



INTERNATIONAL UNIVERSITY MASTER'S DEGREE COURSE
IN

"Digital Health: Engineering and Managing High-Quality Medical Software and Systems"
academic year
2024/25

ARTICLE 1 - AIMS AND OBJECTIVES OF THE MASTER'S COURSE

The Giustino Fortunato Telematic University establishes, for the Academic Year 2024/25, the First Level International University Master's Degree Course in "Digital Health: Engineering and Managing High-quality Medical Software and Systems", pursuant to Art. 3, paragraph 9, of Italian Ministerial Decree No. 270 of 22 October 2004 and subsequent amendments/integrations and in accordance with the First and Second Level University Master's Regulations.

The Master's programme is aimed at graduates who wish to acquire advanced knowledge in the design, engineering and management of advanced health systems, including those based on Artificial Intelligence technologies.

The training course aims to develop skills, also from a managerial perspective, of the analysis, design and control functions of complex health systems. The focus will be on i) system certification issues according to current regulations; ii) quality requirements and objectives; iii) sector standards; iv) verification and validation tools; v) development, management and control processes; and vi) the most advanced founding technologies (i.e., Machine Learning, IoT, etc.).

ARTICLE 2 - ADDRESSES

Holders of a degree obtained according to current legislation and prior to the application of the Ministerial Decree can participate in the Master's course. 509/99 in the following degree classes: Computer Science, Electrical Engineering, Electronics, Telecommunications, Mathematics, Physics or similar, as well as in Clinical Engineering, Medicine and Surgery or similar

Furthermore, candidates in possession of an academic qualification obtained abroad comparable in duration and content to the Italian academic qualification required for access to the Master's degree can apply for admission.

For holders of qualifications obtained from foreign universities, it will be necessary to present the Diploma Supplement for qualifications acquired in the EU area or CIMEA certification.

For foreign students, registration is possible through the procedure on the University portal, attaching the "Declaration of Value" of their study curriculum..

ART. 3 - DURATION, LOCATION AND ATTENDANCE OF THE COURSE

The International University Master's Degree Course lasts one year for a teaching load of 1500 hours corresponding to 60 CFU. The training course is conducted in mixed presence/on-line mode. Attendance by those enrolled in the course activities is compulsory and will be obtained by means of attendance collection and/or tracking on the platform.

An attendance of 80 per cent of the total course duration is required to obtain the degree.



The training will be delivered at the headquarters of the Telematic University Giustino Fortunato, Viale Raffaele Delcogliano, 12 - 82100 Benevento, and on-line through the connection to the Unifortunato platform where the trainee will have access to the didactic material and to the lessons. The participant's access to the Unifortunato platform will be through a user id and password. The Unifortunato platform records the student's activities in compliance with the regulations on the processing of personal data (Legislative Decree 196/2003). The platform and the assistance and tutoring services operate in compliance with the requirements of the Interministerial Decree of 17.4.2003.

ARTICLE 4 - COURSE PROGRAMME

The Master's Degree Course is divided into modules (60 CFU in total) including specific topics, functional to the disciplines object of study, according to the following schedule:

