

## Background document for validation submissions

Programme Title:	B.Sc. (Honours) in Information Technology (Software Development) B.Sc. (Honours) in Information Technology (Network Technologies) B.Sc. (Honours) in Information Technology (Digital Media Technologies)		
Teaching Institution:	DEREE - AMERICAN COLLEGE OF GREECE		
Site(s) where the programme is to be delivered	<ul style="list-style-type: none"> <li>• Aghia Paraskevi Campus</li> <li>• Downtown Campus</li> </ul>	Proposed start date	September 2011

1. Background to the proposal and rationale of the programme (and of its pathways as applicable).

### The Information Technology programme

In congruence with the mission of the College, the B.Sc. in Information Technology has been designed to meet the growing demand for information technology skills and to provide a route for students to progress towards information technology careers. Moreover, the programme aims to expose students to a wide range of **IT-related subjects** while its three pathways offer students the opportunity to pursue the area of specialisation that best matches their needs and their future professional aspirations.

The Information Technology (IT) programme is offered within the School of Arts and Sciences at Deree-ACG, and under the department of Science, Technology and Mathematics. It assumes no prior knowledge in information technology, but rather has a structured approach to the gradual build up of knowledge and understanding, as well as the development of relevant skills in information technology-related pathways. Furthermore, this programme offers students the opportunity to gain a detailed understanding of the technological aspects underpinning software engineering, network communications and digital media.

The process of initially designing the IT programme according to stakeholders' needs was driven by the following internal and external factors:

- Market needs, as they have been derived from institutional and departmental surveys.
- Standards in higher education from the QAA and NEASC.
- Subject benchmarks on computing.
- Academic staff research interests and professional activities, which continuously inform teaching and curriculum enhancement.
- Prior experience of the teaching staff in programme design.

(Please see sections 2, 6 and 8 of the present document)

### Educational aims

The primary goals of the IT programme are to:

- Provide students with comprehensive background knowledge in Information and Communication Technologies.
- Develop the students' analytical and critical skills for problem identification, analysis and solution implementation.
- Provide students with specialized computing knowledge and skills to implement information technologies in the areas of software development, networking or digital media.
- Develop students' understanding of the ethical framework that governs the use of information technologies.
- Providing the students with the broad range of knowledge necessary to pursue graduate studies and/or careers in information technology.

## Structure of the IT programme

Students today are challenged by a unique business environment characterized by an increasing dependence on automation, information dominance, an economic slowdown, global unrest, and new global economy rules of employment. Moreover, organisations are increasing the demand for IT to become a strategic force for change. Taking this into consideration, through the IT curriculum we help our students turn these challenges into competitive advantages by offering modules through which they obtain analytical and quantitative skills, apply critical thinking and scientific method and identify professional and academic career paths.

The programme is designed to integrate theory on different aspects of computing with practical skills on a variety of information technologies. More specifically, practical learning activities support the understanding of underlying principles in a balanced manner. At the same time the programme blends hardware, software and networking concepts in the modelling, design and development of computer-based systems.

In the process of programme design, we have identified three (3) Information Technology pathways our students could possibly follow: Software Development, involving the design, development, and implementation of computer systems and software; Network Technologies, involving network analysis, planning, and implementation; and Digital Media Technologies, involving the creation, design, and production of multimedia products and services. These pathways prepare students for employment in three areas of specialisation in the Information Technology industry.

Students who decide to pursue an award in Information Technology will have to take **eight (8) interdisciplinary modules** that are common for all three pathways. These modules ensure that all students complete a programme of study that is both broad and deep, preparing them for careers and advanced study in computing-related fields. This interdisciplinary modules' design has been extensively benchmarked against colleges and universities in the US and the UK, as well as against the QAA honours degree subject benchmark statement for computing. For these modules, the IT area collaborates with academic departments in the School of Arts & Sciences and the School of Business Administration to review and improve the respective modules according to programme, institutional and market needs (please see Table 4 in Appendix, page 21).

Additionally, students will have to take **nine (9) IT core modules**. By taking these modules, students will gradually develop their knowledge and skills in various information technology principles and practices including, programming, operating systems, databases, data communications and artificial intelligence. In this way, students will be adequately prepared to make an informed choice in regard to the pathway they will follow.

It is worth mentioning that **both interdisciplinary and IT core modules are common** for all three pathways of the programme.

Finally, upon choosing the pathway they prefer, students will have to take 30 credits in level 5 and 75 credits in level 6 of **seven or eight (7 or 8) pathway-specific modules** to complete the requirements of the programme. More specifically, for the Software Development and the Network Technologies pathways students have to take seven (7) pathway-specific modules. For the Digital Media Technologies pathway students have to take eight (8) pathway-specific modules.

So, in order to address the educational aims of the IT programme, the curriculum includes modules under level 4, 5 and 6. The module breakdown in the programme is:

- Eight (8) interdisciplinary modules in psychology, mathematics, English, philosophy and project management, giving 120 credits,
- Nine (9) IT core modules, giving 135 credits,
- Seven or eight (7 or 8) pathway-specific modules, giving 105 credits.

(Please see Tables 1, 2, 3, in the Appendix, pages 21, 22).

At level 4 students gain knowledge and understanding on programming, and on computer architecture concepts. The programme also includes one module in statistics, one module in applied calculus and two modules in psychology. At this level, student learning is guided by the teaching staff and provides the ground for students to blend theories in computing, psychology and mathematics with a practical solution to a problem.

At level 5, students develop their skills in effective communications, and also gain knowledge and understanding on business ethics. Moreover, an additional module in mathematics aims to provide students the background in the form of abstractions for many domains that they will encounter in the pathway of their choice. At this level, students learning gradually become more independent through projects aiming at developing students' analytical and computational thinking. Furthermore, students develop their knowledge and understanding in the modelling and design of computer-based systems. At this point, students will have to choose one out of three pathways and subsequently start taking the respective pathway-specific modules.

At level 6, the programme focuses on pathway-specific modules with learning outcomes and teaching methods aiming to develop student's skills in managing software development projects, so that they are able to deploy appropriate theory and tools for the specification, modelling, design, implementation and evaluation of computer-based systems. At this level, students apply critical thinking and computational skills in an independent learning environment.

At this level, through the capstone project module students integrate knowledge and apply computing-related skills in order manage the whole process involved in the effective deployment of computers to solve practical problems. The final deliverable of the capstone project modules is a small-scale computer-based system that aims to support the goals of a business firm or organisation.

More specifically, three capstone modules have been designed to address the specialised needs of the three IT pathways: the Software Development Capstone Project, the Networking Capstone Project and the Digital Media Capstone Project.

### **Common modules (interdisciplinary and IT core)**

The common modules in the IT programme grant 255 UK credits out of 360 UK credits required for a validated award in Information Technology. Common modules include all level 4 modules of the programme, six out of the eight level 5 modules and three out of the eight level 6 modules. Upon the gradual completion of the seventeen (17) IT core modules, students should be able to make an informed choice of the pathway to follow.

#### **Aims**

The common modules aim at exposing students to a wide range of topics in computing and also at aspects from other disciplines adjacent to computing, as well as to expose them to cutting edge technologies and techniques to support their choice of specialisation.

#### **Objectives**

Upon successful completion of the common modules, students will be able to demonstrate:

- Knowledge and understanding of information technology components and their integration.
- Creative and analytical thinking skills that provide a basis for technological problem.
- The ability to communicate effectively, both orally and in writing.
- An understanding of the biological, social and cultural aspects of user behaviour.
- The ability to apply knowledge, manage projects and work effectively in diverse teams.
- An understanding of the application of new and developing technologies with sensitivity for global, societal, organizational, and personal usage issues, compliant with moral standards.

## Information Technology pathways

Each one of the three IT pathways emphasises fundamental areas of information technology and aims at offering students a specialisation in the area that each one addresses. Moreover, IT pathway modules grant 105 UK credits out of the 360UK credits required for a validated award in Information Technology.

### Software Development pathway

The Software Development pathway offers two level 5 modules that provide students with knowledge on the subjects of algorithmic complexity and data structures and analysis of algorithms. Both modules are instrumental for the progression of students to the remaining pathway modules. At level 6, students are given knowledge and skills in the areas of Internet programming and game programming as well as software engineering concepts, human computer interaction, and artificial intelligence. Moreover, through a software development capstone project, students are expected to develop a comprehensive software solution to a given problem by integrating knowledge and skills acquired in prerequisite modules of the programme.

#### Aims

The **Software Development** pathway aims at providing an in-depth understanding of the concepts, methodologies and application of practices involved in software development.

#### Objectives

Upon successful completion of the software development pathway, students will be able to:

- to identify, formulate, and solve software engineering problems
- have knowledge and skills in programming, together with relevant mathematical structures and concepts
- be productive practitioners skilled in applying methodologies and practices to software components and systems
- manage and develop IT projects.

