

Mechanical Engineering Student Status Sheet (AY 2016-17)

STUDENT NAME _____ Student ID # _____

MATH

Course	Num	Title	Hrs	Sem	Grd
MATH	123	Calculus I	4		
MATH	125	Calculus II	4		
MATH	225	Calculus III	4		
MATH	321	Differential Equations	3		
MATH	373	Intr. To Num. Analysis	3		
MATH	381	Intr. To Prob. & Stat.	3		
Total			21		

BASIC SCIENCES

Course	Num	Title	Hrs	Sem	Grd
CHEM	112	General Chemistry I	3		
CHEM	112L	General Chemistry I L	1		
PHYS	211	University Physics I	3		
PHYS	213	University Physics II	3		
PHYS	213L	University Physics II L	1		
Total			11		

SOCIAL SCIENCE (6 hours required)

Course	Num	Title	Hrs	Sem	Grd
Total			6		

HUMANITIES (6 hours required)

Course	Num	Title	Hrs	Sem	Grd
Total			6		

Three additional credit hours from either SS or HUM must be at the upper level (3xx/4xx)

Course	Num	Title	Hrs	Sem	Grd
Total			3		

General Requirements Outside the Department

Course	Num	Title	Hrs	Sem	Grd
IENG	301	Basic Eng. Econ.	2		
ENGL	101	Composition I	3		
ENGL	279	Tech. Com. I	3		
ENGL	289	Tech. Com II	3		
MET	231	Struct. & Prop. Mat. Lab	1		
MET	232	Prop. of Mat.	3		
EE	301	Intro Circ, Mach, & Sys.	3-1		
CSC	170	Prog. for Eng. and Sci.	2-1		
Total			22		

MECHANICAL ENGINEERING COURSES *

Course	Num	Title	Hrs	Sem	Grd
ME	110	Intro. to Mech. Engr.	2		
ME	125	Design for Manufact.	1		
ME	126L	Prod. Design/Develp	1		
OR					
ME	127L	Virtual Design Mnfctg	1		
ME	210	Statics of Mechanisms	3		
ME	211	Intro. to Thermodyn.	3		
ME	221	Dyn. of Mechanisms	3		
ME	216	Intro. to Solid Mech.	3		
ME	264/L	Electromech. Prod Dev.	4		
OR					
ME	269/L	Energy Sys. Prod Dev.	4		
OR					
ME	265/L	Sys. Eng. Prod. Dev.	4		
ME	312	Thermodynamics II	3		
ME	313	Heat Transfer	3		
ME	316	Solid Mechanics	3		
ME	322	Machine Design I	3		
ME	331	Thermo Fluid Dyn.	3		
ME	351	Mechatronics Meas Sys.	3-1		
ME	352	Intro. to Dyn. Sys.	3		
ME	481	Adv. Prod. Dev. I	1		
ME	477	Mech. Eng. Design I	2		
ME	482	Adv. Prod. Dev. II	1		
ME	479	Mech. Eng. Design II	2		
Total			48		

*C grade or better for all 200/300 ME Core Courses

SENIOR ELECTIVE COURSES**

Course	Num	Title	Hrs	Sem	Grd
ME			3		
ME			3		
ME			3		
ME			3-1		
Total			13		

**One of the first three (3 credit) ME electives listed above may be substituted by any of the following:

1. 3 credit hours of CO-OP upon approved of the Department CO-OP Coordinator and academic advisor; OR
2. 3 credit hours of ME 5XX/6XX for students on the accelerated graduate path; OR
3. 3 credit hours of ROTC upon commission as an Officer in the U.S. Army; OR
4. 3 credit hours of a Technical Elective (Any 3XX/4XX engineering, math, or science course), subject to approval of the academic advisor and the department head.

SDSM&T COURSES MEETING SYSTEMWIDE GENERAL EDUCATION REQUIREMENTS

Goal #1: Students will write effectively and responsibly and will understand and interpret the written expression of others. (6 credits) ENGL 201
Does not count toward any major but nursing and Associate of Art.

Engl 101	3 hrs	Composition I	Engl 279	3 hrs	Technical Communications I
Engl 201	3 hrs	Composition II	Engl 289	3 hrs	Technical Communications II

Goal #2: Students will communicate effectively and responsibly through listening and speaking. 3 credits SPCM 101 does not count toward any major but nursing and Associate of Art.

