

DESIGN PROJECT 2021

A sunset over a mountain range with a city skyline in the foreground. The sky is filled with orange and yellow hues, with several white contrails streaking across it. The mountains are silhouetted against the bright sky, and the city buildings in the foreground are dark and silhouetted.

Meeting: 8 Dec. 2020

Pierre-Yves Gilliéron, Adjoint SIE

Christina Treier, Administratrice SIE

Agenda

- Goals
- Skills
- Cycle of the design
- Work Organization
- Agreement, Budget
- Milestones, Report
- Final Presentation
- Wrap-up



Source: <http://datadrivenaid.org>

Context and Goals

- The goal of the Design Project is to put your knowledge in practice within the **context of professional work**
- A team of students will be working as a consultancy company
 - **Customer:** company, administration
 - **Mandate:** context, objectives, problem to be solved, expectations
 - **Salary:** evaluation of your work (grade); learning outcomes
 - **Responsibility:** project management (meetings); searching for information/data; communication; deadlines

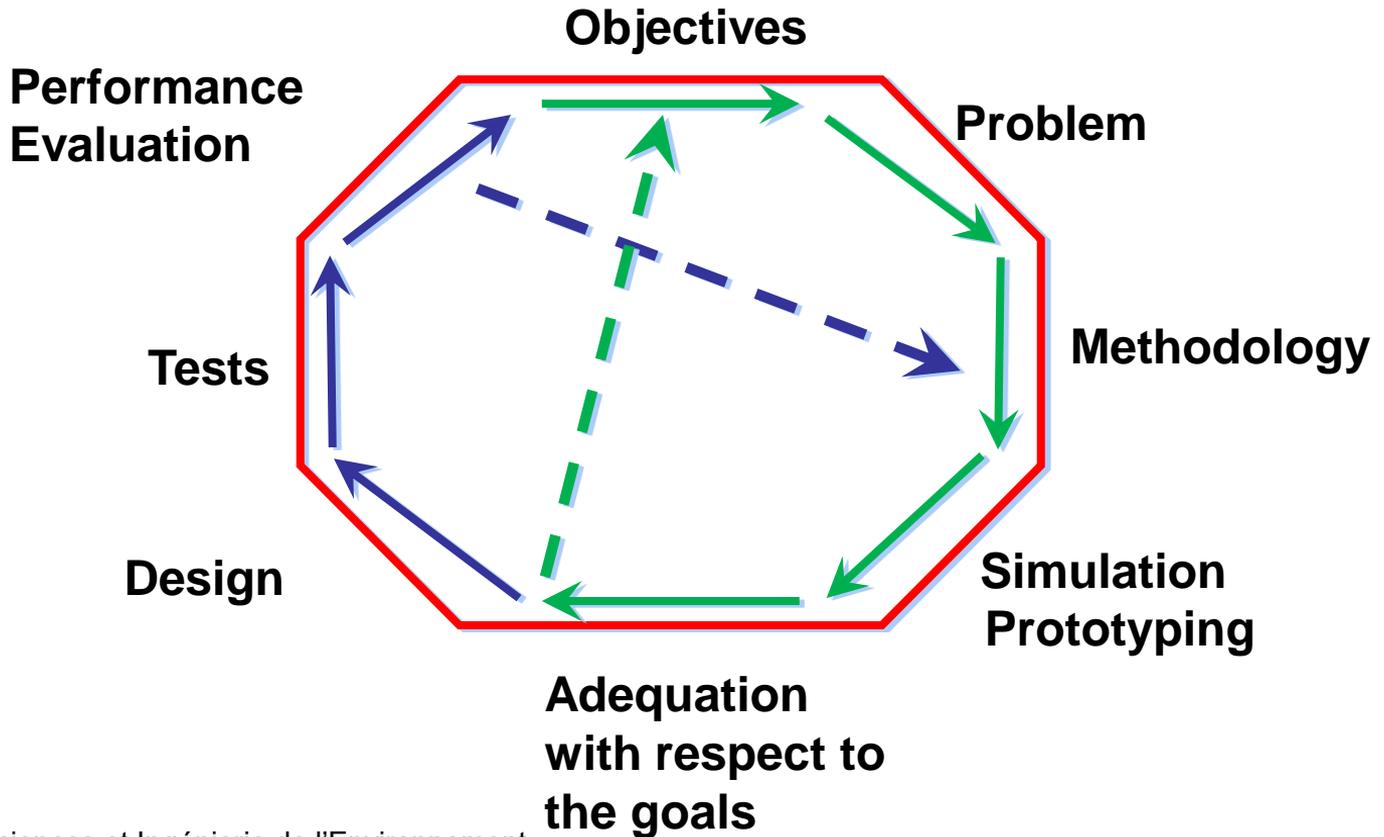
Overall Skills

- **Using your knowledge** in basic sciences and engineering within the context of a real project
- **Understanding** a problem
- **Defining** the needs
- **Developing** a methodology
- **Designing** scenarios
- **Leading** a project and assessing solutions
- **Working** in a team

Specific Skills

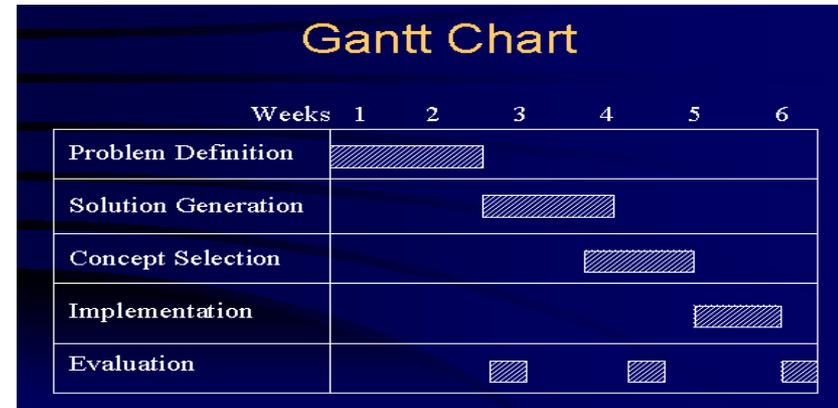
- **To identify, to express and to solve** an engineering issue
 - Defining the project and writing a detailed proposal
 - Analyzing the different and potential options