### Network Technologies pathway

The Network Technologies pathway offers two level 5 modules that provide students with knowledge on the subjects of network administration and telecommunications. Both modules are instrumental for the progression of students to the remaining pathway modules.

At level 6, students acquire knowledge and skills in the areas of network security, network design, and distributed systems. Moreover, through a networking capstone project students are expected to develop a networking solution to a given problem, based on knowledge and skills acquired in prerequisite modules of the programme.

#### Aims

The **Network Technologies** pathway aims to provide an in-depth understanding and skills needed to design and manage computer networks.

#### Objectives

Upon successful completion of the network technologies pathway, students will be able to:

- use high-end network equipment and tools
- configure and operate the principal components of network infrastructure
- use network operating systems and apply data communication techniques in linking computer systems
- apply practical competencies in network design
- evaluate secure networked system feasibility, sustainability in concert with current and future needs.

## **Digital Media Technologies pathway**

The Digital Media Technologies pathway offers three level 5 modules that provide students with knowledge on the subjects of digital imaging, modelling methodologies and digital, video and audio processing. These three modules are instrumental for the progression of students to the remaining pathway modules.

At level 6, students acquire knowledge and skills in the areas of interactive multimedia systems, human computer interaction, game design, game programming, and internet programming. Moreover, through a digital media capstone project students are expected to creatively combine knowledge and skills acquired in prerequisite modules of the programme.

### **Aims**

The **Digital Media Technologies** pathway aims at providing an in-depth understanding of processes and the concepts, practices and principles involved with digital media technologies.

### **Objectives**

Upon successful completion of the digital media technologies pathway, students will be able to:

- have knowledge of digital media technologies including 2D and 3D graphics, video, audio and animation.
- analyse, design, develop and evaluate digital media solutions.

### **Teaching and Learning**

Deree-ACG has a strong reputation in Greece for the high standards it upholds with regard to the classroom experience in the context of a student-centred institutional focus. Although the prevalent approach to disseminating knowledge remains the delivery of class lectures, the College, albeit in a non-formalized way, has been guiding teaching staff toward instructional methods that are more in line with a learning-centred approach: more interactive learning, student engagement as opposed to passive student attendance etc. Teaching is informed by the latest developments in the discipline enabling academic staff to exhibit a more critical methodology when imparting knowledge to students.

The breakdown between traditional lecturing and tutorial time is not typical in the US system of higher education. Therefore, class size is kept relatively small, namely 25-30 students in level 4 modules and 20 students in levels 5 and 6 modules. Teaching of IT modules combines traditional lecturing by the tutor with interactive learning that encourages student participation, involves in-class question-and-answer periods and problem-solving. Depending on module level, the approach to teaching also encourages in-class discussion, independent enquiry, and development of argumentation by students. When the module material permits, teaching is supported by the use of visual aids, such as video presentations, as well as the use of electronic aids, such as internet sources. All classrooms are equipped with one computer and have internet connection. Computer facilities are used extensively in teaching IT modules. Courses at all levels involve instruction at the computer facilities where students under the guidance of the teacher apply methods and techniques previously discussed in theory. Students develop their computing skills and abilities through a wide range of programming, design and implementation problems carried out in the computer laboratories. The software available in the computer laboratories include tools for development, database management, data analysis, project management, security controls and systems modelling.

Classes are held for 3 hours per week for 15 weeks per semester, including a 2-hour final examination at the end of the semester. In the case of short sessions, classes are held daily for 2 hours per day for 19 working days. Final exams are 2-hour exams and take place on the 20<sup>th</sup> day. Each semester or session students spend 45 hours for attending classes (including a 2-hour final examination). In addition, students spend 105 hours per semester or session for private study outside the classroom, including studying module material, preparing assessed coursework, preparing for examinations, writing assessed

essays etc. Thus, student work per semester or session for each module amounts to 150 hours (15 credits).

It is noted that students are not permitted to register for more than 4 (four) 15-credit modules in each semester and 1 (one) module in short sessions. Students are not permitted to register for more than 120 credits per academic year.

Teaching is supported by teacher's office hours. All teaching staff, regardless their rank or seniority, have a contractual obligation to keep one office hour per week per module during semesters. Students are encouraged to make full use of the office hours of their teacher, where they can ask questions, see their exam paper(s) and/or assessed coursework, and/or go over lecture material. Although not formally measured, office hours generally tend to be intensively used by students.

Moreover, staff and students make full use of the Blackboard CMS (Course Management System) platform, where professors post lecture notes, instructions, timely announcements etc. Due to the fact that Blackboard containers for semester/session modules are removed at the end of the term, historical data are not readily available.

Feedback on modules is obtained via the student evaluation form that all students attending a particular module fill in at the end of each semester. Copies of the module evaluation form are available to the panel in the work-room. Relevant data are collected and processed by the IRM. Results are given to each member of the teaching staff at the beginning of the ensuing semester. They are utilized by members of the staff to pursue improvement in their teaching.

### **Pedagogy**

In the area of Information Technology our approaches to pedagogies in teaching are consistent with independent learning and they are informed by teaching staff's scholarship, and expertise in the field.

During the academic year 2009-10, a wide range of activities took place aiming to raising staff awareness with regards to the College's emphasis on pedagogy and research. Lectures, workshops, and seminars were organized by the College and were well attended by the staff of all departments/areas of the college. Notable events include two lectures on pedagogy and learning sponsored by the Global Liberal Arts Alliance (of which DEREЕ became a member this past year) and the conference "Tech-Education 2010, First International Conference on Technology Enhanced Learning, Quality of Teaching and Reforming of Education".

Recognizing the importance of pedagogy and research, the College intends to develop a Deree Learning Resource Centre (e.g. writing, study skills, academic integrity, counselling, pedagogy, learning challenges, learning assessment) to enhance teaching competencies and improve student learning.

### **Assessment**

Assessment of student performance involves a reasonable mix of assessment methods (including seen or unseen examinations) and may incorporate both "formative" ("diagnostic" evaluation that provides feedback in order to improve learning) along with "summative" (evaluation that tests whether students have mastered the learning outcomes of a programme) evaluation tools.

Formative assessment may vary according to the course and its level; it may take the form of very specific in-class exercises such as quizzes (very short written exams), multiple choice, true/false questions, take-home assignments etc. Formative assessment does not contribute to the student's grade.

Summative assessment includes seen or unseen exams, course work, research papers and projects. Summative assessments do contribute to the student's grade. Each summative assessment tests different learning outcomes of the module. Timely feedback is provided to students. More specifically, summative assessment of student performance at Deree-ACG is normally carried out in two stages:

1. Midterm examination or project, which contributes 40% to 50% to the student's overall grade. The midterm component is a summative assessment that takes place part-way through the module and may take different forms (seen or unseen examination, assessed coursework, project or essay). The project component, which is an important component in the IT programme, is usually delivered at the end of the term based on a case problem. The Examination Board approves all proposals for summative assessments. Staff must be vigilant in ensuring that students are not over-assessed and that their assessment load is not unduly heavy. Teaching staff must provide feedback to students on midterm assessments within 21 days. Such feedback informs students to what extent they have met learning outcomes.
2. Final assessment (examination, project or essay questions), which takes place following the last day of classes of the term and contributes 50% to 60% of the module grade.

Tests and examinations assess students' ability to solve problems and address issues under a time constraint, essays develop abilities in written expression and argument, while projects develop ability to study a single issue in depth. In certain modules projects give students practice in making presentations and developing powers of oral expression and argument.

In order to meet learning outcomes of the IT modules, students are assessed through programming problems, where they are expected to develop skills in designing the steps for a solution and transform it into an algorithm or a comprehensive programming module. Moreover, in IT we assess student learning by evaluating the structure, content and functionality of customized websites, database management systems and graphical user interfaces. This is done through marking schemes (rubrics) created for this purpose. Additionally, assessment in level 6 modules is performed by evaluating computing projects where students are expected to synthesize requirements analysis, application development and documentation. In other level 6 modules, students are assessed for computing projects where they are expected to compile the functional requirements, process model, data model, object model and documentation.

The majority of module assessments are supported by the infrastructure (hardware, software, networks) provided to students and academic staff through the computer laboratories.

The exact combination of assessment tools used in each IT module depends on module level and the material covered (please see Module Assessment spreadsheet for a detailed presentation of assessment methods by module).

## 2. Details of market research and evidence of demand for the programme

Before the introduction of the IT programme in fall 2010, Information Technology modules were incorporated within the Computer Information Systems programme. The latter was designed and introduced at the beginning of the 1980s as one of the first Bachelor's programmes offered at Deree-ACG and by the School of Business Administration in specific.

For about three decades domestic competition came from similar information systems programmes run by Greek Universities or Technological Institutions. International competition was mainly associated with US and UK institutions offering similar programmes in information systems.

