Neapolis University Pafos

Affordable Excellence!

Informatics
(BSc & MSc)

BSc in Applied Informatics

Programme description

The purpose of the Undergraduate Programme in Applied Informatics is to offer a curriculum for those aspiring to acquire the knowledge and skills to become experts in the field of Information and Communication Technologies (ICT) and for applying successfully these technologies in private and public sectors. It is the only Bachelor of Sciences in Applied Informatics in Cyprus concerned with the application of IT in Management, Economics, Finance and Business. The content of the Programme is designed to cover all the basics of Applied Informatics and prepare graduates for the increasingly complex technical and administrative responsibilities of ICT systems in the private and public sectors, local government, organizations and businesses. The core of the BSc in Applied Informatics emphasizes on both skills and knowledge required for the effective management and development of ICT infrastructure and resources, as well as on the broader academic, industrial and business environment in which ICT is deployed, developed and evaluated in practice.

The BSc in Applied Informatics is designed based on the latest recommendations given jointly by two leading international scientific organizations; the Association for Computing Machinery (ACM) and the IEEE Computer Society (CS), and it has been enriched with interdisciplinary courses in the areas of Management, Economics, Finance and Business.

Career prospects

The Programme provides graduates with the right skills to secure positions as Instructors, Developers, Analysts, Designers, Researchers, Manufacturers, Repairers and Managers of ICT systems in the private sector (a wide variety of companies, banks, health sector, private education at all levels) as well as the public and broader public sector (teachers of Informatics in Secondary Education and Information Officers) both in Cyprus and abroad. The graduates can of course choose to continue their studies to obtain a Master or a PhD degree.

Entry requirements

High school diploma

Duration: The duration of studies is four (4) years

Language: Greek / English

ECTS: 240

Programme Structure

The Bachelor in Applied Informatics aims to provide a broad knowledge on all key aspects of IT and interdisciplinary subjects through a carefully designed set of compulsory courses, together with a wide range of elective courses. In addition, the BSc in Applied Informatics offers students a choice to specialize through compulsory concentration courses and electives.

In particular, the Programme is divided into two 2-year cycles: the **basic cycle** and the **focused cycle**. The basic cycle includes the classic core courses of Informatics and interdisciplinary courses in Management, Economics and Entrepreneurship. The focused cycle is one that offers the student the opportunity to choose and obtain either a specialized knowledge in one or two areas or a horizontal view of the entire area of Applied Informatics.


The BSc in Applied Informatics offers four (4) specializations that relate to:

- *Operational Informatics*

- *Information Systems*

- *Software Development*

- *Computer Systems and Networks*

The first two specifications offered focus on ICT application development and the other two on the Software and Hardware ICT infrastructure required to run applications.