 - Choosing the best option according to technical constraints and several characteristics
 - Solving a practical engineering issue
- **To Communicate** in an efficient way: proposal, report, oral presentation

Cycle of the Design



Main Milestones of DP

- Identification of the topic and clarification of the problem to be solved
- Organization of the DP
 - Meetings, project proposal, definition of the tasks & planning
- The project proposal must be approved by the partner and by EPFL
- Main tasks
 - Work approach, methodology
 - Collect basic data and information
 - Bibliography and references
 - Development of scenarios/options
 - Presentation of selected options
 - Development of a prototype
 - Solutions assessment
- Communication of outcomes



Work Organization

- DP: Master MA2; Bloc 1; 10 ECTS
- Work load ~ **2 days/week**
 - 10 ECTS = **250-300 hours x 2 students**
- Working in a team
 - Timeline, description of the tasks
 - Sharing the tasks
 - Distributing the work load during the semester
 - Realistic work flow



Week Organization (W#)

- W1: Kick-off meeting; Partner-Academic supervisor-You
- W2: Signature of the agreement and budget
- W3: Project proposal (3 pages, 10% of the grade)
- W9: Mid-term report, technical paper (4-6 pages, 15%)
- W13: Draft final report for review, setup of poster
- W14: Oral presentation (25%)
- W15: Final report (50%)

Agreement

- Sections of the agreement
 - Bilateral responsibilities
 - Topic
 - Names of parties
 - Signatures
 - Company representative
 - Academic supervisor
 - Students

Section Sciences et Ingénierie de l'Environnement
Master M2 – semestre de printemps 2018

Design project

EPFL

1. Titre du projet :

2. Étudiants : 1.
2.

