

EE Curriculum Map--January 18, 2001																										
Freshman Year and Electives																										
(1/18/01)																										
Goal	Freshman Yr							Circuits/Electronics			Computer Eng			Signals/Systems				Fields/Waves/Optics				Co-o				
	GE1103	GE1102	GE1101	GE1001/1002	PHYS	MTH	ENG	CHEM	ECE1343/124	ECE1344	ECE1351/123	ECE1381	ECE1384	ECE1386	ECE1332	ECE1420/123	ECE1456/123	ECE1458	ECE1486	ECE1366	ECE1463	ECE1464	ECE1466	ECE1471	COP1010	
1.1 Formulate and solve EE problems	HE	H	HE						HE	HE	HE		EH	R	RH	HE	HER	HE	HE	HE	HE	HE	HE	HE	HE	
1.2 Laboratory and computing tools	HE	H	HE						HE	R	RH		EH	R	RH		HER	HR	R	H		H	HE	RH	H	S
1.3 Design/conduct experiments, analyze data	HR		HE						H		RH		R			R		R	H							S
1.4 Design systems, components, or processes	HERPV		HE						H	RH	RH		H	RE	RH	HE	HR	HR	H	H			H	RH	H	S
2.1 Understand/apply mathematics																										
2.1.1 Differential Calculus			H			HE			HE	HER	HR					HE	HE		H	HE				HER	HE	
2.1.2 Integral Calculus			H			HE			HE		H					HE	C		H	HE		H	H	HER	HE	
2.1.3 Complex algebra/analysis			H			HE?				H	HR					HE	HE	HE		HE		H	H	HER	HE	
2.1.4 Differential/Difference Equations		H	H			HE?										HE	HE	HE		HE				C	HE	
2.1.5 Linear Algebra		H							H	H				H		HE			HE				H	H	HE	
2.1.6 Multivariate Calculus									C	C						HE					R?			C		
2.1.7 Probability/Stochastic Processes			HE															H						HE		
2.2 Understand/apply physics	HR		HE													HE										
2.2.1 Solid-state physics						HE?			C		HE							H						HE		
2.2.2 Electricity & Magnetism						HE			C	HE	HE											C	C	HER	HE	
2.3 Apply knowledge of programming																										
2.3.1 Flow-charting/program design			HE								HR		H	R	RH				H	R?	H	H	HR			S
2.3.2 Language syntax/debugging	HE	H	HE						HR	HR	HR		H	RE	RH		HR	H		H	R?	H	H	HR		S
2.3.3 Output analysis		H	HE						H	R	R		R	RH		H			H	R?	H	H	H			S
2.4 Connect EE subfields									HEC	HE	HRE		H			HE	HR	HE	H	HE		H	HE	HE	HE	S
2.5 Information sources/literacy	HR		HE						C	RC	R		H		H			C	H	H				R	H	S
2.6 Connection between theory and application	HER								C	HE	HRE		R	RH		HE	HER	R	H	HE				HE	HE	S
2.7 Connection between classroom and work/co-op	C		C						R	HE	HR		EH		H	E								HE	HE	S
3.1 Effective written communication	H	H	H			P?			R	RV	RP		R	RH		ER	RV	R						RV	H	S
3.2 Effective oral communications	H								C				R	R				R						R	C	S
3.3 Analyze information/compare alternatives	HR		H			P?			HR	R	HR		R	RH		R		R	H					H		S
3.4 Multidisciplinary teams									C					R				R	R	C						S
4.1 Professional/ethical issues	C		C										C		C										HE	S
4.2 Lifelong learning	C		C																							S
4.3 Career management														H										C		S
5.1 Social/cultural context of engineering																										S
5.2 Historical/contemporary issues of EE		H	C						C		C		EH	C	C	C	C	R						C	C	S
5.3 Esthetics in engineering	H		H						C		C		EH	C	H				C						HE	
5.4 Esthetics in written/oral expression	H	H	H			P?			R	R	RHP			R				R						HER		
<b>Assessment mechanism:</b>	<b>E</b>	Exams							<b>O</b>	Oral report/discussion																
	<b>H</b>	Homework							<b>S</b>	Self-assessed (Student Survey)																
	<b>R</b>	Reports							<b>TBA</b>	To be assessed																
	<b>P</b>	Papers							<b>?</b>	No Course Charter																
	<b>V</b>	Revision							<b>C</b>	Classroom only																