

EIT Digital Master School

Human Computer Interaction and Design

What can I study at the entry and exit points?



	0
ENTRY - 1ST YEAR, COMMON COURSES	2
Aalto University (Aalto), Finland	2
Université Paris-Saclay (UPS), France	3
University of Twente (UT), The Netherlands	5
Technical University of Madrid (UPM), Spain	7
Polytechnic University of Milan (POLIMI), Italy	9
EXIT - 2ND YEAR, SPECIALISATION	12
Aalto University (Aalto), Finland	12
Université Paris-Saclay (UPS), France	13
University of Twente (UT), The Netherlands	15
Technical University of Madrid (UPM), Spain	16
University of Trento (UNITN), Italy	18

Entry - 1st year, common courses

Aalto University (Aalto), Finland

Visit:

- [University homepage](#)
- [Programme homepage](#)

Contact: [Mika P. Nieminen](#)

FIRST SEMESTER

Compulsory major courses:

- [SCI-E1010 Introduction course for Master's students: Academic skills](#) (1 ECTS)
- Language course: Compulsory degree requirement, both oral and written requirements (3 ECTS)
- [CS-E4900 User-Centered Methods for Product and Service Design](#) (5 ECTS)

Select one of the following courses:

- [CS-E5220 User Interface Construction](#) (5 ECTS) or
- [ELEC-E7851 Computational User Interface Design](#) (5 ECTS)

Optional major courses:

Select at least 7 ECTS over the two semesters:

- [CS-C3120 Human-Computer Interaction](#) (5 ECTS)
- [CS-C3100 Computer Graphics](#) (5 ECTS)
- [CS-E4400 Design of WWW services](#) (5 ECTS)
- [CS-E4450 Explorative Information Visualization](#) (5 ECTS)
- CS-E50xx Seminars and Special courses in Software and Service Engineering (5 ECTS)

Compulsory I&E courses:

- [CS-E5120 Introduction to Digital Business and Venturing](#) (3 ECTS)
- [CS-E5130 Digital Business Management](#) (4 ECTS)

SECOND SEMESTER

Compulsory major courses

- [CS-E4200 Emergent User Interfaces \(5 ECTS\)](#)
- [CS-E5250 Data-Driven Concept Design \(5 ECTS\)](#)
- [CS-E5230 Collaborative evaluation of interactive systems \(5 ECTS\)](#)

Optional major courses

- [CS-E4840 Information Visualization \(5 ECTS\)](#)
- [CS-E4800 Artificial Intelligence \(5 ECTS\)](#)
- [CS-EJ3211 Machine Learning with Python \(2 ECTS\)](#)
- CS-E50xx Seminars and Special courses in Software and Service Engineering (5 ECTS)

Compulsory I&E courses

- [TU-E4100 Startup Experience, BDL \(9 ECTS\)](#)
- [CS-E5140 Global Business in the Digital Age \(4 ECTS\)](#)
- [CS-E5430 ICT Innovation Summer School \(4 ECTS\)](#)

Université Paris-Saclay (UPS), France

[Visit university homepage](#)

Contact: Sarah Fdili Alaoui - sarah.fdili-alaoui@lri.fr

FIRST SEMESTER

Compulsory major courses:

- HCID-101 - Fundamentals of Human-Computer Interaction (5.0 ECTS)
- HCID-102 - Design of Interactive Systems (5 ECTS)
- HCID-103 - Introduction Programming of Interactive Systems (5.0 ECTS)
- HCID-104 - Evaluation of Interactive Systems (2.5 ECTS)
- HCID-302 - Fundamentals of eXtended Reality (2.5 ECTS)

Elective major courses:

- HCID-506 - Virtual Humans and Social Interactions (2.5 ECTS)

- HCID-505 - Groupware and Collaborative Interaction (2.5 ECTS)
- HCID-509 - Creative Design (2.5 ECTS)
- HCID-507 - Adaptive Serious games (2.5 ECTS)
- HCI 504 - Mixed Reality and Tangible Interaction (2.5 ECTS)

Compulsory I&E courses:

- HCID-110 - Innovation & Entrepreneurship Basics (6.0 ECTS)

SECOND SEMESTER

Compulsory major courses:

- HCID 201 : HCID Winter School (5.0 ECTS)
- HCID 202 : Art Studio (2.5 ECTS)
- HCID-201 - Design project in Human-Computer Interaction (5.0 ECTS)

