



# [www.cut.ac.cy](http://www.cut.ac.cy)



## FRONT COVER

### Ktisis

The University Emblem depicts Ktisis, the spirit of creation holding a ruler that measured a roman foot. It derives from a 5<sup>th</sup> century B.C. mosaic in the House of Eustolios at the ancient city-kingdom of Kourion (Curium), situated at the Lemessos District.

Ktisis is carved on the Rector's Chain and is displayed on the University flag.



ISSN 1986-1192

# Contents

Forward by the President of the Interim Governing Board	2
General Information	4
Admission Procedure	6
Studies and Student Life	9
Research and International Cooperation	15
Language Centre	21
Library	27
<b>FACULTY OF APPLIED ARTS AND COMMUNICATION</b>	<b>33</b>
Department of Communication and Internet Studies	34
Department of Multimedia and Graphic Arts	43
<b>FACULTY OF ECONOMICS AND MANAGEMENT</b>	<b>51</b>
Department of Commerce, Finance and Shipping	52
Department of Hotel and Tourism Management	58
<b>FACULTY OF ENGINEERING AND TECHNOLOGY</b>	<b>65</b>
Department of Civil Engineering and Geomatics	66
Department of Electrical Engineering and Information Technology	74
Department of Mechanical Engineering and Materials Science and Engineering	81
<b>FACULTY OF GEOTECHNICAL SCIENCES AND ENVIRONMENTAL MANAGEMENT</b>	<b>89</b>
Department of Agricultural Sciences, Biotechnology and Food Science	90
Department of Environmental Management	101
<b>FACULTY OF HEALTH SCIENCES</b>	<b>107</b>
Department of Nursing	108
<b>APPENDICES</b>	<b>115</b>
Interim Govering Board	116
University Buildings	118
Telephone Directory	120



*The Cyprus University of Technology is gradually being established as a good state University. It ranks very high in our youth's priorities for their university studies and it is valued by society as a University of very high standards. The University honours the trust of its students, of society and the academic community by establishing conditions for academic and scientific excellence.*

*Everybody involved, that is, academics, students and administrative personnel, have the privilege to participate in the historic process of creating and establishing the Cyprus University of Technology. I invite all our students to give their best in terms of effort and talent, their good will and commitment in order to become first class scientists in their chosen field. Their success in their studies will contribute to the success of the University as an institution, which was conceived to contribute to making Cyprus stronger and wealthier. The University will do everything possible to ensure that studying here will be of the highest standards. We will also make everything possible in order to ensure that student life in this new academic community will be constructive and pleasant, both in and outside the lecture rooms and the laboratories, so that our students are comprehensively educated to become useful and active citizens.*

*This undergraduate prospectus presents the programme of studies for each department. These programmes have been designed by highly distinguished academics who have been invited, under the auspices of the Interim Governing Board, from the top Universities of Europe, Australia and the United States of America. The academics who have already been*

*appointed to each department have also contributed to the formulation of the programme. Thus, all of our programmes combine the wisdom and tradition of each science with the innovation and originality that is possible when a university programme is designed from the start. We trust, therefore, that our programmes of study in combination with their efforts will offer our students ways and methods for action and thought, knowledge and skills which will ensure that they can have a bright future both in Cyprus and anywhere else in the world. The programmes of study will of course expand and develop in the future as new academics join us.*

*It is important to stress that the University will mostly develop in the historic centre of Limassol. This decision aims to transform Limassol into a University City. We consider our students' contribution to this process as very instrumental. Moving around in the city, interacting with city life and participating in public events constitute activities that will gradually transform the historic city centre into an academic centre.*

*I wish our students every success in their studies. I also prompt them to experience their studies at the Cyprus University of Technology in a way that will beneficially influence the rest of their lives.*



Professor Anthony Constantinides  
President of the Interim Governing Board

## General Information

*The Cyprus University of Technology (CUT) was established by law in December 2003, and admitted its first students in September 2007. It is a new, public and independent University of an equal status to the University of Cyprus and consequently is sharing identical values concerning its academic character, legal status, organizational and administrative structure, its high quality levels for staff selection procedure and its relationship with the state.*

### Vision and Mission

The Cyprus University of Technology aspires to develop itself into a modern, pioneering University able to offer education and high level research in leading branches of science and technology which have high impact on the economic, technical, and scientific sectors.

With its orientation towards applied research, the University aspires to establish for itself a role in support of the state and society in their efforts to confront problems, which cover all areas of science and technology. The programmes of the CUT to a large extent complement scientific areas, which are not currently covered at Undergraduate and Postgraduate levels by the University of Cyprus or any other institution of higher education in the country.

### Main Objectives

The development of all departments is characterized by the following three objectives:

- To offer education to students of a high scientific, technological and professional level
- To produce high quality research that will transcend the traditional boundaries between basic and applied research, so that solutions may be offered to major problems of society and the economy. Simultaneously to allow Cyprus

to attain an important position as a partner in a modern, European setting and to secure significant external research funding

- To promote University cooperation with local industry and the economic sector in order to participate in the national effort to innovate and constantly improve products and services

### Management

The Cyprus University of Technology is currently administered by an Interim Governing Board (IGB), which is responsible for policy formulation, management and financial issues, as well as the CUT's property. The IGB acts as a Senate, which is the University's highest academic body. The Faculties and Departments are governed by advisory boards. The permanent governing bodies of the University will be formulated when the University is declared autonomous as foreseen by the relevant Law.

### Administrative Services

The University has set-up the following administrative services which are charged with providing the administrative support to the University Community:

- Library and Information Services
- Estate Management
- Research, International and Public Relations
- Finance and Human Resources
- Academic affairs and Student Welfare
- Information Systems and Technology

The administrative services are the executive branch which secures the necessary equipment, services and technological support needed.

Also, the administrative services carry out decisions made by the University Council and Senate (currently by the IGB).

### University Campus

With the exception of the Faculty of Health Sciences which is located within the Nicosia General Hospital complex, in Nicosia, the remaining four Faculties are located in the city centre of Lemessos (Limassol).

For the first phase of its operation, covering the period 2007-2013, the buildings of the University will be located within the old city centre. Old government buildings given to the University have been renovated but in order to cover the remaining needs other buildings in the vicinity have been rented and a number re-modified

in order to house laboratories, lecture rooms as well as offices. During the second phase (2014-2020) the University campus will expand to an area of approximately 50,000m<sup>2</sup>, within the city centre, about seven minutes walking distance from the old city centre.

The University Campus Master Plan envisages that until 2020 the number of students will steadily grow to 7000-8000, with 5-7 Faculties and 21-28 departments. The Master Plan development aims to satisfy all the needs of the University. Student hostels are currently being set-up within walking distance from both areas planned to house the University.

### Academic Staff

The academic staff is selected by electrical boards, which are made up of Cypriot and non-Cypriot academics from at least three different countries. The procedure of electing academic staff is continuing.

The minimum academic qualification for the academic staff is a Ph.D and the ability to teach and conduct research in a university environment. The academics who have already been elected have distinguished academic achievements and lecturing experience at Universities and higher educational institutions in Cyprus and abroad.

Teaching needs of the University are also covered through a system of visiting professors, special scientists, and special teaching personnel.

According to the University rules, independent lecturing of a class is assigned only to academics who hold a Ph.D degree.







**ADMISSION  
PROCEDURE**  
FOR UNDERGRADUATE  
STUDENTS

## Admission Procedure For Undergraduate Students

### Allocation of student places

The distribution of student places per Academic Department is conducted based on the procedures and criteria regulated by the Pancyprian Examinations Law. The ranking criteria are based on the results of the Pancyprian Examinations, which are annually organised by the Ministry of Education and Culture. During its first year of operation (2007-2008) the Cyprus University of Technology received, in its eight programmes of studies, approximately 400 undergraduate students (170 in the Department of Nursing and 30 students in each of the other Departments). During the following academic year, the total number of the students rose up to 900.

### Participation in the Pancyprian Examinations

Applications for participation in the Pancyprian Examinations and the declaration of the study programme preference are submitted in March of the previous academic year to the intended entry date. For further information interested candidates should apply to: Ministry of Education and Culture, Office of University and Tertiary Education ([www.moec.gov.cy/daae](http://www.moec.gov.cy/daae)).

### The right to compete and reserve a place

Applicants who attend all required classes which are stipulated by each academic Department, have the right

to complete for a place based on the Pancyprian Examinations guidelines.

For successful, male applicants, who secure a study place at CUT but cannot take it up due to National Guard conscription, their position is reserved so that the candidates may start their studies at CUT during the academic year following their discharge from the National Guard.

All applicants, who secure a place, including the National Guard conscripts, are obliged to submit their Pancyprian Examination results and the document of “acceptance of a place” by a certain date which is announced by the Ministry. An applicant who, for whatever reason, fails to submit the appropriate documentation is considered to have rejected the offered place.

### Registration

The final distribution of places is finalised once a student registers and begins classes. A student, who has not registered for any class, or cannot produce any evidence of grades, is deleted from the student register.

### Allocations of places outside the Pancyprian Examinations System

Eligible candidates who wish to secure a place of study outside the Pancyprian Examinations system are the following:

a) Cypriot citizens (up to 3%)

Based on the GCE examination results, or other equivalent examinations, or special exams which are organised by CUT:

- Cypriots (and non-Cypriots) who have a high school diploma from a private secondary education institution in Cyprus or equivalent, or from the English School of Nicosia.
- Cypriots who are permanent residents abroad, or are children of foreign service personnel of the Cypriot state.
- Turkish Cypriot graduates who have graduated from a 6th grade secondary education institution.

b) Greek citizens, EU citizens, and third country citizens (up to 15%)

- Based on the general grade of admittance from the Panhellenic Examinations, graduates from Greek secondary schools, including Cypriots who live permanently in Greece.
- Based on the general point average and the GCE results, or any other equivalent examination or special examination which is organised by CUT, graduates from secondary education institutions from EU member states (except from Cyprus and Greece) and other third countries.



### Available Places

Places which become available after the completion of the allocation of places based on the Pancyprian Examinations and prior to the beginning of classes, will be offered to other applicants.

- Applicants who have completed their military obligations (prior to the commencement of classes) can start their studies immediately.
- Applicants who have participated in the Pancyprian Examinations (in 2006 and afterwards) and were examined in subjects which meet the admission requirements for CUT's study programmes in which they would like to be admitted (based on the Pancyprian Examinations guidelines of the year that the students wish to start their study programme).
- Applicants who have a cumulative Grade (converted to a 20-point grade scale) of at least 50% of the highest grade and not lower than 90% of the grades achieved by the last enrolled applicant in the CUT study programme in which they wish to be admitted.

Interested persons must submit their application on a special form with the necessary supporting documents according to the detailed information which is posted by the CUT's study office.

Places, which remain open or will be created after the student's class registration, will be filled with a transfer procedure which comes into effect each March prior to the academic year.



## Studies and **Student Life**

### **System of Undergraduate Studies**

The academic year consists of two semesters, and the expected time for the completion of studies is eight semesters. In special cases, the duration of studies can be extended up to twelve semesters. The Programmes of Study of the Cyprus University of Technology are based on the European Credit Transfer and Accumulation System (ECTS). One credit represents 25-30 hours of student workload. The amount of student workload for an undergraduate programme of studies (four-years) is 6000-7200 hours. Attendance at the Cyprus University of Technology is obligatory and continuous.

For the acquisition of a degree, the completion of at least 240 credits is required, as determined by the relative detailed Programme of Studies. An undergraduate programme of studies can include up to five elective courses, from a field of the student's specialisation, which should be from different Faculties. The official languages of tuition are Greek and Turkish (the official languages of the Republic of Cyprus).

### **Foreign Languages**

All undergraduate programmes of study include two to three courses for learning a foreign language, which

are allocated corresponding ECTS credits. A student's performance in foreign language courses is recorded in the individual analytical transcript of grades, and count towards the final grade.

### **Tuition fees**

The tuition fees for undergraduate studies amount to €1,700 per semester for Cypriot and European Union citizens, which are paid by the Republic of Cyprus. Third Country student tuition fees are €3,400 per semester.

### **Postgraduate Studies**

All the available places for postgraduate study, at Masters and Doctorate levels, are publicly announced. The Cyprus University of Technology has already accepted students for postgraduate study at Doctoral level, and Masters courses are being prepared by all Departments. It is estimated that they will commence in the academic year 2009-2010. Postgraduate Studies are regulated by Rules for Postgraduate Study ([www.cut.ac.cy/studies](http://www.cut.ac.cy/studies)).

### **Academic Advisor**

An academic advisor is appointed for every student who offers guidance throughout the programme of study.



## Student Services

Students can contact the Service for Academic Affairs and Student Welfare, which is responsible for subject registrations, the issuing of certificates, accommodation, facilitating and development of student clubs, the provision of information for postgraduate studies, providing advisory guidance on issues of employment and professional prospects, etc.

### Accommodation

The Cyprus University of Technology, in its present phase, does not have fully organised University accommodation. However, a number of rented apartments are available. These are allocated with subsidised rents and for this reason the selection of students is based on socio-economic criteria.

#### a) Application procedure for apartments/rooms:

The applications for accommodation by first year students are submitted in July, after the announcement of the results of the Pancyprian Examinations, whereas for the rest of the students, during the first fortnight of March of the previous academic year. Applications by Greek, EU and third country students are submitted during the registration period.

#### b) Conditions and Selection Criteria for Tenants:

In order for a student to be included

in the process of selection as a tenant for the apartments/rooms that the SAASW (Service for Academic Affairs and Student Welfare) manages, he/she must meet the following conditions:

- Should be a student during the time of submission of the application.
- Must have submitted the accommodation application along with all the required testimonials within the given deadlines for submission of applications.
- The per capita annual gross income of the student's family must not exceed the amount of €12.000.

#### c) The evaluation of applications is based on the following criteria:

- The financial situation of the student's family.
- Socio-economic parameters.
- The distance of the student's family's permanent residence from the city of Limassol (or Nicosia, for students of the Faculty of Health Sciences)

Note: For students from abroad (e.g. Greece) a separate number of rooms is available depending on their percentage of the total number of students.

Details for the conditions, the criteria, and the selection procedure

are given in the Rules for Selection of Tenants (check [www.cut.ac.cy/studies](http://www.cut.ac.cy/studies)).

#### d) Management of the List of Residences /Apartments for Renting:

For students' convenience, the SAASW (Service for Academic Affairs and Student Welfare) prepares a list of residences/apartments available for renting. The list is distributed during the months of July-September and can be found on the web page [www.cut.ac.cy/studies](http://www.cut.ac.cy/studies).

Indicatively, the monthly rent for a studio/one bedroom apartment is around €250-300, for an apartment of two bedrooms around €350-450, while the rent for an apartment of three bedrooms is around €400-600.

The SAASW advises the students to give emphasis on issues of hygiene and safety of the buildings, before they sign any agreement. In any case, they can apply to the Service for guidance.

### Meals

Around the University there is a large number of private restaurants and cafe's, with which the University seeks to ensure discount prices for its students. At the same time, the University owns a café-restaurant and refreshment room – both in Limassol and in Nicosia - that offers subsidised prices.

### Students Financial Support

Students with serious financial problems can apply to the SAASW for guidance and help. Every year a number of students is financially supported by the students' Welfare Fund of the Cyprus University of Technology and by any other funds that may be secured. The applications are usually submitted during the last fortnight of September, following an announcement, which is placed on the notice board of the Student Services and Information Centre (SSIC).

### Scholarships/ Awards

The SAASW is responsible for the announcement of annual scholarships /awards that are offered, via the Service, by institutions, organisations, private individuals and others, especially to students of the University. Furthermore, various organisations offer scholarships directly to first year Cypriot students based on academic, financial or other criteria (e.g. place of origin). The Cyprus State Scholarship Foundation grants an annual scholarship of around €3,400 to a student from each Department of the Cyprus University of Technology based on the grades obtained at the Pancyprian Examinations.

Additionally, the Cypriot Government grants an annual scholarship of around €3,700 to a Greek student in each Department of the Cyprus University of Technology based on the grades of admission obtained at the Pan-Hellenic Examinations. Details about these scholarships are announced in the daily press and in the SAASW web page ([www.cut.ac/studies](http://www.cut.ac/studies)).

### Sports

The University offers a complete programme of athletic activities, that includes among others:

- Internal Championships
- Athletics
- Recreational Sports

- Sports and Community Service
- Events

Based on the students' programme of study, the various activities are adapted in such a way that the students have the opportunity to participate in their free time.

### Advisory and Psychological Support

The advisory and psychological support provided by the University aims at supporting and encouraging individuals that wish to have Advisory and Psychotherapeutic support and guidance. Some of the difficulties that students often face include low self-esteem, problems in their interpersonal relations, stress about grades, suicidal behaviour, confusion concerning important decisions, and others, that unavoidably influence their academic performance.

The first and foremost objective of the advisory services is to guide the students towards the development of self-confidence and the qualities needed in order to overcome difficulties and to reinforce them as individuals, so that they can succeed in their studies. Support is provided on personal and psychological issues that influence the student's educational performance and personal development.

### Support of students with Special Needs

Students with special needs have the same rights, participate equally in student activities, and they have to follow the same rules as all other students. The SAASW provides all possible help to students with special needs, so that equal access to University academic facilities is ensured. Every possible effort is made, so that practical solutions to student problems are given always in collaboration with other Services, Associations and Organisations. Great effort is also made for the improvement of access to the University premises and for the provision of support to problems of academic nature that they may face.

### Scholarships / Awards

The SAASW is responsible for the announcement of annual scholarships /awards that are offered, via the Service, by institutions, organisations, private individuals and others, especially to students of the University. Furthermore, various organisations offer scholarships directly to first year Cypriot students based on academic, financial or other criteria (e.g. place of origin). The Cyprus State Scholarship Foundation grants an annual scholarship of around €3,400 to a student from each Department of the Cyprus University of Technology based on the grades obtained at the Pancyprian Examinations.

Additionally, the Cypriot Government grants an annual scholarship of around €3,700 to a Greek student in each Department of the Cyprus University of Technology based on the grades of admission obtained at the Pan-Hellenic Examinations. Details about these scholarships are announced in the daily press and in the SAASW web page ([www.cut.ac/studies](http://www.cut.ac/studies)).

### Sports

The University offers a complete programme of athletic activities, that includes among others:

- Internal Championships
- Athletics
- Recreational Sports
- Sports and Community Service
- Events

Based on the students' programme of study, the various activities are adapted in such a way that the students have the opportunity to participate in their free time.

### Advisory and Psychological Support

The advisory and psychological support provided by the University aims at supporting and encouraging individuals that wish to have Advisory and Psychotherapeutic support and guidance. Some of the difficulties that students often face include low self-esteem, problems in their interpersonal relations, stress about grades, suicidal behaviour, confusion concerning important decisions, and others, that unavoidably influence their academic performance.

The first and foremost objective of the advisory services is to guide the students towards the development of self-confidence and the qualities needed in order to overcome difficulties and to reinforce them as individuals, so that they can succeed in their studies. Support is provided on personal and psychological issues that influence the student's educational performance and personal development.

### Support for students with Special Needs

Students with special needs have the same rights, participate equally in student activities, and they have to follow the same rules as all other students. The SAASW provides all possible help to students with

special needs, so that equal access to University academic facilities is ensured. Every possible effort is made, so that practical solutions to student problems are given always in collaboration with other Services, Associations and Organisations. Great effort is also made for the improvement of access to the University premises and for the provision of support to problems of academic nature that they may face.

### Medicare

All the students of the Cyprus University of Technology are entitled to medical care by the state hospitals and outpatient's departments, upon presenting their student ID issued by the Service for Academic Affairs and Student Welfare. A First Aid Centre operates in the central teaching facility in Limassol.

### Career

The SAASW provides students with information on possible professional prospects, and helps students to form a clear picture concerning their professional orientation. Furthermore, the SAASW advises students on how to succeed in a personal interview, it provides information on composing a Curriculum Vitae and an application for employment, and moreover, it contributes to a more effective presence of graduates on the Job market.



### Employment Opportunities

The students are informed about any temporary vacancies in the different services of the University (for which the University holds the responsibility of the selection procedure), as well as about opportunities for part-time employment outside the University. Information is also gathered with regard to the needs of enterprises and organisations regarding employment opportunities.

### Student Union (S.U. C.U.T)

According to the law of the Cyprus University of Technology, students are represented in all the bodies of administration, and, consequently, they take part in the decision-making procedure and participate actively in the management, operation, and development of the University. The Student Union of the Cyprus University of Technology functions according to statutes approved by the students.

Upon registration, each student pays a €17 subscription fee to the S.U. C.U.T. The operation of the Student Union is financially supported from the annual Budget of the University. Additionally, sponsoring of various events can be granted by organised institutions and state services, as the Youth Board of Cyprus, the Cultural Services of the Ministry of Education and Culture, etc.

### Student Clubs

Student clubs cover cultural, artistic and recreational activities, such as music, dance, journalism, theatre etc. Essential prerequisites for the establishment of student clubs are the presentation of statutes to the SAASW and the approval of aims and activities of the clubs from the University authorities. The approved clubs have access to post office boxes, announcement boards and electronic mail (e-mail). Each approved club is sponsored with a subsidy for Sponsoring Student Activities. Students that participate actively in clubs receive a Certificate of Attendance. These certificates contribute to strengthening the students' image on the job market and/or for applications for postgraduate studies.

### Student Services and Information Centre (SSIC)

The Student Services and Information Centre (SSIC) offers information on studies, student life, rules, and services that are provided to the students.

It provides the students with various informative publications, application forms for financial support and general printed material for their studies at the CUT. The Centre operates with administrative personnel and students that are employed during their studies, and it is situated on the ground floor of

the building at 16 Saripolou Street in Limassol.

Hours of service to the public: Daily from 8:00 a.m. - 2:00 p.m. and on Thursday afternoon from 2:30 p.m. - 5:30 p.m.

