

Program Change Request

New Program Proposal

Date Submitted: 07/13/16 3:06 pm

Viewing: **EMGTMS : Engineering Management,
Master of Science in Engineering Management**

Last edit: 10/19/16 7:58 am

Changes proposed by: richardh

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. ENGD 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 Initial
21. ADHE Final
22. Provost's Office-- Notification of Approval
23. Registrar Final
24. Catalog Editor Final

Approval Path

1. 07/13/16 3:26 pm ndennis: Approved for ENGR Dean Initial
2. 07/15/16 8:17 am pkoski: Approved for GRAD Dean Initial

3. 08/12/16 9:29 am
tmartin: Rollback to
ENGR Dean Initial for
Provost Initial
4. 09/06/16 2:10 pm
ndennis: Approved
for ENGR Dean Initial
5. 09/06/16 3:48 pm
pkoski: Approved for
GRAD Dean Initial
6. 09/07/16 8:06 am
tmartin: Rollback to
ENGR Dean Initial for
Provost Initial
7. 10/12/16 7:49 am
ndennis: Approved
for ENGR Dean Initial
8. 10/12/16 9:39 am
pkoski: Approved for
GRAD Dean Initial
9. 10/13/16 3:05 pm
tmartin: Approved for
Provost Initial
10. 10/14/16 3:44 pm
agriffin: Approved for
Director of Program
Assessment and
Review
11. 10/14/16 5:20 pm
lkulcza: Approved for
Registrar Initial
12. 10/17/16 8:19 am
ggunderm: Approved
for Institutional
Research
13. 10/17/16 10:42 pm
ndennis: Approved
for ENGD Chair
14. 10/19/16 8:22 am
rossetti: Approved for
ENGR Curriculum
Committee
15. 10/19/16 2:42 pm
ndennis: Approved
for ENGR Faculty
16. 10/19/16 2:42 pm
ndennis: Approved
for ENGR Dean
17. 10/21/16 4:50 pm
pritchey: Approved
for Global Campus
18. 10/21/16 4:53 pm
tmartin: Approved for
Provost Review

Submitter: User ID: richardh
Phone: 479-575-5521

Academic Level Graduate

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

Program Status Active

Academic Unit Major/Field of Study

Are you adding a concentration? No

Action	Code	Name

Are you adding a track? No

Action	Code	Name

Are you adding a focused study? No

Action	Code	Name

Effective Catalog Year Fall 2017

College, School, Division College of Engineering (ENGR)

Department Code Department of Engineering Dean (ENGD)

Program Code EMGTMS

Degree Master of Science in Engineering Management

CIP Code 14.0101 - Engineering, General.

Program Title Engineering Managment, Master of Science in Engineering Management

Method of Delivery On Campus
On-line/Web-based

On-line/Web-based Information

Reason for offering Web-based Program: Marketing research and needs assessment indicate working engineers prefer the flexibility of online instruction. Additionally, needs expressed by 10% of engineers in the operations management program along with 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 for Web-based Courses: 35

Online

Web-based Delivery
Method:

Web-based
Interaction Method: Electronic Bulletin Boards

Percentage Online: 100%

On Campus
Component: Yes

Provide a List of
Services Supplied by
Consortia Partners or
Outsourced
Organization: None

Estimate Costs of the
Program over the
First 3 Years: Refer to attached spreadsheet.

List Courses Taught
by Adjunct Faculty:

Uploaded MoU
Forms:

Is this program
interdisciplinary
or use courses
from another
College? No

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

Program Requirements, Description and 8-Semester Plan

The Master of Science in Engineering Management prepares students to lead and manage engineering programs, technology, personnel and functions. It is designed specifically to prepare engineers with ABET degrees to lead technical projects and technical workforces. The program provides application skills to solve real world leadership problems in an engineering setting. Each area of instruction helps graduates blend the best practices of engineering and business principles to provide value added to any organization.

Core Courses(4)

- [EMGT 5033](#) Introduction to Engineering Management
- [OMGT 5783](#) Project Management
- [OMGT 5463](#) Economic Decision Making
- [INEG 5443 /OMGT 5443](#) Decision Models

–Engineering Sequence (3)

- Three Course Engineering Sequence (MSE, EMGT, INEG or other disciplines)

–Electives (3)

- **OMGT 5793** Risk Management
- **INEG 5253 /OMGT 5253** Leadership
- **OMGT 5983** Advanced Project Management
- OMGT 5653 Introduction to Analytics for Operations Managers
- Other MSE, OMGT, INEG, Engineering Disciplines, Walton (Entrepreneurship & Innovation)

