

New Program Proposal

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

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

Last edit: 02/26/21 4:04 pm

Changes proposed by: richardh

Submitter:	User ID:	richardh	Phone:
4795755521			
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
17. 02/26/21 4:23 pm
Alice Griffin
(agriffin): Approved
for University

Course and Program
Committee
18. 03/18/21 4:45 pm
Jim Gigantino
(jgiganti): Approved
for Graduate
Committee

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 12
hours needed to
complete the
program?

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

Admissions requirements:

Meet all graduate school admission requirements.

Conferred bachelor of science degree in engineering from an engineering program accredited by the Engineering Accreditation Commission of ABET (or equivalent accreditation) or a STEM degree from a regionally accredited program..

Applicants with a 3.0/4.0 or better undergraduate GPA are not required to take the GRE.

There are no prerequisites for students with an undergraduate degree from an ABET-accredited engineering program.

For students with a degree other than an ABET-accredited engineering degree, prerequisite courses may be required.

Only students with an ABET- accredited engineering degree may apply the graduate certificate courses to the Master of Science in Engineering Management Degree.

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

Program(s)

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:

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.

Alice Griffin (agriffin) (02/26/21 4:04 pm): Paul Cronan moved, and Ethel Goodstein seconded to amend this program proposal to adopt the admission requirements presented by Norm Dennis at UCPC. (See admission requirements inserted into the program requirements field.)

