



University Council

March 15, 2019

UNIVERSITY CURRICULUM COMMITTEE – 2018-2019

John Maerz, Chair

Agricultural and Environmental Sciences – Elizabeth Little

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Education – Morgan Faison

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Environment and Design – Brad Davis

Family and Consumer Sciences – Patricia Hunt-Hurst

Forestry and Natural Resources – Joseph Dahlen

Journalism and Mass Communication – James Hamilton

Law – Randy Beck

Pharmacy – Robin Southwood

Public and International Affairs – Jeffrey Berejikian

Public Health – Anne Marie Zimeri

Social Work – Harold Briggs

Veterinary Medicine – Susan Sanchez

Graduate School – Amy E. Medlock

Ex-Officio – Interim Provost Libby V. Morris

Undergraduate Student Representative – Ali Elyaman

Graduate Student Representative – Chasity Tompkins

Dear Colleagues:

The attached proposal from the Terry College of Business for a new undergraduate certificate in Financial Technology will be an agenda item for the March 22, 2019, Full University Curriculum Committee meeting.

Sincerely,

John Maerz, Chair

University Curriculum Committee

cc: Interim Provost Libby V. Morris
Dr. Rahul Shrivastav

OUTLINE FOR AN INTERDISCIPLINARY CERTIFICATE PROGRAM

1. **Institution:** University of Georgia **Date:** January 10, 2019
2. **School/College:** Terry College of Business
3. **Department/Division:** Management Information Systems
4. **Certificate Title:** Financial Technology (FinTech)
5. **Level:** Undergraduate
6. **Proposed starting date for program:** Fall 2019 or as soon as possible after approval
7. **Abstract of the program for the University Council's agenda:**

To meet the demands of Georgia's growing Financial Transactions industry, the Terry College of Business at the University of Georgia is partnering with the University System of Georgia's Financial Technology initiative to provide students educational opportunities and access to this high-demand career field. The program's curriculum has been developed with direct input from industry leaders, ensuring that students completing this or other programs in the initiative will be well-equipped with the skills needed to work in this high-demand career field. The curriculum is designed to teach students the latest trends and topics in information systems, business process management, cyber security, and legal issues relevant to the financial services industry.

I. Response to the Criteria for All Programs

The criteria that proposed new programs are expected to meet in order to be approved and implemented within the University of Georgia are listed below. Please provide sufficient explanation as to how the proposed program satisfies each criterion.

1. *The purpose and educational objectives of the program must be clearly stated, and must be consistent with the role, scope, and long-range development plan of the institution.*

A. State the purpose and educational objectives of the program and explain how the program complements the role, scope, and long-range development plan of the institution.

The purpose of the proposed program is to prepare (teach and train) students for the emerging Financial Technology (FinTech) industry and show them how technology is used to improve the delivery of financial services.

Students completing the certificate are expected to be more competitive than their peers due to their understanding of:

- the operational and strategic goals of financial institutions and intermediaries, and how technology is reshaping not only the traditional areas of finance (e.g., alternative lending ("alt-finance")) and wealth management, but also in related fields such as insurance ("insur-tech") and real estate.
- alternative revenue models, regulatory issues, and competitive opportunities, as well as the challenges and threats FinTech firms must address.

- the information and communication tools, technologies, and standards integral to consumer, merchant, and enterprise services in the payments and financial service sectors. These technologies span messaging, communication networks and gateways, core processing, mobile and online software, and application program interfaces (APIs).
- the basic legal frameworks of the U.S. banking and securities sectors, how new technologies (“FinTech”) are transforming legacy banking and securities business models, and how new information technologies may be able to deliver financial services to communities historically excluded from the banking and/or securities sectors.

This program is in line with the goals and long-range plans of the institution to service the citizens of the state of Georgia by providing a well-prepared student body and help improve the economic vitality of the state of Georgia.

B. Describe the interdisciplinary nature of the proposed program. Which school(s) or college(s) and department(s) will be involved in the development of the program? Describe the expected stage of development for this program within five years.

The core/required courses in the certificate program will be taught and supported by the departments of Management Information Systems and Finance, as well as our Legal Studies program. The certificate will be fully functional at the time of approval as all four of the courses in the certificate will have been approved by the University and will be offered over the 2019-20 academic year.

