

Electrical Engineering University of North Dakota BSEE Status Sheet – Biomedical Engineering Focus	Transferred from: Started UND (Sem/Yr):
---	--

NAME:	ID #:	ADVISOR:
-------	-------	----------

Fall - Year 1

ES				Credits	Grade	Sem/Yr
Biol	150/150L	General Biology I		4		
L&Q Chem	121	General Chemistry I		3		
L&Q Chem	121L	General Chemistry I Lab		1		
EE	101	Intro to EE ¹		1		
Engl	110	College Composition I		3		
Math	165	Calculus I		4		
				16		

Spring -Year 1

ES				Credits	Grade	Sem/Yr
Biol	151/151L	General Biology II		4		
EE	201	Intro to Digital Electronics		2		
EE	202	EE Laboratory		1		
EE	304	Computer Aided Meas & Contr		3		
Math	166	Calculus II		4		
Phys	251	University Physics I		4		
				18		

Fall - Year 2

EE	206	Circuit Analysis		3		
EE	306	Circuits Laboratory I		1		
Engl	130	College Composition II		3		
Math	265	Calculus III		4		
Phys	252	University Physics II		4		
				15		

Spring - Year 2

Anat	204	Anatomy for Paramedical Pers		3		
EE	307	Circuits Laboratory II		1		
EE	313	Linear Electric Circuits		3		
EE	318	Engineering Data Analysis		3		
Engr	460	Engineering Economics (SS) ²		3		
Math	266	Elem Differential Equations		3		
				16		

Fall - Year 3

EE	308	Electronics Lab I		1		
EE	314/314L	Signals and Systems & Lab		4		
EE	316	Electric & Magnetic Fields		3		
EE	321	Electronics I		3		
Psyc or Soc	111	Introduction to Psychology (SS)		3		
	110	Introduction to Sociology (SS) ^{2,3}				
PPT	301	Human Physiology		4		
				18		

Spring - Year 3

EE	309	Electronics Lab II		1		
EE	405/405L	Control Systems & Lab		4		
EE	409	Distributed Networks		3		
EE	421	Electronics II		3		
EE	452/452L	Embedded Systems & Lab		4		
				15		

Fall - Year 4

A&C EE	480	Senior Design I ⁵		3		
		Electrical Engineering Elective ⁷		3		
		Electrical Engineering Elective ⁷		3		
		Humanities Elective (A&H) ^{2,3}		3		
		Fine Arts Elective (A&H) ^{2,3}		3		
				15		

Spring - Year 4

O EE	481	Senior Design II ⁶		3		
		Electrical Engineering Elective ⁷		3		
		Non-EE Elective ⁴		3		
		Ethics Elective (A&H or SS) ^{2,3,8}		3		
		A&H or SS Elective ^{2,3}		3		
				15		

Total Credits: 128

BSEE Status Sheet

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	Non-EE Elective choices: Engr 201 Statics, Engr 202 Dynamics, Engr 203 Mechanics of Materials, ME 301 Materials Science, ME/CE 306 Fluid Mechanics, and ME 341 Thermodynamics, 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 are not meet the requirement non-EE electives. CSci 242 Algorithms and Data Structures, CSci 260 Advanced Programming Languages, and Math 208 Discrete Mathematics are permitted.
5	EE 480 Senior Design I meets the Essential Studies Special Emphasis requirements for Advanced Communication (A) and Senior Capstone (C).
6	EE 481 Senior Design II meets the Essential Studies Special Emphasis requirement for Oral Communication (O).
7	Maximum of three credits of EE 490 Advanced EE Problems allowed as an independent study, applicable to both EE and non-EE Electives. Recommended EE electives: EE 550 Bioinstrumentation. 2 credits of EE 397 Cooperative Education (40 hours/week) is equivalent to 3 credits of the EE Electives with S/U grading, maximum 4 credits of EE 397 is equivalent to maximum of 6 credits of EE Elective.
8	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), Phil 251 Ethics in Healthcare (A&H, Humanities), ChE 340 The Role of Engineers and Applied Scientists in a Global Society (SS), and ME 370 Engineering Disasters & Ethics (SS).

Spring 2016**Additional Recommended Pre-Medical School Courses:**

Anat 204L Anatomy for Paramedical Personnel Laboratory (2)

Biol 315 Genetics (3) - Recommended for MCAT

Biol 369/369L Histology (2) and Histology Laboratory (2)

Biol 420 Neuroscience (3)

BMB 301 Biochemistry Lecture (3)

Chem 341/341L Organic Chemistry I (4) and Organic Chemistry I Laboratory (1). (Chem 341/341L required for UND Medical School)

Chem 342/342L Organic Chemistry II (4) and Organic Chemistry II Laboratory (1). (Chem 342/342L required for UND Medical School)

MBio 302/302L General Microbiology Lecture (2) and General Microbiology Laboratory (2)