Elective major courses (choose 3):

- HCID-204 - Experimental Design and Analysis (2.5 ECTS)
- HCID-202 - Advanced Design of Interactive Systems (2.5 ECTS)
- HCID-301 - Situated interaction (2.5 ECTS)
- HCID-502 - Advanced Immersive Interaction (2.5 ECTS)
- HCID-511 - Interactive Machine Learning (2.5 ECTS)
- HCID-501 - Interactive Information Visualization (2.5 ECTS)
- HCID-510 - Digital Fabrication (2.5 ECTS)

Compulsory I&E courses:

- HCID-115 - Business Development Lab 1 (3.0 ECTS)
- HCID-215 - Business Development Lab 2 (6.0 ECTS)
- HCID-210 - Innovation & Entrepreneurship Advanced (5.0 ECTS)
- HCID-220 - Summer School (4.0 ECTS)

University of Twente (UT), The Netherlands

Visit

- [University homepage](#)
- [Programme homepage](#)

Contact: Mariët Theune (m.theune@utwente.nl)

The master programme is provided by [Interaction Technology](#)

FIRST SEMESTER

Compulsory major courses:

- [201800234 Foundations of Interaction Technology](#) (5 ECTS)
- [201800226 Concepts, Measures and Methods](#) (5 ECTS)
- [201800227 Human Centred Design](#) (5 ECTS)

Elective major courses:

- [201600075 Speech Processing](#) (5 ECTS)
- [201400174 Data Science](#) (5 ECTS)
- [201400180 Multisensory Design](#) (5 ECTS)
- [201800336 Storytelling through Oral Presentation](#) (5 ECTS)

Compulsory I&E courses:

- [202100178 I&E Innovation Management Basics: for EIT](#) (5 ECTS)
- [201700119 Business Development Lab for EIT I](#) (5 ECTS)

SECOND SEMESTER

Compulsory major courses:

- [202100208 Introduction Human-Computer Interaction](#) (5 ECTS)
- [201600087 Experience Design for Interaction](#) (5 ECTS)

Elective major courses:

- [201800236 I-Tech project](#) (10 ECTS)

- [201600079 Trends in Human Robot Interaction Research](#) (5 ECTS)
- [201600078 Brain Computer Interfacing](#) (5 ECTS)
- [201600073 Affective Computing](#) (5 ECTS)
- [191210910 Image Processing and Computer Vision](#) (5 ECTS)
- [201600077 Conversational Agents](#) (5 ECTS)
- [201700008 Design and Behavior Change](#) (5 ECTS)
- [192111301 Ubiquitous Computing](#) (5 ECTS)
- [201800235 Social Robot Design](#) (5 ECTS)
- [201600082 Advanced Research Projects in Speech Processing](#) (5 ECTS)
- [201800455 Advanced Project in Conversational Agents](#) (5 ECTS)
- [201600085 Advanced Project in Brain Computer Interfacing](#) (5 ECTS)
- [201600086 Advanced Research Projects in Human Robot Interaction](#) (5 ECTS)
- [201100254 Advanced Computer Vision and Pattern Recognition](#) (5 ECTS)
- [201300074 Research Experiments in Databases and Information Retrieval](#) (5 ECTS)
- [201000201 Virtual Reality](#) (5 ECTS)
- [191211060 Modern Robotics](#) (5 ECTS)
- [201800232 Storytelling through Sound](#) (5 ECTS)
- [201500133 Embodied Interaction](#) (5 ECTS)
- [201800228 Mastering Tinkering](#) (5 ECTS)
- [202001583 Sports Interaction Technology](#) (5 ECTS)

Compulsory I&E courses:

- [201700120 Business Development Lab for EIT II](#) (5 ECTS)

Elective I&E courses (Choose one)

First Semester

- [191612680 Computer Ethics](#) (5 ECTS)
- [201500008 Empirical Methods for Designers](#) (5 ECTS)
- [201800230 Advanced Project in Impact, Innovation and Entrepreneurship](#) (5 ECTS)

Second Semester

- [201500080 Advanced Topics in Digital Marketing](#) (5 ECTS)
- [194105070 Information Systems for the Financial Service](#) (5 ECTS)
- [201800205 Smart Industry](#) (5 ECTS)
- [202001492 Design Thinking for Service and Business Innovation](#) (5 ECTS)

Technical University of Madrid (UPM), Spain

Visit:

- [University homepage](#)
- [Programme homepage](#)

Program Coordinator: [Prof. Elena Villalba Mora](#)

Dr. Eng. Elena Villalba Mora is a Professor (Associate) at Universidad Politécnica de Madrid, Spain, in the Computer Science field, concretely in Human Computer Interaction; with more than 15 years' experience in User Experience, eHealth and eInclusion. She holds a master's degree in Telecommunications Engineering and a PhD in Biomedical Engineering, both from the Technical University of Madrid (Spain).