The Student Services and Information Centre issues:

- a) Certificates of registration/study for a particular semester
- b) Certificates of registration study per academic year
- c) Certificates of study (to claim the governmental student subsidy)
- d) Certification of expected graduation
- e) Transcript of grades

### MORE INFORMATION

For more information, apply to the Service for Academic Affairs and Student Welfare (SAASW).

### Student Services and Information Centre (SSIC)

16 Saripolou, behind the Limassol Town Hall, 3603 Limassol  
Tel: 25 002710/11, Fax 25 002760  
Es-mail: [studies@cut.ac.cy](mailto:studies@cut.ac.cy)  
<http://www.cut.ac.cy/studies>

**Office of Student Services in Nicosia**  
Faculty of Health Sciences/ Shakolio Educational Centre (New General Hospital), Nicosia  
Level -1, Tel: 22 001810/11  
E-mail: [studies@cut.ac.cy](mailto:studies@cut.ac.cy)



# **RESEARCH AND INTERNATIONAL COOPERATION**

---

## Research And International **Cooperation**

The Cyprus University of Technology aims at transferring knowledge (education) and producing new knowledge through basic and applied research.

Research at CUT is carried out in each different Department or between two or more Departments, under the responsibility of one or more members of the Academic staff.

University research activities are realised through funding secured from the following two major sources:

- a) From the University's state funded budget.
- b) From different organizations, entities or private

sources at national, European and international level who award, with or without a competition, specific research projects to research groups and/or individual members of the Academic staff.

Strengthening of the research management support and infrastructure, with the aim of securing externally funded projects, is another major objective of the University. Moreover, CUT has adopted the following principles in relation to Research, which conforms with the European Union's declarations relating to the creation of a European Research Area.



The University has adopted the following principles as regards the promotion of Research:

- Effective access and information support.
- Equal research opportunities to all members of Academic staff.
- Effective support of Research Activities.
- Promotion of competition, quality and support of research projects.
- Start-up funding for new members of the Academic staff for the setting-up of research infrastructure, mainly for the creation of research laboratories.

The Service for Research, International Collaboration and Public Relations (SRIPR) has the responsibility to offer administrative support to the research activities of the academic community. Furthermore, it offers managerial services for research projects funded by CUT. Finally, SPIPR provides expertise for research proposal writing, external funding, mainly by the European Commission as well as by other organizations.





## International Cooperation

The Cyprus University of Technology intends to become an attractive, regional educational institution for neighbouring countries. In addition, CUT was established having as its primary aim the development of international cooperation with academic and scientific institutions.

CUT aims in developing, organizing and maintaining effective international relations and networking having in mind the international scientific environment, in order to promote the following:

- Student and staff mobility as well as the development of international collaboration.
- Transnational university cooperation particularly focused on European educational and research programmes.

The international collaboration of the Cyprus University of Technology consists of the following programmes and activities:

- The Bologna process and the application of its provisions
- Bilateral Agreements and Collaborations with Universities and Organizations

- ERASMUS Exchange Programme
- Application of the ECTS (European Credit Transfer and Accumulation System) and Diploma Supplement
- ERASMUS MUNDUS
- Mediterranean Collaboration programmes
- Participation in University Networks
- Participation in European and International Organization Networks
- Collaboration in international Cultural protocols and programmes





# LANGUAGE CENTRE

---



## Language Centre

### Aim

The aim of the Language Centre is to develop into an exemplary Language Centre of Excellence, internationally recognised in the area of Learning and Teaching languages.

The primary mission of the Language Centre falls within the framework of the aims of the Council of Europe, which intends to promote linguistic diversity and language learning in the field of education. It is also related to the Language Education Policy Profile of Cyprus and the languages taught and used in Cyprus. Moreover, the mission of the Language Centre is also to assist students to satisfy the University's foreign language requirement.

It supports the teaching and learning of languages flexibly in accordance with the needs of its users; it uses Information and Communication Technologies (ICT) to underpin its operations, and its activities are informed by relevant research in second language (L2) acquisition and Educational Technology. The courses of the Cyprus University of Technology (CUT) in the five faculties are mainly taught in Standard Modern Greek, one of the two official languages of the Republic of Cyprus. However, taking the European Language Policy into consideration, the mission of the Language Centre includes foreign languages as an integral and required part of all students' studies. The aim is to broaden student language awareness and help them in their learning, in research, in exchange study programmes, in their future career, as well as in their personal and social life.

### Resources, facilities and Services

The Language Centre provides resources, facilities, and services for members of the University, the business and the general community who need foreign languages for their study, research, professional or personal interest. Resources range from materials to specialised learning and teaching equipment and facilities (Smart Multimedia Classrooms and Resources Centres) to materials development, support and consulting services. The Language Centre also provides leadership and technological expertise to support excellence in language learning, teaching, assessment and research at the Cyprus University of Technology. Moreover, the Language Centre offers language related services to the University and the general community, such as testing, translation and interpretation.





## Language courses offered

### English Language

English is compulsory and part of students' studies for at least 2 semesters for all students. Some courses require more than 2 semesters of compulsory English studies.

The CUT Language Centre offers the following English courses:

- 1) English for Academic Purposes, semester 1 (EAP) and
- 2) English for Specific Academic Purposes, semester 2 (ESAP), based on the students' fields of studies.

### EAP (English for Academic Purposes)

EAP is a 3 hour-course. Students entering EAP are expected to be approximately at B1 / B2 levels (Council of Europe's Common European Framework of Reference for Languages, 2001).

### ESAP (English for Specific Academic Purposes)

ESAP is 3 hour-course. Students entering ESAP are expected to have completed the EAP course. This course concentrates on teaching English in the specific area of studies of the students such as Nursing, Hotel and Tourism Management, Communication and Internet Studies, etc.

### ESAP (English for Specific Academic Purposes) at a more Advance Level

ESAP at a more advance level are 3 hour-courses. These courses continue to concentrate on Teaching English in the specific area of Studies of the students such as English for Business, Communication Studies, etc, however at a more advanced level.



### Other English Language Courses

The CUT Language Centre also aims to offer English to teaching faculty, administrative staff and members of the community (e.g. English for Medical staff, English for Business, English for Tourism, etc.)

### German Language

German is only compulsory and part of students' studies for Hotel and Tourism Management students for 2 semesters (Semester I and II), at introductory (CEF A1 and A2) levels.

### Other Languages

German and other languages will be gradually offered as electives to all students. Other languages may include Italian, French, Greek, Turkish, Arabic, Chinese and Russian at the following levels: first at Beginner and Elementary, and then at Lower Intermediate and Intermediate levels.

These languages will be gradually offered to faculty, staff, businesses, and the community as needs arise (e.g. Greek as a foreign language, for exchange student programmes such as Erasmus, Greek for specific professionals, Russian for Business Purposes, French for cooks, etc.)

### Other Programmes and Services

The CUT Language Centre will also provide additional language services such as:

- Teacher-training programmes (for both instructors at the Centre as well as interested language teachers from other institutions such as other Language Centres, afternoon language schools – tutorials, public and private schools)
- Testing programmes:
  - (a) The preparation and running of examinations for new CUT administrative staff.
  - (b) Exam preparation services to government and private bodies
  - (c) The provision of translating and interpreting services within and outside the university
  - (d) The provision of linguistic editing of manuscripts.







# LIBRARY AND INFORMATION SERVICES

---





## Library and Information Services

The mission of the Cyprus University of Technology Library (CUT Library) is to serve and support the members of the university community (faculty members, students, researchers and administrative staff) in their scientific research and educational endeavor.

The Library participates towards the University's vision which aims to offer high quality academic research and teaching in popular scientific fields by:

- Providing access to information and recorded knowledge
- Acquiring, organising and making available information resources appropriate to the University's educational and research purposes
- Developing research and information skills to all Library users as the basis for life-long learning.

The Library is cooperating with the other academic foundations and libraries of Cyprus in a national effort to record its national heritage and culture, as well as other scientific, art and cultural output.

The collections of the CUT Library are currently hosting 9500 books. They also consist of journals (in print and electronic form) and audio-visual material (videos, CD-ROMs, electronic sources of information, software etc.) which is constantly being updated. Other publications are also available to users, such as foreign language dictionaries, scientific dictionaries, encyclopedias,

manuals, government publications and doctoral theses.

### Digital Library & Electronic Services

The CUT Library provides, through its website [www.cut.ac.cy/library](http://www.cut.ac.cy/library), information and useful guidelines to its services, as well as instant access to electronic sources of information (electronic catalogues, electronic journals, electronic books and online databases).

### Online Public Access Catalogue

The collections of the Central Library, the Library of Health Sciences, the Library of the Nicosia General Hospital and the Limassol Municipal Library are accessible through the Library electronic access Catalogue. The user-member of the Library logs in the Online Public Access Catalogue (OPAC) and obtains access to personal information (borrowed books, current reservations, commitments, fines, etc).

### Electronic Journals

The CUT Library provides its users with online access to approximately 25000 electronic journals on a variety of cognitive subjects. This is achieved due to the Library's participation in the Hellenic Academic Libraries Link (HEAL-Link) and the Cyprus Academic Libraries Link (CALCo).

**Databases**

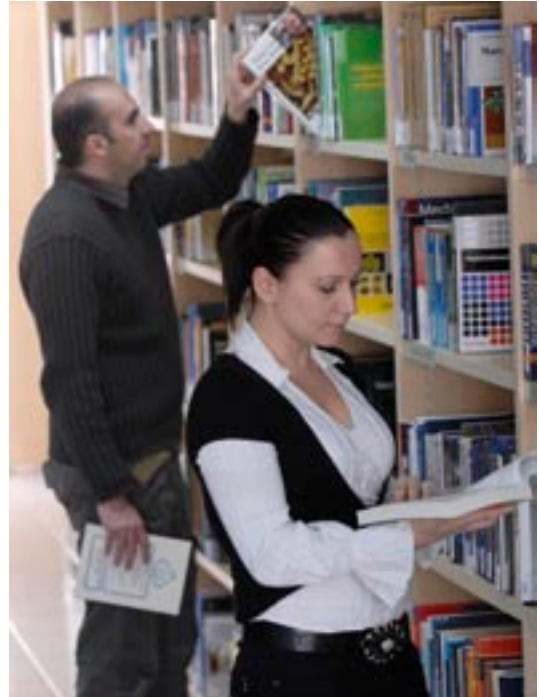
The Library also provides access to 56 bibliographic and full-text databases thus increasing access capacity to information material.

**Electronic Books**

The CUT Library continuously enriches its collection of electronic sources and offers its users access to a great number of titles of electronic books in cooperation with other academic libraries within the Heal-Link framework, as well as from its own resources.

The electronic books collection has been enriched with about 11000 new titles from the Springer 2005, 2006 and 2007 publications and 888 titles from the Referex eBook Engineering Collection (Elsevier).

The NetLibrary offers access to the full text of electronic books (eBooks), electronic journals (eJournals) and electronic audio books (eAudiobooks) which belong to the collection of the Cyprus University of Technology Library, as well as open access to 3400 titles of books (publicly – accessible eBooks). It also allows simultaneous searching on thousands of books regardless of the users location, assuming that the user has a personal log in account.



### 360 Search

Through the 360 Search the Library offers the possibility of searching simultaneously different sources and displaying the results in a common catalogue. From these search results access to the abstract or the full-text of an article is available.

### A-to-Z

This is a single catalogue which lists all the electronic journals of the Library alphabetically. "A-to-Z" makes it possible to search and access the available electronic journals and to retrieve the full text of their articles. Using the "A-to-Z" simplifies the search while any changes to the data (titles, links to the journals and coverage) of electronic journals of major publishing houses are updated on a daily basis. In addition, subject searching is offered for the majority of the journals.

### Accessing the Material

All electronic sources of information are accessible from any computer within the University network through the Cyprus University of Technology Library webpage.

### RFID Technology

The Cyprus University of Technology Library is a pioneer amongst Greek and Cypriot Libraries, in adopting and implementing the Radio Frequency Identification (RFID) technology, offering upgraded borrowing services to its members by providing them with the possibility of automatic borrowing and return of its material. In addition, the RFID technology assists the Library to increase its efficiency by providing an inventory of materials and their exact location on the shelves.

### Central Library

The books are organized according to the subject categories of the Library of Congress Classification System. There is a reading room for the users where it is also possible to access all electronic sources of the digital library. Lending and photocopy services are available. In addition, a special section is dedicated to the daily Greek and foreign press as well as accompanying journal publications.



### Library of the Health Sciences

The Library of the Health Sciences Faculty is located at the Shakolion Educational Health Centre within the complex of the New Nicosia General Hospital. The Library of the Nicosia General Hospital is also hosted at the same building. The Collection of the Health Sciences Faculty is comprises approximately 4000 books and is categorized in accordance with the Library of Congress classification system. The General Hospital's collection consists of approximately 3000 books, journals in print form and subscriptions to databases.

### Library Card

In order to use the Library's services a Library Card is necessary. The card can be issued online or on location at the Circulation and Helpdesk Department.

### Self Check-In/ Check-Out

The Cyprus University of Technology Library due to the implementation of RFID technology enables the user to self-borrow a without involving the Librarian.

### Inter Library Loan

The Inter Library Loan department offers to its users the possibility of ordering bibliography (articles, books, conference proceedings, reports etc.) that is not available from the University Library, from other libraries in Cyprus or abroad. The use of this service is limited to ordering bibliography that is exclusively restricted to the personal educational or research activities of the users.

### Information, Education and Support of Users

The Circulation and Helpdesk Department of the University Library organizes presentations and tours of the Library, as well as educational seminars on the use of its various electronic and other services. The Library offers printed information material and guidelines concerning its collections and services to its users.

### Users and Members of the Library

Users of the Libraries of the Cyprus University of Technology are considered those who use the Libraries for educational and research purposes. Library Members are those who are allowed to borrow library material. They are either internal or external members.

#### Internal Members are considered:

- a) the Teaching and Research members of staff, Special Academic staff, Visiting professors of the CUT,
- b) the undergraduate students of the CUT,
- c) the postgraduate students of the CUT,
- d) the doctoral students of the CUT,
- e) students attending various upgrade programmes
- f) the specialized scientific collaborators and the guest researchers of the CUT,
- g) the administrative staff of the CUT,
- h) students of mobility programmes (e.g. ERASMUS),
- i) the medical and paramedical staff of the Nicosia General Hospital.

#### External Members are considered:

Persons who are not included in any of the aforementioned groups and wish to become external members of the Library can do so by submitting an application. They can acquire the special membership card upon approval by the Head of Library. The external members must pay an annual subscription fee.







# FACULTY OF APPLIED ARTS AND COMMUNICATION

Department of Communication and Internet Studies	<b>34</b>
--	-----------

---

Department of Multimedia and Graphic Arts	<b>43</b>
---	-----------

---



## Department of Communication and Internet Studies

### Overview

The Department of Communication and Internet Studies (CIS) aims to promote scholarship and applied research in the fields of Communication, Mass Media and the Internet. Its curriculum as well as its research orientation focuses on the relationship between new communication technologies and societal activity at local, European, and international level; the programme of study at undergraduate, post-graduate, and professional level has been designed to reflect this emphasis. The ultimate goal of the CIS department is to foster scholarship on how social activity shapes and is shaped by new technologies, and how this interaction impacts on such crucial aspects of society as the economy, politics, education, and culture.

The Department offers a BA in Communication and Internet Studies, the first degree of its kind offered at university level in Cyprus. Courses in the first two years have been designed to provide background knowledge about Internet technologies, media studies and the societal impact of technology. After successful completion of the first two foundation years, students can select one of the following specializations: a) Communication Technologies, b) Information Management, and c) Information Society. Upon completion of the programme, graduates will have acquired the knowledge and skills necessary to pursue advanced university degrees or to be employed in information-intensive professions, such as information technology managerial positions, advertising, public relations and campaigning, film and television production, web-design, mass communications, and journalism.

### Mission

- To create a centre of excellence focused on teaching, research and professional practice.
- To develop and enhance the study of established and

emerging communication modalities.

- To contribute to the cultural and economic development of the local society.
- To enable graduates to develop capabilities and skills to meet the challenges of the Information Society.
- To foster an environment for critical inquiry and positive contributions to society.

### Programme Goals

The goals of the Department are to:

- Establish itself as a regional research centre on interdisciplinary topics relating to the social and technological dimensions of emerging mechanisms for communication.
- Expand local capacity to engage in research on the topics of new information and communication technologies and society.
- Contribute to public dialogue concerning cutting-edge communication modes and human interaction.
- Bridge the gap between the demand for information professionals and the competencies of the local work force.
- Stimulate critical thinking and reflection on the nature of communication

To achieve these goals, the Department seeks to:

- a) Attract highly qualified students, researchers and faculty.
- b) Actively engage in rigorous, interdisciplinary, and applied research which seeks to understand how human activity shapes and is shaped by new means of communication.



- c) Offer high quality education, at undergraduate and graduate level, linked, where appropriate, to related field experience
- d) Provide the necessary experiences to its graduates so that they can develop an informed stance on the new information and communication environment and so contribute to their societies
- e) Actively pursue, create, and sustain links with other departments and organizations with similar interests, both locally and internationally
- f) Contribute to policy making on new communication technologies, at the local and international levels
- g) Cultivate the development of life-long learning

The graduates of the Department of Communication and Internet Studies should acquire the appropriate knowledge basis and expertise to:

- Engage in strategic and operational planning of communication-related professions
- Effectively use communication media to locate and convey information
- Master oral and written presentation and communication skills
- Critically assess the consequences of established and emerging communication technologies on their professional and personal lives, at local and international level
- Become creative and contributing team members, fostering knowledge building, innovation, and mutual understanding
- Find careers in information and communication related fields

- Pursue advanced research degrees in related fields
- Be life-long learners

### Programme Guide

During the 4-year BA in Communication and Internet Studies degree, students will have the opportunity to take a combination of compulsory core courses and electives. At the end of their second year, students will be able to select one of three areas of specialization: 'Communication Technologies', 'Information Management', and 'Information Society'. Each specialization is supported by courses that seek to familiarize students with social sciences' methodology and enhance their research skills; furthermore, the courses will offer students distinctive and particular sets of transferable skills. In their fourth year, as part of their senior thesis, students will have the opportunity to conduct research under supervision by CIS faculty.





**The three broad areas in the first two years carry equal weight.  
The key concepts to be covered in each of the areas are as follows:**

Communication Technologies	Information Management	Information Society
A	B	C
The communication technology environment: economic factors and dimensions, computing, software, protocols, internet, and telecoms, techniques and methodologies for digitization and preservation of cultural heritage. Students will also gain practical production experience through web design, podcasts and blogging as well as media content creation.	Organization of information, human technology interfaces. Database management, information business, security, government regulation, knowledge and content management (e.g. searching online databases). Privacy & ethics and the law. Intellectual property, commodification and piracy. EU communication policy.	Globalization. Post industrialism. The e-Economy. Occupational change. The network society. History of the media. Media analysis and social change. Social theory and theorists. Information society issues, culture and technology, politics and the Internet. Cyprus and the Mediterranean, in a globalizing media world.
These courses emphasize practical issues of design and use of modern communication technologies	These courses have management emphasis	These courses also have more theoretical emphasis, but are policy relevant

**BACHELOR DEGREE IN COMMUNICATION AND INTERNET STUDIES****FIRST YEAR**

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>CIS 130</b>	Introduction to Communication Studies	5	<b>CIS 135</b>	Introduction to Computer Applications	5
<b>CIS 131</b>	Introduction to Social Science	5	<b>CIS 136</b>	Introduction to Social Psychology	5
<b>CIS 132</b>	Communication Technology Environment: Development and current Characteristics	5	<b>CIS 137</b>	Modern & Contemporary European History	5
<b>CIS 133</b>	Introduction to Social Science Research Methods	5	<b>CIS 100</b>	Content Creation I	5
<b>CIS 134</b>	Introduction to Internet Technologies	6	<b>CIS 110</b>	European and International Media Landscape	6
<b>ENG 122</b>	English for Academic Purposes	4	<b>ENG 170</b>	English for Communication Studies I	4
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

**SECOND YEAR**

3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CIS 230</b>	Communication Research Methods I: Quantitative Analysis	5	<b>CIS 231</b>	Communication Research Methods II: Qualitative Analysis	5
<b>CIS 200</b>	Content Creation II	6	<b>MGA 110</b>	Introduction to Multimedia and Cross Media	6
<b>CIS 221</b>	Introduction to the Information Society	5	<b>CIS 232</b>	Research in and through the Internet	5
<b>CIS 210</b>	Communications Policy: The role of the State and the Market	5	<b>CIS 222</b>	Cypriot and Mediterranean Media Landscape	5
<b>CIS 220</b>	Media Theory	5	<b>CIS 211</b>	Communication Ethics and the Law	5
<b>ENG 220</b>	English for Communication Studies II	4	<b>ENG 270</b>	English for Communication Studies III	4
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>



**Branching Phase**

To progress from Year 2 to Year 3, students must secure the 60 credits of Year 2. To progress to their preferred specialization in Year 3, students must obtain a certain level of grades (as set by the department) in the courses taken in that area of specialization during semesters 2 & 3 and 4.

All CIS courses are coded using a combination of letters and numbers, depending on the direction. The first three letters signify the Department, whereas the numbers can be read as follows: Code x0x= Information Technology courses, code x1x= Information Management courses, code x2x=Information Society courses. The complete coding system for all the courses offered by the Department is explained in the memorandum below.

**Structure**

Each direction requires that the student takes two compulsory courses in semesters 5 & 6, one in semester 7, and a focused dissertation for this direction in semester 8.

Progression through the curriculum depends on the availability of courses. The programmes are set each year according to the educational needs and the topical nature of projects.

