Doc. 300.1.2

Date: 08/4/2022

Higher Education Institution's Response

- **Higher Education Institution:**
  C.D.A. College

- **Town: Nicosia**

- **Programme of study**
  Name (Duration, ECTS, Cycle)

  In Greek:

  «Τεχνολογία Πληροφορικής και Επικοινωνίας» (2 Έτη/120 ECTS, Δίπλωμα)

In English:
  "Information and Communication Technology" (2 Years/120 ECTS, Diploma)

- **Language(s) of instruction:** English

- **Programme's status:** Currently Operating

- **Concentrations (if any):**

  In Greek: Concentrations
  In English: Concentrations

ΚΥΠΡΙΑΚΗ ΔΗΜΟΚΡΑΤΙΑ
REPUBLIC OF CYPRUS

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CYQAA

ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
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A. Guidelines on content and structure of the report

- *The Higher Education Institution (HEI) based on the External Evaluation Committee's (EEC's) evaluation report (Doc.300.1.1 or 300.1.1/2 or 300.1.1/3 or 300.1.1/4) must justify whether actions have been taken in improving the quality of the programme of study in each assessment area.*

- *In particular, under each assessment area, the HEI must respond on, without changing the format of the report:*

    - *the findings, strengths, areas of improvement and recommendations of the EEC*
    - *the conclusions and final remarks noted by the EEC*

- *The HEI's response must follow below the EEC's comments, which must be copied from the external evaluation report (Doc.300.1.1 or 300.1.1/2 or 300.1.1/3 or 300.1.1/4).*

- *In case of annexes, those should be attached and sent on a separate document.*

1. Study programme and study programme's design and development
(ESG 1.1, 1.2, 1.7, 1.8, 1.9)

Findings

The Diploma program under evaluation is subject to quality assurance procedures by the College. These procedures have a formal status, operationalised by an Internal Quality Assurance Committee. This committee has clearly defined tasks and procedures. The Diploma program under evaluation is designed with overall objectives that have explicit learning outcomes. Students have the opportunity to be involved in the design of the program through their representation in the Internal Quality Assurance Committee. Overall, the program is subject to a formal institutional approval process.

The program design reflects the four purposes of higher education of the Council of Europe. The program is designed so that it enables smooth student progression. The expected student workload is defined in ECTS, however the EEC finds that the curriculum material is too thin for the corresponding ECTS. This point is discussed further down in this section. The program does not exclude placement opportunities, and in fact all of the current students of the program that the EEC met were at the same time fully employed. However, due to local employment laws in Cyprus prohibiting the employment of non-EU students, the program does not currently include placement opportunities as an integral part of the two years.

Successful completion of the program results in a qualification that is clearly specified and communicated.

The content and the learning outcomes of the ICT Diploma are not in line with the current standards and expectations in the sector. The Programme needs to comply with appropriate quality assurance policies and create courses offered aligned to a level of a Diploma. The program structure and course distribution in semesters are clearly and properly identified with a coherent list of courses, although the course description is not at the required level of depth.

The academic staff teaching the courses have the appropriate qualification, consistently with the program. Their teaching load is consistent with the sector. The courses are taught mostly by staff that are employed on a yearly basis.

The program was developed to meet the expectations of the local employment conditions in Cyprus. Although the current students are in full time employment already, in the future the employability statistics should be comparable with other programmes' employment statistics in the Department or similar programmes in Cyprus.

Strengths

1. The small class size of this program allows personal interactions between faculty and students, and efficient monitoring of student progress by faculty members. The positive results of this might be reflected in the relatively low dropout rate of students in this program, and the high employment rate of graduates.

2. The college representatives involved in the design and running of this program expressed their explicit willingness to revise the program according to recommendations by the EEC or other expert stakeholders. This in itself is appreciated.

3. There is a well balanced mixture of foundational and applied topics in this program.

Areas of improvement and recommendations

1. Currently there is no specific review process of the program, and a strategic plan of development is not clear or publicly available. The program will benefit from a thorough revision and a more focused strategic plan to build upon some strong courses in the curriculum but the synergy with industry, and the involvement of students is necessary.

2. The role of the courses needs to be more strategic in the context of the program in consideration of the current expectations of employers.
   a) For instance, a module dedicated to mobile app development without the provision of both Android and iOS related curriculum will not advance the knowledge of the student intake.
   b) Python is introduced, which is an important language that students need for several activities during their studies and for their employability after they graduate.
   c) Relevant statistics (e.g., number of applicants, student drop-out rate, examination pass rates, etc.) should be communicated in a systematic manner to all related faculty and staff in order to facilitate ongoing monitoring

and improvement of the program. Enhance the quality assurance practices by engaging and receiving feedback from international or local industry experts in the related field, in order to assure that the program is enriched with hot topics in the field. This will also contribute to the attractiveness of the program.

3. Due to the subject (ICT) and the constant renewal of the needs from the industry, it is important to keep the study program up to date and perform those updates in a reasonable period of time (e.g., from one school year to another and not 2 or 3 years). A large amount of courses is focusing on how to use mainstream digital technologies (e.g., Microsoft products). Such a competence is relevant for an ICT study program, nevertheless this needs to be reduced to a course or two max (since most of these skills are acquired in pre-college education anyway) and allow space for courses

Specifically:

a) The course Introduction to Multimedia can go beyond the use of tools such as photoshop and dreamweaver. One can introduce modern multimedia standards and formats, working with HTM5/JS, 2Ds, animations, sampling and quantization and image processing. Flash is outdated.

b) Management and Information Systems looks more like a Management of Information Systems course. The scope should be clarified.

c) Introduction to Java Programming. The EEC suggests that Introduction to Object Oriented Programming is a better name, and it is fine to use Java. However, more than 4 ECTS should correspond to such an important course. Especially considering that 6 ECTS correspond to MS Office (i.e., Introduction To Computer Applications).

d) Visual Programming is block-based programming (e.g., Scratch) not visual basic. So the name needs to be aligned with the content, since the name is misleading. Also, if the employees need skills in visual basic one can keep it, otherwise the EEC advises to update it to something that is more useful in today's IT (e.g., build on the top of previous courses and use JS, Python, Java), to introduce students to more advanced SW skills.

e) Internet Technologies & Web Design: Flash is obsolete, HTML5 will work better. Also Introducing frameworks may help students.

4. Three weaknesses in the composition and operation of the Internal Quality Assurance committee are that:
    1) the student member is selected by faculty members according to academic performance, instead of the student member being elected by the student body directly and independently of academic performance;
    2) there is no permanent and compulsory representation from external stakeholders, such as industry or technical bodies in the area of the program;
    3) information flows into the committee (in the form of meetings minutes, or questionnaire results, for instance), but this information is not wholly aggregated and made directly publicly available.

    • In addition, the EEC has found no evidence of strong initiatives to clearly guard against any form of discrimination or intolerance. There are policies against discrimination and intolerance in place, but it is not clear how seriously they are taken, for the following reason: when the EEC requested statistics on student numbers, split by gender, the college representatives confirmed that they will provide statistics on male and female students. When the EEC pointed out that there should also be a third category with respect to gender, the college representatives found that amusing. They agreed to provide these statistics, but their reaction to non-binary gender identification was not in agreement with the policy of zero tolerance to any form of discrimination and intolerance. Policies should not exist only on paper, they should be implemented.

    • Regarding specifically the design and regular revision of this program, external stakeholders are not formally and necessarily involved. On the basis of the discussions that the EEC had with college representatives, it seems that external stakeholders can be involved in the design and/or revision of the program in an ad hoc way. This practice should be amended. The involvement of relevant external stakeholders should be formal, proactive and regular.

    • It is not clear to what extent the program is periodically reviewed to take into account the student workload and needs. This is motivated by the observation that all five students of the program that the EEC met said that they were enrolled in this program on a full time basis while also being full time employed at the police force. Furthermore, they informed the EEC that all other students of this program in their year are also full time employed at the police force. This program is only offered full time and corresponds to 120 ECTS split over two years. One ECTS corresponds to 27-28 hours of workload for a student. This means that, in a year, students need to work on this program for 60 ECTS, which corresponds to approximately 1650 hours. The total

amount of full time work hours in the EU per year is approximately 2000. This clearly shows that a person who is in full time employment cannot possibly dedicate the hours corresponding to the ECTS of this diploma, according to EU labour provisions. This has worked out so far for the current students mainly because of the following two reasons:

    a. Even though this program is conventional, not a blended or distance learning program of study, lectures are offered to students in the form of videos that students can watch any time. This mode of teaching was observed by the EEC at a time when there were no restrictions prohibiting physical lectures due to COVID-19.

    b. The curriculum of several courses was found to be too light compared to the ECTS of those courses. This practically means that students have a much lighter workload than what they should have, which impacts negatively their learning outcomes. Examples of courses with light curricula:

- The compulsory course "Business English" has a very light curriculum, considering that it is worth 4 ECTS, and also considering the English language qualifications that students must have in order to be admitted to this program.

- The compulsory course "Introduction to Computer Applications" has a very light curriculum, considering that it is worth 6 ECTS. This is a course on how to use MS Windows and MS office (Word, powerpoint, excel, publisher, …). These are very basic skills that are routinely taught by the end of a student's secondary education.

- The program should be revised to take into account the student workload and needs. If the target student body is already in employment, the program could be offered on a part-time basis.

Response of the Higher Education Institution (HEI)

1. CDA College has a strong Quality Assurance System and Mechanisms which are applied in all 44 accredited programs of study. (Appendix 1). Also, CDA College has prepared a comprehensive strategic plan for the whole institution as per the requirements of the CYQAA and it is included in the General Internal Accreditation Report sent to the Agency in 30/1/2022). (Appendix 2)

   Additionally, the College has developed a strategic plan, a SWOT analysis and a Feasibility study especially for the ICT programme analysing the market issues of the information technology industry in Cyprus. (Appendices 3 & 4)

   The institution considered and evaluated the feasibility of the program in comparison with the competition, the potential and opportunities of the ICT programme. During the preparation of the above mentioned procedures, we obviously took into consideration the opinions and suggestions of the students, stakeholders and industry experts. This process is a formal and an integral part of the strategic plan of the College. Please note and take into consideration that the ICT programme at CDA College Limassol (which has the same courses as in Nicosia) was fully accredited by CYQAA in 2020. Nonetheless, as per the suggestions of the External Evaluation Committee (EEC), we proceeded to a comprehensive revision of the curriculum of the ICT program in Nicosia with the addition of some stronger/ innovative courses in synergy with the industry, stakeholders and the involvement of students. (Appendices 5 & 6)

2. The courses are revised/updated taking into consideration the current expectation of employers, students, the industry and as per the EEC suggestions:

   a) The module COM 400: Introduction to Mobile Applications is revised with the addition of both Android and iOS. (Appendix 7)

   b) Python is introduced in module COM 110: Introduction to Programming (Python) which is an important language that students need for several activities during their studies and for their employability after they graduate,

   c) CDA College keeps all relevant statistics for all our programs of study (e.g., number of applicants, student drop-out rate, examination pass rates, etc.) and these are also communicated to all related faculty and staff in order to facilitate ongoing monitoring and improvement of the program. That is why at the end of each academic semester all faculty members should send their Self-Evaluation and suggestions Report where they note down their suggestions/recommendations for the upgrading/improving of their modules and the programme as a whole. Suggestions and recommendations vary from either new bibliography, new IT equipment, new software or hardware, or updating of the content of a module etc.

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Apart from the faculty's recommendation, the College and the IEC take into consideration the suggestions and recommendation of the students of each program. There are numerous evaluations forms such as the Student Faculty Evaluation, the Students module and Programme evaluation forms etc. As a result, some strong/ innovative modules are introduced in the ICT programme. (Appendix 5)

3. Due to the subject (ICT) and the constant renewal of the needs from the industry, CDA College implemented all the EEC suggestions so as to keep the program up to date as follows: (Appendix 5)

   a) The course Introduction to Multimedia is renamed/revised with COM 200: Web Programming I with the addition of HTM5/JS, 2Ds, animations, sampling and quantization and image processing. (Appendix 8)
   b) Management and Information Systems is replaced with COM 240: PC Maintenance and Repair I (Appendix 9)
   c) Introduction to Java Programming is renamed to COM 315: Object Oriented Programming using Java with 6 ECTS. (Appendix 10)
   d) Visual Programming is revised/renamed to COM 323: Visual Studio.NET (C#) (Appendix 11)
   e) Internet Technologies & Web Design renamed/revised with COM 300: Web Programming II (Appendix 12)
   f) Introduction to Computing - Renamed/Revised with COM 120: Human Computer Interaction (Appendix 13)
   g) Introduction to Computer Systems – Renamed/Revised with COM210 Operating Systems Management (Appendix 14)
   h) Communication and Networks – Renamed/Revised with COM 211: Network Management (Appendix 15)
   i) User Support – Renamed/Revised with COM 312: PC Maintenance and Repair II (Appendix 16)
   j) Network Design and Support - Renamed/Revised with COM 423: Systems Network Administration (Appendix 17)
   k) E-Business - Renamed/Revised with COM 444: Content Management system (Appendix 18)
   l) Final project – replaced with COM 421: Database Management (Appendix 19)
   m) Also the addition of three (3) innovative elective courses. (Appendices 31-33)

4.1 As per the suggestion of EEC, the College's Internal Evaluation Committee (IEC) decided that from now on, the student representative will be selected directly by the students' union and independently of academic performance.

4.2 The College has a permanent policy of representation from external stakeholders and we have formal agreements with external stakeholders, such as industry or technical bodies so as to support the good operation and development of the program. These stakeholders and industry professionals are invited as guest lecturers to provide their practical and technical experience of the industry. Additionally, the College has close links with the industry and Society so as to get their suggestions and recommendations and improve the design and evolution of the program as per the market needs. (Appendix 6)

4.3 All the information gathered at the College such as meeting minutes or faculty members or students' suggestions/ recommendations are of course not publicly available. This information is gathered by the College so as to improve/ upgrade the processes of the College and then to be publicly disposed. This is a policy that all higher institutions in Cyprus are implementing. However, the College regarding the policy of public information and information management, as a part of our commitment to openness and transparency, the College publishes a range of information that is available to the public, parents and the students.

All educational information is disclosed to the public through various printed and electronic means such as:
   • The College's Prospectus,
   • the College Web site https://www.cdacollege.ac.cy/

- the publication of all the programs details, criteria, content etc., learning objectives, Lecturers
- Students can have more information through the College e-platform "Moodle" https://cda.college/login/index.php
- Also the students can get further information on courses through the Course Outline during the first week of each semester.
- International Studies guide and Alumni information etc.

Additionally, more detailed formal information is provided to students such as:
- Admissions procedures and requirements for all programmes of study
- Access to disabled students and facilities at the College
- Policies, regulations and guidance regarding Examinations, Assessment and Awards,
- Policy on marking and grading for all the programmes of study
- Complaints and appeals
- Learning resources and student support
- Feedback from graduates on their employment and/or continuation of studies

- Concerning discrimination or intolerance policies, CDA College has strong initiatives to clearly guard against any form of discrimination or intolerance and all of our policies against discrimination are seriously taken by all CDA College staff. The total number of students at the College is 60% foreign and 40% domestic students. Historically the College has developed discrimination policies and we have very good relations with all our foreign students. Specifically, in order to reinforce these relations, we developed an office for International Affairs so as to be closer to the foreign students and provide immediate solutions and support to their problems. The College has also policies against discrimination and intolerance in place and they are taken very seriously. According to our statistics there were only two (2) genders. All Cyprus Government official documentations refer only to two (2) genders so as all College documentation since we are officially advised otherwise. We strictly condemn that we were found it amusing – as per the EEC comments – that there should be a third category with respect to gender. (Appendices 20 & 21)

- The College has a formal policy and Committee concerning the design and revision of the ICT program. Every five (5) years the program has a lot of amendments due to the reaccreditation process by the CYQAA, however due to the evolution on the ICT industry the programme has also several revisions on the modules as per the recommendations of the immediate lecturers, the stakeholders and students. The College has a formal policy for reviewing the program of study and a list of external stakeholders, and industry professionals in the IT area so as to support the good operation and development of the program. Additionally, the College has close links with the industry and society so as to get their suggestions and recommendations to improve the design, the curriculum and evolution of the program as per the market needs. (Appendices 6 & 22)

- The ICT program is periodically reviewed every academic semester due to the fact that the ICT industry is changing rapidly. Of course the students' workload is taken into consideration based on the ECTS system. The ECTS system is applied in all the College programmes of study (44 programs) since 2008.
    - This semester all students of the ICT program are full time employed, however, as per the European standards on average, a full-time employee in the EU works 37 hours per week (main job). 37x14weeks= 518 hours for a semester.
    - The total student workload in EU for a 14-week semester is 30 ECTS x 14 weeks = 750 hrs workload per semester.
    - A year of full-time studies at College level is generally worth 60 ECTS credits, and defined as equal to 1,500-1,800 hours of study work. This means 1 ECTS is equal to between 25 to 30 hours;
    - Which means that a 2 years' program of 120 ECTS, 60 ECTS@ 1 year = 60x25= 1,500 hours workload per academic year (14 weeks).

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- So the current working students, work 518 hrs for 14 weeks and they also have approximately 1,500 studying hours.
- Finally, EU specifies the maximum studying hrs (work load hrs up to 1800 hrs) but it doesn't specify whether it's a working student or not. This is up to the students whether they will work or not. If they do not have the financial ease, then they should work so as to complete their studies and fulfil their future career dreams.
- EU does not specify that a working student should not study because he/she has a full time employment.

a. The ICT program is conventional, however due to the pandemic COVID19, the CYQAA agency set instructions for all the higher institutions in Cyprus to offer online learning. The lectures were offered by distance learning, however as per the instructions of CYQAA we also offer blended learning. One week the students are taught the theory of the module by distance learning and the next week the students come into the College for the practical part of the module. In distance learning the ICT lecturers were applying various methods of teaching using PowerPoint presentations and short videos, moreover, all the lectures are recorded on our Moodle e-platform so the students can watch them any time.

b. As per the EEC suggestions, the following courses were modified:
- The course "Business English" is revised (Appendix 23)
- The course "Introduction to Computer Applications" is revised/renamed to COM100 Introduction to Information Technology. (Appendix 24)

- As per the suggestion of the EEC, the ICT program is thoroughly revised taken into consideration the lecturers, the stakeholders, the industry and the student workload and needs. Additionally, it's up to the students whether they will register on a full time or a part time basis. The College offers both modes of study to choose. As specified in our Feasibility study (Appendix 3, the target market of the program is:
- National and international graduate students from secondary education
- Persons holders of a secondary education diploma wishing to get ICT diploma and be ICT technicians

Furthermore, the College doesn't discriminate between working or not working students. The programme is designed so that the registered students to choose their own method of study whether full/time or part/time, this is up to the decision of the students. The College provide both forms of study full time or part time. The past two years due to Covid 19 pandemic the theoretical courses were offered through distance learning methods as per the instructions given by the CYQAA.

2. Student – centred learning, teaching and assessment
(ESG 1.3)

Findings

The student-centered learning, teaching and assessment is focused on developing the ability of students for an independent learning of ICT concepts. The T&L process considers different modes of delivery although a variety of pedagogical methods is not provided to facilitate the achievement of planned learning outcomes. The implementation of student-centered learning and teaching encourages a sense of autonomy in the students, who have provided positive feedback in terms of the guidance and support from their teacher.

Overall, practical and theoretical sessions are interconnected. The criteria for the method of assessment and for marking are published in advance. The regulations for assessment take into account mitigating circumstances.

Strengths

1. Assessment is consistent, appropriate, transparent, objective and supports the development of the learner. There is a mutual respect within the learner-teacher relationship and based on the student feedback there is a good practice of communication between staff and students. Appropriate procedures for dealing with students' complaints regarding the process of teaching and learning are set.

2. There is overall good communication between students and teachers and good communication between the teachers. Lectures are recorded, thus everyone will have access if they miss the lesson or if they forget something.

Areas of improvement and recommendations

1. The program lacks strong ICT practical and theoretical knowledge and the training in ICT through internships should be emphasized. Formal advisory board for the curriculum review should be in place to provide feedback to update the curriculum to the international standards and inclusion of industry representatives should be mandatory.

2. Rigorous internal reporting in terms of the pipeline year on year of students graduating. This reporting should include the students progression to industry and academia after the graduation or the advancement of their current career. Teaching methods are modern, effective, support the use of modern educational technologies but the tools and material used need to be updated.

3. The EEC recommends that the college should purchase more equipment regarding networking.

4. Overall, the process of teaching and learning does not fully support the students' social development, because the needs of the current students (being full time employed in the police force while also being full time enrolled in this program) are not explicitly taken into account in a structured way. It seems that students are left to their own devices to find the hours to do the work. The student needs should be part of the design of this program.