FIRST SEMESTER

Compulsory major courses:

- Introduction to Human Computer Interaction and Design (3 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000869_1S_2021-22.pdf
- Design Methods for Human Computer Interaction (3 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000870_1S_2021-22.pdf
- Programming of User Interfaces (6 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000871_1S_2021-22.pdf
- Challenges for Accessible Computing for People with Functional Diversity (4 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000877_1S_2021-22.pdf
- User Experience and Mobile Interaction (6 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000874_1S_2021-22.pdf
- HCID Seminars I (2 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000878_1S_2021-22.pdf

Compulsory I&E minor courses:

- Introduction to Innovation and Entrepreneurship Management (6 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000842_1S_2021-22.pdf
- Introduction To Technology Watch And Competitive Intelligence (1 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/2S/GA_10AZ_103000843_2S_2021-22.pdf

SECOND SEMESTER**Compulsory major courses (9 ECTS):**

- Evaluation of Interactive Systems (3 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/2S/GA_10AZ_103000872_2S_2021-22.pdf
- HCI Project (6 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/2S/GA_10AZ_103000873_2S_2021-22.pdf

Elective major courses (chose one) (3 ECTS)

- Image Mining (3 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/2S/GA_10AZ_103000857_2S_2021-22.pdf
- Data Engineering (3 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/2S/GA_10AZ_103000875_2S_2021-22.pdf

Compulsory I&E minor courses (15 ECTS):

- Entrepreneurship and Business Modelling (6 ECTS)
https://www.upm.es/comun_gauss/publico/guias/2021-22/2S/GA_10AZ_103000845_2S_2021-22.pdf

- I&E Seminars (5 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/2S/GA_10AZ_103000844_2S_2021-22.pdf
- Summer School (4 ECTS)
https://www.upm.es/comun_gauss/publico/guias/2021-22/2S/GA_10AZ_103000847_2S_2021-22.pdf

Elective I&E Minor (chose 1) (2 ECTS):

- Launching of ICT Product/services to the Market (2 ECTS)
https://www.upm.es/comun_gauss/publico/guias/2021-22/2S/GA_10AZ_103000846_2S_2021-22.pdf

Polytechnic University of Milan (POLIMI), Italy

Visit:

- [University homepage](#)
- [Programme homepage](#)

Contact: [Franca Garzotto](#)

This entry is best suited for applicants with a degree in Computer Science Engineering. This means a strong base of ICT, computer science, programming and engineering courses in your transcript of records, including math courses at academic level (e.g. calculus, discrete or stats) and physics. A competitive academic record (of more than 3.4/4 or 4.24/5 or B+) is also needed. Please note that the admission committee of Polimi can specify additional constraints on the individual study plan on the basis of previous studies, in order to compensate possible lacks in basic prerequisites.

FIRST SEMESTER

Compulsory major courses:

- [097685](#) - Advanced User Interfaces (6 ECTS)
- [089183](#) - Data Bases 2 (5 ECTS)
- [089184](#) - Software Engineering 2 (5 ECTS)

Compulsory I&E courses:

- [052795](#) - Strategy & Marketing (10 ECTS)

SECOND SEMESTER

Compulsory major courses:

- [089318](#) - Hypermedia Applications (5 ECTS)
- [095898](#) - Computing Infrastructure (5 ECTS)

Compulsory I&E courses:

- [052804](#) - Designing Digital Business Innovation Lab (10 ECTS)
- I&E Summer School (4 ECTS)

Elective major courses:

Choose one HCI course (5 ECTS):

FIRST SEMESTER

- [089175](#) - Videogame Design and Programming (5 ECTS)
- [093212](#) - Design and Implementation of Mobile Applications (5 ECTS)

SECOND SEMESTER

- [050566](#) - Interaction Design Studio (5 ECTS)
- [095948](#) - Process and Service Design (5 ECTS)
- [093206](#) - Multidisciplinary Project (5 ECTS)
- [090951](#) - Philosophical Issues of Computer Science (5 ECTS)
- [093834](#) - Interdisciplinary Course of Robotics (5 ECTS)

