

CIM Report Jan 19, 2018 4:55pm

Program Changes Pending Approval from University Course and Program Committee

Code	Field	Old Value	New Value
BENGBS	Reviewer Comments	<p>agriffin - Wed, 16 Dec 2015 20:43:25 GMT - Rollback: Please change reason for change to a minor change and resubmit.</p> <p>agriffin - Wed, 16 Dec 2015 22:22:05 GMT - Attached follow-up documentation per request of submitter.</p> <p>lkulcza - Thu, 07 Jan 2016 20:45:55 GMT - Checking on courses not found in 8 semester plan.</p> <p>lkulcza - Thu, 07 Jan 2016 21:57:06 GMT - Rollback: Rolling back for changes to 8 semester plan course information.</p> <p>ndennis - Wed, 13 Jan 2016 21:22:54 GMT - Added notation on the specific courses that were being deleted and added to the program</p> <p>agriffin - Wed, 20 Jan 2016 18:00:14 GMT - Inserted credit hours in the Eight Semester Plan for courses pending approval. This corrected the total hours to 128 credit hours (from 119). Also, inserted superscript number with footnotes to clean up catalog copy.</p> <p>lkulcza - Thu, 21 Jan 2016 00:18:44 GMT - All BENG courses "not found" are in approval process to be added fall 2016.</p>	<p>agriffin - Tue, 09 Jan 2018 19:56:46 GMT - Corrected CIP Code from 14.0301 to 14.4501. Change had been updated on ADHE list 10/2/2014. Code updated in UAConnect on 8/15/2017. Directed to correct the CourseLeaf record by Gary Gunderman.</p>
	Upload attachments	BSBE Program Change and Course Change Sent for UA Approval Chain Jan 7 2016.docx	

Description and justification of the request

Summary of Program Changes to BSBE |

|
Proposed to be published in the 2016-2017 University of Arkansas Catalog of Studies. |

|
1) Eliminate ELEG 3903 as a requirement and add a new required course: BENG 3663, Biological Engineering Methods II. |

|
2) Adjust the senior design sequence adding one hour to BENG 4822 (to create BENG 4823) and splitting BENG 4813 into a separate 1-hour professionalism component (BENG 4831) and a 2-hour senior design component (BENG 4812). Inactivate BENG 4813 and BENG 4822 in the process. |

|
3) Remove CHEM 3613 and 3611L and add 3 hours of technical elective. |

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The net change is: |

|
+1 hour of engineering (-3 h ELEG + 4 h BENG) |

-1 hour of science/technical (-4 h chemistry + 3 h tech elective) |

+0 hours on the total program (remains at 128 hours). |

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Justification: |

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Our Academic Advisory Committee recommended improvements to the coverage of professionalism topics to include more workplace skills including conflict and change management. We decided to split-off the professionalism topics from the Senior Design course to better highlight the importance of these topics and to eliminate some confusion that had been expressed by students when the two were combined. Other feedback from the Academic Advisory Committee identified ELEG 3903 and advanced organic chemistry as being less critical to our current graduates. These were eliminated to allow more time to emerging skills (e.g., statistics and modeling) that we have had trouble covering in the old program. The existing Biological Engineering Methods course (BENG 2643) was basically split into two new three-hour courses to accommodate the expanded coverage. An additional technical elective was added to strengthen the ability of students to pursue a technical specialty. |

There are two parts to this request: \n\n(1) elimination of the degree requirement of BIOL 3863, General Ecology; \n\n| Due to varying student interests and career paths, not all of our students optimally benefit from taking BIOL 3863, General Ecology. \n\n

(2) The addition of a degree requirement of a 3 hour Biological Elective, selected from among a list of acceptable courses. A list of acceptable courses will be maintained by the department. At present, the courses we have chosen to populate the list are:\n\nBIOL 3863, General Ecology\nCSES 2203, Soil Science\nENSC 4023, Water Quality\nCHEM 3613, Organic Chemistry II\nCHEM 3813, Elements of Biochemistry\nBIOL 2533, Cell Biology. | The Biological Elective will give students some flexibility in choosing the required biological content (allowing some courses in addition to Ecology) to accommodate varying student interests and career paths.