In the past ten years, competition in Greece and beyond intensified, coming from both public and private institutions. Deree-ACG currently competes with both public and private institutions in Greece. *Parthenon research (Parthenon Group)* documented the College's performance against these competitors over the past decade. The College's efforts to reverse some of these trends have begun to show positive results; for example, in 2009-10 new students enrolling in all academic terms increased a total of 17.8% over the prior year. As Greece opens up, under EU pressure, to private higher education, however, the country may well attract additional private college/university institutional players.

Despite significant enrolment decline since 2000, DEREE-ACG is still the largest private higher education

institution in Greece with a current total market share of 1%.

During the academic year 2009 – 2010 the CIS department after having conducted thorough research and based on feedback received through staff networking with the market, on the annual “Career Week” hosted by the College, as well as on data from the alumni office, identified a need for an Information Technology focused programme. The curriculum committee recommended and the faculty at DERE-ACG approved the introduction of this programme in June 2010. Subsequently, the programme was first offered in fall 2010. In the first semester of its introduction, the programme achieved 37 students enrolled who are the 3.6% of the students’ population of the School of Arts and Sciences.

DEREE – ACG graduates have traditionally been accepted to pursue graduate programmes leading to Master’s degrees or higher at US and UK universities. Although detailed data are not readily available, it is estimated that approximately half of graduates pursue graduate studies, most of them in the UK. The accreditation that Deree-ACG received from NEASC in 1981 made access to postgraduate studies easier for graduates of the IT programme. It is expected that OU validation is going to further enhance the credibility of the IT programme in higher education as well as in the information technology industry.

3. Where there are employer links, please provide details of employer consultation in the development of the proposal

N/A

#### 4. Admission criteria and recruitment strategy and projections

The College has a general admissions policy based on the American system of higher education. Admission requirements are not programme specific. Students have the freedom to declare the programme of their choice either upon admission to the College or after taking a number of modules from the General Education core or as free electives. Admissions criteria are specified in the College catalogue (pp.18-19) and the QAA Code of Practice No. 10.

##### Admissions criteria

To qualify for admissions to the academic programs of Deree-ACG, applicants must demonstrate that they have the appropriate qualifications to suggest that they will be successful in the programme of their choice.

1. The **standard minimum entry requirement** for the programme is the following: 14/20 in the Greek system, an overall average grade of C in the US system, or 20 and above in the IB. Applicants whose grades are between 12/20 -13.99/20 or its equivalent, may be admitted to the General Studies Program, an access programme designed to provide foundation learning opportunities to academic students who show potential.
2. **English Language Qualifications** All applicants must provide proficiency in the English language either by taking the College's English Placement Test (EPT) or by submitting any one of the following tests:
  - Pearson test of Academic English (PTE Academic) > 58
  - Michigan State University Certificate of Language Proficiency (MSU-CELP)
  - Michigan Proficiency Certificate
  - Cambridge Proficiency Certificate
  - IB Certificate
  - IB Diploma
  - IELTS >6.5
  - SAT >450
  - ACT >18
  - TOEFL (paper based) >550
  - TOEFL (computer based) >213
  - TOEFL (internet based) >79
  - GCE higher level English >C
  - EPT >115

The listed grades qualify the student for placement directly into English Composition I (EN1010). Applicants who do not qualify for EN1010 but who otherwise show academic promise, may be placed in the English Language Preparation program, foundation modules in English.

3. **A Letter of Recommendation** from an academic teacher or professor.
4. A **certified copy of their ID card** for Greek citizens or a **valid passport** for non-Greek citizens.
5. An **interview** with an admissions counsellor.

The IT area participates in promotional "Discover Deree Day" events, where members of IT staff provide brochures and information about the programme to potential students. Since its initiation at Fall semester 2010 the IT programme already has 37 declared students and in view of Open University validation that will grant students professional rights in the local market it is expected to attract even more students in the near future.

5. Details of relevant professional accreditation or recognition (as, for example, for programmes in Nursing, Engineering, or Teaching), and currency of the curriculum in light of developments in professional practice.

N/A

## 6. Evaluation of the currency of the curriculum in light of :

- developments in the subject area
- development of QAA subject benchmarks
- developments in professional practice

Before its recent reengineering, the validated Computer Information Systems (CIS) programme used to offer modules in both information technology and information systems. In this capacity, the Computer Information Systems programme has been addressing the educational and vocational needs of a dual audience: students with IT-related career aspirations and students interested in business computing. The CIS academic staff, with the support of the office of Academic Affairs, decided to change the CIS programme to address the market need for information systems graduates with strong background in business administration and at the same time decided to design and develop a new programme in Information Technology under the School of Arts and Sciences.

To support the above mentioned curricular actions benchmarking was conducted in relevant programmes from Universities both in the United States and in the United Kingdom. The Universities selected for this process included NEASC and AACSB accredited universities, major Greek Universities and universities from the United Kingdom offering information technology programmes. In the benchmarking process all faculty members were involved. There was a focus group which was comprised of the programme leader and full time staff. This group conducted the benchmarking and discussed the results with IT academic staff in subsequent meetings to ensure consensus on the changes in programme structure and content (please see Tables 11, 12 in the Appendix).

In view of validation from the Open University, the original IT programme was revised. Changes in structure and content of the programme were informed by a thorough study of the subject benchmark statement for computing.

As part of the quality assurance of the programme, the structure and content of the IT curriculum will be regularly revised to stay abreast with recent developments in the information technology field, with changes in market needs, and with the introduction of new technologies or elimination of obsolete ones in a global and local basis. Furthermore, every three years in the context of the Curriculum Committee Review Cycle a plan is compiled to outline the curricular improvements achieved in or planned for the programme (see section 6 of the present document). Additionally, both accreditation by NEASC and programme validation by the Open University provide us with confidence that student learning outcomes consistently meet the required quality levels.

Both direct and indirect programme-based assessment methods are employed to review the programme and provide information on how well students are achieving programme aims.

The direct programme assessment method includes the capstone modules – one for each pathway- which assess the gradual build-up of student knowledge in information technology via a project, which appraises student ability to apply theory to practice in order to develop a complete solution to a given problem, based on the knowledge and the skills acquired during their studies. Additionally, common final examinations will be organised and scheduled to ensure consistency in material coverage and student assessment in multi-section modules.

Indirect programme assessment will include a Senior Exit Survey through which we will assess the extent to which the programme in general (curriculum, courses, faculty, teaching methods, technology etc.) has met students' expectations.

The strengths of the IT programme can be summarized as follows:

- Well-structured and balanced curriculum, which enables the progressive acquisition of knowledge in information technology through a sequence of fundamental and advanced modules. Each module has been designed in such a way so that its prerequisites provide sufficient knowledge and skills.
- Exposure to a wide range of areas in the field of computing.

- Exposure to specialization subjects in the field of computing.
- The modules' learning outcomes, pedagogies and assessment are continuously informed by the academic staff's research interests.
- The expertise brought to the programme by professionals who are part-time teaching staff.
- Teaching and learning environment that fosters the preparation of our graduates for both professional engagement and graduate studies.

7. Summary of the outcomes of the internal audit of physical resources to support the programme, including an account on how the financial resources are being secured:

- library resources
- multimedia resources
- workshop space, laboratories and other specialist accommodation, as applicable.

Deree–American College of Greece is tuition driven and all programs are supported by student tuition (see financial statements submitted for the purposes of the administrative visit). The budget of the College is divided into units, including an academic unit with its own budget. The academic unit allocates and monitors financial resources relating to individual programmes.

### **Library resources**

The Deree Library system includes two distinct libraries that share resources electronically as well as through intra-campus loan of materials. The main library in Aghia Paraskevi along with the satellite library near the centre of Athens, provide extensive print, electronic and audio-visual collections in support of undergraduate and graduate programs.

Both libraries offer an attractive, quiet and modern environment where students and faculty can study, conduct research, explore the electronic resources or just read for pleasure. In total the two libraries have a seating capacity of 420 and offer 34 computer workstations with access to the online catalogue, the research databases and the Internet. A wireless network is available at both libraries for users who wish to use their laptops or netbooks. Printing and photocopy services are also available.

Deree Libraries offer an array of print and non-print resources including 128,000 books, 18,400 electronic journals, 321 print and microfilm journals, 18 newspapers, more than 1,500 educational DVDs and videos and 780 music CDs. Document delivery and pay-per-article services are also available through the union catalogue of serials in academic and special libraries around Greece, the British Library as well as through a variety of vendors and publishers.

Students studying Information technology have access to a print collection of more than 11,000 books and more than 1,500 journals in full text in and electronic, print and microfilm formats.

The following research databases provide access to high-quality journals, statistical data and reports, industry profiles and more:

- **Academic Search Premier (EBSCOHost)**  
Citations abstract and full text of periodical articles covering all academic disciplines. More than 4,600 titles are available in full text of which 3,900 are peer-reviewed.
- **Business Source Premier (EBSCOHost)**  
Citations, abstracts and full text periodical articles from all areas of business and management including banking, finance, industry and manufacturing. More than 2,300 titles are available in full text.
- **DSI Campus Solution**  
The DSI Campus Solution brings under one common database the complete range of OECD, European Union, IMF Financial and UNIDO's Industry statistics as well as a variety of US and German official and Central Bank statistics.