3. Encadrant EPFL
Tél.
Tél.

4. Encadrant externe
Tél.
e-mail :

5. Description du projet

6. Accord
Toutes les parties impliquées dans ce projet, les étudiants et les encadrants, se sont mises d'accord sur les objectifs du design project décrits ci-dessus. Les étudiants et les encadrants s'engagent à mener au mieux le projet avec des contacts réguliers par téléphone, e-mail et des réunions.
Un budget pour les différents frais du projet (déplacements, consommables, autres) va être établi et soumis à la section dans la semaine 3 (jusqu'au vendredi 9 mars 2018). La section va ensuite déterminer quelle somme de ces frais elle peut rémunérer.

Lieu et date :

signature encadrant EPFL

signature étudiant 1

signature encadrant externe

signature étudiant 2

Budget and financial aspects

- Budget

- Participation of the SIE Section to the costs
 - Travel
 - Some environmental analysis
 - Various costs (small equipment)
- Week 2: Submission of the Budget to the SIE Section (e-mail to christina.treier@epfl.ch)

- Reimbursement of expenses (at the end of the DP)

- Financial responsibility (one student/group)

- Keeping accurate accounts
- Record all the receipts, bills (original documents)
- To inform the SIE Office (Ch. Treier) in case of over budget

Travel

- **Use the public transportation:** keep your receipts/tickets for the reimbursement. No reimbursement for students who have a travel pass (ex. abonnement général)
- Possibility to book a car with Mobility car sharing
 - <https://www.epfl.ch/campus/mobility/vehicles/mobility-carsharing/>
 - Ask christina.treier@epfl.ch for booking

Varia

- **Responsibility for equipment**
 - In case of loss, theft and damage
 - Replacement is the responsibility of the students
 - Use of your own insurance (theft, civil liability)
- **Phone**
 - No reimbursement of telecommunication expenses
Use the softphone and/or videoconference applications
- **Printing**
 - Final report: 20.- /printed bound report; 4 copies; add in the budget
 - Poster: use the SIE computer service
More information will follow in due time

Milestones of the DP

Collect of proposals and evaluation (SIE ad-hoc committee)	Mid-December 2020
List of topics on SIE web pages	Mid-January 2021
Building group of 2 students	End of January 2021
Choice and repartition of the topics	Under the responsibility of students (one contact person for the Section)
Final choice and communication to partners & professors	5 February 2021
Preliminary contacts with external partner and academic supervisor	ASAP and before the beginning of the Spring semester
Kick-off Meeting	Friday 26 February 2021 (or another day during the week)



Report and Presentation

- **Final Report**

- Draft version for a review by partner and academic supervisor
- ~15 pages + Annexes
- Final version: to be submitted one week after the end of the semester

- **Oral Presentation**

- 12-16 slides
- Duration: 20 min (incl. discussion)

- **Poster**

- Dimensions ~ A0 (85 x120 cm), vertical
- Directives and templates provided by SIE Section

Oral Presentations

Friday 4th June 2021: 14h – 18h

SSIE DP 2021 (Draft Program)

Session 1

projct 1A

projct 1B

projct 1C

projct 1D

Break

projct 1E

projct 1F

projct 1G

projct 1H

Session 2

project 2A

project 2B

project 2C

project 2D

Break

project 2E

project 2F

project 2G

project 2H

Session 3

project 3A

project 3B

project 3C

project 3D

Break

project 3E

project 3F

project 3G

project 3H

Poster session; best poster award; Aperó

Wrap-up

Students-Partner-Academic Supervisor Kick off Meeting	Week 1	Friday 26 Feb.
Signed agreement + Budget	Week 2	Friday 5 March
Objective & Schedule	Week 3	Friday 12 March
Mid-term report	Week 9	Monday 19 April
Draft report (for review)	Week 13	Wednesday 26 May
Printing Poster	Week 14	Until Thursday 3 June
Oral Presentation	Week 14	Friday 4 June
Final Report	Week 15	Max. 12 June

QUESTIONS

Page web: [Design Project](#)

