Proposed New Dual Degree Program: BA/BS in a STEM major in A&S and MBA

This is a recommendation that the University Senate approve, for submission to the Board of Trustees, the establishment of a new Dual Degree Program: BA/BS in a STEM major (i.e., Biology, Chemistry, Geology, Mathematics, Mathematical Economics, Neuroscience, and Physics & Astronomy) within the College of Arts & Sciences and MBA in the Gatton College of Business and Economics.

Rationale:
Approximately 350 students graduate each year with a STEM major from the College of Arts and Sciences. While many of these students will immediately enter the workforce, a good number will apply to graduate programs or professional schools. The STEM-MBA dual degree path will add to the various options available to undergraduate STEM majors. There is no sharing of curriculum and no special admissions into the MBA program. This dual degree mirrors the current and approved dual degree program between the College of Engineering and the Gatton College of Business and Economics.

Thanks!
Margaret

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Margaret J. Mohr-Schroeder, PhD | Associate Professor of STEM Education - Mathematics | SAPC University Senate Committee Chair | University Senator/Senate Council Member | STEM PLUS Program Co-Chair | Department of STEM Education | University of Kentucky | www.margaretmohrschroeder.com | Schedule a Meeting with Me
December 12, 2016

Dear Undergraduate Council,

On behalf of the faculty of the College of Arts and Sciences, the Education Policy Committee discussed and approved the STEM Plus MBA Dual Degree Program proposal. 7:0:2 on Tuesday, December 6, 2016.

Sincerely,

Christia Brown
Chair, Education Policy Committee
BACKGROUND

The faculty of the College of Arts and Sciences (“A&S”) and the Gatton College of Business and Economics (“Gatton”) have worked together to propose this dual degree program which combines a Bachelor of Science or Bachelor of Arts degree from one of the STEM disciplines in A&S with the One Year MBA (“MBA”) in a seamless pathway, resulting in a “4+1 program”. A similar dual degree program has existed for many years between the College of Engineering (“Engineering”) and Gatton. Given the success of the existing program with Engineering, Gatton faculty approached A&S to propose a similar pathway for A&S STEM majors. Students in the dual degree program will complete the requirements for each degree separately; however, in the senior year, students who apply to the dual degree program will be able to participate in enrichment opportunities provided by Gatton.

Gatton will benefit from the dual degree pathway through expanding and augmenting the pool of MBA applicants with competitive A&S STEM majors who generally have: strong quantitative and analytic skills; well-rounded liberal arts background that stresses clear oral and written communication skills; foreign language skills; and experience pursuing independent research and/or community service work. These are all skills that are highly prized in the business environment. In addition, applicants from A&S STEM disciplines are likely to increase the diversity of the MBA applicant pool (29% of the current MBA cohort is female; 16% are underrepresented minorities).

A&S departments and faculty strongly support this program. They are dedicated to the development and professional successes of all our students, and take a keen interest in their future career paths, wherever they may go.

BENEFIT TO STUDENTS

Approximately 350 students graduate each year with a STEM major from A&S (A&S STEM majors include Biology, Chemistry, Geology, Mathematics, Mathematical Economics, Neuroscience, and Physics & Astronomy). While many of these students will immediately enter the workforce, a good number will apply to graduate programs or professional schools, including programs in the health sciences. The annual Graduating Senior Survey (2013-14) indicates that 30% of A&S seniors are likely to pursue full-time graduate or professional school. The STEM-MBA dual degree path will add to the various options available to undergraduate STEM majors, since not all science majors are headed toward graduate study in science or the health professions. The enrichment opportunities provided by Gatton during the senior year will allow undergraduates to explore the curriculum of the One Year MBA and to learn more about the various career paths available to those who hold an MBA. Students will thus be able to
post-graduation options with a clearer perspective on the opportunities available to them, and with a better understanding of their own skills and interests.

STRUCTURE OF PROGRAM

ADMISSIONS

Admission to the Dual Degree program: At the completion of the junior year, all students who are eligible for admission to the Graduate School may apply. After being admitted to the Dual Degree program, the student will be able to participate in enrichment opportunities offered by Gatton during the student’s senior year.

A&S will also identify a targeted pre-professional advisor to work with students interested in or participating in the dual degree program. (This advisor will also work with any A&S major who expresses an interest in pursuing an MBA or business degree; not all students aiming for an MBA will be majoring in STEM fields, after all.)

Admission to Gatton’s One Year MBA (“MBA”): In the senior year (Year Four), the student will apply separately for admission to the accelerated MBA program. Students participating in the Dual Degree program as undergraduates are under no obligation to apply to the MBA, or to enroll in the MBA if accepted. Students participating in the Dual Degree program will be eligible to apply for scholarships available to MBA students, depending on their academic qualifications.