**MEMORANDUM**

<b>Three digit code XXX:</b>	<b>First digit</b>	=	Year
	<b>Second digit</b>	=	Category
	<b>Third digit</b>	=	Serial Number

**COURSES BY CATEGORY:**

<b>Code x0x</b>	=	<b>Communication Technology Courses</b>
<b>Code x1x</b>	=	<b>Information Management Courses</b>
<b>Code x2x</b>	=	<b>Information Society Courses</b>
<b>Code x3x</b>	=	<b>Common courses in two or three directions</b>
<b>Code x4x</b>	=	<b>Internship</b>
<b>Code x5x</b>	=	<b>Final Year Project (Preparation and Composition)</b>

**DEPARTMENT CODES**

<b>CIS</b>	=	<b>Communication and Internet Studies</b>
<b>MGA</b>	=	<b>Multimedia and Graphic Arts</b>
<b>EET</b>	=	<b>Electrical Engineering and Information Technology</b>
<b>CFS</b>	=	<b>Commerce, Finance and Shipping</b>
<b>ENG</b>	=	<b>English Language, Language Centre</b>

**Elective Courses**

Compulsory elective courses and free electives can be taken from the list of electives of the Department of Multimedia and Graphic Arts. Free electives can be chosen from departments of other Faculties of the University. Compulsory courses of one direction will be available as electives for the other two directions.

**Internship**

Placement for the internship is integrated into the curriculum of the 7th semester, with the possibility of an extension over holiday period. The internship is compulsory for students who follow the Communication Technologies Direction, and it is elective for those who follow the other two directions.

**Thesis Research**

In their final year of studies, students will develop and conduct a research project (which may take a variety of forms) addressing a communication problem of academic and/or practical nature. The subject of the project will be selected in cooperation with a faculty member, who will be responsible for the thesis supervision.



**BACHELOR DEGREE IN COMMUNICATION AND INTERNET STUDIES**  
**DIRECTION: COMMUNICATION TECHNOLOGIES**

**THIRD YEAR**

5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CIS 300</b>	Introduction to Computer Programming	6	<b>CIS 302</b>	Content and Image Composition through Lens-based Media	6
<b>CIS 301</b>	Social Production for Music, Radio, T.V and the Internet	6	<b>CIS 136</b>	Programming for the Internet applications	6
	Elective (compulsory) *	6		Elective (compulsory) *	6
	Elective (compulsory)*	6		Elective (compulsory) *	6
	Elective (compulsory / free)*	6		Elective (compulsory / free) *	6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>
* See Tables 1 & 2					

**FOURTH YEAR**

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
CIS 450	Preparing for the Thesis	6	CIS 453	Thesis	25
CIS 440	Internship	6		Elective (compulsory) *	5
	Elective (compulsory) *	6			
	Elective (compulsory) *	6			
	Elective (compulsory) *	6			
TOTAL		30	TOTAL		30

\* See Tables 1 - 4



**BACHELOR DEGREE IN COMMUNICATION AND INTERNET STUDIES**  
**DIRECTION: INFORMATION MANAGEMENT**

**THIRD YEAR**

5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CIS 310</b>	EU Communications Policy	6	<b>CIS 311</b>	Organizational Communication	6
<b>MGA 240</b>	Human - computer Interaction	6	<b>CIS 312</b>	Information and Knowledge Management	6
	Elective (compulsory) *	6		Elective (compulsory) *	6
	Elective (compulsory)*	6		Elective (compulsory) *	6
	Elective (compulsory / free)*	6		Elective (compulsory / free) *	6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

\* See Tables 1 &amp; 2

**FOURTH YEAR**

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CIS 451</b>	Preparing for the Thesis	6	<b>CIS 454</b>	Thesis	25
<b>CIS 440</b>	Internship	6		Elective (compulsory) *	5
	Elective (compulsory) *	6			
	Elective (compulsory) *	6			
	Elective (compulsory) *	6			
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

\* See Tables 1 - 4



**BACHELOR DEGREE IN COMMUNICATION AND INTERNET STUDIES**  
**DIRECTION: INFORMATION SOCIETY**

**THIRD YEAR**

5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CIS 320</b>	Theories of Information Society	6	<b>CIS 321</b>	Identities and Emotions in the Cyberspace	6
<b>MGA 240</b>	Human - computer Interaction	6	<b>CIS 322</b>	Social Relations in the Cyberspace	6
	Elective (compulsory) *	6		Elective (compulsory) *	6
	Elective (compulsory)*	6		Elective (compulsory) *	6
	Elective (compulsory / free)*	6		Elective (compulsory / free) *	6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

\* See Tables 1 &amp; 2

**FOURTH YEAR**

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CIS 452</b>	Preparing for the Thesis	6	<b>CIS 455</b>	Thesis	25
	Elective (compulsory) *	6		Elective (compulsory) *	5
	Elective (compulsory) *	6			
	Elective (compulsory) *	6			
	Elective (compulsory) *	6			
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

\* See Tables 1 - 4

**LIST OF COMPULSORY ELECTIVE COURSES FOR THE 3<sup>rd</sup> YEAR**

<b>CIS 313</b>	Alternative Media	<b>CIS 320</b>	Theories of Information Society
<b>CIS 314</b>	Media and Digital Diplomacy	<b>CIS 323</b>	Intercultural Communication
<b>CIS 315</b>	On-line Marketing and Public Relations	<b>CIS 324</b>	Media and Globalization
<b>CIS 316</b>	News and on-line Journalism	<b>CIS 325</b>	Technology, Economy and E-Governance
<b>CIS 317</b>	Information Mining and Management	<b>CIS 326</b>	E-Government and E-Governance
<b>CIS 318</b>	Intellectual Property in the Age of Information	<b>MGA 102</b>	History and Fundamentals of Typography
<b>CIS 319</b>	Writing for Electronic Media		

**LIST OF FREE ELECTIVE COURSES FOR THE 3<sup>rd</sup> YEAR**

<b>CFS 402</b>	E-Commerce
----------------	------------

**LIST OF COMPULSORY ELECTIVE COURSES FOR THE 4<sup>th</sup> YEAR**

<b>CIS 400</b>	Screen-based Communication with Text	<b>CIS 423</b>	Technology, Culture and Society
<b>CIS 401</b>	Radio Production - Internet Radio	<b>CIS 424</b>	Comparing Media and Political Systems
<b>CIS 402</b>	Television Production and Programming	<b>CIS 425</b>	Conflict in the Information Age
<b>CIS 410</b>	Security and Accessibility in the Cyberspace	<b>CIS 430</b>	Digitization of Cultural Heritage
<b>CIS 411</b>	Information and Communication Technologies for Learning	<b>CIS 440</b>	Internship
<b>CIS 420</b>	Political Economy of the Internet	<b>MGA 210</b>	Photography I
<b>CIS 421</b>	Digital Politics	<b>MGA 441</b>	Virtual Reality
<b>CIS 422</b>	Cyber - Culture		

**LIST OF COMPULSORY ELECTIVE COURSES FOR THE 4<sup>th</sup> YEAR \***

Artificial Intelligence

Data Structures

Databases

\* The above courses will be offered by the Department of Electrical Engineering and Information Technology

For analytical description of each course, visit [www.cut.ac.cy](http://www.cut.ac.cy)





## Department of Multimedia and Graphic Arts

### Introduction

Significant technological developments of recent years have resulted in tremendous changes in communication processes and the dissemination of information. As a result, the use of Multimedia and Graphics has been established among the most efficient ways of disseminating information. The importance of Multimedia and Graphic Arts, in conjunction with the interdisciplinary training and knowledge that successful professionals need to be equipped with, has given rise to the need for the development of academic programmes that aim at providing the necessary scientific background to students who wish to establish a career in the areas of Multimedia and Graphic Arts or wish to carry out research in these disciplines.

Especially in Cyprus, where the wider sector of services contributes a significant percentage towards the total national income and provides a significant number of work places, the employment of high calibre scientists, with specialization in Multimedia and the Graphic Arts, is of essence.

The Department of Multimedia and Graphic Arts offers a high level Bachelor Degree, with specialisations in Multimedia and the Graphic Arts. The provision of such a degree will ensure that students, who wish to follow this programme of studies, will acquire the necessary academic training, which will enable them to embark successfully on either professional or research careers.

### Vision and aims of the department

Our vision is to establish the Department of Multimedia and Graphic Arts as a leading educational and research centre in the disciplines of Multimedia and the Graphic Arts.

Our aim is to develop and disseminate cross discipline academic values and knowledge that will provide the necessary background for successful professionals in the areas of Multimedia and the Graphic Arts.

More specifically, the aims of the Department are:

- To attract high calibre students and academics.
- To offer high quality undergraduate and postgraduate academic experience and professional development to both local and international students, including, European Union students.
- To undertake and complete high calibre research projects.
- Through research and teaching activities, to establish links with national and internationally established centres, which are active in the areas of Multimedia and the Graphic Arts.
- To offer students the most up-to-date academic training.
- To facilitate and encourage student and academic staff mobility, especially, in the European academic and research environment.
- To provide the foundations for the promotion of life-long education.



Multimedia and Graphic Arts graduates will acquire the necessary academic background that will enable them to:

- Design and manage projects that include the use of both conventional and digital Graphic Arts and of Multimedia, in general. Such projects will involve applications in different disciplines, such as, Education, Advertising, Marketing, the arts and information dissemination.
- Establish life-long relations and cooperation with industry representatives, for the mutual benefit of both parties.
- Be able to operate satisfactorily within both the local and the international environment, and to gain the ability to be aware of, absorb, and capitalise on the technological developments in the discipline.
- Be able to participate in and/or manage team projects.

### **Programme of Studies**

The programme of studies is designed to offer academic training in the specialisations of Multimedia and the Graphic Arts.

In the first two years of studies (four semesters), students obtain the necessary background for both specialisations, and at the same time, there is a limited selection of courses related to one of the two concentrations. During the third and fourth years of studies, students have the opportunity to select courses in the specialisation of their choice. During the last year, students will be given the chance to work in companies that are active in related disciplines. At the same time, students will have the chance to develop a major project, under the supervision of academic staff of the department.

The completion of a Bachelor Degree in Multimedia and Graphic Arts requires the accumulation of at least 240 ECTS.

The degree's Programme of Studies is presented, below, in Tables A, B, C, D and E.

Course descriptions are given in Table F.



**BACHELOR DEGREE IN MULTIMEDIA AND GRAPHIC ARTS****(4 YEARS - 240 ECTS)****TABLE A: DETAILED PROGRAMME OF STUDIES FOR YEARS ONE AND TWO****FIRST YEAR (ECTS = 60)**

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>MGA 100</b>	Fundamentals of Two-Dimensional Design	5	<b>MGA 101</b>	Fundamentals of Three Dimensional Design	5
<b>MGA 120</b>	Design Theory and Methodologies	5	<b>MGA 102</b>	Fundamentals and History of Typography	6
<b>MGA 130</b>	History of Art I	5	<b>MGA 110</b>	Introduction to Multimedia and Cross Media	6
<b>MGA 140</b>	Informatics I	5	<b>MGA 131</b>	History of Art II	5
<b>MGA 190</b>	Mathematics for Design	5	<b>MGA 141</b>	Informatics II	5
<b>ENG 122</b>	English for Academic Purposes	4	<b>ENG 171</b>	English for Multimedia & Graphic Arts	4
<b>TOTAL</b>		<b>29</b>	<b>TOTAL</b>		<b>31</b>

**SECOND YEAR (ECTS = 60)**

3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
<b>MGA 200</b>	Drawing, Colour, Composition	5	<b>MGA 202</b>	Image and Meaning	5
<b>MGA 201</b>	Contemporary Applications in Typography	5	<b>MGA 211</b>	Introduction to Animation	5
<b>MGA 210</b>	Photography I	5	<b>MGA 212</b>	Photography II	5
<b>MGA 220</b>	Systems Design	5	<b>MGA 221</b>	Design and Content Management	5
<b>MGA 230</b>	Modern and Contemporary Art and Theory	5	Concentration course (See Table B)		5
<b>MGA 240</b>	Human Computer Interaction	5	Major Elective (See Table C)		5
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

**TABLE B - CONCENTRATION COURSES (4<sup>th</sup> SEMESTER)**

<b>MULTIMEDIA CONCENTRATION</b>		<b>ECTS</b>
<b>MGA 241</b>	Computer Networking for Multimedia Applications	5
<b>GRAPHIC ARTS CONCENTRATION</b>		<b>ECTS</b>
<b>MGA 203</b>	Visual Communication	5

**TABLE C - MAJOR ELECTIVE COURSES (4<sup>th</sup> SEMESTER)**

		<b>ECTS</b>
<b>MGA 222</b>	History of Design	5
<b>MGA 232</b>	Art, Design and Technology	5
<b>MGA 242</b>	Multimedia Programming I	5
<b>CIS 100</b>	Content Creation I	5
<b>CIS 132</b>	Communication Technology Environment: Development and Current characteristics	5
<b>CIS 134</b>	Introduction to Internet Technologies	6
<b>CIS 211</b>	Media Ethics and Law	5
<b>CIS 221</b>	Introduction to the Information Society	5

**Note: Concentration Courses (Table B) may also be taken as Major Elective Courses**

**TABLE D: DETAILED PROGRAMME OF STUDIES FOR YEARS THREE AND FOUR****THIRD YEAR (ECTS = 60)**

5 <sup>th</sup> Semester					
Multimedia Concentration			Graphic Arts Concentration		
		ECTS			ECTS
<b>MGA 310</b>	3D Modelling and Animation I	6	<b>MGA 300</b>	Graphic Design and Production	6
<b>MGA 311</b>	Introduction to Sound for Music, Radio, TV and Internet Production	6	<b>MGA 301</b>	Illustration Applications	6
<b>MGA 312</b>	Digital Audio and Video	6	<b>MGA 302</b>	Editorial Design	6
<b>MGA 320</b>	Design for All	6	<b>MGA 310</b>	3D Modelling and Animation I	6
<b>MGA 340</b>	Multimedia Databases I	6	<b>MGA 320</b>	Design for All	6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

6 <sup>th</sup> Semester					
Multimedia Concentration			Graphic Arts Concentration		
		ECTS			ECTS
<b>MGA 313</b>	3D Modelling and Animation II	6	<b>MGA 303</b>	Graphic Design and Advertising	6
<b>MGA 314</b>	Multimedia Project Management	6	<b>MGA 321</b>	Design for Packaging	6
<b>MGA 341</b>	Advanced Web Design	6	<b>MGA 330</b>	Visual Culture	6
Major Elective Course (See Table E)		6	<b>MGA 341</b>	Advanced Web Design	6
Free Elective Course		6	Major Elective Course (See Table E)		6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>



**TABLE D: DETAILED PROGRAMME OF STUDIES FOR YEARS THREE AND FOUR****FOURTH YEAR (ECTS = 60)**

7 <sup>th</sup> Semester					
Multimedia Concentration			Graphic Arts Concentration		
		ECTS			ECTS
<b>MGA 410</b>	Multimedia Applications	6	<b>MGA 400</b>	Graphic Arts Applications	6
<b>MGA 450</b>	Industrial Placement	9	<b>MGA 450</b>	Industrial Placement	9
<b>MGA 460</b>	Research Methods in Multimedia and Graphic Arts (Including Proposal for Final Year Project)	6	<b>MGA 460</b>	Research Methods in Multimedia and Graphic Arts (Including Proposal for Final Year Project)	6
	Major Elective Course (See Table E)	6		Major Elective Course (See Table E)	6
	Free Elective Course	6		Free Elective Course	6
<b>TOTAL</b>		<b>33</b>	<b>TOTAL</b>		<b>33</b>

8 <sup>th</sup> Semester					
Multimedia Concentration			Graphic Arts Concentration		
		ECTS			ECTS
<b>MGA 461</b>	Final Year Project	15	<b>MGA 461</b>	Final Year Project	15
	Major Elective Course (See Table E)	6		Major Elective Course (See Table E)	6
	Free Elective Course	6		Free Elective Course	6
<b>TOTAL</b>		<b>27</b>	<b>TOTAL</b>		<b>27</b>

**TABLE E - INDICATIVE MAJOR ELECTIVE COURSES - YEARS THREE and FOUR**

		<b>ECTS</b>
<b>MGA 304</b>	Painting	6
<b>MGA 315</b>	Multimedia Data Visualizations	6
<b>MGA 322</b>	Product Design	6
<b>MGA 331</b>	History and Theory of Cinema	6
<b>MGA 332</b>	Philosophy of Art	6
<b>MGA 342</b>	Multimedia Databases II	6
<b>MGA 343</b>	Geographical Information Systems	6
<b>MGA 344</b>	Multimedia Programming II	6
<b>MGA 411</b>	Computer Games Development	6
<b>MGA 412</b>	3D Character Creation and Animation	6
<b>MGA 430</b>	Contemporary Art Theory and Criticism	6
<b>MGA 431</b>	Electronic Media and Visual Arts	6
<b>MGA 432</b>	Sociology of Art	6
<b>MGA 440</b>	Speech and Image Processing	6
<b>MGA 441</b>	Virtual Reality	6
<b>MGA 490</b>	Current Topics in Multimedia and Graphic Arts	6

**Note: Second Year MGA Major Electives may also be taken in Years Three and Four**

#### **MEMORANDUM**

Three digit code XXX:	First digit	=	Year
	Second digit	=	Thematic Area
	Third digit	=	Serial Number

#### **COURSES BY THEMATIC AREA:**

Code x0x	=	Graphic Arts Courses
Code x1x	=	Multimedia Courses
Code x2x	=	Design Courses
Code x3x	=	Art History and Theory Courses
Code x4x	=	Computer Science Courses
Code x5x	=	Industrial Placement
Code x6x	=	Senior / Final Year Project
Code x9x	=	Miscellaneous Courses
For analytical description of each course, visit <a href="http://www.cut.ac.cy">www.cut.ac.cy</a>		





# **FACULTY OF ECONOMICS AND MANAGEMENT**

Department of Commerce, Finance and Shipping	52
--	----

---

Department of Hotel and Tourism Management	58
--	----

---



## Department of Commerce, Finance and Shipping

### Introduction

At the start of the twenty-first century every economic system faces two challenges and, at the same time, opportunities: first, no matter how isolated, each economy is influenced by the forces of globalization and, second, the financial and shipping sectors have become key economic sectors, both domestically and globally. The Department of Commerce, Finance and Shipping (CFS) offers a programme of study that prepares students to address effectively these challenges and opportunities. The CFS programme of studies focuses on sectors that are at the heart of contemporary economic development and that are key to the economic health of any nation, especially that of Cyprus: commerce, finance and shipping. It offers students an in depth understanding of how these sectors operate within a modern economic system and the tools necessary for successful careers in business and industry.

During the first two years, the programme of study follows a core curriculum that equips students with a strong quantitative and analytical foundation. In the third and fourth year, students choose one of two specializations: finance or shipping. The choice of specialization provides students with a focus for their studies and the basis for a future career in the private or public sector, or as self-employed entrepreneurs.

In order to provide students with a well-rounded education that prepares them for employment, the CFS Department will establish close links with business, industry and government agencies, both locally and regionally. These links will provide the Department with feedback on the quality of its graduates. They will also offer opportunities for students to carry out their undergraduate thesis (during their final semester of studies) in an actual work environment by analysing real issues. In this way, students will be able to apply the

quantitative and analytical tools learned during their studies to tackle an applied problem and write a critical report on its various aspects.

The CFS Department will conduct a rigorous research programme that will promote both basic and applied knowledge. Students may be able to participate in such research work and have an opportunity to apply the knowledge gained in the classroom to applied research questions.

The solid theoretical foundation of the programme of studies will provide students with an undergraduate degree that will allow them to pursue successfully postgraduate studies, either in Cyprus or abroad. The CFS degree is especially well suited as preparation for enrolling in postgraduate programmes leading to a Masters of Business Administration (M.B.A.) degree or a Masters degree in any Business or Economics discipline.

### Department Mission

The Department is committed to offering world class education and to undertaking research of international excellence in the fields of commerce, finance and shipping. The Department seeks to develop strong links with the commerce, finance and shipping industries and to provide future leaders for these sectors.

The Department will pursue its mission along several directions. It aims to attract the highest quality of students to its undergraduate degree programme. It will offer a programme that combines theoretical rigour with applied problem solving. Emphasis in teaching will be placed on understanding and conducting effective decision making. Thus, graduates of the CFS department will have every opportunity to establish a successful career in their chosen field and will be well equipped to face future career challenges.

The Department is committed to attracting faculty of the highest calibre. The faculty will use the latest teaching techniques and will pursue research topics in both basic and applied research. In promoting its research agenda, the faculty will seek to establish links with well respected academic institutions, both domestically and internationally.

Finally, the Department will make every effort to establish mutually beneficial links with local business and industry. These will involve consultative work undertaken by Department members to address issues of concern to them, placing students in a work environment during their final semester of studies and addressing the needs of business and industry for well-trained graduates.

### Programme of Studies

The programme of studies is divided into two components. The first two years are common for all students and include courses providing the educational background for the latter two years. Courses during the first two years are divided amongst basic courses in commerce, finance and shipping, quantitative courses, general education courses and the study of a foreign language.

Specifically, during the first two years students take the following courses:

- **Basic courses in commerce, finance and shipping (60 ECTS)**  
Ten courses in economics, international economics, finance, shipping and commerce
- **Quantitative courses (24 ECTS)**  
Four courses in mathematical and statistical methods
- **General education courses (24 ECTS)**  
Four courses in accounting, information technology, business ethics and law
- **Foreign Language (14 ECTS)**  
Three courses in English for business

In years three and four of the programme, students choose to specialize in one of two directions: finance or shipping. Students are required to take advanced courses in their chosen specialization in order to deepen their understanding of their area of study. In addition, students choose from a list of elective courses to widen their education. Finally, during their last semester, each student must write an undergraduate thesis that can be carried out in conjunction with a placement in business or other work environment.