5. Teaching staff are willing to offer flexible forms of teaching delivery, for instance alternating theory with practical sessions weekly, or recording videos of lectures and making their telephone numbers available to students who wish to ask questions. However, the EEC found that staff was allowed to begin teaching without any compulsory prerequisites of prior pedagogical training. Seminars are available to the teaching staff, but they are not compulsory. Teaching staff also occasionally receives emails from the college administration with advice on how to improve their teaching. These are all good initiatives in the right direction, but they are not sufficient. A minimum form of basic pedagogical training should be compulsory to all new staff before they begin teaching. There is a need for this. The video lectures that the EEC watched were not engaging and showed no use of pedagogical tools.

6. Overall, assessment is appropriate, however all grades should be accompanied by written feedback that makes it clear why the specific grade was awarded and that supports the students in learning what their mistakes were and how they could be rectified. This should be standard practice for all courses and all forms of homework or examination.

Response of the Higher Education Institution (HEI)

1. As per the revised ICT program, the students have a lot of practice in the program, out of the twenty-four (24) modules, the fifteen (15) modules are practical which is the 62.5% of the whole program. Furthermore, as we have already said to the EEC, due to Cyprus regulation, foreign students cannot be placed in internship programs in Cyprus that's why they have a lot of practical modules in the whole program and visits from industry professionals. Moreover, as we said earlier in 1.3, the program is thoroughly revised with the addition of some strong/innovative modules as per the international standards and the presence of industry representatives. (Appendix 5)

2. CDA College keeps the Alumni statistics reports and are updated every academic semester after the graduation of the students. In the Alumni statistics the College keeps reports on students after their

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graduation and their advancement of their business career. Additionally, the faculty staff teaching methods are modern, effective and support the use of modern educational technologies and we upgrade the tools and material used at the end of each semester.

3. The College upgrades the networking equipment every two years after the suggestions/ recommendations of the immediate IT lecturers. However, the College is fully equipped with all the networking equipment. The Head of the program who is also teaching the networking courses he was never asked by the EEC about this equipment. The College has all the necessary networking equipment such as: switches and intelligence switches, modems, routers/Cisco routers, transceivers wireless access points, etc. (Appendix 25)

4. The College teaching and learning policy is as per the EU ESG 1.3 where it fully supports the students' needs and social development and it's always a part of the design and development process of the program. The teaching staff applies innovative teaching methods and continuously get feedback from student learning. Whether they have certain weaknesses or gaps and the teachers always try to fulfil these gaps with additional revisions, exercises or practice. Moreover, the College has a structural and formal process of teaching and learning which fully support the students' social development and needs as per the EU strategic policy through the Application of Student-centered Learning, Teaching and Assessment policy (ESG1.3) with the following formal processes:
   - Organization of the educational process
   - Adequate learning resources are available to students
   - Academic mentoring
   - Policy for regular communication with students
   - Teaching staff provide effective feedback
   - Control mechanisms for students' performance
   - Support students with disabilities
   - Effective plagiarism system
   - Innovative teaching methods
   - Latest teaching material

5. All seven (7) teaching members of the ICT programme, have very good academic qualifications and extensive teaching and pedagogical training. They all have more than ten (10) years of teaching experience in the higher education, not only at CDA College but also in other higher educational institutions. Every year they attend seminars of their specialization. Due to Covid19 pandemic they were using the distance learning method and in order to improve their e-teaching they attended seminars on how to offer an attractive distance teaching and online teaching techniques. (Appendix 26)

6. In teaching at the College, there is a standard practice in all modules and in all forms of homework or examination where all the teaching staff after a written exercise or practice or examination they provide feedback to students notifying their weaknesses and gaps and make it clear to students why the specific grade was awarded. Then the lecturers provide revision, solutions and support to students on how to correct their mistakes.

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Teaching staff

(ESG 1.5)

Findings

The college ensures that all teaching staff meet the minimum requirements with respect to their educational level and that they are educated in areas very close to the topics they teach. The procedures regarding promotion take into account the quality of teaching and research activity of the staff. It is not clear to the EEC if they also take into account the development of teaching skills and mobility of the staff.

It is not clear how much, if any at all, of the teaching of this program is done by visiting staff. A significant amount of the teaching is done by staff who have yearly contracts with the college. The number of teaching staff is adequate to support the program. The teaching staff rank is appropriate to offer a quality program of study.

There are 7 teaching staff responsible for delivering the various courses of the study program (6. Academic / Teaching Personnel and their qualifications). All teaching staff have a relevant M.Sc. degree with some of them having a relevant PhD degree as well.

According to the information provided to the committee, the number of the teaching staff is adequate to support the programme of study, however there is an unbalanced distribution of the courses among the 7 teaching staff (TABLE 3: TEACHING PERSONNEL, COURSES AND TEACHING PERIODS IN THE PROGRAM OF STUDY). With 2 teaching staff (Pavlos Panayi and Demetra Spanou) undertaking a relatively high teaching load, while others seem to be having other duties to cover their working time.

Most of the teaching staff have been in the college for several years and were recruited with appropriate routines.

Students evaluate the educational work and the instructors receive feedback via different routines (via surveys as well as daily interaction and communication).

Research activity is limited, but this is not a requirement for teaching staff in a 2 years diploma study program.

Strengths

1. The teaching staff of the study program consists of experienced personnel who have been in the college for several years. Although no systematic ongoing training is in place, the teaching staff seem to be engaging with seminars and other activities to maintain and further develop their teaching competence.

2. Also from the conversation with the teachers, there seems to be genuine interest for the quality and further development of the curriculum, as well as their students.

Areas of improvement and recommendations

1. It is clear that evaluation mechanisms exist and that teachers take into account the feedback from the students. However, it is not clear what procedures are followed for quality improvement, in case the feedback indicates so or there is a room for improvement into the teaching practices.

2. The college also tries to improve the teaching skills of the teaching staff through activities such as optional seminars and emails with advice, for instance. These efforts are appreciated. As pointed out in the previous section, such efforts should be structured in a more formal way and be made compulsory to new or inexperienced teachers, in order to ensure that no staff begins teaching without a minimum of pedagogical training.

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ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION

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Response of the Higher Education Institution (HEI)

1. The College has a comprehensive evaluation strategy with a plethora of mechanisms and procedures for assuring the students learning and the quality of the program. In addition, all members of the academic staff participate in the quality assurance system with clear responsibilities and procedures. At the end of the academic year all lecturers study their curricula thoroughly and provide their suggestions on updating the content of their lessons, the new version of manuals, websites and magazines related to their subject matter. They all apply a lot of innovative Teaching methods and assessment mechanisms. Additionally, all the teaching members provide full feedback to students and support students how to rectify their mistakes. (Appendix 27)

2. All seven (7) teaching members of the ICT programme, they have very good academic qualifications and extensive teaching and pedagogical training. They all have more than ten (10) years of teaching experience in the higher education and every year they attend seminars of their specialization. Due to Covid19 pandemic they were using the distance learning method and in order to improve their teaching they attended seminars on how to offer an attractive distance teaching and online teaching techniques. (Appendix 27)

The comments of the EEC are very positive and the **3rd section Teaching Staff** is evaluated as Fully Compliant by the EEC.

Please select what is appropriate for each of the following sub-areas: Sub-area	*Non-compliant/ Partially Compliant/Compliant*
3.1 Teaching staff recruitment and development	Compliant
3.2 Teaching staff number and status	Compliant
3.3 Synergies of teaching and research	Compliant

3. Student admission, progression, recognition and certification
(ESG 1.4)

Findings

Appropriate admission requirements are in place and clearly communicated. The minimum admission requirement is 60% in the general school leaving exams in the Cypriot state educational system, or equivalent for international admissions and minimum 5.5 IELTS for English Language. There are no allowances though for RPL entry. Academic advisors and tutors are available to support and monitor student progression. The grading and degree classification systems are comparable to other national and international Higher Education Institutions. The panel has observed that student progression from year to year in the degree program is appropriately monitored and supported by exams and other means of assessment so that students can move forward in their studies. There are very few female students. The gender gap is a general and important issue to be addressed. A strategy should be designed and implemented to address this. The Department monitors that student performance and wellbeing, and supportive services are in place. The current students are all in full-time employment. Academic advisors and tutors are available to support and monitor student progression.

There are pre-defined regulations regarding the selection and intake of students. The number of students is determined, however, the study program does not recruit as many students as it could.
The study program is a key element in ensuring the progress of the students. The study program clearly defines the number and workload of the various courses, and how they are distributed in the 4 semesters. There are no prerequisites and most of the courses of the study program are defined as mandatory, except one where students can select one of the available optional courses.

The diploma is accompanied by the diploma annex which follows the European and International Regulations.

Strengths

1. There is a low student to teacher ratio, which contributes to a positive atmosphere of trust, focused teaching and room for dialogue and support for students. Students completing the program, advance in their current full time employment role. According to students' feedback during this evaluation process, the panel has observed a high level of satisfaction among students, regarding the program and the support they receive.

2. The procedures are clearly described, allowing for transparency and planning of course management and resource allocation.

3. Students provided very positive feedback for the study program, in particular to the support they receive from the teaching staff.

Areas for improvement and recommendations

1. The panel recommends the development of an action plan to help increase the number of applicants and of enrolled students over the next few years. Some initiatives could be devised to help attract more female applicants. Examples of such initiatives include: 1) using the current/alumni female students and female graduates as "ambassadors" and inviting them to go back to their high school to talk to and inspire high school students, especially females; 2) setting up a gender-balanced focus group of high school and diploma students in order to gain insights into what aspects of computer science and engineering would attract female students and how these should be communicated to them; 3) having a gender-balanced website and external presence of the university in broader activities (Erasmus+), to the extent that this is possible.

2. To attract larger numbers of students, it may be helpful to review the modules taught with content highly relevant with current ICT market needs, and to actively promote and advertise the positive values and high potential of this program to prospective students and relevant stakeholders.

3. The EEC recommends establishing a procedure of recognition of prior learning and work experience (e.g., from another institute or working experience) and increasing and diversifying students' intake.

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CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION

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Response of the Higher Education Institution (HEI)

1. The College has developed an Action plan to increase the number of applicants and also attract more female applicants. CDA College is using the current/alumni female students and female graduates as "ambassadors" through success stories videos in our promotional campaign and in our website. However, this attempt in most part is not on behalf of the College but also due to the culture of Cyprus, actually, there are not many female students all over Cyprus studying ICT or specifically ICT technicians which is the objective of our ICT programme. Moreover, the College has the official charter of the Erasmus + and a lot of students and lecturers took part in this mobility plans. CDA College has agreements with 26 Universities in Europe.

   - CDA College had a number of academic staff from all over Europe visiting for teaching and training in the all-academic areas.
   - The CDA Instructors and Students visited foreign Universities:
     - 40 CDA Instructors as visiting professors and
     - 60 CDA Students participating in foreign universities lectures
   - The Foreign Instructors and Students visited CDA College:
     - 120 foreign instructors visited CDA College as visiting professors. 150 foreign students from France, Lithuania, Poland, Romania, Hungary and Portugal participating in CDA College programs and lectures.

2. As mentioned above in item 1.3, as per the EEC suggestion, the ICT programme is thoroughly updated and we added some strong/ innovative modules in the programme which are relevant to the ICT market and taking into consideration the involvement of the stakeholders, the students. (Appendices 5 & 7 - 19)

3. At the College there is a procedure of recognition of prior learning. The College has a formal Transfer Committee which is responsible to examine prior learning of potential students and offer them the appropriate ECTS exceptions to register in the programme.

The comments of the EEC are very positive and the **4th section Students admission, progression, recognition and certification** is evaluated as Fully Compliant by the EEC.

Please select what is appropriate for each of the following sub-areas: Sub-area	Non-compliant/ Partially Compliant/Compliant
4.1 Student admission, processes and criteria	Compliant
4.2 Student progression	Compliant
4.3 Student recognition	Compliant
4.4 Student certification	Compliant

4. Learning resources and student support
(ESG 1.6)

Findings

Overall, students receive low-quality theoretical training on all key areas of ICT and it is not shown the advancement of ICT skills and the progression from Secondary level education to the Diploma level. Adequate and modern learning resources and learning management system are available to the students, including the following: facilities, library, infrastructure, student welfare, academic mentoring. Some facilities are fit for purpose to achieve the course learning outcomes with a student-centered approach. There has been infrastructure in place for flexible mode of learning and teaching, although it is advised when the restrictions are lifted to return to 100% face to face mode of delivery.

The capacity of the classrooms and computer labs is quite satisfactory, especially given the small number of students. The technical support provided to students was also adequate to support the study program and students' needs. Although sometimes students' were not fully aware of some services that can be offered (e.g., emails provided).

The educational platform used both for posting teaching materials, recorded lectures (in cases where classes were conducted online due to the limitations of the COVID-19 pandemic), and for assigning and delivering assignments, is "Moodle". Moodle is an established solution that offers a complete set of services and successfully covers several educational institutes around the world.

Strengths

1. The Department uses computer laboratories, designated areas for group and individual work and a library and the teaching and learning resources are accessible even during the time of the pandemic. The Department periodically assesses (every 7 years) the adequacy and suitability of these resources and informs the responsible services of the University for their actions, although the panel feels that this is long overdue. Students appear very satisfied with the programme, the teaching staff, and their interactions with the teaching staff. All regulations supporting student progress and satisfaction monitoring are in place. It is to be commented the involvement of the Department with Erasmus+ mobility and it is advised to encourage student and staff mobility during the course.

2. The relationship between teachers and students is very good, since as mentioned above, due to the relatively small number of students, teachers place special emphasis on the personal needs of each student, and this results in students having the best performance.

3. The EEC recognises the following services:
   - Students have access to linux server
   - Students can get email address from the college
   - Students laptops can get fixed for no cost

Areas for improvement and recommendations

1. Student welfare mechanisms for monitoring the sufficiency of student support are in place. Nevertheless, it is recommended to introduce an EDI Committee that will strengthen this area, especially with a history of diverse student population and the needs of mature students that are working full time. Library services are available but it is recommended to review the database sources the department has access to, in terms of the most impactful sources for the ICT sector.

2. Modules' titles and contents are not consistent with the expectations of the diploma degree offering and it is advised to organize a committee to review the curriculum, module names and depth of content. The panel felt that the review of resources at the labs is not adequately planned and does not ensure the provision of the H/W available if the circumstances change and the number of students increase over the years.

3. The panel recommends in the future to consider a formal T&L Committee to monitor the T&L processes, curriculum review and resources at all stages taking into account the student and staff feedback with inclusion of an official industry advisory Board and External examiner.

4. It is recommended to have in place procedures, appropriate training, guidance and support, for teaching personnel, to enable personnel to efficiently support the educational process. Based on the review of the online live provision of the lecture that the panel observed, the audio quality should be improved.

5. The Department needs to establish a process to promote requests for the continuous upgrading and maintenance of laboratories and equipment, and for the unimpeded access of students to the workshops. The students are provided with a departmental email account, but communications are not re-enforced through this email, which should be imposed as the official channel of email communication with the students.

6. The School should consider a rigorous process of data collection in terms of reviewing the pipeline and year on year alumni of the students. There is an under-representation of female students and actions should be taken in order to change the picture of the course, where the students and the staff can identify themselves within the ICT sector.

7. The EEC recommends that audio quality should be improved regarding recorded videos. There was too much background noise in some of the recorded lectures.

Response of the Higher Education Institution (HEI)

1. CDA College cares very much for its students that is why there is a Student welfare office offering a lot of welfare services and support to students. This service ensures the quality of students' life. Students will visit or communicate with it frequently to access or renew a right of access to benefits such as food, housing, care, textbooks, scholarships and counselling on various matters. (Appendix 28)

   Furthermore, CDA College has a long history in the higher education market in Cyprus (45 years). Our College has a long history of diverse student population and the needs of mature working students. Equity, Diversity and Inclusion are values/policies that exist in our College since many years ago. Our College applies the same values and policies for both domestic and foreign students.
   As with any initiative, there are general practices that are foundational to making an Equality, diversity and inclusion (EDI) Committee at CDA College more effective:
   - Explore past and current EDI initiatives in our unit to learn from past experiences and better understand how the committee can support or connect to this work;
   - Cultivate leadership buy-in and sponsorship at the initial stages and throughout the life of the committee to align with the unit's strategic direction;
   - Support the sustainability of the committee by remaining flexible and responsive to local and institutional changes over time while remaining committed to the committee's EDI purpose and values;

   In addition, CDA College has fully equipped the library with updated editions and scientific journals, new electronic platforms, Databanks, Infotrack, upgraded VPN services for students and academic staff. Additionally, CDA College has four (4) libraries in Limassol, Nicosia, Larnaca and Pafos capitalizing on interlibrary loans. The students can immediately borrow books from one library to the other. Moreover, the library is regularly enriched with new editions of textbooks, magazines and e-databases. The new e-libraries EBSCO and Emerald has also many textbooks and scientific journals on all areas. Here below you can find the detailed numbers of books in the libraries. (Appendix 29)
   Furthermore, CDA College Library services have reviewed their database sources and now ICT students have access to the most important sources and trends for the ICT sector, such as:
   - Digital Identity Systems.
   - ICT for Education.
   - Digital healthcare.
   - Mobile payments.
   - Assistive technologies.
   - Internet of Things.
   - 5th generation mobile networks.
   - Artificial intelligence and machine learning.

2. The College has a formal committee responsible for reviewing the program of study at the end of each semester. As mentioned above in item 1.3 and as per the EEC suggestion the College has thoroughly revised/updated the modules names and content of the curriculum. (Appendix 5 & 7 -19). For the time being the resources at the labs are adequately planned as per the number of the students registered, however, if in the future we have more registrations then the College of course will increase the labs resources.

3. The Teaching and Learning Committee advises and makes recommendations to the Academic Board and/or other College bodies as appropriate on matters relating to teaching and learning and assessment in the College. Full processes are shown on Appendix 22 in the College Process of Introducing New or Monitoring and Revising Current Programmes of Study. The College external stakeholders and industry professionals act as external examiners for the support and development of the programme.

4. Regarding the recorded videos, from now on the audio quality will be improved without background noise. Instructions are given to all faculty members to switch off any background noise so as the recorded quality of the lectures to be improved.

5. The College has an established process for the continuous upgrading and maintenance of laboratories and equipment, and there is unrestricted access of students to the workshops. CDA College has signed agreement with an external IT company and every semester provide extensive maintenance to laboratories and equipment. All the students as from their registration are provided with an email account.

6. The fact that there is an under-representation of female students in the registration of the ICT programme, it's not mainly up to the College actions. It's up to the Cyprus culture where there are not many female students wishing to study ICT technicians. In the College promotion campaigns we try to attract both female and male students with no discrimination.

7. Regarding the recorded videos, from now on the audio quality will be improved without background noise. Instructions will be given to all faculty members to switch off any background noise so as the recorded quality of the lectures to be improved.

The **5th section Learning resources and student support** is evaluated by the EEC.

		Non-compliant/ Partially Compliant/Compliant
Please select what is appropriate for each of the following sub-areas: Sub-area		
5.1	Teaching and Learning resources	Partially Compliant
5.2	Physical resources	Compliant
5.3	Human support resources	Compliant
5.4	Student support	Partially Compliant

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5. Additional for doctoral programmes
(ALL ESG)

N/A

7. Eligibility (Joint programme)
(ALL ESG)

N/A

B. Conclusions and final remarks

The EEC reviewed and examined the materials provided by C.D.A. College pertaining to its Diploma Program in Information and Communication Technology. The one-day remote (virtual) visit was held on 1.3.2022.

The EEC was presented with detailed information about the program. During the site visit, the EEC met college leadership peers, professors, teachers, administrators and students.
Based on the examination and evaluation of the accreditation materials and the remote site visit, the EEC concludes that some standards are fully met, others are partially met, and others are not met.

The EEC identified the following key strengths:
- The college has the capacity to look after students on the program during the COVID-19 pandemic.
- The program enjoys a good staff-student ratio, which means that each student can get satisfactory support.
- Staff expertise is consistent with the program of study.
- There is a well balanced mixture of foundational and applied topics in this program.
- The employability of the students who completed the program is encouraging.
- The program has a very good administrative and managerial structure and support.
- The small size of the college allows for effective informal solutions to operations issues.
- Students of the program are highly satisfied with the quality of learning and teaching resources.

The EEC also identified a number of key areas for improvement and therefore, the following recommendations are made:

1. The policy of quality assurance is overall assessed as partially compliant to the CYQAA defined standards because it does not support in a structured and consistent way the involvement of external stakeholders and because of the questionable implementation of zero discrimination and intolerance policies with respect to gender.

2. The design, approval, on-going monitoring and review of the programme is assessed as non compliant because: the programme is designed without the structured involvement of external stakeholders, without explicit evidence of having benefited from external expertise; placement opportunities for students are not an integral part of the program, even though they are appropriate for this diploma; the program curriculum is not up-to-date with the latest knowhow in the area of discipline; the program is not periodically reviewed to take into account student needs with respect to their full time employment while being enrolled in the program fulltime; and external stakeholders are not consistently and structurally involved in the reviewing and revision of the program.

3. The process of teaching and learning and student-centred teaching is assessed as partially compliant because: the social development of students is not supported by the process of teaching and learning (fulltime students are also fulltime employed); the pedagogical methods used are not diversified with respect to modes of delivery; and the curricula are not uptodate with the latest developments in the area.