2. *There must be a demonstrated and well-documented need for the program.*

A. Explain why this program is necessary.

FinTech (Financial Technology) is a fast-growing, \$30 billion business sector that involves the use of technology to facilitate millions of every day financial transactions. FinTech is a rapidly growing industry that is simplifying our lives (e.g., Venmo) and businesses, but this industry is not having an easy time finding skilled workers. Atlanta is the hub of this industry, with more than 100 FinTech companies processing 70 percent of all credit, debit, and pre-paid card transactions in the United States, amounting to \$3.5 trillion annually. Atlanta and the state of Georgia are home to not only large FinTech employers such as First Data, Fiserv, Equifax, Global Payments, NCR, and Incomm, but also a growing community of startups and innovators such as Acculynk, Cardlytics, GreenSky, Kabbage, and Parkmobile. Combined, the FinTech industry employs more than 30,000 people in our state, with demand for skilled professionals growing rapidly. The proposed certificate aims to help fill a void in the marketplace. Despite FinTech’s brisk acceleration (Goldman Sachs estimates that \$4.7 trillion of financial services revenue is at risk of displacement from FinTech), companies are having difficulty finding workers with the right combination of technical abilities and financial acumen. By 2020, the region will need an additional 5,000 FinTech professionals, local experts say.

B. In addition, provide the following information:

1. **Semester/Year of Program Initiation:** Fall 2019
2. **Semester/Year Full Implementation of Program:** Fall 2019
3. **Semester/Year First Certificates will be awarded:** Spring 2020

4. **Annual Number of Graduates expected (once the program is established): 100**

Plan of Study:

BUSN 3700 - Principles of FinTech (first semester)

LEGL 4700 - Fintech and Financial Services Law (spring semester)

MIST 4700 - Financial Technologies (semester after BUSN 3700)

MIST 4803 - Internship in FinTech (the summer after completion of two or three of the above courses listed above)

5. **Projected Future Trends for number of students enrolled in the program:**

Innovation and disruption technology are causing change across the entire face of business. We do not believe this will be short-lived issue and the need to understand this technological change will likely become a great part of the practice of business, the College is confident there will be an increasing demand for the certificate.

3. *There must be substantial evidence that student demand for the program will be sufficient to sustain reasonable enrollments in the program.*

A. Provide documentation of the student interest in the program, and define what a reasonable level of enrollment is for a program of this type. Provide evidence that student demand will be sufficient to sustain reasonable enrollments.

We currently have capacity to support enrollment of 50 students in each of the first two courses for fall and spring semester. This will allow for a maximum of 100 students per year to earn the certificate.

Also note that in 2017, our Finance program graduated 585 BBA students, while our Management Information Systems major graduated 211 BBA students. If only 10% of these students would have been enrolled in the FinTech certificate, we would have met our enrollment goals. This ignores all of the other majors in the College with students likely drawn to this booming industry.

B. In addition, provide the following information - To what extent will minority student enrollments be greater than, less than, or equivalent to the proportion of minority students in the total student body?

Minority student enrollment is expected to be equivalent to the proportion of minority students in the total student body.

4. *The design and curriculum of the program must be consistent with appropriate disciplinary standards and accepted practice.*

Provide the following information:

A. Present a detailed curriculum outline of the program listing specific course requirements (to include programs of study, course prefix, number, and title).

The Financial Technology (FinTech) Certificate will consist of four three-hour courses (12 credit hours). The certificate was developed in line with the FinTech initiative and is kept at

the minimum number of credit hours as to allow students interested in other areas of the FinTech environment to pursue those avenues (e.g. Informatics). The required courses are:

BUSN 3700 - Principles of FinTech (3 hours): An operational and strategic examination of financial institutions, intermediaries and innovative startups in payments, digital and mobile banking, alternative lending ("alt- finance"), wealth management, and insurance ("insur-tech"). This course also examines the practices, business and revenue models, regulatory issues, and competitive opportunities as well as the challenges and threats FinTech firms must address.

MIST 4700 - Financial Technologies (3 hours): Examines the information and communication tools, technologies, and standards integral to consumer, merchant, and enterprise services in the payments and financial service sectors. Explores technology's role in reshaping FinTech businesses. Technologies span messaging, communication networks and gateways, core processing, mobile and online software, and application program interfaces (APIs).

LEGL 4700 - Fintech and Financial Services Law (3 hours): Students will survey banking and securities law, look at how FinTech companies are disrupting old financial services models, and examine how these new technologies can serve communities that have been traditionally excluded from the financial services sector.

