

New Program Proposal

Date Submitted: 02/14/19 1:54 pm

Viewing: **ECONMS : Economic Analytics, Master of Science**

Last edit: 03/01/19 8:28 am

Changes proposed by: kboston

Submitter: 4622 User ID: kboston Phone:

Program Status Active

Academic Level

Type of proposal Major/Field of Study

Select a reason for this new program Adding New Degree--(LOI 1, Proposal-1)

Are you adding a concentration?
No

Are you adding a track?
No

Are you adding a focused study?
No

Effective Catalog Year Fall 2020

College/School Code
Walton College of Business(WCOB)

Department Code
Department of Economics(ECON)

Program Code ECONMS

Degree Master of Science

CIP Code

In Workflow

1. WCOB Dean Initial
2. Provost Initial
3. Director of Program Assessment and Review
4. Registrar Initial
5. Institutional Research
6. ECON Chair
7. WCOB Curriculum Committee
8. WCOB Faculty
9. WCOB Dean
10. Global Campus
11. Dean of University Libraries
12. Provost Review
13. University Course and Program Committee
14. Faculty Senate
15. Provost Final
16. Provost's Office-- Documentation sent to System Office
17. Higher Learning Commission
18. Board of Trustees
19. ADHE Initial
20. ADHE Final
21. Provost's Office-- Notification of Approval
22. Registrar Final
23. Catalog Editor Final

Approval Path

1. 02/12/19 1:20 pm
Karen Boston
(kboston):
Approved for WCOB
Dean Initial
2. 02/13/19 4:01 pm
Terry Martin
(tmartin): Approved
for Provost Initial
3. 02/14/19 1:41 pm
Alice Griffin
(agriffin): Rollback
to Initiator
4. 02/21/19 9:56 am
Karen Boston
(kboston):
Approved for WCOB
Dean Initial
5. 02/23/19 8:39 am
Terry Martin
(tmartin): Approved
for Provost Initial
6. 02/25/19 2:54 pm
Alice Griffin
(agriffin): Approved
for Director of
Program
Assessment and
Review
7. 03/01/19 7:41 am
Lisa Kulczak
(lkulcza): Approved
for Registrar Initial
8. 03/01/19 8:28 am
Gary Gunderman
(ggunderm):
Approved for

- Institutional
Research
9. 03/01/19 8:44 am
Raja Kali (kali):
Approved for ECON
Chair
 10. 03/01/19 8:55 am
Karen Boston
(kboston):
Approved for WCOB
Curriculum
Committee
 11. 03/01/19 8:55 am
Karen Boston
(kboston):
Approved for WCOB
Faculty
 12. 03/01/19 8:56 am
Karen Boston
(kboston):
Approved for WCOB
Dean
 13. 03/01/19 4:32 pm
Miran Kang (kang):
Approved for Global
Campus
 14. 03/01/19 4:42 pm
Carolyn Allen
(challen): Approved
for Dean of
University Libraries
 15. 03/07/19 7:52 am
Terry Martin
(tmartin): Approved
for Provost Review

45.0603 - Econometrics and Quantitative Economics.

Program Title

Economic Analytics, Master of Science

Program Delivery

Method

Online/Web-based

Is this program interdisciplinary?

No

Does this proposal impact any courses from another College/School?

No

What are the total 30
hours needed to
complete the
program?

On-line/Web-based Information

Reason for offering

Web-based Program

To provide opportunities for students to complete the program in an online format.

Maximum Class Size 20
for Web-based
Courses

Course delivery
mode

Method(s)
Online

Class interaction
mode

Method(s):
Electronic Bulletin Boards
E-mail
Blog

Percent Online

100% with No Required Campus Component

Provide a List of
Services Supplied by
Consortia Partners or

Outsourced**Organization**

The only service outsourced is online proctoring service. The University of Arkansas partners with ProctorU for online test proctoring services for some online exams.

Estimate Costs of the Program over the First 3 Years

The program will be initially funded using Walton College operational funds and, eventually, program revenues as they are generated. Start-up marketing and recruiting costs will initially be supported by the College. Administrative responsibilities will be handled by the Economics Department Masters Program Coordinator.

List Courses Taught by Adjunct Faculty**Upload Memorandum of Understanding Forms (if required)**

Program Requirements and Description

Requirements

The Master of Science in Economic Analytics is an intensive program that will guide students through economic modeling and theory to computational practice and cutting-edge tools, providing a thorough training in descriptive, predictive, and prescriptive analytics. Students will be armed with a solid knowledge of econometric and machine learning methods, optimization, and computing. These “big-data” skills, combined with knowledge of economic modeling, will enable them to identify, assess, and seize the opportunity for data-driven value creation in the private and public sector.

Upon successful completion of the program, students will be eligible to receive a Enterprise Systems (Business Analytics Concentration) Graduate Certificate in addition to the MS in Economic Analytics degree. Students must separately apply for the Certificate prior to degree conferral.

Prerequisites to Degree Program:

Students entering the M.S. in Economic Analytics program are expected to have already mastered basic economic concepts or, demonstrated, with an official GMAT or GRE test score, the ability to master economic concepts taught in the program. Students without academic backgrounds in economics may be required to take additional hours or noncredit preparatory classes prior to enrollment in the M.S. program. International applicants must submit an acceptable TOEFL or IELTS score, or complete the Intensive English Language Program (Spring International Language Center) and receive an English proficiency recommendation for admission. Other admissions criteria can be considered on a case by case basis. Students from all academic backgrounds are encouraged to apply.

Requirements for the Master of Science Degree:

Requirements include one or more courses from each of the following core areas: Data Management, Economic Models, Econometrics and Data Science, and Communication and Professional Development.

