

# FINAL PROJECT GUIDELINES

## 1. PREFACE

has a value of 5 credits is a course that should be taken by any student of Industrial Engineering as a requirement for completing the undergraduate education and earned a Bachelor of Industrial Engineering. has a target so that the student is able to describe, analyze and apply the whole educational experience based on the basic subjects and choice in interested fields of expertise. Therefore this can be expected as a means of expressing the creativity of undergraduate students to design, plan, evaluate, improve, innovate and provide a solution to a real problem (problem solving) contained in object study of industrial systems, business system or organization.

This form is a written scientific report that follows the rules of research methodology and papers.

## 2. GENERAL REQUIREMENTS

Every undergraduate student who proposes should fulfill several administrative and academic requirements as follow.

- Registered as active student in Industrial Engineering Department FTI ITS
- Entering or taking the course of in FRS on the semester in which is proposed
- Having finished or passed the courses minimum of 120 credits including minimum of 2 (two) electives

## 3. IMPLEMENTATION PROCEDURE

is essentially divided into 3 (three) stages: (1) Advisor Assigning Stage, (2) Final Project Seminar Stage, (3) Implementation and Defense Session Stage.

### 3.1 Advisor Assigning Stage

This stage is the initial stage in implementation where student should determine the advisor/lecturer prior to the next stages. The procedure of this stage is as follows.

- a. Know the competence (expertise) and interest of the lecturers candidate which can be done through several ways below:
  - Take early consultation

- See the advising track record in the IE website
  - See Sistem Informasi Akademik (Academic Information System)
- b. See the actual advising load for every advisor candidates prior to determining the assigned advisor. The load for every advisors is maximum of 6 (six) undergraduate students. The information of actual load of every advisor can be obtained from secretariat, thesis coordinator, or Academic Information System.
  - c. Determine the thesis topic. Thesis topic can be either the student idea approved by the advisor or the part of advisor's research.
  - d. Fill in the TA-1 Form (Formulir Pengajuan Pembimbing TA) containing student identity, number of credits taken, thesis summary consists of topic/title, purpose (research question to be answered), methodology, and the name of assigned advisor.
  - e. Form TA-1 should be signed by advisor accompanied with the head of related laboratory, and validated by the thesis coordinator.

### 3.2 Final Project Seminar Stage

This stage is done after all the advisor assigning, drafting, and seminar are approved by the seminar examiner team.

- a. Draft the together with the advisor based on the Formatting Guidelines; prior to final project seminar, student must has done consultation minimum of 6 (six) times.
- b. Fill in the TA-2 (Pendaftaran Seminar Proposal TA) if the thesis is ready and approved by the advisor and co-advisor.
- c. Submit the form to the Secretariat based on the timelines (1 week prior to thesis seminar) accompanied with:
  - 5 exemplars of draft;
  - Photocopied FRS;
  - Photocopied consultation Control Card (Kartu Kendali Bimbingan) or print out of consultation activity from SIA which has been approved with minimum of 6 times consultation.
- d. Attend thesis seminar properly to determine whether the is accepted, accepted with revision, or rejected.

### 3.3 Implementation and Defense Session Stage

This stage is done after the is approved and accepted by the seminar examiner team, final project implementation, until final project defense session.

- a. Once is approved, student continues the implementation of in the range of 3 months.
- b. Draft the in accordance with the Formatting Timelines with the guidance of advisor prior to final project defense session, student must do consultation minimum of 12 (twelve) times.
- c. Fill in Form TA-3 (Pendaftaran Sidang Tugas Akhir) with the approval from advisor and co-advisor.
- d. Submit the form to the secretariat based on the timelines (1 week prior to final project seminar), accompanied with:
  - 5 exemplars of draft;
  - Photocopied consultation Control Card (Kartu Kendali Bimbingan) or print out of consultation activity from SIA which has been approved with minimum of 12 times consultation.
- e. Attend final project defense session properly to examine the whole final project draft and to determine the passing status or to retake the final project defense session.

