## APPROVED BY SEC ON BEHALF OF THE SENATE 04/15/2020

# : ACCOUNTANCY: ACCOUNTANCY ANALYTICS, MS (ONLINE)

## In Workflow

- 1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
- 2. 1346 Head (sougiani@illinois.edu; wsmith42@illinois.edu)
- 3. KM Grad Committee Chair (jloew@illinois.edu; lorenan@illinois.edu)
- 4. KM Committee Chair (dyer1@illinois.edu)
- 5. KM Dean (peecher@illinois.edu; mlschltz@illinois.edu)
- 6. University Librarian (jpwilkin@illinois.edu)
- 7. Grad\_College (agrindly@illinois.edu; jch@illinois.edu; lowry@illinois.edu)
- 8. Provost (kmartens@illinois.edu)
- 9. Senate EPC (bjlehman@illinois.edu)
- 10. Senate (jtempel@illinois.edu)
- 11. U Senate Conf (none)
- 12. Board of Trustees (none)
- 13. IBHE (none)
- 14. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

## **Approval Path**

- 1. Mon, 21 Oct 2019 21:21:53 GMT Deb Forgacs (dforgacs): Approved for U Program Review
- 2. Mon, 21 Oct 2019 21:52:00 GMT Brooke Elliott (wbe): Approved for 1346 Head
- Wed, 20 Nov 2019 22:20:25 GMT Jeffrey Loewenstein (jloew): Approved for KM Grad Committee Chair
- Tue, 10 Dec 2019 17:18:01 GMT Michael Dyer (dyer1): Approved for KM Committee Chair
- Tue, 17 Dec 2019 02:26:08 GMT Mark Peecher (peecher): Approved for KM Dean
- 6. Tue, 17 Dec 2019 02:48:41 GMT John Wilkin (jpwilkin): Approved for University Librarian
- 7. Tue, 04 Feb 2020 18:30:41 GMT Allison McKinney (agrindly): Approved for Grad\_College
- 8. Tue, 04 Feb 2020 20:51:38 GMT Kathy Martensen (kmartens): Approved for Provost
- 9. Mon, 10 Feb 2020 18:55:09 GMT Barbara Lehman (bjlehman): Rollback to Provost for Senate EPC
- Fri, 06 Mar 2020 16:24:58 GMT Kathy Martensen (kmartens): Approved for Provost

## **New Proposal**

Date Submitted:Mon, 21 Oct 2019 19:35:11 GMT

## Viewing:: Accountancy: Accountancy Analytics, MS (online)

Changes proposed by: Whitney Smith

## **Proposal Type**

Proposal Type:

Concentration (ex. Dietetics)

#### Proposal Title:

## if this proposal is one piece of a multi-element change please include the other impacted programs here. *example: A BS revision with multiple concentration revisions*

Accountancy Analytics Concentration for the MS in Accountancy online only. (Note: the program drop-down only offers the option of tying to both the online and on-campus versions. This proposal is specific to the online version).

#### **EP Control Number**

EP.20.148

#### **Official Program Name**

Accountancy: Accountancy Analytics, MS (online)

#### **Effective Catalog Term**

Fall 2020

#### **Sponsor College**

Gies College of Business

#### **Sponsor Department**

Accountancy

#### **Sponsor Name**

W. Brooke Elliott

#### **Sponsor Email**

wbe@illinois.edu

**College Contact** 

Mark Peecher

#### **College Contact Email**

peecher@illinois.edu

### **Program Description and Justification**

Provide abriefdescription and justification of the program, including highlights of the program objectives, and the careers, occupations, or further educational opportunities for which the program will prepare graduates, when appropriate.

