

# CHANGE UNDERGRADUATE PROGRAM FORM

## 1. General Information

College:	<u>Arts and Sciences</u>	Department:	<u>Mathematics</u>
Current Major Name:	<u>Mathematics</u>	Proposed Major Name:	_____
Current Degree Title:	<u>BA</u>	Proposed Degree Title:	_____
Formal Option(s):	<u>Option A is unchanged. Option B Mathematical Sciences</u>	Proposed Formal Option(s):	_____
Specialty Field w/in Formal Option:	_____	Proposed Specialty Field w/in Formal Options:	_____
Date of Contact with Associate Provost for Academic Administration <sup>1</sup> :		<u>21 December 2011</u>	
Bulletin (yr & pgs):	<u>2010 p. 138</u>	CIP Code <sup>1</sup> :	<u>27.0101</u>
Accrediting Agency (if applicable):		_____	
Requested Effective Date:	<input checked="" type="checkbox"/> Semester following approval.	OR	<input type="checkbox"/> Specific Date <sup>2</sup> : _____
Dept. Contact Person:	<u>Russell Brown</u>	Phone:	<u>859 257 3951</u>
		Email:	<u>russell.brown@uky.edu</u>

## 2. General Education Curriculum for this Program:

The new General Education curriculum is comprised of the equivalent of 30 credit hours of course work. There are, however, some courses that exceed 3 credits & this would result in more than 30 credits in some majors.

- There is no foreign language requirement for the new Gen Ed curriculum.
- There is no General Education Electives requirement.

### Please list the courses/credit hours currently used to fulfill the University Studies/General Education curriculum:

28 hours including MA 113

### Please identify below the suggested courses/credit hours to fulfill the General Education curriculum.

General Education Area	Course	Credit Hrs
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I. Intellectual Inquiry (one course in each area)

<sup>1</sup> Prior to filling out this form, you MUST contact the Associate Provost for Academic Administration (APAA). If you do not know the CIP code, the (APAA) can provide you with that during the contact.

<sup>2</sup> Program changes are typically made effective for the semester following approval. No program will be made effective until all approvals are received.

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Arts and Creativity	_____	3
Humanities	_____	3
Social Sciences	_____	3
Natural/Physical/Mathematical	_____	3
<b>II. Composition and Communication</b>		
Composition and Communication I	CIS or WRD 110	3
Composition and Communication II	CIS or WRD 111	3
<b>III. Quantitative Reasoning (one course in each area)</b>		
Quantitative Foundations <sup>3</sup>	MA 113	4
Statistical Inferential Reasoning	_____	3
<b>IV. Citizenship (one course in each area)</b>		
Community, Culture and Citizenship in the USA	_____	3
Global Dynamics	_____	3
<b>Total General Education Hours</b>		31

**3. Explain whether the proposed changes to the program (as described in sections 4 to 12) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).**

Separate letters were submitted indicating the approval of Biology, Statistics and Computer Science.

**4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.**

Current	Proposed
<input checked="" type="checkbox"/> Standard University course offering. List: _____	<input type="checkbox"/> Standard University course offering. List: _____
<input type="checkbox"/> Specific course - _____ list:	<input type="checkbox"/> Specific course) _____ - list:

**5. List any changes to college-level requirements that must be satisfied.**

Current	Proposed
<input checked="" type="checkbox"/> Standard college requirement. List: <u>Foreign language 0-11 hours, disciplinary requirements 18 hours, laboratory requirement 1 hour, electives 6 hours</u>	<input type="checkbox"/> Standard college requirement. List: _____
<input type="checkbox"/> Specific required course _____ - list:	<input type="checkbox"/> Specific course - _____ list:

**6. List pre-major or pre-professional course requirements that will change, including credit hours.**

<sup>3</sup> Note that MA 109 is NOT approved as a Quantitative Foundations course. Students in a major requiring calculus will use a calculus course (MA 113, 123, 137 or 138) while students not requiring calculus should take MA 111, PHI 120 or another approved course.

