

SEMESTER 1

GE 100 Fundamentals of Engineering	3 Cr.
GE 199 Engineering Seminar	0 Cr.
CORE 110 The Human Experience	5 Cr.
MATH 131 Analytic Geom. & Calc. I	4 Cr.
PHYS 141 Mechanics and Heat	3 Cr.
PHYS 141L Experimental Physics I	1 Cr.

SEMESTER 2

ECE 110 Exploring ECE	2 Cr.
ECE 111 Exploring ECE Lab	1 Cr.
CORE 115 The Human Experience	5 Cr.
MATH 132 Analytic Geom. & Calc. II	4 Cr.
PHYS 142 Elec., Mag., & Waves	3 Cr.
PE 100 Healthy Lifestyles	1 Cr.

SEMESTER 3

ECE 200 Comp. Tech. for ECE I	2 Cr.
ECE 221 Digital Logic Design	3 Cr.
ECE 250 Fund. of Programming	3 Cr.
ECE 261 Linear Circuit Theory I	3 Cr.
MATH 234 Diff. Eq. & Lin. Algebra	4 Cr.
THEO 200 The Christian Tradition	3 Cr.

SEMESTER 4

ECE 201 Comp. Tech. for ECE II	2 Cr.
ECE 222 Advanced Logic Design	3 Cr.
ECE 262 Linear Circuit Theory II	3 Cr.
MATH 253 Calculus III	4 Cr.
Humanities, Soc. Science, Theo. Elective	3 Cr.

SEMESTER 5

ECE 340 Electronics I	3 Cr.
ECE 360 Signals and Systems	3 Cr.
Electrical Engineering Elective	3 Cr.
Mathematics/Science Elective	3 Cr.
Humanities, Soc. Science, Theo. Elective	3 Cr.

SEMESTER 6

ECE 322 Embedded Microcontrollers	3 Cr.
ECE 341 Electronics II	3 Cr.
ECE 365 Prob. & Statistics For ECE	3 Cr.
GE 301 Fin. & Ethical Decisions in Engr.	3 Cr.
Electrical Engineering Elective	3 Cr.
Foreign Lang. /Diversity Elective	3 Cr.

SEMESTER 7

ECE 430 Electromagnetic Field Theory	3 Cr.
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GE 497 Senior Design Project I	3 Cr.
Electrical Engineering Elective	3 Cr.
Mathematics/Science Elective	3 Cr.
Professional Elective	3 Cr.

SEMESTER 8

ECE 453 Communication Systems	3 Cr.
GE 498 Senior Design Project II	2 Cr.
Electrical Engineering Elective	3 Cr.
Mathematics/Science Elective	3 Cr.
Professional Elective	3 Cr.
Free Elective	3 Cr.

Total credits required for graduation = 130 Cr.

Electrical Engineering Electives: Twelve (12) credits must be taken by completing four (4) of the following eight (8) courses: ECE 424, ECE 429, ECE 450, ECE 452, ECE 460, ECE 471, or ECE 472. At least two (2) of these courses must be selected from among the core electrical engineering electives: ECE 452, ECE 460, ECE 471, or ECE 472.

Math/Science Elective: These requirements may be met by taking three (3) of the following courses: ASTR 252, BIO 151, BIO 152, BIO 171, BIO 172, BIO 210, BIO 260, or BIO 270; Any CHEM course numbered 115 and above; Any MATH course numbered 264 and above; ECE 357; PHYS 142L, PHYS 243, PHYS 245, PHYS 250, PHYS 360, PHYS 371, PHYS 372, PHYS 381, PHYS 421, PHYS 422, PHYS 430, PHYS 430L, or PHYS 440. Other choices may be made available by petition to the ECE Department.

Professional Electives: These courses are selected, in consultation with the advisor, to support the student's specific career goals.

College of Engineering - Valparaiso University
Cooperative Education: Students may request that up to six (6) credits of GE 481 through GE 483 be used to satisfy the Professional Elective, if a minimum of six (6) credits of cooperative education have been completed.