New Program Proposal

Date Submitted: 09/08/23 3:20 pm

Viewing: **REGRGM : Regression Graduate MicroCertificate**

Last edit: 07/17/24 8:49 pm

Changes proposed by: egbengts

Submitter:	User ID:	egbengts	Phone:
479-575-5092			

Program Status Active

Academic Level Graduate

Type of proposal MicroCertificate

Select a reason for this new program Adding New Graduate MicroCertificate

Effective Catalog Year 01/05/2025

College/School Code
Graduate School and International Education (GRAD)

Department Code
Statistics and Analytics (STAN)

Program Code REGRGM

Degree Graduate MicroCertificate

CIP Code

In Workflow

1. **GRAD Dean Initial**
2. **GRAD Dean Initial**
3. **Director of Curriculum Review and Program Assessment**
4. **Registrar Initial**
5. **Institutional Research**
6. **STAN Chair**
7. **AFLS Dean**
8. **EDUC Dean**
9. **ENGR Dean**
10. **ARSC Dean**
11. **WCOB Dean**
12. **GRAD Dean**
13. **Global Campus**
14. **Provost Review**
15. **Graduate Council**
16. **Faculty Senate**
17. Provost Final
18. Registrar Final
19. Catalog Editor Final

Approval Path

1. 09/08/23 3:22 pm
   Ed Bengtson
   (egbengts):
   Approved for GRAD
   Dean Initial
2. 09/08/23 3:23 pm
   Ed Bengtson
   (egbengts):
   Approved for GRAD
   Dean Initial
3. 09/20/23 10:00 am
   Lisa Kulczak

(lkulcza): Rollback to GRAD Dean Initial for Director of Curriculum Review and Program Assessment

4. 09/20/23 2:47 pm Ed Bengtson (egbengts): Approved for GRAD Dean Initial

5. 10/03/23 6:47 pm Lisa Kulczak (lkulcza): Approved for Director of Curriculum Review and Program Assessment

6. 10/05/23 7:21 am Gina Daugherty (gdaugher): Approved for Registrar Initial

7. 10/05/23 1:01 pm Doug Miles (dmiles): Approved for Institutional Research

8. 10/25/24 4:48 pm Ed Bengtson (egbengts): Approved for STAN Chair

9. 10/25/24 5:04 pm Lona Robertson (ljrobert): Approved for AFLS Dean

10. 10/27/24 9:21 am Matthew Ganio (msganio):

Approved for EDUC
Dean

11. 11/13/24 8:14 am
Kevin Hall (kdhall):
Approved for ENGR
Dean

12. 11/13/24 8:24 am
Christopher Schulte
(cschulte):
Approved for ARSC
Dean

13. 11/13/24 8:26 am
Alan Ellstrand
(aellstra): Approved
for WCOB Dean

14. 11/13/24 8:29 am
Ed Bengtson
(egbengts):
Approved for GRAD
Dean

15. 11/13/24 9:17 am
Suzanne Kenner
(skenner): Approved
for Global Campus

16. 11/13/24 11:17 am
Jim Gigantino
(jgiganti): Approved
for Provost Review

17. 11/23/24 7:07 am
Ed Bengtson
(egbengts):
Approved for
Graduate Council

27.9999 - Mathematics and Statistics, Other.

Program Title
Regression Graduate MicroCertificate

Program Delivery
Method
On Campus

Is this program interdisciplinary between two or more colleges or schools?

Yes

College(s)/School(s)

College/School Name
Bumpers College of Agricultural, Food, and Life Sciences (AFLS)
College of Education and Health Professions (EDUC)
College of Engineering (ENGR)
Fulbright College of Arts and Sciences (ARSC)
Walton College of Business (WCOB)

Do the proposed changes impact any specific course(s) from another college or school?

Yes

College(s)/School(s)

College/School Name
Bumpers College of Agricultural, Food, and Life Sciences (AFLS)
College of Education and Health Professions (EDUC)
College of Engineering (ENGR)
Fulbright College of Arts and Sciences (ARSC)
Walton College of Business (WCOB)

What are the total hours needed to complete the program?

6

Program Requirements and Description

Requirements

Students must maintain a grade of 'B' or better in all courses.

Students select one of the following regression analysis courses:		3
STAT 53133	Regression Analysis	
ESRM 64203	Multiple Regression Techniques for Education	
INEG 53903	Applied Regression Analysis for Engineers	
SOCI 53203	Applied Data Analysis	
AGST 57103	Applied Regression Analysis for Agricultural Sciences	

ECON 57403	Introduction to Econometrics	
Students select one of the following multivariant analysis courses:		3
STAT 53533	Methods of Multivariate Analysis	
PLSC 59403	Advanced Research Methods in Political Science	
ESRM 64503	Applied Multivariate Statistics	
AGST 5040V	Special Topics (3 credit hours)	
ISYS 57203	Advanced Multivariate Analysis	
ECON 66203	Econometrics II	

Total Hours	6

Program Costs

There are no additional program costs needed for this program.

Library Resources

There are no additional library resources needed for this program.

Instructional Facilities

There are no additional instructional facilities needed for this program.

Faculty Resources

There are no additional faculty resources needed for this program.

List Existing Certificate or Degree Programs that Support the Proposed Program

Program(s)
STANMS - Statistics and Analytics, Master of Science

Are Similar Programs available in the area?

No

Estimated Student Demand for Program	25
Scheduled Program Review Date	NA

Program Goals and Objectives

Program Goals and Objectives
1. To provide students with the fundamental statistical framework necessary to use and understand applied data science in the workplace or in further study.
2. To provide and foster knowledge, practices and skills common to traditional first year graduate level programs in Statistics, Business Analytics, Operations Analytics, Computational Analytics, Quantitative Social Sciences, and Educational Statistics and Psychometrics.
3. To provide current practitioners a thoughtful and tested curricula to extend their skills and knowledge into data science.

Learning Outcomes

Learning Outcomes
1. Thorough knowledge of linear regression modeling and analysis.   2. Proficiency with regression in the context of many possibly collinear variables.   3. Capability with software tools enabling general purpose statistical analysis.

Description and Justification for this request

Description of request	Justification for request
To establish a graduate micro certificate focused on the acquisition of knowledge and skill needed for fundamental understanding and use of linear regression and analysis.	This graduate micro certificate will assist in filling the void left by the now inactive STAN graduate certificate. The certificate is designed to allow for introductory knowledge acquisition that can lead to potential recruitment of students for the STAN MS degree.

Upload attachments

Reviewer Comments

Lisa Kulczak (lkulcza) (09/20/23 10:00 am): Rollback: Per conversation with the dean.

Lisa Kulczak (lkulcza) (10/03/23 6:41 pm): Adjusted program code to reflect established convention (GM); adjusted requirements course list to sum total hours needed for the MicroCertificate.

Lisa Kulczak (lkulcza) (10/03/23 6:45 pm): Split out Program Goals into three separate entries.

Lisa Kulczak (lkulcza) (10/03/23 6:46 pm): ATTENTION REGISTRAR: Please remove Undergraduate Council from the workflow.

Gina Daugherty (gdaugher) (10/05/23 7:21 am): Removed Undergraduate Council from workflow.

Lisa Kulczak (lkulcza) (07/17/24 8:49 pm): Adjusted effective date from fall 2024 to spring 2025; the proposal will not complete the approval process in time for fall 2024.

Key: 975