

UNIT REPORT

Chemical Engineering (MS & ME) - Reviewer's Report - Academic Data

Generated: 7/8/19, 11:15 AM

Chemical Engineering (MS & ME)

M.S. in Chemical Engineering Mission

Mission:

The mission of the Department of Chemical Engineering is stated as follows: To offer high-quality undergraduate and graduate degree programs in chemical engineering, and to conduct research that helps educate graduate students and serves the needs of Florida and the nation. Support to the mission of the College of Engineering The mission of the College of Engineering is stated as follows The College of Engineering fosters and provides world-class programs in engineering education, research and service to enhance the economic and social well-being of the citizens of Florida, the nation and the world. The department's mission supports the college's mission by addressing the college's the world-class program aspirations through the delivery of high-quality degree programs in chemical engineering, and by helping to educate chemical engineering students who can enhance the economic and social well-being of the state of Florida. Support to the mission of the University of Florida The department's mission lends support to the following elements of the university's mission (itemized below for easy reference): (a) It is the mission of the University of Florida to offer broad-based, exclusive public education, leading-edge research and service to the citizens of Florida, the nation and the world. (b) Teaching is a fundamental purpose of this university at both the undergraduate and graduate levels. (c) Research and scholarship are integral to the education process and to the expansion of our understanding of the natural world, the intellect and the senses. Element (a) of the university's mission is supported by the department's mission-explicit mandate to educate students who can serve the needs of the state of Florida. Element (b) is supported by the department's commitment to offer undergraduate and graduate chemical-engineering degrees that are of high quality, hence addressing the fundamental nature of the teaching purpose of the university. Element (c) is supported through the department's mission-explicit statement to educate graduate students through a research venue focusing on chemical engineering.

Start: 07/01/2017

End: 06/30/2018

PG 1 Faculty Involvement

Goal: Have at least 80% of the department faculty involved in the MS program through teaching, research, and advising.

Evaluation Method:

Analysis of faculty-assignment records maintained by the department.

Results:

 The faculty involvement level in this degree program is **85 %** (**17** out of a total of **20** faculty).

The percentage faculty involvement is compiled by including in the data set all faculty members who conduct at least one activity among teaching, research, and advising related to this degree program.

XOn Campus: true

XProgram CIP: 14.0701

XOnline: false

XOther Site: false

XIf Other Site:

PG 2 Graduate within 2 years

Goal: Achieve a graduation rate of at least 75% within 2 years of matriculation into this degree program.

Evaluation Method:

Analysis of records maintained by the department.

Results:

 The graduation rate for this degree program is **100 %** (**0** out of **11** ME students failed to graduate within 2 years of matriculation into the degree).

The graduation rate is compiled by including in the data set the cohort of students who matriculated into this program 2 years ago or earlier.

XOn Campus: true

XProgram CIP: 14.0701

XOnline: false

XOther Site: false

XIf Other Site:

PG 3 Matriculation standard for GRE score

Goal:

Achieve a matriculation standard of 1200 or higher in the cumulative GRE score calculated as the sum of the average verbal and quantitative components of the exam.

Evaluation Method:

Analysis of records maintained by the department.

Results:

The average cumulative GRE score for the students matriculated into this degree program during the assessment period is **314** (**149** verbal and **165** quantitative). A total of **21** students matriculated in this degree program.

XOn Campus: true

XProgram CIP: 14.0701

XOnline: false

XOther Site: false

XIf Other Site:

SLO 1 Knowledge

Outcome:

a. Ability to identify a problem b. Ability to formulate a problem c. Ability to solve engineering problems d. Ability to critically read engineering literature

SLO Area (select one): Knowledge (Grad)

Assessment Method:

Evaluated by:

(1) The Supervisory Committee through the written *M.S. Dissertation* and the oral *M.S. Dissertation Defense* (Thesis-Track students)

(2) The Research Advisor through the written *MSNT Final Project* (Non-Thesis-Track students)

(3) The Supervisor of an *Industrial Internship Experience* (Non-Thesis-Track students who elect the internship option)

Rubric: The rubric identifies each of the SLOs of this type.