Specifically, during the last two years students take the following courses:

- **Advanced courses in the chosen specialization: finance or shipping (60 ECTS)**  
Ten courses in finance or shipping – five of these courses are common to both specializations
- **Elective courses (30 ECTS)**  
Electives are chosen from an approved list – at least two of the courses must be offered by the CFS Department and at least two must be offered outside the Department
- **Research skills in finance or shipping (6 ECTS)**  
One course that prepares students to conduct research in their chosen field
- **Undergraduate thesis (15 ECTS)**  
Undertaken during the final semester of studies
- **Internship (7-10 ECTS)**  
Undertaken during the final semester of studies

The following table shows in greater detail the requirements for the undergraduate degree in Commerce, Finance and Shipping.





### UNDERGRADUATE DEGREE: COMMERCE, FINANCE AND SHIPPING FINANCE AND SHIPPING SPECIALIZATION CORE CURRICULUM

#### FIRST YEAR

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>CFS 101</b>	Economics I	6	<b>CFS 102</b>	Economics II	6
<b>CFS 110</b>	Mathematical Methods I	6	<b>CFS 111</b>	Statistical Methods	6
<b>HTM 140</b>	Fundamentals of Accounting	6	<b>CFS 141</b>	Information Technology for Business	6
<b>ENG 122</b>	English for Academic Purposes	4	<b>ENG 191</b>	English for Commerce, Finance and Shipping	4
<b>HTM 201</b>	Business Ethics	6	<b>CFS 143</b>	Business Law	6
<b>TOTAL</b>		<b>28</b>	<b>TOTAL</b>		<b>28</b>

#### SECOND YEAR

3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CFS 221</b>	Finance I	6	<b>CFS 222</b>	Finance II	6
<b>CFS 201</b>	International Economics I	6	<b>CFS 202</b>	International Economics II	6
<b>CFS 231</b>	Shipping I	6	<b>CFS 232</b>	Shipping II	6
<b>CFS 210</b>	Mathematical Methods II	6	<b>CFS 211</b>	Statistical Methods II	6
<b>CFS 203</b>	Commerce I	6	<b>CFS 204</b>	Commerce II	6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>



## UNDERGRADUATE DEGREE: COMMERCE, FINANCE AND SHIPPING FINANCE SPECIALIZATION

### THIRD YEAR

5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CFS 310</b>	Quantitative Methods	6	<b>CFS 323</b>	Financial Risk Management	6
<b>CFS 320</b>	Corporate Finance	6	<b>CFS 311</b>	Business Forecasting	6
<b>CFS 330</b>	Shipping Finance	6	<b>CFS 325</b>	Investment Management	6
<b>CFS 322</b>	Asset Pricing	6	<b>CFS 324</b>	International Financial Markets	6
<b>CFS 321</b>	Banking	6	<b>CFS 312</b>	Financial Econometrics	6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

### FOURTH YEAR

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CFS 420</b>	Research Skills for Finance	6	<b>CFS 440</b>	Undergraduate Thesis	15
	Elective Courses (see list next page)	24	<b>CFS 441</b>	Internship	7-10
			<b>ENG 491</b>	English for Commerce and Finance	6
				Elective Course (see list next page)	6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>34</b>



## ELECTIVE COURSES

## FINANCE SPECIALIZATION

## FOURTH YEAR

At least two electives to be chosen from the following offered by the CFS Department		ECTS	At least two electives to be chosen from the following offered outside the CFS Department		ECTS
<b>CFS 331</b>	International Commodity Trade	6	<b>ABF 200</b>	Ecology and Environmental Management	4
<b>CFS 332</b>	Marine Insurance	6	<b>ABF 413</b>	Sustainable Agriculture	4
<b>CFS 423</b>	Commodity Risk Management	6	<b>HTM 361</b>	Consumer Behavior	6
<b>CFS 431</b>	Logistics and Distribution	6	<b>HTM 350</b>	Human Resources Management	6
<b>CFS 402</b>	E-Commerce	6	<b>MGA 110</b>	Introduction to Multimedia	6
<b>CFS 421</b>	Financial Derivatives	6	<b>MGA 130</b>	History of Art	5
<b>CFS 425</b>	Financial Forecasting	6	<b>CIS 134</b>	Introduction to Internet Technologies	6
<b>CFS 424</b>	Financial Statement Analysis	6			
<b>CFS 403</b>	Games and Strategic Behavior	6			

## UNDERGRADUATE DEGREE: COMMERCE, FINANCE AND SHIPPING SHIPPING SPECIALIZATION

### THIRD YEAR

5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CFS 310</b>	Quantitative Methods	6	<b>CFS 323</b>	Financial Risk Management	6
<b>CFS 320</b>	Corporate Finance	6	<b>CFS 311</b>	Business Forecasting	6
<b>CFS 330</b>	Shipping Finance	6	<b>CFS 333</b>	Shipping Law	6
<b>CFS 331</b>	International Commodity Trade	6	<b>CFS 334</b>	Shipping Operations Management	6
<b>CFS 332</b>	Marine Insurance	6	<b>CFS 335</b>	Chartering	6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

### FOURTH YEAR

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CFS 430</b>	Research Skills for Shipping	6	<b>CFS 440</b>	Undergraduate Thesis	15
	Elective Courses (see list below)	24	<b>CFS 441</b>	Internship	7-10
			<b>ENG 492</b>	English for Shipping	6
				Elective Course (see list below)	6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>34</b>

## ELECTIVE COURSES

### SHIPPING SPECIALIZATION

#### FOURTH YEAR

At least two electives to be chosen from the following offered by the CFS Department		ECTS	At least two electives to be chosen from the following offered outside the CFS Department		ECTS
<b>CFS 322</b>	Asset Pricing	6	<b>ABF 200</b>	Ecology and Environmental Management	4
<b>CFS 321</b>	Banking	6	<b>ABF 413</b>	Sustainable Agriculture	4
<b>CFS 423</b>	Commodity Risk Management	6	<b>HTM 361</b>	Consumer Behavior	6
<b>CFS 431</b>	Logistics and Distribution	6	<b>HTM 350</b>	Human Resources Management	6
<b>CFS 402</b>	E-Commerce	6	<b>MGA 110</b>	Introduction to Multimedia	6
<b>CFS 421</b>	Financial Derivatives	6	<b>MGA 130</b>	History of Art	5
<b>CFS 425</b>	Financial Forecasting	6	<b>CIS 134</b>	Introduction to Internet Technologies	6
<b>CFS 424</b>	Financial Statement Analysis	6			
<b>CFS 403</b>	Games and Strategic Behavior	6			

For analytical description of each course, visit [www.cut.ac.cy](http://www.cut.ac.cy)

## Department of Hotel and Tourism Management

### Introduction

According to the World Tourism Organisation, in many countries, including Cyprus, the hospitality industry constitutes the main source of foreign exchange revenue and a primary contributor to the labour force. The same source predicts a rather prosperous future for the industry since more than 1.6 billion tourists will travel by the year 2020. In Cyprus, the hospitality industry contributes close to 13% of the country's GDP and provides employment to forty thousand employees. The hospitality industry comprises of lodging, food and beverage and travel establishments, as well as public and private organizations that pursue the sustainable development, promotion and administration of the country's tourism destinations.

Reflecting the latest developments and trends of the volatile hospitality industry, the Department offers, for the first time in Cyprus, an academic degree (BSc Level) in Hotel and Tourism Management. The Department strives to develop an ideal learning environment in which students will receive a pedagogically sound academic experience that adequately prepares them for a successful managerial-level career in the Hospitality and Tourism Industry.

### Vision and objectives

The Department envisions becoming an international centre of excellence for teaching and research in the area of Hotel and Tourism Management. Our objective is to develop, promote, and disseminate in a rational manner the scientific knowledge and values on which the hotel and tourism professions are based. At the same time the

Department aims to educate high calibre individuals, who are able to serve the hotel and tourism industry in particular, and Cypriot society and culture in general.

The primary objectives of the Department are:

- To attract, motivate and retain outstanding students, faculty and staff.
- To provide high quality undergraduate and postgraduate education and professional development to students from Cyprus and neighbouring countries, including the European Union countries, in Hotel and Tourism Management.
- To perform innovative applied research and consultancy that advance hotel and tourism management, repositioning and enhancing in this way the scientific field of Hotel and Tourism Management in Cyprus.
- Provide students with state-of-the-art industry-related knowledge, skills and experience.
- To establish a close association with the hotel and tourism community in Cyprus and abroad and provide an international centre of expertise in hotel and tourism management.
- To facilitate and extend international cooperation and student/faculty mobility, primarily in European Union countries.
- To provide possibilities and opportunities for life-long learning to professionals and practitioners from the tourism and hospitality industry.

Graduates of the Hotel and Tourism Management Department will gain proper scientific foundation that will enable them to:

- Develop strategic and operational plans, and to organize and control organizational resources in order to optimize customer expectations in the hotel and tourism environment.
- Effectively communicate and develop long-standing mutually beneficial relationships in coordination with the stakeholders.
- Design and implement innovative hotel and tourism experiences for a wide range of markets.
- Operate efficiently both at the national and global hospitality business environment.
- Motivate, lead and inspire people towards the achievement of organizational goals.
- Understand and address socioeconomic, cultural and environmental issues relevant with managing hotel and tourism operations.
- Develop a supportive organizational environment that fosters teamwork, loyalty, creativity and mutual understanding.

### **Programme Of Studies**

The programme provides a unique academic experience in Hotel and Tourism Management with two specializations: Hotel Management and Tourism Management. During the first two years of studies students acquire an overall knowledge of the operational aspects of the industry in order to select, in the third year, a specialization according to their interests and future career aspirations. In the last year of studies, students have the opportunity to undertake a major project related with their specialization path under the guidance and

supervision of faculty members of the Department.

For the successful completion of the Hotel and Tourism Management Degree, students must earn at least 240 ECTS.

#### **Degree Requirements:**

##### **• General Education in Business Administration (89 ECTS)**

Fifteen courses offered by the Department of Hotel and Tourism Management and the School of Management and Economics

##### **• Core Hospitality and Tourism Management Courses (67 ECTS)**

Thirteen Hotel and Tourism Management courses offered by the Department of Hotel and Tourism Management

##### **• English Language Courses (12 ECTS)**

Three English Language courses

##### **• Foreign Language Courses (12 ECTS)**

Two foreign language courses (Selection between French or German)

##### **• Major Project / Dissertation (12 ECTS)**

A major project related with the students' specialization.

##### **• Specialized Hotel and Tourism Courses (24 ECTS)**

Four specialized courses (According to chosen specialization path: (1) Hotel Management; (2) Tourism Management)

##### **• Restricted Elective Courses (12 ECTS)**

Two restricted elected courses offered by other University Departments.

##### **• Hotel and Tourism Management Internships (12 ECTS)**

Two summer 400-hour practical training experiences in the Hotel and Tourism industry.





Programme Curriculum - Hotel and Tourism Management					
BACHELOR OF SCIENCE (BSc) - HOTEL AND TOURISM MANAGEMENT					
FIRST YEAR (ECTS = 60)					
1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
HTM 100	Introduction to Hotel and Tourism Industry	6	HTM 111	Food and Beverage Management	5
HTM 130	Fundamentals of Tourism	6	HTM 110	Production and Service Operations	6
HTM 140	Fundamentals of Accounting	6	HTM 180	Statistics	6
GER 111	German Language I	6	GER 112	German Language II	6
ENG 122	English for Academic Purposes	4	ENG 190	English for Hotel & Tourism Management	4
TOTAL		28	TOTAL		27
HTM 190 SUMMER - Hotel and Tourism Management Internship I (400 Hours): 6 ECTS					
SECOND YEAR (ECTS = 60)					
3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
CFS 101	Economics I	6	CFS 102	Economics II	6
HTM 241	Cost Management	5	HTM 242	Managerial Accounting	6
HTM 201	Business Ethics	6	HTM 202	Business Law	6
HTM 220	Management of Hotel Operations	5	HTM 221	Yield Management	4
ENG 240	English for Business Communication	4	HTM 260	Introduction to Marketing	6
TOTAL		26	TOTAL		28
HTM 291 SUMMER - Hotel and Tourism Management Internship II (400 Hours): 6 ECTS					

**Programme Curriculum - Hotel and Tourism Management****BACHELOR OF SCIENCE (BSc) - HOTEL AND TOURISM MANAGEMENT****THIRD YEAR (ECTS = 60)**

5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
HTM 343	Financial Decision Making	6	HTM 381	Research Methods	6
HTM 350	Human Resources Management	6	HTM 370	E-Commerce in Tourism	6
HTM 361	Consumer Behaviour	6	HTM 351	Organizational Behaviour	6
HTM 322	Group Business Management	6	HTM 323	Hospitality Property Management	6
Hotel or Tourism Specialization Course		6	Hotel or Tourism Specialization Course		6
TOTAL		30	TOTAL		30
Summer: HTM 392 (Optional) Management Trainee (any hospitality division relevant to the student's specialization) 6 ECTS					

**FOURTH YEAR (ECTS = 60)**

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>HTM 482</b>	Project/Dissertation I	6	<b>HTM 483</b>	Project/Dissertation II	6
<b>HTM 453</b>	Hospitality Leadership	6	<b>HTM 426</b>	Corporate Strategy	6
<b>HTM 462</b>	Strategic Hospitality and Tourism Marketing	6	<b>HTM 471</b>	Information Technology in Hotels & Tourism	6
Hotel or Tourism Specialization Course		6	Hotel or Tourism Specialization Course		6
Restricted Elective Course		6	Restricted Elective Course		6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>
<b>TOTAL ECTS CREDITS 240</b>					

**HOTEL AND TOURISM MANAGEMENT SPECIALIZATION COURSES****THIRD AND FOURTH YEAR**

HOTEL MANAGEMENT			TOURISM MANAGEMENT		
Specialization Courses		ECTS	Specialization Courses		ECTS
<b>HTM 324</b>	Service Quality and TQM	6	<b>HTM 331</b>	Tourism Destination Management	6
<b>HTM 427</b>	Hotel Planning and Project Management	6	<b>HTM 332</b>	Tourism Policy and Planning	6
<b>HTM 325</b>	Entrepreneurship	6	<b>HTM 434</b>	Sustainable Tourism Development	6
<b>HTM 428</b>	Risk Management in the Hospitality Industry	6	<b>HTM 435</b>	Destination Marketing Communication Mix	6

**HOTEL AND TOURISM MANAGEMENT ELECTIVE COURSES****THIRD AND FOURTH YEAR**

<b>Elective Courses (Restricted)</b>		<b>ECTS</b>
<b>HTM 312</b>	Beverage Management	6
<b>HTM 436</b>	Sociology of Tourism	6
<b>HTM 333</b>	Cultural and Heritage Tourism	6
<b>HTM 352</b>	Employee Development in the Hospitality Industry	6
<b>HTM 409</b>	Special Topics in the Hotel and Tourism Industry	6
<b>HTM 392</b>	Management Training in the Hotel and Tourism Industry	6
<b>HTM 454</b>	Career Development	6
<b>HTM 412</b>	Hospitality Event Management	6
<b>CFS 311</b>	Business Forecasting	6
<b>CIS 210</b>	Communications Policy: The Role of the State and the Market	6
<b>CIS 134</b>	Introduction to Internet Technologies	6

For analytical description of each course, visit [www.cut.ac.cy](http://www.cut.ac.cy)





# FACULTY OF ENGINEERING AND TECHNOLOGY

Department of Civil Engineering & Geomatics	66
Department of Electrical Engineering and Information Technology	74
Department of Mechanical Engineering and Material Science and Engineering	81





## Department of Civil Engineering & Geomatics

### Introduction

The Department offers two specializations with respective curricula which are in accordance with the advances and needs of the 21st century.

- Civil Engineering
- Surveying Engineering & Geoinformatics Engineering

These specializations play an important role in identifying, categorizing, shaping, creating, expanding and maintaining our built environment in harmony with nature.

Civil Engineers are responsible for planning, design, construction, maintenance and removal of buildings, roads, bridges, ports, harbours, dams, offshore structures, airports, water distribution systems to name a few. The civil engineering profession offers a wide range of professional opportunities to graduates which spread across different disciplines and beyond national boundaries. Civil Engineers of today have the opportunity to apply their skills to projects ranging from small building construction to working within large multi-disciplinary teams to develop eco buildings or provide life cycle solutions for the development and maintenance of intelligent civil infrastructure systems and networks. Increasingly there are opportunities to interact with other disciplines and embrace new technologies which will enable civil engineers to develop more effective solutions and make a significant contribution to society.

Surveying and Geomatics Engineers are the experts who exploit complex acquisition, analysis, elaboration and interpretation techniques for qualitative and quantitative information derived from our three-dimensional geographic environment. They are also involved in the development of new measurement methods and techniques as well as in the investigation of inter-

relationships and variation processes of the acquired information in the application in hand. These applications range from topographic photogrammetric, hydrographic, geodetic and geophysical surveys, remote sensing and geographical information systems (GIS) to local and regional planning, environmental monitoring, archeology and coastal management to name a few.

Both fields of specialization incorporate the sub-fields of water resources management and transportation engineering focused on the planning, design, and operation of transportation projects.

The Civil Engineering & Geomatics Department of the Cyprus University of Technology aims to develop high level courses leading to undergraduate and post-graduate degree qualifications. The graduates will work within a dynamic and inspiring environment that will challenge them and enable them to develop the wide range of skills they need to make a positive and significant difference to the civil infrastructure and the quality of life.

### Vision and aims of the Department

The aim of our Department is to develop a dynamic, stimulating and challenging environment for teaching and research of the highest international standard offering our students the opportunity to develop a strong technical background, a clear appreciation of the practical significance of their subject area and strong personal and professional attributes that will enable them to make a significant contribution within their profession.

The Department aims to establish strong interactions with industry and government to give the students the opportunity to get involved in current civil engineering developments and work alongside the professionals through individual and team project work and professional training.



One of our goals is to establish strong links with other academic institutions from around the world and encourage exchange of students and visits of distinguished academics who can bring their specialist expertise to our department's undergraduate and postgraduate students.

Our teaching and research structure, while aiming to provide the students with a strong technical background in the core traditional areas of civil engineering and surveying engineering & geo-informatics, aims to remain sensitive and receptive to the current and future needs of society. The courses will be continuously evolving to meet future needs. The range of advanced specialist subject options offered by the department will provide the students the opportunity to cover from more modern subject areas such as offshore engineering and integrity and risk management of civil infrastructure, radiometry and microwave, geometric documentation of monuments, real estate valuations which are becoming increasingly more important.

### Programme Structure

The Department offers two specializations:

- Civil Engineering
- Surveying Engineering & Geoinformatics Engineering

The first year is common to both degrees. They are overlapping in subsequent years, while the specialization and the flexibility in electives increase in later years. The structure of the degree course is based on the credit accumulation mode of study and the prerequisites as well as choices of electives (free and technical) are monitored by respective student advisors. **Two hundred and forty five (245)**, with thesis, practical training and language requirements included, is required for the successful completion of a degree.

From the third year on, the students have the opportunity to diversify their specialization by choosing subjects from a number of technical modules of subjects. These modules cover state-of-the-art aspects of infrastructure engineering (INFRA), building technology (DOMO) and geomatics-geoinformatics (GEO).

The final year dissertation is an important part of the course in which students select an investigative project in an area of their interest. The research activities in the department will provide opportunities for the undergraduate students to get involved in research projects of current interest. This will also prepare our graduates who wish to join our postgraduate research programmes.

The degree programmes include a number of professional training periods during which the students work in industry or government departments to get first hand professional experience which students cannot obtain from lectures or laboratories. The industrial placements are arranged through the department to ensure that all students have exposure to a range of civil engineering applications. This learning experience will help the students develop a clearer appreciation of the practical use of scientific methods in engineering, enhance their interpersonal and management skills, develop an appropriate professional attitude and acquire a network of contacts. All of these are highly valued by future employers and will give the graduates a head start in the jobs market.

