

PREPARATORY CURRICULUM FOR ENGINEERING GRADUATE STUDENTS

To: _____

Date _____

NU ID: _____

The Department of Biological Systems Engineering administers a Masters and Ph. D. program in Agricultural and Biological Systems Engineering. To succeed as engineers, a core of mathematics, science and engineering courses is required. Students who have not graduated from an ABET accredited engineering program should complete the following courses to be fully admitted graduate students: the list of courses taken shall be determined by the student's graduate advisory committee. The list includes courses offered at the University of Nebraska-Lincoln. Equivalent substitutes from other institutions will be accepted. Selected undergraduate courses, including a design class, may also be required in your area of study.

Course Title	Dept.	Course Number	Credit Hours	Requirement Met (Y/N), or, List Any Substitutes
Analyt. Geom. and Calc. I	MATH	106	5	_____
Analyt. Geom. and Calc. II	MATH	107	5	_____
Analyt. Geom. and Calc. III	MATH	208	4	_____
Differential Equations	MATH	221	3	_____
General Physics I (calc. based)	PHYS	211	4	_____
Fundamentals of Chemistry	CHEM	109/113	4	_____
Cell Structure and Function, or Organismic Biology	BIOS	102, or 103	4 4	_____
Fourth Science Class:				
General Physics II (calc. based), or Fundamentals of Chemistry II	PHYS CHEM	212 110/114	4 4	_____
Statics †	ENGM	223	3	_____
Dynamics	ENGM	373	3	_____
Mechanics of Elastic Bodies, or Principles of Process Engineering, or , Introduction to Biomedical Engineering, or Introduction to Environmental Engineering	ENGM AGEN/BSEN BSEN BSEN/CIVE	325, or 303, or 317, or 326	3 3 3 3	_____
Transport Processes	AGEN/BSEN	344	3	_____
Thermodynamics	AGEN/BSEN MECH CHME	244, or 200, or 322	3 3 3	_____
Fluid Mechanics	MECH/CIVE CHME	310, or 332	3 3	_____
Electrical/Electronic Engr.	ELEC	211/215	3	_____

The following courses are also required for your area of study:

† Note: Students that have taken a Physics course that did not require calculus as a prerequisite must attain a grade of B or better in Engineering Mechanics 223 to continue in the program.

Graduate Advisor

BSE Graduate Committee Chair

I understand that I must complete these requirements.

Student