4. The practical training is assessed as partially compliant because no external stakeholders are structurally and consistently involved in its delivery.

5. The teaching and learning resources are assessed as partially compliant because not all of them are adequate for changing circumstances and not all resources are fit for purpose.

6. Student support is assessed as partially compliant because student mobility within and across higher education systems is not strongly practically encouraged within the program under evaluation.

7. Finally, the EEC recommends that the number and gender balance of admitted students is subject to a targeted strategy aiming to improve it.

ΔΙΠΑΕ CYQAA

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Response of the Higher Education Institution (HEI)

1. Please see our reply above on 1.1, 1.4.2 & 1.4.3. CDA College has established a very good and powerful quality assurance system. CDA College has developed 28 quality assurance mechanisms as per the CYQAA standards that's is why we have 44 accredited programs of study by CYQAA, where through these mechanisms the Internal Evaluation Committee gathers all the necessary information so as to assure the quality and standards in all our accredited programs of study. (Appendix 1)

   Through these quality assurance policies, we also support the involvement of external stakeholders and industry professional. The College has a formal agreement with stakeholders and industry professional to visit the ICT programme as guest lecturers. Additionally, CDA College has strong ties with foreign students and we have formal policies regarding discrimination and intolerance with respect to gender. (Appendices 6 & 20-21)

   CDA College has a complete and comprehensive strategic plan for the whole institution as per the requirements of the CYQAA and it is included in the General Internal Accreditation Report sent to the Agency in 30/1/2022). (Appendix 3)
   Additionally, the College has developed a strategic plan, a SWOT analysis and a Feasibility study especially for the ICT programme analysing the market issues of the information technology industry in Cyprus. (Appendix 3)
   The institution considered and evaluated the feasibility of the program in comparison with the competition, the potential and opportunities of the ICT programme. During the preparation of the above mentioned procedures, we obviously took into consideration the opinions and suggestions of the students, stakeholders and industry experts. This process is a formal and an integral part of the strategic plan of the College. (Appendix 5).

   The College has a permanent policy of representation from external stakeholders and we have agreements with external stakeholders, such as industry or technical bodies in the area of the program and they support the good operation and development of the program. These stakeholders or industry professionals are also guest lecturers to provide their practical and technical experience in the industry. Additionally, the College has close links with the Society so as to get the suggestions and recommendations of the stakeholders and the industry and improve the design and evolution of the program as per the market needs. (Appendix 6)

   Concerning discrimination or intolerance policies, CDA College has strong initiatives to clearly guard against any form of discrimination or intolerance. The total number of the College is 60% foreign students and 40% domestic students. Historically the College has developed discrimination policies and we have very good relations with all our foreign students. Specifically, in order to reinforce these relations, we developed an office for Foreign affairs so as to be closer to the foreign students and provide immediate solutions to their problems. The College has also policies against discrimination and intolerance in place and they are taken very seriously. According to our statistics there were only two (2) genders. As per the Cyprus Government official documentations, the Cyprus government also has two (2) genders in all its official applications and all documentation. (Appendices 20 -21)

2. As it is mentioned above in our reply 1.3, the programme is thoroughly revised as per the industry professionals and EEC suggestions, with the introduction of some strong/innovative courses. Now the programme is reinforced and the courses are sufficient for the achievement of the learning outcomes. (Appendices 5 & 7-19). Due to the subject (ICT) and the constant renewal of the needs from the industry, CDA College implemented all the EEC suggestions so as to keep the program up to date as follows: (Appendix 5)
   a) The course Introduction to Multimedia is renamed/revised with COM 200: Web Programming I with the addition of HTM5/JS, 2Ds, animations, sampling and quantization and image processing. (Appendix 8)

b) Management and Information Systems is replaced with COM 240: PC Maintenance and Repair I (Appendix 9)
c) Introduction to Java Programming is renamed to COM 315: Object Oriented Programming using Java with 6 ECTS. (Appendix 10)
d) Visual Programming is revised/renamed to COM 323: Visual Studio.NET (C#) (Appendix 11)
e) Internet Technologies & Web Design renamed/revised with COM 300: Web Programming II (Appendix 12)
f) Introduction to Computing - Renamed/Revised with COM 120: Human Computer Interaction (Appendix 13)
g) Introduction to Computer Systems – Renamed/Revised with COM 210: Operating Systems Management (Appendix 14)
h) Communication and Networks – Renamed/Revised with COM 211: Network Management (Appendix 15)
i) User Support – Renamed/Revised with COM 312: PC Maintenance and Repair II (Appendix 16)
j) Network Design and Support - Renamed/Revised with COM 423: Systems Network Administration (Appendix 17)
k) E-Business - Renamed/Revised with COM 444: Content Management system (Appendix 18)
l) Final project – replaced with COM 421: Database Management (Appendix 19)
m) Also the addition of three (3) innovative elective courses. (Appendices 31-33)

3. CDA College applies the policy of Student-centered Learning, Teaching and Assessment (ESG1.3) which it specifically consists of the following main areas:
   - Organization of the educational process
   - Adequate learning resources are available to students
   - Academic mentoring
   - Policy for regular communication with students
   - Teaching staff provide effective feedback
   - Control mechanisms for students' performance
   - Support students with disabilities
   - Effective plagiarism system
   - Innovative teaching methods
   - Latest teaching material

   The College always support the social development of the students beside the fact that many of our students are working. The lecturers are very qualified with extensive teaching experience and they apply innovative pedagogical methods and innovative teaching methods. Finally, as we have already said above, the curricula are regularly updated with the suggestions of the lecturers, stakeholders, the latest developments of the, industry and the opinion of the students.

4. The students have a lot of practice in the program, out of the twenty-four (24) modules, the fifteen (15) modules are practical which is the 62.5% of the whole program. Furthermore, as we have already said to the EEC, due to Cyprus regulation, foreign students cannot do internships in Cyprus that's why they have a lot of practical modules in the whole program. Moreover, the program is thoroughly revised with the addition of some strong/innovative modules. (Appendices 5 & 7-19)

5. As we have already mentioned above in item 5.1, CDA College has fully equipped the library with updated editions and scientific journals, new electronic platforms, Databanks, Infotrack, upgraded VPN services for students and academic staff. Additionally, CDA College has four (4) libraries in Limassol, Nicosia, Larnaca and Pafos capitalizing on interlibrary loans. The students can immediately borrow books from one library to the other. Moreover, the library is regularly enriched with new editions of textbooks, magazines and e-databases. The new e-libraries EBSCO and Emerald has also many textbooks and scientific journals on all areas. Here below you can find the detailed numbers of books in the libraries.

- The number of books in the Limassol library is: 3,660
- There are 550 books on the ICT sector.
- Most of the text books editions are from 2000 – 2020.
- Journals-Articles: 72, EBooks: 26, Databases: 25, General Information websites: 15, e-Libraries: 8.
- The total number of books in the other 3 libraries of the College (Nicosia, Larnaca and Pafos) is 6,200. Etc. (Appendix 29)

CDA College Library services have reviewed their database sources and now ICT students have access to the most important sources and trends for the ICT sector, such as:
- Digital Identity Systems.
- ICT for Education.
- Digital healthcare.
- Mobile payments.
- Assistive technologies.
- Internet of Things.
- 5th generation mobile networks.
- Artificial intelligence and machine learning.

6. CDA College has the official Erasmus+ charter since 2018, currently the College has signed mobility agreements with 26 European Universities. Many of our students and faculty staff has taken part of the Erasmus+ mobility schemes. (Appendix 30)

7. CDA College cares very much for its students that is why there is a Student welfare and support office offering a lot of welfare services το students. This service ensures the quality of life of students. Students will visit or communicate with it frequently to access or renew a right of access to benefits such as food, housing, care, textbooks, scholarships and counselling on various matters. (Appendix 28)
CDA College has a long history in the higher education market in Cyprus (45 years). Our College has a long history of diverse student population and the needs of mature working students.
However, the number and gender balance of admitted students is not up to the College strategy. The College promotional strategy is targeted to:
- Target national and international graduate students from the secondary education
- Potential students either from Cyprus or abroad
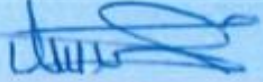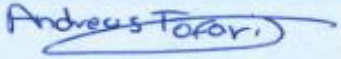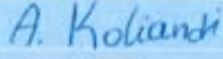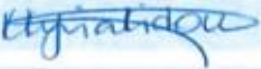- Persons holders a secondary education diploma wishing to get Information Technology degree
The College has no discrimination regarding the gender of students, the College would like to register more female students in the ICT program, however the culture of Cyprus and the working opportunities of the programmes does not attract many female students because the objective of this 2-year vocational programme is to create ICT technicians not Computer Science programmers. Equity, Diversity and Inclusion are values/policies that exist in our College since many years ago. We apply the same values and policies for both domestic and foreign students.

Finally, the College has already taken the appropriate actions and implemented all the suggestions mentioned by the EEC. In the above program, there is full compliance to the EEC's suggestions and the College applies high quality criteria and is constantly upgraded in accordance with the regulations of the Agency for Quality Assurance and Certification of Higher Education (CY.Q.A. A). As can be seen from our response, we have already taken immediate action and adopt the EEC's suggestions and recommendations.

The College firmly believes that the program "Information and Communication Technology" a two (2) year vocational program has a lot to offer to the Higher Education and to the vital sector of Information Technology and to the small and medium companies which it's the primary objective to have excellent graduates/ IT technicians. We once again point out the implementation of all the suggestions raised by the EEC and we look forward to your positive response.

C. Higher Education Institution academic representatives

Name	Position	Signature
Dr. Pantelis Ioannou	General Director of C.D.A. College, Chairman of IQC	
Dr. Andreas Tofaris	Director of Research Centre «Aristotelis» Member of IQC	
Dr. Pavlos Panayi	Head of ICT Department Member of IQC	
Mr. Efstathios Michael	General Director of C.D.A. College Pafos Member of IQC	
Mrs. Athena Koliandri	Director of International Affairs Member of IQC	
Mrs. Katerina Kyriakidou	Director of C.D.A. College Nicosia Member of IQC	

Date: 8/04/2022

Appendix 1   **CDA COLLEGE EDUCATIONAL QUALITY ASSURANCE MECHANISMS**

The College has a detailed evaluation system to assess the quality of the programs
There are 28 Quality Assurance Mechanisms:

1. Three meetings per academic year
   - One (1) general meeting before the academic year starts
   - two (2) departmental meetings each semester
2. Faculty Classroom Observation
3. Students' Faculty Evaluation Form
4. Student's Program Evaluation
5. Student's Module Evaluation
6. Faculty Self-Evaluation and Suggestions Report
7. Faculty Other Academic Matters Results (Research, Course outlines, etc)
8. Faculty Overall Evaluation Results
9. Internal Memos, Instructions and Guidelines for each program of studies
10. Students Evaluation/Assessment criteria
11. Student's Complaint and/or Suggestions Form
12. Student's Complain Management Procedures
13. Examination and Invigilation Procedures
14. Instructions to Examination Candidates
15. Application of the ECTS System in all the programs of study
16. Assignments, Tests, Quizzes, Final Projects, Group Projects
17. Mid-Term and Final Examinations
18. Attendance Roster/ Detailed Records with all and material covered by each lecturer
19. Final Project (Thesis) Assessment Criteria
20. Internal Examiner
21. Faculty Staff Development
22. Faculty Staff Involvement
23. Innovative Teaching Methods
24. Survey by current students and Alumni
25. Administrative Staff Self-Evaluation & Suggestions Report
26. Administrative Staff Evaluation Report
27. CDA College Committees for Monitoring the Educational Quality Assurance
28. Formal Policy for the Development & Management of Programs of Study

Appendix 2   **Στρατηγικό Πλάνο CDA College**

1. Στρατηγικός Σχεδιασμός / Στρατηγικό Πλάνο

Η υιοθέτηση στρατηγικού σχεδιασμού είναι το κλειδί για την εύρυθμη λειτουργία του ιδρύματος, αφού αποτελεί πρακτική που αυξάνει την ικανότητά του να ανταποκρίνεται αποτελεσματικά στις αλλαγές του αυξανόμενου ακαδημαϊκού ανταγωνισμού στο χώρο της εκπαίδευσης. Το ίδρυμα θα πρέπει καταρτίσει το δικό του στρατηγικό πλάνο που να περιλαμβάνει στρατηγικούς πυλώνες και δείκτες μέτρησης και απόδοσης..

1.1. Ανάλυση του Οργανισμού (SWOT Analysis)

Για τη διαμόρφωση της στρατηγικής του Πανεπιστημίου ή της ΣΤΕ θα πρέπει να ληφθεί υπόψη η ανάλυση του εσωτερικού (δυνατά και αδύνατα σημεία) και εξωτερικού περιβάλλοντος (ευκαιρίες, απειλές) του οργανισμού

CDA College - SWOT ANALYSIS	
ΕΣΩΤΕΡΙΚΑ ΣΤΟΙΧΕΙΑ ΤΟΥ ΙΔΡΥΜΑΤΟΣ	
ΔΥΝΑΤΑ ΣΗΜΕΙΑ (STRENGTHS)	**ΑΔΥΝΑΤΑ ΣΗΜΕΙΑ (WEAKNESSES)**
1. **Ποιοτικά προγράμματα σπουδών** 2. **Υψηλές προοπτικές απασχόλησης αποφοίτων** 3. **Πολυετή παρουσία των προγραμμάτων και η εμπειρία του Κολλεγίου στην Κυπριακή αγορά προσδίδουν κύρος και φήμη.** 4. **Ο σχεδιασμός των προγραμμάτων και το περιεχόμενο των μαθημάτων.** 5. **Τα προγράμματα είναι στοχευμένα στην τοπική αγορά εργασίας, και συνεπώς οι απόφοιτοι μετά την περάτωση των σπουδών τους μπορούν να εργοδοτηθούν άμεσα ή και να συνεχίσουν τις σπουδές τους σε πτυχία ανώτερης βαθμίδας.** 6. **Σαφές σύστημα αξιολόγησης και κριτηρίων επίδοσης των φοιτητών**	1. Μέτρια ερευνητική δραστηριότητα 2. Χαμηλή εξωτερική ερευνητική χρηματοδότηση 3. Λίγες συνεργασίες με ξένα Ιδρύματα, διεθνείς οργανισμούς και ερευνητικά κέντρα 4. Μέτρια ποσοστά σε Δημοσιεύσεις καθηγητών 5. Αναβάθμιση της Βιβλιοθήκης 6. ποιο συστηματική παρακολούθηση των αποφοίτων σχετικά με την απορρόφηση τους από την αγορά εργασίας καθώς κα η πιθανή συνέχιση των σπουδών τους σε άλλα προγράμματα. 7. Μη εξασφάλιση άριστων φοιτητών σε όλα τα προγράμματα σπουδών 8. Ενθάρρυνση των φοιτητών στη συνδιαμόρφωση των προγραμμάτων.

7. **Σύγχρονες εκπαιδευτικές μέθοδοι και τεχνολογίες**

8. **Μαθησιακές δραστηριότητες που ενθαρρύνουν την συμμετοχή στη διαδικασία της μάθησης και την εξέλιξη των φοιτητών σε ατομικό και διαπροσωπικό επίπεδο.**

9. **Συνάφεια των γνωστικών και ερευνητικών αντικειμένων των διδασκόντων με τα προγράμματα**

10. **Ο υψηλός δείκτης αριθμού φοιτητών προς αριθμό διδασκόντων**

11. **Εργασιακή αφοσίωση και δέσμευση των διδασκόντων.**

12. **Καλό εργασιακό κλίμα.**

13. **Υψηλό επίπεδο παρακίνησης από την πλευρά των διδασκόντων για την ακαδημαϊκή και επαγγελματική βελτίωση τους.**

14. **Ποιοτική εξυπηρέτηση των φοιτητών σε όλα τα προγράμματα**

15. **Ειδική μέριμνα για ΑΜΕΑ**

16. **Διευκόλυνση των εργαζόμενων φοιτητών**

17. **Πολύ καλή εργαστηριακή και ψηφιακή υποδομή που ανταποκρίθηκε επιτυχώς στις συνθήκες της πανδημίας.**

18. **Πολύ καλές δομές στήριξης φοιτητών**

19. **Ικανοποιητική ενημέρωση των φοιτητών για τις προσφερόμενες υπηρεσίες του Ιδρύματος.**

20. **Μεγάλη φήμη (45 χρόνια στην τριτοβάθμια εκπαίδευση)**

21. **Παρουσία σε όλες τις πόλεις σε όλη την Κύπρο**

22. **Αξιόλογο ακαδημαϊκό προσωπικό**

23. **Καλά εκπαιδευμένο και προσοντούχο διοικητικό προσωπικό**

24. **Υποτροφίες προς τους φοιτητές**

9. Ενθάρρυνση και επιβράβευση των διδασκόντων για ενεργή συμμετοχή σε προγράμματα επιμόρφωσης με την παροχή κινήτρων.

10. Ενθάρρυνση των διδασκόντων να συμμετέχουν πιο ενεργά σε Erasmus προγράμματα κινητικότητας και έρευνας.

11. Μη επαρκής ανάπτυξη δραστηριοτήτων επαγγελματικής κατάρτισης και δια βίου εκπαίδευσης

12. Ενίσχυση της κινητικότητας των φοιτητών μέσω προγραμμάτων Erasmus σε περισσότερες χώρες της ΕΕ πέραν της Ελλάδας

13. Περιθώρια βελτίωσης στις υποδομές στήριξης με προτεραιότητα στη βιβλιοθήκη

14. Περιορισμένος επιτρεπόμενος αριθμός για φοίτηση φοιτητών από τρίτες χώρες

25. **Φοιτητικές παροχές σε οικονομικά δυσπραγούντες**	
26. **Καλή οργάνωση και σαφείς ακαδημαϊκές διαδικασίες**	
27. **Καλό Εσωτερικό σύστημα διασφάλισης ποιότητας**	
28. **Πολύ καλές εγκαταστάσεις (βιβλιοθήκη, εργαστήρια πληροφορικής κλπ)**	
29. **Πλατφόρμα ηλεκτρονικής μάθησης Moodle και Υπηρεσίες VPN**	
30. **Συμφωνίες με ηλεκτρονικές βιβλιοθήκες, π.χ. EBSCO και Emerald.**	
31. **Η προσαρμοστικότητα και αποτελεσματικότητα του Κολεγίου στις νέες εκπαιδευτικές συνθήκες που δημιούργησε η πανδημία.**	
32. **Εξ αποστάσεως διδασκαλία μέσω της πλατφόρμας Moodle.**	
33. **Εισαγωγή νέων καινοτόμων προγραμμάτων σπουδών**	
34. **Συνδυασμός σπουδών και εργασίας μέσα από την νέα μας καμπάνια «study & work"**	

ΕΞΩΤΕΡΙΚΑ ΣΤΟΙΧΕΙΑ ΤΟΥ ΙΔΡΥΜΑΤΟΣ	
ΕΥΚΑΙΡΙΕΣ (OPPORTUNITIES)	**ΑΠΕΙΛΕΣ (THREADS)**
1. **Η οικονομική κρίση έρχεται στο τέλος** 2. **Ανοδική τάση της οικονομικής ανάκαμψης της αγοράς** 3. **Θετικές επίσημες στατιστικές ΑναΔ για ανάγκες απασχόλησης** 4. **Ανοδική τάση για επαγγελματικά προγράμματα.**	1. Παγκόσμια οικονομική κρίση 2. Κυβερνητική νομοθεσία για αλλοδαπούς φοιτητές εκτός Ευρώπης 3. Η λειτουργία Κολεγίων υπό την ομπρέλα των Πανεπιστήμιων. 4. Επιδημία Covid19 5. Η τάση για μείωση των μισθών 6. Η τάση των ανθρώπων για ανώτερα διπλώματα π.χ. Μάστερ & Διδακτορικά 7. Μεγάλος ανταγωνισμός στην αγορά της εκπαίδευσης.

1.2. Στρατηγικό Πλάνο/Στρατηγικός Σχεδιασμός (Δείκτης Μέτρησης και Δείκτης Απόδοσης)

▪ Σε συνέχεια της χρήσης SWOT ανάλυσης όπου αναδεικνύονται τα ισχυρά σημεία και οι ευκαιρίες του Ιδρύματος, θα πρέπει ετοιμαστεί ο στρατηγικός σχεδιασμός. Επίσης, προτείνεται και δομείται ο τρόπος εφαρμογής (ενδεικτικών) δράσεων που θα μπορούσε να προτάξει το Ίδρυμα με βάση τα «ισχυρά σημεία» και τις «ευκαιρίες» του.

▪ Το Πανεπιστήμιο θα πρέπει βάσει των στοιχείων που θα συλλέξει (π.χ. ανάλυση της εσωτερικής και εξωτερικής έκθεσης αξιολόγησης/προγραμματικές/τμηματικές) να προβεί στην δική του ανάλυση θέτοντας του βασικούς στρατηγικούς πυλώνες (π.χ. Στρατηγική Ακαδημαϊκής Ανάπτυξης, Στρατηγική Έρευνας, Στρατηγική κτηριακών και χωροταξικών υποδομών, Στρατηγική διεθνοποίησης, Κοινωνική Στρατηγική κ.α.)