Choose one ICT course (5 ECTS):

FIRST SEMESTER:

- [089214](#) - Artificial Intelligence (5 ECTS)
- [052534](#) - Recommender Systems (5 ECTS)
- [095943](#) - Principles of Programming Languages (5 ECTS)

SECOND SEMESTER:

- [090958](#) - Computer Graphics (5 ECTS)
- [097683](#) - Machine Learning (5 ECTS)
- [089165](#) - Computer Security (5 ECTS)

Exit - 2nd year, specialisation

Aalto University (Aalto), Finland

Visit:

- [University homepage](#)
- [Programme homepage](#)

Contact: [Mika P. Nieminen](#), mika.nieminen@aalto.fi

Specialisation: Cross-Device Interaction

Aalto University offers a specialisation in Cross-Device Interaction with courses on various design and user interface development techniques embarking from web and mobile development towards post-desktop interactions with virtual or augmented reality. Human interaction capabilities and goals largely remain the same even if the used interaction device and implementation methods evolve. 90's early experimentations with mobile code (Java) have changed to responsive design and mobile-first culture of information consumption. Through developments in sensors, algorithms, and computer graphics we are waiting for the consumer break-through of augmented reality and 3D user interfaces.

Compulsory courses:

- [Language course: Compulsory degree requirement, both oral and written requirements \(3 ECTS\)](#)
- [SCI-E1010 Introduction course for Master's students: Career and working life skills \(1 ECTS\)](#)
- [CS-E4400 Design of WWW Services \(5ECTS\)](#)
- CS-EXXXX Device-Agnostic Design (5 ECTS) *

Compulsory I&E courses

- [CS-E5425 I&E Study Project \(6 ECTS\)](#)

Optional Courses (minimum 10 ECTS):

- [CS-E4460 WWW Applications \(5 ECTS\)](#)
- [CS-E4670 Full Stack Web Development \(5 ECTS\)](#)

- [DOM-E5161 Introduction to Virtual Reality](#) (3 ECTS)
- [DOM-E5162 Coding Virtual Worlds](#) (5 ECTS)
- [CS-E5220 User Interface Construction](#) (5 ECTS)
- [ELEC-E7851 Computational User Interface Design](#) (5 ECTS)
- CS-E50xx Seminars and Special courses in Software and Service Engineering (5 ECTS)

* New course starting in 2022-2023

Université Paris-Saclay (UPS), France

[Visit University homepage](#)

Contact: Sarah Fdili Alaoui - sarah.fdili-alaoui@lri.fr

Specialisation: Situated Interaction

Université Paris-Saclay (formerly Université Paris Sud) offers a specialisation in situated interaction: students will learn how to design, develop and evaluate interactive applications and interfaces tailored to the user needs and adapted to their contexts of use. They will be trained to the state-of-the-art in novel interaction techniques, including mixed reality, tangible interfaces, immersive environments, interactive visualization and collaborative interaction.

FIRST SEMESTER

Compulsory courses:

- HCID-102 - Design of Interactive Systems (5 ECTS)
- HCID-103 - Introduction Programming of Interactive Systems (5.0 ECTS)

Theses:

- HCID-400 - Master thesis work (30.0 ECTS)

Elective courses (pick 2, 10 ECTS):

- HCID-506 - Virtual Humans and Social Interactions (2.5 ECTS cours)
- HCID-505 - Groupware and Collaborative Interaction (2.5 ECTS cours)
- HCID-509 - Creative Design (2.5 ECTS cours)
- HCID-507 - Adaptive Serious games (2.5 ECTS cours)

- HCI 504 - Mixed Reality and Tangible Interaction (2.5 ECTS cours)

SECOND SEMESTER

Compulsory courses:

- HCID-301 - Fundamentals of Situated Interaction (2.5 ECTS)

Elective courses:

- HCID-204 - Experimental Design and Analysis (2.5 ECTS cours)
- HCID-202 - Advanced Design of Interactive Systems (2.5 ECTS cours)
- HCID-301 - Situated interaction (2.5 ECTS cours)
- HCID-502 - Advanced Immersive Interaction (2.5 ECTS cours)
- HCID-511 - Interactive Machine Learning (2.5 ECTS cours)

- HCID-501 - Interactive Information Visualization (2.5 ECTS cours)

- HCID-510 - Digital Fabrication (2.5 ECTS cours)

Sarah Fdili Alaoui is an associate professor at Université Paris-Saclay and Ex)Situ INRIA research team in interaction design, human computer Interaction and dance. She is a choreographer, a dancer, and a Laban Movement Analyst. She is interested in intersecting research in interaction design with dance making and choreography. She has been involved in many art and science projects, collaborating with dancers, visual artists, computer scientists and designers to create interactive dance performances, interactive installations, as well as systems for supporting choreography and dance learning and documentation.