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pursue a technical specialty. |

CIP Code	Agricultural Engineering.	Biological/Biosystems Engineering.
Effective Catalog Year	Fall 2016	Fall 2018
Program Goals and Objectives	<p>The educational objectives of the Biological Engineering program at the University of Arkansas are to produce graduates to:</p> <ol style="list-style-type: none"> 1) Successfully practice engineering involving the design and management of sustainable food, water, energy and related biological systems, 2) Make valuable and sustained contributions that benefit employers, communities, Arkansas and the world, and 3) Succeed in continuing professional development or graduate studies, as needed for professional growth. 	<p>The educational objectives of the Biological Engineering program at the University of Arkansas are to produce graduates to:</p> <ol style="list-style-type: none"> 1) Successfully practice engineering involving the design and management of sustainable food, water, energy and related biological systems, 2) Make valuable and sustained contributions that benefit employers, communities, Arkansas and the world, and 3) Succeed in continuing professional development or graduate studies, as needed for professional growth.

Learning Outcomes	<p>In order to prepare graduates to attain our Educational Objectives, the following student outcomes were defined:</p> <p>a) An ability to apply knowledge of mathematics, science, and engineering.</p> <p>b) An ability to design and conduct experiments, as well as analyze and interpret data.</p> <p>c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.</p> <p>d) An ability to function on multidisciplinary teams.</p> <p>e) An ability to identify, formulate, and solve engineering problem.</p> <p>f) An understanding of professional and ethical responsibility.</p> <p>g) An ability to communicate effectively.</p> <p>h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.</p> <p>i) A recognition of the need for, and an ability to engage in life-long learning.</p> <p>j) A knowledge of contemporary issues.</p> <p>k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.</p>	<p>In order to prepare graduates to attain our Educational Objectives, the following student outcomes were defined:</p> <p>a) An ability to apply knowledge of mathematics, science, and engineering.</p> <p>b) An ability to design and conduct experiments, as well as analyze and interpret data.</p> <p>c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.</p> <p>d) An ability to function on multidisciplinary teams.</p> <p>e) An ability to identify, formulate, and solve engineering problem.</p> <p>f) An understanding of professional and ethical responsibility.</p> <p>g) An ability to communicate effectively.</p> <p>h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.</p> <p>i) A recognition of the need for, and an ability to engage in life-long learning.</p> <p>j) A knowledge of contemporary issues.</p> <p>k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.</p>
Track(s) - Action		Action
Focused Stud(y/ies) - Action		Action
Does this proposal impact any courses from another College/School?	No	Yes
College(s)/School(s)		AFLS ARSC
What are the total hours needed to complete the program?		128

BENGMS	Scheduled Program Review Date	NA	2018-2019
	Description and justification of the request	Adding requirements already set at the Graduate School level.	Added the requirement to produce a journal quality paper. Set a maximum number of 4000 level course that can be used for the degree. Changes in the graduate catalogue were made to clarify the degree requirements so students are able to better process the information. All of the changed parts had been the department policy and have been stated in the department's graduate handbook for over 7-10 years as described in the "DESCRIPTION" section. For example, the "preparation of a paper suitable for submission to a refereed journal" has been required at least for the past 7 years for both MS and PhD degrees in BENG. However, we found that the Graduate Catalogue has not clearly reflected the degree requirements, causing confusions for the students. The 4000 level course requirement aligns the program with ADHE requirements.
	Description and Justification for this request	Adding requirements already set at the Graduate School level.	
	Effective Catalog Year	Fall 2017	Fall 2018
	Program Goals and Objectives	NA	1. Prepare students for significant applications of and contributions to Biological Engineering beyond graduation.\n2. Produce theses which meet high academic standards and constitute significant applications of and contributions to Biological Engineering.\n
	Learning Outcomes	NA	1. Students will make satisfactory progress toward the completion of course requirements in preparation for conducting thesis research which constitutes a significant contribution to Biological Engineering.\n2. Students will be prepared to plan thesis research which meets high academic standards and constitutes a significant contribution to Biological Engineering.\n3. Students will write a thesis which meets high academic standards and constitutes a significant contribution to Biological Engineering.\n4. Students will be able to communicate effectively.\n
	Track(s) - Action		Action
	Focused Stud(y/ies) - Action		Action
	What are the total hours needed to complete the program?		30