#### 4. FINAL PROJECT SEMINAR

Final Project proposal seminar was done with the purpose of: (1) evaluating the feasibility of the proposed topic, (2) evaluate the accuracy of methods/models used, (3) give advice on improvements to the proposal

- a. Seminar on Final Project proposalis a forum of academic and scientific activities, therefore students are required to dress modestly, wearing suit, and present it on time, and keep quiet around the seminar room.
- b. Seminar on Final Project proposals can be attended by any students of Industrial Engineering.
- c. Seminar proposals are implemented in several waves (usually 3 or 4 waves) where each wave schedule will be determined and published at the beginning of each period of Undergraduate Thesis.
- d. Execution of the Final Project (determination of the schedule, panel examiners, and the Chairman of the hearing) is the responsibility of the laboratory concerned.
- e. Panel examiners in the seminar proposal consists of 2 (two) Lecturers, where 1 lecture can be derived from another laboratory.
- f. The Chairman of seminar/session (not the advisor) served to moderator course seminar/session, facilitates the examiners between session to produce a verdict, as well

as responsible for the administrative files such as the list of attendance, grading sheets, revision sheet, and so on until it handed back to the Secretariat.

g. Seminar proposals must produce a verdict with the option as follows:

- Accepted
- Revision, or
- rejected, because;
  - o topic/title is too simple
  - o Method/model is wrong
  - o Topic has been examined by other students
  - o other reason...

h. When Final Project proposals rejected then the student should perform revision and consultation with his/her advisor until ready to put back in the next period of seminar proposals;

i. Students who eventually rejected will be given the opportunity to repeat the seminars at the same period no later than on the last wave of Final Project seminar proposal.

j. Student who ultimately declared his/her Final Project proposals accepted, the revised proposal should be completed in accordance with the revision sheet until getting approval from examiners. Collected to the Secretariat no later than one week after the seminar implementation of the proposal; If not, the seminar will be annulled and the student is required to perform seminar for a second time.

k. Re proposal task ultimately declared admissible, the enforceability of the title/topic of the Final Project proposal to a maximum of one year. If after one year of the Final Project the students concerned were declared not ready to defended, then the student are required to propose a Final Project proposal again with or without accompanied the turn lecturer supervisor.

## 5. FINAL PROJECT DEFENSE

Final Project defense is done with the purpose of: (1) examined the feasibility of a undergraduate thesis, (2) examined students understanding of their final project material, (3) determine whether Final Project of the students is passed or not, (4) provide an assessment of students ' Final Project if they passed.

- a. Final Project defense is academic activities and a serious scientific forum, so that students are required to dress modestly, wearing suit's rapid, present it on time, and keep quiet around the courtroom
- b. Final Project defense is closed, and only attended by faculty mentors, examiners, and students are being examined
- c. Final Project defense is carried out in several waves (usually 3 or 4 waves) where each wave schedule will be determined and published at the beginning of each period
- d. Execution of the Final Project (determination of the schedule, a panel examiners, and the Chairman of the hearing) is the responsibility of the laboratory concerned.
- e. Panel examiners in the Final Project consisting of three lecturers, where 1 lecturer should come from other laboratory
- f. the Chairman of Final Project defense (not the advisor) served to moderator of seminar/session, facilitates the examiners between session to produce a verdict, as well as responsible for the administrative files such as the list of attendance, grading sheets, revision sheet, and so on until it handed back to the Secretariat.
- g. Final Project defense must produce a verdict with the option as follows:
  - passed, with the Final Project value ranging from C to A., or
  - not pass (repeat) with the value D
- h. Result of this Final Project defense, related status of graduation thesis and the values will be read out by the Chairman of the Panel Examiners towards the execution of Final Project defense
- i. If a student is declared not to pass, the student must make improvements and further consultation with the supervising lecturer until declared ready to put back in the next period
- j. Students who did not pass the thesis defense, which must repeat the defense for the next semester judicium period without repeat the seminar proposal
- k. Students who did not pass the Final Project defense and do not repeat Final Project defense, students are required to propose a Final Project proposal again with or without accompanied the turn advisor.
- l. Students who passed the defense must make the Final Project revision in accordance with the revision sheet until getting approval from examiners. Revision should be collected to the Secretariat no later than one week after the execution of the Final Project defense. Students who do not do a revision up to the specified limit, will be cancelled the score

m. Student who passed the defense, in addition to doing the revision must be working on Final Project paper according to format papers for seminars/conferences. The collected papers should get the approval of the supervising lecturer.