Guide for the SIE/ENAC Project 2017-2018

1. OBJECTIVES

The SIE/ENAC project, part of the mandatory block, is a research work to be conducted during the Master cycle of the SIE section.

If the project is of the « ENAC » type, that is to say if it is part of the “ENAC Culture”, one or two students of two different sections bring together their views and their scientific knowledge to conduct research and the supervision includes, in addition to the laboratory professor, one or more professors of other laboratories/sections related to the topic.

For students who wish so, the research work can also be in the same field as the practical master work. It can also be an opportunity to acquire more in-depth research knowledge in a topic of special interest.

The studies are presented in a report and eventually defended during an oral presentation in front of a panel.

2. ORGANIZATION

The SIE project is worked on individually unless the laboratory or field activities justify group work. It’s conducted under the direction of a professor or of a person responsible for SIE or ENAC internal courses.

The ENAC project is carried out individually or in a group of two students and is supervised by professors of IIE or of different sections, depending on the topic.

The supervisor(s) are responsible for:
- advising the students in defining the project topic
- encouraging students to find bibliographic references
- pointing them towards other people to consult
- evaluating the work according to the criteria mentioned in point 6

For the topic selection, the students ask for or propose a topic to an SIE or ENAC teacher. The instructor is then responsible or co-responsible (project ENAC) for the supervision.
The students have the choice to conduct the project either during the M2 or the M3 semester.

3. REGISTRATION SCHEDULE

The registration deadlines on IS-Academia are the same as for the other courses. Work submission: one week after the semester end or as agreed upon with the professor.

4. REPORT

The report can be written either in French or in English. It should contain essential work elements in the form of text, graphics and images. Important documents and results should be included in the annex.

STRUCTURE

- Cover sheet: title - date - name(s) of the student(s) and the section(s) - name of the responsible professor
- Official statement (SIE/ENAC project, SIE master)
- Table of content
- One page summary
- Main content: Introduction – Goals – Hypothesis - Methodology – Developments/Results – Conclusion
- Bibliography in alphabetical order by author with numeration corresponding to text references [X]
- Annexes.

SOME ADVICE FOR THE STUDENTS

- Once the topic is chosen, look at the projects on the following web page: http://enac.epfl.ch/research/environmental-engineering-institute/labs-and-groups
- Define the problematic and its extent early on,
- Based on a tentative table of content, discuss the topic content and limits with the responsible person. Propose a methodology,
- Schedule the work throughout the semester, do not neglect the writing of the report,
- Think of the presentation: structure, syntax, orthography, general presentation
- Do not mix up the summary, introduction and conclusion,
- All elements taken from an external source must be clearly identified (quotation marks, references, etc...),
- Note down the references throughout the work process
Plan meetings throughout the semester to discuss the intermediate results and to readjust the project’s orientation.

5. ORAL PRESENTATION

The oral presentation is optional. The SIE section encourages students to present. It’s not only an opportunity for concluding the conducted work, but also for practicing oral presentation for the oral defense of the master project.

The presentation, of a 15 minute-duration max., is followed by a question and answer session of about 10 minutes. It takes place in front of the professor / responsible person as well as of another person (who can be a member of the same laboratory). Other people or students may also be invited.

A little advice for the slides: they should be easy to read and they should not contain too much information (a dozen lines maximum, one concept per slides). The font size should be adapted to the size of the room (at least 14 for an auditory).

6. EVALUATION

The SIE/ENAC project is worth 4 credits (1 credit corresponds to approximately 30h of work) within the block “Branches obligatoires”.

The evaluation criteria for the student’s work are the following:
- Synthesis (writing, clarity, concision, structure and quality of the report)
- Analysis (subject depth and mastery, documentation, bibliography)
- Added value (personal contribution)
- Responsibility (clarity of the methodology, traceability of information, etc.)
- Quality of the oral defense

7. PROPERTY / CONFIDENTIALITY

The work’s propositions and conclusions are solely the responsibility of the student. The text, while remaining the student’s property, may not be diffused without authorization by the professor or responsible person.