▪ Το Πανεπιστήμιο ή η ΣΤΕ θα πρέπει να επισυνάψει το στρατηγικό πλάνο το οποίο θα πρέπει να έχει εγκριθεί από τα Τμήματα, Σχολές, Σύγκλητο και Συμβούλιο του Πανεπιστημίου και τα αντίστοιχα σώματα των ΣΤΕ, Διεύθυνση και Συντονιστές ακαδημαϊκούς των προγραμμάτων.

Το στρατηγικό πλάνο θα πρέπει να περιλαμβάνει δείκτες μέτρησης και δείκτες απόδοσης:

-Σύγκριση δεικτών ανά έτος και ανά 3 χρόνια.

-Αναφορά στη διαδικασία διαμόρφωσης συγκεκριμένου βραχύ-μεσοπρόθεσμου (λ.χ. 5ετούς) σχεδίου ανάπτυξης.

-Αναφορά στον αριθμό και στον βαθμό συμμετοχής ακαδημαϊκών και φοιτητών στη διαμόρφωση στρατηγικής ακαδημαϊκής ανάπτυξης, σε τακτές ή έκτακτες συνεδρίες.

**Στρατηγική Ακαδημαϊκή Ανάπτυξη - Strategic Academic Development
(5 Year Strategic Plan: Short, Medium, Long-term)**

1st Stage – Marketing Analysis - Where are we now?
• Marketing Audit
• SWOT Analysis of CDA College
• Students' (Customers) Analysis
• Competitor Analysis (other higher institutions in the Educational sector)
• Financial Analysis & Feasibility Plan

2nd Stage – Planning – Where do we want to be?
Strategic Direction & Strategy Formulation
• Mission
• Objectives (Financial, Educational, Management, Social, Marketing): Short, Medium, Long-term

ΔΙΠΑΕ CYQAA ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
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1. Quality Education
2. Research & Innovation
3. Financial
4. Internationalization
5. Student Success & Welfare
6. Admissions & Enrollments
7. Faculty & Staff
8. Facilities & Resources
9. Management Efficiency
10. Social Strategy

- Market Segmentation (STP) - Educational sector
- Research
- Formulation of Strategy
- Porter Competitive Strategies
- Ansoff Market and Product Strategies (Innovative Educational Programs)

3rd Stage – How might we get there?
Strategic Choice
- Marketing Mix Analysis – 7Ps
- Current Programs of Study & Revision of Current & Development of New Programs of Study
- Pricing/Fees
- Promotion/Communication Plan
- Relationships with other institutions and Professional organisations

4th Stage – Which way is best?
Strategic Evaluation
- Criteria & Modelling approaches: BCG, PLC, GE, Key Country Matrix
- Feasibility Study

5th Stage – How can we ensure arrival?
Strategic Implementation & Control
- Marketing control and Monitoring Strategies
- Gantt Chart

ΣΥΝΟΨΗ ΣΤΡΑΤΗΓΙΚΟΥ ΣΧΕΔΙΑΣΜΟΥ

ΓΙΑ 3 ή 5 ΧΡΟΝΙΑ

Στρατηγικοί Πυλώνες	Στρατηγικοί Στόχοι
Ποιοτική Εκπαίδευση	1. Προσφορά ποιοτικών και διεθνώς ανταγωνιστικών προγραμμάτων σπουδών 2. Αριστεία στη διδασκαλία- Διασφάλιση συνεχούς εκσυγχρονισμού του διδακτικού έργου του Ιδρύματος 3. Ενίσχυση της απασχολησιμότητας των φοιτητών/ριών 4. Προσέλκυση υψηλού επιπέδου φοιτητών/ριών σε όλα τα προγράμματα σπουδών 5. Προαγωγή της διά βίου μάθησης - ΙΔΕΠ
Στρατηγική για την Έρευνα και την Καινοτομία	1. Ανάπτυξη και ενίσχυση ερευνητικής δραστηριότητας 2. Προσέλκυση εξωτερικής ερευνητικής χρηματοδότησης 3. Βέλτιστη αξιοποίηση και διάχυση των αποτελεσμάτων της έρευνας 4. Διασύνδεση της ερευνητικής δραστηριότητας με την καινοτομία, την επιχειρηματικότητα και τις ανάγκες της κοινωνίας
Βιώσιμη Οικονομική Αυτονομία **(τμημάτων, σχολών)**	1. Δημιουργία νέων προγραμμάτων σπουδών και περαιτέρω ενίσχυση υφιστάμενων 2. Κριτήρια κατανομής του προϋπολογισμού στα τμήματα για σκοπούς διαφάνειας 3. Αποτελεσματική διαχείριση και ανάπτυξη κτηριακών εγκαταστάσεων και εργαστηριακών υποδομών 4. Ενίσχυση και καθιέρωση σε Πράσινο Ίδρυμα 5. Αύξηση ιδίων εσόδων 6. Στήριξη της έρευνας μέσω εσωτερικής χρηματοδότησης
Ανάπτυξη Υποδομών	1.Πλάνο χωροταξικής ανάπτυξης 2. Υποδομές
Διεθνοποίηση	1. Ενίσχυση συνεργασιών με ξένα Ιδρύματα, διεθνείς οργανισμούς και ερευνητικά κέντρα διεθνούς εμβέλειας 2. Αξιοποίηση ευρωπαϊκών προγραμμάτων κινητικότητας ακαδημαϊκού και διοικητικού προσωπικού

Αναβάθμιση φοιτητικής ευημερίας και ανάπτυξης	1. Ουσιαστική καθοδήγηση και υποστήριξη φοιτητών/ριών σε θέματα σπουδών και σταδιοδρομίας 2. Ενίσχυση της συμμετοχής των φοιτητών/ριών στην πανεπιστημιακή ζωή 3. Ενίσχυση φοιτητικού κέντρου στήριξης και ανάπτυξης 4. Ενίσχυση κοινωνικής στήριξης και ευημερίας φοιτητών
Στρατηγική διοίκησης	1. Αναβάθμιση εσωτερικής οργάνωσης και λειτουργίας 2. Αποτελεσματική διαχείριση και ανάπτυξη ανθρώπινου δυναμικού για αύξηση της δέσμευσης και αφοσίωσης του προσωπικού 3. Συνεχής αναβάθμιση της ποιότητας των υπηρεσιών που προσφέρουν οι Διοικητικές Υπηρεσίες
Κοινωνική Στρατηγική	1. Εδραίωση καλής φήμης και αξιοπιστίας Ιδρύματος 2. Ουσιαστική συνεισφορά στην Κοινωνία

Στρατηγικοί Πυλώνες	Στρατηγικοί Στόχοι	Δείκτης Μέτρησης	Key Performance Indicator (ετήσια, 3 και 5 χρόνια) Δείκτης απόδοσης (planned)	Key Performance Indicator (ετήσια,3 και 5 χρόνια) Δείκτης απόδοσης (achieved)
Ποιοτική εκπαίδευση	1. Προσφορά ποιοτικών και διεθνώς ανταγωνιστικών προγραμμάτων σπουδών	Αριθμός προπτυχιακών προγραμμάτων	3	3
	2. Αριστεία στη διδασκαλία-διασφάλιση συνεχούς εκσυγχρονισμού του διδακτικού έργου του Ιδρύματος	Αριθμός μεταπτυχιακών προγραμμάτων	1	1
		Αριθμός διδακτορικών τίτλων που απονεμήθηκαν	0	0
		Αριθμός προγραμμάτων εξ αποστάσεως φοίτησης	1	0
	3. Ενίσχυση της απασχολησιμότητας των φοιτητών	Αριθμός προγραμμάτων στην αγγλική γλώσσα	5	5
	4. Προσέλκυση υψηλού επιπέδου φοιτητών σε όλα τα προγράμματα σπουδών	Αριθμός διαπανεπιστημιακών προγραμμάτων	0	0
	5. Προαγωγή της διά βίου μάθησης	Αριθμός προπτυχιακών φοιτητών ανά πρόγραμμα	240	158
		Αριθμός μεταπτυχιακών φοιτητών ανά πρόγραμμα	60	102
		Ποσοστό πιστοποιημένων προγραμμάτων σπουδών (προγραμματική αξιολόγηση)	100%	100%
		Ποσοστό πιστοποιημένων Τμημάτων (τμηματική αξιολόγηση)	Δ/Ε	Δ/Ε

Στρατηγικοί Πυλώνες	Στρατηγικοί Στόχοι	Δείκτης Μέτρησης	Key Performance Indicator (ετήσια, 3 και 5 χρόνια) Δείκτης απόδοσης (planned)	Key Performance Indicator (ετήσια,3 και 5 χρόνια) Δείκτης απόδοσης (achieved)
Στρατηγική για την έρευνα και την καινοτομία	1. Ανάπτυξη και ενίσχυση ερευνητικής δραστηριότητας	Αριθμός συνεργασιών με άλλα πανεπιστήμια, ερευνητικά κέντρα και άλλους οργανισμούς διεθνούς εμβέλειας	30	25
	2. Προσέλκυση εξωτερικής ερευνητικής χρηματοδότησης	Αριθμός εργοδοτούμενων ερευνητών	5	3
	3. Βέλτιστη αξιοποίηση και διάχυση των αποτελεσμάτων της έρευνας	Αριθμός ερευνητικών προτάσεων που υποβλήθηκαν για εξωτερική χρηματοδότηση	2	0
	4. Διασύνδεση της ερευνητικής δραστηριότητας με την καινοτομία, την επιχειρηματικότητα και τις ανάγκες της κοινωνίας	Ποσοστό ερευνητικών προτάσεων που υποβάλλονται και εγκρίνονται για εξωτερική χρηματοδότηση	Δ/Ε	Δ/Ε
		Μέσο ετήσιο ύψος χρηματοδότησης που εξασφαλίστηκε (από εθνικούς πόρους, ευρωπαϊκούς πόρους, εσωτερικά κονδύλια, βιομηχανία)	Δ/Ε	Δ/Ε
		Αριθμός δημοσιεύσεων ακαδημαϊκού προσωπικού με το σύστημα	8	3

ΔΙΠΑΕ
CYQAA

ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
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Στρατηγικοί Πυλώνες	Στρατηγικοί Στόχοι	Δείκτης Μέτρησης	Key Performance Indicator (ετήσια, 3 και 5 χρόνια) Δείκτης απόδοσης (planned)	Key Performance Indicator (ετήσια,3 και 5 χρόνια) Δείκτης απόδοσης (achieved)
		διεθνών κριτών (peer reviewing)		
		Αριθμός δημοσιεύσεων επιστημονικών άρθρων σε επιστημονικά περιοδικά ψηλής απήχησης	8	3
		Αριθμός κοινών ερευνητικών δημοσιεύσεων με ξένους ακαδημαϊκούς	Δ/Ε	Δ/Ε
		Αριθμός ετεροαναφορών (citations) στις ερευνητικές δημοσιεύσεις		
		Αριθμός ετεροαναφορών πατεντών σε δημοσιεύσεις ανά ακαδημαϊκό μέλος		
		Αριθμός βραβείων και διακρίσεων (εθνικών και διεθνών) που απονέμονται στα μέλη του ακαδημαϊκού προσωπικού	Δ/Ε	Δ/Ε
Βιώσιμη οικονομική αυτονομία (Τμημάτων και Σχολών)	1. Δημιουργία νέων Τμημάτων και περαιτέρω ενίσχυση υφιστάμενων 2. Αποτελεσματική διαχείριση και	Έσοδα από μεταπτυχιακά προγράμματα, ερευνητικά προγράμματα, παροχή συμβουλευτικών υπηρεσιών κ.α	175,000	124,000

Στρατηγικοί Πυλώνες	Στρατηγικοί Στόχοι	Δείκτης Μέτρησης	Key Performance Indicator (ετήσια, 3 και 5 χρόνια) Δείκτης απόδοσης (planned)	Key Performance Indicator (ετήσια,3 και 5 χρόνια) Δείκτης απόδοσης (achieved)
	ανάπτυξη κτηριακών εγκαταστάσεων και εργαστηριακών υποδομών 3. Ενίσχυση και καθιέρωση σε Πράσινο Πανεπιστήμιο 4. Αύξηση ιδίων εσόδων 5. Στήριξη της έρευνας μέσω εσωτερικής χρηματοδότησης	Κατανομή προϋπολογισμού στα τμήματα		10,000
Ανάπτυξη Υποδομών	1.Πλάνο χωροταξικής ανάπτυξης 2. Υποδομές	Ολοκλήρωση κατασκευαστικών έργων βάσει χρονοδιαγραμμάτ ων, προϋπολογισμού και κριτηρίων ποιότητας	2019 – 2021 2019 - 2021	2019 – 2021 2019 - 2021
Διεθνοποίηση	1. Ενίσχυση συνεργασιών με ξένα Πανεπιστήμια, διεθνείς οργανισμούς και ερευνητικά κέντρα διεθνούς εμβέλειας 2. Αξιοποίηση ευρωπαϊκών προγραμμάτων κινητικότητας ακαδημαϊκού και διοικητικού προσωπικού 3. Βελτίωση της διεθνούς φήμης	Ποσοστό εισακτέων ξένων φοιτητών (που έρχονται από άλλη χώρα εκτός παγκύπριων εξετάσεων) Ποσοστό ξένων μελών ακαδημαϊκού προσωπικού Αριθμός ξένων ερευνητών Αριθμός διμερών συμφωνιών με		

Στρατηγικοί Πυλώνες	Στρατηγικοί Στόχοι	Δείκτης Μέτρησης	Key Performance Indicator (ετήσια, 3 και 5 χρόνια) Δείκτης απόδοσης (planned)	Key Performance Indicator (ετήσια,3 και 5 χρόνια) Δείκτης απόδοσης (achieved)
	του Πανεπιστημίου μέσω των διεθνών λιστών κατάταξης	πανεπιστήμια του εξωτερικού		
		Αριθμός συνδρομών σε διεθνείς οργανισμούς και δίκτυα		
		Αριθμός εισερχομένων erasmus (ακαδημαϊκών, διοικητικών, φοιτητών για σπουδές και φοιτητών για τοποθέτηση)	50	40
		Αριθμός εξερχομένων νέων αποφοίτων για τοποθέτηση, φοιτητών erasmus για πρακτική άσκηση, φοιτητών erasmus για σπουδές, ακαδημαϊκού προσωπικού για διδασκαλία/ εκπαίδευση, μελών διοικητικού προσωπικού για εκπαίδευση	40	37
		Αριθμός διμερών συμφωνιών erasmus με πανεπιστήμια εντός Ε.Ε	20	26
		Αριθμός διμερών συμφωνιών erasmus με	4	1

Στρατηγικοί Πυλώνες	Στρατηγικοί Στόχοι	Δείκτης Μέτρησης	Key Performance Indicator (ετήσια, 3 και 5 χρόνια) Δείκτης απόδοσης (planned)	Key Performance Indicator (ετήσια,3 και 5 χρόνια) Δείκτης απόδοσης (achieved)
		πανεπιστήμια τρίτων χωρών		
Αναβάθμιση φοιτητικής ευημερίας και ανάπτυξης	1. Ουσιαστική καθοδήγηση και υποστήριξη φοιτητών σε θέματα σπουδών και σταδιοδρομίας	Ποσοστό εργοδότησης αποφοίτων σε εργασίες άμεσα σχετιζόμενες με τις σπουδές τους	80%	60%
		Ποσοστό ικανοποίησης εργοδοτών από την απασχόληση των φοιτητών εκδηλώσεις, κτλ	80%	80%
	2. Ενίσχυση της συμμετοχής των φοιτητών στην πανεπιστημιακή ζωή	Αριθμός αθλητικών προγραμμάτων για φοιτητές και ποσοστό συμμετεχόντων	Δ/Ε	Δ/Ε
	3. Ενίσχυση φοιτητικού κέντρου στήριξης και ανάπτυξης			
	4. Ενίσχυση κοινωνικής στήριξης και ευημερίας φοιτητών	Ποσοστό φοιτητών που λαμβάνουν υποτροφίες	50%	50%
		Αριθμός ιδιόκτητων φοιτητικών εστιών	Δ/Ε	Δ/Ε
		Αριθμός φοιτητών που διαμένουν σε φοιτητικές εστίες	Δ/Ε	Δ/Ε

Στρατηγικοί Πυλώνες	Στρατηγικοί Στόχοι	Δείκτης Μέτρησης	Key Performance Indicator (ετήσια, 3 και 5 χρόνια) Δείκτης απόδοσης (planned)	Key Performance Indicator (ετήσια,3 και 5 χρόνια) Δείκτης απόδοσης (achieved)
Στρατηγική Διοίκησης	1. Αναβάθμιση εσωτερικής οργάνωσης και λειτουργίας	Βαθμός αποτελεσματικότητας και αποδοτικότητας των Διοικητικών Υπηρεσιών	5	4
	2. Αποτελεσματική διαχείριση και ανάπτυξη ανθρώπινου δυναμικού για αύξηση της δέσμευσης και αφοσίωσης του προσωπικού		5	5
	3. Συνεχής αναβάθμιση της ποιότητας των υπηρεσιών που προσφέρουν οι Διοικητικές Υπηρεσίες		5	4
Κοινωνική Στρατηγική	1. Εδραίωση καλής φήμης και αξιοπιστίας Πανεπιστημίου	Αριθμός επιστημονικών συνεδρίων, σεμιναρίων, ημερίδων και εκπαιδευτικών προγραμμάτων προς το κοινό	20	10
	2. Ουσιαστική συνεισφορά στην Κοινωνία	Αριθμός μνημονίων συνεργασίας με εθνικούς/ τοπικούς φορείς	15	10

Είναι σημαντικό να αναφερθεί ότι η κατανομή του προϋπολογισμού σε τμήματα ή σχολές θα πρέπει να γίνεται βάσει συγκεκριμένων κριτηρίων για σκοπούς διαφάνειας.

Ως εκ τούτου το Ίδρυμα θα πρέπει να προβαίνει σε κατανομή του προϋπολογισμού σε τμήματα & σχολές βάσει των πιο κάτω κριτηρίων που ήδη θα πρέπει να συμπεριληφθούν ως δείκτες μέτρησης σε όλους τους πυλώνες του στρατηγικού σχεδιασμού.

Κριτήρια Κατανομής προϋπολογισμού σε τμήματα/σχολές

1. Αριθμός Μελών ΔΕΠ +ΕΕΠ + Τεχνικού προσωπικού του Τμήματος	25
2. Αριθμός δημοσιεύσεων σε επιστημονικά περιοδικά με το σύστημα κριτών των Μελών του Τμήματος	3
3. Αριθμός δημοσιεύσεων σε επιστημονικά περιοδικά ανά Μέλος ΔΕΠ του Τμήματος	5
4. Αριθμός Έτερο-αναφορών των Μελών του Τμήματος	0
5. Αριθμός ερευνητικών προγραμμάτων με εξωτερική χρηματοδότηση, με κύριο ερευνητή- επιστημονικό υπεύθυνο μέλος του τμήματος	0
6. Αριθμός ερευνητικών προγραμμάτων με εξωτερική χρηματοδότηση, με συμμετοχή μελών του τμήματος	2
7. Αριθμός Ενεργών Προπτυχιακών Φοιτητών του Τμήματος	
8. Εργαστήρια Τμημάτων	7
9. Αριθμός Ετών Προπτυχιακής Φοίτησης Τμήματος	
10. Αριθμός Μεταπτυχιακών προγραμμάτων του Τμήματος	1
11. Αριθμός μεταπτυχιακών φοιτητών ανά έτος	25

1.3. Χρονική οργάνωση των δράσεων του Στρατηγικού Σχεδιασμού

Προτείνεται η χρονική οργάνωση των δράσεων του στρατηγικού σχεδιασμού με βάση το διάγραμμα Gantt. Το ίδρυμα θα πρέπει να επισυνάψει σε ψηφιακή μορφή το εν λόγω διάγραμμα.