Gain advanced knowledge and skills through the creation of an individual profile according to your skills !
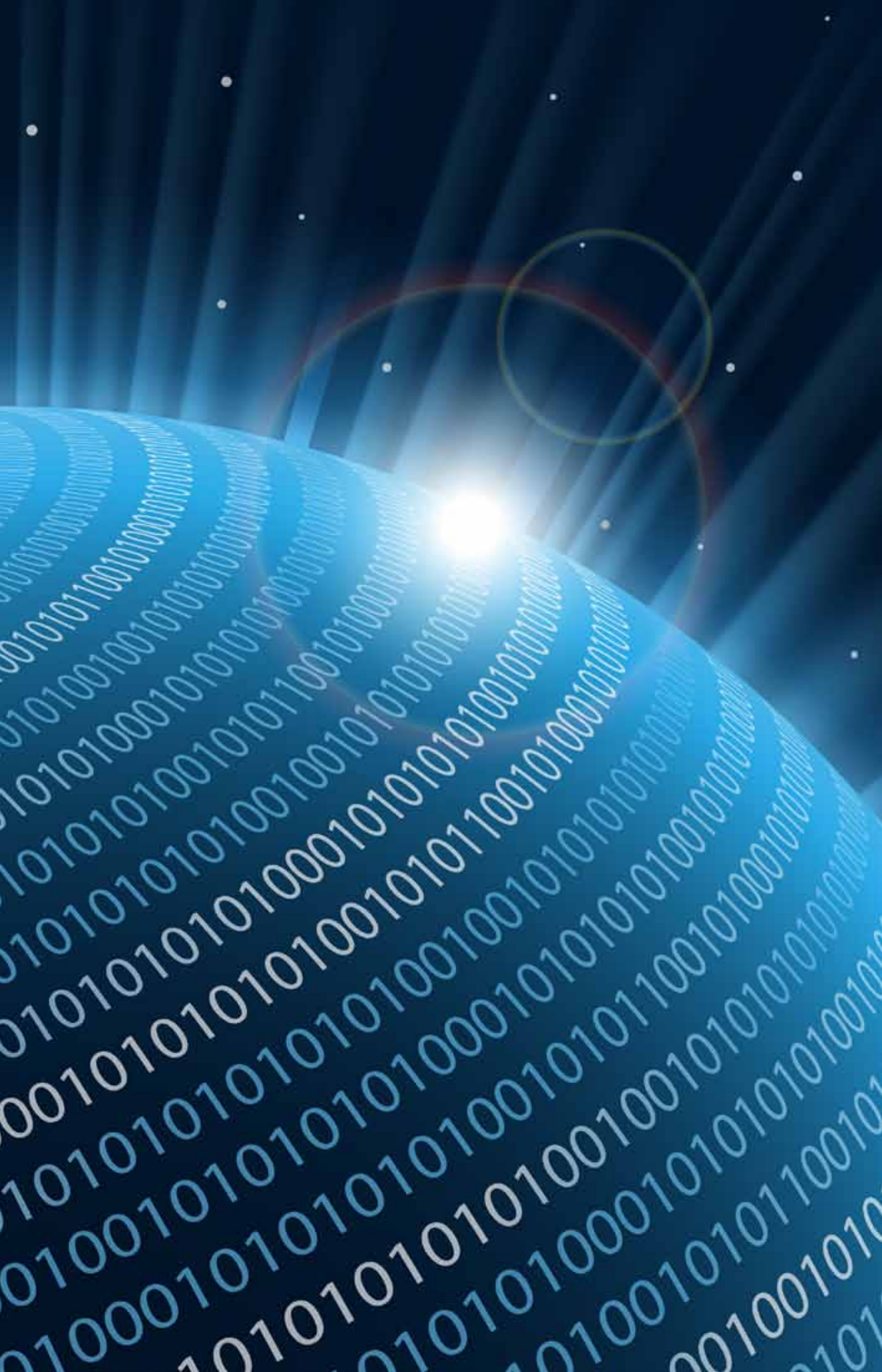
Code	Course title	ECTS
Year: 1 Semester : 1		
AIINTR	Introduction to Computer Science and networks	6.0
AIK01	Introduction to programming	7.0
AIK02	Linear Algebra	7.0
AIK03	Management Information Systems	6.0
ECON101	Introduction to Economics	4.0
		30.0
Year: 1 Semester : 2		
AIK04	Discrete mathematics	6.0
AIK05	Calculus	7.0
AIK06	Data Structures and Programming Techniques	7.0
AIK07	Computer Architecture I	6.0
BUSN100	Introduction to Business	4.0
		30.0
Year: 2 Semester : 3		
AIK08	Finance	7.0
AIK09	Probability and Statistics	6.0
AIK10	Object-oriented Programming	7.0
AIK11	Graphics I	6.0
PSYS100	Introduction to Psychology	4.0
		30.0
Year: 2 Semester : 4		
AIK12	Algorithms and Complexity	7.0
AIK13	Operations Research	6.0
AIK14	Design and usage of Data Bases	6.0
AIK15	Communication networks I	7.0
PEPS100	Language and Communication Skills	4.0
		30.0
Year: 3 Semester : 5 Orientation A		
AIK16	Operating Systems	6.0
AIK18	Numerical Analysis	6.0
AIK21	Analysis and Design of Information Systems	6.0
	Elective Courses	12.0
		30.0
Orientation B		
AIK16	Operating Systems	6.0
AIK19	Implementation of Database Systems	6.0
AIK20	Computer Architecture II	6.0
	Elective Courses	12.0
		30.0
Year: 3 Semester : 6 Orientation A		
AIK17	Software Engineering	6.0
AIK23	Macroeconomic Models and Policies	6.0
AIK24	Protection and Security of Information Systems	6.0
	Elective courses	12.0
		30.0
Orientation B		
AIK17	Software Engineering	6.0
AIK22	Artificial Intelligence	6.0
AIK24	Network Management	6.0
	Elective courses	12.0
		30.0
Year: 4 Semester : 7 Orientations A and B		
AIECP	Orientation A Project AIECP2 or AIECP4	8.0
AIECP	Orientation B Project AIECP1 or AIECP3	
	Elective courses	14.0
AITHE1	Thesis	8.0
		30.0
Year: 4 Semester : 8 Orientations A and B		
AITHE2	Thesis	8.0
	Elective courses	22.0
		30.0

