

Academic Year 2025-2026

Doctor of Engineering - DEGR-DEGR Learning Outcomes

Student Learning Outcome #1 **MET**

Students will demonstrate an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

MEASURES	RESULTS	ACTIONS
ENGR 6604 Dissertation Direct - Assignment <i>Engineering Dissertation II: ENGR 6604</i> Target 75% of the students will achieve a score of 3 out of 4 or above for all programs ECE - DE SACS Spreadsheet 2025-2026.xlsx SLO1-rubricpdf.pdf	MET Summary Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering Four (4) students graduated during the past review cycle, and all students exceeded expectations. Electrical Engineering Two (2) students graduated during the past review cycle and both exceeded expectations. Industrial Engineering Add summary of results here. Mechanical Engineering Two (2) students graduated during the past review cycle and both exceeded expectations. Analysis Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering The DE program had 4 students, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense. Students achieved a mean score of 3.95 out of	Other - [ECEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [MEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [ISEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [CVEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [CHEN - Action 1:] Not Started No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Recommended Due Date: 09/01/2026

	4.0 on this outcome, with 100% achieving the proficiency level mentioned above, indicating strong attainment. Electrical Engineering The DE program had 2 students, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense and attached rubric (4.00/4.00). Industrial Engineering Add analysis here. Mechanical Engineering Mechanical engineering had 2 DE students graduated, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense and attached rubric (4.00/4.00).	
Qualifying Exam The qualifying exam is part of the DE requirements and DE candidates must pass this exam to be in good academic standing. The results of the exam for each program (CHEN, CVEN, ECEN, ISEN, ME) are assessed for outcome attainment here. Direct - Exam (Course-based) Target 75% of the students will achieve a score of 3 out of 4 or above for all programs.	MET Summary Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering No students have taken the qualifying exam this year. Electrical Engineering No students have taken qualifying exam this year. Industrial Engineering Add summary of results here. Mechanical Engineering Three students have taken qualifying exam this year. Analysis Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering	Other - [ISEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [CHEN - Action 1:] Not Started No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Recommended Due Date: 09/01/2026 Other - [CVEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [ECEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Updates <i>July 01, 2026 by Abdelnasser Eldek</i> No qualifying exam results for this year. Other - [MEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026

	No students have taken the qualifying exam this year. Electrical Engineering No students have taken qualifying exam this year. Industrial Engineering Add analysis Mechanical Engineering Mechanical Engineering had three students taking qualifying exam in this year. The assessment data based on the qualifying exam showed this outcome is met (4 out of 4)	
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General Outcome Actions

ACTIONS
Other - [CVEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026
Other - [MEEN - Action 1] Not Started NA Recommended Due Date: 09/01/2026
Other - [ECEN- Action-1. Revise Curriculum] Not Started Modifications to the Doctor of Engineering (D.Eng.) Program in the ECE Department The following curriculum revisions are proposed for the Doctor of Engineering (D.Eng.) program in the Department of Electrical and Computer Engineering. New Courses ECEN 6355 – Advanced Electrical Machine & PE Drive ECEN 6356 – Advanced Power System Monitoring & Protection ECEN 6357 – Advanced Power System Stability & Control Removed Courses ELEN 6303 – Advanced Python Programming ELEN 6320 – Justification Engineering Project ELEN 6330 – Verilog HDL Programming and Applications Modified Courses The following modifications have been made to existing graduate courses: Course Prefix Changes: The course prefix was changed from ELEN to ECEN for the following graduate courses: ECEN 6301 ECEN 6305 ECEN 6307 ECEN 6311 ECEN 6314 ECEN 6317 ECEN 6318 ECEN 6325 ECEN 6346 ECEN 6350 ECEN 6366 Prerequisite Updates: Several courses were revised to reflect changes in undergraduate course prefixes and curriculum: ECEN 6311: Prerequisite updated from ELEN 3431 to ECEN 3431. ECEN 6317: Prerequisite updated from ELEN 3431 to ECEN 3431. ECEN 6318: Prerequisite updated from ELEN 3431 to ECEN 3431. ECEN 6325: Prerequisite updated from ELEN 3431 to ECEN 3431. ECEN 6346: Prerequisite changed from ELEN 4314 to CPEN 4314. ECEN 6350: Prerequisite updated from ELEN 1301 to ECEN 1301. ECEN 6366: Prerequisite changed from ELEN 4314 to CPEN 4314. Recommended Due Date: 09/01/2026
Other - [ISEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026
Other - [CHEN - Action 1] Not Started NA

Recommended Due Date: 09/01/2026

Conclusion

Chemical Engineering:

No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department.

Civil Engineering:

Four (4) students graduated during the past review cycle, and all exceeded expectations for Outcome 1.

