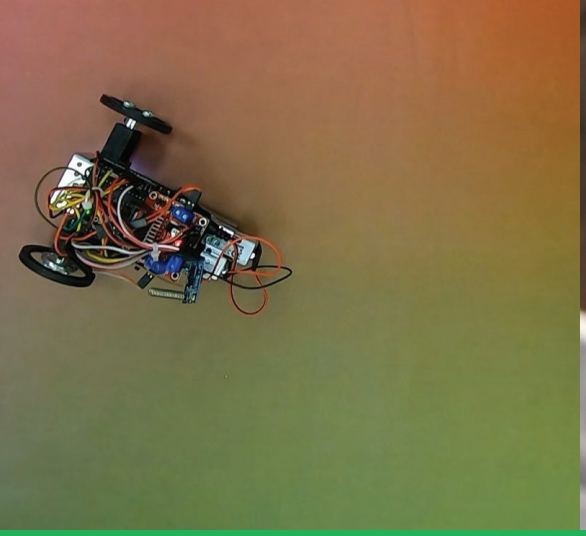

University of Camerino
School of Science
and Technology

COMPUTER SCIENCE

MASTER DEGREE

Second Cycle Degree
Duration 2 years
ECTS credits 120
Campus Location Camerino
web site
computerscience.unicam.it
fb Studiare Informatica a Camerino
UNICAMente informatica

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INTRODUCING THE MASTER

Nowadays, Computer Science has applications in several fields, that are very different from each other and in constant increasing number. UNICAM proposes the Master Degree in Computer Science (Laurea Magistrale) to allow graduate students in Computer Science to specialize their knowledge, competences and skills. Different specialization programmes are proposed within the Master Degree together with the possibility to gain, in addition to the UNICAM degree, a Master degree awarded by a partner University (Double Degree).
The degree, being in collaboration with European and international institutions, is completely taught in English. Students at UNICAM are immersed in an international environment with foreign students coming from different countries. They can participate to international exchange programs such as Erasmus+ or Double Degree and spend a semester or one year abroad for exams and/or thesis. Double Degree programs are available with:

- Reykjavik University (RU) in Iceland,
- University of Applied Sciences and Arts Northwestern Switzerland of Olten (FHNW) in Switzerland,
- Universidad Nacional de Catamarca (UNCa) in Argentina.

Scholarships of merit for supporting the mobility are offered to exchange students through UNICAM funds (if available) or, for European locations, through the Erasmus+ Programme.
The Master of Science (Laurea Magistrale) in Computer Science allows to access the "Albo Professionale dell'ordine degli ingegneri" (National Engineer's Register), section A, sector "Information Engineering". To access the Register, a student must pass a special exam (Esame di Stato), for which UNICAM is an entitled site.
CISCO activities, certified by the Cisco Networking Academy Program, are available as part of the degree program. This is another important opportunity for our students as Cisco Networking Academy Program is introductory for CISCO Industrial certifications, which are highly spendable in the job market.
According to AlmaLaurea statistics, one year after the degree the employment rate of those who graduated in Computer Science at University of Camerino is 80%.

ADMITTANCE REQUIREMENTS

- Bachelor Degree that satisfies the requirements for access to University Master Degree courses
- Level of language proficiency (strongly recommended): ENGLISH level B2 (Independent User)
- Sufficient knowledge, competences and skills of Mathematics and Computer Science will be checked before the student is admitted to the program.

Further information on admission rules, pre-admission deadline and other services at http://international.unicam.it

Classes will be held face to face in the University halls but it is possible to attend them also in streaming.
Practical activities and laboratories will be organized in different modalities that will be communicated at the due time.

Classes are held in English

HR EXCELLENCE IN RESEARCH

COURSE STRUCTURE

Thera are two semesters, from October to the end of January, and from March to mid-June June. The Winter Exam Session is In February.
Here below the curricula that can be chosen within the Master Degree of Computer Science are described in details.

Curriculum
Intelligent and Adaptive Systems (IAS)

Modern ICT systems are composed of a large number of interconnected devices that interact with each other and with users to reach a certain goal. IAS aims at forming highly specialized data analysts and software designers capable of developing and managing these complex systems. IAS students will also learn how to use the data collected during systems execution in order to detect and prevent critical situations and to identify the countermeasures that guarantee the expected quality of service and security.