Gantt Chart of CDA College 3 Years Action Plan (2018/19 - 2020/21)

Στρατηγικοί Πυλώνες & Στόχοι	3 Ετές Σχέδιο Δράσης/Τακτικές	2018/19	2019/20	2020/21
1 Ποιοτική Εκπαίδευση				
1. Προσφορά ποιοτικών και διεθνώς ανταγωνιστικών προγραμμάτων σπουδών	Να γνωστοποιήσουμε όλα τα αξιολογημένα προγράμματα σπουδών (44 προγράμματα) του Κολεγίου.			
2. Αριστεία στη διδασκαλία- Διασφάλιση συνεχούς εκσυγχρονισμού του διδακτικού έργου του Ιδρύματος	Παρακολούθηση επιστημονικών σεμιναρίων από το διδακτικό προσωπικό.			
3. Ενίσχυση της απασχολησιμότητας των φοιτητών/ριών	Σύναψη νέων επιχειρησιακών συνεργασιών με επαγγελματικούς οργανισμούς			
4. Προσέλκυση υψηλού επιπέδου φοιτητών/ριών σε όλα τα προγράμματα σπουδών	Παρουσίαση των προγραμμάτων και Διοργάνωση σεμιναρίων για την μελλοντική σταδιοδρομία σε σχολεία δευτεροβάθμιας εκπαίδευσης.			
5. Προαγωγή της διά βίου μάθησης - ΙΔΕΠ	Παρουσίαση των προγραμμάτων του Κολεγίου σε απόφοιτους και Ενήλικες με σκοπό την συνεχή μάθηση και ενημέρωση σε προγράμματα ΙΔΕΠ.			
2 Στρατηγική για την Έρευνα και την Καινοτομία				
1. Ανάπτυξη και ενίσχυση ερευνητικής δραστηριότητας	Παροχή περισσότερων ερευνητικών κινήτρων στους διδάσκοντες			
2. Προσέλκυση εξωτερικής ερευνητικής χρηματοδότησης	Δημιουργία και αποστολή περισσότερων αιτήσεων για έρευνα σε κέντρα χρηματοδότησης όπως EU Funding, Horizon, Erasmus+, ΙΔΕΠ κ.α			
3. Βέλτιστη αξιοποίηση και διάχυση των αποτελεσμάτων της έρευνας	Διοργάνωση σεμιναρίων προς το κοινό και διάδοση των αποτελεσμάτων της έρευνας.			
4. Διασύνδεση της ερευνητικής δραστηριότητας με την καινοτομία, την επιχειρηματικότητα και τις ανάγκες της κοινωνίας	Διοργάνωση σεμιναρίων προς το κοινό και διάδοση των αποτελεσμάτων της έρευνας.			
3 Βιώσιμη Οικονομική Αυτονομία				
1. Δημιουργία νέων προγραμμάτων σπουδών και περαιτέρω ενίσχυση υφιστάμενων	Προώθηση νέου προγράμματος «Βοηθός Φροντιστή Υγείας» Πιστοποιητικό			
2. Κριτήρια κατανομής του προϋπολογισμού στα τμήματα για σκοπούς διαφάνειας	Θέσμιση κριτηρίων κατανομής του προϋπολογισμού στα τμήματα.			
3. Αποτελεσματική διαχείριση και ανάπτυξη κτηριακών εγκαταστάσεων και εργαστηριακών υποδομών	Επίβλεψη/συντήρηση σε χρονιαία και 5 ετή βάση όλων των κτηριακών και εργαστηριακών υποδομών.			
4. Ενίσχυση και καθιέρωση σε Πράσινο Ίδρυμα	Εφαρμογή της πολιτικής ανακύκλωση όλων των υλικών στο Κολέγιο για Πράσινο περιβάλον			
5. Αύξηση ιδίων εσόδων	Συζήτηση με Κυβερνητικούς παράγοντες για τον κανονισμό όσον αφορά την είσοδο ξένων φοιτητών εκτός Ευρώπης			
6. Λειτουργία Κολεγίων υπο την ομπρέλα των Πανεπιστημίων	Συζήτηση με Κυβερνητικούς παράγοντες για τη τα Πανεπιστήμια λειτουργουν Κολέγια στις ίδιες υποδομές			
7. Στήριξη της έρευνας μέσω εσωτερικής χρηματοδότησης	Παροχή €60,000 εσωτερικής χρηματοδότησης			
4 Ανάπτυξη Υποδομών				
1. Πλάνο χωροταξικής ανάπτυξης	Δημιουργία πλάνου χωροταξικής ανάπτυξης του Κολεγίου			
2. Υποδομές	Δημιουργία νέων υποδομών και Συντήρηση υφιστάμενων υποδομών - Συνεχής αναβάθμιση της Βιλιοθήκης			

Gantt Chart
of CDA College
3 Years Action Plan (2018/19 - 2020/21)

5	Διεθνοποίηση		
	1. Ενίσχυση συνεργασιών με ξένα Ιδρύματα, διεθνείς οργανισμούς και ερευνητικά κέντρα διεθνούς εμβέλειας	Σύναψη νέων συνεργασιών με Ευρωπαϊκά ανώτερα εκπαιδευτικά ιδρύματα	
	2. Αξιοποίηση ευρωπαϊκών προγραμμάτων κινητικότητας ακαδημαϊκού και διοικητικού προσωπικού	Περαιτέρω αυξηση των ευρωπαϊκών προγραμμάτων κινητικότητας ακαδημαϊκού και διοικητικού προσωπικού	
6	Αναβάθμιση φοιτητικής ευημερίας και ανάπτυξης		
	1. Ουσιαστική καθοδήγηση και υποστήριξη φοιτητών/ριών σε θέματα σπουδών και σταδιοδρομίας	Παροχή περισσοτέρων πληροφοριών/διαλέξεων στους φοιτητές σε θέματα σπουδών και σταδιοδρομίας από το Τμήμα Φοιτητικής Μέριμνας	
	2. Ενίσχυση της συμμετοχής των φοιτητών/ριών στην πανεπιστημιακή ζωή	Ενεργής συμμετοχή των φοιτητών σε όλες τις επιτροπές του Κολεγίου	
	3. Ενίσχυση φοιτητικού κέντρου στήριξης και ανάπτυξης	Παροχή περισσότερων υποτροφιών στους φοιτητές	
	4. Ενίσχυση κοινωνικής στήριξης και ευημερίας φοιτητών	Περεταίρω ενημέρωση και Ενίσχυση των ενεργειών για ευημερία των φοιτητών	
7	Στρατηγική διοίκησης		
	1. Αναβάθμιση εσωτερικής οργάνωσης και λειτουργίας	Η δημιουργία οργανογράμματος του Κολεγίου με τα αναλυτικά τα καθήκοντα όλων των τμημάτων	
	2. Αποτελεσματική διαχείριση και ανάπτυξη ανθρώπινου δυναμικού για αύξηση της δέσμευσης και αφοσίωσης του προσωπικού	Χρονιαία Αξιολόγηση, αυτοαξιολόγηση και ανάπτυξη του ανθρώπινου δυναμικού	
	3. Συνεχής αναβάθμιση της ποιότητας των υπηρεσιών που προσφέρουν οι Διοικητικές Υπηρεσίες	Αναβαθμίζουμε συνεχώς την ποιότητα των υπηρεσιών που προσφέρουμε	
8	Κοινωνική Στρατηγική		
	1. Εδραίωση καλής φήμης και αξιοπιστίας Ιδρύματος	Γνωστοποίηση της πολύ καλής φήμης και αξιοπιστίας Ιδρύματος με 45 χρονια προσφοράς και 44 αξιολογημενα προγραμματα σπουδων	
	2. Ουσιαστική συνεισφορά στην Κοινωνία	Εδώ και 45 χρόνια προσφέρουμε αξιόλογους/προσοντούχους αποφοίτους στην Κοινωνία.	

45

ΔΙΠΑΕ
CYQAA
ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION

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Appendix 3　　　　**ICT Strategic Plan (Development Plan) & SWOT Analysis**

1. Key stakeholders who need to give input to the plan:
    - Students
    - Faculty
    - All components of administration

2. IT plan provides businesses with a clear, tangible plan to achieve its goals.
3. First adding new hardware, software and infrastructure along the way.
4. Information technology is a field combining information science, computing, telecommunications and electronics.
5. Information technology is also defined as the: study, design, development, application, implementation and support or management of computer-based information systems.
6. IT strategic plan is a roadmap to help the business implement its strategies.
7. A mission statement overall business objectives.
8. The IT strategic plan should include a SWOT analysis of its strengths, weaknesses, opportunities
9. identifying the areas where the use of technology can improve operations.
10. It is important that the IT strategic plan be clear about its ultimate goals, including a list of technology investments
    - IT is critical to learning, teaching, and research in colleges and universities.
    - It underpins every higher education business and operational process.
    - IT changes—rapidly, persistently, dramatically. Each change promises more power and more capabilities in exchange for more resources.
11. IT plans have thematic goals followed by objectives and tactics. Some of the areas addressed:
    - Research support
    - Security
    - Usability/accessibility
    - Data warehousing
    - Classroom technology
    - Administrative process improvement

SWOT Analysis of ICT Nicosia

Strengths:
1. Great reputation, 45 years of presence & 44 accredited programs in the higher education in Cyprus
2. Small number of ICT students per class
3. Very good facilities (computer labs, classrooms, library)
4. Moodle e-learning platform and VPN services
5. ICT Graduates after graduation can be employed immediately or continue their studies at higher degrees.
6. Clear system of evaluation and performance criteria of students
7. Innovative teaching methods and technologies
8. The high ratio of number of students to number of teachers
9. Qualified/experience teachers.
10. ICT graduates gain Problem resolution skills & Technical/Technician competency
11. Technological adaptability & Organization's Maintenance
12. Special care for disabled students
13. Facilitation of working students
14. Scholarships for students, Student benefits for the financially disadvantaged
15. Very good laboratory and digital infrastructure that successfully responded to the conditions of the pandemic.
16. Very good student support services
17. Continuous Upgrading of the structure of the programme
18. Revision of the content of the modules every semester
19. Formal links with industry professionals

Weaknesses:
1. Room for improvement in infrastructure; priority given to the library
2. Not securing excellent students in all study programs
3. Encourage lecturers to participate more actively in Erasmus mobility programs.
4. Limitation to the number of students from third countries
5. Room for improvement in the content of the modules

Opportunities
1. The financial crisis is coming to an end
2. Upward trend of the economic recovery of the market
3. Positive official HR statistics for employment needs
4. Upward trend for professional program
5. Covid19 pandemic is coming to an end

Threats
1. Global financial crisis
2. Government legislation for foreign students outside Europe
3. The operation of colleges under the umbrella of universities.
4. Covid19 pandemic
5. The tendency to reduce wages
6. The tendency of people for higher diplomas e.g., Masters & Doctorates
7. Great competition in the education market

Appendix 4   **Feasibility Study**
Information and Communication Technology (ICT)
(2 Years/120 ECTS, Diploma)

A. Current Situation and Market Opportunities:

C. D. A. College has a long tradition in Tertiary education in Cyprus going back to 1976. In those early years it was the first institution that offered the first students in the Travel and Tourism Industry.

In 1978 the College was restructured and concentrated its energies in developing some other programmes of study most essential to the Cyprus economy reconstruction needs, and the social structures in the aftermath of the Turkish invasion of 1974. All these years our College offered hundreds of graduates to the Business and Travel Industry with success. Additionally, in 1978 the College established new branches in Limassol and Larnaca.

Furthermore, the College continues to grow and expand and in 2014 establish our new branch in Paphos. C.D.A College is the only academic institution in Cyprus which operates in all towns Nicosia, Limassol, Larnaca and Paphos. The College has a lot of academic achievements thus the College is proud to announce that has 42 fully accredited programmes of study and for 42 years the College has contributed a lot to the local communities of each town and to the society as a whole.

B. Model of Business:

- The Information and Communication Technology (ICT) program of study curriculum is developed after a thorough research of the educational sector in Cyprus and abroad
- The program is developed and operated by the College direction and the faculty staff
- The Information and Communication Technology (ICT) program of study is already fully accredited in Nicosia and in Limassol branches.
- The ICT program of study was recently Re-accredited in Limassol in 2019.
- As per ANAD statistics, Information Communication jobs, IT Technicians will be among the 5 most wanted jobs in the future.
- The Information and Communication Technology (ICT) program of study is successfully operating for 10 years.
- In Nicosia the number of ICT graduates is 56 and the number of current registered students is 20.

C. Market Analysis of the Information and Communication Technology Sector

- By providing valuable insights through innovative research the program can contribute to the efforts of the planners aiming to the development of the Information and Communication Technology, an important pillar of the Cypriot economy.

- The Government of Cyprus has announced ICT as one of the island's priority growth sectors, a Digital Strategy and Action Plan has been developed for immediate implementation. The capital Nicosia has been identified as the future centre of Cyprus for ICT and Research & Development. Recently, a tender for the establishment and development of a large-scale Science Technology Park East of Limassol has been closed and is currently under evaluation. The Science Technology Park will host research centres, spin-off innovative enterprises and business incubators, supporting research, development, technology, entrepreneurship and development.[1]

- The business-friendly environment of Cyprus is indeed attractive for international software companies. Cyprus offers certain Visa incentives for non-EU software specialists. Furthermore, Cyprus has a very competitive IP-Box Tax Regime in place, which is fully in line with the recent (2016) international amendments of tax policies for the profit from intellectual property. Intellectual property is, of course, one of the main concerns of software companies.[2]

- It is, therefore, safe to support that the Information and Communication Technology Industry will continue to grow and seek qualified employees to cover the needs.

D. Cyprus Business Market/Economy Analysis

- **GDP Growth** - The Cyprus economy has been expanding rapidly, with growth accelerating since 2015. The island was among the top five Eurozone performers in 2018, with an impressive growth rate of 3.1% in 2019, compared with an EU average of 1.9%. The European Commission predicts a growth rate of 3.1% in 2019 and 2.7% in 2020. The upturn is being driven by strong private demand, expanding employment, and four successive years of record tourism arrivals.

- **Unemployment** is set to continue its decline. The unemployment rate started to fall in the first half of 2015, averaging 14.9% in that year. It dropped to 6.9% in Nov. 2019, which is among the lowest rate in the EU.

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[1] https://www.mondaq.com/cyprus/new-technology/625280/cyprus-for-ict-and-rd-business

[2] https://www.mondaq.com/cyprus/new-technology/625280/cyprus-for-ict-and-rd-business

ΔΙΠΑΕ
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ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
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- **Trade & Investment -** More than half of Cyprus' trade in goods is done with the EU, and it has achieved strong numbers in recent years for exports of both services €10 billion in 2018 from €8.1 billion in 2014 and domestically produced goods €1.6 billion in 2018 from €735 million in 2014.

E. **Forecasts of Employment Needs in the Cyprus Economy 2017-2027 by the Human Resource Development Authority of Cyprus (HRDA) – ΑνΑΔ**
   http://www.anad.org.cy/easyconsole.cfm/page/project/p_id/404

Τεχνικοί εγκατάστασης και επισκευής εξοπλισμού τεχνολογιών πληροφορίας και επικοινωνίας (ISCO-08 7422)

Περιγραφή Επαγγέλματος
Οι Τεχνικοί εγκατάστασης και επισκευής εξοπλισμού τεχνολογιών πληροφορίας και επικοινωνίας εγκαθιστούν, επιδιορθώνουν και συντηρούν τηλεπικοινωνιακό εξοπλισμό, εξοπλισμό μετάδοσης δεδομένων, ηλεκτρονικούς υπολογιστές και κεραίες. Ειδικότερα:

- συντηρούν, ελέγχουν και επιδιορθώνουν ηλεκτρονικούς υπολογιστές, εξοπλισμό μετάδοσης δεδομένων και περιφερειακό εξοπλισμό ηλεκτρονικών υπολογιστών
- εγκαθιστούν και ρυθμίζουν υλισμικό ηλεκτρονικών υπολογιστών
- εγκαθιστούν, συντηρούν και επιδιορθώνουν ασύρματα συστήματα επικοινωνίας και με ηλεκτρομαγνητικά κύματα
- παρέχουν τεχνικές συμβουλές και πληροφορίες και παρακολουθούν την απόδοση πολύπλοκων δικτύων και εξοπλισμού τηλεπικοινωνιών
- εγκαθιστούν και επιδιορθώνουν καλωδιώσεις για ηλεκτρονικούς υπολογιστές, τηλέφωνα και τηλεοράσεις
- εγκαθιστούν, συντηρούν και επιδιορθώνουν κεραίες οι οποίες χρησιμοποιούνται στις επικοινωνίες

Ενδεικτικοί Τομείς Απασχόλησης

Τομέας	Ποσοστό
Τηλεπικοινωνίες	28%
Λιανικό εμπόριο	17%
Κατασκευές	16%
Άλλες δραστηριότητες υπηρεσιών	16%
Δημόσια διοίκηση και άμυνα	4%
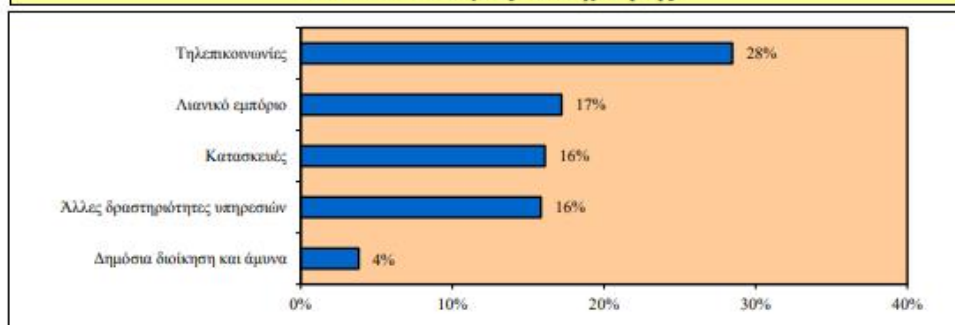
Προβλέψεις Απασχόλησης

2012	2017	2022	2027
1.092	1.709	2.203	2.634

Προβλέψεις Αναπτυξιακών Αναγκών Απασχόλησης

Προβλέψεις Αναγκών Απασχόλησης λόγω Αποχωρήσεων

Προβλέψεις Συνολικών Αναγκών Απασχόλησης
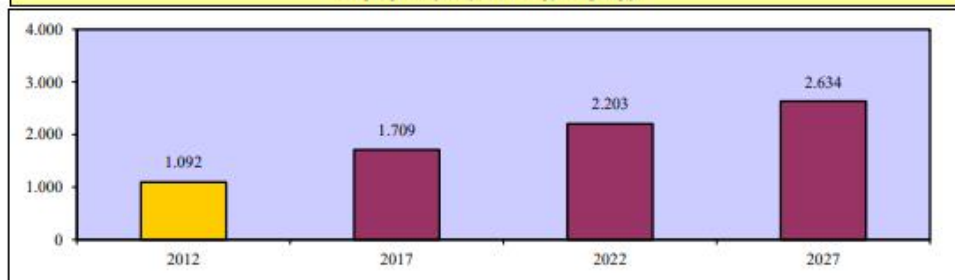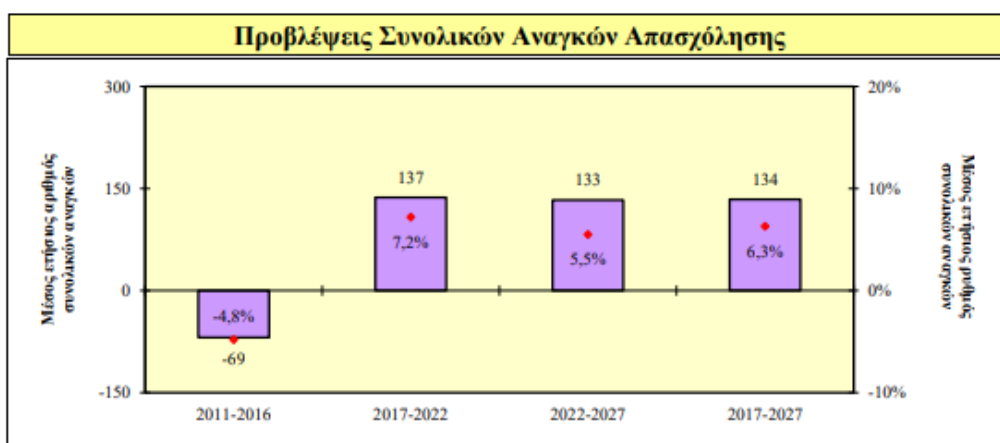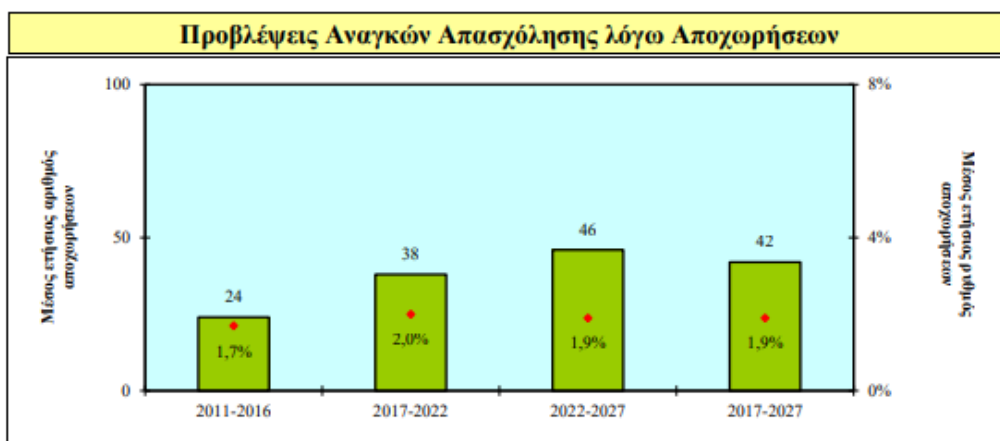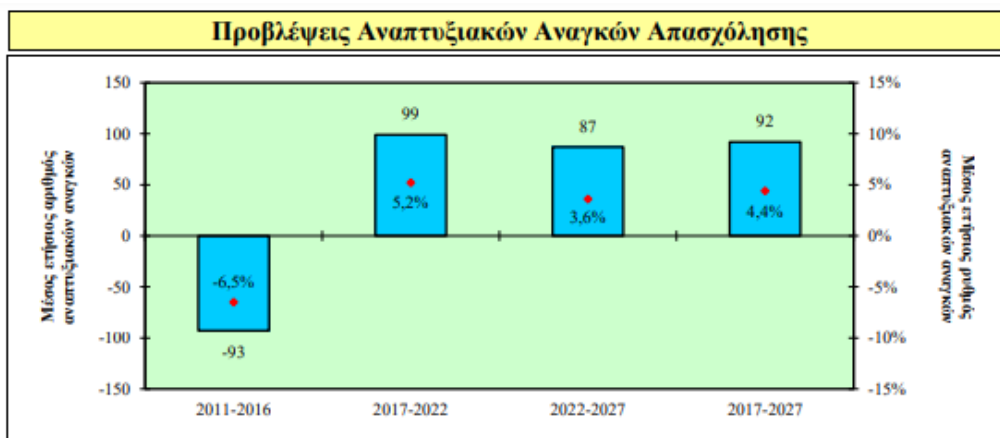
F. Target Market - The Potential Students are:

- Target national and international graduate students from the secondary education
- Potential students either from Cyprus or abroad
- Persons holders a secondary education diploma wishing to get Information Technology degree
- The ICT degree will open new horizons to follow a BA Information Technology degree

G. The Market Competition:

- In Nicosia there is one (1) government university
- Three private Universities
- Three big private Colleges
- Their fees are much higher than CDA College

H. The Competitive Advantage of CDA College:

- It's long history and reputation (44 years) in the tertiary higher education in Cyprus
- The College premises, faculty staff, technology, IT Labs, Libraries,
- The very competitive prices (fees)
- Value for money,
    - students can study in a pleasant academic environment,
    - the opportunity of getting a scholarship and
    - get an accredited degree
- Cypriot students can get a government subsidy according to their economic situation
- A lot of our students get the 40% of the government subsidy

I. Financial Analysis:

Proposed Number of Students: 20 students per semester

Minimum Number of Students: 8 students

Tuition Fees: €4,680
Admission Fees: €100

Other Fees   **€**

Admission Fees   100
Annual Insurance fee (international students)   160
Laboratory fee per course   35
Late registration fee (per semester if applicable)   34
Change of program fee   10
Transcript   10
Student I.D. replacement fee   8
Make-up examination fee   50
Graduation fee   10
Application for credit transfer fee   8
Certificate of registration fee   6
Grade complaint fee (per subject)   20
Internet/Email Lab per semester   35

Scholarships:

(a) Scholarships based on academic performance. Students who demonstrate exceptional academic achievement while at C.D.A. COLLEGE may receive academic scholarships in the form of tuition fee discounts, the amount of which varies according to the schedule below:

Cumulative GPA	Tuition Reduction
4.00	50%
3.75-3.99	20%
3.50-3.74	10%

Eligible for this type of financial aid are students who:
1. already completed two regular semesters at C.D.A. College
2. are enrolled in 30 credit hours.
3. have settled all financial obligations at the time of application for scholarship;
4. were full-time students (enrolled in 30 credit hours) during the preceding semester;
5. have completed a minimum of 60 credit hours at C.D.A. College.

(b) Scholarships based on High School Leaving Certificate
   Ten full scholarships that cover tuition during a student's first year of studies are awarded to outstanding graduating students from Cypriot High Schools. A minimum grade of 18.5/20 is required on their High School Leaving Certificate. In addition, the College can consider outstanding graduating students for partial scholarships.

(c) Scholarships based on athletic skills
   These scholarships are offered to students who have been registered athletes in various clubs, and who are willing to participate regularly in the sports teams of

the College. The scholarship given is up to 20% of tuition fees and is based upon the participant's performance and the degree of participation, which are evaluated regularly by the College.

(d) Administration assistantship opportunities
A number of administration assistantship opportunities are available throughout the year. These opportunities enable students with excellent academic record and good character to be employed as assistants in various positions within the College campus in non-academic duties and gain valuable experience. These students, depending on the hours of work per week, will be compensated in the form of reduced tuition fees. This compensation can be up to 20% of the tuition fees.

Financial Adequacy - Cash Flow Statement

The College continuously invests substantial amount of money on building maintenance as well as improving and updating the College's equipment. The incomes of the College mostly derive from tuition fees. We attach the Cash Flow Statement of the company CDA COACHING CENTRE LTD for 2019 – 2020.

Cash Flow 2019 -2020

	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	TOTAL
RECEIPTS		465.784			454.219			536.935			127.713		1.584.651
PAYMENTS		310.499			368.799			369.799			239.969		1.289.066
SURPLUS / DEFICIT		155.285			85.420			167.136			(112.256)		295.585
B/F		-			(138.975)			(53.555)			113.581		113.581
C/F		(138.975)			(53.555)			113.581			1325		1325

5 Year Financial Projections (2020 -2025) of Information & Communication Technology
(2 Years, Plus an Optional Foundation year, Diploma)

PLANNED REVENUES		2020/21	2021/22	2022/23	2023/24	2024/25
Expected Students Fall Semester		20	20	20	20	20
Current Students Fall Semester		20	60	100	140	180
Admission Fees Fall Semester	100	4000	8000	12000	16000	20000
Students Fees Fall Semester	4680	187200	374400	561600	748800	936000
Total Revenue for Fall Semester		**191200**	**382400**	**573600**	**764800**	**956000**
Expected Students Spring Semester		50	50	50	50	50
Current Students Spring Semester		120	110	120	110	115
Admission Fees Spring Semester	100	5000	5000	5000	5000	5000
Students Fees Spring Semester	4200	714000	672000	714000	672000	693000
Baseline Fees Increase/Decrease		-	-	-	-	-
Total Revenue for Fall Semester		**719000**	**677000**	**719000**	**677000**	**698000**
Expected Revenue		**910200**	**1059400**	**1292600**	**1441800**	**1654000**

PLANNED EXPENDITURES		2019/20	2020/21	2021/22	2022/23	2023/24
Salaries & Wages Estimates of 5 Faculty (Full & Part Time)		40000	40000	40000	40000	40000
Fringe Benefits		4600	4600	4600	4600	4600
Operating Expenses (rent, taxes, Electricity etc)		10000	10000	10000	10000	10000
Students Financial Aid		2000	2000	2000	2000	2000
Faculty Quality Development (Trainning, seminars etc)		4000	4000	5000	5000	5000
Library resources		2000	2500	2500	2500	2500
Premises / Building Improvements		1000	1500	2000	2500	2500
Furniture, Equipment, Projectors, Offices		1000	1500	2000	2500	2500
Computers / Servers / Software		1500	1500	2000	2500	2500
Graduation/Awards		1000	1000	1500	1500	15000
Expected Expenditures		**67100**	**68600**	**71600**	**73100**	**86600**
Projected Benefit/Deficit		**843100**	**990800**	**1221000**	**1368700**	**1567400**

J. Employability Opportunities of the Graduates

- ICT Technician Support Officer
- Information System Manager
- IT Consultant
- IT Sales Professional
- Application Developer
- Business Analyst
- Database Administrator
- Game Developer
- Information Security Officer
- Network Engineer
- System Analyst
- System Developer
- Web Designer and Developer

Additional Job Prospects of our ICT Graduates in the IT Sector:

- Problem resolution skills: Use the technology competently to solve problems of information and communication character in a small or medium company.
- Technical/Technician competency: Install, configure, maintain, operate, troubleshoot, and repair a variety of hardware and software systems.
- Technological adaptability: Cope competently with the changing technologies of the profession and adapt comfortably in the rapidly changing professional environment.
- Organization's Maintenance: To be able to employ system integration techniques for installing and maintaining IT systems of the organization.

K. Summary and Conclusions

The Program of Study, "Information and Communication Technology" (2 Years, plus an Optional Foundation Study, Diploma) is successfully operating for 10 years now, in Nicosia. The number of ICT graduates is 56 and the number of current registered students is 15.

C.D.A College has a competitive edge due to its long history (44 years) and high reputation in the Cyprus market.

Moreover, the College has very attractive educational offerings such as:
- lower fees,
- new premises,
- qualified faculty staff,
- updated libraries with all new books editions
- innovative teaching strategies

- state of the art technology and labs
- College Scholarships
- Economic help for students with poor economic condition
- Government subsidy

Thus with all these competitive components, CDA College will be a very significant competitor in the educational market offering attractive and competitive programmes of study to continue offering higher education for the benefit of the students and the Cyprus society as a whole.

Appendix 5

REVISED Information and Communication Technology
(2 Years/120 ECTS, Diploma)
Nicosia

A/A	Course Type	Course Name	Course Code	Periods per week		Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
				Theory	**Lab**				
A' Semester									
1.	Theory	Business English	COM 140	3		50	14	42	4
2.	Practical	Introduction to Information Technology	COM 100		3	50	14	42	5
3.	Practical	Introduction to Programming (python)	COM 110		3	50	14	42	6
4.	Theory	Human Computer Interaction	COM 120	3		50	14	42	6
5.	Theory	Basic Mathematics and Statistics	COM 150	3		50	14	42	4
6.	Practical	Computer System Architecture	COM 130		3	50	14	42	5
B' Semester									
1.	Practical	Web Programming I	COM 200		3	50	14	42	4
2.	Practical	Operating Systems Management	COM 210		3	50	14	42	6
3.	Practical	Introduction to Relational Databases	COM 220		3	50	14	42	6
4.	Theory	PC Maintenance and Repair I	COM 240	3		50	14	42	4
5.	Theory	System Analysis and Design	COM 223	3		50	14	42	6
6.	Practical	Network Management	COM 211		3	50	14	42	4

A/A	Course Type	Course Name	Course Code	Periods per week		Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
				Theory	Lab				
C' Semester									
1.	Practical	Cloud Computing	COM 324	3		50	14	42	5
2.	Practical	PC Maintenance and Repair II	COM 312		3	50	14	42	4
3.	Practical	Visual Studio.Net (C#)	COM 323		3	50	14	42	6
4.		Free Elective		3		50	14	42	3
5.	Theory	Web Programming II	COM300	3		50	14	42	6
6.	Practical	Object Oriented Programming using Java	COM 315		3	50	14	42	6
D' Semester									
1.	Practical	Fundamentals of Computer Security	COM 422		3	50	14	42	6
2.	Theory	Introduction to Mobile Applications	COM 400	3		50	14	42	6
3.	Practical	Systems and Network Administration	COM 423		3	50	14	42	6
4.	Theory	Content Management System	COM 444	3		50	14	42	6
5.	Theory	Database Management	COM 421	3		50	14	42	6

Free Elective Courses:

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
1	Theory	Greek Language*	GRE 501	3	50	14	42	3
2	Theory	Russian Language	RUS 502	3	50	14	42	3
3	Theory	Hacking & Defensive Technology	COM 505	3	50	14	42	3
4	Practical	Digital Forensics	COM 506	3	50	14	42	3
5	Theory	Image Processing	COM 507	3	50	14	42	3

*Greek Speaking Students cannot choose GRE 101: Greek Language

Appendix 6   The Program Attracts Visiting Professors & Industry Links

The program attracts foreign professors and students visited CDA College:

- 120 foreign instructors visited CDA College the last 4 years
- 150 foreign students from 25 EU universities

Moreover, CDA College, in consultation with the lecturers of the program of study, will invite visiting professors on a regular basis on specialized subjects of the program. Some of them are:

CDA College, in consultation with the lecturers of the program of study, will invite Visiting Professors on a regular basis on specialized subjects of the program. Some of them are:

- Charis Chiromeridis from The Department of Information Technology Services (DITS) a Government body responsible for matters concerning the promotion and application of Information Technology and e-Government in the Public Sector.
- Dr. Panayiotis Panayiotou from DotCY about technological advancements as they have clients in Russia and Middle East.
- Dr. Christos Makarounas from TEPAK - Interconnected Networks or Networks on Chip.
- Stella Komninou - Graphic Designer for the course INF221 Introduction to Multimedia
- George Georgiou - Web page Designer for the course INF222 E-Business
- Dr. Yiorgos Demetriou, Computer Science and Engineering, Frederick University
- Dr. Batanov Dencho Nikolov, Computer Science, Technical University, Sofia, Bulgaria
Dr. Nicos Mylonas, Computer Science and Engineering, Frederick University

College Industry & Society Links with

CDA College established links between the College and the Society thought the creation of agreements with various professional associations and organizations:

The College signed agreements with various professional bodies for student onsite visits, such as:

- Computer Companies,
- iBSC Co.
- G.C Computer Co
- Banks
- Guest Lecturers and Industry Engineers
- Field Visits

The College has also established agreements with business organizations such as:

- PASIXE (Cyprus Hotels Association)
- CSTI (Cyprus Sustainable Tourism Initiative)
- STEK (Cyprus Tourist Enterprises Association)
- Cyprus Hotel Managers Association
- Sabre offer internships to the travel agents

- Cyprus Economists Association

Furthermore, CDA College constantly offers to the Cyprus society by organizing sponsorships and charitable events such as:
- Providing beauty services to nursing home for elderly people
- Hairdressing services to nursing home for elderly people
- Contributing to philanthropic organizations, e.g. PASYKAF

Appendix 7

COM400 Introduction to Mobile Applications

Course Title	**Introduction to Mobile Applications**
Course Code	**COM400**
Course Type	Compulsory
Level	Diploma
Year / Semester of Study	2nd Year D Semester
Lecturer's Name	Pelekanou Olga

ECTS	6	Lectures / week		Labs / week	
Course's Aim and Objective	This course introduces students to programming technologies, design, and development related to mobile applications. Topics include accessing device capabilities, industry standards, operating systems, and programming for mobile applications using an OS Software Development Kit (SDK). Upon completion, students should be able to create basic applications for mobile devices.				
Learning Outcomes	Upon successful completion of the course, the student will demonstrate the ability to: • Explain mobile devices, including their capabilities and limitations. • Use current mobile platforms and their architectures. • Develop mobile applications on a popular mobile platform.				
Prerequisites	None				

Course Syllabus	**Week**	**Contents of the Course**
	1.	Chapter 1: Android Development. What is Android? Open handset alliance (oha) What is OHA? Other Operating Systems. Worldwide Smartphone OS. Market Share. Tablet OS. iOS vS Android Applications. Android vs. WP vs. iPhone Limitations. Possibilities. Do I Need Phones?
	2.	Chapter 2: Android Platform. Tools. Phone. Eclipse ADT Plugin – Specify SDK location. Android SDK. SDK Manager AVD
	3.	Chapter 3: Overview of Sensors. Maps.Tutorials.

ΔΙΠΑΕ ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
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	4.	Chapter 4: Beginning Android Development This chapter provides a quick introduction to Android and Android application development, bridging fundamental Java concepts with Android ones. It discusses Activities, Layouts, and Views along with other building blocks of Android applications. It teaches users how to write, build, and run event-driven applications on emulators and on physical Android devices. Other topics covered include LogCat debugging, Intents, and the Activity Lifecycle.Simple App (Lists, Passing Data, IOs, Messaging)
	5.	Chapter 4: Beginning Android Development This chapter provides a quick introduction to Android and Android application development, bridging fundamental Java concepts with Android ones. It discusses Activities, Layouts, and Views along with other building blocks of Android applications. It teaches users how to write, build, and run event-driven applications on emulators and on physical Android devices. Other topics covered include LogCat debugging, Intents, and the Activity Lifecycle. Simple App (Lists, Passing Data, IOs, Messaging)
	6.	Revision for midterm.
	7.	Mid-Term Examination
	8.	Chapter 5: The Android Game This chapter will combine the knowledge you've gained from building a Java game development framework and a simple Android application and walk you through the design and implementation of an Android game development framework.
	9.	Chapter 5: The Android Game This chapter will combine the knowledge you've gained from building a Java game development framework and a simple Android application and walk you through the design and implementation of an Android game development framework.
	10.	Chapter 6: Building the Game This chapter is all about creating an Android game, exploring principles of optimization and getting your application ready for publication
	11.	Chapter 7: Continuing the Journey Describe how to design programs that display menus and execute tasks according to the user's menu selection. Explain the importance of modularizing a menu driven program.
	12.	Chapter 8: Windows Phone Development Introduction to Windows Phone Development: List Box + Datat Binding, IOs, Sensors, Map Control, Web Control, Web Services, Push Notifications; Monetizing your app in Marketplace
	13.	Chapter 8: Windows Phone Development Introduction to Windows Phone Development: List Box + Datat Binding, IOs, Sensors, Map Control, Web Control, Web Services, Push Notifications; Monetizing your app in Marketplace
	14.	Revision

Methodology	Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations
Bibliography	**COURSE BOOK:** **1.** The Beginner's Guide to Android Game Development Author: James S. Cho. Publisher: Glasnevin Publishing (July 28, 2014) **RECOMMENDED BOOKS** 1. Android Programming: The Big Nerd Ranch Guide Author: Bill Phillips and Brian Handy. Publisher: Big Nerd Ranch Guides; 1 edition (April 7, 2013).
Evaluation	40% coursework and 60% final examination Passing mark: 50%
Language	English

ΔΙΠΑΕ CYQAA ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
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Appendix 8   COM200 Web Programming I

Course Title	**Web Programming I**
Course Code	**COM 200**
Course Type	Compulsory
Level	Diploma
Year / Semester of Study	2nd Year A Semester
Lecturer's Name	Demetra Spanou

ECTS	4	Lectures / week		Labs / week	3
Course's Aim and Objective	This course provides students with necessary knowledge of core principles and technologies of Web design. Topics covered in this course include fundamental principles of Web design such as page layout, HTML5, Style Sheet Languages (CSS), client-side scripting (JavaScript), theory part of service-side scripting (PHP). Students will be given individual and group assignments to form practical skills. Therefore, this course also puts emphasis on basic concepts of web design.				
Learning Outcomes	- To study and apply the HyperText Markup Language (HTML5). - To study and apply the basics of Cascading Style Sheets (CSS). - To learn and understand the fundamentals of the JavaScript programming language. - Ability to implement an appropriate planning strategy for developing websites. - Ability to produce functional, flexible, & versatile websites. - Experience creating various small website projects using KompoZer. - An awareness of the process in creating a website & the various roles needed in that process.				
Prerequisites	None				

Course Syllabus	Week	Contents of the Course
	1	Web Fundamentals, Programming Languages for the Web - Define the Internet and the World Wide Web - Differentiate between a Web page and a Web site - Describe a home page and a splash page
	2	Introduction to Web Programming - Creating a Website - Web Page Example - HTML Tags - Structural Elements

		• title Element • HTML Attributes • Body Elements: hr, p, br, div • Cascading Style Sheets Preview • History of HTML • Differences Between Old HTML and HTML5
	3	Coding Standards, Block Elements, Text Elements, and Character References • HTML Coding Conventions • Comments • Block Elements • Whitespace Collapsing • Phrasing Elements • strong, em, b, u, and i Elements • Span Elements
	4	Organizing a Page's Content with Lists, Figures, and Various Organizational Elements • Unordered Lists • Ordered Lists • Organizational Elemen • nav and a Elements
	5	Image Manipulations, Audio, Links and Video • Img Element • Vector Graphics • Positioning Images • Iframe element • Audio • Web Fonts • Video • Links
	6	Revision
	7	Midterm
	8	Cascading Style Sheets – CSS • CSS Rules • CSS Syntax and Style • External CSS Files

		• CSS Properties • Color Properties • Font Properties • Text Properties
	9	Javascript • History of JavaScript • Hello World Web Page • Buttons • Functions • Variables • Identifiers • Assignment Statements and Objects • Document Object Model
	10	Javascript • form Element • Controls • Text Control • Email Address Generator Web Page • Accessing a Form's Control Values • reset and focus Methods
	11 - 12	Introduction to Kompozer Build Website using Kompozer Use HTML5 , CSS , Javascript
	13	Publishing Web sites • Presentation of Web Sites Assignments
	14	Revision
Methodology	Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations	
Bibliography	**Course Book:** 1. Web Programming with HTML5, CSS, and JavaScript. Author: John Dean Publisher: Jones & Bartlett Learning ISBN-13 : 978-1284091793 **Recommended Books**	

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	1. Web design: introductory concepts & techniques. Author: Gary B. Shelly, Jennifer T. Campbell. Publisher: Course Technology, 4th ed., 2011, ISBN: 0538482400. 2. Internet & World Wide Web: how to program. Author: Paul Dietel. Publisher: Prentice Hall 5th ed. 2012, ISBN: 0273764020.
Evaluation	40% coursework and 60% final examination Passing mark: 50%
Language	English

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Appendix 9   COM240 PC Maintenance and Repair I

Course Title	PC Maintenance and Repair I
Course Code	COM 240
Course Type	Compulsory
Level	Diploma
Year / Semester of Study	1ST Year B Semester
Lecturer's Name	Petros Efthymiou

ECTS	4	Lectures / week		Labs / week	

Course's Aim and Objective	Students will look in detail at how PC's and Laptops work and how to fix problems with hardware and software. The course will give to the students the skills to upgrade computer systems and to solve a range of problems. Also includes procedures for disassembling and reassembling different classes of computers, troubleshooting, and repair.
Learning Outcomes	Upon successful completion of this course, the student will be able to: • explain how a PC works, and understand the relationship between hardware and software; • classify and explain the function of different computer hardware components; • understand purpose and functions of an operating system (OS); • understand the purpose and functions of the computer peripherals; • understand diagnostic procedures and troubleshooting techniques to personal computers, portable devices, different operating systems (Windows, Linux and MacOS) and computer peripherals. • install, configure, optimize and upgrade personal computers; • install, configure, optimize and upgrade the portable computers; • install, configure, optimize and upgrade different operating system; • to be able to perform diagnostic procedures and troubleshooting techniques to personal computers, portable devices, operating systems and computer peripherals.

