

UNIVERSITY FACULTY SENATE FORMS

Academic Program Approval

This form is a routing document for the approval of new and revised academic programs. Proposing department should complete this form. For more information, call the Faculty Senate Office at 831-2921.

Submitted by: William F. Ritter phone number 831-2468

Action: Add MS in Bioresources Engineering
(Example: add major/minor/concentration, delete major/minor/concentration, revise major/minor/concentration, academic unit name change, request for permanent status, policy change, etc.)

Effective term 07F
(use format 04F, 05W)

Current degree None
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed change leads to the degree of: MS
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed name: Bioresources Engineering
Proposed new name for revised or new major / minor / concentration / academic unit (if applicable)

Revising or Deleting:

Undergraduate major / Concentration: _____
(Example: Applied Music – Instrumental degree BMAS)

Undergraduate minor: _____
(Example African Studies, Business Administration, English, Leadership, etc.)

Graduate Program Policy statement change: _____
(Attach your Graduate Program Policy Statement)

Graduate Program of Study: Bioresources Engineering MS
(Example: Animal Science: MS Animal Science: PHD Economics: MA Economics: PHD)

Graduate minor / concentration: _____

List program changes for curriculum revisions:

None

List new courses required for the new or revised curriculum:

(Be aware that approval of the curriculum is dependent upon these courses successfully passing through the Course Challenge list. If there are no new courses enter "None")

BREG 631, Experimental Methods for Engineers

Other affected units:

(List other departments affected by this new or revised curriculum. Attach permission from the affected units. If no other unit is affected, enter "None")

None

Rationale:

(Explain your reasons for creating, revising, or deleting the curriculum or program.)

In 2001, the Bioresources Engineering Department underwent an academic program review. In preparing the self study report there was discussion at several department meetings on graduate education. The academic program review team cited the lack of a graduate program as one of the weaknesses of the Department. Although several of the faculty members have joint appointments in the College of Engineering and the Department participates in the interdisciplinary Operations Research graduate program, this approach has not been entirely successful. In particular it has been difficult for new faculty to utilize and advise graduate students in their research under the current arrangements. Because of this it was decided that the Department needed to create opportunities for the new faculty members that have been hired since 2001 to advise and utilize graduate students in their research. The only satisfactory way to do this is to develop an MS program in Bioresources Engineering. A new water resources engineering faculty member has been hired and there will be three additional faculty members retiring within the next four to seven years. The MS program will help in recruiting new faculty.

Program Requirements:

(Show the new or revised curriculum as it should appear in the Course Catalog. If this is a revision, be sure to indicate the changes being made to the present curriculum.)

A minimum of 30 credits is required for the Master of Science degree. It is to include 24 credits of approved course work and 6 credits of thesis BREG 869. Of the 24 credit hours of approved course work, at least 3 credits must be a statistics or advanced math course. Selection of courses will be done in consultation with the chair of the graduate committee based upon the student's interest and area of research. The Department will offer students the opportunity to select Natural Resources Engineering or another focus area of Bioresources Engineering as their interest area and area of research. The awarding of the Master of Science degree is also contingent upon an approved research proposal, the successful oral defense of the research performed, and an acceptable thesis.

All students enrolled in the program will be required to take BREG 631, Experimental Methods for Engineers, and a graduate level advanced mathematics or statistics course. Students may choose from the following list including, but not limited to: CIEG 601, CIEG 605, MATH 503, MATH 508, MATH 535, MATH 611, MEEG 891, STAT 601, STAT 611, STAT 635, and STAT 657.

Students in the Natural Resources Engineering focus area will have to take two of the following courses: REG 621, BREG 622, BREG 628, CIEG 636, and CIEG 698. Students interested in developing a focus in another aspect of Bioresources Engineering

can propose an alternate program of study approved by their graduate committee. Graduate students must maintain a minimum GPA of 3.00 to remain in good academic standing. GPA requirements are monitored by the Office of Graduate Studies according to the Graduate Studies Academic Probation Policy.

ROUTING AND AUTHORIZATION: (Please do not remove supporting documentation.)

Department Chairperson _____ Date _____

Dean of College _____ Date _____

Chairperson, College Curriculum Committee _____ Date _____

Chairperson, Senate Com. on UG or GR Studies _____ Date _____

Chairperson, Senate Coordinating Com. _____ Date _____

Secretary, Faculty Senate _____ Date _____

Date of Senate Resolution _____ Date to be Effective _____

Registrar _____ Program Code _____ Date _____

Vice Provost for Academic Programs & Planning _____ Date _____

Provost _____ Date _____

Board of Trustee Notification _____ Date _____

Revised 11/03/04 /khs