

Power 3

Person in charge: Theodor FELEZEU

Prerequisite:

Organization: 60h Lectures/ Projects

Evaluation: Project

ECTS: 5 credits

Context

The Power 3 project aims to create, prototype and market a connected high-tech, design and useful object by forming multidisciplinary teams through the association of ISEP engineering students, Penninghen designers as well as students in marketing from Stanford University.

The goal for the teams is to build a project on three pillars:

- Engineering: designing a technological, functional product that can be industrialized;
- Design: develop a design and a form factor responding to aesthetic and technological issues;
- Marketing: build the product strategy and its business model.

Objectives

Knowledge

The following concepts, whose understanding is an objective of the module, will be addressed:

- Entrepreneurship (6h): entrepreneurial state of mind and dynamics, team building / consolidation, decision-making / forum theater;
- Design (4h): design thinking, UX, ergonomics;
- Marketing strategy (6h): Business Models, roadmap product, TTM (Time To Market);
- Industrial strategy (6h): TRIZ innovation, sustainability, purchasing & costs;
- Legal (2h): patents, industrial property;
- Project progress (up to 36h): face-to-face support and coaching (Engineering,

Pedagogical Approach

The module consists of lectures and staging in the form of Forum Theater, face-to-face (for half) and workshops group work project (for the other half).

References

- The Innovator's Dilemma / Clayton Christensen (Popular economics)
- Open Innovation: The New Imperative for Creating and Profiting from Technology / Henry Chesbrough (HBS Press)
- Business Model Generation : A Handbook for Visionaries, Game Changers, and Challengers / Alexander Osterwalder (Strategyzer)
- Lean startup / Eric RIES (Crown)
- Book of Ideation, The Tetra Pak Way / Sven Andren (Googol)
- Le guide des startups high tech / Olivier Ezratty
- Startup backpack, outils et bons plans pour la création d'entreprise (La petite étoile)