–Comprehensive Exam

Program Costs	All program costs will be supported from tuition and fees. Projected student enrollment is 25 students per year. Program cost is \$262.50 per credit hour and \$150 per course distance fee. Total program cost is \$9375 per student. There is no annual state general revenues or external support for this program. The program will be funded entirely off of tuition and fees.
Library Resources	All currently available to college of engineering.
Instructional Facilities	All currently available to college of engineering.
Faculty Resources	Tenure track and adjunct faculty in the College of Engineering and Walton College of Business.
Are Similar Programs available in the area?	No
List Existing Certificate or Degree Programs that Support the Proposed Program:	Master of Science in Engineering Master of Science in Electrical Engineering Master of Science in Operations Management
Estimated Student Demand for Program:	30
Scheduled Program Review Date:	Fall 2019-20
Program Goals and Objectives:	Prepare students to lead and manage engineering programs, technology, personnel and functions.
Learning Outcomes:	<ol style="list-style-type: none">1. Create engineering management strategic plans to support an organization’s vision and mission.2. Evaluate and apply leadership theories for a technical workforce.3. Apply techniques leading multi-disciplinary project teams to solve complex problems in global operations involving processes, technology and people.4. Assess financial status of programs and organizations using quantitative tools and propose solutions to root causes of deficiencies.5. Develop and evaluate solutions to complex, contemporary engineering management problems using qualitative and quantitative decision and risk models.6. Effectively communicate decision papers to senior stakeholders and decision makers
Description and justification of the request:	Long term goal of the college of engineering to provide follow on leadership skills in demand for engineers. Feedback from advisory boards, students and local employers as well as benchmark research on need. The attached survey results form Arkansas senior leadership at Wal Mart, JB Hunt, Dassault-Falcon Jet and Tyson. They rate the need for a ABET degree and technical track from neutral to very important. The leaders also indicate a need for engineering management skills from important to very important. Two companies noted the importance of the technical track to their employees development.

Program reviewer
comments

ndennis (12/08/15 2:03 pm): Added attachments
tmartin (12/11/15 8:04 am): Rollback: Please revise the Proposal to include program revenue and expenditures for the first three years and correct formatting issues with the document.
ndennis (12/15/15 11:43 am): I uploaded your spreadsheet, but was unable to remove the prose description of costs. It does not appear in any of my editable boxes. Please remove the cost description and say "refer to attachment: EMGT-COST.xlsx"
ndennis (12/15/15 11:44 am): Rollback: See my comments. Remove cost description and add "refer to attached spreadsheet. "
lkulcza (01/14/16 6:01 pm): Rollback: Rollback per request from Alice Griffin; also please clarify if this is a new degree versus a new major? Is this an MS with a major in Engineering Management or is this a MSEM (Master of Science in Engineering Management)?
agriffin (05/02/16 3:10 pm): Effective date will need to be fall 2017, based on timing of submission and the approval process.
agriffin (05/12/16 4:29 pm): Hyperlinked courses in catalog copy.
agriffin (05/13/16 3:48 pm): Rollback: Please edit Proposal-1 form and upload LOI-1 form. Also remove LON 13.
ndennis (07/13/16 12:12 pm): Removed LON-1, duplicated file.
ndennis (07/13/16 12:31 pm): Rollback: please correct Proposal to either include attachments or remove the reference to them (see my email). Scrub faculty list to remove retirees and deceased faculty who no longer teach.
tmartin (08/12/16 9:29 am): Rollback: Rollback to ENGR Dean to make changes in proposal.
ndennis (09/06/16 2:10 pm): Uploaded Revised: Proposal, Employer Survey Results, Faculty CV, and Program Cost documents.
tmartin (09/07/16 8:06 am): Rollback: Rolled back to ENGR Dean to revise uploaded files.
agriffin (10/14/16 1:30 pm): Under Faculty Resources changed Walton Business School to Walton College of Business.
agriffin (10/14/16 1:44 pm): Changed "Program Costs" field from student tuition and fees to include explanation of source of program funding (taken from proposal form 1).
agriffin (10/14/16 3:28 pm): Removed "new" and development language from catalog copy. Edited course titles to match official course names.
agriffin (10/14/16 3:44 pm): Uploaded revised LOI and Proposal-1 form. Reformatted template for alignment and renamed documents to match naming convention for BOT approval.
lkulcza (10/14/16 5:20 pm): EMGT 5033, OMGT 5793 and OMGT 5653 have all been approved for fall 2017
ggunderm (10/17/16 8:18 am): I suggest changing the CIP Code from 14.9999 (Engineering, Other) to 14.0101 (General Engineering). We try to avoid using the "Other" CIP Codes as this can make benchmarking difficult and the "Other" codes are often excluded from the list of programs desired at the state and local level.
agriffin (10/17/16 4:56 pm): Inserted revised CIP Codes into LOI and Proposal 1 form. Uploaded revised copies.
rossetti (10/18/16 3:08 pm): Uploaded revised file EMGTMS Proposal 1 Form Revised.docx
rossetti (10/19/16 7:58 am): Attached revised document

Uploaded
attachments:

[employer needs survey form - summary 2015.pdf](#)
[ENGR - OMGT Evaluation.pdf](#)
[EM Surveys Combined.pdf](#)
[EMGT Costs.pdf](#)
[EMGT Faculty CV edited.pdf](#)
[EMGTMS - New Degree - Ltr of Intent.docx](#)
[EMGTMS Proposal 1 Form Revised.docx](#)