Università di Camerino

Computer Science

UNICAM, in its effort to counter gender stereotypes, has undertaken awareness-raising initiatives to give greater linguistic visibility to differences. When the masculine form is used in this text for the sole purpose of simplification, it is intended to be inclusive of all individuals operating within the university community.

Master degree
Second Cycle Degree
Duration 2 years
ECTS credits 120
Campus Location Camerino

School of Science and Technology
Computer Science Division

School Director
prof. David Vitali
direttore.scienze@unicam.it

Educational Manager
dr. Anna Maria Santroni
annamaria.santroni@unicam.it
+39 0737 402849

Course Coordinator
prof. Andrea Polini
andrea.polini@unicam.it
+39 0737 402563

fb
Studiare Informatica a Camerino
UNICAMente informatica
instagram
unicamente_informatica
TikTok
informaticaunicam

Delegates

Educational Guidance
prof.ssa Barbara Re
barbara.re@unicam.it
+39 0737 402524

Tutoring
prof.ssa Diletta Cacciagrano
diletta.cacciagrano@unicam.it
+39 0737 402573

International Mobility
prof. Luca Tesei
luca.tesei@unicam.it
+39 0737 402572

Stage and Placement (Internship)
prof. Fausto Marcantoni
fausto.marcantoni@unicam.it
+39 0737 402105

INTRODUCING THE MASTER

Nowadays, Computer Science has applications in almost any human field. The discipline has enlarged its sphere of influence greatly, and specialization is more and more relevant to start a professional career. For such a reason the MSc in Computer Science active at UNICAM has structured its didactic offer over 5 different curricula trying to satisfy the formative expectations of students, and the market. In addition to a set of "up-to-date" curricula, as detailed in the following, the MSc in Computer Science offers many interesting opportunities to students to enlarge their formative perspectives.

First of all, by enrolling in the MSc in Computer Science at UNICAM the student will have the possibility of getting admitted to one of the four Double Degree programs. These study programs permit the student to gain, in addition to the UNICAM degree, a Master degree awarded by a partner University. Active Double Degree programs are in place with the following Universities:
- Reykjavik University in Iceland;
- University of Applied Sciences and Arts Northwestern Switzerland of Olten in Switzerland;
- University of Tirana in Albania.

The Double Degree programs ask the students to spend at least 6 months at the partner university site. Scholarships are provided by UNICAM in order to cover associated expenses.

The degree, being delivered 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. CENSIS has repeatedly recognized UNICAM as one of the most international MSc degrees among the Computer Science degrees, in Italy. Students can participate in international exchange programs such as Erasmus+ or/and spend part of their study period abroad for exams and/or thesis. Scholarships of merit, to support the mobility, are offered to exchange students through UNICAM funds or, for European locations, through the Erasmus+ Programme.

Students at UNICAM can take advantage of a big and lively community, constituted by more than 750 students enrolled in UNICAM at a Bachelor or Master level in Computer Science. For some years now UNICAM, in order to help students in their study activities, has adopted a platform that permits students to access the lessons remotely and to possibly rewatch recorded lessons.

Students graduated with a Master of Science in Computer Science can access the "Albo Professionale dell'ordine degli ingegneri" (National Engineer Register), section A, sector "Information Engineering". To access the Register, the 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, the employment rate of those who graduated in Computer Science at the University of Camerino is 92,6%.

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

Business Informatics and Data Science (BIDS)

Nowadays, companies experiment with a continuous push toward the adoption of ICT systems and infrastructures. The introduction of ICT systems has to be carefully considered and planned, to avoid expensive failures. At the same time, the adoption of such systems enables a "Data-Oriented perspective" on the company itself permitting to analyze, starting from collected data, of the organization's strengths and weaknesses.
The curriculum intends to equip the student with knowledge and capabilities in relation to methodologies and tools to govern the digital transformation of a company, and to take advantage of such a transformation.

First Year	(60 Ects)	Second Year	(60 Ects)
English Language (B2 or C1 Level)	6	Software Project Management	12
Complex Systems Design	12	Blockchain and Distributed Ledger Technologies	6
Fundamentals of Machine Learning	6	Free Choice	12
Technologies for Big Data Management	6	Thesis	30
Distributed Systems	6		
Business Process Modeling and Enactment	6		
Financial Management and Strategy	6		
Knowledge Engineering and Business Intelligence	6		
Process Mining	6		

Artificial Intelligence and Informatics for Robotics (AIIR)

The world is nowadays witnessing a pervasive introduction of synthetic intelligence in almost all human contexts (e.g manufacturing, agriculture, and health). Particularly interesting and challenging are those contexts in which synthetic intelligence is used to concretely manipulate and have an effect on reality in order to reach specific objectives, as it is the case, for instance, of smart cities and smart manufacturing scenarios. In some cases, the system to engineer will involve the coordination of autonomous agents (e.g. robots).
The curriculum intends to equip the student with knowledge and competencies in relation to methodologies and tools to permit the engineering of intelligent systems that could include a physical part.