Electrical Engineering:

The DE program (ECE) had 2 students and all of the students exceeded expectations with respect to Student Learning Outcome 1 based on assessment data results using the dissertation and final oral defense and attached rubric.

Industrial Engineering:

Add analysis Here.

Mechanical Engineering:

Add analysis Here.

Student Learning Outcome #2 **MET**

Students will demonstrate an ability to develop and conduct appropriate experimentation or numerical simulation, analyze and interpret data, and use engineering judgment to draw conclusions and produce solutions appropriately.

MEASURES	RESULTS	ACTIONS
ENGR 6604 Dissertation Direct - Assignment <i>Engineering Dissertation II: ENGR 6604</i> Target 75% of the students will achieve a score of 3 out of 4 or above. ECE - DE SACS Spreadsheet 2025-2026.xlsx SLO2-rubricpdf.pdf	MET Summary Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering Four (4) students graduated during the past review cycle, and all students exceeded expectations. Electrical Engineering Two (2) students graduated during the past review cycle and both exceeded expectations. Industrial Engineering Add summary of results here. Mechanical Engineering Add summary of results here. Analysis Chemical Engineering	Other - [ISEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [CVEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [CHEN - Action 1:] Not Started No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Recommended Due Date: 09/01/2026 Other - [MEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [ECEN - Action 1:]

	No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering The DE program had 4 students, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense. Students achieved a mean score of 3.86 out of 4.0 on this outcome, with 100% achieving the proficiency level mentioned above, indicating strong attainment. Electrical Engineering The DE program had 2 students, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense and attached rubric (4.00/4). Industrial Engineering Add analysis here. Mechanical Engineering Mechanical Engineering had 2 students who completed their dissertation and oral defense, and the assessment data collected showed this outcome is met (4 out of 4) for both students.	Not Started NA Recommended Due Date: 09/01/2026
Qualifying Exam Direct - Exam (Course-based) Target 75% of the students will achieve a score of 3 out of 4 or above.	MET Summary Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering No students have taken qualifying exam this year. Electrical Engineering No students have taken qualifying exam this year. Industrial Engineering Add summary of results here. Mechanical Engineering Three students have taken qualifying exam this year.	Other - [CVEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [ECEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [MEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [ISEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [CHEN - Action 1:] Not Started

	Analysis Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering Department No students have taken the qualifying exam this year. Electrical Engineering No students have taken qualifying exam this year. Industrial Engineering Add analysis Here. Mechanical Engineering Mechanical Engineering had three students taking qualifying exam. The assessment data based on the qualifying exam showed this outcome is met (4 out of 4)	No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Recommended Due Date: 09/01/2026
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General Outcome Actions

ACTIONS
Other - [ECEN - Action 1] Not Started NA Recommended Due Date: 09/01/2026
Other - [ISEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026
Other - [CVEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026

Other - [CHEN- Action 1:]

Not Started

NA

Recommended Due Date: 09/01/2026

Other - [MEEN - Action 1]

Not Started

NA

Recommended Due Date: 09/01/2026

Conclusion

Chemical Engineering:

No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department.

Civil Engineering:

Four (4) students graduated during the past review cycle, and all exceeded expectations for Outcome 1.

Electrical Engineering:

The DE program had 2 students, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense and attached rubric (4.00/4).

Industrial Engineering:

Add analysis Here.

Mechanical Engineering:

Add analysis Here.

Student Learning Outcome #3 **MET**

Students will demonstrate an ability to use modern engineering tools to produce engineering analysis in a systematic manner.

MEASURES	RESULTS	ACTIONS
ENGR 6604 Dissertation Direct - Assignment <i>Engineering Dissertation II: ENGR 6604</i> Target 75% of the students will achieve a score of 3 out of 4 or above. ECE - DE SACS Spreadsheet 2025-2026.xlsx SLO3-rubric.pdf	MET Summary Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering Four (4) students graduated during the past review cycle, and all students exceeded expectations. Electrical Engineering	Other - [CHEN - Action 1:] Not Started No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Recommended Due Date: 09/01/2026 Other - [CVEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [ISEN - Action 1:]

	Two (2) students graduated during the past review cycle and both exceeded expectations. Industrial Engineering Add summary of results here. Mechanical Engineering Add summary of results here. Analysis Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering The DE program had 4 students, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense. Students achieved a mean score of 3.96 out of 4.0 on this outcome, with 100% achieving the proficiency level mentioned above, indicating strong attainment. Electrical Engineering The DE program had 2 students, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense and attached rubric (4.00/4). Industrial Engineering Add summary of results here. Mechanical Engineering Mechanical Engineering had 2 students who completed their dissertation and oral defense, and the assessment data collected showed this outcome is met (4 out of 4) for both students.	Not Started NA Recommended Due Date: 09/01/2026 Other - [ECEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [MEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026
Qualifying Exam Target 75% of the students will achieve a score of 3 out of 4 or above.	MET Summary Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department.	Other - [MEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [ECEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [CHEN - Action 1:] Not Started