Students whose previous studies or experience indicate mastery of basic economic concepts must satisfactorily complete the 30 hours of course work listed below.

<u>ECON 5243</u>	Managerial Economics	3
<u>ECON 5263 Applied Microeconomics</u>	<u>Course ECON 5263 Applied Microeconomics Not Found</u>	3
<u>ECON 5743</u>	Introduction to Econometrics	3
<u>ECON 5753</u>	Forecasting	3
<u>ECON 5763 Economic Analytics</u>	<u>Course ECON 5763 Economic Analytics Not Found</u>	3
<u>ECON 5783 Applied Microeconometrics</u>	<u>Course ECON 5783 Applied Microeconometrics Not Found</u>	3
<u>ECON 636V</u>	Special Problems in Economics	3
<u>ISYS 5103</u>	Data Analytics Fundamentals	3
<u>ISYS 5833</u>	Data Management Systems	3
<u>ISYS 5843</u>	Seminar in Business Intelligence and Knowledge Management	3
Total Hours		30

Program Costs

Existing resources on campus will be used. Existing faculty in Economics and Information Systems will teach the courses. Except for three new proposed courses, the other courses are already offered on a regular basis.

For the three new courses, the department has plans to re-organize faculty teaching to be able to fully staff these. Currently the department has two assistant professors who are on reduced teaching loads. One of these faculty members will come off their teaching reductions in the next year (Fall 2019), and the other will increase his teaching load in Fall 2020. In addition, the department is hiring a new faculty member to join the department in Fall 2019.

As a result, based on current faculty resources the department’s capabilities are aligned with the ability to offer three new courses. If the proposed program experiences rapid growth in the number of students, then resource constraints will be re-evaluated in the future.

Marketing and recruiting costs for the program will be supported by the College.

Library Resources

N/A

Instructional

Facilities

N/A

Faculty Resources

As noted above, for the three new courses, the department has plans to re-organize faculty teaching to be able to fully staff these. Currently the department has two assistant professors who are on reduced teaching loads. One of these faculty members will come off their teaching reductions in the next year (Fall 2019), and the other will increase his teaching load in Fall 2020. In addition, the department is hiring a new faculty member to replace a faculty who left the department. This faculty member will join the department in Fall 2019. As a result, based on current faculty resources the department’s capabilities are aligned with the ability to offer three new courses.

List Existing Certificate or Degree Programs that Support the Proposed Program

Program(s)
ECONMA - Economics, Master of Arts
INSYMI - Information Systems, Master of Information Systems

Are Similar Programs available in the area?

No

Estimated Student Demand for Program 10-15

Scheduled Program Review Date 2021-2022

Program Goals and Objectives

Program Goals and Objectives

Program Goals and Objectives

The Master of Science in Economic Analytics is an intensive program that will guide students through economic modeling and theory to computational practice and cutting-edge tools, providing a thorough training in descriptive, predictive, and prescriptive analytics. Students will be armed with a solid knowledge of econometric and machine learning methods, optimization, and computing. These “big-data” skills, combined with knowledge of economic modeling, will enable them to identify, assess, and seize the opportunity for data-driven value creation in the private and public sector.

Learning Outcomes

Learning Outcomes

Students will have the ability to apply econometric and machine learning methods, optimization, and computing to identify, assess, and seize the opportunity for data-driven value creation in the private and public sector.

Examinations will involve problem solving and practicum-style data-analysis, depending upon the course.

Description and Justification for this request

Description of request	Justification for request
A new, 30 hour Master of Science in Economic Analytics utilizing three existing courses within the Master of Information Systems, four existing courses within the Master of Arts and Economics and three new Economics courses proposed for the program.	The digital revolution ignited an explosion of data. The availability of data is no longer a constraint to answering important questions. The critical constraint is now the ability to analyze, digest, visualize, and ultimately harness the data to drive decision making in business, science, and society. The Master of Science in Economic Analytics program will guide students through economic modeling and theory to computational practice and cutting-edge tools, providing a thorough training in descriptive, predictive, and prescriptive analytics. Students will be armed with a solid knowledge of econometric and machine learning methods, optimization, and computing. These “big-data” skills, combined with knowledge of economic modeling, will enable them to identify, assess, and seize the opportunity for data-driven value creation in the private and public sector.

Upload attachments

[ECONMS - New Degree - Faculty CVs.pdf](#)

[ECONMS - New Degree - LOI-Proposal.docx](#)

[ECONMS - New Degree - Letters of Support.pdf](#)

Reviewer Comments

Alice Griffin (agriffin) (02/14/19 10:32 am): BOT approval date will need to be inserted into the proposal, once the dates have been published.

Alice Griffin (agriffin) (02/14/19 10:32 am): Item 14 on proposal document.

Alice Griffin (agriffin) (02/14/19 10:35 am): Inserted scheduled program review date. It is anticipated that program will be reviewed at the same time as the AACSB accreditation visit. College is encouraged to review and make appropriate changes if necessary.

Alice Griffin (agriffin) (02/14/19 10:44 am): Adjusted formatting, minor edits, and renamed documents to match BOT naming convention.

Alice Griffin (agriffin) (02/14/19 10:45 am): Edited course descriptions in proposal to match course descriptions submitted into Course Management. Also, changed "short courses" to special problems for consistency. College is encouraged to review these changes.

Alice Griffin (agriffin) (02/14/19 10:46 am): Courses in red within program requirements have been reviewed and are currently pending UCPC approval.

Alice Griffin (agriffin) (02/14/19 1:41 pm): Rollback: Please adjust delivery mode to include online delivery. Also modify the justification as discussed in correspondence. Thank you.

Gary Gunderman (ggunderm) (03/01/19 8:28 am): This CIP code is appropriate.