- o **Expanded Academic ASAP (Gale/Cengage Learning)**

Citations, abstracts and full text of periodical articles covering all academic disciplines. More than 2,000 periodical titles are available in full text.

- o **Library, Information Science and Technology Abstracts (EBSCOhost)**

Description: Citations and abstracts with some full text of more than 550 journals, research reports and proceedings in librarianship, cataloguing, bibliometrics, online information retrieval, information management and more.

Coverage: 1965 – present

Most of the above resources are also available remotely, so that students and staff may access them while being off campus.

All library collections are enriched through close evaluation and monitoring in collaboration with faculty throughout the academic year. Online resources are carefully evaluated by librarians, faculty and students through trial and are benchmarked against other peer international and US libraries supporting similar programs.

The library staff offers incoming students training sessions on the use of the library, the online catalogue and the online resources. Students tour the library and learn how to use the library website to access, select, evaluate and use information resources. In collaboration with faculty, special sessions are organized for the needs of specific modules or disciplines. The reference desk is staffed by especially trained personnel who can assist students and faculty in information discovery and research.

An array of media services is also available to all students and staff. The Library Media Centre houses the library's audio-visual and multimedia collections and provides equipment for viewing and listening. Moreover, the Media Centre offers assistance to students and faculty in integrating the latest audiovisual and computer technologies to their research.

The list of books for the programme is renewed so that it reflects recent developments in the IT area. The last update was effective February 2010.

A list of the books currently present in the library is available through an Online Public Access Catalogue.

More information on library resources will be placed in the work room.

### **Multimedia resources**

The IT programme benefits from the use of the following software that have been purchased by ACG and have been installed in College PCs:

- **Microsoft Office:** 750 licenses currently in operation. Licenses are per machine and are renewed every 5 years.
- **SPSS:** 100 licenses currently in operation. Licenses are concurrent and are renewed annually.
- **E-views:** 3 licenses currently in operation. Licenses are per machine and are renewed annually.
- **Thompson Reuters:** 2 licenses currently in operation. Licenses are per machine and are renewed annually.
- **Blackboard platform:** The license is renewed annually. In the academic year 2011-12, ACG is updating the Blackboard platform used from the "basic" to the "enterprise" edition.
- **Turnitin:** License is renewed annually.

### **Computer laboratories**

IT students benefit from new, state-of-the-art student computer lab in the Communications building and the Centre for the Arts building, which replaced an older facility, doubling the number of students that can be served at any given time. The computer lab was designed by VOA architects in Chicago and was built by Technical Services and the Information Resources Management (IRM) department of

Deree-ACG.

Featuring 36 Dell personal computers and 4 Apple Macintosh computers, the lab has a number of new features to improve both the student learning experience and the aesthetics of the facility. The laboratory is equipped with flat screen monitors positioned throughout the room, displaying information from the professor's computer. To reduce clutter and manage cords, the room has a raised floor to contain wiring. All 40 computer stations are fitted with ergonomic chairs and attractive, spacious work areas. In addition, new laser and ink jet printers are conveniently located in the room.

Please see Table 6 in the Appendix for a comprehensive list of the latest versions of the software that is installed in the computer laboratories serving the specialised needs of the IT programme.

Moreover, a new state-of-the-art computer laboratory that will serve the purpose of the specialization modules of the Network Technologies pathway is being designed and it is planned to be completed by Fall 2011.

8. Staff List		
Staff Name	Brief description of role (e.g. programme leader, module tutor)	FT/PT
Makri, Despina, MSc	Area Coordinator (Programme Leader), Management Information Systems	FT
Hotzoglou, Ilias, MSc	IT Staff, Information Management	FT
Leftheriotis, Konstantinos, MSc	IT Staff, Information Management	FT
Varouhas, Emmanuel, MSc	IT Staff, Analysis & Design, Security	FT
Triantafyllidis, Athanassios, MSc	IT Staff, Management Information Systems	FT
Stefanou, Vassilia, MSc	IT Staff, Human Computer Interaction	FT
Kotsovoulou Maria, MSc	IT Staff, Software Engineering	FT
Lazarou Vasilios, PhD	IT Staff, Multi-Agent Systems	Adjunct
Kiourktsoglou Ioannis, BSc	IT Staff, Software Development, IT Project Management	Adjunct
Vogiatzis, Dimitrios, PhD	IT Staff, Computer Science	FT, Research
Dritsas, Alexandros, MSc	IT Staff, MIS, Project Management	PT
Lytras, Miltiades, PhD	IT Staff, Knowledge Management	FT, Research
Kokolakis, Emmanuel, MSc	IT Staff, Distributed Interactive Systems	PT
Krinos, Nikolaos, MSc	IT Staff, Distributed Interactive Systems	PT
Tsoukas, Theodore	IT Staff, Network Technologies	PT
Galanos, Akis	IT Staff, Digital Media	PT
Natsis, Dimitris, Ph.D.	Area Coordinator, Mathematics	FT
Panagopoulos, Sotiris, Ph.D.	Math staff	FT
Gastardo, Teresa-Maria, Ph.D.	Math staff	FT
Camouzis, Elias, Ph.D.	Math staff	FT
Karavellas Dionysis, Ph.D.	Math staff	Adjunct
Gikas Miltiadis, Ph.D.	Math staff	PT
DeBrown Harry, Ph.D.	Math staff	PT
<p><i>Note:</i>  <b>FT members</b> of staff have a contractual obligation of teaching 9 modules per academic year.  <b>Department Heads (FT)</b> have a contractual obligation to teach 6 modules per academic year.  <b>Adjunct members</b> of staff have a contractual obligation of teaching 6 modules per academic year.  <b>Part-time members</b> of staff teach according to departmental needs.</p>		<p>*FTE has been calculated for full-time and adjunct members of staff only, in the ratio of 1:0.67, according to contractual load. Part-time members of staff have been included in the list, but excluded from FTE calculations as their load varies.</p>
Total FTE* (full-time equivalent) =		15.01

9. Where use will be made of external associate lectures of visiting speakers, please indicate the extent of their contribution.

External speakers/lecturers are occasionally invited to offer lectures as part of the extra-curricular activities. Their contribution is not part of the students' assessment for specific courses.

10. Details of how the research/professional activity of staff informs the curriculum (*Brief CVs of teaching staff must be attached*)

All Deree academic staff holds postgraduate degrees. Overall, there has been remarkable growth of research activities in the last two years, reflecting the College's new focus in and support for this priority. A summary of research/professional activity for the entire College during the academic year 2009-2010 is presented in Table 7 of the Appendix.

The IT teaching staff consists of experienced academics, researchers in various areas and professionals in computing-related areas. Furthermore, teaching staff who are also involved in professional activities other than teaching are exposed to state-of-the-art technologies and business environments in the IT industry. The benefits deriving from having practitioners and researchers teaching in the department is twofold. First, expertise and best practices from the industry are transferred in the classroom via lectures, always in the context of the module specifications. Second, this expertise is driving and informing revisions and improvements to the IT programme. As far as research is concerned, nearly all full-time teachers are currently participating in or leading research projects.

The IT area has two (2) full-time research staff holding PhD degrees, two (2) part-time teaching staff with PhD degrees, four (4) postgraduate researchers in PhD programmes, and three (3) staff who have already applied for postgraduate research in the context of a PhD programme.

In regard to the academic staff's research interests, a variety of research is being carried out by full-time and part-time staff in the IT Area. An indicative list of research projects is found in the table below:

Research topic	Staff name	In PhD programme	Status
Agent information systems for software engineering	Dr. Lazarou		Adjunct
Machine learning	Dr. Vogiatzis		FT, research
Crisis management information solutions and e-government	Mr. Leftheriotis	Yes	FT
Knowledge management	Dr. Lytras		FT, research
Advanced technology learning (E-learning)	Mrs. Kotsovoulou	Yes	FT
Human computer interaction and e-learning	Mrs. Stefanou	Yes	FT
E-learning platforms	Mr. Triantafyllidis	Yes	FT
Quality assessment in higher education	Mr. Varouhas	Yes	FT
E-research and Technology Enhanced Learning	Mr. Hotzoglou	Yes	FT

The results of research projects have been published in scientific journals and books and they can be available upon request (please see Table 8 in Appendix for the professional/academic engagement of the IT academic staff).

It is noteworthy that the “World Summit on the KNOWLEDGE SOCIETY 2009” was hosted at Deree-ACG and it was chaired by Dr. Lytras who is the president of Open Research Society.

