

CS-489

Experience design

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| Cursus | Sem. | Type |
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| Computer science | MA1, MA3 | Opt. |
| Cybersecurity | MA1, MA3 | Opt. |
| SC master EPFL | MA1, MA3 | Opt. |

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| Language of teaching | English |
| Credits | 6 |
| Session | Winter |
| Semester | Fall |
| Exam | During the semester |
| Workload | 180h |
| Weeks | 14 |
| Hours | 6 weekly |
| Courses | 2 weekly |
| Project | 4 weekly |
| Number of positions | |

Summary

As we move towards a design economy, the success of new products, systems and services depend increasingly on the excellence of personal experience. This course introduces students to the notion and practice of experience design following a hands-on, studio-based approach.

Content

Experience design in practice encompasses the collection, analysis and design of users experiences based on a deep understanding of the context concerned. We will examine these processes using a series of mini-workshops, to rapidly iterate on multiple design experience options. The goal is to create a meaningful, interactive, data-driven (and possibly AI-assisted) digital interface and physical prototypes for new experiences.

We explore questions at the intersection of physical and digital architecture through an experience design approach, involving: (1) a mapping of the social dynamics surrounding an experience; (2) a critical analysis of the geographical and temporal flows (experience journeys); and (3) a detailed evaluation of the experience touch points. Based on this experience diagnosis, we propose alternative designs of experience blueprints that combine physical and digital touch points which in turn will constitute the elements of future typologies.

Our particular focus will be on information intensive typologies in the contemporary city, such as museums, libraries, airports, banks, boutiques, governments, hospitals and homes. Each year, we will investigate a different typology. Digital interfaces and augmented artifacts will be considered as possible alternatives to reconfigure the senses of perception, redistribute time, and reorchestrate the configuration of social, emotional and spatial experiences.

The seminar will combine students from both IC and ENAC to work together in a real interdisciplinary process.

Keywords

User Experience (UX) Design, Design Thinking, Journey Mapping, Optioneering, Critical Prototyping, Value Proposition

Learning Prerequisites**Required courses**

Bachelor in Computer Science or equivalent

Learning Outcomes

By the end of the course, the student must be able to:

- Identify issues of experience design in relation to an actual design project
- Perform rigorous analysis of the problem space and map the design opportunities
- Develop alternative design concepts for future artifacts

- Translate design concepts into meaningful experiences through iterative prototyping at appropriate scales and levels of granularity
- Create convincing arguments for the design propositions and persuasive visual and tangible evidence

Teaching methods

Workshops, Design reviews, Presentations, Group projects

Expected student activities

Group discussion, Case studies, Design Reviews, Pin-Up, Desk Crits

Assessment methods

Grading will be based upon the quality of the projects in the preliminary workshops (30%), intermediary reviews (20%) and in the final review (50%). Projects will be reviewed and assessed based on their conceptual strength, the coherence of their translation into prototypes, their narrative clarity and experiential power, and the persuasiveness of their communication, both orally and through the presented artifacts.

Supervision

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| Office hours | Yes |
| Assistants | Yes |

Resources

Bibliography

To be made available during the course