	Reviewer Comments		<p>ndennis - Tue, 24 Oct 2017 20:28:09 GMT - Rollback: You are adding a requirement, not clarifying. Provide a justification for the added requirement (why are you adding the requirement)</p> <p>ndennis - Fri, 27 Oct 2017 20:32:24 GMT - Rollback: Please see the previous rollback comment and add the program change to the description of change. You are adding a program requirement to the catalog. Describe the specific requirement and the justification for making the new requirement in the description and justification box.</p> <p>ndennis - Tue, 07 Nov 2017 16:42:23 GMT - Rollback: Come see me and lets talk about your admission and program requirements in general.</p> <p>ndennis - Fri, 10 Nov 2017 17:05:09 GMT - Revised 4000 level course statement and the description and justification blocks.</p> <p>agriffin - Tue, 14 Nov 2017 17:24:14 GMT - Rollback: Please review item 2 of requirements. The Graduate School no longer allows the use of 4000-level courses toward graduate programs. Thus, the description and justification will also need to be changed. Consult with Dr. Dennis regarding this new policy.</p> <p>agriffin - Thu, 16 Nov 2017 16:02:26 GMT - Inserted scheduled program review date.</p> <p>ndennis - Wed, 13 Dec 2017 20:46:32 GMT - Rollback: While were are making these separate changes for MS and PhD programs please separate MS and PhD admission requirements. Currently, the mixture of requirements is confusing and possibly contradictory. Also, the grad school is encouraging us not to rely on a combined GRE score for admission, therefore publishing a mandatory minimum score is contradictory to their guidance.</p> <p>ndennis - Wed, 03 Jan 2018 22:18:25 GMT - Modified language in the requirements section to clarify meaning</p>
BENGP	Scheduled Program Review Date	NA	2018-2019
	Description and justification of the request	Adding existing requirements that match the Graduate School's general requirements.	Adding the requirement to produce a journal quality paper. Clarifying the number of 4000 level credit hours that can be used in the degree. Removing administrative details of the examinations. Reduce the verbiage in the catalog and refer students to the departmental graduate student handbook for administrative details. While the details may change from time to time, the program requirements themselves will not change. Align the use of 4000 level courses with ADHE requirements.
	Description and Justification for this request	Adding existing requirements that match the Graduate School's general requirements.	
	Effective Catalog Year	Fall 2017	Fall 2018
	Program Goals and Objectives	NA	1. Prepare students for independent research to contribute new scientific knowledge of fundamental importance to the fields of Biological Engineering.\n2. Contribute new knowledge of fundamental importance or significantly modify, amplify, or interpret existing knowledge in a new and important manner.\n