University of Twente (UT), The Netherlands

Visit:

- [University homepage](#)
- [Programme homepage](#)

Contact: Mariët Theune (m.theune@utwente.nl)

The master programme is provided by [Interaction Technology](#).

Specialisation: Intelligent Systems

The University of Twente offers a specialization in Intelligent Systems, examining and developing models that can simulate human intelligence in agents. Such agents can perform automated reasoning and learn automatically from various kinds of data, enabling them to carry out a perception-action cycle of understanding human behaviours and generating system responses. We look at tools and methods that can deal with incomplete, uncertain and ambiguous real-life data, including human speech and language. Students can also learn to design and develop multi-agent systems that can be applied to complex real world problems. Further information can be found [here](#).

Compulsory courses:

- [201800525 I&E study EIT](#) (6 ECTS)
- [201800524 Research Topics EIT](#) (4 ECTS)
- [201900195 Final Project](#) (30 ECTS)

Specialization courses (min. 10 EC):

- [201600070 Machine Learning I](#) (5 ECTS)
- [201600074 Natural Language Processing](#) (5 ECTS)
- [192320601 Multi-Agent Systems](#) (5 ECTS)
- [201600075 Speech Processing](#) (5 ECTS)
- [201400174 Data Science](#) (5 ECTS)
- [201600076 Foundations of Information Retrieval](#) (5 ECTS)
- [201600071 Machine Learning II](#) (5 ECTS)
- [201600081 Advanced Project in Natural Language Processing](#) (5 ECTS)
- [201800177 Deep learning - from theory to practice](#) (5 ECTS)

Other elective courses (max. 10 EC):

- [201800236 I-Tech project](#) (10 ECTS)
- [201400180 Multisensory Design](#) (5 ECTS)
- [201200063 Philosophy of Technology](#) (5 ECTS)
- [201700019 Brand management](#) (5 ECTS)
- [201800231 Documentary practice](#) (5 ECTS)

Mariët Theune is assistant professor at the University of Twente, working in the Human Media Interaction research group. She has a background in computational linguistics and her research interests include automatic language generation, serious games, dialogue systems and embodied conversational agents.

Technical University of Madrid (UPM), Spain

Visit:

- [University homepage](#)
- [Programme homepage](#)

Program Coordinator: [Prof. Elena Villalba Mora](#)

Dr. Eng. Elena Villalba Mora is a Professor (Associate) at Universidad Politécnica de Madrid, Spain, in the Computer Science field, concretely in Human Computer Interaction; with more than 15 years' experience in User Experience, eHealth and eInclusion. She holds a master's degree in Telecommunications Engineering and a PhD in Biomedical Engineering, both from the Technical University of Madrid (Spain).

Specialisation: Accessible and Adaptive Interaction

Universal Design implies taking into account the diversity of sensory, physical and cognitive abilities of the users of the system. Some users will have limitations in their abilities, which may be permanent, temporary, situational or contextual. The usability-based concept of accessibility implies that designers should work for reaching adequate levels of effectiveness, efficiency and user satisfaction across the diversity of users.

To reach good accessibility a combination of two approaches is required: design for all and assistive products. Design for all, also known as inclusive design, is the design of products to be accessible and usable by all people, to the greatest extent possible, without the need for specialized adaptation.

But design for all is not always enough, as some persons with disabilities require specific adaptations to be able to use ICT. These adaptations are called assistive products, which are any product (including devices, equipment, instruments and software), especially produced or generally available, used by or for persons with disability for participation; to protect, support, train, measure or substitute for body functions, structures and activities; or to prevent impairments, activity limitations or participation restrictions.

Further information can be found [here](#).