Inspiring tommorow's knowledge!
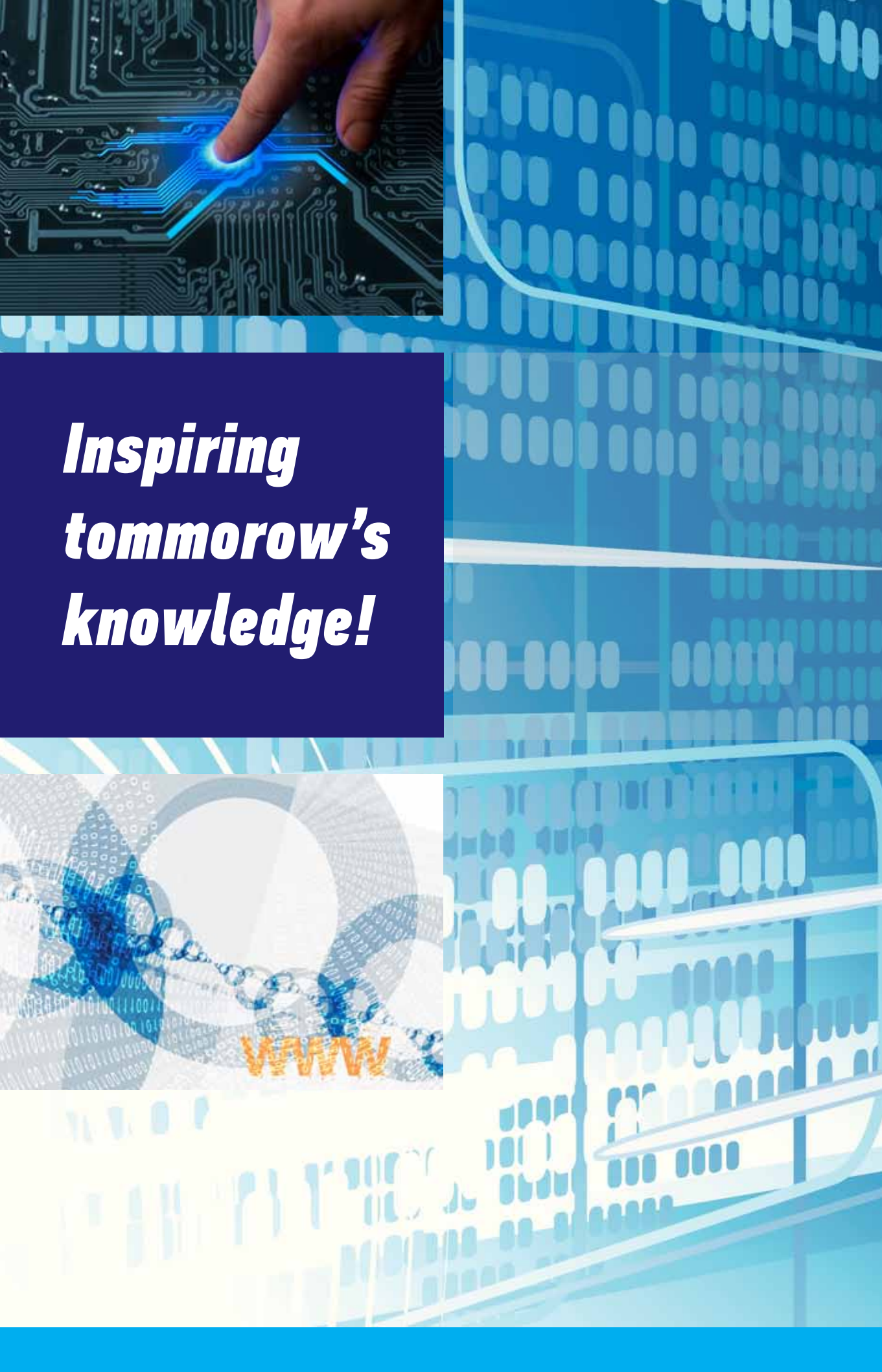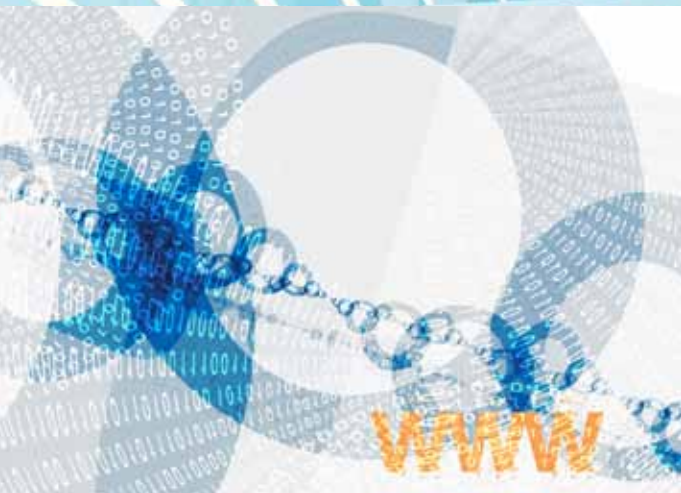
"Informatics is the intersection of people, information and technologies"

