>CORE</i>	3
	15(0)	<i>CORE (Social Science)</i>	<u>3</u>
			17(3)

Junior

ENGR 307 Fluid Mechanics (<i>WI</i>)	3	ENGR 311 Matrix Methods for Structures	1
ENGR 305 Circuits Analysis I	4	ENGR 310 Structures I	3
ENGR 304 Dynamics	3	<i>ENGR Elective (required)</i>	3
ENGR 303 Engr Mech II: Solids	3	<i>ENGR Elective (required)</i>	2-3
PHIL 207 Business Ethics* - <i>CORE</i>	<u>3</u>	<i>CORE (Literature)</i>	3
	16 (13)	<i>CORE (Theology)</i>	<u>3</u>
			15-16(9-10)

Senior

ENGR 411 Senior Design Project I	2	<i>ENGR Elective (required)</i>	3
ENGR 401 Hydraulics	3	ENGR 412 Senior Design Project II	2
ENGR 325 Hydrogeology	3	ENGR/PHYS 342 Thermal Physics	3
MA 314 Prob & Stats for Engineers	2	<i>Free Elective (required)</i>	3
<i>CORE (Philosophy)</i>	<u>3</u>	<i>CORE (Fine Arts)</i>	<u>3</u>
	13(8)		14(8)

Students in this major are encouraged to use the required electives, and possibly additional optional electives, to customize a curriculum that will satisfy their own personal interests and will help them to achieve their own personal educational goals.

122-123 Total Credits (48-49 Engineering Credits)

Notes:

*PHIL 207 is preferred but any philosophy course in ethics is acceptable.

EC 203 fulfills 3 of the 6 required CORE credits in the social sciences.

The CORE requirements are that each student shall have a Global Diversity (GD) course or experience and a National Diversity (ND) course or experience. In addition, each student must complete two Writing Intensive (WI) courses while at Carroll, one inside the major and the other outside the major. These may be met by courses the student is taking to fulfill other CORE requirements. This four-year plan assumes that GD, ND, and WI requirements will be met with courses that also fulfill other CORE requirements.