

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	121/121L	General Chemistry I		4		
EE	101	Intro to EE ¹		1		
Engl	110	College Composition I		3		
Math	165	Calculus I		4		
				<hr/>		
				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		
Engr	201	Statics		3		
Math	166	Calculus II		4		
		Humanities Elective (A&H) ^{2,5}		3		
				<hr/>		
				17		

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	265	Calculus III		4		
Phys	251/251L	University Physics I/Lab		4		
				<hr/>		
				18		

Spring - Year 2

Anat	204	Anatomy for Paramedical Pers		3		
EE	307	Circuits Laboratory II		1		
EE	313	Linear Electric Circuits		3		
Math	266	Elem Differential Equations		3		
Phys	252/252L	University Physics II/Lab		4		
		Psvc 111 or Soc 111 (SS) ²		3		
				<hr/>		
				17		

Fall - Year 3

Chem	122/122L	General Chemistry II		4		
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		
				<hr/>		
				18		

Spring - Year 3

EE	309	Junior Laboratory II		2		
EE	401	Electric Drives		3		
EE	405	Control Systems		3		
EE	409	Distributed Networks		3		
EE	421	Electronics II		3		
EE	452	Embedded Systems		3		
				<hr/>		
				17		

Fall - Year 4

A&C EE	480	Senior Desian I ³		3		
		Electrical Engineering Elective ⁶		3		
ME	341	Thermodynamics		3		
PPT	301	Human Physiology		4		
Engr	460	Engineering Economics (SS) ²		3		
				<hr/>		
				16		

Spring - Year 4

O EE	481	Senior Desian II ⁴		3		
		Electrical Engineering Elective ⁶		3		
ME/CE	306	Fluid Mechanics		3		
		A&H or SS Elective ^{2,5}		3		
		Ethics Elective (A&H or SS) ^{2,5,7}		3		
		Fine Arts Elective (A&H) ^{2,5}		3		
				<hr/>		
				18		

Total Credits: 137

BSEE Status Sheet - Biomedical Engineering Focus

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)

1	May be waived for transfer students (substitute science credit required). For undecided engineering students, Engr 100 Introduction to Engineering is acceptable.
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	Senior Standing with approval of advisor. EE 480 Senior Design I meets the Essential Studies Special Emphasis requirements for Advanced Communication (A) and Senior Capstone (C).
4	EE 481 Senior Design II meets the Essential Studies Special Emphasis requirement for Oral Communication (O).
5	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.
6	Recommended EE Elective: EE 550 Biomedical Instrumentation. Additionally a maximum of three credits of EE 490 EE Problems are allowed as an independent study.
7	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).

Fall 2015 Revised