

EE-517 Bio-Nano-Chip Design

Student Projects - Rules

1. The project is **mandatory**.
2. The Project counts for 60 points maximum on the final grade
3. The Written exam also counts for 60 point maximum on the final grade
4. **Obtaining 40 points out of 60 in the written exam is mandatory for the project to be counted.**
5. **The Final Grade** is obtained by adding all the gained points on 120 points maximum, and then reporting the final grade on 6 maxima.
6. Students are **individually required to propose a project** (following the project template form) **within week 2 - Friday, 17.00**. Proposals must be sent to all TAs by email in pdf format (object: "EE-517 Project", filename: <EE-517_proposal_name_surname>)
7. The TAs will evaluate all the individual proposals based on the overall quality, final scope and timeline feasibility. The TAs will attribute final projects and working groups before week 3.
8. Every week, during the proejct session, the TAs will supervise the groups in their own project.
9. **Groups are required to submit one progressive report** following the guidelines and the template given by the TAs to receive their feedback and comments about the progress of their work. Progressive report must be sent to all TAs **within week 9 - Friday, 17.00** by email in .pdf format (object: "EE-517 Project", filename: <EE-517_group#XX_Progressive>)
10. **A final report** (following the IEEE template provided) **will be required from each group within 31st of December**. The final report must be sent to all TAs by email in .pdf format (object: "EE-517 Project", filename: <EE-517_group#XX_final>)
11. The TAs will evaluate the reports assigning the final mark, based on the technical quality, completeness, and clarity.
12. In order to obtain the maximum grade, the project needs to be focused on electrochemical detection only and needs to include at least the three aspects covered by the course: Bio, Nano, and CMOS.
13. The **Project evaluation** is done based on the following aspects:
 - a. **Individual proposal: 15 points (individual mark)**
 - b. **Progressive report: 15 points (group mark)**
 - c. **Final report: 15 points (group mark)**
 - d. **Individual queries during the sessions: 15 points (individual mark)**
14. **Motivational hint: exceptionally good-projects might have the possibility to be submitted to an internationally-recognized and peer-reviewed scientific conference.** At least, along the years, it happened sometimes! For example, the paper titled "Portable Breathalyzer for Exhaled Volatile Organic

Compounds Monitoring in Lung Diseases” by Alec Chevrot, Justina Venckute, and Sarah Cuesta; published in the Proceedings of the IEEE Medical Measurements and Applications (MeMeA), held in 2022.

15. People of reference of project supervision and management:

- a. Francesca Rodino (francesca.rodino@epfl.ch)
- b. Ali Meimandi (ali.meimandi@epfl.ch)
- c. Junyan Qian (junyan.qian@epfl.ch)