**CIVIL ENGINEERING PROGRAMME DEFINITION****DEGREE - CIVIL ENGINEERING****FIRST YEAR**

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>CIV 111</b>	Professional Studies and Skills I	2	<b>CIV 116</b>	Engineering Mechanics - Statics	5
<b>CIV 131</b>	Geodesy I	5	<b>CIV 132</b>	Geodesy II	5
<b>CIV 112</b>	Geology for Engineers	3	<b>CIV 117</b>	Mathematics II	5
<b>CIV 113</b>	Technical Drawing & Computer Aided Design (CAD)	5	<b>CIV 118</b>	Computer Programming for Engineers I	5
<b>CIV 114</b>	Physics I	6	<b>CIV 119</b>	Statics, Error Theory and Least Squares Method	5
<b>CIV 115</b>	Mathematics I	5	<b>CIV 181</b>	Integrated Design for Civil Engineers & Surveying and Geoinformatics Engineers I	2
<b>ENG 122</b>	English for Academic Purposes	4	<b>ENG 160</b>	English for Civil Engineering	4
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>31</b>

**SECOND YEAR**

3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CIV 221</b>	Construction Materials	5	<b>CIV 225</b>	Structural Analysis II	5
<b>CIV 211</b>	Mathematics III	5	<b>CIV 226</b>	Soil Mechanics	5
<b>CIV 222</b>	Strength of Materials	5	<b>CIV 227</b>	Highway Engineering I	5
<b>CIV 212</b>	Professional Studies and Skills II	2	<b>CIV 214</b>	Principles of Geoinformatics and Geographical Information Systems (GIS)	4
<b>CIV 223</b>	Structural Analysis I	5	<b>CIV 215</b>	Sustainability and Environmental Concepts	4
<b>CIV 224</b>	Hydraulics	5	<b>CIV 281</b>	Integrated Design for Civil Engineers & Surveying and Geoinformatics Engineers II	2
<b>CIV 213</b>	Computer Programming for Engineers II	5			
<b>TOTAL</b>		<b>32</b>	<b>TOTAL</b>		<b>25</b>

**Practical Training I: June to July (8 weeks) 4 ECTS**

**CIVIL ENGINEERING PROGRAMME DEFINITION****DEGREE - CIVIL ENGINEERING****THIRD YEAR**

5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CIV 321</b>	Reinforced Concrete Structures I	5	<b>CIV 313</b>	Construction Management	4
<b>CIV 311</b>	Environmental Impact Assessment	4	<b>CIV 325</b>	Reinforced Concrete Structures II	5
<b>CIV 322</b>	Structural Dynamics	5	<b>CIV 326</b>	Earthquake Engineering	5
<b>CIV 323</b>	Foundation Engineering	5	<b>CIV 327</b>	Steel Structures	5
<b>CIV 324</b>	Water Supply & Waste Management in Structures	5	<b>CIV 328</b>	Smart Sensors for Infrastructure Engineering	5
<b>CIV 312</b>	Project Management and Economics	5	<b>CIV 329</b>	Transportation Planning	5
<b>TOTAL</b>		<b>29</b>	<b>TOTAL</b>		<b>29</b>
<b>PRACTICAL TRAINING II: JUNE to JULY (8 weeks) - 4 ECTS</b>					

**FOURTH YEAR**

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CIV 421</b>	Prestressed Concrete	5	Free Elective (Foreign Language)		4
<b>CIV 481</b>	Project (Thesis) (7th & 8th semester)	5	<b>CIV 482</b>	Project (Thesis) (7th & 8th semester)	5
<b>CIV 411</b>	Elements of Law and Engineering Legislation	2	<b>CIV 422</b>	Durability of Infrastructures and Risk Management	5
Choose 3 out of 5 INFRA/DOMO modules		5 5 5	Choose 3 out of 7 INFRA/DOMO modules		5 5 5
Choose 1 out of 2 GEO modules (see Table A)		5			
<b>TOTAL</b>		<b>32</b>	<b>TOTAL</b>		<b>29</b>

**CIVIL ENGINEERING****TECHNICAL ELECTIVES - TABLE A**

			<b>ECTS</b>
INFRA -1	<b>CIV 441</b>	Highway Engineering II	5
DOMO-1	<b>CIV 451</b>	Building Technology I	5
INFRA -2	<b>CIV 442</b>	Hydrology	5
DOMO-2	<b>CIV 452</b>	Numerical Methods for Structural Analysis	5
INFRA -3	<b>CIV 443</b>	Water Supply Networks I	5
GEO -1	<b>CIV 361</b>	Cadastre	5
GEO -2	<b>CIV 362</b>	Land Management	5
INFRA -4	<b>CIV 444</b>	Analysis of Bridges and Tunnels	5
INFRA -5	<b>CIV 445</b>	Offshore Engineering	5
INFRA -6	<b>CIV 446</b>	Coastal Engineering	5
DOMO-3	<b>CIV 453</b>	Building Technology II	5
INFRA -7	<b>CIV 447</b>	Water Supply Networks II	5
INFRA -8	<b>CIV 448</b>	Water Resources Management	5
DOMO-4	<b>CIV 454</b>	Design of Steel and Composite Structures	5

**CIVIL ENGINEERING****PROGRAMME MODULE STRUCTURE**

<b>Modules</b>	<b>Number</b>	<b>ECTS</b>
Required Modules	42	188
Technical Electives	7	35
Free Elective Modules (Foreign Language except English Language)	1	4
Final Year Project	2	10
Practical Training	2	8
<b>TOTAL</b>	<b>54</b>	<b>245</b>

## SURVEYING ENGINEERING & GEO-INFORMATICS ENGINEERING PROGRAMME DEFINITION

### DEGREE - SURVEYING ENGINEERING AND GEO-INFORMATICS ENGINEERING

#### FIRST YEAR

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>CIV 111</b>	Professional Studies and Skills I	2	<b>CIV 116</b>	Engineering Mechanics - Statics	5
<b>CIV 131</b>	Geodesy I	5	<b>CIV 132</b>	Geodesy II	5
<b>CIV 112</b>	Geology for Engineers	3	<b>CIV 117</b>	Mathematics II	5
<b>CIV 113</b>	Technical Drawing & Computer Aided Design (CAD)	5	<b>CIV 118</b>	Computer Programming for Engineers I	5
<b>CIV 114</b>	Physics I	6	<b>CIV 119</b>	Statics, Error Theory and Least Squares Method	5
<b>CIV 115</b>	Mathematics I	5	<b>CIV 181</b>	Integrated Design for Civil Engineers & Surveying and Geoinformatics Engineers I	2
<b>ENG 122</b>	English Language I	4	<b>ENG 160</b>	Technical English and Report Writing	4
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>31</b>

#### SECOND YEAR

3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
<b>CIV 211</b>	Mathematics III	5	<b>CIV 226</b>	Soil Mechanics	5
<b>CIV 222</b>	Strength of Materials	5	<b>CIV 227</b>	Highway Engineering I	5
<b>CIV 212</b>	Professional Studies and Skills II	2	<b>CIV 214</b>	Principles of Geoinformatics and Geographical Information Systems (GIS)	5
<b>CIV 224</b>	Hydraulics	5	<b>CIV 215</b>	Sustainability and Environmental Concepts	4
<b>CIV 213</b>	Computer Programming for Engineers II	5	<b>CIV 281</b>	Integrated Design for Civil Engineers & Surveying and Geoinformatics Engineers II	2
<b>CIV 231</b>	Databases for Surveying Engineers	4	<b>CIV 233</b>	Photogrammetry I	5
<b>CIV 232</b>	Remote Sensing I	5	<b>CIV 234</b>	Cartography I	4
<b>TOTAL</b>		<b>31</b>	<b>TOTAL</b>		<b>29</b>

COMPULSORY SUMMER FIELD EXERCISES IN SURVEYING (I) (100 HOURS - 2 weeks) - 4 ECTS

PRACTICAL TRAINING I: JUNE to JULY (6 weeks) – 3 ECTS





## SURVEYING ENGINEERING & GEO-INFORMATICS ENGINEERING PROGRAMME DEFINITION

### DEGREE - SURVEYING ENGINEERING AND GEO-INFORMATICS ENGINEERING

#### THIRD YEAR

5th Semester			6th Semester		
		ECTS			ECTS
<b>CIV 331</b>	Geodesy III	4	<b>CIV 334</b>	Satellite Geodesy	4
<b>CIV 311</b>	Environmental Impact Assessment	4	<b>CIV 335</b>	Photogrammetry II	5
<b>CIV 361</b>	Cadastre	5	<b>CIV 313</b>	Construction Management	4
<b>CIV 332</b>	Remote Sensing II	4	<b>CIV 336</b>	Thematic Cartography	4
<b>CIV 333</b>	Geography and Spatial Analysis	4	<b>CIV 337</b>	Regional Planning	5
<b>CIV 312</b>	Project Management and Economics	5	<b>CIV 338</b>	Geodesy IV	5
<b>CIV 362</b>	Land Management	5			
<b>TOTAL</b>		<b>31</b>	<b>TOTAL</b>		<b>27</b>
SUMMER FIELD EXERCISES IN SPECIAL GEO-INFORMATICS ENGINEERING SUBJECTS (2 weeks) - 4ECTS					
PRACTICAL TRAINING II: JUNE to JULY (6 weeks) - 4 ECTS					

#### FOURTH YEAR

7th Semester			8th Semester		
		ECTS			ECTS
<b>CIV 481</b>	Project (Thesis) (7th & 8th semester)	5	<b>CIV 482</b>	Project (Thesis) (7th & 8th semester)	5
<b>CIV 431</b>	Cartography II	4	<b>CIV 435</b>	GIS Applications	4
<b>CIV 432</b>	Urban Planning	4	<b>CIV 436</b>	Geometric Documentation of Monuments	3
<b>CIV 433</b>	Radiometry and Microwave Remote Sensing	4	<b>CIV 437</b>	Digital Cartography	4
<b>CIV 434</b>	Real Estate Valuations	3	Free Elective (Foreign Language)		4
<b>CIV 411</b>	Elements of Law and Engineering Legislation	2	Choose 1 of the remaining modules INFRA/DOMO/GEO (see Table Band E)		5
Choose 1 out of 2 INFRA / DOMO / GEO modules (see Table B and E)		5			
<b>TOTAL</b>		<b>27</b>	<b>TOTAL</b>		<b>25</b>

**TABLE E**

SURVEYING ENGINEERING & GEO-INFORMATICS ENGINEERING			
TECHNICAL ELECTIVES			
			ECTS
GEO	<b>CIV 461</b>	Hydrography, Oceanography and Marine Geodesy	5
GEO	<b>CIV 462</b>	Photogrammetry III	5
INFRA -9	Choose INFRA from Table B		5
INFRA -10	<b>CIV 324</b>	Water Supply and Waste Management in Structures	5
INFRA -6	<b>CIV 446</b>	Coastal Engineering	5
INFRA -7	<b>CIV 447</b>	Water Supply Networks II	5
INFRA -8	<b>CIV 448</b>	Water Resources Management	5
SURVEYING ENGINEERING & GEO-INFORMATICS ENGINEERING			
PROGRAMME MODULE STRUCTURE			
Modules		Number	ECTS
Required Modules		49	207
Technical Electives		2	10
Free Elective Modules ( Foreign language except English Language)		1	4
Final Year Project		2	10
Practical Training		2	6
<b>TOTAL</b>		<b>58</b>	<b>245</b>

For analytical description of each course, visit [www.cut.ac.cy](http://www.cut.ac.cy)



## Department of Electrical Engineering & Information Technologies

### Introduction

The Department of Electrical Engineering and Information Technologies (EEIT) combines the areas of Electrical Engineering, Computer Engineering and Computer Science in a single Department making it an interdisciplinary Department. The program of study is common during the first year. After the first year, the students have the choice to follow one of two major directions; that of Electrical Engineering and that of Information Technologies. The Information Technologies programme is a combination of Computer Engineering and Computer Science.

The objectives of the EEIT program are designed to promote technical competence, professional development and citizenship in the Cyprus and global community. Looking ahead in the future, the trend of globalisation and the place of Cyprus as a member of the European Union dictate training of our students to be competitive when it comes to job qualifications, further studies abroad, exchange programs etc in any part of the world.

### Electrical Engineering Program

#### Objectives

The Electrical Engineering programme will train our graduates to be proficient in mathematics, science and engineering and apply these disciplines to solve problems in modern Electrical Engineering. The graduates of the program will be able to design, analyse and evaluate electrical components and systems with the aim of achieving certain performance specifications within practical and economic constraints.

The graduates will acquire the professional skills to compete in a world of rapidly changing technological environment, assume leaderships in industry and succeed in entrepreneurial, governmental and academic

environments in the broad context of Electrical Engineering.

The graduates will be capable of professional redirection into diverse fields such as system biology, biomedical, computer science, multimedia, nanotechnology, business, law through graduate level study by choosing an appropriate plan of study and relevant electives from the program.

The graduates will have the capability and communication skills to function effectively as individuals and as members of multidisciplinary teams in solving Electrical Engineering problems. In addition they will have an understanding of the importance of high ethical and professional standards and their significance in the working environment.

### Information Technologies Programme

#### Objectives

The Information Technologies programme combines Computer Engineering and Computer Science in a single programme of study. It educates the students in the science and know-how of the design and application of hardware and software of modern computer systems. The students of Information technologies acquire the principles of the theory of computer science, computer architecture and the underlying mathematics and mechanics. The graduates of the program will be capable of designing, analysing and evaluating hardware and software systems, so that that the interaction of the two will satisfy required specifications. The final objective is to enable students to solve a wide spectrum of problems through the use of computers, within a framework of practical and economic restrictions.

As with the EE program the graduates will have the professional skills to be competitive in a rapidly changing technological environment, to assume leadership roles in



industries, and to excel in entrepreneurial , governmental and academic environments within the mainframe of information technologies.

The graduates will have the capability to follow careers in a wide spectrum of sectors such as systems biology, biomedical systems, information technologies, multimedia, nanotechnology, and business administration. This will be achieved via graduate studies and the choice of suitable programme of study of elective courses offered in the programme of study.

The graduates will also acquire communication skills so they can be effective as individuals and as team members of interdisciplinary teams working to solve broader problems in information technologies. Moreover they will develop high ethical standards and understand of the importance of such high standards in the work environment.

### **Programme of Study**

The programme of studies at the Cyprus University of Technology is based on the European Credit Transfer Systems (ECTS) units. For a Bachelors Degree in Electrical Engineering a minimum of 240 ECTS units is required with a grade 5 out of 10 or higher for each course. The 240 ECTS include language and basic science courses, electrical and computer engineering/computer science core and elective courses and a design project. Each academic year is divided into two semesters and a maximum of 60 ECTS are allocated in each academic year.

A student is required to maintain a grade point average (GPA) of 5 or above out of 10 for graduation. A student may repeat a course if his/her grade is below 5 at most 2 times and all grades are recorded so that the great point average is calculated. If a student fails to maintain a GPA 5 or above out of 10 by the end of the 8th semester he/she

will be allowed to continue for a maximum of additional 4 semesters. If after a total of 12 semesters the student fails to maintain a GPA above 5/10 then the student's studies will be terminated by the Department.

The programme of study leads to a Degree in Electrical Engineering. The courses are divided into the following categories:

- a) Required courses. These are fundamental to Electrical Engineering and prerequisites to higher level courses, and must be taken by all students in the Department.
- b) Electrical Engineering Electives. These are courses which can be taken within the Department as part of a plan of study allowing students to focus on a particular area within Electrical Engineering.
- c) Engineering Electives. These are courses which can be taken within the school of Engineering upon approval by the Department in order to allow students to broaden their knowledge to areas relevant to their plan of study in Electrical Engineering
- d) Free Electives. These are courses from Social Studies, Humanities, Business, Management, Economics etc. . Their purpose is to broaden the knowledge of students beyond the Engineering boundaries in areas that are relevant to the Engineering profession.

In addition to the above choices, each student is required to complete a capstone design project during the last semester. The design project will allow the students to demonstrate their knowledge by working on an individual practical problem which will involve design, analysis and testing. Each student will work with an academic advisor in coming up with a plan of study according to the goals of the student and future plans. The advisor will assist the student with the plan of study by choosing the elective courses and direction of study.



## DEPARTMENT OF ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGIES

## ELECTRICAL ENGINEERING

## FIRST YEAR

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>MATH 101</b>	Mathematics I	5	<b>MATH 102</b>	Advanced Mathematics I	5
<b>PHYS 101</b>	Physics I	6	<b>PHYS 102</b>	Physics II	6
<b>EEIT 111</b>	Introduction to Computing	6	<b>EEIT 113</b>	Programming Principles	6
<b>EEIT 112</b>	Introduction to EE/IT	6	<b>MATH 104</b>	Linear Algebra	5
<b>ENG 122</b>	English for Academic Purposes	4	<b>ENG 161</b>	English for Electrical Engineering	4
			<b>EEIT 115</b>	Electrical Circuits	6
<b>TOTAL</b>		<b>27</b>	<b>TOTAL</b>		<b>32</b>

## SECOND YEAR

3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
<b>MATH 202</b>	Advanced Mathematics II	5	<b>EEIT 216</b>	Electronics Circuits I	6
<b>PHYS 202</b>	Physics III	5	<b>EEIT 211</b>	Signals and Systems	6
<b>EEIT 212</b>	Electrical Network Analysis	6	<b>EEIT 217</b>	Probability and Statistics	6
<b>EEIT 213</b>	Digital Logic	6	<b>EEIT 222</b>	Electrical Laboratory II	4
<b>EEIT 215</b>	Electrical Laboratory I	4	<b>EEIT 214</b>	Computer Organisation	6
<b>EEIT 204</b>	Introduction to Biology	5			
<b>TOTAL</b>		<b>31</b>	<b>TOTAL</b>		<b>28</b>

## DEPARTMENT OF ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGIES

### ELECTRICAL ENGINEERING

#### THIRD YEAR

5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>EEIT 321</b>	Control Systems	6	<b>EEIT 329</b>	Electrical Laboratory III	4
<b>EEIT 324</b>	Random Processes	6	<b>EEIT 327</b>	Communication Systems	6
<b>EEIT 323</b>	Digital Design Laboratory	4	<b>EEIT 328</b>	Digital Signal Processing	6
<b>EEIT 322</b>	Electronic Circuits II	6	<b>EEIT 313</b>	Engineering Economic Analysis	4
<b>EEIT 325</b>	Reconfigurable Logic	6	<b>EEIT 326</b>	Electromagnetics	6
<b>EEIT 312</b>	Introduction to Bioengineering	4	Engineering Elective		6
<b>TOTAL</b>		<b>32</b>	<b>TOTAL</b>		<b>32</b>

#### FOURTH YEAR

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>EEIT 411</b>	Project Engineering & Professional Practice	6	<b>EEIT 414</b>	Capstone Design Project II	6
<b>EEIT 422</b>	Power Systems	6	EEIT Elective		6
<b>EEIT 413</b>	Capstone Design Project I	6	EEIT Elective		6
Engineering Elective		6	Engineering Elective		6
Free Elective		6	Free Elective		6
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

### EE ELECTIVES

Robotics	Mathematical Logic
Control Systems II	Object Oriented
Semiconductor Devices	Automata Theory
VLSI & Advanced Digital Design	Computer Graphics
Microelectronics	Digital System Design
Electromagnetism II	

**Note that EE could also choose courses from IT and vice versa as electives in this category upon approval of the Department**

#### **Engineering Electives**

Courses from other Engineering Departments to be approved by the Department

#### **Free Electives**

Courses from Social Studies, Humanities, Business, Management, Economics etc., to be approved by the Department





## DEPARTMENT OF ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGIES

## INFORMATION TECHNOLOGIES (IT)

## FIRST YEAR

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>MATH 101</b>	Mathematics I	5	<b>MATH 102</b>	Advanced Mathematics I	5
<b>PHYS 101</b>	Physics I	6	<b>PHYS 102</b>	Physics II	6
<b>EEIT 111</b>	Introduction to Computing	6	<b>EEIT 113</b>	Programming Principles	6
<b>EEIT 112</b>	Introduction to EE/IT	6	<b>MATH 104</b>	Linear Algebra	5
<b>ENG 122</b>	English for Academic Purposes	4	<b>ENG 161</b>	English for Electrical Engineering	4
			<b>EEIT 115</b>	Electrical Circuits	6
<b>TOTAL</b>		<b>27</b>	<b>TOTAL</b>		<b>32</b>

## SECOND YEAR

3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
<b>MATH 202</b>	Advanced Mathematics II	5	<b>EEIT 234</b>	Discrete Mathematics	6
<b>EEIT 213</b>	Digital Logic	6	<b>EEIT 216</b>	Electronic Circuits I	6
<b>EEIT 212</b>	Electrical Network Analysis	6	<b>EEIT 217</b>	Probability and Statistics	6
<b>EEIT 215</b>	Electrical Laboratory I	4	<b>EEIT 237</b>	Digital Design Laboratory	4
<b>EEIT 232</b>	Data Structures and Algorithms	6	<b>EEIT 238</b>	Systems Programming	6
<b>EEIT 204</b>	Introduction to Biology	5	<b>EEIT 214</b>	Computer Organisation	6
<b>TOTAL</b>		<b>32</b>	<b>TOTAL</b>		<b>34</b>



## DEPARTMENT OF ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGIES

## INFORMATION TECHNOLOGIES (IT)

## THIRD YEAR

5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>EEIT 333</b>	Operating Systems	6	<b>EEIT 311</b>	Signals and Systems	6
<b>EEIT 336</b>	Computer Architecture	6	<b>EEIT 337</b>	Computer Networks	6
<b>EEIT 334</b>	Advanced Object Oriented Programming	6	<b>EEIT 313</b>	Engineering Economic Analysis	4
<b>EEIT 332</b>	Advanced Algorithms and Complexity	6	Engineering Elective		6
<b>EEIT 312</b>	Introduction to Bioengineering	4	Engineering Elective		6
<b>TOTAL</b>		<b>28</b>	<b>TOTAL</b>		<b>28</b>

## FOURTH YEAR

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>EEIT 411</b>	Project Engineering & Professional Practice	6	<b>EEIT 414</b>	Capstone Design Project II	6
Engineering Elective		6	EEIT Elective		6
<b>EEIT 413</b>	Capstone Design Project I	6	EEIT Elective		6
Engineering Elective		6	Engineering Elective		6
Free Elective		5	Free Elective		5
<b>TOTAL</b>		<b>29</b>	<b>TOTAL</b>		<b>29</b>

**IT ELECTIVES**

Power Systems

Analog Electronics

Robotics

Control Systems II

Semiconductor Devices

VLSI &amp; Advanced Digital Design

Microelectronics

Digital Signal Processing

Electromagnetism II

Computer Graphics

Digital System Design

Databases

Artificial Intelligence

Parallel Computer Systems

Compilers

Advanced Computer Architecture

Interconnection Networks

**Note that IT could also choose courses from EE and vice versa as electives in this category upon approval of the Department**

**Engineering Electives**

Courses from other Engineering Departments to be approved by the Department

**Free Electives**

Courses from Social Studies, Humanities, Business, Management, Economics etc., to be approved by the Department

For analytical description of each course, visit [www.cut.ac.cy](http://www.cut.ac.cy)



## Department of Mechanical Engineering and Materials Science and Engineering

### Introduction

Mechanical and Materials engineering are among the broadest engineering disciplines; the objectives of these fields are to utilize the scientific principles of physics, mathematics, chemistry and biology for the analysis, design, development, optimization, and production of components, machines, processes and systems.