Prerequisites	COM111, COM113 and COM121		

Course Syllabus	**Week**	**Contents of the Course**
	15.	Introduction to the World of IT

	16.	Connectivity
	17.	On the Motherboard
	18.	Introduction to Configuration
	19.	Disassembly and Power.
	20.	Memory
	21.	Mid-Term Examination
	22.	Storage Devices
	23.	Multimedia Devices
	24.	Printers
	25.	Understanding Laptops
	26.	Mobile Devices
	27.	Computer Design and Troubleshooting Review
	28.	Troubleshooting Methodology and Resolving Core Hardware Problems Revision for Final Exams
Methodology		Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations
Bibliography		**COURSE BOOK:** **1.** Complete A+ Guide to IT Hardware and Software: A CompTIA A+ Core 1 (220-1001) & CompTIA A+ Core 2 (220-1002) Textbook, 8th edition, Author: Cheryl A. Schmidt., Pearson IT Certification; 8th edition (August 1, 2019). ISBN: 978-0789760500
Evaluation		40% coursework and 60% final examination Passing mark: 50%
Language		English

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Appendix 10 COM215 Object – Oriented Programming using Java

Course Title	**Object – Oriented Programming using Java**				
Course Code	**COM 215**				
Course Type	Compulsory				
Level	Diploma				
Year / Semester of Study	2nd Year A Semester				
Lecturer's Name	Demetra Spanou				
ECTS	6	Lectures / week		Labs / week	3
Course's Aim and Objective	A broad introduction to object oriented programming and the related knowledge necessary to program in a contemporary programming language. This would include coverage of an Application Development Kit, creating stand-alone applications and applets for enhancing Web pages. Current technologies included in this course include the Java programming language and related knowledge necessary to program in Java. This includes coverage of the Java Development Kit (JDK), the Java API, creating stand-alone Java applications, Java applets for enhancing Web pages, and introduction of the Object Model and Object Oriented Programming. The course aims to introduce and familiarize all students, whatever their previous experience and backgrounds, to the use of programming using Java. To learn the Java Development Kit (JDK), the Java API, creating stand-alone Java applications, Java applets for enhancing Web pages, and introduction of the Object Model and Object Oriented Programming.				
Learning Outcomes	- to develop an understanding of computers and computer program execution - to develop an understanding of program elements such as variables, types and objects - to develop skills in problem solving and program design - to develop an understanding of abstractions such as methods and control structures - to provide a grounding in object-oriented programming techniques; - to introduce key aspects of the Java API and Swing; - to develop an understanding of data structures and algorithmic complexity; - to establish a sound and consistent programming style in Java; - to provide experience of collaborative work on solving programming problems; - to introduce unit testing and develop an understanding of how to write simple automated tests.				

Prerequisites	None		
Course Syllabus	**Week**	**Contents of the Course**	
	1	Introduction to Programming The Java Programming Language, Program Development Object-Oriented Programming	
	2	Variables and Data Variables and Assignment, Data Types, Data Conversion Interactive Programs, Graphics, Drawing Shapes	
	3	Classes and Objects Creating Objects, The String Class, Formatting Output, Enumerated Types, Components and Containers, Images	
	4	Writing Classes Classes and Methods, Graphical Objects, Graphical User Interfaces, Buttons and Text Fields	
	5	Conditionals IF statement and other Conditional Statements, Comparing Data	
	6	Loops The while Statement and other Repetition Statements Decisions and Graphics	
	7	Mid-Term Examination	
	8-9	Arrays Declaring and Using Arrays, Arrays of Objects, Two-Dimensional Arrays, The ArrayList Class, Polygons and Polylines, Mouse Events and Key Events	
	10-11	Object-Oriented Design Software Development Activities, Identifying Classes and Objects, Static Variables and Methods, Class Relationships Interfaces, Enumerated Types Revisited	
	12-13	Inheritance Creating Subclasses, Overriding Methods, Class Hierarchies Inheritance and Visibility, Designing for Inheritance; Inheritance and GUIs	

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	14	Revision
Methodology	Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations	
Bibliography	**<u>Course Book:</u>** Java software solutions: foundations of program design. Author: Lewis and William Loftus. Publisher: Pearson, 9th ed. 2017, ISBN: 0134462025. **<u>Recommended Books</u>** • Introduction to Java Programming, Brief Version Author: Y. Daniel Liang, Publisher: Prentice Hall 10th ed. 2014, ISBN: 12920778561. • Java how to program: early objects version. Author: Harvey M. Deitel and Paul J. Deitel. Publisher: Prentice Hall 10th ed. 2014, ISBN: 1292019360.	
Evaluation	40% coursework and 60% final examination Passing mark: 50%	
Language	English	

Appendix 11 COM323 Visual Studio.Net (C#)

Course Title	**Visual Studio. NET (C#)**
Course Code	**COM 323**
Course Type	Compulsory
Level	Diploma
Year / Semester of Study	2nd Year A Semester
Lecturer's Name	Demetra Spanou

ECTS	6	Lectures / week		Labs / week	3

Course's Aim and Objective	This course using both lecture and laboratory practice. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, files and databases. This course is a study of the C# (C Sharp) programming language within the .NET Framework. Emphasis is placed upon the position of.NET in software development and creation of .NET applications by applying built in .NET libraries, classes and developing and applying user-defined classes in applications using C#.

Learning Outcomes	The student will prove proficiency of the Visual Studio IDE and the .NET Framework using C# by:
	
	    a. Recognize, diagram, and implement introductory programming concepts using C#
	    b. Determine logical alternatives with C# decision structures utilizing iteration, class methods, fields, and properties.
	    c. Assemble forms, classes, and controls into C# solutions utilizing arrays and methods
	    d. Using the application development environment to create and manage a programming project.
	    e. Implementing user controls in the graphical user interface.

Prerequisites	

Course Syllabus	**Week**	**Contents of the Course**

	1	Getting Started with Visual C#.Net
		
		    • Advantages/Disadvantages
		    • Why C#/ Why Not C#
		    • C, C++ to Visual C#

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		• Features of C#
	2	.NET Framework and Introduction to Visual Studio
	3	C#.Net Overview • The start of the application • C#.Net Program Design • Syntax of C# • C# Comments
	4	Variables and Data Types and Constants User Input
	5	Math Operators and Methods
	6	Making Decisions
	7	Develop Repetitions
	8	Revision
	9	Midterm
	10	Sub procedures and functions.
	11	Classes & Objects
	12	Inheritance and Polymorphism
	13	Using Arrays
	14	Revision
Methodology		Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations

Bibliography	**Course Book:** Visual C# 2010 How to Program, 4th Edition, (ISBN: 0132151421), by Harvey & Paul Deitel . **Recommended Books** C# 2010 for Programmers, 3rd Edition, (ISBN:0132618206), by Paul J. Deitel & Harvey M. Deitel
Evaluation	40% coursework and 60% final examination Passing mark: 50%
Language	English

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Appendix 12   COM300 Web Programming II

Course Title	**Web Programming II**				
Course Code	**COM300**				
Course Type	Compulsory				
Level	Diploma				
Year / Semester of Study	2nd Year C Semester				
Lecturer's Name	Pelekanou Olga				
ECTS	6	Lectures / week		Labs / week	
Course's Aim and Objective	Students will explore, modify, and export data from databases in MySQL. Learn foundation concepts like tables, data types, and queries, and advanced techniques like join statements, subqueries, and stored procedures. Students will install local server – MAMP and Install WordPress Locally on Windows. Also they will build a website using WordPress. Programming in PHP and MySQL Students will learn how to use these technologies together and pick up valuable web programming practices along the way				
Learning Outcomes	This course aims to program in PHP, MySQL, install and use MAMP, build website in WordPress, to explore MySQL from database structure to complex queries, to use the MySQLi extension, PHP's improved MySQL interface.				
Prerequisites	COM200				
Course Syllabus	**Week**	**Contents of the Course**			
	29.	Chapter 1: Programming in PHP and MySQL Introduction to PHP Evaluation of Php, Basic Syntax, Defining variable and constant, Php Data type, Operator and Expression.			
	30.	Chapter 2: Decisions and loop Making Decisions, Doing Repetitive task with looping, Mixing Decisions and looping with Html. Chapter 3: Function What is a function, Define a function, Call by value and Call by reference, Recursive function, String			

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		Creating and accessing, String Searching & Replacing String, Formatting String, String Related Library function
	31.	Chapter 4: Array Anatomy of an Array, Creating index based and Associative array Accessing array, Element Looping with Index based array, Looping with associative array using each () and foreach(), Some useful Library function. Chapter 5: Handling Html Form with Php Capturing Form, Data Dealing with Multi-value filed, and Generating File uploaded form, redirecting a form after submission
	32.	Chapter 6: Programming in MySQL. Introduction to MySQL What is a database and why do we need SQL? Top 5 problems in Excel and why using SQL solves this problem Should we import from Excel and why? How it is done? Create a link to Excel spreadsheet with MySQL?
	33.	Chapter 7: Tables & Queries How to Create Tables SQL Data Types Primary Keys Null values and Not Null Values Auto Increment
	34.	Chapter 8: How to Create a Basic Query Use the Where clause Conditional statements Multiple conditions Comparison Operators Logic Values Null Values Patterns also known as Wildcard characters Compare Column Values
	35.	Chapter 9: Advanced Queries Distinct Values Top Values Date Functions Date Calculations Aggregate Functions String Functions Sort Data Rank Data Save a Query Execute a Query Modify a Saved Query

	36.	Chapter 10: Stored Procedures Introduction to Stored Procedures Changing the Delimiter Editing a Stored Procedure Variable Scope A Data Generating Procedure
	37.	Chapter 11: Database Connectivity with MySql Introduction to RDBMS, Connection with MySql Database, Performing basic database operation(DML) (Insert, Delete, Update, Select), Setting query parameter, Executing queryJoin (Cross joins, Inner joins, Outer Joins, Self joins.)
	38.	Mid-Term Examination
	39.	Chapter 12: MAMP for Windows. Installing MAMP. MAMP - local server environment Chapter 13: WordPress Overview. Features of WordPress. Some benefits of WordPress. WordPress users. Functions of WordPress.
	40.	Chapter 14: Essential Widgets (SiteOrigin Widget Bundle, Image Widget, Google Maps Wiget) Creating WordPress Website. Designing WordPress Theme. Templates and Web Design Software. How to Create WordPress Theme from scratch.
	41.	Chapter 15: Dashboard. WordPress Admin Dashboard and Menu Bar. Posts. Media. Pages. Comments. Appearance. Adding Menu Items. Menu Structure. Plugins. Tools. Settings. Developing different types of Websites.
	42.	Revision
Methodology		Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations
Bibliography		**COURSE BOOK:** 　**2.** Learning PHP, MySQL & JavaScript, 5th Edition. Author: Robin Nixon. Publisher: O'Reilly Media, Inc., May 2018. ISBN: 9781491978917 　2. WordPress for Beginners 2022 Author: Dr. Andy Williams. Kindle Edition (2022)
Evaluation		40% coursework and 60% final examination Passing mark: 50%
Language		English

Appendix 13 COM120 Human Computer Interaction

Course Title	**Human Computer Interaction**			
Course Code	**COM120**			
Course Type	Compulsory			
Level	Diploma			
Year / Semester of Study	Semester 1			
Lecturer's Name	Dr. Pavlos Panayi			
ECTS	6	**Lectures / week**	3	**Labs / week**
Course's Aim and Objective	For end-users, the interface is the system. So design in this domain must be interaction-focused and human-centered. Students need a different repertoire of techniques to address this objective. Thus, the main objectives of the course are: - Provide an overview of the concepts relating to the design of human-computer interfaces in ways making computer-based systems comprehensive, friendly and usable. - Understand the theoretical dimensions of human factors involved in the acceptance of computer interfaces. - Understand the important aspects of implementation of human-computer interfaces. - Identify the various tools and techniques for interface analysis, design, and evaluation. - Identify the impact of usable interfaces in the acceptance and performance utilization of information systems. - Identify the importance of working in teams and the role of each member within an interface development phase.			
Learning Outcomes	After completion of the course students are expected to be able to: 1. **Understand the Computer and Human-Computer Interaction (HCI).** Students will understand what interaction design is. We look at the difference between good and poor design, highlighting how products can differ radically in how usable they are. We then describe what and who is involved in the process of interaction design. The user experience, which has become a central concern of interaction design, is then introduced. inally, we outline how to characterize the user experience in terms of usability, user experience goals, and design principles. 2. **Have an insight to Human Capabilities.** Students should be able to understand core cognitive aspects of interaction design. Specifically, we consider what humans are good and bad at and show how this knowledge can be used to inform the design of technologies that both extend human capabilities and compensate for their weaknesses. 3. **Interactive Systems Design.** Students should have a clear understanding of HCI principles that influence a system's interface design, before			

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writing any code. Such preliminary thinking involves ideas about user needs and demands and what kinds of designs might be appropriate for each implementation context.

4. **Interfaces' Design and Prototyping.** Students will understand that the interfaces' design emerges iteratively, through repeated design–evaluation–redesign cycles involving users. Broadly speaking, there are two types of design: conceptual and physical. The former is concerned with developing a conceptual model that captures what the product will do and how it will behave, while the latter is concerned with details of the design such as screen and menu structures, icons, and graphics.

5. **Windows Concepts and Interfaces.** Students will have the skills and knowledge to consider how to design interfaces for different environments, people, places, and activities. To begin with, we give an overview of paradigmatic developments in interaction design. We then present an overview of the major interface developments, ranging from WIMPs (windows, icons, menus, pointers) to wearables. For each one, we outline the important challenges and issues confronting designers, together with illustrative research findings and products.

6. **Quantitative Analysis – Evaluation – Redesign.** Students will have the skills to understand why evaluation is important, what needs to be evaluated, where that evaluation should take place, and when in the product lifecycle evaluation is needed. We introduce three evaluation approaches and key evaluation methods, and examine short evaluation case studies which illustrate them. For each one we look at the aim of the evaluation, at what stage the evaluation was done during design, the techniques that are used to collect and analyze the data, and the challenges that the evaluators encountered).

7. **Research Topics in HCI.** Students will be able to understand the multi- disciplinarity of the subject by presenting research dimensions on various areas, such as cognitive psychology / sciences, sociology, computing, mobility, etc., and with the use of real cases will realize the importance of incorporating such issues in the design and development of interfaces and information systems increasing usability and satisfaction.

| Prerequisites | COM100 Introduction to Information Technologies |
| | COM211_Network Management I |

Course Syllabus	**Weeks**	**Content of the Course**
	1	1. **Introduction to Human-Computer Interaction:** Includes the difference between good and poor interaction design, what interaction design is and how it relates to human-computer interaction and other fields, what is involved in the process of interaction design, the different forms of guidance used in interaction design, etc.
	2	1. **Interaction Design:** Involves communication and collaboration, the main kinds of social mechanisms that are used by people to communicate and collaborate, the range of collaborative systems that have been developed to support this kind of social behavior, how field studies and socially based theories can inform the design of collaborative systems, etc.

3	3.	**Understanding Users, Cognitive and Affective Factors:** Involves what cognition and affection is and why it is important for interaction design, the main ways cognition and affection has been applied to interaction design, a number of examples in which cognitive research has led to the design of more effective interactive products, mental models, conceptual frameworks that are useful for interaction design, etc.
4	3.	**The Computer and Human-Computer Interaction:** Involves the various devices and implementation beds as well as technological constraints and opportunities, the problem space, how to conceptualize interaction, the pros and cons of using interface metaphors as conceptual models, the relationship between conceptual design and physical design, etc.
5	3.	**Web Interfaces:** Concerns an introduction of the notion of a paradigm and set the scene for how the various interfaces have developed in interaction design, overview of the many different kinds of interfaces, highlight of the main design and research issues for each of the different interfaces, considerations which interface is best for a given application or activity, etc.
6	3.	**Introduction to Interactive System Design:** Includes what 'doing' interaction design involves, some advantages of involving users in development, the main principles of a user-centered approach, etc.
7		Mid-term exam
8	3.	**Discuss Data Gathering and Requirements Analysis with focus in HCI aspects:** Discusses how to plan, run and analyze successful data gathering schemes based on previous knowledge, which could include tools and methods as interviews, questionnaires, observations, etc. taking into consideration the HCI influential aspects taught in previous chapters.
9	3.	**Interfaces Design and Prototyping:** Includes prototyping and different types of prototyping activities with regards to systems interfaces design, production of simple prototypes from the models developed during the requirements activity, production of a conceptual model for a product, use of scenarios and prototypes in design, a range of tool support available for interaction design, etc.
10	3.	**Usability Testing & Analytic Evaluation:** Involves usability testing through examples, the basics of experimental design, the methods used in usability testing, the role of field studies in evaluation, the important concepts associated with inspection methods,
11	3.	How heuristic evaluation can be adapted to evaluate different types of interactive products, what is involved in doing heuristic

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		evaluation and various kinds of walkthrough, how to perform predictive technique, and when to use them, the advantages and disadvantages of using analytical evaluation, etc.
	12	3. **Evaluation:** Includes the conceptual, practical, and ethical issues involved in evaluation, how observation, interviews, and questionnaires are used in evaluation, the key concepts and terms used in evaluation, the three main evaluation approaches
	13	3. Key evaluation methods within the context of real evaluation studies, how the approaches and methods are used for different purposes at different stages of the design process, the practical challenges that evaluators have to consider when doing evaluation, etc.
	14	Revision for the final exam
Methodology		Lectures, Discussions with peer participation, Case Analysis, Project
Bibliography		**Required Textbook** Title: **Interaction design: Beyond Human-Computer Interaction, 4/e** Author(s): J. Preece, Y. Rogers and H. Sharp Minasi M., Gibson Publisher: John Wiley & Sons Edition: 5th Year: 2015 ISBN: 9781119088790 **Textbooks, References, Other Bibliography** **Title:** Designing the User Interface, 5/e,. **Author(s):** Shneiderman B., Plaisant C., Cohen M., Jacobs S. **Publisher:** Pearson **Edition:** 7th **Year:** 2013 **ISBN:** 9781292037011
Evaluation		50% coursework and 50% final examination
Language		English

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Appendix 14   COM210 Operating Systems Management

Course Title	**Operating Systems Management**			
Course Code	**COM210**			
Course Type	Compulsory			
Level	Diploma			
Year / Semester of Study	Semester 2			
Lecturer's Name	Dr. Pavlos Panayi			
ECTS	6	Lectures / week	3	Labs / week
Course's Aim and Objective	• A study of the design and implementation of modern operating systems. The course concentrates on operating system kernel design, and includes the following topics: concurrent processes, interprocess communication, synchronization, scheduling, resource allocation, memory management, the concept of virtual memory and the required underlying hardware support, secondary storage management, file systems, and security. Many concepts are illustrated with examples from real operating systems.			
Learning Outcomes	1. After completion of the course students are expected to be able to: 1. describe how computing resources are used by application software and managed by system software 2. compare and contrast the various ways of structuring an operating system such as object-oriented, modular, micro-kernel, and layered 3. contrast kernel and user mode in an operating system 4. describe the difference between processes and threads 5. compare and contrast the common algorithms used for both preemptive and nonpreemptive scheduling of tasks in operating systems, such as priority, shortest job first, round robin, and multi-layer schemes 6. describe reasons for using interrupts, dispatching, and context switching to support concurrency in an operating system. 7. describe the need for concurrency within the framework of an operating system 8. demonstrate the potential run-time problems arising from the concurrent operation of many separate tasks 9. summarize the various approaches to solving the problem of mutual exclusion in an operating system 10. explain memory hierarchy and cost-performance trade-offs 11. explain the concept of virtual memory and how it is realized in hardware and software.			
Prerequisites	Consent of Instructor			
Course Syllabus	**Weeks**	**Content of the Course**		
	1	**Introduction.** History of operating systems, computer-system organization and architecture, operating system structure and operation.		
	2	**Operating system structures.** Operating system services and interfaces, system programs, operating system design and implementation.		