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Current	<i>Proposed</i>
<u>MA 113</u>	<u>MA 113 or MA 137</u>
<u>MA 114</u>	<u>MA 114 or MA 138</u>
<u>CS 115</u>	<u>CS 115</u>
<u>CS 215</u>	

**7. List the major's course requirements that will change, including credit hours.**

Current	<i>Proposed</i>
<u>MA 213, MA 214</u>	<u>CS 215, MA 213, MA 214,</u>
<u>MA/STA 320</u>	<u>MA/STA 320, MA/CS 321, MA 322, STA 321,</u>
<u>MA/CS 321</u>	<u>Two semester sequence chosen from</u>
<u>STA 321</u>	<u>-MA/CS 340 &amp; MA/CS 415G</u>
<u>MA 322, CS 216, STA 281</u>	<u>-MA 432G &amp; MA 433G</u>
<u>MA/CS 416G, STA 422</u>	<u>-MA 481G &amp; MA 483G</u>
<u>One of MA 361, MA 433G or MA 471G</u>	<u>-MA/CS 416G &amp; MA/STA 417G</u>
<u>9 house of 300+ mathematics courses</u>	<u>6 hours of acceptable MA courses at the 300 level</u>
<u>One of the following sequences:</u>	<u>and above (MA 308 may not be used)</u>
<u>MA 481G &amp; MA 483G,</u>	
<u>CS/MA 321 &amp; CS/MA 422,</u>	
<u>CS/MA 416G &amp; MA/STA 417G,</u>	
<u>CS 315 &amp; CS 450G</u>	

**8. Does the pgm require a minor AND does the proposed change affect the required minor?**  N/A  Yes  No

If "Yes," indicate current courses and proposed changes below.

Current	<i>Proposed</i>
_____	_____

**9. Does the proposed change affect any option(s)?**

N/A

Yes  No

If "Yes," indicate current courses and proposed changes below, including credit hours, and also specialties and subspecialties, if any.

Current	<i>Proposed</i>
_____	_____

**10. Does the change affect pgm requirements for number of credit hrs outside the major subject in a related field?**

Yes

No

If so, indicate current courses and proposed changes below.

Current	<i>Proposed</i>
<u>The fourteen hours required by the old College requirement</u>	<u>Nine hour supporting program chosen from one area outside mathematics. The DUS must approve the supporting program. Courses in the supporting program must be at the 300 level and above. Cross-listed courses may be used for the supporting program provided they are not used to satisfy another major requirement</u>

**11. Does the change affect pgm requirements for technical or professional support**

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**electives?**  Yes  No

If so, indicate current courses and proposed changes below.

Current	<i>Proposed</i>
_____	_____

**12. Does the change affect a minimum number of free credit hours or support electives?**  Yes  No

If "Yes," indicate current courses and proposed changes below.

Current	<i>Proposed</i>
_____	_____

**13. Summary of changes in required credit hours:**

	Current	<i>Proposed</i>
a. Credit Hours of Premajor or Preprofessional Courses:	<u>15</u>	<u>11</u>
b. Credit Hours of Major's Requirements:	<u>52</u>	<u>43</u>
c. Credit Hours for Required Minor:	_____	_____
d. Credit Hours Needed for a Specific Option:	_____	_____
e. Credit Hours Outside of Major Subject in Related Field:	_____	<u>9</u>
f. Credit Hours in Technical or Professional Support Electives:	_____	_____
g. Minimum Credit Hours of Free/Supportive Electives:	_____	<u>6</u>
h. Total Credit Hours Required by Level:		
100:	_____	<u>27</u>
200:	_____	<u>14</u>
300:	_____	<u>39 (300+)</u>
400-500:	_____	_____
i. Total Credit Hours Required for Graduation:	_____	<u>120</u>

**14. Rationale for Change(s) - if rationale involves accreditation requirements, please include specific references to that.**

The mathematical economics program has demonstrated that we have students who are interested in a program that combines rigorous mathematics and an application area. This mathematical sciences option to the mathematics major will serve students with an interest in subjects such as chemistry, physics, biology and engineering..

The current mathematical science option is no longer viable as many of the courses are not offered. Some revision of our program is needed in order to adjust for changed course offerings..