Spcm 101	3 hrs	Fundamentals of Speech	Engl 279	3 hrs	Technical Communications I
			Engl 289	3 hrs	Technical Communications II

Goal #3: Students will understand the organization, potential, and diversity of the human community through study of the social sciences. (6 credits, in 2 disciplines or course prefixes)

Anth 210	3 hrs	Cultural Anthropology	Pols 100	3 hrs	American Government
Econ 201	3 hrs	Principles of Microeconomics	Pols 210	3 hrs	State and Local Government
Econ 202	3 hrs	Principles of Macroeconomics	Psyc 101	3 hrs	General Psychology
Geog 101	3 hrs	Introduction to Geography	Soc 100	3 hrs	Introduction to Sociology
Geog 212	3 hrs	Geography of North America	Soc 150	3 hrs	Social Problems
Hist 151	3 hrs	United States History I	Soc 250	3 hrs	Courtship and Marriage
Hist 152	3 hrs	United States History II			

Goal 4: Student will understand the diversity and complexity of the human experience through study of the arts and humanities. (6 credits: in 2 disciplines, course prefixes or a sequence of a foreign language)

Art 111	3 hrs	Drawing I	Hist 122	3 hrs	Western Civilization II
Art 112	3 hrs	Drawing II	Hum 100	3 hrs	Introduction to Humanities
Arth 211	3 hrs	History of World Art I	Hum 200	3 hrs	Connections: Humanities and Tech
Engl 221	3 hrs	British Literature I	Lakl 101/102	3 hrs	Introductory Lakota I and II
Engl 222	3 hrs	British Literature II	Mus 100	3 hrs	Music Appreciation
Engl 241	3 hrs	American Lit I	Phil 100	3 hrs	Introduction to Philosophy
Engl 242	3 hrs	American Lit II	Phil 200	3 hrs	Introduction to Logic
Engl 250	3 hrs	Science Fiction	Phil 220	3 hrs	Introduction to Ethics
Fren 101/102	4/4	Introductory French I and II	Phil 233	3 hrs	Philosophy and Literature
Ger 101/102	4/4	Introductory German I and II	Span 101/102	4/4	Introductory Spanish I and II
Hist 121	3 hrs	Western Civilization I			

Goal 5: Students will understand and apply fundamental mathematical processes and reasoning (3 credits)

Math 102/102L	4 hrs	College Algebra/Lab	Math 125	4 hrs	Calculus II
Math 115	4 hrs	Precalculus	Math 225	4 hrs	Calculus III
Math 120/120L	3 hrs	Trigonometry/Lab	Math 281	3 hrs	Introduction to Statistics
Math 123	4 hrs	Calculus I			

Goal 6: Students will understand the fundamental principles of the natural sciences and apply scientific methods of inquiry to investigate the natural world. (6 credits) Must include a lab so typically a minimum of 7 credits.

Biol 151/151L	3/1	General Biology I/Laboratory	Geol 201/201L	3/1	Physical Geology/Laboratory
Biol 153/153L	3/1	General Biology II/Laboratory	Phys 111/111L	3/1	Introduction to Physics I/Laboratory
Chem 106/106L	3/1	Chemistry Survey/Laboratory	Phys 113/113L	4 hrs	Introduction to Physics II/Laboratory
Chem 108/108L	4/1	Organic & Biochemistry/Laboratory	Phys 211	3 hrs	University Physics I
Chem 112/112L	3/1	General Chemistry I	Phys 213/213L	3/1	University Physics II/Laboratory
Chem 114/114L	3/1	General Chemistry II			

Goal 7: Students will recognize when information is needed and have the ability to locate, organize, critically evaluate, and effectively use information from a variety of sources with intellectual integrity.

Important Notes:

1. South Dakota Board of Regents policy requires all general education requirements to be met during the first two years (64 credits). Program exceptions have been granted for all majors, except for IS, Math, and Phys, to take Engl 289 in the first semester of the junior year.
2. Both Engl 279 and Engl 289 must be completed in order to satisfy goals 1 and 2.
3. Goal 3 requires that courses be from two different disciplines or course prefixes.
4. Goal 4 requires that courses be from two different disciplines, course prefixes or a sequence of a foreign language.
5. AP, CLEP and Credit by Examination can meet any of the above goals.