MODULE I - Quality Management, Project Management and Risk Management (ING_INF/05) 8 CFU	The module focuses on the main aspects of product and process quality. In particular, it introduces the processes of project management, risk management and incident management, industry standards (ISO 13485, ISO 14971, IEC 64234, etc.) and the issues of certification of Medical Devices and Software as a Medical Device in the European context.
MODULE II - IoT & Embedded Systems for healthcare (ING_INF/03) 5 CFU	The module presents an introduction to embedded systems, IoT and embedded IoT systems. Then several applications for the healthcare sector are introduced, including tele-monitoring and tele-medicine services.
MODULE III - Biomedical equipment (ING_INF/06) 5 CFU	The module introduces the main classes of biomedical equipment and biomedical equipment software. Biomedical equipment with special reference to diagnostic imaging will be analysed by describing their connection in the hospital network and the remote management of state-of-the-art equipment. Predictive approaches with AI software for machine maintenance and repair will be described.
MODULE IV - AI for medicine (ING_INF/05) 8 CFU	The module presents an overview of artificial intelligence and machine learning methods and algorithms, discussing their properties and showing examples of their use in different application scenarios related to the health domain. The module will complement the theoretical study with an experimental part in which it will show how artificial intelligence and machine learning methods and techniques can be used to solve problems in the health domain. That is, starting from a correct formulation of the problem of interest, with the choice of the most appropriate approach or algorithm, and providing indications and examples on how to organise and conduct an experimental validation of the results obtained.
MODULE V - Software engineering (ING_INF/05) 5 CFU	The module presents healthcare software development processes and frameworks (including V-model and Scrum), object and component-based SW design techniques, design patterns, design controls and software testing techniques and tools.
MODULE VI - Electronic Health Records and	The module presents the architectural models, the main enabling technologies and health informatics standards (such as DICOM, HL7 CDA2, HL7 FHIR, IHE profiles) necessary to realise



related Standards (ING_INF/05) 5 CFU	syntactically and semantically interoperable health information systems. Particular emphasis will be placed on IT systems supporting e-health applications, such as electronic health records and the electronic health record.
MODULE VII - Data Analytics for Healthcare (ING_INF/05) 5 CFU	The module focuses on technologies and standards for managing and exploiting Big Data. Tools and methodologies for Big Data management, Business Intelligence and Visual Analytics will be presented.
MODULE VIII - Improving Technical English (L-LIN/12) 4 CFU	The module aims to provide the terminology of English for Specific Purposes (ESP), with a focus on technical English, while consolidating the basic grammatical structures of standard English. Technical English refers to a common core language used in numerous professional fields: science, technology, medicine, IT etc. The acquisition of technical-specialist terminology not only facilitates written and oral communication between native and non-native speakers, but also reduces the risk of errors. Originally limited to the aviation industry, today it serves as a common basis for a variety of occupations and plays an important role for many professional profiles including engineers, doctors, technologists and computer scientists.
COMPANY INTERNSHIP and FINAL TEST 15 CFU	The company internship is designed to enable students to develop a project of industrial interest with the guidance of company managers. The final consists of a discussion of the paper developed at the end of the placement.

ARTICLE 5 - ENROLMENT FEE AND MANAGEMENT OF THE MASTER'S DEGREE COURSE

The registration fee is Euro 5,000.00. Payment may be made in a single instalment upon enrolment, or in three instalments. The first instalment of Euro 1,516.00 (of which Euro 16.00 for stamp duty) must be paid upon enrolment; the second instalment of Euro 1,500.00 within two months of enrolment and the third instalment of Euro 2,000.00 within five months of enrolment.

A student who is not up to date with payments will not be able to access the e-learning platform and the final examination for the degree.

Foreign students who do not receive a visa from the competent authorities, even though they have applied for one at least six months before the start of the classroom activities, will be entitled to a refund of the instalments paid.

ARTICLE 6 - ADMISSION AND REGISTRATION PROCEDURES

Admission to the Master's Degree Course requires completion of the admission/enrolment form, which can be downloaded online and is attached to this notice; the form must be sent, by October 7, 2024, by email to segreteria@unifortunato.eu. Only if the course reaches at least the minimum number of enrolments, the student secretariat is allowed to accept further enrolments, even if produced late, as long as they are made before the official starting date of the Course.

The application must be accompanied by the following documents:

1. Identification document.
2. All educational documents, including degree certificates and mark sheets



3. CV

4. Motivational letter

Declaration of Value (DOV) or CIMEA certificate before the start of the course (students who obtained the qualification outside the European Union), Diploma Supplement for students graduated from EU institutions.

