New Program Proposal

Date Submitted: 02/07/21 12:16 pm

Viewing: **EMGTGC : Engineering Management Graduate Certificate**

Last edit: 02/19/21 9:26 am

Changes proposed by: richardh

Submitter: 4795755521	User ID:	richardh	Phone:

Program Status	Active
Academic Level	Graduate
Type of proposal	Certificate
Select a reason for this new program	Adding New Graduate Certificate (12-21 semester hours)--(LON)
Effective Catalog Year	Fall 2021
College/School Code	College of Engineering (ENGR)
Department Code	Department of Industrial Engineering (INEG)
Program Code	EMGTGC
Degree	Graduate Certificate
CIP Code	

In Workflow

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

Approval Path

1. 12/04/20 3:34 pm
   Norman Dennis
   (ndennis): Approved
   for ENGR Dean
   Initial

2. 12/04/20 3:52 pm
   Pat Koski (pkoski):
   Approved for GRAD
   Dean Initial

3. 12/08/20 4:05 pm
   Terry Martin
   (tmartin): Approved
   for Provost Initial

4. 12/09/20 2:54 pm
   Alice Griffin
   (agriffin): Rollback
   to Initiator

5. 02/08/21 4:01 pm
   Norman Dennis
   (ndennis): Approved
   for ENGR Dean
   Initial

6. 02/08/21 5:09 pm
   Jim Gigantino
   (jgiganti): Approved
   for GRAD Dean
   Initial

7. 02/09/21 11:06 am
   Terry Martin
   (tmartin): Approved
   for Provost Initial

8. 02/09/21 2:01 pm
   Alice Griffin
   (agriffin): Approved
   for Director of
   Program
   Assessment and
   Review

9. 02/09/21 5:08 pm Lisa Kulczak (lkulcza): Approved for Registrar Initial
10. 02/09/21 5:30 pm Gary Gunderman (ggunderm): Approved for Institutional Research
11. 02/13/21 8:32 am Ed Pohl (epohl): Approved for INEG Chair
12. 02/18/21 9:38 am Manuel Rossetti (rossetti): Approved for ENGR Curriculum Committee
13. 02/18/21 9:43 am Norman Dennis (ndennis): Approved for ENGR Faculty
14. 02/18/21 10:34 am Norman Dennis (ndennis): Approved for ENGR Dean
15. 02/18/21 10:37 am Suzanne Kenner (skenner): Approved for Global Campus
16. 02/18/21 10:46 am Terry Martin (tmartin): Approved for Provost Review

15.1501 - Engineering/Industrial Management.

Program Title

Engineering Management Graduate Certificate

Program Delivery
Method

　On Campus

　Off Campus

　Online/Web-based

Is this program interdisciplinary?

No

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

No

What are the total
hours needed to
complete the
program?

12

Off Campus Information

Off Campus
Location(s)

Location Name	Address	Distance from Main Site
Walton College at 2nd and Main	119 S. Maint St Little Rock, AR 72291	186
North Central Florida - Hurlburt AFB	221 Lukaski Ave., Hurlburt Field, FL 32644	729
Naval Air Station Millington Tennessee	5750 Millington, TN, 38504	335

Reason for Offering
Program Off Campus

During marketing surveys, current and potential students have indicated a desire for graduate certificates focusing on specific disciplines within operations management. This initiative led to MSOM certificates in Project Management, Lean Six Sigma and Homeland Security Operations which has resulted in more than 198 certificates awarded since 2018. A new need emerged from student interest; students with an undergraduate STEM degree or an MS in another discipline (e.g., M.S. in Engineering or M.S. in Operations Management) seeking a broad understanding of engineering management to upgrade skills or prepare for engineering management positions. May be used as an entry to the Master of Science in Engineering Management, but cannot be awarded concurrently with the degree.

Fifty percent of the
credits required will
be offered

    Both - off-campus location and distance technology

                            Will Students complete all Program Requirements at this Location?

    No

Where will the
Program be
completed?

    Online

Upload
Memorandum of
Understanding Forms
(if required)

On-line/Web-based Information

Reason for offering
Web-based Program

    Market research and needs assessment indicate working professionals prefer the flexibility of online
    instruction. Additionally, needs expressed by students in the MSOM, MSEM and MSE programs prefer the
    flexibility of 5 8-week terms. The attached survey shows decision-makers in Arkansas companies believe an
    option for mixed methods including web-based/online instruction is an important part of any program.

