Master Course in Computer Science
Orientation day
Benvenuti alla Sapienza

Welcome to Sapienza
Bienvenue à La Sapienza
Willkommen zu Sapienza
Bienvenidos à La Sapienza
Sapienza'ya hoş geldiniz
سانيز مین خوش آمدید (Dar sapienza khush aamdeed)
به ساپینزا خوش آمدید (Dar sapienza khush amad)
Sapienza में आपका स्वागत है (Sapienza main aapka Svaagat hy)
Info on the Department of Computer Science

Ranked first (in its area) in 5-year Research Assessment by Ministry of University and Research 2013 e 2017

Ranked first (full score) among top 180 Departments in Italy (all fields)

Departments of Computer Science with the highest number of researchers awarded with an ERC grant (>1mil euro):
5 Starting grant, 1 Consolidated grant

1 Shannon Award, 1 Sloan fellowship, 1 NSF career award, 5 Google research awards, 2 Google focused research awards, 3 IBM research awards, and counting
Master courses of the Department

Lectures and exams in English

Computer Science
curricula in:
  Information Science and Applications
  Multimedia Computing and Interaction
  Networks and Security,
  Software Engineering

Cybersecurity (inter-departments)
Data Science (inter-departments)
Our approach

To learn to express problems and solutions in computational terms
Identify the mathematical and logical bases
Learn to model problems and solutions
Learn to transform models into realisations
Calendar (common to all Sapienza)

Lectures from Sept 28 to Dec 18
Exams from Jan 7 to Feb 19
Lectures from Feb 22 to May 28
Exams from June 7 to July 23
Exams from Sept 1 to Sept 17

Many courses require projects, some written exams and/or homework problems, most oral exams

Grades from 18 to 30 to pass the course (fail otherwise)
Exams can be repeated unless a passing grade has been officially recorded
Master Course in Computer Science

The offer is organized into Curricula
- Software Engineering
- Multimedia Computing and Interaction
- Networks and Security
- Information Science and Applications

Each curriculum consists of mandatory courses and other courses that can be chosen also from other curricula
- 9 characterizing courses
- 2 pertinent courses
- 2 chosen by the student
- 6 CFU for complementary activity (= AFC)
- 36 CFU (= 6 courses) for the final thesis
List of courses: I Year

I Semester

Biometric Systems
Cloud Computing  *
Computer Network Performance
Cryptography
Distributed Systems
Formal methods in software development
Foundations of Data Science  *
Machine Learning
Methods in computer science education: Design
Security in software applications

II Semester

Autonomous Networking
Big Data Computing
Computer Vision
Human Computer Interaction on the Web
Internet of Things
Mathematical Logic for Computer Science
Methods in computer science education: Analysis
Natural Language Processing
Practical Network Defense
List of courses: II Year

I Semester

Automatic Software Verification
Computational complexity
Computer Vision
Deep Learning and Artificial Intelligence
Fundamentals of Computer Graphics
Network Algorithms

II Semester

Advanced Algorithms
Advanced Machine Learning
Concurrent Systems
Data and Network Security *
Models of Computation
Information Systems
Intensive Computation
Multimodal Interaction
Topics in Physics

Complementary activity
Two recent additions

Methods in computer science education: analysis
Methods in computer science education: design
Enable to follow a post-graduate track for teaching Computer Science in high-school
Students are required to select six courses from the following list:
- Advanced Algorithms
- Big Data Computing
- Computer Network Performance
- Computer Vision
- Fundamentals of Computer Graphics
- Graph Theory
- Mathematical Logic for Computer Science
- Models of Computation
- Network Algorithms
- Security in Software Applications

and three courses from the following list:
- Autonomous Networking
- Computational Complexity
- Cryptography
Multimedia Computing and Interaction

Students are required to select five courses from the following list:
- Biometric Systems
- Computer Vision
- Deep Learning and Artificial Intelligence
- Fundamentals of Computer Graphics
- Human Computer Interaction on the Web
- Machine Learning
- Multimodal Interaction
- Natural Language Processing
- Web and Social Information Extraction

and four courses from the following list:
- Advanced Software Engineering
- Big Data Computing
- Cloud Computing
- Computer Network Performance
- Concurrent Systems
- Distributed Systems
- Formal Methods in Software Development
Networks and Security

Students are required to select five courses from the following list:

- Autonomous Networking
- Computer Networks Performance
- Cryptography
- Data and Network Security
- Distributed Systems
- Internet of Things

and four courses from the following list:

- Automatic Software Verification Methods
- Cloud Computing
- Concurrent Systems
- Human Computer Interaction on the Web
- Intensive Computation
- Deep Learning and Artificial Intelligence
- Machine Learning
- Multimodal Interaction
- Network Algorithms
- Security in Software Applications
Software Engineering

Students are required to select four courses from the following list:
- Automatic Software Verification Methods
- Concurrent Systems
- Formal Methods for Software Development
- Security of Software Applications

and five courses from the following list:
- Big Data Computing
- Cloud Computing
- Deep Learning and Artificial Intelligence
- Distributed Systems
- Human Computer Interaction on the Web
- Machine Learning
- Mathematical Logic for Computer Science
- Models of Computation
Study plans MOST IMPORTANT

Students of the Master Programme in Computer Science can submit or update their study plans (“percorsi formativi”) once per year, from December 1 to December 30.

The online study plan submission system (reachable from within InfoStud) prevents submission of most (but not all) study plans violating the rules.

Plans successfully submitted via the system are evaluated and approved either automatically (in real time) or manually by the study plan evaluation committee.

Please check carefully the info at:
https://www.studiareinformatica.uniroma1.it/master-course-computer-science/study-plans

NO EXAM CAN BE TAKEN IF NOT INCLUDED IN THE STUDY PLAN
All info at: studiareinformatica.uniroma1.it

**AVVISI**

- 29/12/2016
  - OFA (Obblighi Formativi aggiuntivi)
- 28/06/2017
  - per i laureandi triennali
- 30/06/2017
  - Spostamento aula
  - appello orale Calcolo integrale Prof. Nebbia

**WORKSHOP BRIDGESTONE**

We are organizing a workshop about application design and development, together with RomaTre University, Tor Vergata University and Sapienza DIAG (ingegneria informatica).

The apps, made by students in groups, will focus on driving safety and more generally on mobility and connected services, with attention to people and the environment. The workshop