Deree-ACG consistently funds staff professional development. Full-time staff members are guaranteed one conference per year and may receive funding for up to three conferences per academic year. Adjunct and part-time members of staff receive funding depending on the quality of the submitted proposal and budgetary availability. As of academic year 2009-10, the College has organized an annual faculty research exhibition, which took place in the fall semester.

Research and professional activities contribute to the student’s learning experience and assist in the attainment of programme learning outcomes by making teaching informed of the latest developments in each subject and generally enriching and keeping the curriculum up to date. Other benefits include the possibility of qualified students being engaged in staff research projects.

Full-time teaching staff has an annual contractual obligation to teach 9 (nine) modules.

Adjunct teaching staff has an annual contractual obligation to teach 6 (six) modules.

Part-time teaching staff is assigned modules according to the needs of the programme. The former usually maintain their primary employment in the industry (e.g. mobile telephony operators, software development firms, etc.) and in parallel they constitute a significant asset for the programme as they enrich the learning experience of students by bringing in their professional expertise.

11. If the proposed programme is replacing an existing programme, include details of consultations with registered students over the change.

N/A

12. Details of any proposals for dual accreditation or recognition.

NEASC accreditation is pending.

13. Details of the proposed programme management arrangements, including the composition and terms of reference of a programme committee or equivalent.

The award in Information Technology is offered by the department of Science, Technology and Mathematics which operates under the School of Arts and Sciences. The programme is managed by the area coordinator (programme leader) who is elected by staff members for a 3-year term. The IT area coordinator reports directly to the head of department who reports to the Associate Dean of the School of Arts and Sciences. The area coordinator's indicative tasks are listed in the Appendix (table 10) of the present document as they were revised in 2009-2010.

Area meetings are held at least twice per semester and more often as necessary. Minutes are kept by a member of the area staff who voluntarily acts as secretary. Also, ad hoc work teams may be formed as needed (e.g. for the purposes of annual outcomes assessment, syllabi/programme revision, research funding applications, etc.), Moreover, staff members represent the IT area in college-wide academic initiatives and social events. IT teaching staff also serves as module leaders and participates in Exam Boards.

In general, each department/area reports annually on academic achievements, curricular changes, and outcomes assessment by programme. These monitoring reports are forwarded to the Program Committee.

The Program Committee for the School of Arts and Sciences is comprised of department heads and area coordinators, when applicable, as well as of the presidents of student academic societies. Programme committees are responsible for the routine monitoring of programs, including the consideration of student feedback, performance data and external examiners' reports. The committee prepares responses to external examiners' reports and approval of the School's and Departments' annual monitoring reports. The program committees also propose modifications to curricula and other actions to enhance the quality of teaching and learning and inform the Academic Council and the Curriculum Committee appropriately.

14. Arrangements for student guidance, support and advice systems, including those related to work placements and study period abroad where applicable.

**Student Success Centre**

The Student Success Centre supports students by offering comprehensive, integrated services in the areas of academic advising, student affairs, student records, registration, and payments in a one-stop area. The Centre is committed to providing students with consistent, high-quality service, both in person and through technology. The Student Success Centre aims to create the optimum conditions so that students can follow a path to academic success.

**Academic Advising**

Responsible for coordinating all aspects of the undergraduate advising process, the academic advising office aids students in choosing and completing their academic programs. The student advising staff provides academic advice and information to undergraduate students, advising all first-year students, some second-year students, and transfer students; support for academic staff advisors; and resources for all students in need of academic advice. Once students have declared their programme they participate in an advising programme that uses academic staff as advisors to handle the responsibility of advising on academic and career-related matters.

International students have an additional non-academic international student advisor from the Office of Student Affairs who assists them in their efforts to adjust to the new culture and supports them in

obtaining any student visas and residence permits required by Greek law.

### **Writing Centres**

The Writing Centres, open daily at the Aghia Paraskevi campus and downtown campuses, offer academic assistance to all DERE-ACG students through individual tutoring sessions. Tutoring at the Writing Centres is provided by academic staff from the English department.

### **Disability and Learning Differences**

The College Committee on Disability and Learning Differences monitors and recommends policies and procedures to benefit individuals with disabilities and learning differences. In addition, it makes recommendations in consultation with relevant academic departments/areas regarding special assessments to be given by teaching staff to specific students with disability and/or learning differences.

The Committee proposes alternative assessment methods for specific students with disability and/or learning differences in consultation with relevant academic departments/areas to ensure appropriateness of assessment method. The Committee is obliged to follow the advice of the relevant department/area with regard to appropriateness of assessment method proposed by the Committee. The Committee on Disability and Learning Differences is accountable for the decisions made on alternative assessment methods for specific students with disability and/or learning differences to the Board of Examiners.

### **Peer Tutoring**

For the CS2188 – Introduction to Programming - module additional assistance is provided through the method of peer tutoring where knowledgeable and capable students having exceptional subject matter skills, transferability, enthusiasm, appreciation for peer tutoring, responsibility, and professionalism assist students.

Moreover, additional help is provided by all members of the teaching staff during office hours.

15. Where applicable, reference to any subject reviews undertaken by the QAA- or equivalent in other countries – and by professional, statutory and regulatory body in the last 5 years.

NEASC accreditation for the ACG institution (last renewed in 2006 for ten years).

### **16. Opportunities for personal development planning within the proposal.**

In general, the purpose of Personal Development Planning is to ensure that students acquire and are aware of key personal, intellectual, and vocationally-relevant skills. In US colleges and universities, this purpose is served by General Education, which refers partly to foundation skills, but also to knowledge, cognitive skills, state of mind, life habits that are developed primarily through a set of required courses and which prepare students for success in their major course of study, and their personal and professional lives after the college experience.

General Education courses provide the core of what it means to be an educated person; moreover, such broad exposure to the disciplines gears students towards lifelong learning, exposes them to the mainstreams of thought and interpretation and promotes their understanding of the interrelationships among the various fields of study. While not directly relating to the students' vocational preparation, these courses help them build a strong set of educational skills and acquire knowledge necessary for a successful personal, professional and civic life.

17. An account of how the proposal has been collectively produced and agreed and the extent to which it has been subject to consultation across the institution.

In light of the OU validation, all members of the IT teaching staff, full-time, adjunct, and part-time have actively participated in the process of shaping the proposal for the IT programme. This process was

managed by the head of the Computer Information Systems (CIS) department and the IT area coordinator. Moreover, the development of the programme specifications has been the outcome of collective effort in the IT area.

The steps in this process are explicitly stated below:

- The associate dean of arts and sciences, in congruence with the directives of the OU validation services, coordinated the effort of the academic departments/areas in the school towards programme validation.
- In the IT area, various formal and informal meetings were held in order for all necessary documents to be successfully and timely produced. During those meetings the teaching staff had the opportunity to be informed and discuss the various issues related to the module specifications and programme underlying principles.
- When required, department heads and academic staff from other departments were consulted on areas of their subject.
- Full time, adjunct and part time staff were assigned to revise modules according to their expertise, teaching experience and research interests.
- Module leaders were then given directions head on how to revise the required modules according to the validation process, academic standards and subject benchmark statements.
- The revised modules and programme were then distributed to all module tutors for feedback and consent.
- Various technologies were used as tools to facilitate the communication and collaboration of the work teams as well as the distribution of all material to all stakeholders. Those include email, cloud storage solutions and the Blackboard CMS.

This college-wide effort towards institutional and programme validation, was coordinated by an ad hoc work-team consisting of:

- Vice President for Academic Affairs and Dean of Graduate and Professional Studies
- Vice President and Dean of Faculty
- Associate Dean of School of Arts and Sciences
- Associate Dean of School of Business
- Four senior members of the academic staff at large.

