# **ACADEMIC YEAR 2020/2021**



Distance courses for the whole academic year and face-to-face courses whenever feasible.

# Innovation design







# INTERNATIONAL MASTER OF SCIENCE IN "INNOVATION DESIGN"



The course offers the advantage of abilities, skills and cultures of four very different organisations: Technical Departments, the "Enzo Ferrari" and "Dismi" Department of Engineering of Modena and Reggio Emilia University and the "Endif" Department of Engineering of Ferrara University, and a Design Department: the DA Architecture Department of Ferrara University.

The result is an original training path where designers learn how to integrate humanistic culture of design approach (human centered design) and research methodologies which come from applied sciences in engineering approach, in order to develop disruptive innovation in industrial products and services.

The course fosters a collaborative approach involving multidisciplinary team working and encourages external companies involvement.





To access the Master Degree course in Innovation design the student must have earned a Bachelor's (First cycle) degree, another equivalent qualification (Italian) or another equivalent qualification obtained abroad. It is necessary to possess specific degree. The Master Degree course admits a planned number of students each year, in relation to the available resources. The number of admitted students and the selection methods are published yearly in the relative "Call for applications" in the web page <a href="http://www.unife.it/studenti/immatricolazioni-e-iscrizioni/corsi-di-studio-a-numero-programmato">http://www.unife.it/studenti/immatricolazioni-e-iscrizioni/corsi-di-studio-a-numero-programmato</a>. In 2020-21 they are 40. Students must also provide proof of knowledge of English language of at least B2 Level, according to the Common European Framework of Reference for Languages, with a attestation.

For more information about the admission process, deadlines, documents required and requirements please visit: link on site <a href="http://www.unife.it/studenti/immatricolazioni-e-iscrizioni/corsi-di-studio-a-numero-programmato">http://www.unife.it/studenti/immatricolazioni-e-iscrizioni/corsi-di-studio-a-numero-programmato</a>

# WHAT TO STUDY 🔎

The course of study provides for compulsory attendance and develops face-to-face learning, but is equipped, if it is not made possible, also for distance learning. The contents of the Course refer to the following thematic areas:

# 1 Area of "Innovation design for human needs"

It has the task of providing skills, methods and tools to develop innovative design projects based on people's needs. It also has the task of educating at working in multidisciplinary teams.

# 2 Area of "Innovation Engineering"

It has the task of providing expertise, methods and tools for the development of technological solutions and implementation processes that enable the feasibility and sustainability of innovative products and services. It also has the task of educating to the quantitative evaluation of the project and its relationship with industrial actuality.

# 3 Area of "Innovation Management"

It has the task of providing skills, methods and tools for scenario and market analysis, for defining strategies and project management of innovative products and services. It also has the task of educating to the understanding and interfacing with organizations, agencies and structures that allow to reach the market and the society for which products and services are conceived.

# 4 "Synthesis" area

It has the task of providing technical methodologies and strategies for the synergic application of the skills and tools learned during the Course, in the development of the project that is the final thesis work. Three final workshops are offered, closely linked to the entrepreneurial history of the involved towns: Educational Technology Innovation (Reggio Emilia), Mobility innovation (Modena) and Health and wellness innovation (Ferrara), during which students will have the opportunity to work in direct contact with a specific industrial reality and to verify their self-management and project-planning skills.

# WHICH PROFESSIONAL YOU BECOME



With the Master's Degree in Innovation Design you became an expert in developing continuous innovation of products, processes and services. The figure of the Innovation Designer has various opportunities in the professional and business activities in the field of design.

In particular, he can carry out self-employment, professional activity as an employee for both SMEs and manufacturing and service companies, professional activity as a collaborator or consultant in design studies. You can find employment at the public administration and at institutions and research organizations.

