

**CHANGE UNDERGRADUATE DEGREE PROGRAM**

*PLEASE NOTE: To ensure that a series of changes to an existing degree program does not essentially create a new program, the Southern Association for the Accreditation of Colleges and Schools (SACS) requires submission of its Substantive Change Checklist for every program change. Prior to college-level review, you must fill out and submit the SACS Substantive Change Checklist to the Office of Institutional Effectiveness. Contact Institutional Effectiveness ([institutionaleffectiveness@uky.edu](mailto:institutionaleffectiveness@uky.edu)) for assistance.*

*Once approved at the college level, your college will send the proposal to the appropriate Senate academic council (HCCC and/or UC) for review and approval. Once approved at the academic council level, the academic council will send your proposal to the Senate Council office for additional review and then a 10-day posting online, during which senators review on their own and have an option to register an objection if they so desire. If no objection is raised to the Senate Council Office within ten days of the posting the proposal, then the program change is approved. The Senate Council Office will report approvals to the Provost, Registrar and other appropriate entities, including the contact person.*

For every proposed change, you MUST also include the existing requirement.

<b>SUMMARY OF CHANGES</b>							
<b>Check all that apply.</b>							
<input checked="" type="checkbox"/>	Courses	<input type="checkbox"/>	Program name	<input type="checkbox"/>	Total required credit hours	<input type="checkbox"/>	Student learning outcomes
<input type="checkbox"/>	Criteria for admissions/progression/termination	<input type="checkbox"/>	Certificate assessment	<input type="checkbox"/>	Other		
<b>1. General Information</b>							
1a	Date of contact with Institutional Effectiveness (IE) <sup>1</sup> :						
	<input checked="" type="checkbox"/> Appended to the end of this form is a PDF of the reply from Institutional Effectiveness.						
1b	College <sup>2</sup> :	Engineering	Department <sup>2</sup> :	Biosystems & Agricultural Engineering			
1c	CIP codes <sup>3</sup> :		Today's Date:	12/1/16			
1d	Current major name: (Biology, Design, etc.)	Biosystems Engineering	Proposed major name:	Biosystems Engineering			
1e	Current Degree (BA, BFA, etc.):	BS	Proposed degree:	BS			
1f	Will there be any changes regarding a track(s) for the program?				Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
1g	Accrediting agency, if applicable:	ABET (Accreditation Board for Engineering Technology)					
1h	Date of most recent periodic program review for this degree:	Fall 2016					
1i	Requested effective date:	<input checked="" type="checkbox"/> Fall semester following approval.	OR	<input type="checkbox"/> Specific Date <sup>4</sup> : <i>Fall 20</i>			

<sup>1</sup> Prior to college-level review, you must fill out and submit the SACS Substantive Change Checklist to the Office of Institutional Effectiveness. You can reach Institutional Effectiveness by phone or email (257-2873 or [institutionaleffectiveness@uky.edu](mailto:institutionaleffectiveness@uky.edu)).

<sup>2</sup> It is not possible to change the home academic unit of a degree program via this form. To change the home unit, visit <http://www.uky.edu/faculty/senate> and search for forms related to academic organizational structure.

<sup>3</sup> The CIP code is provided by Institutional Effectiveness. If a different CIP code is necessary, the program may undergo a review similar to the new program approval process.

<sup>4</sup> No program change(s) will be effective until all approvals are received.

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1j	Contact person name:	Czarena Crofcheck	Phone / Email:	8-4349 / crofcheck@uky.edu
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**2. Overview of Changes**

2a	Describe the rationale for the changes, including results from the most recent program review if applicable. (450 word limit)
	Beginning in Fall 2016, the College of Engineering implemented a new First Year Experience for engineering students. All students beginning their first semester at UK in the College of Engineering would be taking a common set of classes during this year, including an Engineering Explorations course, where each of the engineering disciplines are introduced. This change in first year programming resulted in the cancellation of BAE's own freshman year courses and restructuring of the sophomore through senior year curriculum. These changes include introducing a new introductory course to Biosystems Engineering (BAE 200), changing BAE 201 to BAE 301 and listing as a major requirement, and reducing the number of technical electives required by one course (from 4 to 3).

