KENTUCKY STATE UNIVERSITY

ACADEMIC UNIT: MASC-MAT DATE SUBMITTED: 

1. BRIEF EXPLANATION OF PROPOSED CHANGE:
The Pre-Engineering faculty are cleaning up the program as listed in the catalogue
to reflect both the new liberal studies core and the various small unofficial
modifications that have occurred over the years.

2. CHECK ITEM(s) BELOW FOR CHANGES DESIRED:

☐ New Degree Certification ☐ Deletion of Degree or Certification
☒ New or Revised Major ☐ Deletion of Course
☐ New or Revised Minor ☐ Revised Degree or Certification
☐ New Course(s) ☐ Revised Course
☐ Course Level (number) Change ☐ Other (specify below):

I. Dean's Action:

☒ Approved ☐ Disapproved ☐ Returned for Recommended Change

(Signature) Date: 4/16/13

II. Curriculum Committee Action:

☐ Approved ☐ Disapproved ☐ Returned for Recommended Change

Chairperson: (signature): Date: 4/23/13

III. Faculty Senate Action:

☐ Approved ☐ Disapproved ☐ Returned for Recommended Change

Senate President (signature): Date: 4/25/13

IV. Provost/Vice President Academic Affairs (not required for courses):

☐ Approved ☐ Disapproved ☐ Returned for Recommended Change

Provost/VPAA (Signature): Date: 5/1/13

V. President's Action (not required for courses):

☐ Approved ☐ Disapproved ☐ Returned for Recommended Change

President (Signature): Date: 5/1/13

Final Faculty senate Approved form as of 9/15/06
**Program Change Proposal**

**Academic Unit:** MASC  
**Date Prepared:** 1/8/2013  
**Primary Author(s):** Dr. Max Brown  

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**Academic Discipline**  
**Faculty Approved:**  
(Committee Chairperson's Signature)  
4/16/2013  
(Date)  

**Chairperson/Dean Approved:**  
(Chairperson's/Dean Signature)  
(Date)  

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1. **Description of Change**

- Agricultural Engineering will be renamed Biosystems Engineering.  
- Engineering majors will no longer be required to take PHY 361.  
- MAT 304 will no longer be the required choice for the final IGS course.  
- COS 109 will now be required for Civil, Mechanical, Electrical and Mining Engineering.  
- Chemical Engineering will no longer require the upper division Physics sequence (PHY 305, 311, 320, 390).  
- Materials Engineering should have CHE 200 in place of 201/210, 202/220.  
- MAT 333* will now be an option for nearly all Pre-Engineering students to fulfill their advanced math elective.  
- PHY 350 will replace PHY 305 per CC 12/13-35.*

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*Subject to Faculty Senate approval of CC 12/13-34 and 12/13-35.*

Final Faculty Senate Approved Form as of 10/4/89
2. **STARTING WITH:**

   X  Fall,  ___ Spring,  ___ Summer,  2013  Year

3. **EXPLANATION AND JUSTIFICATION FOR REQUESTED CHANGE**

   With the reduction of the liberal studies core, the Pre-Engineering faculty are taking this opportunity to clean up the program as listed in the catalogue to reflect both the new liberal studies core and the various small unofficial modifications that have occurred over the years.

   Agricultural Engineering has been renamed Biosystems Engineering. This mirrors the name change that took place at UK and will facilitate the transfer of our students to UK as part of the 3/2 program.

   PHY 361: Modern Physics is not currently being offered at KSU and it is no longer required for the Engineering programs at UK. Therefore it should no longer be listed as a requirement for graduation for any of the Engineering options.

   MAT 304: Since MAT 304 is taught only occasionally, it is in our students' best interest to remove this restriction on the final course of the IGS sequence however advisors will still strongly recommend this course when available.

   COS 109: The addition of COS 109 will give our students an opportunity to improve their logic and reasoning while continuing to develop basic programming.

   *Subject to Faculty Senate approval of CC 12/13-34 and 12/13-35.
proficiency which is an invaluable skill for Civil, Mechanical, Electrical and Mining Engineers.

MAT 333*: Complex variables is added as an option as a Supporting Elective so that students may choose from MAT 315 or MAT 321 or MAT 333. Complex variables is a subject that generates a great deal of student interest and is useful for many Engineering disciplines, especially Electrical Engineers.

PHY 350: Will replace PHY 305 per CC 12/13-35.*

Due to the fact that Chemical Engineering has a significantly different focus from the other Engineering disciplines we no longer see the need for Chemical Engineers to take the upper division Physics sequence (PHY 305, 311, 320, 390).

Materials Engineering should have CHE 200 in place of CHE 201/210 and 202/220 as these courses do not exist at KSU and a survey of organic chemistry is required in UKs material engineering program.

As a result of these changes our Pre Engineering majors will ideally leave KSU with approximately 90 credit hours after three years (Biosystems: 90, Chemical: 92, Civil: 91, Electrical:91, Materials:92, Mechanical:91, Mining:91). Our students will be able to finish their degree at UK by earning the remaining 30 credits as 300-400 Level Electives and other Electives.

*Subject to Faculty Senate approval of CC 12/13-34 and 12/13-35.
Dr. Brown,
It is good to know that COS 109 is added back again to the required courses for Engineering majors. There is no problem at all for us. We offer one section for COS 109 class every semester. Let us know if further information is needed.
Thanks.
Chi
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*Subject to Faculty Senate approval of CC 12/13-34 and 12/13-35.*