The profile of the engineering field has changed so dramatically over the years that it is no longer an easy task to define a “typical” mechanical engineer. Indeed, the level of education afforded to the mechanical engineer of today permits him or her to work in diverse areas ranging from research, design, development, consulting, fabrication, processing, and testing, to operation, planning, marketing, sales and management. In fact, as they mature professionally, many mechanical engineers move from the more technical environment of design and development to the more business-oriented environment of operations, sales and management. Thus, it is perhaps more appropriate to talk about a typical career path rather than a typical mechanical engineering. In recognition of the diversity of the mechanical engineering discipline, the Department of Mechanical Engineering and Materials Science and Engineering aims to foster the appropriate learning environment for its students that will allow them to meet their educational aspirations and pursue their career goals in Cyprus or abroad.

The single feature that characterises and distinguishes engineers from other professionals is design, and that could entail design of machinery (Mechanical Engineering), design of major highways (Civil Engineering), design of electronic materials/devices and systems (Materials Engineering and Electrical Engineering), and many others. In order for design to have practical significance, however, it must culminate in the production or fabrication of a device, structure or

system. Fabrication of any product, however, requires the selection of the appropriate materials. In fact, materials selection is so important from both engineering and economic perspectives that it constitutes an integral and often the most important component of engineering design. If one also takes into account the fact that the rapid technological advancements of recent years have brought into the forefront novel materials like composite and smart materials that allow the design of materials with enhanced properties and characteristics, then one appreciates that the term “modern mechanical engineering design” entails the design of not only a product or a structure but also the material itself. Thus, it is logical that a Department that combines the fields of Mechanical Engineering and Materials Science and Engineering will be able to arm its graduates with the necessary tools to effectively complete engineering design beginning with the preliminary stages of design of not only the product or structure but also of the appropriate material and culminating in the last stages of production. In our Department therefore, integrated with the field of Mechanical Engineering is the field of Materials Science and Engineering.

Materials Science and Engineering may be defined as the field of study of the structure and properties of different materials that has the objective of appreciating the relationships between the structural characteristics, processing techniques, and properties of a certain product. Materials Science and Engineering is the utilization of the accumulated knowledge base for the purpose of effecting specific design, synthesis, control and modification of appropriate materials for engineering and general technological applications.

Materials Science and Engineering is divided into different platforms depending on the properties of the different materials. The most important ones are: Electronic and Magnetic Materials, Metallic and



Intermetallic Materials, Polymers, Ceramics, Amorphous and Glassy Materials, Composites and Smart Composites, Colloidal Systems, Nanomaterials and Biomaterials.

The applications of these materials encompass a wide range of platforms from mechanical structures and systems to electro-optical devices and biomedical components. It is customary that most materials find applications in a general technological field or platform. In this respect, the proper materials are more amenable to educational and research activities than specific end products.

As was mentioned above, it is clear that the nature of the field of Mechanical Engineering is closely linked to that of Materials Science and Engineering. Thus, the coexistence of the two in a single department offers a unique opportunity for the development and operation of an important educational and research centre, unique in Cyprus, in which the activities of the two fields will be integrated and will compliment each other. The fundamental objective of this endeavour is the education of high calibre scientists and researchers, who will not only be well versed in traditional Mechanical Engineering, but will also be acquainted with the properties and behaviour of the different materials that are used or have the potential to be used in various engineering applications. This will be of significant benefit to those graduates of the department that are interested in pursuing a career in Mechanical Engineering. On the other hand, people who graduate from the Materials Science and Engineering stream, while fully capable of practicing as Mechanical Engineers, will also be able to be employed in industry, in the energy and telecommunication sectors, and in the broader public sector for the design and specifications control of materials and structures, or seek a research-oriented career in a University or Research Centre.

### **Vision and Objectives of the Department**

The objective of the Department of Mechanical Engineering and Materials Science and Engineering is to become an international leader in the field and establish centres of excellence that will be involved in cutting-edge research and development in liaison with local and international industrial and educational partners. The department aims to stay abreast of modern developments in the engineering field through on-going rigorous fundamental and applied research, consulting activities, and active participation in various academic and industrial forums.

### **The specific goals of the Department are:**

- To attract motivated students and prominent academic and administrative personnel.
- To provide a well-balanced education that will promote the technical and personal growth of students and allow them to integrate with society, so that they can make meaningful contributions to the betterment of their fellow man.
- To grant high calibre undergraduate and postgraduate degrees that will render the students competitive both in Cyprus and the European Union, as well as in the Middle East region, and elsewhere in the world.
- To pursue active collaboration with national and international research and industrial partners.
- To continuously improve the know-how and facilities in the department to reflect pertinent changes in industry.
- To make significant contributions to the growth and establishment of the Cyprus University of Technology as a leading educational and research institution in both the Middle East and the European Union.
- To be an active partner in the growth and development of the city of Lemesos in particular and Cyprus in general.



**The graduates of the Department of Mechanical Engineering and Materials Science and Engineering will gain the necessary tools which will allow them to:**

- Design, develop and optimise mechanisms and machines such as automobiles, space crafts, marine vessels, recreation vehicles, wheelchairs, exercise equipment, testing equipment and many others.
- Manufacture, analyse, test and optimise products and tools such as bolts, nuts, fasteners, connecting rods, shafts, brakes, clutches, grippers, spanners and countless others.
- Design and develop biomedical systems, devices and components such as artificial organs, prosthetic devices and others.
- Investigate and simulate biological systems on a macroscopic, microscopic, and nanoscopic scale such as arterial and vein systems and regenerative mechanics at the cell and tissue level.
- Design and develop microelectromechanical devices and systems such as sensors, actuators, micro- grippers, micro-motors, drug-delivery systems etc.
- Select and install indoor environmental control equipment such as heating, ventilation, and air-conditioning units.
- Participate as members of advisory boards and expert panels in order to make sure products work efficiently, reliably and safely.
- Design and develop appropriate coatings for the environmental protection of structures.
- Work in all aspects of the energy sector, such as energy production from renewable sources, e.g. solar energy which is largely underutilized in Cyprus, despite its abundant availability, energy conversion, energy storage etc.

- Investigate, using micromechanical and computational modeling, the behaviour of novel materials such as composites and smart composites, nanocomposites etc.
- Develop and sustain automation and control algorithms and processes for the manufacturing, food, chemical, fuel and other industries.
- Participate in software teams that develop computer programs and packages for the design and analysis of mechanical products and devices.
- Design and specify controls of materials and structures.

The above list gives only a brief insight as to what mechanical engineers do. Mechanical engineers are involved in essentially everything that surrounds us! The graduates of the Department of Mechanical Engineering and Materials Science and Engineering are expected to be employed in:

- Industry and Industrial Research Development
- Energy and Telecommunications Sector
- Universities and Research Centres and Laboratories
- Government
- As Entrepreneurs or Business Owners

**Programme of Study**

The Department of Mechanical Engineering and Materials Science and Engineering offers a single degree in two directions, the Mechanical Engineering direction and the Materials Science and Engineering direction (i.e. Mechanical Engineering with specialization in materials). To graduate, a candidate requires 240 ECTS (European Credit Transfer Units) that include a foreign language, basic science courses, Mechanical Engineering and Materials Science and Engineering courses, elective courses, and an undergraduate design project. The programme of study consists of four academic years with about 60 ECTS corresponding to each year. The academic year is divided into the Fall and Winter semesters



TABLE A

DEPARTMENT OF MECHANICAL ENGINEERING AND MATERIALS SCIENCE AND ENGINEERING					
MECHANICAL ENGINEERING DIRECTION					
FIRST YEAR					
1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>MATH 101</b>	Calculus I	5	<b>MATH 102</b>	Calculus II	5
<b>PHYS 101</b>	Physics I	6	<b>PHYS 102</b>	Physics II	6
<b>CHEM 101</b>	Chemistry I	6	<b>ME-MSE 111</b>	Programming Principles	7
<b>ENG 122</b>	English for Academic Purposes	4	<b>ENG 162</b>	English for Mechanical Engineers	4
<b>ME-MSE 101</b>	Introduction to Engineering	6	<b>ME-MSE 112</b>	Engineering Materials I	6
<b>TOTAL</b>		<b>27</b>	<b>TOTAL</b>		<b>28</b>

SECOND YEAR					
3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
<b>MATH 201</b>	Differential Equations	6	<b>EEIT 204</b>	Introduction to Biology	5
<b>ME-MSE 211</b>	Mechanics I (Statics)	5	<b>EEIT 245</b>	Principles of EE	5
<b>ME-MSE 212</b>	Introduction to Thermodynamics	5	<b>ME-MSE 215</b>	Mechanics & Testing of Materials	6
<b>ME-MSE 213</b>	Computer Aided Design (CAD)	6	<b>ME-MSE 311</b>	Materials Processing I	7
<b>ME-MSE 214</b>	Engineering Materials II	6	<b>ME-MSE</b>	General Elective	5
<b>ME-MSE</b>	General Elective	5	<b>ME-MSE</b>	General Elective	5
<b>TOTAL</b>		<b>33</b>	<b>TOTAL</b>		<b>33</b>





TABLE A

DEPARTMENT OF MECHANICAL ENGINEERING AND MATERIALS SCIENCE AND ENGINEERING					
MECHANICAL ENGINEERING DIRECTION					
THIRD YEAR					
5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>ME 321</b>	Fluid Mechanics	6	<b>ME 323</b>	Heat and Mass Transfer	5
<b>ME 221</b>	Mechanics II (Dynamics)	6	<b>ME 324</b>	Dynamics of Mechanical Systems	6
<b>ME 222</b>	Basic Experimental Methods	6	<b>ME 325</b>	Mechanical Engineering Laboratory	5
<b>ME 322</b>	Automatic Control I	6	<b>ME 326</b>	Mechanical Design	6
<b>ME-MSE</b>	Technical Elective	5	<b>ME 327</b>	Automatic Control II	6
			<b>ME-MSE</b>	Technical Elective	5
<b>TOTAL</b>		<b>29</b>	<b>TOTAL</b>		<b>33</b>

FOURTH YEAR					
7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>ME 421</b>	Advanced Manufacturing	6	<b>ME-MSE 411</b>	Failure Analysis & Materials Selection	5
<b>ME-MSE 412</b>	Statistics & Quality Control	6	<b>ME 422</b>	Microelectronic Mechanical Systems - MEMS	5
<b>ME 423</b>	Introduction to Energy Management & Environment	5	<b>ME-MSE</b>	Technical Elective	5
<b>ME-MSE</b>	Technical Elective	5	<b>ME-MSE</b>	Technical Elective	5
<b>ME 424</b>	Capstone Design Project	7	<b>ME 425</b>	Capstone Design Project	8
<b>TOTAL</b>		<b>29</b>	<b>TOTAL</b>		<b>28</b>



TABLE B

DEPARTMENT OF MECHANICAL ENGINEERING AND MATERIALS SCIENCE AND ENGINEERING					
MATERIALS SCIENCE AND ENGINEERING DIRECTION					
FIRST YEAR					
1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>MATH 101</b>	Calculus I	5	<b>MATH 102</b>	Calculus II	5
<b>PHYS 101</b>	Physics I	6	<b>PHYS 102</b>	Physics II	6
<b>CHEM 101</b>	Chemistry I	6	<b>ME-MSE 111</b>	Programming Principles	7
<b>ENG 122</b>	English for Academic Purposes	4	<b>ENG 162</b>	English for Mechanical Engineers	4
<b>ME-MSE 101</b>	Introduction to Engineering	6	<b>ME-MSE 112</b>	Engineering Materials I	6
<b>TOTAL</b>		<b>27</b>	<b>TOTAL</b>		<b>28</b>

SECOND YEAR					
3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
<b>MATH 201</b>	Differential Equations	6	<b>EEIT 204</b>	Introduction to Biology	5
<b>ME-MSE 211</b>	Mechanics I (Statics)	5	<b>EEIT 245</b>	Principles of EE	5
<b>ME-MSE 212</b>	Introduction to Thermodynamics	5	<b>ME-MSE 215</b>	Mechanics & Testing of Materials	6
<b>ME-MSE 213</b>	Computer Aided Design (CAD)	6	<b>ME-MSE 311</b>	Materials Processing I	7
<b>ME-MSE 214</b>	Engineering Materials II	6	<b>ME-MSE</b>	General Elective	5
<b>ME-MSE</b>	General Elective	5	<b>ME-MSE</b>	General Elective	5
<b>TOTAL</b>		<b>33</b>	<b>TOTAL</b>		<b>33</b>



TABLE B

DEPARTMENT OF MECHANICAL ENGINEERING AND MATERIALS SCIENCE AND ENGINEERING					
MATERIALS SCIENCE AND ENGINEERING DIRECTION					
THIRD YEAR					
5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>MSE 331</b>	Transport Phenomena	6	<b>MSE 333</b>	Kinetics & Phase Transformations	6
<b>MSE 231</b>	Classical & Quantum Mechanics	6	<b>MSE 334</b>	Polymers Science & Technology	5
<b>MSE 335</b>	Materials Laboratory	6	<b>MSE 332</b>	Solid State Physics & Technology	7
<b>MSE 232</b>	Applied Thermodynamics	6	<b>MSE 432</b>	Metallic Materials	5
<b>CHEM 201</b>	Chemistry II	5	<b>ME-MSE</b>	Technical Elective	5
			<b>ME-MSE</b>	Technical Elective	5
<b>TOTAL</b>		<b>29</b>	<b>TOTAL</b>		<b>33</b>

FOURTH YEAR					
7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>MSE 431</b>	Advanced Materials Processing	6	<b>MSE 434</b>	Engineering Ceramics	5
<b>ME-MSE 412</b>	Statistics & Quality Control	6	<b>MSE 435</b>	MEMS	5
<b>MSE 336</b>	Atomic & Nanoscale Characterization	5	<b>ME-MSE</b>	Technical Elective	5
<b>ME-MSE</b>	Technical Elective	5	<b>ME-MSE</b>	Technical Elective	5
<b>MSE 433</b>	Capstone Design Project	7	<b>MSE 436</b>	Capstone Design Project	8
<b>TOTAL</b>		<b>29</b>	<b>TOTAL</b>		<b>28</b>

TABLE C

STRUCTURE OF THE PROGRAMME OF STUDY		
Courses	Number	ECTS
Compulsory Courses	33	185
Electives	8	40
Undergraduate Design Project	2	15
<b>TOTAL</b>	<b>43</b>	<b>240</b>





# FACULTY OF GEOTECHNICAL SCIENCES AND ENVIRONMENTAL MANAGEMENT

Department of Agricultural Sciences, Biotechnology and Food Science	90
Department of Environmental Management	101



## Department of Agricultural Sciences, Biotechnology and Food Science

### Introduction

The agricultural and food sector of Cyprus, like all other sectors of the economy, is in a state of transition due to the new socio-economic environment created by the accession of Cyprus to the EU. This new environment, together with the liberalization of the international trade, exert a strong competitive pressure on raw and processed agricultural products of Cyprus, both in the European and the local market. In order to adjust to the new environment, and thus ensure its survival and further development within the EU, the agricultural sector of Cyprus must improve its competitiveness by reducing production costs and by improving quality of products. The same problems and challenges exist for the food and beverage industry, which at present, is the most important and dynamic sub-sector of the processing industry of Cyprus.

The required increased competitiveness of the agri-food sector can only be achieved through modernization and technological upgrading of agricultural and livestock enterprises, as well as of food and beverage units. In both the primary (raw material) and secondary (processed) food production sectors, it is absolutely essential to introduce new production methods that would ensure sustainable use of natural and biological resources, food quality and safety, mitigation of negative effects on environment and biodiversity, animal health and welfare, as well as other requirements of the European market. Particular attention should be paid to the development of new products, to the utilization of the competitive advantages offered by traditional Cyprus products and to the need for major improvements in storage, packing, standardization and transport of agri-food products. It is also important to carry out market research on a regular basis, in order to ensure timely response of production to continuously changing consumer preferences, and to adopt new and effective methods and practices for promotion and marketing of agri-food products.

Considering the problems, prospects and challenges resulting from Cyprus' accession to the EU and with the objective to contribute to the required modernization and technological transformation of the island's agri-food sector, the Cyprus University of Technology has established, for the first time in Cyprus, a department of Agricultural Sciences, Biotechnology and Food Science. The new department will offer a B.Sc. degree in Agricultural and Food Sciences with specialization in three basic areas: a) Crop Science and Technology, b) Animal Science and Technology (including fisheries and aquaculture) and c) Food Science and Technology. The research programmes and the course curricula in all three specialization options, will focus on the development and adoption of new scientific methods and technological applications. Particular attention will be given to such cutting-edge research areas as the field of modern biotechnology and its multiple applications in plant and animal production, the food industry and the environment.

It is of interest to note that within the context of the Lisbon strategy, a new concept of Agriculture is being presently developed in the EU, that of the "Knowledge-based Bio-economy". This new concept integrates in a sustainable way modern crop and animal production, fisheries and aquaculture, food industry and biotechnology. In this regard, the Department's main role will be to generate (through its research programmes) and to disseminate (through its educational programmes) the necessary knowledge base and technology required for the development and promotion of modern bio-economy in Cyprus.

The programme of study aims to prepare students for scientific careers in the public and the private sectors of Cyprus. Some examples of potential public employers of our graduates include the Ministry of Agriculture, Natural Resources and Environment (MANRE) and its various services and departments (Dept. of Agriculture,



Agricultural Research Institute, Dept. of Fisheries and Marine Research), the Agricultural Insurance Organization, the Agricultural Payments Organization, the State General Chemistry Laboratory etc.

In the private sector, graduates will be able to either develop independent professional careers (e.g. agricultural consultants, seed / plant protection companies, greenhouse units, nurseries, landscape design, micropropagation labs, aquaculture units, food labs etc.) or be employed by private companies engaged in bio-economic activities such as those mentioned above or by large agricultural and livestock enterprises, food and beverage industries (wineries, dairy units) etc.

In addition, graduates will be in a position to pursue careers abroad in the various services of the European Commission or as experts/delegates/attaches of the Republic of Cyprus in the EU, international organizations or foreign countries. Finally, they will be able to pursue post-graduate and doctoral studies and thus develop careers in research and academia.

### **Vision and Objectives of the Department**

The vision of the new Department is to become an internationally recognized, research oriented department, of top choice, for undergraduate and graduate education in Agricultural and Food Sciences including Biotechnology.

The main objective of the new department will be to produce through its high-quality research and to disseminate through its top quality education, the necessary scientific knowledge and technological applications, enabling the sustainable development and improved competitiveness of Cyprus' agri-food sector. Sustainable rural development with respect to natural and biological resources, socio-economic development of the rural population and preservation of the environmental and cultural characteristics of Cyprus' countryside, is also a major objective of the new Department.

The Specific Aims of the new Department are:

- To attract and retain outstanding students, faculty and staff
- To provide high quality education in Agricultural and Food Sciences and Biotechnology for undergraduate and graduate students from Cyprus and neighbouring countries, including EU countries
- To perform innovative and relevant research that would advance the frontiers of Agricultural and Food Sciences and Biotechnology and ensure sustainable development of knowledge-based bio-economy
- To maintain a close collaboration with the Agri-Food sector (public and private), including farmers associations, food industries and animal production units, at both the national and European level, with a view to develop into an internationally recognized research and education centre
- To promote sustainable rural development with respect to natural and biological resources, biodiversity and the environment
- To promote international cooperation and students / teachers mobility, especially in the EU
- To provide the basis for the promotion of life-long learning.

The Department consists of three divisions, namely Crop Science and Technology, Animal Science and Technology and Food Science and Technology, which offer respective specialization options. More specifically, the Crop Science and Technology division will focus on enhancing crop production quantitatively and qualitatively with the aim of achieving self-sufficiency in crop produce and increasing competitiveness at European and global level. The promotion of scientific knowledge and the development of research will be directed towards two major areas:





(i) Improvement of production and quality of cultivated plants (fruit crops, vegetables, flowers and ornamentals, vines and field crops) by the development and adoption of new, improved cultivars and cultural practices.

(ii) Development and implementation of effective and ecologically acceptable methods of crop production and protection. Specific directions to be considered further are: Crop protection, Vegetables, Floriculture, Pomology and Viticulture.

The Animal Science and Technology division will focus on scientific research and high level education in animal breeding and genetics, reproduction, nutrition, hygiene and management of farm animals (cattle, sheep and goats, swine, poultry) and aquatic organisms (fish, crustaceans). The advancement of basic and applied research for the development of know-how and technology that contributes to the profitability and competitiveness of the livestock industry and the quality of animal products is top priority.

The Food Science and Technology division will focus on scientific research and high level education for producing safe, healthy and tasty food. Innovations and new practical processes that offer significant benefits to consumers, industry and society, either in the products or in the production chain will be sought. Significant directions are:

- (i) Food process and bioprocess engineering.
- (ii) Food chemistry, biochemistry and microbiology
- (iii) Product design and quality management studies.

At a later stage, all three divisions will participate in the organization of a post-graduate programme in Biotechnology offering the possibility of specialization in Plant, Animal or Food Biotechnology.

### **Programme Of Study**

The programme of study provides a general foundation in natural sciences (general and inorganic chemistry, organic chemistry, physics, mathematics, statistics), basic education in agricultural biosciences (plant and animal anatomy and physiology, genetics, biochemistry, microbiology, biometry, soil science, ecology and environmental management) and, finally, specialized scientific training in three basic directions (specialization options) of agricultural and food sciences, namely: a) Crop science and technology, b) Animal science and technology, including fisheries and aquaculture, and c) Food science and technology. The general foundation in natural sciences and the basic education in agricultural biosciences are mainly offered during the first three semesters, which are common to all students of the Department. In addition, during these semesters the curriculum includes introductory courses to the three specialization options, aiming at providing students with the background information and understanding required to choose their direction of study, depending on their interests and particular professional objectives. In the fourth year, students of all three options are required to take courses in Agricultural Economics and Management and to carry out a research project under the supervision of staff members of the Department.

It should be noted that the Department is interested to ensure a balanced development of all three directions of its undergraduate programme. Therefore, the choice of specialization option by students is subject to certain restrictions, concerning their performance in particular courses considered essential for each option.