2b	Use the fields below, as applicable, to identify the areas in which changes will be made.		
		Current	Proposed
i.	Credit Hours of Premajor Courses:	43	44
ii.	Credit Hours of Preprofessional Courses:		
iii.	Credit Hours of Major Core Course Requirements	47	49
iv.	Minimum Credit Hours of Guided Electives:	24	21
v.	Minimum Credit Hours of Free Electives:	3	3
vi.	Credit Hours for Track 1 (name):		
vii.	Credit Hours for Track 2 (name):		
viii.	Credit Hours for Track 3 (name):		
ix.	Credit Hours for Track 4 (name):		
x.	Credit Hours for Track 5 (name):		
xi.	Credit Hours for Required Minor:		
xii.	Total Credit Hours Required by Level:	100-level:	
		200-level:	
		300-level:	
		400-level:	
		500-level:	

	<b>TOTAL CREDIT HOURS REQUIRED FOR GRADUATION:</b>	<u>132</u>	<u>132</u>
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xv.	If the total hours required for graduation have changed, explain below. (150 word limit)

2c	Will the requested change(s) result in the use of courses from another educational unit?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," describe generally the courses and how they will used.		
	If "Yes," two pieces of supporting documentation are required.		

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Check to confirm that appended to the end of this form is a letter of support from the appropriate chair/directors of each unit from which individual courses will be used.

Check to confirm that appended to the end of this form is verification that the chair/director of each affected unit has consent from the faculty members of the unit. This typically takes the form of meeting minutes.

2d Will the proposed change(s) affect an associated minor? Yes  No

If "Yes," the department must also submit a change form to change the minor.

**3. Course Sharing**

3a. Will the requested changes result in the use of courses from another unit? Yes  No

If "Yes," describe generally the courses and how they will used.

If "Yes," two pieces of supporting documentation are required.

Check to confirm that appended to the end of this form is a letter of support from the other units' chair/directors from which individual courses will be used.

Check to confirm that appended to the end of this form is verification that the chair/director of the other unit has consent from the faculty members of the unit. This typically takes the form of meeting minutes.

**3. UK Core Courses**

3a Are there any proposed changes to the UK Core requirements for the program? (If "Yes," indicate and proceed to next question. If "No," indicate and proceed to 4a.) Yes  No

If "Yes," note the specific changes in the grid below.

UK Core Area	Current Course	Current Credits	Proposed Course	Proposed Credits
<b>I. Intellectual Inquiry</b>				
Arts and Creativity				
Humanities				
Social Sciences				
Natural/Physical/Mathematical				
<b>II. Composition and Communication</b>				
Composition and Communication I	CIS/WRD 110	3	<i>CIS/WRD 110</i>	3
Composition and Communication II	CIS/WRD 111	3	<i>CIS/WRD 111</i>	3
<b>III. Quantitative Reasoning</b>				
Quantitative Foundations				
Statistical Inferential Reasoning				
<b>IV. Citizenship (one course in each area)</b>				
Community, Culture & Citizenship in USA				
Global Dynamics				

<sup>5</sup> A dean may submit a letter only when there is no educational unit below the college level, i.e. there is no department/school.

<sup>6</sup> A dean may submit a letter only when there is no educational unit below the college level, i.e. there is no department/school.

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	<b>Total UK Core Hours</b>	_____	_____
3b	Provide the Bulletin language about UK Core.		