The admission committee will evaluate the application. The student (whom application is accepted to the master program) must send the following documents within two weeks the reception of admission notification:

1. Identification document and registration application.
2. The receipt of payment of the first instalment of the enrolment fee equal to Euro 1516.00 (of which Euro 16.00 for stamp duty) to be paid into the bank account BIC/SWIFT: BPPIITRRXXX - IBAN: IT88 K 07601 15000 000095641692 made out to Università Telematica Giustino Fortunato of Benevento, including "Master Digital Health 2024" as payment reference.

ARTICLE 7 - ACTIVATION

Activation of the Master's Degree Course is conditional on reaching the minimum number of enrolled students, set at 10. Therefore, if the Master is not activated, the student will be entitled to a refund of the sum paid at the time of enrolment.

ART. 8 - INTERNSHIP and FINAL TEST

The training includes a company internship for 600 hours.

At the end of the Master's Degree Course, those enrolled who have fulfilled their attendance obligations and submitted a final dissertation will be awarded the International University Master's Degree Level I in 'Digital Health: Engineering and managing high-quality medical software and systems', equivalent to 60 C.F.U., which can be used in accordance with current legal provisions.

ARTICLE 9 - DIRECTOR AND STEERING COMMITTEE OF THE MASTER'S DEGREE COURSE

Responsibility and co-ordination is assumed by the Director Prof. Antonio Coronato and the members of the board of directors, consisting of the Director, Prof. Luciano Mirarchi and Prof. Muddasar Naeem.

ARTICLE 10 - REGULATIONS IN FORCE

For any information not explicitly provided, please refer to the regulations in force.



Bollo Assolto in modo virtuale ai sensi del D.P.R. N. 642 del 26/10/1972
Autorizzazione dell' Agenzia delle Entrate – Direzione Provinciale di Benevento del 07/09/2010 n. 2010/75803

TO THE MAGNIFICENT RECTOR OF THE
TELEMATIC UNIVERSITY "GIUSTINO
FORTUNATO

REGISTRATION APPLICATION

Name and Surname_____
Born to_____ date_____/_____/_____
Nation_____Citizenship _____ sex (m/f)
Cod. Fiscal_____
CHIEDE
To be enrolled__ for the A.Y. 2024/25 at the FIRST LEVEL INTERNATIONAL UNIVERSITY MASTER IN "Digital Health: Engineering and managing high-quality medical software and systems"
To this end, he declares under his own responsibility the following:
RESIDENCE
City_____
Adress_____n_____
Phone_____
e- mail _____@_____
DEGREE AND/OR MASTER'S DEGREE AND/OR OLD SYSTEM DEGREE (DECLARATION PURSUANT TO ART.46 D.P.R. 445/2000)



Graduated in _____ To _____ University _____

DECLARES UNDER YOUR OWN RESPONSIBILITY:

- a. to be aware that the University will verify the truthfulness of what has been declared;
 - b. to be aware that in the event of a false declaration or one containing untruthful data, as required by art. 75 of the Presidential Decree 28.12.2000 n. 445, forfeits any benefits obtained from the provision issued on the basis of the untruthful declaration and loses the right to any form of intervention for the entire duration of the course of studies, except in any case, the application of the criminal laws for the facts constituting a crime ;
 - c. to have signed the "information note" pursuant to EU Regulation number 2016/679 and to grant my consent to the processing of personal data;
 - d. to have viewed the University regulations on the website www.unifortunato.eu and therefore declares to be aware of the rules and terms, including administrative ones, envisaged and to accept, without reservation, all the conditions;
- And. to acknowledge that if this document lacks a revenue stamp and/or the documents required to be attached and/or contains inaccurate data, it will be rejected;

DECLARE THAT YOU ARE AWARE THAT:

