

Winona State University
Four Year Map
General Engineering Electronics Concentration (GENE)

Fall Year 1			Spring Year 1		
Course	Requirement Met	SH	Course	Requirement Met	SH
Chemistry 212, Principles of Chemistry I	GE Goal 3/Major	4	Chemistry 213, Principles of Chemistry II	GE Goal 3/Major	4
Math 212, Calculus 1	GE Goal 4/Major	4	Math 213, Calculus 2	GE Goal 4/Major	4
English 111, College Rdg/Wrt	GE Goal 1	4	Communication Studies 191	GE Goal 1	3
CME 102, Introduction to Engineering	Major	2	Physics 221, University Physics 1	GE Goal 3/Major	4
General Education Elective	GE Goal 5/6/7/8/9/10	3	Physics 231, University Physics 1B	Major	1
OR 100 Intro to Higher Education	GE	1	CME 182, Engineering Graphics and Design	Major	2
Notes: If ready, take Math 212 instead of Math 120			Notes:		
		Total SH			Total SH
		18			18
Fall Year 2			Spring Year 2		
Course	Requirement Met	SH	Course	Requirement Met	SH
Math 312, Multivariable Calculus	Major/CAI	4	Math 313, Differential Equations	Major	4
Physics 222, University Physics 2	GE Goal 3/Major	4	General Education Elective	GE Goal 5/6/7/8/9/10	3
Physics 232, University Physics 2B	Major	1	CME 260, Mechanics of Materials	Major	3
Computer Science 234, Algorithms and Pro	Major	4	Physics 328, Electrical Circuits and Measure	Major	4
CME 250, Statics	Major	3	Physics 340, Modern Physics	Major/WI	4
Notes:			Notes: Apply for admission to		
		Total SH	Engineering after completing Math 312		Total SH
		16			18
Fall Year 3			Spring Year 3		
Course	Requirement Met	SH	Course	Requirement Met	SH
Physics 320, Computational Physics	Major	2	Physics 321, Computerized Data Acquisition	Major	2
Physics 330, Electronics	Major/WI	4	CME 280 + 281, Properties of Materials	Major/WI	4
Physics 430, Electricity and Magnetism 1	Major/CAI	3	General Education Elective	GE Goal 5/6/7/8/9/10	3
General Education Elective	GE Goal 5/6/7/8/9/10	3	General Education Elective	GE Goal 5/6/7/8/9/10	3
GENE elective	Major E	3	GENE elective	Major E	3
Notes:			Notes: If you haven't yet, talk to advisor		
		Total SH	about post graduation plans		Total SH
		15			15
Fall Year 4			Spring Year 4		
Course	Requirement Met	SH	Course	Requirement Met	SH
Physics 455, Engineering Design	Major/OI	2	Physics 455, Engineering Design	Major/OI	2
Stat 303, Engineering Statistics	Major	3	CME 491B, Engineering Seminar	Major/OI	1
CME 491A, Engineering Seminar	Major	0	CME 270, Dynamics or Physics 345, Thermodynamics	Major	4
CME 300, Thermo or Physics 350, Mechanics	Major	4	Physics 333, Microprocessor	Major	3
Physics 332, Digital Circuits	Major	3	Physics 420, Control Theory	Major	3
General Education Elective	GE Goal 5/6/7/8/9/10	3			
Notes: Can take CME 300 and then CME 270 in Spring; or Phys 350 and Phys 345 in spring			Notes: Apply for graduation		
		Total SH			Total SH
		15			13