**4. Graduation Composition and Communication Requirement**

4a	Will the Graduation Composition and Communication requirement be changed? (If "Yes," indicate and proceed to next question. If "No," indicate and proceed to 5a.)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<p>If "Yes," note the specific changes below, including changes to credit hours.</p> <p>If the course(s) used are from outside the home unit, one piece of supporting documentation is required.</p> <p><input type="checkbox"/> Check to confirm that appended to the end of this form is a letter of support from the other units' chair/director<sup>7</sup> from which individual courses will be used.</p>			
<i>Current</i>		<i>Proposed</i>	
i.	<input type="checkbox"/> Single course in home unit:	<input type="checkbox"/> <i>Single course in home unit:</i>	
ii.	<input type="checkbox"/> Multiple courses in home unit.	<input type="checkbox"/> <i>Multiple courses in home unit.</i>	
iii.	<input type="checkbox"/> Single course outside home unit.	<input type="checkbox"/> <i>Single course outside home unit.</i>	
iv.	<input type="checkbox"/> Multiple courses outside home unit.	<input type="checkbox"/> <i>Multiple courses outside home unit.</i>	
v.	<input type="checkbox"/> Course(s) inside & outside home unit.	<input type="checkbox"/> <i>Course(s) inside &amp; outside home unit.</i>	
4b	Provide the Bulletin language about GCCR below.		

**5. Other Course Changes**

5a	Will the college-level requirements change? (If "Yes," indicate and note the specific changes in the grid below. If "No," indicate and proceed to question 5c.)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
<i>Current</i>		<i>Proposed</i>				
<input type="checkbox"/> Standard college requirement		<input type="checkbox"/> <i>Standard college requirement</i>				
<input type="checkbox"/> Specific course		<input type="checkbox"/> <i>Specific course</i>				
Prefix & Nmbr	Credit Hrs	Title	Prefix & Nmbr	Credit Hrs	Title	Course Status <sup>8</sup>
						Select one....
						Select one....
						Select one....
5b	Will the existing language in the Bulletin about college-level requirements change?		Yes <input type="checkbox"/>	No <input type="checkbox"/>		
If "Yes," provide the new language below.						

<sup>7</sup> A dean may submit a letter only when there is no educational unit below the college level, i.e. there are no departments/schools.

<sup>8</sup> Use the drop-down list to indicate if the course is a new course ("new"), an existing course that will change ("change"), or if the course is an existing course that will not change ("no change").

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5c	Will the pre-major or pre-professional course requirements change? (If "Yes," indicate and note the specific changes in the grid below. If "No," indicate and proceed to question 5e.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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Current			Proposed			
Prefix & Nmbr	Credit Hrs	Title	Prefix & Nmbr	Credit Hrs	Title	Course Status <sup>9</sup>
BAE 201	2	Economic Analysis for Biosystems				Change
			BAE 200	3	Principles of Biosystems Engineering	New
						Select one....
						Select one....
						Select one....

5d	Provide the Bulletin language about pre-major or pre-professional courses below.

5e	Will the major's core course requirements change? (If "Yes," indicate and note the specific changes in the grid below. If "No," indicate and proceed to question 5g.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," note the specific changes in the grid below.		

Current			Proposed			
Prefix & Nmbr	Credit Hrs	Title	Prefix & Nmbr	Credit Hrs	Title	Course Status <sup>10</sup>
			BAE 301	2	Economic Analysis for Biosystems	Change
						Select one....
						Select one....
						Select one....
						Select one....
						Select one....
						Select one....
						Select one....
						Select one....
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						Select one....
						Select one....

<sup>9</sup> Use the drop-down list to indicate if the course is new, exists but will change, or exists but will not change.  
<sup>10</sup> Use the drop-down list to indicate if the course is new, exists but will change, or exists but will not change.

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5f	Provide the Bulletin language for major core course requirements.

5g	Will the guided electives change? (If "Yes," indicate and note the specific changes in the grid below. If "No," indicate and proceed to question 5i.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
<i>Current</i>		<i>Proposed</i>				
Prefix & Nmbr	Credit Hrs	Title	Prefix & Nmbr	Credit Hrs	Title	Course Status <sup>11</sup>
	3			3		Select one....
	3			3		Select one....
	3			3		Select one....
	3					Select one....
						Select one....
						Select one....

