

Academic Assessment Report: 2023-24

Program - Systems Engineering and Operations Research (PhD)

Program - Systems Engineering and Operations Research (PhD): Assessment Report

SLO-5 Independent Research

Graduates of the PhD in Systems Engineering and Operations Research will be able to conduct independent research resulting in an original contribution to knowledge in the focused areas of their PhD program.

Outcome Status: Active

Assessment Period(s): 2023 - 2024

ACTIONS & IMPROVEMENT PLANS

Past Improvements: The SEOR Department has a Ph.D. Curriculum Committee that meets several times per semester to discuss issues associated with the program. While students are meeting the SLO at the target rate of 100%, there are still areas for improvement. The committee and department continue to have discussions about student expectations for external publications. There is considerable variability in publication output by our doctoral students. This is partly a function of the diverse areas of research in our department and corresponding diversity in publication venues. While we generally feel that we should increase output in high impact journals, we have not yet reached agreement on how to define that

Future Improvements: While students are meeting the SLO at the target rate of 100%, there are still areas for improvement. Several action plans have been developed in the last year:

"We are planning to host a departmental "research day" every fall (starting in 2024). All faculty and doctoral students are expected to attend. Faculty and students give short presentations about their research and interests, followed by a social mixer. The purpose is to facilitate better matching of students to faculty advisors, providing a friendly environment where students can learn about the research interests of the faculty. A secondary objective is to improve the community life of doctoral students, which has suffered significantly since covid.

"The department is reviewing the format of the comprehensive exam (8 hours written plus a follow-up oral exam). Some feel the format is too onerous. The committee will review the exam formats of several other departments and make a recommendation about proposed changes to our format. This will be completed in AY 2024-25.

"The committee has created a draft PhD "handbook" which outlines expectations, tips, and best practices for students. This provides clearer expectations for students and will help to reduce misconceptions among students. The document will be reviewed and revised in AY 2024-25.