

BAE ADMISSION POLICY FOR NON-ENGINEERING STUDENTS

Minimum Required Coursework

Students who enter an M.S. or Ph.D. program but do not have a suitable B.S. degree in an engineering discipline, as determined by the Biosystems and Agricultural Engineering Department's Graduate Committee, are required to complete a program of coursework that will provide them with a baseline of knowledge and competencies that are consistent with B.S. engineering graduates. The following courses (totaling 47-48 credit hours) constitute the minimum baseline coursework required of non-engineering students and do not count toward the student's graduate degree program coursework. Advisors and advisory committees may require additional courses to the minimum baseline coursework as deemed appropriate.

Complete all of the following (totaling 32 credit hours):

- CHE 105, General College Chemistry I (4 credits)
- CHE 107, General College Chemistry II (3 credits)
- MA 113, Calculus I (4 credits)
- MA 114, Calculus II (4 credits)
- MA 213, Calculus III (4 credits)
- MA 214, Calculus IV (3 credits)
- PHY 231 General University Physics (4 credits)
- PHY 241, General University Physics Lab (1 credit)
- PHY 232, General University Physics (4 credits)
- PHY 242, General University Physics Lab (1 credit)

Complete five of the seven (totaling 15-16 credit hours):

- EM 221, Statics (3 credits)
- EM 302, Mechanics of Deformable Materials (3 credits)
- EM 313, Dynamics (3 credits)
- ME 220, Engineering Thermodynamics I (3 credits)
- ME 325, Elements of Heat Transfer (3 credits)
- CE 341, Fluid Mechanics I (4 credits) or ME 330, Fluid Mechanics (3 credits)
- EE 305, Electrical Circuits and Electronics (3 credits)

Credit for Prior Coursework

The Biosystems and Agricultural Engineering Department's Graduate Committee is responsible for determining credit for prior coursework. The Graduate Committee's procedure will be to make a course-by-course check of the student's transcript for courses that are identical or equivalent to those listed above. Prior courses that are identical or judged equivalent to required baseline courses will be considered as having fulfilled the corresponding baseline requirements, and the student will not have

to include those baseline courses in their plan of study. The student is responsible for providing any course catalogs or other material required by the Graduate Committee to assess equivalence. The Graduate Committee will include the results of their assessment with their admission recommendation to the Director of Graduate Studies (DGS) (see included worksheet).

Plan of Study

Non-engineering students who are admitted to an M.S. or Ph.D. degree program must include unfulfilled baseline courses on the plan of study. It is the advisor's responsibility to ensure that the student prepares an approved (by the advisor for M.S. students, by the advisory committee for Ph.D. students) plan of study that includes all unfulfilled baseline coursework. The plan of study must be completed no later than the start of class registration for the second semester and submitted to the DGS for review and filing. There is no requirement that all baseline coursework be completed prior to graduate degree program coursework. However, the coursework should be completed (or in concurrence with) before scheduling the defense of the M.S. thesis or Ph.D. qualifying exam though, in some instances for Ph.D. students, coursework may be completed later upon approval of the student's advisory committee. The student and advisor share responsibility for ensuring that the student has the necessary background for any degree program courses taken prior to completion of unfulfilled baseline courses.

Administration

Upon a positive recommendation from the Graduate Committee, determination of unfulfilled baseline coursework, identification of an advisor and (if appropriate) availability of funding and acceptance of offer, the student will be recommended to be admitted with "Conditional" status, contingent on fulfilling identified baseline coursework. When the student has completed all baseline coursework, the student's advisor should notify the DGS, who will verify that the baseline coursework requirements have been fulfilled. The DGS will then initiate the process to have the student's admission status changed from "Conditional" to "Regular."

Summarized Process

1. Graduate Committee receives application from non-engineering student.
2. Graduate Committee arrives at recommendation for admission.
 - a. If "Do not admit," stop.
 - b. If "Admit," go on to Step 3.
3. Compare baseline coursework listing to student's transcript to determine unfulfilled baseline coursework.
4. Forward results of Step 3 to DGS with admission recommendation.
5. Contingent on identification of advisor, availability of funding, and acceptance of offer (as appropriate), DGS recommends to the Graduate School that the student be admitted on "Conditional" status, contingent on completion of specified unfulfilled baseline coursework.
6. Student and advisor develop plan of study that accounts for unfulfilled baseline coursework and graduate degree program coursework and submit to DGS for review and filing.
7. Student completes coursework, notifies advisor, who notifies the DGS.
8. DGS verifies completion of unfulfilled baseline requirements, initiates a change in status to "Regular," notifies advisor when complete.

University of Kentucky Biosystems and Agricultural Engineering Department

**Baseline Coursework Assessment Worksheet for
Non-Engineering Graduate Program Applicants*
(To be forwarded with admission recommendation)**

BAE Requirement	Credits	Prior/Equivalent Course*	Credits
-----Complete All-----			
CHE 105	4		
CHE 107	3		
MA 113	4		
MA 114	4		
MA 213	4		
MA 214	3		
PHY 231	4		
PHY 241	4		
PHY 232	1		
PHY 242	1		
<i>Subtotal</i>	<i>32</i>		
-----Complete Five of Seven-----			
EM 221	3		
EM 302	3		
EM 313	3		
ME 220	3		
ME 325	3		
CE 341 or ME 330	4 or 3		
EE 305	3		
<i>Subtotal</i>	<i>15-16</i>		
Total	47-48		

*Students without an entry in the “Prior/Equivalent Course” column are required to include these courses in their plan of study in addition to graduate degree program courses and must complete them prior to admission under “Regular” status.