**15. List below the typical semester by semester program for the major. If multiple options are available, attach a separate sheet for each option.**

<b>YEAR 1 - FALL:</b>	<u>MA 113 (4 hours)</u>	<b>YEAR 1 -</b>	<u>MA 114 (4 hours)</u>
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<p><b>(e.g. "BIO 103; 3 credits")</b></p>	<p><u>MA 193 (1 hour)</u>  <u>CIS/WRD 110 (3 hours)</u>  <u>Foreign Language 1 (4 hours)</u>  <u>UK Core Humanities (3 hours)</u>  <u>Total 15 hours</u></p>	<p><b>SPRING:</b></p>	<p><u>MA 194 (1 hour)</u>  <u>CIS/WRD 111 (3 hours)</u>  <u>Foreign Language 2 (4 hours)</u>  <u>UK Core Social science (3 hours)</u>  <u>Total 15 hours</u></p>
<p><b>YEAR 2 - FALL :</b></p>	<p><u>MA 213 (4 hours)</u>  <u>CS 115 (3 hours)</u>  <u>Foreign Language 3 (3 hours)</u>  <u>UK Core Science (3 hours)</u>  <u>A&amp;S Humanities (3 hours)</u>  <u>Total 16 hours</u></p>	<p><b>YEAR 2 - SPRING:</b></p>	<p><u>MA 214 (3 hours)</u>  <u>MA 322 (3 hours)</u>  <u>CS 215 (3 hours)</u>  <u>UK Core Arts (3 hours)</u>  <u>A&amp;S Science (3 hours)</u>  <u>A&amp;S lab (1 hour)</u>  <u>Total 16 hours</u></p>
<p><b>YEAR 3 - FALL:</b></p>	<p><u>MA sequence 1 (3 hours)</u>  <u>MA/STA 320 (3 hours)</u>  <u>A&amp;S Humanities/GWR (3 hours)</u>  <u>A&amp;S Science (3 hours)</u>  <u>Supporting program 1 (3 hours)</u>  <u>Total 15 hours</u></p>	<p><b>YEAR 3 - SPRING:</b></p>	<p><u>MA Sequence 2 (3 hours)</u>  <u>STA 321 (3 hours)</u>  <u>MA/CS 321 (3 hours)</u>  <u>Supporting program 2 (3 hours)</u>  <u>A&amp;S Social Science (3 hours)</u>  <u>Total 15 hours</u></p>
<p><b>YEAR 4 - FALL:</b></p>	<p><u>MA Elective (3 hours)</u>  <u>Supporting program 3 (3 hours)</u>  <u>A&amp;S Social Science (3 hours)</u>  <u>UK Core Statistics (3 hours)</u>  <u>UK Core USA (3 hours)</u>  <u>Total 15 hours</u></p>	<p><b>YEAR 4 - SPRING:</b></p>	<p><u>MA elective (3 hours)</u>  <u>A&amp;S Social Science (3 hours)</u>  <u>UK Core Global (3 hours)</u>  <u>Electives (4 hours)</u>  <u>Total 13 hours</u></p>


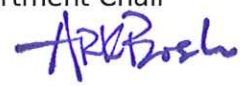
REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM

12	Requested effective date for changes (term/year):	Fall	/	2010
13	Within the department, who should be contacted for further information about the proposed program change?			
	Name:	Russell Brown	Phone:	7-3951
			Email:	rbrown@uky.edu

RMB  
3/31/10

14. Signatures of Approval.

Oct. 29, 2009  
DATE of Approval by  
Department Faculty  
2/9/10

ZHONGWEI SHEN /   
printed name Reported by Department Chair signatu  
re  
Anna R. K. Bosch /   
printed name Reported by College Dean signatu  
re

DATE of Approval by  
College Faculty  
2/8/2012

Sharon Gill /  
printed name Reported by Undergraduate Council Chair signatu  
re

\*DATE of Approval by  
Undergraduate Council

\*DATE of Approval by  
Graduate Council

printed name Reported by Graduate Council Chair signatu  
re

\*DATE of Approval by  
Health Care Colleges  
Council (HCCC)

printed name Reported by Health Care Colleges Council  
Chair signatu  
re

\*DATE of Approval by  
Senate Council

Reported by Office of the Senate Council

\*DATE of Approval by  
the University Senate

Reported by the Office of the Senate Council

\*If applicable, as provided by the *University Senate Rules*.