MIST 4803* - Internship in FinTech (3 hours): Students are permitted to enter businesses, governmental agencies, or other organizations for the purposes of obtaining practical and applied FinTech experience. A paper or suitable project associated with a description and analysis of this experience is required.

*Substitutions for MIST 4803 can be approved by the department in situations where deemed necessary. The substitution must be related to the goals of the FinTech Certificate and should only be offered in very unique situations.

B. Identify which aspects of the proposed curriculum already exist and which constitute new courses.

New courses developed for this program:

BUSN 3700 - Principles of FinTech (3 hours)

MIST 4700 - Financial Technologies (3 hours)

MIST 4803 - Internship in FinTech (3 hours)

Existing Course:

LEGL 4700/6700 - FinTech and Financial Services Law (3 hours)

C. **Identify model programs, accepted disciplinary standards, and accepted curricular practices against which the proposed program could be judged. Evaluate the extent to which the proposed curriculum is consistent with these external points of reference and provide a rationale for significant inconsistencies and differences that may exist.**

The proposed program is unique in that the faculty developed the courses in collaboration with industry partners and university system administration. Many recognizable schools offer specialized course(s) in FinTech, including Massachusetts Institute of Technology (MIT),

Stanford University, Georgetown University, New York University Stern School of Business, University of Pennsylvania, Columbia University, University of California Berkeley, McMaster University's DeGroote School of Business, University of Southern California's Marshall School of Business, and Duke University's Fuqua School of Business.

While few of the noted programs offer a degree in FinTech, a FinTech degree would be designed to meet the rising need for quantitative modeling and analysis, risk management, and actuarial science. At the University of Georgia, we have strengths in these areas within the business school and elsewhere on campus. Thus, we believe that the best route to educate our students, and students across the University, is using a certificate. In this manner, students in related programs, such as risk management or management information system, can focus some of their additional coursework on the specifics of the FinTech Industry. The certificate proposed is in line with the USG goals for the program.

D. If program accreditation is available, provide an analysis of the ability of the program to satisfy the curricular standards of such specialized accreditation.

The Terry College of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB). No formal accreditation standards exist for a Certificate in FinTech.

5. *Faculty resources must be adequate to support an effective program.*

A. Define the size, experience, and specializations of the full-time faculty needed to support an effective program. Identify the extent to which such faculty resources currently exist at the institution, and what additions to the faculty will be needed to fully implement the program. Specify how many full-time faculty will provide direct instructional support to this program.

The Terry College of Business will provide the needed instructional support for core courses and overall administration of the certificate. If approved, we will begin by offering the Principles of FinTech course (BUSN3700) once each semester beginning Fall 2019. The Financial Technologies course (MIST4700) will begin being offered in Spring 2020 and offered each semester thereafter. We will staff these courses with a part-time lecturer, potentially expanding this role as the certificate shows its true potential. The Law of FinTech course (LEGL 4700/6700), which covers topics in commercial banking and legal studies, will be taught by a current member of our Legal Studies Faculty and is currently taught each spring.

B. In addition, for each faculty member directly involved in this program, list:

- 1) Name, rank, degrees, academic specialty, educational background
- 2) Special qualifications related to this program
- 3) Relevant professional and scholarly activity for past five years
- 4) Projected responsibility in this program and required adjustments in current assignments

Marie-Claude (Maric) Boudreau, PhD
Department of Management Information Systems
Department Head and Associate Professor
Project responsibility – Administrative oversight – no required adjustment to current assignment

David Gunton, JD
Legal Studies Program
Lecturer
Project responsibility – Teaching a course – no required adjustment to current assignment

Weifeng Li, PhD
Department of Management Information Systems
Assistant Professor
Research and teaching in cyber-security
Project responsibility – Faculty oversight – no required adjustment to current assignment

Jeffry (Jeff) M. Netter
Department of Finance
Project responsibility – Faculty oversight – no required adjustment to current assignment

Craig Piercy, PhD
Department of Management Information Systems
Senior Lecturer
Project responsibility – Faculty oversight – He is involved with a FinTech class in our MBT program – no required adjustment to current assignment

Richard (Rick) Thomas Watson, PhD
Department of Management Information Systems
J. Rex Fuqua Distinguished Chair for Internet Strategy
Project responsibility – Faculty oversight – no required adjustment to current assignment

Xia Zhao, PhD
Department of Management Information Systems
Assistant Professor
Research & teaching in cyber-security
Project responsibility – Faculty oversight – no required adjustment to current assignment

C. Where it is deemed necessary to add faculty in order to fully develop the program give the desired qualifications of the persons to be added.