## References

*QAA Subject benchmark standards, Computing*

*QAA Academic Infrastructure*

*Guidelines for preparing Programme Specifications, QAA 2006.*

*The Framework for higher education qualifications (FHEQ).*

## List of Tables

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**Table 1.**

<b>Software Development</b>		
<b>LEVEL 4</b>	<b>LEVEL 5</b>	<b>LEVEL 6</b>
PS 1000 Psychology as a Natural Science (15 credits)	EN 2342 Professional Communication (15 credits)	MG/CS 3157 Project Management (15 credits)
PS 1001 Psychology as a Social Science (15 credits)	PH2105 Business Ethics (15 credits)	CS 3480 Artificial Intelligence Principals (15 cr)
MA 1105 Applied Calculus (15 credits)	MA 2106 Mathematics for Computing (15 credits)	CS 3414 Internet Programming (15 credits)
MA 2118 Statistics for Business and Economics I (15 credits)	CS 2234 Object Oriented Programming (15 credits)	CS 3416 Software Engineering (15 credits)
CS 2186 Computer System Architecture (15 credits)	CS 3260 Fundamentals of RDBMS (15 credits)	CS 4417 Game Programming (15 credits)
CS 2188 Introduction to Programming (15 credits)	CS 3375 Communications and Networking Essentials (15 cr)	CS 3230 Human Computer Interaction (15 cr)
CS 2276 C Language Programming (15 credits)	CS 3413 Algorithms and Complexity (15 credits)	CS 3441 Web Science (15 credits)
CS 2293 Operating Systems Concepts (15 credits)	CS 3387 Data Structures and Analysis of Algorithms (15 cr)	CS 4918 Software Development Capstone Project (15 credits)

**Table 2.**

<b>Network Technologies</b>		
<b>LEVEL 4</b>	<b>LEVEL 5</b>	<b>LEVEL 6</b>
PS 1000 Psychology as a Natural Science (15 credits)	EN 2342 Professional Communication (15 credits)	MG/CS 3157 Project Management (15 credits)
PS 1001 Psychology as a Social Science (15 credits)	PH2105 Business Ethics (15 credits)	CS 3480 Artificial Intelligence Principals (15 cr)
MA 1105 Applied Calculus (15 credits)	MA 2106 Mathematics for Computing (15 credits)	CS 3414 Internet Programming (15 credits)
MA 2118 Statistics for Business and Economics I (15 credits)	CS 2234 Object Oriented Programming (15 credits)	CS 3522 Network Security and Cryptography (15 credits)
CS 2186 Computer System Architecture (15 credits)	CS 3260 Fundamentals of RDBMS (15 credits)	CS 3443 Virtualization Concepts and Applications (15 credits)
CS 2188 Introduction to Programming (15 credits)	CS 3375 Communications and Networking Essentials (15 cr)	CS 4726 Distributed Systems (15 credits)
CS 2276 C Language Programming (15 credits)	CS 3419 Network Administration (15 credits)	CS 4442 Network Design (15 credits)
CS 2293 Operating Systems Concepts (15 credits)	CS 3421 Telecommunications Essentials (15 credits)	CS 4927 Networking Capstone Project (15 cr)

**Table 3.**

<b>Digital Media Technologies</b>		
<b>LEVEL 4</b>	<b>LEVEL 5</b>	<b>LEVEL 6</b>
PS 1000 Psychology as a Natural Science (15 credits)	EN 2342 Professional Communication (15 credits)	MG/CS 3157 Project Management (15 credits)
PS 1001 Psychology as a Social Science (15 credits)	PH2105 Business Ethics (15 credits)	CS 3480 Artificial Intelligence Principals (15 cr)
MA 1105 Applied Calculus (15 credits)	MA 2106 Mathematics for Computing (15 credits)	CS 3414 Internet Programming (15 credits)
MA 2118 Statistics for Business and Economics I (15 credits)	CS 2234 Object Oriented Programming (15 credits)	CS 3371 Interactive Multimedia Systems (15 credits)
CS 2186 Computer System Architecture (15 credits)	CS 3260 Fundamentals of RDBMS (15 credits)	CS 3330 Human Computer Interaction (15 cr)
CS 2188 Introduction to Programming (15 credits)	CS 3375 Communications and Networking Essentials (15 cr)	CS 4535 Game Design (15 credits)
CS 2276 C Language Programming (15 credits)	CS 2128 Digital Imaging (10 credits)	CS 4417 Game Programming (15 credits)
CS 2293 Operating Systems Concepts (15 credits)	CS 2229 3D Modelling Methodologies (10 credits)	CS 4959 Digital Media Capstone Project (15 cr)
	CS 3220 Digital Video and Audio Technologies (10 credits)	

- Common modules
- Software Development pathway-specific modules
- Network Technologies pathway-specific modules
- Digital Media Technologies pathway-specific modules

**Table 4.**

<b>Interdisciplinary modules — Credits by department</b>	
Psychology (PS)	30 credits
Mathematics (MA)	30 credits
English (EN)	15 credits
Philosophy (PH)	15 credits
Management (MG)	15 credits
<i>Total</i>	105 credits

Table 5.

Deree-ACG, School of Arts and Sciences, Information Technology			
	Module/Course	Module/Course Title	Module Leaders
Level 4	PS 1000	Psychology as a Natural Science	Nega, Chrisanthi
	PS 1001	Psychology as a Social Science	Nega, Chrisanthi
	MA 1105	Applied Calculus	Natsis, Dimitris
	MA 2118	Statistics for Business and Economics I	Natsis, Dimitris
	CS 2186	Computer System Architecture	Hotzoglou, Elias
	CS 2188	Introduction to Programming	Kotsovoulou, Maira
	CS 2276	C Language Programming	Kiourktsoglou, Yiannis
	CS 2293	Operating Systems Concepts	Hotzoglou, Elias
Level 5	EN 2342	Professional Communication	Maragou, Helen
	PH2105	Business Ethics	Patsioti, Ioanna
	MA 2106	Mathematics for Computing	Natsis, Dimitris
	CS 2234	Object Oriented Programming	Kotsovoulou, Maira
	CS 3260	Fundamentals of RDBMS	Kotsovoulou, Maira
	CS 3375	Communications and Networking Essentials	Vogiatzis, Dimitris
	CS 3413	Algorithms and Complexity	Vogiatzis, Dimitris
	CS 3387	Data Structures and Analysis of Algorithms	Lazarou, Vassilis
	CS 3419	Network Administration	Vogiatzis, Dimitris
	CS 3421	Telecommunications Essentials	Hotzoglou, Elias
	CS 2128	Digital Imaging	Makri, Despina
	CS 2229	3D Modelling Methodologies	Hotzoglou, Elias
CS 3220	Digital Video and Audio Technologies	Hotzoglou, Elias	
Level 6	MG/CS 3157	Project Management	Dritsas, Alexandros
	CS 3480	Artificial Intelligence Principles	Vogiatzis, Dimitris
	CS 3414	Internet Programming	Kotsovoulou, Maira
	CS 3416	Software Engineering	Kotsovoulou, Maira
	CS 4417	Game Programming	Vogiatzis, Dimitris
	CS 3230	Human Computer Interaction	Stefanou, Vassia
	CS 3441	Web Science	Vogiatzis, Dimitris
	CS 4918	Software Development Capstone Project	Leftheriotis, Kostas
	CS 3522	Network Security and Cryptography	Varouhas, Emmanuel
	CS 3443	Virtualization Concepts and Applications	Tsoukas, Theodore
	CS 4726	Distributed Systems	Lazarou, Vassilis
	CS 4442	Network Design and Virtualization	Tsoukas, Theodore
	CS 4927	Networking Capstone Project	Vogiatzis, Dimitris
	CS 3371	Interactive Multimedia Systems	Hotzoglou, Elias
	CS 4535	Game Design	Makri, Despina
CS 4959	Digital Media Capstone Project	Hotzoglou, Elias	

Table 6.

Software ID	Software Name	Vendor	Version
1	3D Studio Max	Autodesk	2011
2	ACL Software Tool	ACL	
3	Adobe Creative Suite CS5	Adobe	CS5
4	Adobe Director	Adobe	latest
5	Adobe Dreamweaver CS5	Adobe (Part of CS5 Suite)	CS5
6	Adobe Flash CS5	Adobe (Part of CS5 Suite)	CS5
7	Adobe Photoshop CS5	Adobe (Part of CS5 Suite)	CS5
8	Adobe Premiere Pro CS5	Adobe (Part of CS5 Suite)	CS5
9	Adobe Soundbooth CS5	Adobe (Part of CS5 Suite)	CS5
10	Ajax Control Toolkit		
11	Apache HTTP Server		latest
12	Autocad	Autodesk	latest
13	Ciao Prolog v1.7#162 (ciao-1.7p162win32)	CIAO	
14	CORBA middleware		
15	CorelDraw	Corel	latest
16	Cytrix Xen Server		
17	Dynagen		
18	Dynamips Cisco-Juniper Emulator	CISCO	
19	Erwin Data Modeler	Computer Associates	7.2
20	Express Web	Microsoft	3
21	GNS3		
22	Joomla + Virtumart extention	Joomla	latest
23	Linux Server Fedora	Fedora	
24	Lisp		
25	Macromedia Authorware	Adobe	7.02
26	Microsoft Office 2007	Microsoft	2007
27	Microsoft Project 2007	Microsoft	2007
28	Microsoft TechNet	Microsoft	
29	Microsoft Visio 2007	Microsoft	
30	Microsoft Visual Studio	Microsoft	6.0
31	Microsoft Web Server IIS	Microsoft	
32	MS-Windows 200x Advanced Server	Microsoft	
33	MySQL Server		latest
34	OpenGL graphics library		latest
35	Oracle Data Modeller	ORACLE	
36	Oracle Database Server 11g Enterprise Edition	ORACLE	11g
37	Oracle Essbase Studio	ORACLE	latest
38	ORACLE Jdeveloper 11g + JDK 5.0	ORACLE	latest
39	Oracle SQL Developer Latest	ORACLE	latest
40	Oracle VirtualBox	ORACLE	
41	PUTTY SSH	PUTTY	
42	Quicktime for Windows	Quicktime	Latest
43	VMWARE 1.05 Server		1.05
44	VMWare Workstation for virtualization workshops		

Table 7.

