UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2019/20
BACHELOR
Computer Science (Classe L-31)
enrolled until 2017/2018 academic year

HEADING

Degree classification - Denomination and code:	L-31 Computer science
Degree title:	Dottore
Length of course:	3 years
Total number of credits required to complete programme:	180
Years of course currently available:	3rd
Access procedures:	
Course code:	F1X

PERSONS/ROLES

Head of Study Programme

Prof. Giovanni Pighizzini

Degree Course Coordinator

Prof. Walter Cazzola

Tutors - Faculty

Danilo Mauro Bruschi, Giovanni Pighizzini, Nicolò Cesa-Bianchi, Paolo Boldi, Lorenzo Capra, Camillo Fiorentini, Walter Cazzola, Alfio Ferrara, Andrea Visconti, Alberto Momigliano, Stefano Aguzzoli, Massimo Santini, Anna Morpurgo

Degree Course website

https://informatica.cdl.unimi.it/

http://www.unimi.it/studenti/matricole/77516.htm

EXPERIENCE OF STUDY ABROAD AS PART OF THE TRAINING PROGRAM

The University of Milan supports the international mobility of its students, offering them the opportunity to spend periods of study and training abroad, a unique opportunity to enrich their curriculum in an international context.

Study and internships abroad

The education program can be enriched by educational activities abroad both to deepen some topics and as socialization experience in international environments. WIthin the Erasmus+ program study periods can be taken in over 50 universities in Spain, Portugal, France, belgium, Switzerland, Germany, Finland, Norway, Sweden, Latvia, Poland, Hungary, Czeck Republic, Slovenia, Greece, Romania, Turkey. Courses will be recognized in the personalized study plan. These periods abroad are typically 5-month long and include courses for about 30 CFU, in the area of information and communication technology and related applications. Recognition of these educational activities will be based on the Learning Agreement, to be defined in advance by the student and the Erasmus coordinator at the Computer Science Department before starting the period abroad: course in the learning agreement with passed exams will replace the educational activities of the study plan ("manifesto"), either by covering the same topics or complementing the acquired basic competences. The Erasmus Committee at the Computer Science Department will perform the recognition of CFU obtained abroad and the definition of the personalized study plan. Similarly, stages to prepare the final dissertation are allowed in the same foreign universities. Recognition will be performed by the Department Erasmus Committee.

How to participate in Erasmus mobility programs

To gain access to mobility programs for study purposes, lasting 3-12 months, the enrolled students of the University of Milan must attend a public selection that starts usually around the month of February each year through the presentation of specific competition announcements, which contain information on available destinations, respective duration of the mobility, requirements and deadlines for submitting the online application.

The selection, aimed at evaluating the proposed study abroad program of the candidate, knowledge of a foreign language, especially when this is a preferential requirement, and the motivations behind the request, is performed by specially constituted commissions.

Each year, before the expiry of the competition announcements, the University organises information sessions for the specific study course or groups of study courses, in order to illustrate to students the opportunities and participation rules.

To finance stays abroad under the Erasmus + program, the European Union assigns to the selected students a scholarship that - while not covering the full cost of living abroad - is a useful contribution for additional costs as travel costs or greater cost of living in the country of destination.

The monthly amount of the communitarian scholarship is established annually at national level; additional contributions may be provided to students with disabilities.

In order to enable students in economic disadvantaged conditions to participate in Erasmus+ program, the University of Milan assigns further additional contributions; amount of this contributions and criteria for assigning them are established from year to year.

The University of Milan promotes the linguistic preparation of students selected for mobility programs, organising every year intensive courses in the following languages: English, French, German and Spanish.

The University in order to facilitate the organisation of the stay abroad and to guide students in choosing their destination offers a specific support service.

More information in Italian are available on www.unimi.it > Studenti > Studiare all¿estero > Erasmus+

For assistance please contact:
Ufficio Accordi e relazioni internazionali
via Festa del Perdono 7 (ground floor)
Tel. 02 503 13501-12589-13495-13502
Fax 02 503 13503
E-mail: mobility.out@unimi.it
Desk opening hour: Monday-friday 9 - 12

1st COURSE YEAR (disactivated from academic year 2018/19) Core/compulsory courses/activities common