ADVANTAGES

The primary advantage of the Dual Degree program is to allow faculty to identify interested and eligible undergraduates in the science fields, and to offer them co-curricular and extra-curricular opportunities through Gatton. These enrichment opportunities will enable students to better understand and evaluate their interests in business fields. Many high-achieving students in the STEM disciplines are not certain they wish to pursue a PhD or a medical degree, and may be interested in exploring other avenues for graduate work. This Dual Degree program will provide a seamless transition from the Bachelor’s degree into an MBA for students who are so motivated. While still undergraduates, these students will: make contacts with faculty and staff members in Gatton; learn about the variety of employment opportunities available to those who earn an MBA; and be able to explore several career paths after graduation.

PROGRAM OF STUDY

To earn the BA/BS+MBA, a student must satisfy the requirements of both degrees. Since the degrees are completed sequentially, the curriculum of one degree will not overlap with or interfere with the second. Any student pursuing a science or mathematics major in A&S who is eligible for admission to the Graduate School may apply.

Years One through Four: Student completes usual requirements for a bachelor’s degree in one of the STEM fields. The bachelor’s degree is awarded at the end of Year Four.

Summer between Years Three and Four: In July, A&S STEM disciplines provide names of high-achieving juniors to the Director of the MBA Center. These will be students who have earned 90+ credits, and who meet the minimum GPA requirements for the Dual Degree program (3.25 or higher).
The MBA Director, in consultation with Gatton’s Admissions Office, will invite eligible A&S STEM majors to participate in the Dual Degree program, but all students who are eligible for admission to the Graduate School may apply. In August, students will be informed whether they have been conditionally admitted to the Dual Degree program.

Before start of the MBA program, the student will take four MBA prerequisites: Micro and Macro Economics; Financial and Managerial Accounting. All four classes can be taken either in the classroom or online.

Year Four: Faculty and staff in Gatton will provide enrichment opportunities to undergraduate students admitted to the Dual Degree program. In Year Four, students will take either the GMAT or GRE. Students will apply to the Graduate School for admission into the program in the fall or spring of Year Four. Students will earn the bachelor’s degree upon completion of the requirements for the BA/BS in May of Year Four.

Year Five: Students start the MBA in June and complete it in May.

GRADE POINT AVERAGE

Grade Point Average for each program will be calculated separately.

GRANTING OF DEGREES

Dual degree students will in fact earn each degree sequentially: first the BA/BS, and then the MBA. Since the MBA program is a highly concentrated curriculum, a student will not be permitted to enroll in the accelerated MBA until all bachelor’s degree requirements have been met. Students participating in the Dual Degree program as undergraduates are under no obligation to apply to the MBA, or to enroll in the MBA if accepted.

TUITION/FEE PAYMENTS

Since the degrees are completed sequentially, the student is responsible for tuition and fees for each degree separately. Undergraduate tuition and fees apply until the student has completed the bachelor’s degree and earned the diploma; while an undergraduate, the student will be eligible for UK grants and scholarships as applicable. The student who enrolls in the accelerated MBA program will be responsible for MBA tuition and fees and will be eligible for UK grants and scholarships as applicable.

FAILURE TO COMPLETE BACHELOR’S OR MBA REQUIREMENTS

The two degrees will be awarded separately. The BA or BS degree will be awarded upon completion of all requirements for a bachelor’s degree. The student who fails to complete the bachelor’s degree requirements will not be permitted to enroll in the MBA program. The MBA will be awarded upon completion of the requirements of the MBA program.

ASSESSMENT OF DUAL DEGREE PROGRAM

The Dual Degree program provides educational opportunities to eligible undergraduates in the STEM disciplines in A&S. The program will be deemed a success if (a) students apply for, and are accepted to, the Dual Degree program; (b) students participate in the enrichment opportunities offered through Gatton; (c) students participating in the Dual Degree program apply to, and are accepted into, the MBA...
program, and successfully earn the MBA. At each stage some attrition is expected, since not all undergraduates in the Dual Degree program may decide to apply to the MBA program. A&S and Gatton will work together to track participation, application, and graduation data at each stage of this program. The colleges will also collaborate to develop a “student satisfaction survey” to be administered to graduating bachelor’s degree students to understand their views on the strengths and weaknesses of the co-curricular activities offered through the Dual Degree program.

David W. Blackwell
DEAN OF GATTON COLLEGE OF BUSINESS AND ECONOMICS

Mark Lawrence Kornbluh
DEAN OF COLLEGE OF ARTS AND SCIENCES
Dear Education Policy Committee and Undergraduate Council,

As Department Chair/or Program Director, I approve the creation of a STEM Plus MBA Dual Degree Program between the College of Arts and Sciences and the Gatton College of Business and Economics.