- 1. the training takes place in e-learning mode through connection to the Unifortunato platform where the student will be able to access the teaching material and benefit from the lessons. The start date, the calendar of teaching activities and all further information are communicated on the university website www.unifortunato.eu and on the Unifortunato platform;
- 2. the student who does not consult the website and in particular the Unifortunato platform, indicates his/her e-mail address incorrectly, or has failed to provide the necessary documents to attach to the application, or does not connect to the Unifortunato platform , or fails to contact the Student Secretariat when necessary, damages, through his own fault, exclusively his own educational path, and will be able to charge the University nothing;
- 3. upon the start of the teaching activities, the access data to the Unifortunato platform (userid and password) will be delivered to the e-mail address indicated by the student in this application;
- 4. the payment must be made to the BIC/SWIFT CODE: BPPIITRXXX postal IBAN code IT88 K 07601 15000 000095641692 or in the additional methods indicated on the website www.unifortunato.eu and must indicate the name of the student with reason: "Master Digital Health 2024" ;"
- 5. to be admitted to the exams, online attendance of the various teaching activities is necessary. Online attendance will be obtained through tracking on the platform. Access to the Unifortunato platform by each student is monitored by the teachers, who, at the end of the course, on the basis of specific reports, evaluate whether the student can access the final exam;
- 6. once the courses have started, if problems arise relating to the access credentials to the Unifortunato platform (userid and password), students must contact the Secretariat as soon as possible on the telephone number 0824 31 60 57 or write an e-mail to segreteria@unifortunato.eu;

The student (whom application is accepted to the master program) must send the following documents within two weeks the reception of admission notification:

- 1. Identification document and registration application.

The receipt of payment of the first instalment of the enrolment fee equal to Euro 1516.00 (of which Euro 16.00 for stamp duty) to be paid into the bank account BIC/SWIFT: BPPIITRXXX - IBAN: IT88 K 07601 15000 000095641692 made out to Università Telematica Giustino Fortunato of Benevento, including "Master Digital Health 2024" as payment reference

Date ____/____/____

Signature_____

INFORMATION PURSUANT TO ART. 13 EU REGULATION N. 2016/679 – TELEMATIC UNIVERSITY
"GIUSTINO FORTUNATO"



Pursuant to article 13 of EU Regulation number 2016/679 and the relevant national reference legislation, the interested party is informed that the processing of personal data provided and acquired by him/her will be processed in compliance with the provisions of the aforementioned Regulation, with particular reference to the consequent rights and obligations.

1. Data controller The Data Controller is the “Giustino Fortunato” Telematic University, based in Benevento at Via Delcogliano n.12.

2. Data Protection Officer. The person responsible for protection is the “Giustino Fortunato” Telematic University. It is possible to contact the DPO by writing an e-mail to privacy@unifortunato.eu, or by sending a registered letter with return receipt to the headquarters of the “Giustino Fortunato” Telematic University, addressing it to the C/A of the RPD.

3. Object of the Processing. The Data Controller will process your personal, identifying and non-sensitive data (for example name, surname, company name, address, telephone, e-mail, bank and payment details) communicated by you upon completing your registration at the University for the completion of your academic career, only for purposes connected and/or instrumental to the activity and services of the Data Controller.

4. Purpose of the Processing

Your data, including those relating to your university career and in any case produced by the Giustino Fortunato Telematic University as part of the performance of its institutional functions, will be processed both with the aid of electronic or automated means and with tools paper, for carrying out the institutional activities of the University and for all the related legal obligations connected to the execution of the various ones that the University itself proposes, as well as for the purposes of research and statistical activities. In particular, your data will be processed for the following purposes:

a) for the purposes of managing the contractual and/or pre-contractual relationship with the “Giustino Fortunato” Telematic University: specifically, for the purpose of planning and providing the training activities chosen by you; purposes strictly connected and instrumental to the management of the aforementioned relationship, such as for example, for the acquisition of information for enrollment and enrollment in degree courses, to carry out the operations and services requested;

b) for the pursuit of a legitimate interest of the “Giustino Fortunato” Telematic University: for the completion of preliminary checks connected to the completion of enrolment, to execute a request from the student and/or potential student; for quality control, research and development in order to improve products and services;

c) for the purposes of analyzing the information held for statistical purposes;

d) for communications of commercial information and sending of advertising/information material of goods and services, deemed to be of interest to you, also with automated and conventional methods, e-mail and related Web applications, pursuant to your express consent;

e) for communications of commercial information and sending of advertising/informative material of goods and services, of subsidiaries, parent companies, associated companies, co-owners, deemed to be of interest to you, also with automated and conventional methods, electronic mail and related Web applications, pursuant to of express consent;

f) for communication of the data to third parties so that they can also process them for marketing purposes, subject to your consent;