- David Penniman

MSc in Information Systems

Programme description

The MSc Programme in Information Systems is mainly addressed to those who aspire to become experts in the field of Information and Communication Technologies (ICT) by applying and developing these successfully in the private and public sectors. The Programme has a modular design in order to serve a multiplicity of needs and corresponding objectives, ranging from the promotion of pure scientific and technological knowledge in Information Systems (IS) and Information Technology (IT) to applying and promoting the IS and IT principles and technologies to other cognitive areas such as business, health, governance, economy, etc.

The Programme's objective is to provide advanced education to those aspiring to become effective leaders in the private and public sector. The ICT sector continues to be an important factor of growth and a key factor for other sectors of the economy. However, recent trends suggest that being simply specialized in hardware or software is no longer sufficient to monitor the fast-paced evolution of ICT. Therefore, while there are plenty of opportunities for professionals in the ICT sector, there is a further need of a fundamental shift in advanced computer skills focusing on the management of ICT and on the end-user.

Career prospects

The Programme provides graduates with the right skills to ensure senior positions as Analysts, Designers, Researchers, Instructors, Programmers and Managers of ICT systems in the private sector (a wide spectrum of companies, banks, health sector, private education at all levels), as well as in the public and broader public sectors (as teaching assistants at universities, teachers of Informatics in Secondary Education and Information Officers) both in Cyprus and abroad. Successful handling of IS safety problems, intelligent data mining of large data repositories and the development and support of e-government systems, which are considered to be the cornerstones in today's Information Society and the Web of Citizens, offer to the Programme's graduates extremely promising professional perspectives. Of course, the graduates of the Programme can choose to pursue further studies for a PhD degree.