First Year	(60 Ects)	Second Year	(60 Ects)
English Language (B2 or C1 Level)	6	Autonomous and Collaborative Robotics	6
Complex Systems Design	12	Cyber Physical Systems Design	6
Fundamentals of Machine Learning	6	Parallel and Distributed Programming	6
Distributed Calculus and Coordination	6	Free Choice	12
Multiagent Systems Lab	9	Thesis	30
Distributed Systems	9		
Knowledge Engineering and Business Intelligence	6		
Deep Learning and Computer Vision	6		

Software Development and Technologies (SDT)

Nowadays software systems are more and more pervasive. Methodologies, technologies, and tools to develop such systems are continuously changing and the engineering of complex software systems requires the acquisition of complex competencies in many different aspects of the discipline.
The curriculum intends to equip the student with knowledge and competencies on methods and tools for the engineering of Complex Software Systems. A student who graduates in such a curriculum aims at starting a career in software development and wants to acquire a clear understanding of the activities composing a development process, as well as the effective techniques available to perform such activities, also considering different application contexts.

First Year	(60 Ects)	Second Year	(60 Ects)
English Language (B2 or C1 Level)	6	Blockchain and Distributed Ledger Technologies	6
Complex Systems Design	12	Cyber Physical Systems Design	6
Fundamentals of Machine Learning	6	Software Project Management (DevSecOps)	12
Technologies for Big Data Management	6	Parallel and Distributed Programming	6
Distributed Systems	6	Thesis	30
Business Process Modeling and Enactment	6		
Fundamentals of Software Testing	6		
Free Choice	12		

CyberSecurity (CySec)

Nowadays software systems are more and more pervasive. As they become pervasive the risks associated with their usage increase. The society is in urgent need of professionals that are able to evaluate risks and find solutions connected to the introduction of an ICT based system.
The curriculum intends to equip the student with knowledge and competencies on methods and tools for engineering secure software systems, as well as to analyze the risks associated with the usage of ICT systems, so as to derive security assessment for a given software solution, and to possibly plan risk mitigation activities.

First Year	(60 Ects)	Second Year	(60 Ects)
English Language (B2 or C1 Level)	6	Software Project Management	12
Complex Systems Design	12	Cryptography: Theory and Applications	6
Static Analysis and Program Verification	6	Parallel and Distributed Programming	6
Data and Network Security	6	Blockchain and Distributed Ledger Technologies	6
Security By Design	6	Thesis	30
Distributed Systems	6		
Fundamentals of Software Testing	6		
Free Choice	12		

Methodologies and Technologies for Digital Communication (MTDC)

Nowadays the relevance of digital communication is increasing. Channels used to convey any kind of information are changing and in need of continuous innovation. The organization of software systems supporting such digital communication is somehow peculiar and needs "hybrid" competencies. In particular novel paradigms, such as gaming, are more and more relevant in such a context.
The curriculum intends to equip the student with knowledge and competencies on methods and tools to conceive and implement effective digital communication technologies with a special focus on digital technologies for the enhancement of the cultural heritage.

First Year	(60 Ects)	Second Year	(60 Ects)
English Language (B2 or C1 Level)	6	Software Project Management	12
Complex Systems Design	12	Digital Technologies for Cultural Heritage	6
Fundamentals of Machine Learning	6	Technologies for Extended Reality	6
Technologies for Big Data Management	6	Web 3D and Immersive Communication	6
Knowledge Engineering and Business Intelligence	6	Thesis	30
Applied Game Design	6		
Financial Management and Strategy	6		
Free Choice	12		

Student Services

Guidance
Orientation to master's degrees
https://www.unicam.it/futuro-studente/vuoi-iscriverti/orientamento

Scholarships
- *WelcomeinUnicam*
  scholarships for master's degrees

- *TalentinUnicam*
  merit scholarships

https://www.unicam.it/studente/servizi-studenti/borse-di-studio

Internships and Placements
Internships, Career service, Career day
https://www.unicam.it/impresa-e-territorio/stage-e-placement

Welcome and International mobility
welcoming international students, mobility programmes
https://international.unicam.it/

Information

Open

| Monday-Wednesday-Friday | 10.30-13.00 |
| Tuesday-Thursday | 15.00-17.00 |

Address
Polo degli Studenti - via Gentile III da Varano - 62032 Camerino

Contributions and registrations
Procedure available at https://**miiscrivo.unicam.it** from 1 July 2023.
Personalized fees on the basis of the ISEE-U.
Total or partial tuition fees exemptions.

More information
https://www.unicam.it/didattica/guida-dello-studente
https://international.unicam.it/

International students
Pre-enrolment procedures and requirements
welcome@unicam.it

Student Registry
segreteriastudenti.scienze@unicam.it

Bachelor's Degree and **Master's Degree Programmes**
https://www.unicam.it/offerta-formativa
https://www.unicam.it/offerta-formativa-en

https://www.unicam.it/

a.y. 2023/2024