UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2018/19
MASTER DEGREE
Informatics Security (Classe LM-66)
Enrolled until 2017/2018 academic year

HEADING

Degree classification - Denomination and code:	LM-66 Comupter science security
Degree title:	Dottore Magistrale
Curricula currently available:	
Length of course:	2 years
Credits required for admission:	180
Total number of credits required to complete programme:	120
Years of course currently available:	2nd
Access procedures:	Open, subject to completion of self-assessment test prior to enrolment
Course code:	F2Y

PERSONS/ROLES

Head of Study Programme
Prof. Alessandro Rizzi

Degree Course Coordinator
Prof.sa Sabrina de Capitani di Vimercati

Tutors - Faculty
Valentina Ciriani, Marco Cremonini, Massimo Lazzaroni, Elvinia Riccobene, Pierangela Samarati, Fabio Scotti.

Degree Course website
http://www.ccdinfcr.unimi.it

Via Bramante n. 65 - 26013 Crema   Phone 0373/898011-12   La Segreteria osserverà i seguenti orari: da Settembre a Luglio: lun, mer, giov, ven: 9:00-12:00 mar : 9:00-12:00; 14.00-15.00 Agosto da lun a ven: 9:00-12:00 La segreteria è disponibile oltre gli orari sopra indicati previo appuntamento via mail (segreteria.studenti.crema@unimi.it) o telefono (0373/898011). http://crema.di.unimi.it
Email: segreteria.didattica.crema@unimi.it

Via Bramante n. 65 - 26013 Crema   Phone 0373/898011-12   La Segreteria osserverà i seguenti orari: da Settembre a Luglio: lun, mer, giov, ven: 9:00-12:00 mar : 9:00-12:00; 14.00-15.00 Agosto da lun a ven: 9:00-12:00 La segreteria è disponibile oltre gli orari sopra indicati previo appuntamento via mail (segreteria.studenti.crema@unimi.it) o telefono (0373/898011). http://crema.di.unimi.it
Email: segreteria.studenti.crema@unimi.it

http://www.unimi.it/studenti/matricole/77648.htm

CHARACTERISTICS OF DEGREE PROGRAMME

General and specific learning objectives

The masterly degree in Informatics Security aims at supplying the advanced knowledge required for professionals who will carry on research, design, implementation, verification, coordination and management of ICT systems where security and protection of the systems themselves as well as of the information they handle are crucial issues.

The masterly graduated in Informatics Security will also have the skills necessary to handle the innovation in the ICT field: to this purpose, she/he will have high-level scientific and technical competencies, methodological and operating capabilities, critical and open perspective view regarding adoption and usage of secure ICT technologies.

The masterly degree in Informatics Security foresees a graduation thesis, to be developed inside the University as well as in a private or public company and to be discussed as the final examination. The thesis is a written relation (English or Italian) structured as a scientific publication, prepared with the help of a supervisor and describing an original scientific experience in the field of ICT security.

The degree has been designed to be proficiently followed both by people already acquainted with ICT security issues (to whom it will provide deeper insight into ICT sciences and technologies useful for security critical application) and by people coming from scientific degrees where computer security has never been specifically addressed (to whom it will supply t required competencies starting from basic aspects of ICT security). In both cases, however, training is structured around a large common basis, preserving the uniqueness of the overall degree and guaranteeing homogeneity and cultural coherence of the graduated people.

The training foresees lectures, practical exercises, laboratory courses and ICT learning support tools.

Professional profile and employment opportunities

Competencies acquired by people who obtained the masterly degree in Informatics Security are typical of high responsibility job positions in all projects requiring consultancy, analysis, design, management, marketing of medium-large information systems.

These job positions will be available in all kinds of private and public companies using ICT technologies and requiring particular attention to security and privacy issues.

More in detail, referring to the ISTAT 2008 Professional Classification scheme, the masterly degree in Informatics Security will prepare:

2114 Informatics and Telecommunication specialists

21141 Basic ICT research specialists

21142 System and application software analysts and designers.

21143 System analysts

21144 ICT security experts

21145 Computer network specialists

26200 Mathematical and computer sciences researchers

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 to all curricula

Learning activity		Ects	Sector
BIOMETRIC SYSTEMS		6	INF/01
English language 2		3	L-LIN/12
LOGIC		6	INF/01
ORGANIZATION		6	SECS-P/10
PRIVACY AND DATA PROTECTION		6	INF/01
RISK ANALYSIS AND MANAGEMENT		6	INF/01
SYSTEM MODELING AND ANALYSIS		6	INF/01
	Total compulsory credits	39	

2nd COURSE YEAR Core/compulsory courses/activities common to all curricula

Learning activity		Ects	Sector
PROCESSING OF SENSITIVE DATA		6	IUS/01
SERVICE-ORIENTED ARCHITECTURE SECURITY		6	INF/01
	Total compulsory credits	12	

Further elective courses common to all curricula

End of course requirements common to all curricula

FINAL EXAM		39	NA
	Total compulsory credits	39	

ACTIVE CURRICULA LIST

Methods for information technology security Course years currently available: 2nd
Safe systems Course years currently available: 2nd

CURRICULUM: [F2Y-A] Methods for information technology security

1st COURSE YEAR (disactivated from academic year 2018/19) Core/compulsory courses/activities Curriculum-specific features Methods for information technology security

Learning activity		Ects	Sector
DEPENDABILITY		6	ING-INF/07
Formal languages and automata		6	INF/01
Project management		6	INF/01
	Total compulsory credits	18	

CURRICULUM: [F2Y-B] Safe systems

1st COURSE YEAR (disactivated from academic year 2018/19) Core/compulsory courses/activities Curriculum-specific features Safe systems

Learning activity		Ects	Sector
COMPUTER FORENSICS		6	ING-INF/05
CRYPTOGRAPHY		6	INF/01
NETWORK SECURITY		6	INF/01
	Total compulsory credits	18	