

FIRST CYCLE DEGREE IN COMPUTER SCIENCE HIGHER EDUCATION (BACHELOR) ACADEMIC YEAR 2008-2009

This degree is intended to graduate students able to provide I.T. solutions to technical and management problems in industry, finance and public administration. To this aim theoretical background, practical experience, knowledge of economics and legislation regarding the new technologies as well as the use of suitable mathematical modelling techniques are required.

This degree in Computer Science is offered into two curricula:

1. INFORMATION TECHNOLOGY (I.T.)
2. INFORMATION TECHNOLOGY AND MANAGEMENT (I.M.)

their purpose is to train two distinct types of I.T. professionals whose future employment will be either as a technical expert in I.T. or as an expert in I.T. applications and management. Students completing the chosen curriculum will obtain a First Cycle Degree in Computer Science.

LEARNING OUTCOMES

The graduated students have knowledge, skills and competences to:

- design, develop and manage information systems;
- analyse problems and develop information systems as their solutions;
- effectively use, besides the mother tongue, the English language;
- team working, autonomously take decisions and integrate into working environments.

Learning activities, during the first teaching phase, are dedicated to a strong basic training in computer science. During the second phase they are more professional-oriented. During this latter students personalize his/her learning period with free choice activities and with a stage in a suitable enterprise or research and development laboratory. Students can apply for Erasmus mobility fellowships and they can follow learning activities in others Italian Universities.

PROSPECTS OF EMPLOYMENT

The graduated students have knowledge, skills and competences to be employed in the following areas:

- software analysis, design, coding and maintenance;
- design and management of information systems and databases;
- business processes management and automation;
- design and development of enterprise communication networks and Internet services;
- any field that involves computing systems such as industry, public administration and medicine.

FURTHER STUDIES

The graduated students are eligible to apply to

- legal examination for entering into the national association of junior informatics engineers
- second cycle degree in Computer Science

DEGREE ORGANIZATION

The first cycle degree is organized in three years. The student will earn 180 ECTS credits. Every academic year is divided into two semesters. First semester lectures start on 1st October 2008 and end on 30th January 2009. Second semester lectures start on 2nd March 2009 and end on 12th June 2009. Examination sessions occur at the end of each semester.

LANGUAGE OF TEACHING

All courses are in Italian.

Tutoring and examinations can be done in English.

CURRICULA

The following tables show the distribution of the ECTS credits in the two curricula.

° INFORMATION TECHNOLOGY

^ INFORMATION TECHNOLOGY AND MANAGEMENT

	ECTS °	ECTS ^	SEMESTER
YEAR 1			
Computer programming + Lab	12	12	1
Mathematical Analysis	6	6	1
Discrete Mathematics	6	6	1
Computer Architecture + Lab	12	12	2
Mathematical Logics	6		2
Private law		6	2
Foundations of Computer Science	6	6	2
Physics	6	6	2
English language	9		(*)
YEAR 2			
Algorithms and Data Structures + Lab	12	12	1
Computer Networks	6		1
Economics		6	1
Probability and Mathematical Statistics	6	6	1
Operations Research	6	6	1
Operating Systems + Lab	12	12	2
Databases + Lab	12	12	2
Programming Languages and Compilers	6	6	2
YEAR 3			
Software Engineering + Lab	12	12	1
Student choice (**)	6	6	1
Economics and Management of the Firm	6	6	1
Student choice (***)	12	12	2
STAGE	12	12	2
FINAL EXAMINATION	9	9	2
TOTAL ECTS CREDITS	180	180	

(*) English language lectures (level 0, 1, 2) are distributed over the two semesters.

(**) Students may choose between 'Combinatorial Optimization' and 'Numerical Analysis' for the Information Technology Curriculum, and 'Political Economy' and 'Commercial Law' for the Informatics and Management Curriculum

(***) Students may choose between available courses activated in the Academic Year.
For the Academic Year 2008-2009 refer to following section.

LEARNING ACTIVITIES AND WORKLOAD

Modules	Year	Semester	Lectures Hours		Individual Study Hours	ECTS credits
			Lessons	Exercise		
Computer Programming	I	I	24	18	108	6
Computer Programming - LAB	I	I	24	18	108	6
Mathematical Analysis	I	I	24	18	108	6
Discrete Mathematics	I	I	24	18	108	6
Computer Architecture	I	II	24	18	108	6
Computer Architecture - LAB	I	II	24	18	108	6
Mathematical Logics	I	II	24	18	108	6
Foundations of Computer Science	I	II	24	18	108	6
Physics	I	II	24	18	108	6
Private Law	I	II	24	18	108	6
English 0	I	I,II				2
English 1	I	I,II				3
English 2	I	I,II				4
Algorithms and Data Structures	II	I	24	18	108	6
Algorithms and Data Structures - LAB	II	I	24	18	108	6
Computer Networks	II	I	24	18	108	6
Economics	II	I	24	18	108	6
Probability and Mathematical Statistics	II	I	24	18	108	6
Operations Research	II	I	24	18	108	6
Operating Systems	II	II	24	18	108	6
Operating Systems - LAB	II	II	24	18	108	6
Databases	II	II	24	18	108	6
Databases - LAB	II	II	24	18	108	6
Programming Languages and Compilers	II	II	24	18	108	6
Software Engineering	III	I	24	18	108	6
Software Engineering - LAB	III	I	24	18	108	6
Combinatorial Optimization	III	I	24	18	108	6
Numerical Analysis	III	I	24	18	108	6
Economics	III	I	24	18	108	6
Economics and Management of the firm	III	I	24	18	108	6
Political Economy	III	I	24	18	108	6
Commercial Law	III	I	24	18	108	6
Student choice:						
Economics and Management		I	24	18	108	6
Laboratory of Computer Networks		I	24	18	108	6
Web Technologies		I	24	18	108	6
Discrete Events Systems Simulation		II	24	18	108	6
Network Policies and Security		II	24	18	108	6
Enterprise Statistics			36		89	5
Enterprise Strategies			24	18	108	6
e-Commerce		I	24	18	108	6
Computational Graphics		II	36		89	5
Systems of Automation		I	45	30	225	12
Information Technology Law		I	40		100	6
Law and Digital Economy		I	24	18	108	6
Mathematical Models for Enterprise Management		I	24	18	108	6
Codes and Cryptography		I	36		89	5
Enterprise Information Systems		I	45	30	225	12
Informatics 0		I	24	18	108	6
Informatics 1		I	24	18	108	6
Informatics 2		II	24	18	108	6
Introduction to Computer Science		II	20	15	90	6

QUALITY ASSURANCE

The first and the second cycle degrees in Computer Science of University of Camerino have obtained the two following quality assurances:

- GRIN (National Computer Scientists Group) Assurance on the study programmes, namely 'a level of quality of learning activities for a student who wants to take valuable studies in computer science'
- ISO 9001 Vision 2000 Quality Management Systems

DEGREE COORDINATOR

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HOW TO ENROL

Applications for enrolment should be addressed to the Rector and be written on official stamped paper and should be sent or delivered to the 'Area Accademica e Didattica dell'Università' between the 15th of July and the 31st of October of each Academic Year.