Date Submitted: 10/09/24 11:13 am

# of Science in Industrial Engineering, Master

Last approved: 10/04/24 3:13 pm

Last edit: 12/02/24 1:44 pm

Changes proposed by: ashlea

Catalog Pages Using
this Program
Industrial Engineering (INEG)

Submitter: User ID: ashlea Phone:

575-3702

Program Status Active

Academic Level Graduate

Type of proposal Major/Field of Study

Select a reason for this modification

Making Minor Changes to an Existing Certificate, Degree or Program (including 15 or fewer hours, admission/graduation requirements, Focused Studies or Tracks)

Are you adding a concentration?

No

Are you adding or modifying a track?

No

Are you adding or modifying a focused study?

No

Effective Catalog Year Fall 2025

College/School Code

College of Engineering (ENGR)

Department Code

Department of Industrial Engineering (INEG)

#### In Workflow

- 1. ENGR Dean Initial
- 2. GRAD Dean Initial
- 3. Director of
  Curriculum Review
  and Program
  Assessment
- 4. Registrar Initial
- 5. Institutional Research
- 6. INEG Chair
- 7. ENGR Curriculum Committee
- 8. ENGR Faculty
- 9. ENGR Dean
- 10. Global Campus
- 11. Provost Review
- 12. Graduate Council
- 13. Faculty Senate
- 14. Provost Final
- 15. Registrar Final
- 16. Catalog Editor Final

# **Approval Path**

- 1. 10/10/24 10:18 am Kevin Hall (kdhall): Approved for ENGR Dean Initial
- 2. 10/10/24 10:59 am
  Ed Bengtson
  (egbengts):
  Approved for GRAD
- 3. 11/26/24 9:35 am Lisa Kulczak

Dean Initial

(Ikulcza): Approved

for Director of

Curriculum Review

Program Code

**INEGMS** 

Degree

Master of Science in Industrial Engineering

CIP Code

and Program Assessment

- 4. 12/02/24 1:45 pm Gina Daugherty (gdaugher): Approved for Registrar Initial
- 5. 12/02/24 2:16 pm
  Doug Miles
  (dmiles): Approved
  for Institutional
  Research
- 6. 12/02/24 2:43 pm Chase Rainwater (cer): Approved for INEG Chair
- 7. 01/15/25 8:27 am
  Manuel Rossetti
  (rossetti): Approved
  for ENGR
  Curriculum
  Committee
- 8. 01/15/25 10:58 am Kevin Hall (kdhall): Approved for ENGR Faculty
- 9. 01/15/25 10:59 am Kevin Hall (kdhall): Approved for ENGR Dean
- 10. 01/15/25 11:02 am
  Suzanne Kenner
  (skenner): Approved
  for Global Campus
- 11. 01/15/25 11:50 am
  Jim Gigantino
  (jgiganti): Approved
  for Provost Review
- 12. 01/17/25 11:09 am
  Phyllis Howell
  (pahowell):

Approved for Graduate Council

- 13. 01/17/25 11:12 am Samantha Robinson (sewrob): Approved for Faculty Senate
- 14. 01/17/25 1:46 pm Jim Gigantino (jgiganti): Rollback to Faculty Senate for Provost Final

### History

- 1. Feb 2, 2016 by Charlie Alison (calison)
- 2. May 18, 2020 by Manuel Rossetti (rossetti)
- 3. Jan 16, 2024 by Gina Daugherty (gdaugher)
- 4. May 1, 2024 by ashlea
- 5. Oct 4, 2024 by Jean Mitchell (jem03)

14.3501 - Industrial Engineering.

**Program Title** 

Industrial Engineering, Master of Science in Industrial Engineering

**Program Delivery** 

Method

On Campus

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

No

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

No

What are the total 30

hours needed to

complete the program?

# **Program Requirements and Description**

#### Requirements

#### Prerequisites to the M.S.I.E. Degree Program:

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

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

**Requirements for the Master of Science in Industrial Engineering Degree:** In addition to the requirements of the Graduate School, the following departmental requirements must be satisfied by candidates for the M.S.I.E. degree: Candidates who present a thesis are required to complete a minimum of 24 graduate credit hours plus six hours of INEG 6000V Master's Thesis.

Candidates who present a project are required to complete a minimum of 27 graduate credit hours plus three hours of <a href="INEG 5130V">INEG 5130V</a> Master's Research Project and Report.