Maximum Class Size   35
for Web-based
Courses

Course delivery
mode

Method(s)
Blended Delivery Methods

Describe Blended
Delivery Methods

    Student has the option of taking classes in several different modes depending on their timeline
    for program completion. Face-to-face instruction will be offered on-site. However, If a student
    prefers, they can receive on-line instruction via synchronous or pre-recorded video. Both
    methods of course completion will be available to the student

Class interaction
mode

Method(s):
Electronic Bulletin Boards

Percent Online

　　100% with No Required Campus Component

　　50-99%

Provide a List of
Services Supplied by
Consortia Partners or
Outsourced
Organization

　　None

Estimate Costs of the
Program over the
First 3 Years

Absorbed in current
program.

List Courses Taught
by Adjunct Faculty

Upload
Memorandum of
Understanding Forms
(if required)

Program Requirements and Description

Requirements

Core Courses (9 hours)		9
EMGT 5033	Introduction to Engineering Management	
EMGT 5603	Systems Thinking and Systems Engineering	
OMGT 5783	Project Management for Operations Managers	
Electives (select one)		3
OMGT 5003	Introduction to Operations Management	
OMGT 5253	Leadership Principles and Practices	
OMGT 5463	Economic Decision Making	
Total Hours		12

Program Costs

　See attached spreadsheet. Cost absorbed in the current program. No new course requirements.

Library Resources

　No additional cost.

Instructional

Facilities

　No additional cost.

Faculty Resources

　No additional cost.

List Existing Certificate or Degree Programs

that Support the Proposed Program

Program(s)
EMGTMS - Engineering Management, Master of Science in Engineering Management
ENGRME - Engineering, Master of Science in Engineering
OPMGMS - Operations Management, Master of Science in Operations Management

Are Similar Programs available in the area?

　No

Estimated Student   20
Demand for Program

Scheduled Program   2028-2029
Review Date

Program Goals and
Objectives

Program Goals and Objectives

Program Goals and Objectives

Program Goals:

1. Provide internationally competitive and industry-recognized education to meet the emerging needs of engineering, engineering management, and operations management professionals.
2. Prepare students to assume leadership roles in industry and government employing engineering management principles and practices.

Program Objectives:

1. Select and apply the appropriate tools and analysis methods to improve engineering management and systems engineering processes to achieve the organizational mission.
2. Be able to plan and lead projects to improve engineering management processes and deliver products and services.
3. Concisely communicate to decision-makers.

Learning Outcomes

Learning Outcomes

Expected student learning outcomes

1. Develop broad competencies in engineering management principles and practices.
2. Demonstrate skills to lead engineering management projects to provide new or improved products and services.
3. Apply problem-solving using systems thinking and system engineering principles.

Description and Justification for this request

Description of request	Justification for request
Continuing strategic pursuit of graduate certificates based on enrollment data and interest as well as evidence of enrollments for the first three certificates exceeding estimates	Allowing intermediate certificate for student interested in graduate degrees; allows engineers and STEM majors to add skills required to lead and manage engineering management functions.

Upload attachments

4x_emgtgc_cost_for_engineering_management_gc_02262021.xlsx

4x_emgtgc_graduate_certificate_ltrofnotification_02262021.pdf

4x_emgtgc_graduate_certificate_supporting_documentation_02262021.docx

4x_emgtgc_graduate_certificate_engr_supporting_documentation_02262021.docx

Reviewer Comments

Alice Griffin (agriffin) (12/09/20 2:54 pm): Rollback: Please update LON, program requirements, and scheduled program review date based on the email correspondence from 12/9/2020. Also please correct typo in program title.

Alice Griffin (agriffin) (02/09/21 12:48 pm): Reformatted program requirements by clicking on the total hours field and indenting courses to reflect 12 total hours. College is encouraged to review for the desired appearance.

Alice Griffin (agriffin) (02/09/21 12:55 pm): Corrected minor typos in program title field and justification.

Alice Griffin (agriffin) (02/09/21 1:17 pm): Changed scheduled program review date field to match proposed date submitted in the Letter of Notification.

Alice Griffin (agriffin) (02/09/21 1:55 pm): Exchanged OMGT 5303 with OMGT 5253 with permission from submitter.

Alice Griffin (agriffin) (02/09/21 1:59 pm): Revised LON and Supporting documentation with support from submitter. Renamed documents to match BOT naming convention.

Lisa Kulczak (lkulcza) (02/09/21 5:07 pm): Changed program code to be consistent with naming convention of EMGTMS.

Alice Griffin (agriffin) (02/18/21 11:43 am): Renamed BOT materials to match revised program code presented by Registrar's Office.

Alice Griffin (agriffin) (02/19/21 9:26 am): Changed names of documents to match the revised naming convention of program code.

Key: 818