

New Program Proposal

Date Submitted: 09/08/23 3:18 pm

Viewing: **STMDGM : Statistical Methods and Design Graduate MicroCertificate**

Last edit: 10/10/23 7:23 am

Changes proposed by: egbengts

Submitter: 479-575-5982	User ID: egbengts	Phone:
Program Status	Active	
Academic Level	Graduate	
Type of proposal	MicroCertificate	
Select a reason for this new program	Adding New Graduate MicroCertificate	
Effective Catalog Year	Fall 2024	
College/School Code	Graduate School and International Education (GRAD)	
Department Code	Department of Graduate Dean (GRSD)	
Program Code	STMDGM	
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. GRSD Chair
7. EDUC Dean
8. ENGR Dean
9. ARSC Dean
10. AFLS 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 3:24 pm
Ed Bengtson
(egbengts):
Approved for GRAD Dean Initial
3. 09/20/23 10:01 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. 10/09/23 6:31 pm
Lisa Kulczak
(lkulcza): Approved for Director of Curriculum Review and Program Assessment
6. 10/10/23 7:23 am
Gina Daugherty
(gdaugher):
Approved for Registrar Initial
7. 10/10/23 9:56 am
Doug Miles
(dmiles): Approved for Institutional Research
8. 10/10/23 10:13 am
Ed Bengtson
(egbengts):
Approved for GRSD Chair
9. 10/10/23 1:06 pm
Matthew Ganio
(msganio):
Approved for EDUC Dean
10. 10/10/23 4:16 pm
Kevin Hall (kdhall):

Approved for ENGR
Dean

- 11. 10/11/23 3:22 pm
Christopher Liner
(liner): Approved for
ARSC Dean
- 12. 10/11/23 3:27 pm
Lona Robertson
(ljrobert): Approved
for AFLS Dean
- 13. 10/11/23 4:49 pm
Alan Ellstrand
(aellstra): Approved
for WCOB Dean
- 14. 10/12/23 7:55 am
Ed Bengtson
(egbengts):
Approved for GRAD
Dean
- 15. 10/12/23 8:06 am
Suzanne Kenner
(skenner): Approved
for Global Campus
- 16. 10/12/23 8:20 am
Jim Gigantino
(jgiganti): Approved
for Provost Review
- 17. 10/19/23 3:15 pm
Ed Bengtson
(egbengts):
Approved for
Graduate Council

27.0501 - Statistics, General.

Program Title

Statistical Methods and Design Graduate MicroCertificate

Program Delivery

Method

On Campus

Is this program interdisciplinary?

Yes

College(s)/School(s)

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

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

Yes

College(s)/School(s)

College/School Name
College of Education and Health Professions (EDUC)
College of Engineering (ENGR)
Fulbright College of Arts and Sciences (ARSC)
Bumpers College of Agricultural, Food, and Life Sciences (AFLS)
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 statistical methods courses:

3

[STAT 5003](#)
& [STAT 5001L](#) Statistical Methods
and Statistics Methods Laboratory

[ESRM 6403](#) Educational Statistics and Data Processing

[SOCI 5013](#) Advanced Social Research

[AGST 5023](#) Principles of Experimentation

[ISYS 5503](#) Decision Support and Analytics

<u>INEG 5263</u>	Engineering Statistics	
<u>PLSC 5913</u>	Research Methods in Political Science	
Students select one of the following experimental design courses:		3
<u>STAT 5373</u>	Experimental Design	
<u>ESRM 6413</u>	Experimental Design in Education	
<u>INEG 5333</u>	Design of Industrial Experiments	
<u>AGST 5014</u>	Experimental Design	
<u>ECON 5433</u>	Experimental Economics	
Total Hours		6

Program Costs

There will be no additional costs for this program.

Library Resources

There will be no additional library resources needed for this program.

Instructional

Facilities

There will be no need for additional instructional facilities needed for this program.

Faculty Resources

There will be 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 25

Demand for Program

Scheduled Program NA

Review Date

Program Goals and Objectives

Program Goals and Objectives

1. Provide students with the fundamental statistical framework necessary to use and understand applied data science in the workplace or in further study. 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.
2. To provide current practitioners a thoughtful and tested curricula to extend their skills and knowledge into data science.

Learning Outcomes

Learning Outcomes

1. Fundamental language of statistics (probability distributions, mean, variance, covariance, hypothesis testing, etc.)
2. Thorough knowledge of the theory and design of statistical experiments.
3. Capability with software tools enabling general purpose statistical analysis.

Description and Justification for this request

Description of request	Justification for request
<p>To establish a graduate micro certificate focused on the acquisition of knowledge and skill needed for fundamental understanding of statistical methods and design.</p>	<p>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.</p>

Upload attachments

Reviewer Comments

Lisa Kulczak (lkulcza) (09/20/23 10:01 am): Rollback: Per conversation with the dean.

Lisa Kulczak (lkulcza) (10/09/23 6:31 pm): ATTENTION REGISTRAR: Please remove Undergraduate Council from the workflow.

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

Key: 974