This proposal seeks the approval of a new Accountancy Analytics concentration in the online Master of Science in Accountancy graduate program. The proposed concentration is designed to enhance graduate students' knowledge, skills, and professional opportunities related to using information technology to solve accounting and business problems and effectively communicate analyses, findings and conclusions. The courses in this concentration specifically address the needs of working professionals with limited prior experience in the use of information technology in accounting and business contexts. The skills and knowledge acquired in this concentration will enable working professionals to become more technology-savvy business advisors and strategists. Professions where these skills are high in demand are those involving increasingly complex scenarios and large data sets, and include auditors, finance managers, management accountants, business analysts, and tax accountants and advisors.

Moreover, the 2018 Standard A5 for Accounting Accreditation by the Association to Advance Collegiate Schools of Business (AACSB) states that "Consistent with mission, accounting degree programs integrate current and emerging accounting and business practices in three primary components within the curricula.

1) Information systems and business processes including data creation, manipulation/management, security, and storage;

2) Data analytics including, for example, statistical techniques, clustering, data management, modeling, analysis, text analysis, predictive analytics, learning systems, or visualization; and

3) Developing information technology agility among students and faculty, recognizing the need for continual learning of new skills needed by accounting professionals."

The proposed Accountancy Analytics concentration is designed to address this standard.

#### Is this program interdisciplinary?

No

#### Corresponding Program(s):

#### Corresponding Program(s)

Accountancy, MS (on campus online)

#### Academic Level

Graduate

#### Is This a Teacher Certification Program?

No

#### Will specialized accreditation be sought for this program?

No

## Enrollment

Number of Students in Program (estimate)

Year One Estimate

40

5th Year Estimate (or when fully implemented)

80

## **Delivery Method**

#### This program is available:

Online Only

#### Describe the use of this delivery method:

Courses are delivered fully online through Compass2G (Blackboard) and Coursera. Each iMSA course has two structural components. One component is the self-directed, asynchronous part of the course, which is designed to help students develop foundational knowledge. That material is delivered via pre-recorded videos, complementary readings, and quizzes.

The second component is the high engagement part of the course. It is an expansion of the foundational materials and involves weekly live sessions in a virtual classroom led by Gies Accountancy faculty. Other high-engagement content will come in the form of readings, in-depth exercises and assignments, and case studies.

## Budget

Will the program or revision require staffing (faculty, advisors, etc.) beyond what is currently available?

No

## **Resource Implications**

Facilities

Will the program require new or additional facilities or significant improvements to already existing facilities?

No

Technology

#### Will the program need additional technology beyond what is currently available for the unit?

No

Non-Technical Resources

Will the program require additional supplies, services or equipment (non-technical)?

No

### Resources

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

We do not expect there to be any additional impact on faculty resources, class size, teaching loads, or ratios as the courses are taught by current faculty.

Library Resources

Describe your proposal's impact on the University Library's resources, collections, and services. If necessary please consult with the appropriate disciplinary specialist within the University Library.

There will be no impact on the University's Library resources.

Instructional Resources

Will there be any reduction in other course offerings, programs or concentrations by your department as a result of this new program/proposed change?

No

Does this new program/proposed change result in the replacement of another program?

No

Does the program include other courses/subjects impacted by the creation/revision of this program?

No

## **Financial Resources**

#### How does the unit intend to financially support this proposal?

Current academic and administrative staff in the Department of Accountancy and Gies College of Business Online Programs office have the capacity to serve as advisors, maintain records, and process student registration in the concentration and related coursework.

Current instructional staff in the Department of Accountancy will offer and instruct the courses.

#### Will the unit need to seek campus or other external resources?

No

Attach letters of support

Analytics Acknowledgement Letter CS.pdf

#### Is this program requesting self-supporting status?

No

## **Program Regulation and Assessment**

Briefly describe the plan to assess and improve student learning, including the program's learning objectives; when, how, and where these learning objectives will be assessed; what metrics will be used to signify student's achievement of the stated learning objectives; and the process to ensure assessment results are used to improve student learning. (Describe how the program is aligned with or meets licensure, certification, and/or entitlement requirements, if applicable).

The iMSA program helps students meet the education requirement for the Uniform CPA Exam. The proposed concentration does not impact the program's alignment with CPA exam educational requirements. Moreover, the concentration will align with the program's existing learning objectives.