	Learning Outcomes	NA	<p>1. Students will make satisfactory progress toward the completion of course requirements in preparation for independent research to contribute new and fundamentally important knowledge to Biological Engineering.\n2. Students will be prepared for independent research in Biological Engineering.\n3. Students will be prepared to contribute new and fundamentally important knowledge to Biological Engineering.\n4. Students will contribute new and fundamentally important knowledge to Biological Engineering or significantly modify, amplify, or interpret existing knowledge in a new and important manner.\n5. Students will be able to communicate effectively in a professional, scientific setting.\n\n\n</p>
	Track(s) - Action		Action
	Focused Stud(y/ies) - Action		Action
	What are the total hours needed to complete the program?		78
	Reviewer Comments		<p>ndennis - Tue, 24 Oct 2017 20:26:18 GMT - Rollback: You at adding the requirement for creation of a journal quality paper, not clarifying requirements. Provide a reasonable justification for this new requirement.</p> <p>ndennis - Fri, 27 Oct 2017 20:29:26 GMT - Rollback: You are adding a requirement to your PhD program. State the exact change in the description of change box. This change is not a clarification.</p> <p>ndennis - Tue, 07 Nov 2017 16:39:21 GMT - Rollback: Under new graduate school policy no coursework presented for a PhD can be 4000 level or below. The only exception is going from BA to PhD, in that case up to 12 hours (50% of course work allowed for an MS) of coursework could be 4000 level, but it must be taken during the first 30 hours of the program. if going from MS to PhD all coursework must be 5000 level or above. Bullet 2 in your program requirements potentially violates this policy. Plus the only change I see in your requirements is the requirement to produce a publishable article, not all of the other changes you describe. Please modify your coursework language in the program requirements.</p> <p>ndennis - Fri, 10 Nov 2017 16:56:39 GMT - Added the requirement for all coursework to be at the 5000 level for MS to PhD. Revised description and justification of change.</p> <p>agriffin - Tue, 14 Nov 2017 17:28:50 GMT - Rollback: Please review item 2 of requirements. The Graduate School no longer allows the use of 4000-level courses toward graduate programs. Thus, the description and justification will also need to be changed. Consult with Dr. Dennis regarding this new policy.</p> <p>agriffin - Thu, 16 Nov 2017 16:06:55 GMT - Inserted scheduled program review date.</p> <p>ndennis - Wed, 13 Dec 2017 20:52:24 GMT - Rollback: Bullet 2 in the requirements applies only to students who are going from BS to PhD. Please state that.</p> <p>ndennis - Wed, 03 Jan 2018 22:11:38 GMT - Modified language in the requirements section</p>

CHEGBS	Description and justification of the request	Correcting course titles and swapping two CHEG courses whose semester of offering changed.	Graduation requirements are being changed so that all students complete at least 30 hours of Chemical Engineering (CHEG) courses at the U of A. Currently, transfer students could earn a degree in Chemical Engineering by completing 30 hours of 3000-4000 level classes, but these classes do not have to be specific to the major.
	Description and Justification for this request	Correcting course titles and swapping two CHEG courses whose semester of offering changed.	
	Effective Catalog Year	Fall 2015	Fall 2018
	Track(s) - Action		Action
	Focused Stud(y/ies) - Action		Action
	What are the total hours needed to complete the program?		128
	Reviewer Comments		ndennis - Fri, 17 Nov 2017 13:37:09 GMT - added Fayetteville to be clear about the university campus the courses must be taken at.
CSCEBA	Scheduled Program Review Date	NA	2024-2025
	Description and justification of the request	Added general requirements that were accidentally dropped when the CSCE programs were split into tabs.	We are adding CSCE 3513 Software Engineering and CSCE 3613 Operating Systems as required courses and removing 6 hours of CSCE elective courses. Changes of this nature were suggested in a recent program review of the BA program.
	Description and Justification for this request	Added general requirements that were accidentally dropped when the CSCE programs were split into tabs.	
	Effective Catalog Year	Fall 2014	Fall 2018
	Program Goals and Objectives	NA	Program Goals for the BA degree in Computer Science Computer Science graduates will: Enhance Arkansas' and the nation's information technology industry. Engage in advanced study of Computer Science and other fields, including engineering, law, medicine, and business. Possess a sufficiently broad education to be inquisitive, well-informed reasoning members of their profession and society. Understand human, social and ethical issues so that they will be good employees or employers, citizens and neighbors.
	Learning Outcomes	NA	BA Student learning outcomes: Posses an ability to apply knowledge of computing and mathematics appropriate to the discipline. Possess an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution. Possess an ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs. Possess an understanding of professional, ethical, legal, security and social issues and responsibilities. Possess an ability to communicate effectively with a range of audiences.
	Track(s) - Action		Action
	Focused Stud(y/ies) - Action		Action
	What are the total hours needed to complete the program?		120

	Reviewer Comments		ndennis - Tue, 12 Dec 2017 19:08:44 GMT - Rollback: please list all program goals and objectives. agriffin - Thu, 14 Dec 2017 14:56:16 GMT - Updated program review date.
EGEDBA		Added	
SSEDBA		Added	