

Master of Science and Engineering Digital Health

ENGLISH
TAUGHT
PROGRAM

Over the last ten years, information and communication technologies (ICT) have been widely applied to the health sector, accelerating the digitalization, standardization, and intelligence of health services. Digital Health refers to the application of ICT in support of health and health-related fields and includes public health data, electronic medical records, telemedicine, mobile health applications, personalized medicine, home automation and more. As JUNIA ISEN's newest multidisciplinary major, the Digital Health Master program invites students to **discover the realm of digital health, from biology to medicine, to better understand data related to health, and to master advanced digital technology in this emerging sector.** The program's objective is to train engineers and project leaders specialized in digital health, such as in health application/web development, health data management, biological and medical data analysis and beyond.

active pedagogy

Our Digital Health program is built on project-based learning, active teaching methods, and learning-by-doing. This hands-on approach gives students real world experience and, with our piecemeal curriculum, the power to decide how to build their own expertise.

LEARNING BY DOING

- Teaching and group projects supervised by professionals
- Hackathons and coding challenges
- Innovation learning centers and Fab Lab
- Flipped classrooms and serious games
- Co-design labs with partner schools

projects

Semester-long team projects are an integral part of the curriculum. One day per week is dedicated to group projects in collaboration with a professional expert, partner company, or research institute and supervised by a JUNIA ISEN faculty member.

EXAMPLES OF PROJECTS

- Using biophysical characteristics to identify cancerous cells
- Study the impact of stress on the human body using physiological data

internships

Students spend 40% of the program immersed in real professional experience. These internships, carried out either in France or abroad, in a company or research center, expose students to the current reality of working and prepare them for entry into the global workforce.

EXAMPLES OF INTERNSHIPS

- Data visualisation and statistics in a hospital emergency department

career prospects

The Digital Health program teaches students the skills necessary to manage data in healthcare, master digital analytics in biology and health, develop and evaluate medical software and applications, and manage projects in the health sector. These skills can be applied to a career in a variety of roles in the health and well-being sector: health data engineer, bio-statistician, engineer in health applications development, digital health project manager and more.

In addition to exceptional technical knowledge and managerial skills, JUNIA ISEN graduates are prepared for the reality of the professional world even before they get their diploma, which is why 100% of JUNIA ISEN alumni are employed within 6 months of graduating. JUNIA ISEN's more than 26,000 alumni around the world work for some of the biggest names in electronics and digital technology or join and create their own start-ups thanks to the entrepreneurial mindset cultivated at JUNIA.

Practical information

admission requirements

- Bachelor's degree in the field of digital technology and life sciences
- English B2 level certified by an official test IELTS, TOEIC, TOEFL IBT or FIRST
- Knowledge of French language is recommended, but not required for admission

application procedure

- Complete your online application on junia.force.com
- Have an individual interview (video conference)
- Application deadline: **May 15th, 2023**

financial aspects

Fees and other expenses

- 2-year Program Costs: €18,000
- Living expenses in France: approx. €850/month
- Miscellaneous fees (insurance, visa...): approx. €650/year

Scholarships and Financial Aid

- Scholarships: refer to your local French embassy or Campus France Office
- Paid internships if carried out in France: min. €555/month
- French government housing allowance: approx. 90€/month

MASTER 1

		ECTS
Fall Semester	Introduction to Digital Health	3
	Java 1	3
	Systems and Networks	3
	Design of Bio-MEMS Systems	3
	Artificial Intelligence	3
	French as a Foreign Language	3
	Technical Project	4
Spring Semester	Bioinformatics	3
	Bioethics	2
	Data Base	3
	MEMS Applications: Biology and Clinics	3
	Advanced Machine Learning	3
	Android	3
	Humanities and Management	5
Technical Project	7	
Summer Internship	Three-month Internship	10

MASTER 2

		ECTS
Fall Semester	Artificial Intelligence Applied to Health	3
	Health Data Management	3
	Biostatistics	3
	Cloud Computing and Architecture	3
	Urbanization of IT Services	2
	Humanities & Management	5
	French as a Foreign Language	2
	Innovation Project	9
Spring Semester	Six-month Internship	30

Course details are subject to change, please visit junia.com for the latest information

international student services

Dedicated support just for you

- Reservation of accommodation in a student residence
- Administrative procedures (visa, resident permit, etc.)
- Integration into student life (associations, activities, etc.)
- Welcome Session: intensive French language course, intercultural communication, orientation week, social events, and more