5h	Provide the Bulletin language for guided electives.
<p>We call these guided electives "technical electives". Since all students will take BAE 200, which does have enough content to be considered a technical elective, the required number of technical electives is being reduced from four to three. The following is the Bulletin language:</p> <p><b>**A minimum of 9 hours are to be taken in addition to the 9 core hours selected by the student. The technical electives allow the student an opportunity to concentrate or gain depth in one or more of the various specialty areas of biosystems engineering. The technical electives must be selected from the courses listed below and approved by the student's academic advisor. Other courses may be considered, each on its individual merit</b></p> <p>Approved technical electives: BAE 435G, 438G, 450, 503, 504, 505, 506, 515, 517, 532, 536, 537, 538, 541, 549, 580, 599; BCH 401G; BME 301, 481G, 488, 501, 530, 599; CE 211, 351, 451, 461G, 471G, 525, 551; CHE 230, 236; CME 599; EE 402G; FSC 434G, 530, 536, 538; ME 321, 344, 440, 501, 503, 513, 532; PGY 412G; NRE 556; GEO 451G; EES 530, 585; EGR 599</p>	

5i	Will the free electives change? (If "Yes," indicate and note the specific changes in the space below. If "No," indicate and proceed to question 5j.)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

5j	Does the proposed change affect any track(s)? (If "Yes," note the specific changes using the grid below. If "No," proceed to question 6.)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If more than one track is affected, click <a href="#">HERE</a> for a template. Append a PDF for each affected track to the end of this form.			

Track Name:		<input type="checkbox"/> New Track	<input type="checkbox"/> Changed Track	<input type="checkbox"/> Deleted Track		
<i>Current</i>		<i>Proposed</i>				
Prefix & Nmbr	Credit Hrs	Title	Prefix & Nmbr	Credit Hrs	Title	Course Status <sup>12</sup>

<sup>11</sup> Use the drop-down list to indicate if the course is new, exists but will change, or exists but will not change.  
<sup>12</sup> Use the drop-down list to indicate if the course is new, exists but will change, or exists but will not change.

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						Select one....
						Select one....
						Select one....
						Select one....
						Select one....
						Select one....

5k Provide the Bulletin language for the track.

**6. Semester by Semester Program**

List below the typical semester-by-semester program for the major. If multiple tracks are available, click [HERE](#) for a template for additional tracks and append a PDF of each track's courses to the end of this form.

<b>YEAR 1 – FALL:</b> (e.g. "BIO 103; 3 credits")	EGR 101	1	<b>YEAR 1 – SPRING:</b>	EGR 103	2
	EGR 102	2		MA 114	4
	CHE 105	4		CIS/WRD 111	3
	CIS /WRD 110	3		PHY 231	4
	MA 113	4		PHY 241	1
	Total	14		UK Core	3
				Total	17
<b>YEAR 2 - FALL :</b>	BAE 200	3	<b>YEAR 2 – SPRING:</b>	BAE 202	3
	BIO 148	3		MA 214	3
	MA 213	4		ME 220	3
	PHY 232	4		EM 221	3
	PHY 242	1		CHE 107	3
	CE 106	3		Total	15
Total	18				
<b>YEAR 3 - FALL:</b>	BAE 301	2	<b>YEAR 3 - SPRING:</b>	BAE 305	3
	CE 341	4		EM 302	3
	EE 305	3		ME 325	3
	EM 313	3		Core Elective	3
	BIO 152	3		UK Core	3
	WRD 204 (GCCR)	3		UK Core	3
Total	18	Total	18		
<b>YEAR 4 - FALL:</b>	BAE 402	2	<b>YEAR 4 - SPRING:</b>	BAE 403	2
	BAE 400	1		ME 340	3
	Core or Tech Elective	3		Core or Tech Elective	3
	Core or Tech Elective	3		Core or Tech Elective	3
	Core or Tech Elective	3		UK Core	3
	Bio Sci Elective	3		Supporting Elective	3
Total	15	Total	17		

**7. Approvals/Reviews**

Information below does not supersede the requirement for individual letters of support from educational unit administrators and verification of faculty support (typically takes the form of meeting minutes).