	SCHOOL OF ARTS & SCIENCES 2009-2010										SCHOOL OF BUSINESS						GRAND TOTAL							
	COMMUNICATION	ECONOMICS & SOCIAL STUDIES		ENGLISH & LANGUAGES	HUMANITIES & ARTS										TOTAL Arts and Sciences	ACCOUNTING & FINANCE		COMPUTER INFORMATION SYSTEMS	INT. BUSINESS & EUROPEAN AFFAIRS	MANAGEMENT	MARKETING	TOTAL Bus School		
		Economics	Sociology, Anthropology		Art History, Archaeology	Classical Literature	Dance	History	Musik	Philosophy	Theater Arts	Visual Arts	Mathematics	NATURAL SCIENCES & MATHEMATICS	PSYCHOLOGY									
Scholarly Activities																								
Refereed article publications	2	3	4	4	1			2					8	2	2	24	3	11	3	1	6	24	48	
Books/Chapters in books	4	1	10	6	3		1					1	1	2	29	4	4	3	1	8	37	8	37	
Reviews/Ed. Boards	1	1	1	1	1							6	1	11	1	11	1	1	2	8	11	22	22	
Presentations of papers in conference	3	7	10	17	1			2		2		2	4	48	1	48	1	1	5	3	2	11	59	
Proceedings/Abstracts	1	2	4	6	2			2		2	1	3	3	27	1	27							27	
<b>Sub-totals</b>	<b>10</b>	<b>14</b>	<b>29</b>	<b>30</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>20</b>	<b>10</b>	<b>7</b>	<b>139</b>	<b>3</b>	<b>17</b>	<b>13</b>	<b>5</b>	<b>16</b>	<b>54</b>	<b>193</b>	
Other Professional Engagement																								
Delivery of Lectures/Seminars/Speech	10	3	2	7	3	1	2	6	5	1	1	1	3	5	15	64	1	1	1	3	1	7	71	
Other publications (newspaper regular/occasional columns)	2	1		6			3																15	
Excavation Projects					3									3									3	
Attendance/Organization of Conferenc	20	7	23	69	4			11	9	3	2	11	26	7	192	10	12	1	7	14	44	236		
Performances/Recordings	3			4			7	41			6	3	1	65		65							65	
Faculty pursuing PhD	2		2	1				1	1							7	2	5		1	8	15		
PhD Completion																1	1				1	2	3	
Art Exhibitions											2	7				9							9	
<b>Sub-totals</b>	<b>37</b>	<b>11</b>	<b>27</b>	<b>87</b>	<b>10</b>	<b>1</b>	<b>10</b>	<b>13</b>	<b>58</b>	<b>9</b>	<b>11</b>	<b>11</b>	<b>14</b>	<b>35</b>	<b>22</b>	<b>356</b>	<b>14</b>	<b>18</b>	<b>2</b>	<b>10</b>	<b>17</b>	<b>61</b>	<b>417</b>	
<b>Total per department/area</b>	<b>47</b>	<b>25</b>	<b>56</b>	<b>117</b>	<b>18</b>	<b>1</b>	<b>10</b>	<b>14</b>	<b>62</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>34</b>	<b>45</b>	<b>29</b>	<b>495</b>	<b>17</b>	<b>35</b>	<b>15</b>	<b>15</b>	<b>33</b>	<b>115</b>	<b>610</b>	

Table 8.

**Information Technology academic staff professional engagement, 2004-2010**

	Name	Status	Highest Degree	Field of studies	Journal Articles / Papers	Books / Chapters in Books	Book editor	Professional Certifications	Attend Professional trainings	Conduct Professional trainings	Main Speaker	Conference / Seminar Participation	Conference / Seminar Attendance	Website maintenance	Research Projects
1	Dritsas, A.	PT	M.Sc.	Information Management					2				1		
2	Hotzoglou, I.	FT	M.Sc.*	Information Management				1	2				4		
3	Kiourktsoglou, J.	Adjunct	Ptychion	Computing										1	
4	Kokolakis, E.	PT	M.Sc.	Distributed Interactive Systems											
5	Konstantinou, I.	Adjunct	M.Sc.	Total Quality Management				1	1				5		
6	Kotsovoulou, M.	FT	M.Sc.*	Human-computer Interaction						5			2	1	1
7	Krinos, N.	PT	M.Sc.	IS Management											
8	Lazarou, V.	PT	Ph.D.	Multi-agent Systems	3	1									3
9	Leftheriotis, K.	FT	M.Sc.*	Information Management					4		3	2			
10	Lytras, M.	FT research	Ph.D.	Knowledge Management	27	22	3		3		3	3			
11	Makri, D.	FT	M.Sc.	TQM				1	1			1		1	
12	Stefanou, V.	FT	M.Sc.	Human-computer Interaction	1			1					2	2	1
13	Triantafyllidis, A.	FT	M.Sc.*	IS Management				1	1				1		
14	Varouhas, E.	FT	M.Sc.*	Information Management					1		3	1	6		
15	Vogiatzis, D.	FT research	Ph.D.	Artificial Neural Networks	4				1		3	1	6		

\* Ph.D. researcher

**Table 9.**

**Department Heads – Indicative Tasks**

**Department heads indicative tasks**

<b>Faculty</b>	<b>Curriculum development &amp; review</b>	<b>Scheduling</b>
<ol style="list-style-type: none"> <li>1. Participate in the search and evaluation of new faculty candidates.</li> <li>2. Help orient new faculty.</li> <li>3. Discuss with Dean applications for change of status.</li> <li>4. Supervise faculty with respect to office hours, adherence to syllabi, absences, etc. However, all observations are stated carefully and respectfully.</li> <li>5. Is responsible for promptly disseminating information to all members of the department concerning deadlines, policies, course cancellations, etc.</li> </ol>	<ol style="list-style-type: none"> <li>1. Process all new course syllabi, ensuring that the major’s curriculum is modern and up to date.</li> <li>2. Supervise annual syllabi review and program review in his/her area.</li> <li>3. Maintain and update major’s academic information to students: handbook, 2-4 year master plan, etc.</li> <li>4. 4. Supervise second grading of courses</li> </ol>	<ol style="list-style-type: none"> <li>1. Construct the schedule in collaboration with the Assistant Department Head for all campuses and assign faculty to courses. Schedules are discussed with all members of the area and are constructed according to College policy and curriculum needs. Area Coordinators should create schedules for their own areas which they submit to the Department Head.</li> <li>2. Review the schedule for all campuses before it is placed on the web.</li> <li>3. Meet the Dean at the very end of each registration period to discuss cancellations.</li> </ol>
	<p><b>Outcomes assessment</b></p> <ol style="list-style-type: none"> <li>1. Collaborate with the Dean in constructing the outcomes assessment plan for the major.</li> <li>2. Implement the Outcome Assessment Plan.</li> <li>3. Submit a report on the progress of Outcome Assessment annually.</li> <li>4. Supervise the distribution of the Senior Exit Surveys from and to the senior students.</li> </ol>	<p><b>Advising</b></p> <ol style="list-style-type: none"> <li>1. Advise students in the major with &gt;50 credits at the APC.</li> <li>2. Solve problems relating to registration.</li> <li>3. Review APC student petitions and make recommendations with regards to deviations from program requirements.</li> <li>4. Check/maintain graduation requirements at the APC.</li> </ol>

**Department heads indicative tasks (cont.)**

<b>Other</b>	<b>A successful dept. head should:</b>	<b>Work obligations</b>
<ol style="list-style-type: none"> <li>1. Supervise student societies in the area. Has signature authority over elections and general assemblies. Area Coordinators are charged with oversight of student groups in their areas and will assist the head to the fullest extent possible to ensure these student organizations operate at a high level.</li> <li>2. Be the initial contact person (after the area coordinator if this is applicable) for student academic complaints. Such complaints are best handled at the lowest level possible; hopefully most issues can be resolved without the involvement of anyone outside the department.</li> <li>3. Receive and evaluate plagiarism reports and submit them to the Dean accordingly.</li> <li>4. Help coordinate common final exams (if any).</li> </ol>	<ol style="list-style-type: none"> <li>1. Treat all colleagues with respect and consideration. Foster a spirit of cooperation and communication.</li> <li>2. Assist in promoting faculty development.</li> <li>3. Consult with the Dean on issues involving area/department matters.</li> <li>4. Communicate with DT Assistant Head and the Deans of the DT and Junior College.</li> <li>5. Attend all meetings scheduled by the Dean.</li> <li>6. Promote integrity issues in the department.</li> <li>7. Demonstrate initiative.</li> <li>8. Meet all deadlines.</li> <li>9. Consult colleagues about all curricular matters.</li> </ol>	<ol style="list-style-type: none"> <li>1. Must hold office hours at least four days a week during semesters, and be reachable during winter and summer sessions.</li> <li>2. Must be present on campus during all registration periods.</li> <li>3. Hold at least one departmental meeting per semester. If the dept. consists of several areas it might be best to hold meetings separately with each one.</li> <li>4. Respond to all e-mails received from colleagues or the administration. Unless a particular inquiry requires research and thought and if it is received before 16:00 it should be answered that day. If otherwise, then the next day.</li> <li>5. Write and submit an Annual Report to the Dean's office at the end of the academic year according to the announced date</li> </ol>

