

Capstone Project Learning Outcome Measurement Guidelines

apropos TABEE Requirements for International Program

CVE401 & CVE402

Learning Outcome to be measured in CVE 401

- Social Activities, Environment, Sustainable Development, Engineering Professionals
- Engineering Ethics
- Live-long Learning

Learning Outcome to be measured in CVE 402

- Engineering Problem Analysis
- Design and Development of Solutions to Complex Engineering Problems
- Investigation and Evaluation of Data
- Teamwork
- Communication

In order for the measurement of outcomes in CVE401 Capstone Project Proposal and CVE402 Capstone Project to be relevant with TABEE requirements as mentioned, each project group shall carry out work that includes:

- Analyses of Engineering Problems that contain at least two different Civil Engineering disciplines.
- Examples of “design” that can be used in real-life applications. Students who carry out projects of research-oriented nature can also apply results from their research to demonstrate its use by providing some design examples.

In addition, students shall provide the following documents:

- Project Report relevant to advisor's requirements submitted to only advisor. The complete version shall be required for CVE402
- Executive Summary for Examination Committee that shall contain:

For CVE 401

- Overall, history, scope and expected results of the project
- Project methodology and equipment/tools/program used in the project
- Expected project impact on engineering, society, and environment as applicable

For CVE 402

- Summary of results
- Conclusions and suggestions
- Appendix for CVE402 that shall contain:
 - Engineering design examples
 - References

LO	Measurement
Engineering Problem Analysis	Project Report, Executive Summary
Design and Development of Solutions to Complex Engineering Problems	Project Report, Executive Summary
Investigation and Evaluation of Data	Project Report
Teamwork	Advisor Evaluation Form
Communication	Project Presentation
Social Activities, Environment, Sustainable Development, Engineering Professionals	Executive Summary
Engineering Ethics	Advisor Evaluation Form
Live-long Learning	Advisor Evaluation Form