Biology
Chemistry
Earth and Environmental Sci.
Mathematics
Math Economics
Neuroscience
Physics and Astronomy

Bruce OHara
Mark Meier
Dave Moecher
Russell Brown
Robert Molzon
Elizabeth Debski
Mark Prendergast
James Geddes
Sumit Das
<table>
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<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
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<tr>
<td>1</td>
<td>Take courses to complete bachelor’s degree</td>
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<td>2</td>
<td>Take courses to complete bachelor’s degree</td>
<td>Take courses to complete bachelor’s degree</td>
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<td>3</td>
<td>Take courses to complete bachelor’s degree</td>
<td>Take courses to complete bachelor’s degree</td>
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<td>*ACC 201</td>
<td>*ECO 201</td>
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<td>STEM/MBA dual degree application invitations are sent to qualified candidates during the summer but all eligible students may apply.</td>
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<tr>
<td>4</td>
<td>Take courses to complete bachelor’s degree and attend exclusive enrichment activities provided by Gatton.</td>
<td>Take courses to complete bachelor’s degree and attend exclusive enrichment activities provided by Gatton.</td>
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<tr>
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<td>*ACC 202</td>
<td>*ECO 202</td>
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<td>Start/submit application to the MBA program through the Graduate School application and satisfy the MBA admissions requirements.</td>
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<td>Students should take either the GMAT or GRE during this time.</td>
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<td>5</td>
<td>One Year MBA program</td>
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*Before start of MBA program, students must complete the required MBA prerequisite courses (ECO 201, ECO 202, ACC 201, and ACC 202). All courses offered during the academic year and summer terms. Additionally, the MBA program accepts these prerequisites offered through IVY Software.

**IVY Software Instructions**

IVY Software is an online, diagnostics tool that offers specific courses that have met our prerequisite specifications. Below are the instructions to access the necessary courses through IVY Software:

Visit the University of Kentucky's MBA IVY Software page

Add to your cart the required prerequisite course(s): Fundamentals of Economics, Financial Accounting and Managerial Accounting (recommended order)

Non engineering, finance, and mathematics majors - Add to your cart the recommended course(s): Business Math & Statistics and Excel for MBA Students (recommended order)

Proceed to checkout. Once you've purchased the courses, instructions will be emailed from IVY Software on how to access and begin

Please Note:
To successfully pass the course(s), you must obtain a minimum of 80% on the Final Comprehensive Exam with a maximum of three attempts

Upon completion/passing of the course, please email Christopher Carney, Director of MBA Recruitment to verify that you've passed the course

If you have any questions or experience any technical difficulties with IVY Software, please contact the IVY Software Support Team

Graduate Council Approve

Roshan Nikou
Brothers, Sheila C

From: Nikou, Roshan
Sent: Wednesday, April 19, 2017 10:56 AM
To: Brothers, Sheila C; Ett, Joanie M; Jackson, Brian A; McCormick, Katherine; Nikou, Roshan; Price, Cleo; Timoney, David M
Cc: Buntin, William J; Bruckner, Geza; Bruckner, Geza; Truszczynski, Mirek; Brown, Christia S; Johnson, Julia M
Subject: Transmittals
Attachments: ICT Masters Required Courses.pdf; UK AT 3+2 program-new.pdf; USP - COE to CS.pdf; STEM Plus MBA Dual Degree Program 2017 (revised 3-1-17).pdf; UPS.pdf; ENG, MFA_Creative Writing, Final, 3_21, 2017.pdf

TO: Katherine McCormick, Chair and Sheila Brothers, Coordinator

FROM: Brian Jackson, Chair and Roshan Nikou, Coordinator
Graduate Council

The Graduate Council approved the following proposals and is now forwarding them to the Senate Council to approve. The courses listed below, are all accessible via Curriculog.

Programs (attached)
Master of Athletic Training
Master of Fine Arts
Master of Information Communication Technology
STEM plus MBA Dual Degree
University Scholars – Computer Science
University Scholars – Civil Engineering

Courses (available through Curriculog)
A-S - 564 - Digital Fabrication Projects (Subtitle Required)
A-S - 567 - Advanced Topics in Digital Fabrication (Subtitle Required)
APP - 500 - Special Topics in Appalachian Studies (Subtitle Required)
AT - 510 - Life-Threatening and Emergency Conditions During Physical Activity
AT - 520 - Management and Administration in Athletic Training
AT - 550 - Evidence-Based Practice in Athletic Training
AT - 590 - Musculoskeletal Anatomical Dissection
AT - 591 - Foundations and pathophysiology of the Musculoskeletal System: Muscle / Tendon and Nerve
AT - 592 - Foundations and Pathophysiology of the Musculoskeletal System for Athletic Trainers: Articular/Bone/Cartilage
AT - 593 - Foundations and Pathophysiology of the Musculoskeletal System for Athletic Trainers: Integumentary and Immune Systems

CPH - 684 - STRATEGIC HUMAN RESOURCE MANAGEMENT IN HEALTHCARE
CPH - 783 - Applications in Healthcare Finance and Operations
CPH - 784 - DECISION MAKING IN HEALTH CARE ORGANIZATIONS

EDC - 560 - Literacy Development in the ESL Classroom
ENT 402 – Forest Entomology
FAM - 745 - Families and Children in Play Therapy
MAT 572 – International Merchandising
IPS - 790 - Supervised Research and Study in Integrated Plant and Soil Sciences
PA - 633 - MUNICIPAL SECURITIES
TSL - 560 - Literacy Development in the ESL Classroom

Roshan Nikou, MA
Graduate Council Coordinator
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