For award of the B.Sc. degree of the Department of Agricultural Sciences, Biotechnology and Food Science, students are required to complete 240 European Credit Units, in the context of the ECTS system.

The B.Sc. degree requirements could be summarized as follows:

**A. Courses common to all students  
(mainly the first three semesters)**

- General foundation in natural sciences: 27 ECTS
- Basic education in agricultural biosciences: 62 ECTS
- Foreign language: 8 ECTS.

**B. Specialization options (4th to 8th semester)**

- Specialized scientific training: 96-102 ECTS \*
- Courses in economics and management: 10 ECTS
- Elective courses: 18-24 ECTS \*
- Practical training (summer session between 3rd and 4th year): 5 ECTS
- B.Sc. thesis (4th year): 10 ECTS

\*There are slight differences between different specialization options



**B.SC. DEGREE: AGRICULTURAL SCIENCES, BIOTECHNOLOGY AND FOOD SCIENCE****FOUNDATION COURSES: COMMON TO ALL THREE OPTIONS****FIRST YEAR**

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>ABF 100</b>	General and Inorganic Chemistry	6	<b>ABF 104</b>	Biochemistry	6
<b>ABF 101</b>	Organic Chemistry	6	<b>ABF 105</b>	Microbiology	6
<b>MAS 110</b>	Mathematics	5	<b>ABF 150</b>	Introduction to Food Science & Technology	5
<b>PHYS 101</b>	Physics	5	<b>ABF 106</b>	Statistics / Biometry	5
<b>ABF 110</b>	Plant Morphology & Anatomy	5	<b>ABF 107</b>	Genetics	4
<b>ENG 122</b>	English for Academic Purposes	4	<b>ENG 180</b>	English for Agriculture Studies	4
<b>TOTAL</b>		<b>31</b>	<b>TOTAL</b>		<b>30</b>

**SECOND YEAR**

3 <sup>rd</sup> Semester		
		ECTS
<b>ABF 200</b>	Ecology & Environmental Management	4
<b>ABF 210</b>	Plant Systematics	5
<b>ABF 211</b>	Plant Physiology	5
<b>ABF 212</b>	Principles of Crop Production	6
<b>ABF 213</b>	Soil Science & Plant Nutrition	5
<b>ABF 230</b>	Principles of Animal Production	6
<b>TOTAL</b>		<b>31</b>

**B.SC. DEGREE: AGRICULTURAL SCIENCES, BIOTECHNOLOGY AND FOOD SCIENCE****COURSES FOR THE CROP SCIENCE AND TECHNOLOGY OPTION****SECOND YEAR****4<sup>th</sup> Semester**

		<b>ECTS</b>
<b>ABF 214</b>	Pomology (Fruit Crops)	6
<b>ABF 215</b>	Agricultural Zoology & Nematology	5
<b>ABF 216</b>	Molecular Biology & Biotechnology	5
<b>ABF 217</b>	Soil Physics	5
<b>ABF 218</b>	Agronomy (Field Crops)	5
<b>ABF 219</b>	Agrometeorology	4
<b>TOTAL</b>		<b>30</b>

**THIRD YEAR****5<sup>th</sup> Semester****6<sup>th</sup> Semester**

			<b>ECTS</b>				<b>ECTS</b>
<b>ABF 310</b>	Plant Pathology	6		<b>ABF 316</b>	Floriculture & Landscape Architecture	7	
<b>ABF 311</b>	Olericulture (Vegetable Crops)	5		<b>ABF 317</b>	Entomology & Acarology	7	
<b>ABF 312</b>	Agricultural Hydraulics - Irrigation	5		<b>ABF 318</b>	Diseases of Crop Plants	5	
<b>ABF 313</b>	Agricultural Machinery & Automation	5		<b>ABF 319</b>	Greenhouse Technology & Hydroponics	5	
<b>ABF 314</b>	Plant Breeding & Genetics	4			Electives	6	
<b>ABF 315</b>	Viticulture	4					
<b>TOTAL</b>			<b>29</b>	<b>TOTAL</b>			<b>30</b>

**ABF 390 Practical Training (Summer Session) - 5 ECTS\***\* The five ECTS Summer Training credits are shared 3:2 between the 6<sup>th</sup> and 7<sup>th</sup> semesters.

**B.SC. DEGREE: AGRICULTURAL SCIENCES, BIOTECHNOLOGY AND FOOD SCIENCE****COURSES FOR THE CROP SCIENCE AND TECHNOLOGY OPTION****FOURTH YEAR**

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>ABF 410</b>	Nursery Production & Technology of Propagation Material	5	<b>ABF 471</b>	Agricultural Economics (Management & Marketing)	4
<b>ABF 411</b>	Weed Science	5	<b>ABF 472</b>	Agricultural Policy	2
<b>ABF 412</b>	Pesticide Science	5	<b>ABF 414</b>	Postharvest Physiology and Technology	4
<b>ABF 413</b>	Sustainable Agriculture	5		Electives	8
<b>ABF 470</b>	Principles of Economics & Management	4	<b>ABF 490</b>	B.Sc. Thesis	10
	Electives	4			
<b>TOTAL</b>		<b>28</b>	<b>TOTAL</b>		<b>28</b>

TOTAL: 240 ECTS

**ELECTIVES FOR THE CROP SCIENCE AND TECHNOLOGY OPTION**

Course		ECTS
<b>ABF 421</b>	Aromatic & Medicinal Plants	4
<b>ABF 422</b>	Hydrology	4
<b>ABF 423</b>	Geographical Information Systems (GIS)	4
<b>ABF 424</b>	Renewable Energy Sources (RES) in Agriculture	2
<b>ABF 425</b>	Computer Aided Design (CAD)	3
<b>ABF 426</b>	Agricultural Constructions	4
<b>ABF 427</b>	Greenhouse Vegetable Production	4
<b>ABF 474</b>	Cooperatives	2

Other electives can be chosen from the other two options of the Department, as well as from other Departments / Faculties of the University

**B.SC. DEGREE: AGRICULTURAL SCIENCES, BIOTECHNOLOGY AND FOOD SCIENCE****COURSES FOR THE FOOD SCIENCE AND TECHNOLOGY OPTION****SECOND YEAR****4<sup>th</sup> Semester**

		<b>ECTS</b>
<b>ABF 216</b>	Molecular Biology and Biotechnology	5
<b>ABF 250</b>	Food Packaging	5
<b>ABF 251</b>	Food Process Engineering	5
<b>ABF 252</b>	Food Quality Management	5
<b>ABF 253</b>	Food Chemistry	6
<b>ABF 254</b>	Food Physics	5
<b>TOTAL</b>		<b>31</b>

**THIRD YEAR****5<sup>th</sup> Semester****6<sup>th</sup> Semester**

		<b>ECTS</b>			<b>ECTS</b>
<b>ABF 350</b>	Oenology	6	<b>ABF 355</b>	Food Microbiology	6
<b>ABF 351</b>	Food Fermentations	6	<b>ABF 356</b>	Food Processing and Product Quality	7
<b>ABF 352</b>	Food Enzymology	6	<b>ABF 357</b>	Food & Ingredient Functionality	6
<b>ABF 353</b>	Dairy Science & Technology	6	<b>ABF 358</b>	Meat Science & Technology	6
<b>ABF 354</b>	Science and Society	2		Electives	5
	Electives	4			
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

**ABF 390 Practical Training (Summer Session) - 5 ECTS \***\* The five ECTS Summer Training credits are shared 3:2 between the 6<sup>th</sup> and 7<sup>th</sup> semesters.

**B.SC. DEGREE: AGRICULTURAL SCIENCES, BIOTECHNOLOGY AND FOOD SCIENCE****COURSES FOR THE FOOD SCIENCE AND TECHNOLOGY OPTION****FOURTH YEAR**

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>ABF 470</b>	Principles of Economics and Management	4	<b>ABF 414</b>	Post Harvest Physiology and Technology	4
<b>ABF 450</b>	Risks Associated with Foods	5	<b>ABF 454</b>	By-product Utilization and Waste Management	2
<b>ABF 451</b>	Principles of Human Nutrition and Health	5	<b>ABF 473</b>	Organization and Management of Food Enterprises	4
<b>ABF 452</b>	Food Legislation	2	Electives		7
<b>ABF 453</b>	Food Analysis	4	<b>ABF 490</b>	B.Sc. Thesis	10
Electives		7			
<b>TOTAL</b>		<b>27</b>	<b>TOTAL</b>		<b>27</b>

TOTAL: 240 ECTS

**ELECTIVES FOR THE FOOD SCIENCE AND TECHNOLOGY OPTION**

Course		ECTS
<b>ABF 460</b>	Case Studies on Product Quality	6
<b>ABF 461</b>	Sensory Science	4
<b>ABF 462</b>	Loss of Nutrients by Processing	2
<b>ABF 463</b>	Food Sanitation and Safety	4

Other electives can be chosen from the other two options of the Department, as well as from other Departments / Faculties of the University



**B.SC. DEGREE: AGRICULTURAL SCIENCES, BIOTECHNOLOGY AND FOOD SCIENCE****COURSES FOR THE ANIMAL SCIENCE AND TECHNOLOGY OPTION**

SECOND YEAR		
4 <sup>th</sup> Semester		
		ECTS
<b>ABF 231</b>	Animal Biology (Anatomy - Physiology)	5
<b>ABF 232</b>	Animal Breeding & Genetics	5
<b>ABF 233</b>	Feedstuff Technology	5
<b>ABF 234</b>	Biometry & Experimental Design	5
<b>ABF 252</b>	Food Quality Management	5
<b>ABF 216</b>	Molecular Biology and Biotechnology	5
<b>TOTAL</b>		<b>30</b>

THIRD YEAR					
5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>ABF 330</b>	Cattle Production	5	<b>ABF 334</b>	Aquaculture and Fisheries	5
<b>ABF 331</b>	Animal Reproduction & Fertility	5	<b>ABF 335</b>	Digestive Physiology & Nutrition of Non-ruminants	5
<b>ABF 332</b>	Production in Small Ruminants	5	<b>ABF 336</b>	Apiculture and Honey Technology	5
<b>ABF 333</b>	Digestive Physiology & Nutrition of Ruminants	5	<b>ABF 337</b>	Animal Pathophysiology and Disease	5
<b>ABF 354</b>	Science and Society	2	<b>ABF 338</b>	Management of Genetic Resources & Bioinformatics	5
	Electives	6		Electives	5
<b>TOTAL</b>		<b>28</b>	<b>TOTAL</b>		<b>30</b>
ABF 390 Practical Training (Summer Session) - 5 ECTS*					

\* The five ECTS Summer Training credits are shared 3:2 between the 6<sup>th</sup> and 7<sup>th</sup> semesters.

**B.SC. DEGREE: AGRICULTURAL SCIENCES, BIOTECHNOLOGY AND FOOD SCIENCE**

FOURTH YEAR					
7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>ABF 470</b>	Principles of Economics and Management	4	<b>ABF 414</b>	Post Harvest Physiology and Technology	4
<b>ABF 413</b>	Sustainable Agriculture	4	<b>ABF 433</b>	Veterinary Pharmacology	5
<b>ABF 430</b>	Fish Production	5	<b>ABF 472</b>	Agricultural Policy	2
<b>ABF 431</b>	Pig Production	5	Elective		7
<b>ABF 432</b>	Poultry Production	5	<b>ABF 490</b>	B.Sc. Thesis	10
Electives		6			
<b>TOTAL</b>		<b>29</b>	<b>TOTAL</b>		<b>29</b>

**ELECTIVES FOR THE FOOD SCIENCE AND TECHNOLOGY OPTION**

Course		ECTS
<b>ABF 440</b>	Special Topics in Animal Breeding	5
<b>ABF 441</b>	Special Topics in Horse Breeding	5
<b>ABF 442</b>	Computer Applications in Animal Science	5
<b>ABF 443</b>	Animal Behaviour and Endocrinology	5
<b>ABF 444</b>	Adaptation Physiology	5
Other electives can be chosen from the other two options of the Department, as well as from other Departments / Faculties of the University		

For analytical description of each course, visit [www.cut.ac.cy](http://www.cut.ac.cy)



## Department of Environmental Management

### Introduction

In the 20<sup>th</sup> century engineers and scientists developed powerful technologies that met the needs of society: Housing, transportation, food, clothing, and entertainment. However, rapid economic development was accompanied by an enormous increase in the consumption and depletion of the earth's resources: Minerals, fossil fuels, and ecosystems. Global warming and loss of biodiversity have already signaled that economic development has resulted in major environmental problems that society has to deal with in the 21<sup>st</sup> century. The deterioration of the natural environment is particularly severe in islands like Cyprus where land and water resources are limited. In the past, environmental degradation was attributed to some particular company or industry, but industry only responds to societal needs and markets. Therefore, the term "industrial activities" must include both industries that provide products and services and society that demands and consumes the industrial output. It is now generally recognized that it is absolutely necessary for engineers and scientists to re-think and even re-design industrial activities with full knowledge of their environmental impacts. Also, it has led the United Nations to define "sustainable development" as that which meets the needs of the current generation but does not prevent future generations from meeting their needs.

This improved understanding of human activities on their environment has led to the creation of new educational courses and programmes that prepare graduates who can lead the way in establishing a fair balance between societal needs, on one hand, and avoiding further deterioration of the environment, on the other. The foundations of these programmes are sound scientific principles, in particular earth sciences, and new methodologies that have been developed

in the last few decades to help humanity deal with the environmental problems created by population growth and very rapid economic development. These methodologies include industrial ecology, life cycle assessment, and geographic information systems.

The Department of Environmental Management of the Cyprus University of Technology has based its goals on the above principles. The undergraduate and Masters curricula have been designed to train people who after graduation can move to industry, government and teaching positions and ensure that industrial activities are designed with the full understanding of their environmental consequences. These environmental managers will also have the skills required for rehabilitation of land and water resources and thus help to correct the mistakes of the past. The courses and curricula of the Department were designed by the faculty assisted by an international group of leading scientists in environmental science and engineering who took into full account the special environmental needs and problems of Cyprus and of the surrounding region. Therefore, the University provides, for the first time in Cyprus, a university level programme in Environmental Management that will prepare graduates for a successful professional career and equip them for positions of leadership in industry, government, and academia.

On the basis of their goal-oriented training, the environmental management graduates will be able to confront environmental problems, arrive at practical solutions and help prevent further environmental deterioration. Also, the research conducted by faculty and students and the overall training of the graduates will help Cyprus to be in compliance with EU environmental policy and regulations that are aimed at advancing the goals of sustainable development and protecting public health and the environment



### **Vision**

The establishment of an internationally recognised Department in the field of Environmental Science and Management which provides high quality education and performs innovative basic and applied research and which is able to attract and retain outstanding students and faculty.

### **Mission**

- To provide high quality education in the field of Environmental Sciences and Management.
- To promote basic and applied research in the field of Environmental Sciences and Management.
- To establish and maintain close association with relevant environmental issues, competent authorities, the private sector, NGOs and local communities.
- To facilitate international cooperation, the mobility of students, researchers and academics.

### **Educational and Teaching Objectives of the Programme**

The educational objectives aim to provide:

- A solid background in basic sciences such as chemistry, physics, biology and mathematics.
- An understanding of Environmental Sciences focusing on physical, chemical and biological processes taking place in water, soil and the air.
- An understanding of the origin, fate and impact of pollutants
- Competence in laboratory and field analytical work and monitoring
- An integrated approach towards environmental issues taking into consideration social, legal, economic and technical aspects
- Abilities to formulate and communicate sound Environmental Management Schemes

### **Thus enabling graduates to:**

- Work within or lead groups in competent authorities (central and local) responsible for the implementation of environmental legislation and policies.
- Perform environmental impact assessment studies
- Participate in interdisciplinary consultancy groups studying balanced and sustainable development projects.
- Advance their studies and engage in research and academic activities.

### **Undergraduate Programme**

The undergraduate programme of the Department offers specific scientific education and training in the field of Environmental Management. During the first semesters, the curriculum offers introductory courses in Environmental Management as well as a solid background in basic/core lessons which will help the students to understand better the more specific lessons that will follow. During the last year of studies students will be able to conduct their Diploma Thesis, related to their studies, which will be supervised by a member of the Department's faculty.

The B.Sc. in Environmental Science and Management requires at least 239 ECTS.



**The curriculum of the Department is summarized as follows:**

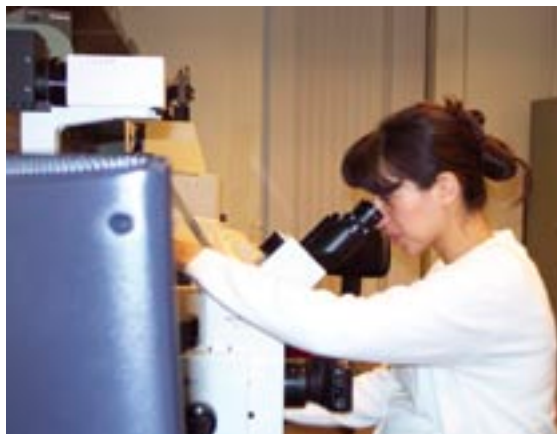
- General – Introductory Education: 60 ECTS

Eleven Courses: Introduction to Environmental Sciences, General and Inorganic Chemistry, Biology, Physics, Mathematics I, Mathematics II, Principles of Sustainable Resource Management, Statistics, Introduction to Earth Sciences, Plant Systematics, Material and Energy Balances.

- Education in Environmental Management: 149 ECTS

Twenty nine specific lessons in Environmental Management: Environmental Chemistry, Ecology, Water Quality Analysis, Environmental Management Tools, Surface and Groundwater Hydrology, Soil Science, Biodiversity and Conservation, Plant Systematics, Statistics, Water and contaminant transport in soils, Environmental Law and Policy, Agrometeorology, Environmental Economics, Geographic Information Systems, Renewable sources of energy, Liquid Waste Management, Solid Waste Management, Air pollution and prevention, Water pollution, Environmental monitoring and Remote Sensing, Urban Environment I, Environmental impact and risk assessment, Sustainable agriculture and forestry, Marine Biology and sustainable fisheries, Industrial ecology (Environmental analysis systems), Coastal zone management, Environmental Remediation, Urban Environment II, Global climatic change.

- Foreign Language, English: 8 ECTS
- Diploma Thesis: 12 ECTS
- Required Electives: 10 ECTS
- Total Programme: 239 ECTS



**BACHELOR - ENVIRONMENTAL MANAGEMENT****FIRST YEAR**

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>EMA 101</b>	Introduction to Environmental Sciences	5	<b>EMA 104</b>	Principles of Sustainable Resource Management	6
<b>EMA 102</b>	General and Inorganic Chemistry	6	<b>EMA 105</b>	Environmental Chemistry	6
<b>EMA 103</b>	Biology	5	<b>MATH 201</b>	Mathematics II (Differential Equations)	6
<b>PHYS 101</b>	Physics	5	<b>EMA 106</b>	Introduction to Earth Sciences	6
<b>MATH 110</b>	Mathematics I	5	<b>ENG 181</b>	English for Environmental Management	4
<b>ENG 122</b>	English for Academic Purposes	4			
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>28</b>

**SECOND YEAR**

3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
<b>EMA 211</b>	Ecology	4	<b>EMA 221</b>	Water Quality Analysis	6
<b>EMA 201</b>	Environmental Management Tools	5	<b>EMA 222</b>	Surface and Groundwater Hydrology	6
<b>EMA 202</b>	Soil Science	5	<b>EMA 212</b>	Biodiversity and Conservation	5
<b>ABF 210</b>	Plant Systematics	5	<b>ABF 106</b>	Statistics	5
<b>EMA 203</b>	Material and Energy Balances	6	<b>EMA 223</b>	Water and Contaminant Transport in Soils	6
Required elective or additional new course		6			
<b>TOTAL</b>		<b>31</b>	<b>TOTAL</b>		<b>28</b>

**BACHELOR - ENVIRONMENTAL MANAGEMENT****THIRD YEAR**

5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>EMA 331</b>	Environmental Law and Policy	6	<b>ABF 219</b>	Agrometeorology	4
<b>EMA 332</b>	Environmental Economics	5	<b>ABF 423</b>	Geographic Information Systems	5
<b>EMA 351</b>	Renewable sources of energy	6	<b>EMA 343</b>	Liquid Waste Management	6
<b>EMA 341</b>	Solid Waste Management	5	<b>EMA 344</b>	Air Pollution and Prevention	6
<b>EMA 321</b>	Water pollution	5	<b>EMA 301</b>	Environmental Monitoring and Remote Sensing	6
	Required elective or additional new course	4	<b>EMA 302</b>	Urban Environment I	4
<b>TOTAL</b>		<b>31</b>	<b>TOTAL</b>		<b>31</b>

**FOURTH YEAR**

7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>EMA 431</b>	Environmental Impact and Risk Analysis	6	<b>EMA 413</b>	Marine Biology and sustainable fisheries	6
<b>EMA 411</b>	Sustainable agriculture and forestry	6	<b>EMA 432</b>	Coastal Zone Management	6
<b>EMA 412</b>	Industrial ecology (Environmental analysis systems)	6	<b>EMA 403</b>	Urban Environment II (elective)	6
<b>EMA 441</b>	Environmental Remediation	6	<b>EMA 402</b>	Thesis Project	12
<b>EMA 401</b>	Global climatic change	6			
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

For some courses, besides the three hours of teaching it is anticipated a number of hours for laboratory or exercises

For analytical description of each course, visit [www.cut.ac.cy](http://www.cut.ac.cy)







# FACULTY OF HEALTH SCIENCES

Department of Nursing

---

108



## Department of Nursing

### Curriculum Development

#### Mission Statement

The Graduate of the Department of Nursing will be a competent, knowledgeable practitioner of nursing, who is confident in working from an evidence base in a multi disciplinary environment. He/She will be a good communicator who is research aware and demonstrates professional leadership for the 21<sup>st</sup> century.