Entry requirements

A Bachelor's degree or a qualification of an equivalent standard.

Duration: 2 years

Language: Greek / English

ECTS: 120

Our Vision the new Technologies!

Programme Structure

The Masters in Information Systems provides up-to-date knowledge in a variety of different sectors that make up the field of Information Systems. The core curriculum of each branch emphasizes both skills and knowledge required for the effective management, processing, data mining and data protection.

Depending on their undergraduate background and their professional experience in the area of ICT, students can acquire a specialization in the areas of IS safety, of the intelligent data management and the electronic services. Additional courses allow students to become familiar with state-of-the-art developments in the field of Information Systems, such as grid and cloud computing.

The Masters in Information Systems combines theory and practice and is designed to equip students with advanced knowledge required for the design, development, maintenance and management of IS. The training includes exposure to the latest technologies used in the development of IS, and core skills needed to cope with the rapidly changing nature of the field.

To this end, the Programme is broad-based and it covers a wide range of techniques and skills that an IS professional or user of IS is expected to possess. In particular, the Masters in Information Systems covers a variety of thematic areas, such as, on (a) Software Development and Infrastructure, (b) Electronic Services, (c) Intelligent Data Manipulation, (d) Security of Information Systems, and (e) Management Systems and Services. The structure of the Masters in Information Systems is such that it allows students, if they wish so, and depending on their background in ICT, to specialize in a sector of IS.
In particular, three (3) specializations are offered:

- **on Information Systems Security**
- **on Intelligent Data Manipulation**
- **on Electronic Services.**

These three specializations are of vital importance for the safe and efficient use of Information Systems in every area of their application.

The basic philosophy of the Programme is the empirical approach to the study, development and use of Information Systems, where new knowledge and skills are blended with the students experience and applied from the beginning to real-life settings. This approach broadens and deepens students' understanding of the application of techniques and procedures of ICT. At the same time it enhances the skills of research, analysis, synthesis, creativity while it also encourages innovation and alertness on the role of ICT in innovation.

Advanced IS Track	Applied IS Track	ECTS
Semester : 1		
Analysis and Design of Information Systems	Data Structures, Algorithms & Programming Principles	10.0
Advanced Web Technologies and Programming	Web Programming	10.0
IS Project Management	IS Project Management	10.0
		30.0
Semester : 2		
Data Mining	Intelligent Systems	10.0
Communication Networks	Communications and Computer Networks	10.0
Research Methods	Research Methods	10.0
		30.0
Semester : 3		
Elective11	Elective21	10.0
Elective12	Elective22	10.0
Thesis	Thesis	10.0
		30.0
Semester : 4		
Elective13	Elective23	10.0
Thesis	Thesis	20.0
		30.0

NEAPOLIS UNIVERSITY

SCHOOLS

- School of Economic Sciences & Business

- School of Architecture, Land & Environmental Sciences

- School of Health Sciences

- School of Law Sciences & Social Sciences

PhD PROGRAMMES AVAILABLE!

OTHER PROGRAMMES
- Informatics (BSc & MSc)
- Theology (MA)

ΑΝΑΓΝΩΡΙΣΜΕΝΟ ΑΠΟ ΤΟ
Δ.Ο.Α.Τ.Α.Π
ΚΑΙ
ΚΥ.Σ.Α.Τ.Σ

Contact details

ADDRESS
2 Danaes Avenue,
8042 Pafos
Cyprus

PHONE & FAX
T: +357 26843300
F: +357 26931944

EMAIL & WEB
info@nup.ac.cy
www.nup.ac.cy

www.facebook.com/NeapolisUniversity
www.youtube.com/user/nupaccy
www.twitter.com/nupac