Given the current faculty expertise, the likely next hire would be one or two part-time Lecturers with direct experience in the FinTech arena and with the ability to coordinate with the staff of the USG initiative and members of the FinTech Industry to secure meaningful experiences for students.

6. *Library, computer, and other instructional resources must be sufficient to adequately support the program.*

A. Describe the available library resources for this program and the degree to which they are adequate to support an effective program. Identify the ways and the extent to which library resources need to be improved to adequately support this program.

Currently available library, computer, and instructional resources are adequate to support this proposed certificate.

- B. Likewise, document the extent to which there is sufficient computer equipment, instructional equipment, laboratory equipment, research support resources, etc. available to adequately support this program. Specify improvements needed in these support areas.**

Currently available library, computer, and instructional resources are adequate to support this proposed certificate.

7. *Physical facilities necessary to fully implement the program must be available.*

Describe the building, classroom, laboratory, and office space that will be available for this program and evaluate their adequacy to fully support an effective program. Plans for allocating, remodeling, or acquiring additional space to support the program's full implementation of the program should also be identified.

Classroom facilities currently in use and near completion are adequate to meet the needs of this undergraduate certificate

8. *The expense to the institution (including personnel, operating, equipment, facilities, library, etc.) required to fully implement the program must be identified.*

- A. Detailed funding to initiate the program and subsequent annual additions required to fully implement the program are needed below. Estimates should be based upon funding needed to develop an effective and successful program and not upon the minimal investment required to mount and sustain a potentially marginal program.**

To effectively offer the certificate and still meet the demand from students for the MIST major, the Terry College will be hiring one or two part-time Lecturers to cover the first two courses in the FinTech curriculum. The Lecturer will also oversee the experiential learning opportunities associated with the FinTech Certificate.

- B. Indicate the extent of student support (fellowships, assistantships, scholarships, etc.) available for this program, and evaluate the adequacy of this support. Assistantships funded from institutional (as opposed to sponsored) funds should be included in this funding analysis as well.**

N/A

9. *Commitments of financial support needed to initiate and fully develop the program must be secured.*

- A. Identify the sources of additional funds needed to support the program and the probability of their availability.**

Funding and necessary resources will be allocated to the certificate by the Terry College of Business from its existing academic allocation.

- B. It is particularly important to include in this response the long-range plans for additional or expanded facilities necessary to support an effective program. Evaluate the timing and likelihood of such capital funding.**

Facility expansion will not be necessary for any future expansion of this program.

10. *Provisions must be made for appropriate administration of the program within the institution and for the admission to and retention of students in the program in keeping with accepted practice.*

Describe and evaluate the structure for the administration of the program. Explain the degree to which that structure is in keeping with good practice and accepted standards. Similarly, explain how and by what criteria students will be admitted to and retained in the program, and how these procedures are consistent with accepted standards for effective and successful programs.

Administration of the program will be handled by faculty of the MIST program. Our largest certificate in the College (Legal Studies) is also housed within an academic department. Being housed within the College of Business means it is subject to review by our accrediting body. In addition, given the USG focus on this topic and their input concerning the development of the curriculum, we believe the certificate will constantly evolve to meet the accepted standards for a successful program for the students and the University.

The certificate program will be open to all students at the University. Administration of the selection process for admission will be the responsibility of faculty identified by the unit head. In the event that student demand exceeds the number of seats available in the required courses, the application may serve as a selection tool, and a GPA cut-off may need to be implemented. To earn the certificate, students must earn a minimum grade of C (2.00) in all certificate coursework.

Approvals on File

Proposal: Undergraduate Certificate in Financial Technologies

College: Terry College of Business

Department: Management Information Systems

Proposed Effective Term: Fall 2019

School/College:

- Legal Studies Program Director, Dr. Robert Hoyt, 3/6/2019
- Department of Finance Department Head, Dr. Jeffry Netter, 3/6/2019
- Department of Management Information Systems Department Head, Dr. Marie-Claude Boudreau, 1/10/2019
- Terry College of Business Dean, Dr. Benjamin Ayers, 1/10/2019