#### Introduction

This programme has been designed to comply with the relevant professional requirements leading to nursing registration, as required by the relevant legislation. Additionally the programme complies with the EU Directives for nursing. In addition it has taken note of relevant healthcare policy, including the National Health Plan.

#### Philosophy

The educational philosophy places the student at the centre of learning. Students have different learning styles and aspire to be adult learners in an environment that recognises individual learning needs and aspirations. The student learning process is demonstrated by interaction and collaboration between teacher, student, clinician and service users.

The development of critical thinking is a strong theme throughout the programme. Independence and self-direction in the acquisition of knowledge skills and attitudes will be encouraged and facilitated. The programme will reflect a high standard of clinical competence. Students will be encouraged to develop skills of reflection and be prepared to challenge existing nursing and health care practices.

A culture of lifelong learning will be developed. A range of teaching and learning methods will be employed to foster the development of independent learners whose practice is informed by an extensive knowledge base of

relevant theory and research including the acquisition of clinical decision making and problem solving skills.

### Overall Programme Aims And Objectives

#### Programme Outcomes

- To educate and accountable practitioners, who are aware of safe practices and demonstrate a consistently high standard of clinical competence in a variety of health care settings;
- To foster personal, intellectual, social and political awareness of students, which will enable them to contribute positively both to their profession and to society;
- To develop nurses who are able to provide professional leadership in care-giving and promote health;
- To encourage and further develop life long learning and support continuing professional development;
- To develop awareness in research and the ability to keep up to date with and critically evaluate, new knowledge;
- To prepare registered nurses who can apply evidence based practice.

#### Graduates of the Nursing Programme will be able to:

- Practice to a high level of competence, which enables them to work autonomously as a member of a multidisciplinary team and in cooperation with service users;
- Demonstrate awareness of the holistic needs of service users in the multicultural health care environment, practice in a non-discriminatory manner. The importance of equity and social inclusion in health care delivery;
- Be skilled in communication and be sensitive to the psycho-social needs of service users;
- Be politically, legally and ethically aware and respond



appropriately to changes in health care practice;

- Be intellectually enquiring and rigorous in the use of evidence-based principles to assess, plan, implement and evaluate care;
- Contribute effectively to the public health agenda to meet the needs of the population in the 21st century with a clear understanding of social, demographic, technological and health care developments;
- Demonstrate reflective, problem-solving and critical review skills in academic work and clinical practice;
- Demonstrate leadership potential and work within the parameters of EU Directives and Cyprus legislation;
- Recognise and respond to the relation of practice, theory and research to deliver high quality care.

## The Curriculum

### Structure

The overall structure of the programme is based on two semesters per academic year with 13 weeks each.

In order to develop the curriculum the main themes are tabled against the courses. So for each main nursing theme there is a strand of content mapped into a corresponding number of courses.





Major Curriculum Themes	Content	
1. Science for Nursing	1. Physiology - Anatomy 2. Biochemistry 3. Biology 4. Nutrition 5. Social Sciences	6. Psychology 7. Pharmacology 8. Pathophysiology 9. Microbiology 10. Biophysics
2. Nursing Theories	1. Communication 2. Nursing Theories & Models 3. Nursing History 4. Legal Issues 5. Education 6. English Language	
3. Professional Development	1. Leadership 2. Management 3. Ethics 4. Legal Issues 5. Education 6. English Language	
4. Research for Practice	1. Health Informatics 2. Methodologies 3. Statistics 4. Epidemiology	
5. Nursing Practice	1. Basics of Nursing (principles) 2. Medical / Surgical 3. Child Care Nursing 4. Mental Health 5. Care of older people	6. Community Nursing 7. Oncology Nursing 8. Cardiology Nursing 9. Specialties 10. Midwifery
6. Electives	1. Occupational Health 2. First Aid 3. Disabilities and Rehabilitation 4. Genetics 5. Family Nursing	
7. Erasmus		
8. DISSERTATION		



## Distribution of Theoretical Hours, Laboratories, Clinical Practice, Personal Effort (Total Work Load) and Ects

The above distribution was performed according to the European Credit Transfer and Accumulation System (ECTS) Key Features (Bologna Declaration of June 1999).

According to the principles of the European Credit Transfer and Accumulation System, this curriculum is student-centred, based on the student workload required to achieve the objectives of a programme, objectives preferably specified in terms of learning outcomes and competences to be acquired.

This work is based on the convention that 60 credits measure the workload of a full-time student during one academic year. The student workload of a full-time study programme in Europe amounts in most cases to 1500 / 1800 working hours per year and in those cases one credit stands for 25 to 30 working hours. Workload refers to the notional time an average learner might expect to complete the required learning outcomes.

The total workload required for the acquisition of the title “Bachelor in Nursing” of four years duration, is 240 ECTS.

Student workload in ECTS includes the time spent in attending lectures, seminars, independent study, preparation for and taking of examinations etc.

Credits are allocated to all educational components of a study programme (such as modules, courses, placements, dissertation work etc.) and reflect the quantity of work each component requires in relation to the total quantity of work necessary to complete a full year of study in the programme considered.

The following tables present the subjects for every semester and the total workload required for every subject including lectures, laboratories, tutorials, clinical practice and the estimated hours needed for study as well as the ECTS for every subject.



**BACHELOR OF NURSING****FIRST YEAR**

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
		ECTS			ECTS
<b>APH 111</b>	Human Anatomy – Physiology I	7	<b>APH 112</b>	Human Anatomy – Physiology II	5
<b>PSY 116</b>	Introduction to Psychology	4	<b>BIO 112</b>	Biology - Biochemistry	5
<b>NUR 123</b>	Introduction to Nursing Science	5	<b>SOC 116</b>	Sociology	3
<b>INF 141</b>	Introduction to Health Informatics	5	<b>NUR 121</b>	Communication	3
<b>NUR 151</b>	Introduction to Fundamentals of Nursing I	5	<b>NUR 152</b>	Fundamentals of Nursing II	7
<b>ENG 122</b>	English for Academic Purposes	4	<b>BIO 110</b>	Biophysics	3
			<b>ENG 150</b>	English for Nursing	4
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

**SECOND YEAR**

3 <sup>rd</sup> Semester			4 <sup>th</sup> Semester		
		ECTS			ECTS
<b>PAT 218</b>	Pathophysiology I	5	<b>PAT 219</b>	Pathophysiology II	6
<b>MIC 219</b>	Microbiology	3	<b>NUR 217</b>	Pharmacology	6
<b>NUR 225</b>	Health Promotion	3	<b>INF 241</b>	Health Informatics	4
<b>NUR 233</b>	Ethics	2	<b>NUR 253</b>	Medical Nursing Specialties II	6
<b>NUR 251</b>	Fundamentals of Nursing III	5	<b>NUR 255</b>	Surgical Nursing Specialties II	6
<b>NUR 252</b>	Medical Nursing Specialties I	6	Elective: <b>OHE 261</b>	Occupational Health	<b>OR</b> 2
<b>NUR 254</b>	Surgical Nursing and Specialties I	6	<b>FAD 262</b>	Special Issues in First Aid	
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

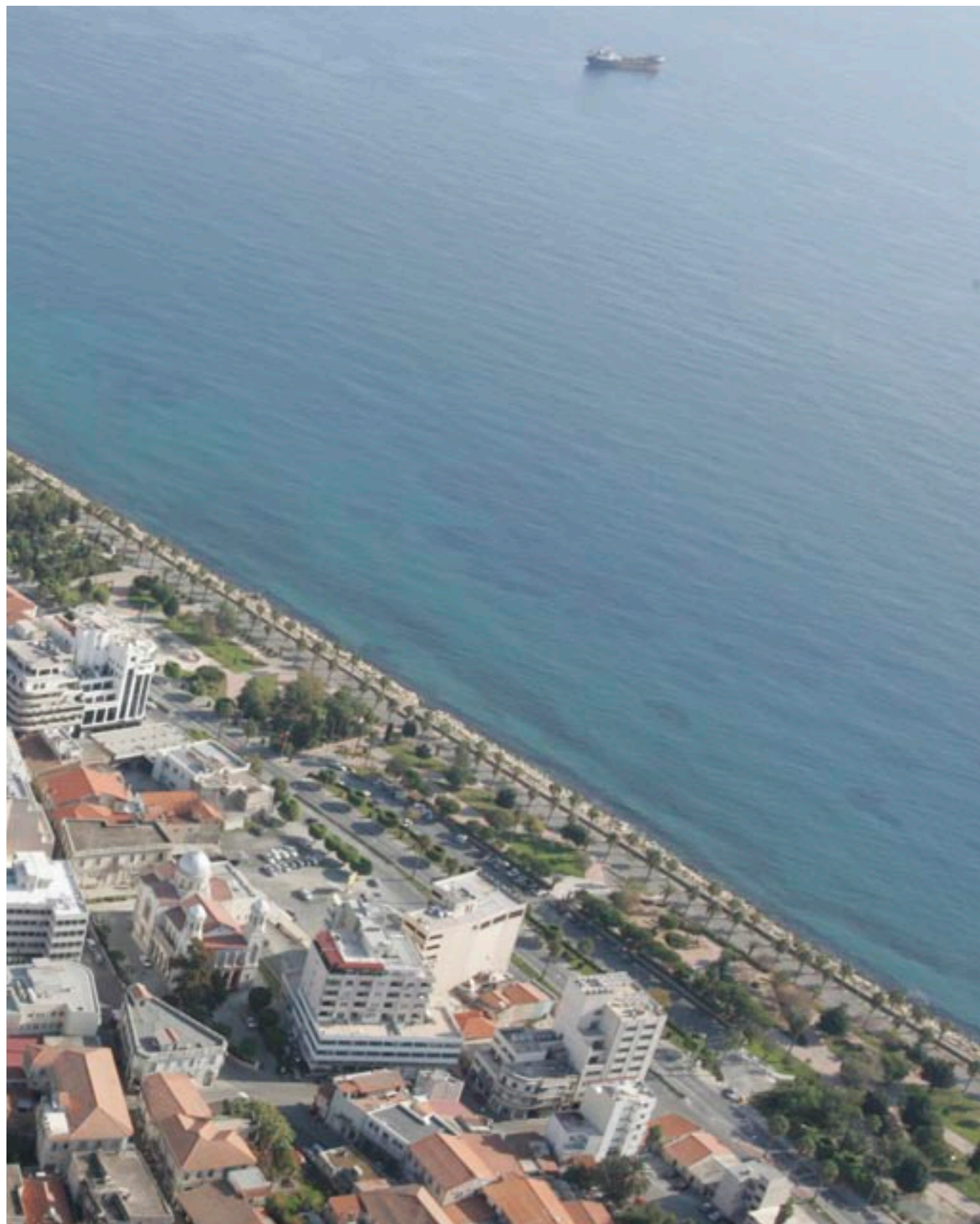




THIRD YEAR					
5 <sup>th</sup> Semester			6 <sup>th</sup> Semester		
		ECTS			ECTS
<b>NUR 322</b>	Nursing Theories & Models	3	<b>NUR 324</b>	Transcultural Nursing	5
<b>EPI 344</b>	Epidemiology	4	<b>PSY 316</b>	Health Psychology	4
<b>EDU 335</b>	Education	4	<b>NUR 354</b>	Mental Health Nursing	6
<b>STA 343</b>	Statistics	4	<b>NUR 353</b>	Child Care Nursing	6
<b>NUR 355</b>	Gerontological Nursing	6	<b>NUR 350</b>	Midwifery	6
<b>NUR 356</b>	Community Nursing	6	Elective: <b>GEN 364</b>	Genetics	<b>OR</b> 3
<b>NUR 334</b>	Legal Issues in Nursing	3	<b>NUR 365</b>	Family Nursing	
			<b>NUR 363</b>	Disabilities and Rehabilitation	
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

FOURTH YEAR					
7 <sup>th</sup> Semester			8 <sup>th</sup> Semester		
		ECTS			ECTS
<b>NUR 452</b>	Medical Nursing Specialties III	6	<b>NUR 431</b>	Nursing Management and Leadership	3
<b>NUR 453</b>	Surgical Nursing Specialties III	6	<b>NUR 459</b>	Specialties/Consolidation (Clinical Setting – CCU, ICU, A&E, Theatre Nursing)	17
<b>RSC 442</b>	Methodology of Research in Nursing	6	<b>PRO 400</b>	UNDERGRADUATE PROJECT	10
<b>NUT 414</b>	Nutrition and Special Diets.	2			
<b>NUR 457</b>	Oncology Nursing	5			
<b>NUR 458</b>	Cardiology Nursing	5			
<b>TOTAL</b>		<b>30</b>	<b>TOTAL</b>		<b>30</b>

For analytical description of each course, visit [www.cut.ac.cy](http://www.cut.ac.cy)



# APPENDICES

Interim Governing Board	116
University Buildings	118
Telephone Directory	120

## Interim Governing Board

Until the election of the first Senate and the formation of the first Council of the University, the Interim Governing Board will have all the responsibilities and execute all the duties of the Council and Senate. The members of the Governing Board are appointed according to the law by the Council of Ministers. Until the election of the first Rector, the President of the Interim Governing Board has all the responsibilities and executes all the duties of the Rector and Chairman of the Council.

### Members of the Interim Governing Board

#### Constantinides Anthony, President

Professor of Communications and Signal Processing  
Imperial College, UK

#### Persianis Panayiotis, Vice-President

Former Associate Professor of Comparative  
Education and History of Education  
University of Cyprus

#### Demertzis Nikos

Professor of Political Sociology  
National and Kapodistrian University of Athens

#### Demetriades Panicos

Professor of Financial Economics  
University of Leicester, UK

#### Hitzanidis Kyriakos

Professor of Mechanical and Electrical Engineering  
National Technical University of Athens

#### Kattamis Theo

Professor of Material Science and Engineering  
University of Connecticut

#### Kerkides Petros

Professor of Soil Physics  
Agricultural University of Athens  
Director of Agricultural Hydraulics laboratory

#### Loizidou Maria

Professor of Chemical Engineering  
National Technical University of Athens

#### Mantas John

Professor of Health Informatics  
National and Kapodistrian University of Athens  
Faculty of Nursing, Former Chair  
Director of Public Health Department  
Director of Health Informatics Laboratory

#### Petrou Michael

Associate Professor of Civil and Environmental  
Engineering  
University of Cyprus

#### Sophocleous Mimis

Former Academic  
Royal Melbourne Institute of Technology  
Director of the Historical Archive Museum  
and Centre of Studies of Limassol Municipality

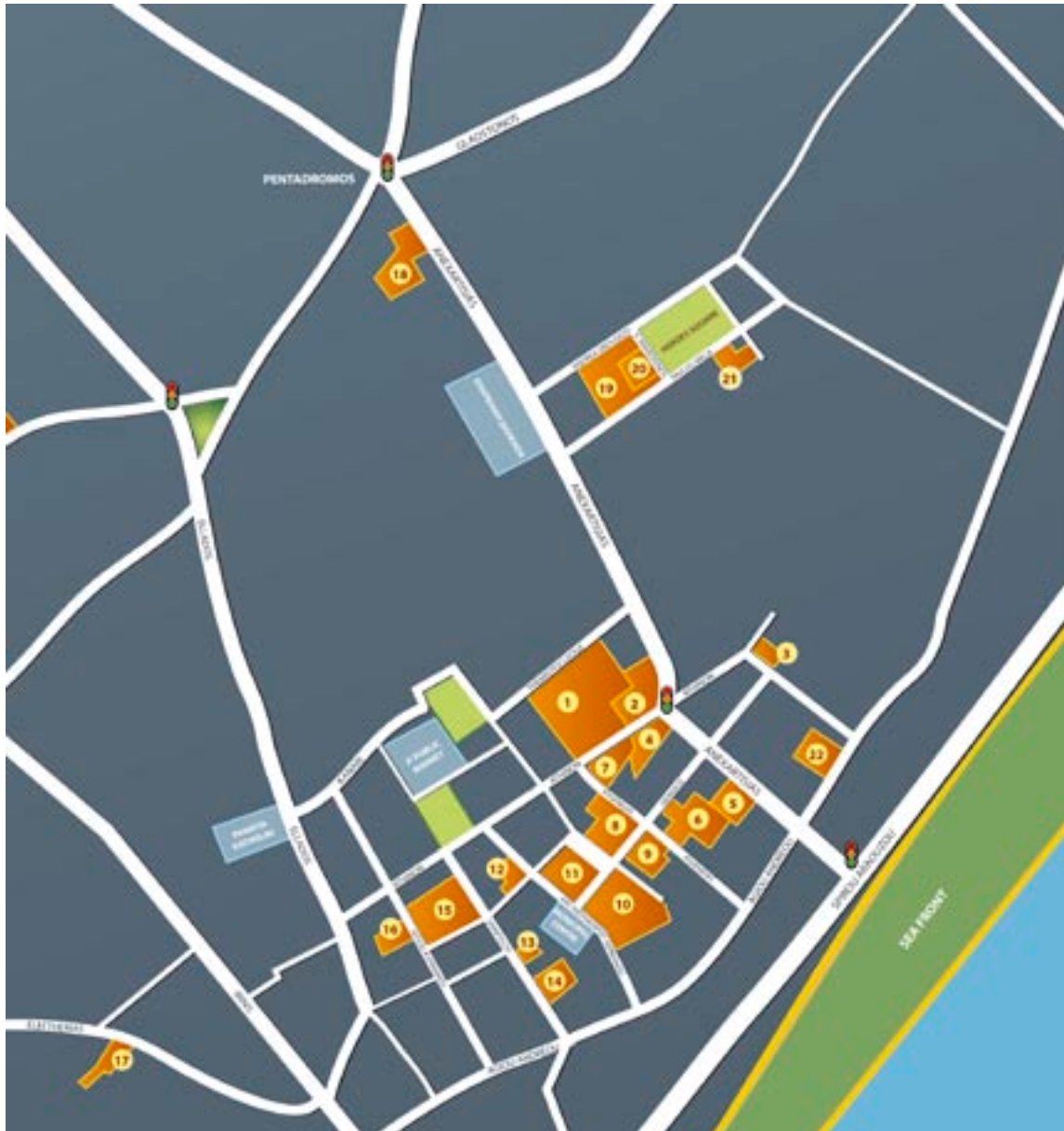
### Mallouppas Andreas, Secretary and Registrar

#### Rector's Council

The Rector, the Vice Rectors and the Secretary and Registrar form the Rector's Council which can be assigned by the Senate to any of the Senates responsibilities. By decision of the Interim Governing Board an informal Rector's Council is in force and composed of the President of the Interim Governing Board Professor Anthony Constantinides, the Vice President Dr. Panayiotis Persianis as well as the Secretary and Registrar Dr. Andreas Mallouppas.







1. Common Lecture Rooms / Computer Laboratories
2. Faculty of Geotechnical Sciences and Environmental Management
3. Service for Research, International Cooperation and Public Relations
4. Laboratories / Faculty of Geotechnical Sciences and Environmental Management
5. Faculty of Economics and Management
6. Premises under study
7. Common Lecture Rooms / Computer Laboratories
8. University Library
9. Premises under study
10. Premises under study
11. Senate House / Under Construction
12. Administration Building
  - a. Secretary and Registrar (4<sup>th</sup> floor)
  - b. Service for Finance and Human resources (3<sup>rd</sup> Floor)
  - c. Information Systems and Technology (1<sup>st</sup> Floor)
13. Academic Affairs and Student Welfare Service
  - a. Service Offices (1<sup>st</sup> -3<sup>rd</sup> Floors)
  - b. Student Services and Information Centre (basement)
14. Faculty of Engineering and Technology
15. Laboratories / Faculty of Engineering and Technology
16. Laboratories / Faculty of Engineering and Technology
17. Library and Information Services Office
18. Premises under study
19. Laboratories / Faculty of Applied Arts and Communication
20. University Cafeteria
21. University Dorms
22. Temporary Senate House



Cyprus University of Technology  
 31, Archbishop Kyprianos, 3036 Lemessos  
 P.O.Box: 50329, 3036 Lemessos, Cyprus  
 Tel: (+357) 25 00 25 00  
 Fax: (+357) 25 82 90 91  
 email: [administration@cut.ac.cy](mailto:administration@cut.ac.cy)  
<http://www.cut.ac.cy>

President of the Interim Governing Board	25002549
Secretary and Registrar	25002554
<b>ADMINISTRATIVE AND OTHER SERVICES</b>	
Student Service and Information Centre	25002710, 25002711
Academic Affairs and Student Welfare Service	25002702
Library and Information Services	25002703
Information Systems and Technology	25002701
Human Resources	25002704
Service for Research, International and Public Relations	25002705
Estate Management Service	25002706
Accounting Office	25002707
Language Centre	25002708
<b>FACULTIES</b>	
<b>FACULTY OF APPLIED ARTS AND COMMUNICATION</b>	<b>25002721</b>
Department of Communication and Internet Studies	25002722
Department of Multimedia and Graphic Arts	25002723
<b>FACULTY OF ECONOMICS AND MANAGEMENT</b>	<b>25002718</b>
Department of Hotel and Tourism Management	25002719
Department of Commerce, Finance and Shipping	25002720
<b>FACULTY OF ENGINEERING AND TECHNOLOGY</b>	<b>25002724</b>
Department of Civil Engineering and Geomatics	25002727
Department of Electrical Engineering and Information Technology	25002725
Department of Mechanical Engineering and Materials Science and Engineering	25002726
<b>FACULTY OF GEOTECHNICAL SCIENCES AND ENVIRONMENTAL MANAGEMENT</b>	<b>25002715</b>
Department of Agricultural Sciences, Biotechnology and Food Science	25002716
Department of Environmental Management	25002717
<b>FACULTY OF HEALTH SCIENCES</b>	<b>22001813</b>
Department of Nursing	22001814