

# Electrical Engineering

## University of North Dakota

### BSEE Status Sheet – Computer Science Focus

Transferred from:

Started UND (Sem/Yr):

NAME:

ID #:

ADVISOR:

#### Fall - Year 1

ES				Credits	Grade	Sem/Yr
L&Q	Chem	121	General Chemistry I	3		
	Chem	121L	General Chemistry I Lab	1		
	Csci	130	Intro. to Scientific Programming	4		
ot	Csci	160	Computer Science I			
	EE	101	Intro to EE <sup>1</sup>	1		
	Engl	110	College Composition I	3		
	Math	165	Calculus I	4		
			Humanities Elective (A&H) <sup>2,3</sup>	3		
				19		

#### Spring -Year 1

ES				Credits	Grade	Sem/Yr
	CSci	161	Computer Science II	4		
	EE	201	Intro to Digital Electronics	2		
	EE	202	EE Laboratory	1		
	Engr	201	Statics	3		
	Math	166	Calculus II	4		
	Phys	251/251L	University Physics I/Lab	4		
				18		

#### Fall - Year 2

	EE	206	Circuit Analysis	3		
	EE	304	Computer Aided Meas & Contr	3		
	EE	306	Circuits Laboratory I	1		
	Engl	130	College Composition II	3		
	Math	208	Discrete Mathematics	3		
	Math	265	Calculus III	4		
				17		

#### Spring - Year 2

	EE	307	Circuits Laboratory II	1		
	EE	313	Linear Electric Circuits	3		
	Engr	460	Engineering Economics (SS) <sup>2,3</sup>	3		
	CSci	230	Systems Programming	3		
	Math	266	Elem Differential Equations	3		
	Phys	252/252L	University Physics II/Lab	4		
				17		

#### Fall - Year 3

	EE	308	Junior Laboratory I	2		
	EE	314	Signals and Systems	3		
	EE	316	Electric & Magnetic Fields	3		
	EE	318	Engineering Data Analysis	3		
	EE	321	Electronics I	3		
	EE	451	Computer Hardware Organization	3		
				17		

#### Spring - Year 3

	EE	309	Junior Laboratory II	2		
	EE	405	Control Systems	3		
	EE	409	Distributed Networks	3		
	EE	421	Electronics II	3		
	EE	452	Embedded Systems	3		
			Social Sciences Elective (SS) <sup>2,3</sup>	3		
				17		

#### Fall - Year 4

			Computer Science Elective <sup>6</sup>	3		
	CSci					
A&C	EE	480	Senior Design I <sup>5</sup>	3		
			Electrical Engineering Elective <sup>7</sup>	3		
	Math	207	Introduction to Linear Algebra	2		
			Engineering Science Elective <sup>8</sup>	3		
			Fine Arts Elective (A&H) <sup>2,3</sup>	3		
				17		

#### Spring - Year 4

			Computer Science Elective <sup>6</sup>	3		
	CSci					
O	EE	481	Senior Design II <sup>5</sup>	3		
			A&H or SS Elective <sup>2,3</sup>	3		
			Ethics Elective (A&H or SS) <sup>2,3,9</sup>	3		
			Technical Elective <sup>7,10</sup>	3		
				15		

**Total Credits: 137**

## BSEE Status Sheet – Computer Science Focus

1	May be waived for transfer students (substitute science credit required).
2	To meet the University's Essential Studies Breadth of Knowledge requirements, all students must complete 9 credits of Arts & Humanities Electives (minimum of 2 departments, including 3 Fine Arts credits and 3 Humanities credits) and 9 credits of Social Sciences Electives (minimum of 2 departments). Refer to the online Academic Catalog for a listing of acceptable Essential Studies courses.
3	To meet the University's Essential Studies Social-Cultural Diversity requirements, all students must complete 3 credits of Global (G) Diversity Electives and 3 credits of United States (U) Diversity Electives. Refer to the online Academic Catalog for a listing of acceptable Essential Studies G and U Diversity Electives.
4	EE 480 Senior Design I meets the Essential Studies Special Emphasis requirements for Advanced Communication (A) and Senior Capstone (C).
5	EE 481 Senior Design II meets the Essential Studies Special Emphasis requirement for Oral Communication (O).
6	Computer Science Elective choices: Any Computer Science course, 300 level or higher. A maximum of three credits of CSci 260 Advanced Programming.
7	Maximum of three credits of EE 490 Advanced EE Problems allowed as an independent study, applicable to both EE and Technical Electives.
8	Engineering Science Elective choices: Engr 202 Dynamics, Engr 203 Mechanics of Materials, ME 301 Materials Science, ME/CE 306 Fluid Mechanics, and ME 341 Thermodynamics.
9	The Ethics Elective is a 3-credit course that meets Essential Studies requirements in either the Arts & Humanities or the Social Sciences. Ethics Elective choices: Phil 250 Ethics in Engineering & Science (A&H, Humanities), ChE 340 The Role of Engineers and Applied Scientists in a Global Society (SS), and ME 370 Engineering Disasters & Ethics (SS).
10	Technical Elective choices: Computer Science, Engineering (including EE), Math, and Physics courses approved by advisor, normally 300 level or higher. Math 308 History of Math and Math 321 Applied Statistical Methods do not meet the Technical Elective requirement. CSci 242 Algorithms and Data Structures, CSci 260 Advanced Programming Languages, and Math 208 Discrete Mathematics are permitted. 2 credits of EE 397 Cooperative Education (40 hours/week) can be applied toward 3 credits of the Technical Electives with S/U grading, maximum 4 credits of EE 397 is equivalent to maximum of 6 credits of Technical Elective.

**Fall 2015 Revised**