#### Is the career/profession for graduates of this program regulated by the State of Illinois?

No

## **Program of Study**

"Baccalaureate degree requires at least 120 semester credit hours or 180 quarter credit hours and at least 40 semester credit hours (60 quarter credit hours) in upper division courses" (source: https://www.ibhe.org/assets/files/PrivateAdminRules2017.pdf). For proposals for new bachelor's degrees, if this minimum is not explicitly met by specifically-required 300- and/or 400-level courses, please provide information on how the upper-division hours requirement will be satisfied.

All proposals must attach the new or revised version of the Academic Catalog program of study entry. Contact your college office if you have questions.

#### For new programs, attach Program of Study

Programs of Study Catalog Accountancy Analytics.xlsx

Catalog Page Text

## Catalog Page Text: Description of program for the catalog page. This is not official content, it is used to help build the catalog pages for the program. Can be edited in the catalog by the college or department.

The Accountancy Analytics Concentration is designed to develop leaders who understand (1) how to apply data analytics in a variety of accounting and business contexts, (2) critically solve business problems using data-intensive business and accounting Information, and (3) synthesize and effectively communicate data-intensive information, findings, and conclusions to other environment-constituents, including supervisors, peers and subordinates, clients, and regulatory agencies. This concentration will not only provide a strong foundational knowledge of data analytics, but also provide students multiple opportunities to apply this knowledge via experiential learning opportunities.

#### Statement for Programs of Study Catalog

Code	Title	Hours
ACCY 569	Data Driven Decisions in Accounting	2
ACCY 576	Data Preparation for Accounting	2
Select eight (8) hours from the following:		8
ACCY 577	Machine Learning for Accounting	
ACCY 578	Accounting Analytics Applications	
MBA 563	Data Toolkit: Business Data Modeling & Predictive Analytics	
MBA 564	Applying Analytics Across Business Functions	

MBA 565

Infonomics

**Total Hours** 

## **EP Documentation**

## **DMI Documentation**

**Program Reviewer Comments** 

Barbara Lehman (bjlehman) (Mon, 10 Feb 2020 18:55:09 GMT):Rollback: being returned: flagged by CIM as having missing courses. Kathy Martensen (kmartens) (Thu, 19 Mar 2020 16:45:56 GMT):Uploaded letter of support from Computer Science dated 3/18/20 per request of Lorena Nicholas.

Key: 911

12

#### Existing

#### Proposed

Proposed				
	ACCY 567	Data Driven Decisions for Accounting	2	
	ACCY 576	Data Preparation for Accounting	2	
	ACCY 577	Machine Learning for Accounting	2	
Select six credit hours from the following:			6	
	Accy 593	Infonomics		
	Accy 593 A	Accounting Analytics Application A		
	Accy 593 B	Accounting Analytics Application B		
	Accy 593 1	Accounting Analytics Application 1		
	Accy 593 2	Accounting Analytics Application 2		
	Total Hours		12	



## THE GRAINGER COLLEGE OF ENGINEERING

Department of Computer Science 2232 Siebel Center, MC-258 201 N. Goodwin Ave. Urbana, IL 61801

#### NANCY M. AMATO

Abel Bliss Professor and Head 2248 Siebel Center namato@illinois.edu

March 18, 2020

To Whom It May Concern:

I am writing in support of the proposed new MS degree, to be offered by the Gies College of Business, entitled "Master of Science in Business Analytics". The Department of Computer Science believes that this is a positive addition to the overall portfolio of analytics-themed professional masters-level degrees at Illinois. The degree covers the application of data analysis methods for business purposes whereas the Master of Computer Science (including its Data Science track) covers the underlying algorithms, data structures and systems development for data analysis. The proposed MS in Business Analytics thereby provides a complement to the existing degrees offered by Computer Science.

Sincerely,

Tany ant

Nancy M. Amato Abel Bliss Professor and Head Department of Computer Science