FIRST SEMESTER

Compulsory major courses (20 ECTS):

- Accessible design of Interactive Systems (4.5 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000880_1S_2021-22.pdf
- Adaptive systems (4.5 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000881_1S_2021-22.pdf
- Assistive Products (4.5 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000882_1S_2021-22.pdf
- E-health: Promoting healthy ageing (4.5 ECTS) (link to learning guide:
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000885_1S_2021-22.pdf
- HCID Seminars II (2.5 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000890_1S_2021-22.pdf

Elective major courses (4 ECTS):

- Management, Relationships and Communication in Working Groups (4 ECTS):
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000887_1S_2021-22.pdf
- Intelligent Virtual Environments: Technologies, Architectures and Applications (4 ECTS): https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000879_1S_2021-22.pdf

Compulsory I&E minor courses:

- I&E Study (6 ECTS)
https://www.upm.es/comun_gauss/publico/guias/2021-22/1S/GA_10AZ_103000848_1S_2021-22.pdf

SECOND SEMESTER

Compulsory major courses (30 ECTS):

- Master Thesis (30 ECTS)

University of Trento (UNITN), Italy

[Visit University homepage](#)

Programme

Contact: Luca Turchet luca.turchet@unitn.it

Specialisation: Cognitive Interaction

The University of Trento (UNITN) offers a specialisation in cognitive interaction which studies the mental and cognitive processes that are underlying language, vision, and interaction. This specialisation provides the student with the interdisciplinary training in language science, neuroscience, psychology, computational methods for the statistical analysis of large amounts of language and perceptual data, and in interface design. Theoretical knowledge will be supplemented by experience acquired in substantial practical projects carried out in research and industry labs.

Further information can be found [here](#).

Compulsory Courses (6 ECTS):

- [145623 - Innovation and Entrepreneurship Studies in ICT](#) (6 ECTS) DISI

Elective Courses (choose 24 ECTS):

- [155003 - Social interaction](#) (6 ECTS) DIPSCO
- [155005 - Mind-Brain interaction and cognitive constraints](#) (6 ECTS) DIPSCO
- [145459 - Participatory design](#) (6 ECTS) DISI

- [145809 - Multisensory Interaction](#) (6 ECTS) DISI
- [155002 - Prototyping interactive systems](#) (6 ECTS) DIPSCO
- [145520 - Affective computing](#) (6 ECTS) DISI
- Research Project (12 CFU)

Thesis (24 ECTS)

Internship (6 ECTS)

Luca Turchet is an Assistant Professor at the Department of Information Engineering and Computer Science of University of Trento, where he leads the Creative, Intelligent and Multisensory Interactions Laboratory (www.cimil.disi.unitn.it). He received master degrees (summa cum laude) in Computer Science from University of Verona, in classical guitar and composition from Music Conservatory of Verona, and in electronic music from the Royal College of Music of Stockholm. He received the Ph.D. in Media Technology from Aalborg University Copenhagen.

His scientific, artistic, and entrepreneurial research has been supported by numerous grants from different funding agencies including the European Commission (Marie Curie Individual Fellowship), the European Institute of Innovation and Technology, the European Space Agency, the Italian Minister of Foreign Affairs, and the Danish Research Council. He is co-founder of the company Elk, which operates in the sector of Music Technology (www.elk.audio). He serves as an associate editor for IEEE Access and the Journal of the Audio Engineering Society. He has been guest editor of a special issue of the Journal of the Audio Engineering Society on the Internet of Sounds topic. He is the founder and General Chair of the International Workshop on the Internet of Sounds. His main research interests are in music technology, Internet of Things, human-computer interaction, and perception.



EIT Digital

We believe in making and shaping a competitive digital Europe that is inclusive, fair and sustainable and aim at global impact through European innovation fuelled by entrepreneurial talent and digital technology.

We embody the future of innovation by mobilizing a pan-European multi-stakeholder open-innovation ecosystem of top European corporations, SMEs, startups, universities and research institutes, where students, researchers, engineers, business developers and investors address the technology, talent, skills, business and capital needs of digital entrepreneurship.

We build the next generation of digital ventures, digital products and services, and breed digital entrepreneurial talent, helping business We build the next generation of digital ventures, digital products and services, and breed digital entrepreneurial talent, helping business and entrepreneurs to be at the frontier of digital innovation by providing them with technology, talent, and growth support:

For more information, visit www.eitdigital.eu. Follow us on Twitter: @EIT_Digital



**FOR A STRONG
DIGITAL EUROPE**

Co-funded by the
European Union