In addition to the information below, attach documentation of department and college approval. This typically takes the form of meeting minutes but may also be an email from the unit head reporting department- and college-level votes.

	Reviewing Group Name	Date Approved	Contact Person Name/Phone/Email
7a	College of Engineering Faculty	4-13-17	Kimberly Anderson @ arkyl.edu

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			/	/
			/	/
			/	/
			/	/
<b>7b (Collaborating and/or Affected Units)</b>				
			/	/
			/	/
			/	/
			/	/
			/	/
<b>7c (Senate Academic Council)</b>				
		<b>Date Approved</b>	<b>Contact Person Name</b>	
	Health Care Colleges Council (if applicable)			
	Undergraduate Council	4/25/17	Joanie Ett-Mims	

## **Brandenburg, Barbara J**

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**From:** Institutional Effectiveness  
**Sent:** Tuesday, April 04, 2017 11:51 PM  
**To:** Brandenburg, Barbara J; Institutional Effectiveness  
**Subject:** RE: Sub Change Checklist--the proposed program changes to the BS in Biosystems Engineering (14.0301)

Dear BJ:

Thank you for your email regarding the proposed program changes to the **BS in Biosystems Engineering (14.0301)**

As presented, the proposed program changes (refer to list below) are not substantive changes as defined by SACSCOC, the university's regional accreditor. Therefore, no additional information is required by the Office of Planning & Institutional Effectiveness. The proposed program change(s) may move forward in accordance with college and university-level approval processes.

List of Proposed Change(s):

- Change in course title
- Add 200 level course,
- Reduce the number of required technical electives from 4 to 3, and
- Moving a sophomore level course to a junior level course.

Should you have questions or concerns about the UK's substantive change policy and its procedures, please do not hesitate contacting me.

Regards,  
Mia

**Mia Alexander-Snow, PhD**

Director, Planning and Institutional Effectiveness

Phone: 859-257-2873

Fax: 859-323-3999

Visit the Institutional Effectiveness Website: <http://www.uky.edu/ie>

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**From:** Brandenburg, Barbara J  
**Sent:** Friday, March 31, 2017 3:06 PM  
**To:** Institutional Effectiveness <InstitutionalEffectiveness@uky.edu>  
**Subject:** FW: SubChange Checklsit

I am checking on the status of this request. Could you please let me know where we are in the process.

Thanks!

BJ Brandenburg  
College of Engineering  
Director of Student Records

373 Ralph G. Anderson Building  
University of Kentucky  
Lexington, KY 40506-0503  
Tel: (859) 257-7978  
Fax: (859) 257-5727

**From:** Crofcheck, Czarena L  
**Sent:** Monday, February 27, 2017 8:44 PM  
**To:** Institutional Effectiveness <[InstitutionalEffectiveness@uky.edu](mailto:InstitutionalEffectiveness@uky.edu)>  
**Cc:** Brandenburg, Barbara J <[barbara.brandenburg@uky.edu](mailto:barbara.brandenburg@uky.edu)>; Modenbach, Alicia A <[alicia.modenbach@uky.edu](mailto:alicia.modenbach@uky.edu)>  
**Subject:** SubChange Checklisit

Please find attached our SubChange Checklist for our latest program change. Basically, we're adding a new 200 level course, reducing the number of required technical electives from 4 to 3, and moving a sophomore level course to a junior level course. We don't see these as substantial changes and we hope our checklist reflects that.

If you need anything more from me, please let me know.

Cheers,  
Czar

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Czarena Crofcheck, PhD, PE  
Professor, [Biosystems and Agricultural Engineering](#) | [Director of Undergraduate Studies](#)  
[Intellectual Property Committee, Chair](#) | [University of Kentucky](#) | [KY-NSF-EPSCoR](#) – [Workforce Development](#)  
[Kentucky Girls STEM Collaborative](#) | [Institute of Biological Engineers](#)