	Civil Engineering No students have taken the qualifying exam this year. Electrical Engineering No students have taken qualifying exam this year. Industrial Engineering Add summary of results here. Mechanical Engineering Three students have taken qualifying exam this year. Analysis Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering Department No students have taken the qualifying exam this year. Electrical Engineering No students have taken qualifying exam this year. Industrial Engineering Add analysis here. Mechanical Engineering Mechanical Engineering had three students taking qualifying exam. The assessment data based on the qualifying exam showed this outcome is met (4 out of 4)	No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Recommended Due Date: 09/01/2026 Other - [ISEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [CVEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026
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General Outcome Actions

ACTIONS
Other - [CHEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026
Other - [CVEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026
Other - [ISEN - Action 1:]

Not Started NA Recommended Due Date: 09/01/2026
Other - [ECEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026
Other - [MEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026

Conclusion

The DE program had 2 students, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense and attached rubric (4.00/4).

Chemical Engineering:

No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department.

Civil Engineering:

Four (4) students graduated during the past review cycle, and all exceeded expectations for Outcome 1.

Student Learning Outcome #4 **MET**

Students will demonstrate an ability to complete a doctoral dissertation and effectively communicate the dissertation work with a range of audiences

MEASURES	RESULTS	ACTIONS
ENGR 6604 Dissertation Direct - Assignment <i>Engineering Dissertation II: ENGR 6604</i> Target 75% of the students will achieve a score of 3 out of 4 or above. ECE - DE SACS Spreadsheet 2025-2026.xlsx SLO4-rubric.pdf	MET Summary Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering Four (4) students graduated during the past review cycle, and all students exceeded expectations. Electrical Engineering Two (2) students graduated during the past review cycle and both exceeded	Other - [ISEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [CHEN - Action 1:] Not Started No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Recommended Due Date: 09/01/2026 Other - [CVEN - Action 1:] Not Started

	expectations. Industrial Engineering Add summary of results here. Mechanical Engineering Add summary of results here. Analysis Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering The DE program had 4 students, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense. Students achieved a mean score of 3.62 out of 4.0 on this outcome, with 100% achieving the proficiency level mentioned above, indicating strong attainment. Electrical Engineering The DE program had 2 students, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense and attached rubric (4.00/4). Industrial Engineering Add summary of results here. Mechanical Engineering Mechanical Engineering had 2 students who completed their dissertation and oral defense, and the assessment data collected showed this outcome is met (4 out of 4) for both students.	NA Recommended Due Date: 09/01/2026 Other - [ECEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [MEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026
Qualifying Exam Direct - Exam (Course-based) Target 75% of the students will achieve a score of 3 out of 4 or above.	MET Summary Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering	Other - [ISEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [CVEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [ECEN - Action 1:] Not Started NA

	No students have taken the qualifying exam this year. Electrical Engineering No students have taken qualifying exam this year. Industrial Engineering Add summary of results here. Mechanical Engineering Three students have taken qualifying exam this year. Analysis Chemical Engineering No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Civil Engineering No students have taken the qualifying exam this year. Electrical Engineering No students have taken qualifying exam this year. Industrial Engineering Add summary of results here. Mechanical Engineering Mechanical Engineering had three students taking qualifying exam. The assessment data based on the qualifying exam showed this outcome is met (4 out of 4)	Recommended Due Date: 09/01/2026 Other - [MEEN - Action 1:] Not Started NA Recommended Due Date: 09/01/2026 Other - [CHEN - Action 1:] Not Started No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department. Recommended Due Date: 09/01/2026
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Conclusion

The DE program had 2 students, and the assessment data collected showed 100% success rate based on assessment data results using the dissertation and final oral defense and attached rubric (4.00/4).

Chemical Engineering:

No DE student results are available for this reporting year because the department currently has no students enrolled in the DE program and has not had DE enrollment for several years. This appears to be related, at least in part, to the department's offering of the PhD program, which has experienced continued enrollment growth and has become the primary doctoral pathway for students in the department.

Civil Engineering:

Four (4) students graduated during the past review cycle, and all exceeded expectations for Outcome 1.

Assessment Report Summary

The DE program has 5 concentrations, namely, Chemical, Civil, Electrical, Industrial, and Mechanical engineering. All 5 programs assess the performance of the students using Theses and Qualifying exam materials. The student performance is measured using 5 Student Learning Outcomes assessed every year. Based on the data collected, the students attained all 4 student learning outcomes across all 5 programs.