



WAYNE STATE
UNIVERSITY

Industrial & Systems Engineering

PETITION AND AUTHORIZATION

FOR DIRECTED STUDY

BACHELOR OF SCIENCE

Course Description:

IE 4990 – Directed Study

This course provides students with the opportunity to pursue an individualized study in a selected area of Industrial Engineering under faculty supervision. Students will define a research question or study objective, review relevant literature, apply appropriate methodologies, and analyze findings. The course emphasizes independent learning, critical thinking, and effective communication of results through written reports or presentations.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Define a research question or study objective within the selected field of Industrial Engineering.
- Conduct a comprehensive review of relevant literature, methodologies, and industry practices related to the chosen topic.
- Develop a structured study plan or research methodology under faculty supervision.
- Apply appropriate engineering principles, analytical methods, or experimental techniques to investigate the selected topic.
- Analyze data, case studies, or system performance to draw meaningful conclusions.
- Synthesize findings and relate them to existing knowledge and practical applications in Industrial Engineering.
- Communicate study results effectively through written reports, presentations, or other appropriate formats.
- Demonstrate self-directed learning, problem-solving skills, and independent critical thinking in addressing complex engineering challenges.



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Manufacturing Engineering Building, 4815 Fourth Street, Detroit, MI 48202 | Phone: 313.577.2660

This form must be approved by the student's instructor and the departmental officer. Registration in directed study will be authorized when all steps are completed. For information & further instructions please see the undergraduate advisor or undergraduate program director. This document must accompany the research proposal. Students can take up to 2 credit directed study per semester, in total 4 credits towards graduation

Student's Name _____ PID# _____

Requests permission to register in IE 4990 for _____ hours of credit to be earned through Directed study for the term ending _____ study is to be completed by _____

Credit hours earned in this course _____. Maximum credits allowed in this (see Undergraduate Bulletin) _____.

DESCRIPTION OF THIS STUDY. Discuss with faculty advisor before preparing the petition.

1. Course or project outline. (Include key reading assignment if applicable. Attach additional page if necessary).

2. Significance of the course or project to the student's academic program.

3. Manner in which the course will be evaluated (e.g. oral or written reports. Midterm examination, essays, etc.)

APPROVALS

Instructor _____ Date _____

Departmental Undergraduate Program Director _____ Date _____