Candidates who do not present either a thesis or project are required to complete 30 semester hours of course work.

Candidates must successfully complete a master's oral examination that is conducted by the candidate's committee. Courses Taken for Graduate Credit: A limited number of <u>40000-level</u> tourses may be taken for graduate credit.

Attendance at INEG graduate seminar is required of all graduate students in Industrial Engineering.

#### Accelerated M.S.I.E. Degree

High-achieving current undergraduate students seeking a B.S.I.E. degree at the University of Arkansas who choose to pursue graduate studies in INEG may participate in the accelerated M.S.I.E. program. Eligible students may take up to 6 credit hours of 5000 INEG courses applied toward their bachelor's degree and those hours will also count towards theirM.S.I.E.degree. Eligible In addition, students may take up to 12 another 6 credit hours of graduate degree credit and as undergraduate students in order to apply them towards both to their bachelor's degree and their M.S.I.E. degree. degree, provided those credits meet These additional 6 hours of courses may not have been used toward the undergraduate degree requirements for both the bachelor's degree and must meet the M.S.I.E. degree-quirements. The total of 12 credit hours of graduate courses taken as an undergraduate student must be taken during the final 12 month period of their undergraduate degree.

Once fully admitted to the M.S.I.E. program, students request that up to 12 hours of <u>50000-level</u> or above courses taken in the final 12-month period of their undergraduate degree count toward their graduate degree, if these courses were taken on the Fayetteville campus of the University of Arkansas. Students then take an additional 18 credit hours of approved INEG graduate-level courses (including <u>INEG 6000V</u> or <u>INEG 5130V</u>) in order to complete their M.S.I.E. <u>degree</u>.

<del>degree.</del> Industrial engineering undergraduate students interested in the accelerated M.S.I.E. degree should apply to the program prior to starting the second-to-last semester of their undergraduate program. To be eligible, students

must have a 3.5 cumulative GPA or higher and submit the normal application materials required by the graduate school for the M.S.I.E. degree program.

Students should also be aware of Graduate School requirements with regard to master's degrees.

Are Similar Programs available in the area?

No

Estimated Student

NA

Demand for Program

Scheduled Program

2028-2029

**Review Date** 

Program Goals and

Objectives

#### **Program Goals and Objectives**

- 1. Prepare students for significant applications of and contributions to Industrial Engineering beyond graduation.
- 2. Produce projects and theses which meet high academic standards and constitute significant applications of and contributions to Industrial Engineering.

#### **Learning Outcomes**

#### **Learning Outcomes**

- 1.Students will make satisfactory progress toward the degree, preparing to write a thesis which meets high academic standards and constitutes a significant contribution to Industrial Engineering.
- 2. Thesis students will be prepared to write a thesis which meets high academic standards and constitutes a significant contribution to Industrial Engineering.
- 3. Thesis students will write a thesis which meets high academic standards and constitutes a significant contribution to Industrial Engineering.
- 4. Project students will present a project which meets high academic standards and constitutes a significant application of Industrial Engineering.
- 5. Coursework students will demonstrate achievement of select course outcomes. 6. Students will be able to communicate effectively.

Description and justification of the request

Description of specific change	Justification for this change
1) Two references to 4-digit course numbers were updated	1) Updates from 4-digit to 5-digit course
to refer to 5-digit course numbers.	references are made to be consistent with the
	current university course numbering system.
2) For students in the Accelerated M.S.I.E. program, increase	
the number of graduate credit hours that students may	2) This change brings the Accelerated M.S.I.E into
count towards both their bachelor's degree and M.S.I.E.	alignment with the Accelerated M.S.O.M.,
from 6 hours to 12 hours.	another Accelerated degree program
	administered by our department.

## Upload attachments

#### **Reviewer Comments**

**Lisa Kulczak (Ikulcza) (11/26/24 9:34 am):** Updated effective date from fall 2024 to fall 2025. ATTENTION REGISTRAR: Please remove Undergraduate Council from the workflow.

**Gina Daugherty (gdaugher) (12/02/24 1:44 pm):** Undergraduate Council removed from workflow.

Jim Gigantino (jgiganti) (01/17/25 1:46 pm): Rollback: Rollback:-this was approved in error. It has not been presented at faculty senate yet

Key: 334