5. Profiling activities. The “Giustino Fortunato” Telematic University may process, subject to your consent, the personal data provided spontaneously and that acquired during the use of the service/services offered, for automated and/or manual analysis activities aimed at detecting your chosen preferences, and commercial habits, to improve the services provided and to propose commercial offers deemed to be of greatest interest to you. The profiling activity is carried out using the VTIGER CRM, Odoo, Zoom, Moodle software.

6. Data retention period. Within the scope of the purposes indicated above, your personal data will be retained for the duration of the contract and for the ten years following the period in which the Data Controller is subject to conservation obligations for fiscal, contractual, or other impositions established by laws or regulations or for the purposes already indicated, after this period, unless expressly reconfirmed by the interested party, they will be deleted.

7. Data Transfer. The management and storage of data will take place on servers located within the “Giustino Fortunato” Telematic University for the purposes referred to in point 4 of this information. A backup copy of the data is present on the Aruba servers located throughout the country. Pursuant to art. 45 GDPR, the transfer of personal data may take place to a third country or an international organization if the Commission has decided that the third country or international organization in question guarantees an adequate level of protection or other adequate guarantees provided for by the GDPR. This transfer will take place if the student decides to participate in Erasmus, training courses abroad, etc.

8. Rights of the interested party. The subject to whom the personal data refers has the right, at any time, to obtain from the data controller confirmation whether or not personal data concerning him or her is being processed and, in this case, to obtain: the right to withdraw



consent of the processing of personal data (art. 7 paragraph 3 RGDP), access to personal data and the information contained (art. 15 RGDP), the right of rectification (art. 16 RGDP), the right to cancellation (Art.17 RGDP), the right to limit processing (art. 18 RGDP), the right to portability of personal data (art. 20 RGDP) and the right to object (art. 21 RGDP), the right not to be subjected to a decision based solely on automated processing, including profiling (Art. 22 RGDP).

9. Method of exercising rights

9.1 You can exercise your rights at any time by sending:

- A registered letter with return receipt. at the "Giustino Fortunato" Telematic University – Via Delcogliano n. 12 Benevento
- By e-mail to the address: privacy@unifortunato.eu;

9.2 The interested party also has the right pursuant to and for the purposes of article 77 of the GDPR 679/2016, to lodge a complaint with the Guarantor and Supervisory Authority in case of violation of the current legislation on the protection of personal data.

Pursuant to art. 7 of the G.D.P.R. 2016/679 and the relevant national legislation, I declare that I have read this information.

Date, _____

In Faith: _____

I also declare that:

- Authorize Do not Authorize

To the processing of personal data for purposes related to the performance of institutional activities*

- Authorize Do not Authorize

the Data Controller processes the data collected for sending via email, newsletters, letters, telephone, fax, SMS, MMS, internet and other automated and non-communication systems aimed at the promotion and sale of products and services of all joint data controllers as reported in point 4 letter d) e) and f) of the information on the processing of personal data.

- Authorize Do not Authorize

the Data Controller to process the data collected for the purposes of market surveys and detection of the degree of student satisfaction, on the quality of the services rendered and for profiling activities carried out using proprietary software with the aim of improving the offer and services of the site in in line with the preferences and tastes of the interested parties referred to in point 5 of the information on the processing of personal data.*

Date, _____

In Faith: _____

*Necessary for the provision of the service