Metric: Each SLO is evaluated through a scoring scale of 0 (SLO Not Met), 1 (Partially Met), and 2 (Met).

SLO Not Assessed This Year:

Results:

Attached Files

Start: 07/01/2017

End: 06/30/2018

Threshold of Acceptability: 70

How many students did you assess for this outcome?: 16

How many students met the outcome?: 16

What percentage of students met the outcome?: 100

Does this meet your threshold of acceptability?: Yes

SLO 2 Skills

Outcome: Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice at an advanced level.

SLO Area (select one): Skills (Grad)

Assessment Method:

Evaluated by:

(1) The Supervisory Committee through the written *M.S. Dissertation* and the oral *M.S. Dissertation Defense* (Thesis-Track students)

(2) The Research Advisor through the written *MSNT Final Project* (Non-Thesis-Track students)

(3) The Supervisor of an *Industrial Internship Experience* (Non-Thesis-Track students who elect the internship option)

Rubric: The rubric identifies each of the SLOs of this type.

Metric: Each SLO is evaluated through a scoring scale of 0 (SLO Not Met), 1 (Partially Met), and 2 (Met).

SLO Not Assessed This Year:

Results:

Attached Files

Start: 07/01/2017

End: 06/30/2018

Threshold of Acceptability: 70

How many students did you assess for this outcome?: 16

How many students met the outcome?: 16

What percentage of students met the outcome?: 100

Does this meet your threshold of acceptability?: Yes

SLO 3 Professional Behavior

Outcome: Ability to communicate effectively.

SLO Area (select one): Professional Behavior (Grad)

Assessment Method:

Evaluated by:

(1) The Supervisory Committee through the written *M.S. Dissertation* and the oral *M.S. Dissertation Defense* (Thesis-Track students)

(2) The Research Advisor through the written *MSNT Final Project* (Non-Thesis-Track students)

(3) The Supervisor of an Industrial Internship Experience (Non-Thesis-Track students who elect the internship option)

Rubric: The rubric identifies each of the SLOs of this type.

Metric: Each SLO is evaluated through a scoring scale of 0 (SLO Not Met), 1 (Partially Met), and 2 (Met).

SLO Not Assessed This Year:

Results:

Attached Files

Start: 07/01/2017

End: 06/30/2018

Threshold of Acceptability: 70

How many students did you assess for this outcome?: 16

How many students met the outcome?: 16

What percentage of students met the outcome?: 100

Does this meet your threshold of acceptability?: Yes

Programmatic Use of Results

Program: Chemical Engineering (MS & ME)

Programmatic Use of Results:

The results were reviewed by the *Department Chair* and the *Graduate Curriculum Committee*.

All the Program Goals and Student Learning Outcomes were met. No corrective action was taken.

Program Results Not Reported This Year:

M.S. in Chemical Engineering Detail

End: 06/30/2018

Start: 07/01/2017

Providing Department: Chemical Engineering (MS & ME)

Assessment Cycle (All AAPs):

Analysis and Interpretation: May - June

Program Modifications: Completed by September 15

Dissemination: Completed by October 15

SLOs	Year	17-18	18-19	19-20	20-21	21-22	22-23
Knowledge							
Ability to identify a problem		X	X	X	X	X	X
Ability to formulate a problem		X	X	X	X	X	X
Ability to solve engineering problems		X	X	X	X	X	X
Ability to critically read engineering literature		X	X	X	X	X	X
Skills							
Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice at an advanced level		X	X	X	X	X	X
Professional Behavior							
Ability to communicate effectively		X	X	X	X	X	X

The assessment timeline indicated in the Assessment Timeline is implemented so that the assessment data is collected once in each cycle.

SLO Assessment Rubric (All AAPs):

Methods and Procedures (UG and Certificate AAPs):

Curriculum Map (UG AAPs only):