# COURSES PROGRAMMES



# FIRST YEAR (starts 2020-21)

N	semester	course	SSD	AF	CFU	type L/T	hours	town site
1	1	Design thinking methods Lab.			21		210	FE
		Human Centered Design	ICAR/13	B1	9	L	90	FE
		Human environments design	ICAR/14	С	3	T	30	FE
		Design methods	ING-IND/35	В3	9	L	90	FE
2	2	Multimodal Concept design Lab.			18		180	FE
		Multimodal design	ICAR/13	B1	9	L	90	FE
		Virtual Prototyping	ING-IND/15	B2	6	L	60	FE
		Concept design tools	ICAR/17	С	3	L	30	FE
3	2	Design management for Innovation Lab.			15		150	FE
		Integrated design	ICAR/13	B1	6	L	60	FE
		Design validation	ING-IND/15	С	3	T	30	FE
		Design evaluation	ICAR/22	С	3	T	30	FE
		Innovation management	SECS-P/06	С	3	T	30	FE
		Formazione sicurezza nei luoghi di lavoro Corso generale A	NN	F	0			FE
		Formazione sicurezza nei luoghi di lavoro Corso specifico B	NN	F	0			FE
		Formazione sicurezza nei luoghi di lavoro Corso specifico C	NN	F	0			FE



# SECOND YEAR (starts 2021/22)

N	seme- ster	course	SSD	AF	CFU	type L/T	hours	town site
4	1	Smart technologies for sustainable design Lab.			24		240	FE
		Smart and sustainable design	ICAR/13	B1	6	L	60	FE
		Interactive and smart products engineering	ING-IND/14	B2	6	L	60	FE
		Sustainable engineering	ING-IND/10	С	3	T	30	FE
		Smart spaces design	ICAR12	С	3	T	30	FE
		ICT for smart products	ING-INF/05	B2	6	L	60	FE
5	1	Final Synthesis Lab 1 - Final Thesis Design	ICAR/13	B1	6	L	60	FE
6		<b>Final Synthesis Lab 2:</b> possibile scelta di una delle tre opzioni elencate con sede in tre province diverse*						
6.1	2	Final Synthesis Lab 2- Educational technology innovation*			12		120	
		Educational Product Design	ICAR/13	D	3	L	30	RE
		Smart Product Engineering	ING-IND/14	D	3	L	30	RE
		Systems and communications for educational smart objects	ING-INF/03	D	3	L	30	RE
		Automation and interaction for educational smart objects	ING-INF/04	D	3	L	30	RE
6.2	2	Final Synthesis Lab 2- Mobility innovation*			12		120	MO
		Automotive Product Design	ICAR/13	D	3	L	30	MO
		Business planning for automotive	SECS-P/08	D	3	L	30	MO
		Engineering methods for automotive	ING-IND/15	D	3	L	30	MO
		Information Technology for automotive	ING-INF/07	D	3	L	30	MO
6.3	2	Final Synthesis Lab 2- Health and wellness innovation*			12		120	FE
		Product Design for Health	ICAR/13	D	3	L	30	FE
		Product Engineering for biomedical and wellness	ING-IND/13	D	3	L	30	FE
		Materials and product perfomances for biomedical and wellness	ING-IND/22	D	3	L	30	FE
		Smart ICT for biomedical and wellness	ING-INF/05	D	3	L	30	FE
		Traineeship		F	12			

<sup>\*</sup> The number of Final Synthesis Labs may change in the year of activation.

### DIRETTORE DIPARTIMENTO DI ARCHITETTURA

Prof. Alessandro Ippoliti alessandro.ippoliti@unife.it

### COORDINATORE DEL CORSO DI STUDIO

Prof. Giuseppe Mincolelli giuseppe.mincolelli@unife.it

# **DELEGATO ORIENTAMENTO**

Prof. Fabio Conato fabio.conato@unife.it

## **MANAGER DIDATTICA**

Dott.ssa Sara Fortini manager.lm.architettura@unife.it; manager.design@unife.it www.unife.it/studenti/manager-didattici

# **UFFICIO ORIENTAMENTO, WELCOME E INCOMING**

www.unife.it/it/iscriviti/scegliere orientamento@unife.it

### SITO WEB DEL CORSO

www.unife.it/architettura/lm.design



Via Della Ghiara, 36 - 44121 Ferrara Via Quartieri, 8 - 44121 Ferrara

Portineria Tel. 0532 293 600 http://architettura.unife.it