Learning activity	Ects	Sector
AUTOMATA AND FORMAL LANGUAGES	6	INF/01
COMPUTER ARCHITECTURE I	6	INF/01
COMPUTER ARCHITECTURE II	6	INF/01
COMPUTER PROGRAMMING	12	INF/01
CONTINUUM MATHEMATICS	12	MAT/09, MAT/01, MAT/02, MAT/03, MAT/04, MAT/05, MAT/06, MAT/07, MAT/08
DISCRETE MATHEMATICS	6	MAT/09, MAT/01, MAT/02, MAT/03, MAT/04, MAT/05, MAT/06, MAT/07, MAT/08
English assessment B1 (3 ECTS)	3	L-LIN/12
MATHEMATICAL LOGIC	6	MAT/01, INF/01
Total compulsory credits	57	

2nd COURSE YEAR (disactivated from academic year 2019/20) Core/compulsory courses/activities common

Learning activity	Ects	Sector
ALGORITHMS AND DATA STRUCTURES	12	INF/01
DATABASES	12	INF/01
OPERATING SYSTEMS	12	INF/01
SOFTWARE ENGINEERING	12	INF/01
STATISTICS AND DATA ANALYSIS	6	INF/01
Total compulsory credits	54	

3rd COURSE YEAR Core/compulsory courses/activities common

Learning activity	Ects	Sector
COMPUTER NETWORKS	12	INF/01
COMPUTER NETWORKS	12	INF/01
Total compulsory credits	24	

Further elective courses			
OPERATIONS RESEARCH		6	MAT/09
OPERATIONS RESEARCH		6	MAT/09
PHYSICS		6	FIS/03, FIS/02, FIS/01
PROGRAMMING LANGUAGES		6	INF/01
PROGRAMMING LANGUAGES		6	INF/01
SECURITY AND PRIVACY		6	INF/01
SECURITY AND PRIVACY		6	INF/01
BUSINESS PROCESS MANAGEMENT		6	INF/01
COMPLEMENTS OF MATHEMATICS		6	MAT/09, MAT/01, MAT/02, MAT/03, MAT/04, MAT/05, MAT/06, MAT/07, MAT/08
CRYPTOGRAPHY I		6	INF/01
DECLARATIVE PROGRAMMING		6	INF/01
DIGITAL IMAGE PROCESSING		6	INF/01
EMBEDDED SYSTEMS		6	INF/01
INFORMATION SYSTEMS		6	INF/01
LANGUAGES AND COMPILERS		6	INF/01
MULTIMEDIA PUBLISHING		6	INF/01
SCIENTIFIC VISUALIZATION		6	INF/01
TECNOLOGIES AND LANGUAGES FOR WEB		6	INF/01
FUNDAMENTALS OF DIGITAL SOCIAL MEDIA		6	INF/01
SIGNAL PROCESSING		6	INF/01
End of course requirements			
ECONOMICAL, ETHICAL, SOCIAL, AND LEGAL ASPECTS OF IT		3	NA
ECONOMICAL, ETHICAL, SOCIAL, AND LEGAL ASPECTS OF IT		3	NA
FINAL EXAM		3	NA
FINAL EXAM		3	NA
FINAL STAGE		15	NA
TRAINING		15	NA
	Total compulsory credits	42	

COURSE PROGRESSION REQUIREMENTS

The course contains the following obligatory or advised prerequisites

Learning activity	Prescribed foundation courses	O/S
OPERATIONS RESEARCH	CONTINUUM MATHEMATICS	Recommended
	DISCRETE MATHEMATICS	Core/compulsory
DATABASES	COMPUTER PROGRAMMING	Core/compulsory
ALGORITHMS AND DATA STRUCTURES	COMPUTER PROGRAMMING	Core/compulsory
	CONTINUUM MATHEMATICS	Recommended
	DISCRETE MATHEMATICS	Recommended
PROGRAMMING LANGUAGES	ALGORITHMS AND DATA STRUCTURES	Recommended
	COMPUTER PROGRAMMING	Core/compulsory
COMPUTER ARCHITECTURE II	COMPUTER ARCHITECTURE I	Recommended
SECURITY AND PRIVACY	COMPUTER NETWORKS	Recommended
	OPERATING SYSTEMS	Recommended
STATISTICS AND DATA ANALYSIS	CONTINUUM MATHEMATICS	Core/compulsory
	DISCRETE MATHEMATICS	Recommended
OPERATING SYSTEMS	COMPUTER PROGRAMMING	Core/compulsory
	COMPUTER ARCHITECTURE II	Recommended
SOFTWARE ENGINEERING	COMPUTER PROGRAMMING	Core/compulsory