**Table 10.**

**Area Coordinators – Indicative Tasks**

**Area coordinators indicative tasks**

<b>Faculty</b>	<b>Curriculum development &amp; review</b>	<b>Scheduling</b>
<ol style="list-style-type: none"> <li>1. Participate in the search and evaluation of new faculty candidates.</li> <li>2. Discuss with Dean applications for change of status.</li> <li>3. Supervise faculty with respect to office hours, adherence to syllabi, absences, etc. However, all observations are stated carefully and respectfully.</li> <li>4. Is responsible for promptly disseminating information to all members of the area.</li> </ol>	<ol style="list-style-type: none"> <li>1. Process all new course syllabi, ensuring that the major’s curriculum is modern and up to date.</li> <li>2. Supervise annual syllabi review and program review in his/her area.</li> <li>3. Maintain and update major’s academic information to students: handbook, 2-4 year master plan, etc.</li> </ol>	<ol style="list-style-type: none"> <li>1. Construct the schedule and submit it to the Department Head. Schedules are discussed with all members of the area and are constructed according to College policy and curriculum needs.</li> </ol>
	<p style="text-align: center;"><b>Outcomes assessment</b></p> <ol style="list-style-type: none"> <li>1. Coordinate the Outcomes Assessment project for the major.</li> <li>2. Submit a report on the progress of Outcomes Assessment annually.</li> <li>3. Supervise the distribution of the Senior Exit Surveys to senior students.</li> </ol>	<p style="text-align: center;"><b>Advising</b></p> <ol style="list-style-type: none"> <li>1. Advise APC students in the major with &gt;50 credits.</li> <li>2. Review APC student petitions and make recommendations with regards to deviations from program requirements.</li> <li>3. Check/maintain graduation requirements at the APC.</li> </ol>

**Area coordinators indicative tasks (cont.)**

<b>Other</b>	<b>A successful area coordinator should:</b>	<b>Work obligations</b>
<ol style="list-style-type: none"> <li>1. Supervise student societies in the area. Have signature authority over elections and general assemblies.</li> <li>2. Be the initial contact persons for student academic complaints.</li> <li>3. Receive and evaluate plagiarism reports and submit them to the Department Head.</li> <li>4. Help coordinate common final exams (if any).</li> </ol>	<ol style="list-style-type: none"> <li>1. Treat all colleagues with respect and consideration. Foster a spirit of cooperation and communication.</li> <li>2. Assist in promoting faculty development.</li> <li>3. Attend all meetings scheduled by the Dean.</li> <li>4. Promote integrity issues in the area.</li> <li>5. Meet all deadlines.</li> <li>6. Consult colleagues about all curricular matters.</li> </ol>	<ol style="list-style-type: none"> <li>1. Must hold office hours at least four days a week during the semester, and must be reachable during winter and summer session.</li> <li>2. Must be reachable by phone during all registration periods.</li> <li>3. Hold at least one area meeting per semester.</li> <li>4. Respond to all e-mails without major delays.</li> <li>5. Include an area report in the FAR which will help the Department Head write an Annual Report for the entire Department.</li> </ol>

**Table 11:****Benchmark on US accredited UK and Greek institutions****Academic Institutions**

The lists below are only indicative and cover a wide range of Institutions (i.e. Top ranking, NEASC accredited, US, UK, Hellenic). Overall, computing is rather standardized.

<b>IT Requirements (referred to as IT or Computer Science)</b>	University of Edinburgh	University of Massachusetts	Royal Holloway	MIT	National and Capodistrian University of Athens	University of Reading	Stanford University	Minnesota State University	University of Essex	Open University, UK	Brandeis University
Computer System Architecture	x	x	x	x	x	x	x	x		x	
Introduction to Programming	x	x	x	x	x	x	x	x	x	x	x
Object Oriented Programming	x	x	x	x	x	x	x	x	x	x	x
C Language Programming	x			x		x	x		x	x	x
Operating Systems Concepts	x	x		x	x	x	x	x			
Project Management		x						x			
Fundamentals of RDBMS	x	x	x		x	x		x		x	x
Communications and Networking Essentials	x	x			x			x	x		
Artificial Intelligence Principles	x	x		x		x	x		x	x	x

<b>S/W Development</b>	University of Edinburgh	University of Massachusetts	Royal Holloway	MIT	Carnegie Mellon	National and Capodistrian University of Athens	University of Essex	Brandeis University
Alegorithms and complexity	x	x	x	x	x	x		x
Data Structures and Analysis of Algorithms	x	x	x	x	x	x	x	x
Internet Programming			x	x			x	
Software Engineering	x	x	x	x	x	x	x	x
Game Programming	x	x	x	x	x	x	x	
Software Developemnt Capstone Project	x	x	x	x	x	x	x	x

<b>Network Technologies</b> (in their majority, Universities/Colleges offer Networking specializations at the MSc level)	Carnegie Mellon	National and Capodistrian University of Athens	University of Essex
Network Administration	x	x	x
Telecommunications Essentials	x	x	
Network Security and Cryptography	x		x
Virtualization Concepts and Applications	x		
Distributed Systems	x		x
Network Design			
Networking Capstone Project	x	x	x

<b>DM Technologies</b> (in their majority, Universities/Colleges offer Digital Media specializations at the MSc level)	University of Edinburgh	University of Massachusetts	Carnegie Mellon	University of Loughborough
Digital Imaging	x	x	x	x
3D Modelling Methodologies	x	x	x	x
Digital Video and Audio Technologies	x	x	x	x
Interactive Multimedia Systems	x	x	x	x
Human Computer Interaction				x
Game Design	x	x	x	
Digital Media Capstone Project	x	x	x	x

**Table 12:**

**Benchmark on Academic Institutions Postgraduate Courses**

**Academic Institutions Postgraduate Courses**

The lists below are only indicative and cover a wide range of Institutions.

<b>IT Requirements (referred to as IT or Computer Science)</b>	Herriot Watt	University of Liverpool	University of York	Bristol University	University of Sheffield	Rochester Institute of Technology	Indiana University Bloomington	University of Maryland	University of Minnesota	Harvard University
Computer System Architecture			X	X	X		X	X	X	
Introduction to Programming		X	X		X		X		X	
Object Oriented Programming		X	X	X					X	
C Language Programming				X						
Operating Systems Concepts		X	X				X	X	X	
Project Management				X	X	X				
Fundamentals of RDBMS	X		X	X	X	X	X	X	X	X
Communications and Networking Essentials		X			X	X	X	X	X	
Artificial Intelligence Principles	X						X	X	X	
Internet Programming		X	X	X	X	X				X

<b>S/W Development</b>	Herriot Watt	University of Liverpool	University of York	Bristol University	University of Sheffield	Rochester Institute of Technology	Indiana University Bloomington	University of Maryland	University of Minnesota	Harvard University
Algorithms and complexity							x	x	x	
Data Structures and Analysis of Algorithms		x	x		x		x	x	x	x
Software Engineering	x	x	x	x	x	x	x	x	x	x
Game Programming	x					x				
Software Development Capstone Project			x			x				x

<b>Network Technologies</b> (in their majority, Universities/Colleges offer Networking specializations at the MSc level)	St Andrews University UK	University of Southampton	Queens University Belfast	University of Sheffield	Glasgow University	UC San Diego	Indiana University Bloomington	University of Maryland	University of Minnesota	Harvard University
Network Administration		x							x	
Telecommunications Essentials	x		x	x	x	x				x
Network Security and Cryptography	x	x			x	x		x	x	x
Virtualization concepts and applications										x
Distributed Systems	x						x	x		x
Network Design								x	x	
Networking Capstone Project		x								x

<b>DM Technologies</b> (in their majority, Universities/Colleges offer Digital Media specializations at the MSc level)	The University of Edinburgh	Glasgow University	University of York	University of Sheffield	London Metropolitan University	Rochester Institute of Technology	Harvard University	Indiana University Bloomington	University of Maryland	University of Southern California
Digital Imaging	x	x					x		x	x
3D Modeling Methodologies	x			x	x		x			x
Digital Video and Audio Technologies					x		x			x
Interactive Multimedia Systems	x	x				x				x
Human Computer Interaction		x	x	x		x		x	x	
Game Design				x	x	x				
Digital Media Capstone Project	x				x		x			