

Thesis Course Syllabus

1. Course number and name
51323821 Thesis
2. Credits and contact hours
Credit hour(s) 4. Contact hours are to be arranged depend on the topic and advisor's requirement.
3. Instructor's or course coordinator's name
Supriyanto
4. Text book, title, author, and year
To be arranged, depends on selected topics
5. Specific course information
 - a. Course description:
Thesis can be an engineering design project or a research in environmental engineering topic. Topic is selected by the student according to his/her interests. Eligible student should write a Thesis proposal with guidance from an advisor. The proposal will be assessed by the Thesis team consists of groups of advisors to get input and suggestions. Student then proceeds their proposal with guidance from the formal advisor appointed by Thesis coordinator. At the end of the project, students should conduct seminar, present the result of their project in front of their fellow students and the evaluator.
 - b. Prerequisites : Fieldwork, Research Method, having 120 credit hours completion
Co-requisites : -
 - c. This course is required /mandatory
6. Specific goals for the course
 - a. After attending the course, students are expected to be able :
 - i. to identify, formulate and solve problems depends on the selected final project's topic (G)
 - ii. to design and conduct experiments, as well as to analyzed and interpret data (D)
 - iii. to design a system, component or process to meet desired needs within realistic constrains especially social, ethical, health and safety and sustainability (E)
 - iv. to self learn, can review and summarize technical material that was not presented in the course (SO K)
 - v. to write a report, presenting it orally and communicate the final project result effectively against evaluators and fellow students questions (SO I)
 - b. This course addresses student outcome D, E,G, I and K as follows:
 - i. An ability to design & conduct experiments, as well as to analyze & interpret data (SO D)

- ii. An ability to design a system, component, or process to meet desired needs within realistic constraints such as social, political, ethical, health and safety, manufacturability and sustainability (SO E)
- iii. An ability to identify, formulate and solve environmental engineering problems (SO G)
- iv. An ability to communicate effectively (SO I)
- v. A recognition of the need for, and an ability to engage in life-long learning (SO K)

7. Brief list of topics to be covered

Domain of Thesis project can be an engineering design project or a research in environmental engineering topic. Topic is selected by student according to his/her interests. Eligible student should write a final project proposal with guidance by an advisor. The proposal will be assessed by final project team consists of groups of advisors to get input and suggestions. The students then proceeds their proposal with guidance by formal advisor appointed by final project coordinator.