First Year (60 Ects)

English Language (B2 or C1 Level)	6
Complex Systems Design	12
Distributed Calculus and Coordination	6
Systems Verification Lab	6
Performance Analysis and Simulation	6
Knowledge Engineering	6
Logic and Constraint Programming	6
Optional exam	6
Free Choice	6

Second Year (60 Ects)

Software Project Management	12
Machine Learning	6
Multiagent Systems Lab	6
Free Choice	6
Master Thesis	30

Curriculum
Information Systems Engineering (ISE)

The Information Systems Engineering curriculum focuses on methodologies, techniques, technologies and tools for engineering complex information systems. Effective strategies for defining customer needs, required functionalities early in the development cycle, systems design, validation and deployment are deeply investigated. ISE graduates will be able to understand and solve issues related to business and IT alignment, such as process and data organization, performance and cost optimization, engagement of social aspects, and technology adoption and maintenance.

First Year (60 Ects)

English Language (B2 or C1 Level)	6
Complex Systems Design	12
Enterprise and Business Process Modeling	6
Data Analytics	6
Knowledge Engineering	6
Process Mining	6
Enterprise Software Infrastructures	6
Optional exam	6
Free choice	6

Second Year (60 Ects)

Software Project Management	12
Quality Assurance for Information Systems	6
Blockchain For Distributed Applications	6
Free Choice	6
Master Thesis	30

Curricula
Software and Systems for Industries (SSI)

Embedded systems are increasingly being joined together into an "Internet of things" or sensor networks to enable several applications such as smart homes, manufacturing, energy distribution and transportation. SSI provides students with a knowledge and understanding of embedded system architectures, the concepts underpinning their interconnection and programming. Security, simulation and verification of distributed systems, where possible tailored to embedded systems, will be also part of the programme.

First Year (60 Ects)

English Language (B2 or C1 Level)	6
Complex Systems Design	12
Performance Analysis and Simulation	6
Data Analytics	6
IT Security: Foundation	6
Distributed Systems	6
Embedded Systems Architecture	6
Optional exam	6
Free choice	6

Second Year (60 Ects)

Software Project Management	12
Embedded System Programming	6
IoT protocols and Standards	6
Free choice	6
Master Thesis	30

Curricula
Telehealth and Digital Medicine (TDM)

Offers students specific training in telehealth and digital technologies applied to health including mHealth and eHealth. Digital technologies represent the future of healthcare, but in general, professionals are not prepared to this challenge.
The course intends to provide a knowledge and understanding of complex systems design, IT security, to the Internet of things and to the fundamentals of telemedicine and telepharmacy.
The courses will be delivered in part using the same communication systems common for telehealth and digital medicine applications.

First Year (60 Ects)

English Language (B2 or C1 Level)	6
Complex Systems Design	12
Telecommunication technologies in healthcare	6
Data Analytics	6
IT Security: Foundation	6
Computerization of health services	6
Digital health and telemedicine	6
Optional exam	6
Free choice	6

Second Year (60 Ects)

Software Project Management	12
Digital Health, Legal, ethical issues and malpractice	6
IoT protocols and standards	6
Free choice	6
Master Thesis 3	0

Optional exam selection

Any lecture of other curriculum	
Theory of Complexity	6
Financial Management and Strategy	6
Networking fundamentals CISCO (I-II)	6
Networking discovery CISCO (III-IV)	6

TUITION FEES , DISCOUNTS AND GRANTS AVAILABLE

find out at

http://www.unicam.it/studente/guida-dello-studente

and

https://international.unicam.it/services/scholarships

a.y. 2021/2022

QUALITY ASSURANCE SYSTEM

UNICAM Quality Management System Certificate ISO 9001:2015 (from AFAQ-France, a French leader and one of the first certification bodies at the global level) guarantees students the quality of services provided. The guarantee is via a rigorous analysis of internal organizational procedures and the prompt addressing of any weaknesses or shortcomings whether detected or reported by the students themselves. The Quality Management System includes the following support services for students: orientation and guidance, mentoring, International mobility, Internships and communication. These integrate with and support the educational activities, so as to contribute to the complete training of the student.