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	3	**Processes.** Process concepts, process scheduling, operations on processes, and cooperating processes.
	4	**Threads.** Motivation, user and kernel threads, multithreading models, thread scheduling.
	5	**Processor (CPU) scheduling.** Preemptive vs. non-preemptive, FIFO, SJF, Priority, RR, and multilevel queue.
	6	**Concept of device independence and input/output redirection**. System calls related to input/output. Operating modes on specific devices and on files. Concept of file system and its representation mechanisms. Practice: use shell redirections, handle the file system from the shell, program examples of input/output.
	7	Revision and Mid-term exam
	8	**Process Synchronization.** Producer-consumer problem, mutual exclusion, Peterson solution, lock-based solution, and semaphores.
	9	**Deadlocks.** System model, prevention, avoidance, detection, and recovery.
	10	**Memory Management.** Logical and physical address space, swapping, and memory allocation.
	11	**Virtual Memory.** Paging, segmentation, page replacement strategies.
	12	**File System:** Interface and Implementation.
	13	**Client-server based resource management model.** Examples of resource managers (drivers).
	14	Revision for the final exam
Methodology		Lectures, Practical Exercises, Project Work, and Assignments.

Bibliography	**Required Textbook** Title: Operating Systems: Internals and Design Author(s): W. Stallings Publisher: Prentice Hall Edition: 9th Year: 2017 ISBN: 978- 0134670959 **Textbooks, References, Other Bibliography** **Title:** Modern Operating Systems, 4th Ed. **Author(s):** A. Tanenbaum, H. Bos **Publisher:** Prentice Hall **Edition:** 4th **Year:** 2014 **ISBN:** 978- 0133591620
Evaluation	50% coursework and 50% final examination
Language	English

Appendix 15   COM211 Network Management

Course Title	**Network Management**
Course Code	**COM211**
Course Type	Compulsory
Level	Diploma
Year / Semester of Study	? Semester 2
Lecturer's Name	Dr. Pavlos Panayi

ECTS	6	Lectures / week	3	Labs / week

Course's Aim and Objective	The main objectives of the course are to: • Discuss the basic computer networking and existing connectivity technologies and the required infrastructure which comprises the key steps involved in the communication process. Basically to understand the LAN/WAN/MAN network architectures and the hybridized existing form in the business environment. • Explain the layered approach that makes design, implementation and operation of extensive networks possible. To learn the 7-layer OSI network model (each layer and its responsibilities) and understand the TCP/IP suite of protocols and the networked applications supported by it. • Discuss the basic protocols involved in wired/wireless communication process. These include the characteristics of the required infrastructure for Local Area Networks (MAC-CSMA-CD/Ethernet, Token Ring, FDDI, and others), and for Wide Area Networks using the TCP/IP (Visualizing TCP/IP mechanisms and variations), UDP/IP. Additionally to learn the VoIP technology in the business communication world. 2 • Link different network performance concepts and traffic issues for Quality of Service (QoS) in broadband communication as well to link the above concepts with the network economics of the enterprise. • Discuss the basic design principles of broadband wired and wireless communication networks (802.11x) in the business environment. Moreover to gain the ability to design reliable wireless networks and model and analyze the structural performance for some commonly used in business network architectures.
Learning Outcomes	After completion of the course students are expected to be able to: • Explain the physical and logical as well as the electrical characteristics of digital signals and the basic methods of data transmission. • Acknowledge the importance of the ISO 7-layer reference model. • Discuss the concepts and requirements hosted in communication protocols and give an overview of Data Communication Standards, how these standards were developed and under which assumptions were adopted. • Figure the area of computer networks in terms of connectivity, mobility and the role of metrics, with emphasis on the range of communication protocols utilized. • Identify the basic protocols involved in wired/wireless communication process. Local Area Networks

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	(MAC-CSMA-CD/Ethernet, Token Ring, FDDI, and others), and for Wide Area Networks using the TCP/IP, UDP/IP. • Apply the basic design principles of wired and wireless communication networks. Moreover, to model and analyze the structural performance for some commonly used network architectures and discuss the functions and architectures of LAN and WAN. • Analyze and design LAN architecture and the design and deployment requirements. • Discuss the electrical interface and the basics of digital data transmission. • Appreciate the need for Data Communication standards and the underlying technology used in wired and wireless communication models. • Compare the protocols used in various types of computer networks. • Discuss the principles of Open Systems and the Transport/Application 3 protocols, which facilitate them. • Link different network performance concepts and traffic issues for Quality of Service (QoS) in broadband communication as well to link the above concepts with the network economics of the enterprise. • Gain the ability to design reliable wireless networks and to model and analyze the structural performance for some commonly used in business network architectures. • Explain fundamentals and technologies of physical, data-link and network layers.
Prerequisites	COM100 Introduction to Information Technology or Consent of Instructor

Course Syllabus	Weeks	Content of the Course
	1	**Basic Concepts of connectivity and networking.** Uses of Computer Networks, Network Architectures and topologies, Layering and Protocols, Metric Units, Basic Probability Theory.
	2	**2. Physical Layer.** Theoretical basis for data communication. Guided Transmission Media. Wireless Transmission. Communication Satellites.
	3	**Data-Link Layer Encoding**, Framing and Synchronization, Error Detection and Correction, Flow control and the sliding window algorithm.
	4	**Principles of Medium Access Control.** Ethernet (802.3), Token Ring (802.5), FDDI, Wireless (802.11).
	5	**Network Layer, Switching and Routing.** Packet vs Circuit switching, Protocols and Services, Internetworking protocols, IP, ICMP, ARP, DHCP, VPN. Routing principles, The Network Layer and its usage in the Internet.
	6	**Transport layer Services and Protocols.** User Datagram Protocol (UDP), Transmission Control Protocol (TCP), TCP congestion control.
	7	Mid-term exam
	8	**Applications.** Networked applications (mail, file transfer, www), multimedia applications (RTP, H.323).
	9	**IP Layer Issues,** Congestion Control Algorithms, Packet Switching/ Mobility issues, QoS, IP Layer & Internet.
	10	**Network performance concepts and traffic issues** for Quality of Service (QoS) in broadband communication. Association of all the subsequent metrics with the network economics of an enterprise
	11	**Network Simulation tools and experimentation**-Exercises on NetSim
	12	**Internet of Things (IOT) and Wireless Sensor Networks**

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		• Cyber physical systems (CPS) and IoT – An Introduction • One Hop IoT Network over IEEE 802.15.4 • IoT – Multi-Hop Sensor-Sink Path
	13	Software Defined Networks (SDN)
	14	Revision for the final exam
Methodology	Lectures, Lab Presentations, Lab Tutorials, Theoretical Exercises and Assignments	
Bibliography	**Required Textbook** Title: Business Data Communications 5/E Author(s): William Stallings Publisher: Prentice Hall Edition: 3rd Year: 2018 ISBN: 0131442570 **Textbooks, References, Other Bibliography** **Title:** Data Communications, Computer Networks and Open Systems,. **Author(s):** Fred Halsall **Publisher:** AddisonWesley (ISBN: 020142293X) **Edition:** 7th **Year:** 2018 **ISBN:** 978- 0133591620	
Evaluation	50% coursework and 50% final examination	
Language	English	

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Appendix 16   COM312 PC Maintenance and Repair II

Course Title	PC Maintenance and Repair II
Course Code	COM 312
Course Type	Compulsory
Level	Diploma
Year / Semester of Study	2nd Year C Semester
Lecturer's Name	Petros Efthymiou

ECTS	4	Lectures / week		Labs / week	
Course's Aim and Objective	Students will look in detail at how PC's and Laptops work and how to fix problems with hardware and software. The course will give to the students the skills to upgrade computer systems and to solve a range of problems. Also includes procedures for disassembling and reassembling different classes of computers, troubleshooting, and repair.				
Learning Outcomes	Upon successful completion of this course, the student will be able to: • explain how a PC works, and understand the relationship between hardware and software; • classify and explain the function of different computer hardware components; • understand purpose and functions of an operating system (OS); • understand the purpose and functions of the computer peripherals; • understand diagnostic procedures and troubleshooting techniques to personal computers, portable devices, different operating systems (Windows, Linux and MacOS) and computer peripherals. • install, configure, optimize and upgrade personal computers; • install, configure, optimize and upgrade the portable computers; • install, configure, optimize and upgrade different operating system; • to be able to perform diagnostic procedures and troubleshooting techniques to personal computers, portable devices, operating systems and computer peripherals.				
Prerequisites	COM111, COM113, COM121 and COM240				

Course Syllabus	**Week**	**Contents of the Course**	
	43.	Internet Connectivity, Virtualization, and Cloud Technologies	

	44.	Networking
	45.	Hardware and Network Troubleshooting
	46.	Introduction to Operating Systems
	47.	Introduction to Scripting and Remote Access
	48.	Advanced Windows
	49.	Mid-Term Examination
	50.	macOS Operating Systems
	51.	Linux Operating Systems
	52.	Computer and Network Security
	53.	Troubleshooting Operating Systems and Security
	54.	Operational Procedures
	55.	Safety and Environmental Concerns
	56.	Revision for Final Exams
Methodology	Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations	
Bibliography	COURSE BOOK: 3. Complete A+ Guide to IT Hardware and Software: A CompTIA A+ Core 1 (220-1001) & CompTIA A+ Core 2 (220-1002) Textbook, 8th edition, Author: Cheryl A. Schmidt., Pearson IT Certification; 8th edition (August 1, 2019). ISBN: 978-0789760500 4. Practical Linux System Administration, Author Ken Hess, Publisher(s): O'Reilly Media, Inc., 2022 ISBN: 9781098108960	
Evaluation	40% coursework and 60% final examination Passing mark: 50%	
Language	English	

Appendix 17   COM423 Systems and Network Administration

Course Title	**Systems and Network Administration**			
Course Code	**COM423**			
Course Type	Compulsory			
Level	Diploma			
Year / Semester of Study	Semester 4			
Lecturer's Name	Dr. Pavlos Panayi			
ECTS	6	Lectures / week	3	Labs / week
Course's Aim and Objective	The course gives basic theoretical and practical knowledge in monitoring and administration of computer networks. The course deals with installation, configuration, and adaption of existing tools and techniques, and development of custom tools. It is designed for students interested in network and server administration. The text includes extensive hands-on projects, exercises, and review questions in each chapter, which reinforce network administration skills as they are learned. Case projects at the end of each chapter allow students to take on the role of a network administrator, making decisions and troubleshooting real-life problems. Specific topic coverage includes: network administration and management, administering active directory, managing group policy, administering file resources, administering web resources ίη Windows 20XX and UNIX Server administering TCP/IP, administering DNS, monitoring and troubleshooting network related problems.			
Learning Outcomes	After completion of the course students are expected to be able to: • Install or upgrade a network operating system and gain practical experience in installing the Windows 20xx and UNIX Server operating System • Analyze and implement a security policy through: accounts, general network policy, file attributes, disk quotas and the distributed file system. • Manage and implement disaster recovery. • Implement Web servers, terminal services • Implement, administer and monitor a Windows-based LAN including configuring hardware devices			
Prerequisites	COM100 Introduction to Information Technologies COM211_Network Management			
Course Syllabus	**Weeks**	**Content of the Course**		
	1	1. Networking Overview 1.1 History 1.2 Protocol Standards 1.3 Reference Model (OSI, TCP/IP)		

		1.4 Windows and Linux Networking Basics 1.5 Switching and Routing basics
	2	2. Server Administration Basics 2.1 Server and Client Installation 2.2 Boot Process and Startup Services:Xinetd/Inetd 2.3 Managing accounts: users, groups and other privileges 2.4 File Systems and Quota Management 2.5 Job Scheduling with cron, crontab, anacron and system log analysis 2.6 Process controlling and management 2.7 Online Server upgrade/update process 2.8 Administering Database Server (MySQL)
	3	3. Network Configuration Basics 3.1 IPv4 and IPv6 addressing 3.2 Network Interface Configuration 3.3 Diagnosing Network startup issues 3.4 Linux and Windows Firewall configuration 3.5 Network troubleshooting commands
	4	**Laboratory work:** All the features of this course **Samples:** • Server/Client Installation over VMware Environment • Packet Analysis by using TCPDUMP and WIRESHARK • Network Practice with Packet Tracer • System Administration: User/Group management, File System Management ....
	5	4. Dynamic Host Configuration Protocol (DHCP) 4.1 DHCP Principle 4.2 DHCP Server Configuration 4.3 DHCP Options, Scope, Reservation and Relaying 4.4 DHCP Troubleshooting
	6	5. Name Server and Configuration 5.1 DNS principles and Operations 5.2 Basic Name Server and Client Configuration 5.3 Caching Only name server 5.4 Primary and Slave Name Server
	7	Mid-term exam
	8	5.5 DNS Zone Transfers 5.6 DNS Dynamic Updates 5.7 DNS Delegation 5.8 DNS Server Security 5.9 Troubleshooting

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	9	6. Web and Proxy Server Configuration 6.1 HTTP Server Configuration Basics 6.2 Virtual Hosting 6.3 HTTP Caching 6.4 Proxy Caching Server Configuration 6.5 Proxy ACL 6.6 Proxy-Authentication Mechanisms 6.7 Troubleshooting
	10	7. FTP, File and Print Server 7.1 General Samba Configuration 7.2 SAMBA SWAT 7.3 NFS and NFS Client Configuration 7.4 CUPS configuration basics 7.5 FTP Principles 7.6 Anonymous FTP Server 7.7 Troubleshooting
	11	8. Mail Server basics 8.1 SMTP, POP and IMAP principles 8.2 SMTP Relaying Principles 8.3 Mail Domain Administration 8.4 Basic Mail Server Configuration (Sendmail, postfix, qmail, exim..) 8.5 SPAM control and Filtering 8.6 Troubleshooting
	12	9. Remote Administration and Management 9.1 Configuration 9.2 Webmin/usermin 9.3 Team Viewer 9.4 Telnet 9.5 SSH 9.6 SCP, Rsync
	13	**Lab and Practical works** **Laboratory work:** 1. Network Configuration: Start/Stop network Service, network interface configuration 2. Firewall Configuration 3. DNS and DHCP Configuration and Troubleshooting 4. Web and Proxy Server Configuration and Troubleshooting 5. Basic Mail Server Configuration and Troubleshooting 6. SAMBA, NFS, CUPS and FTP configuration and Troubleshooting 7. Webmin/SSH configuration
	14	Revision for the final exam
Methodology		Lectures, Discussions with peer participation, Case Analysis, Project

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Bibliography	**Required Textbook** **Title:** Study guide for Practice of System and Network Administration by Thomas A. Limoncelli, Cram101; 2nd Edition (2011). ISBN-10: 1428851755. **Title:** Linux Administration: A Beginner's Guide, Seventh Edition 7th Edition by Wale Soyinka **Title:** Active Directory: Designing, Deploying, and Running Active Directory Fifth Edition by Barian Desmond **Title:** Mastering Microsoft Windows Server 2008 R2 MinasiM., Gibson D., Finn A., Henry W., Hynes B., First Edition, Sybex (2010), ISBN: 978-0470532867
Other Resources: WWW	Microsoft Certification Program http://www.microsoft.com/learning/en/us/certification/mcsa.aspx Cisco training and events http://www.cisco.com/web/learning/index.html Network Security Certification http://www.eccouncil.org/certification/eccouncil_ network_security_administrator.aspx Windows Server 2008 http://www.microsoft.com/windowsserver2008/en/us/default.aspx Network Administration and security tutorials http://www.omnisecu.com/ Windows Server Administration http://www.msserveradmin.com/ Windows Server Administration Assistance: http://www.aspdeveloper.net/tikiindex.php?page=WindowsAdmin Linux Network Administrators Guide http://tldp.org/LDP/nag2/nag2.pdf
Evaluation	50% coursework and 50% final examination
Language	English

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Appendix 18   **COM444   Content Management Systems**

Course Title	**Content Management Systems**
Course Code	COM**444**
Course Type	Compulsory
Level	Diploma
Year / Semester of Study	2nd Year B Semester
Lecturer's Name	Demetra Spanou

ECTS	6	Lectures / week		Labs / week	3

Course's Aim and Objective	This course is designed to give a student practical knowledge about the currently most used web content management environments. This module is designed to help students develop an understanding of Web Content Management Systems and their importance. Introduce students to the most popular open source content management systems (CMS) in use on the web today, including WordPress, Joomla.
Learning Outcomes	Upon successful completion of this course, students will be able to: 1. Describe the basic concepts of e-commerce 2. Understand the difference between a Dynamic and Static websites 3. Explores the use of open source web-based content management systems such as Joomla, Moodle, Wordpress, and other online software solutions and CMS. 4. Create a website (e-shop) using a content management system. 5. Experiment with different themes and modify themes. 6. Experiment with plugins , Modules, Pages and Menus of the CMS 7. Practically install and configure a CMS
Prerequisites	Web Programming II or equivalent

Course Syllabus	Weeks	Contents of the Course
	1	**Introduction to E-commerce and Content Management Systems** • Ecommerce Importance • Website Importance (blog or e-shop) to an organization • Purchasing and configuring a domain name and web hosting • Website planning, site mapping, content planning.

		• CMS terminology, including CMS, PHP, MySQL, • Dynamic and static HTML website,
	2	**Installing and Upgrading WordPress** • System Requirements • Installation using the Web Interface • Initial Settings • Installing Themes • Installing Plugins Assignment 1
	3	**Dashboard and Settings** • The Dashboard • The Administration Menu and the Admin Bar • Settings • Comments • Permalinks
	4	**Working with Content** • Create and edit Posts • Create and edit Pages • Create and edit Menus • Media Files Upload: images, video, audio, tags, formats, etc.
	5	**Working with Themes** • Using the Customizer • Using Widgets • Using Menus • Using Header and Background Images • Modifying WordPress Theme using CSS and HTML parameters
	6	**Working with Plugins** • How Plugins works • Evaluating Plugins • Troubleshooting Plugins • WooCommerce **Working with Users**

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		• Users • Roles • Managing Roles with Plugins
	7	**Revision**
	8	**Midterm**
	9	**Setting Up a Joomla Site** • Installing Joomla! • Installing and Configuring the Apache Server • Installing and Configuring PHP • Installing and Configuring MySQL • Installing the Joomla! Files Assignment 2
	10	**Adding Content** • Planning your Content • Selecting a Text Editor • Adding Articles • Adding Menus to Point to Content • Installing a New Template
	11	**Administering Joomla!** • Presentation Administration . • Content Administration • System Administration • Backing Up the Joomla! Installation • Joomla Templates
	12	**Joomla Extensions & Modules** • The Difference Between Modules, Components, • and Plug-Ins . • Default Site Modules • Administrator Modules • Site Components
	13	During this session students will show off their final projects and provide an overview of the development process.

		• Presentation of final projects - assignments
	14	REVISION
Methodology	Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations	

Bibliography	**Main Book**
	
	1. WordPress for Web Developers: An Introduction for Web Professionals
	    Author:
	
	2. Beginning Joomla! Second Edition
	    Author : Dan Rahmel
	
	Recommended Books
	
	1. ***Professional WordPress: Design and Development***
	    Brad Williams, David Damstra, Hal Stern
	
	    Publisher : Wrox; 3rd edition , ISBN-13 : 978-1118987247	

Evaluation	40% coursework and 60% final examination Passing mark: 50%	
Language	English	

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Appendix 19 COM421 Database Management

Course Title	**Database Management**				
Course Code	**COM 421**				
Course Type	Compulsory				
Level	Diploma				
Year / Semester of Study	2nd Year D Semester				
Lecturer's Name	Pelekanou Olga				
ECTS	8	Lectures / week		Labs / week	
Course's Aim and Objective	Students will obtain the knowledge and skills to retrieve data held in a relational database using Oracle Database. Students successfully completing this course will be able to • analyze the data and data organization needs of organizations; • elaborate on data storage and indexing options, and perform query optimization; • use SQL on Oracle for database creation, manipulation, and control; • and describe the key components used to implement internet database environments; • perform basic database administration tasks;				
Learning Outcomes	This course aims to introduce SQL on Oracle The Introduction to SQL on Oracle is designed to give students practical experience in using SQL on Oracle. Exercises and examples are used throughout the course to give practical hands-on experience with the techniques covered. The theoretical material in this course is supplemented by labs, Assignment, and Project components.				
Prerequisites	INF 121 Introduction to Relational Databases				
Course Syllabus	**Week**	**Contents of the Course**			
	57.	Chapter 1: SQL - A Standard Navigation Language for Relational Databases. The SQL language used by most database management systems.			
	58.	Chapter 2: RELATIONAL DATABASE CONCEPTS What is an Oracle Database			

		Relational Database Structures Tables, Rows and Columns Indexes, Primary Keys and Foreign Keys Data Types The Data Dictionary
	59.	Chapter 3: USING SQL*PLUS on Oracle What is SQL*Plus Getting Started Entering and Executing SQL Statements The SQL*Plus Command Line History Editing SQL Statements The login.sql File Creating, Editing and Executing SQL Files
	60.	Chapter 4: RETRIEVING DATA WITH THE SELECT STATEMENT on Oracle The SELECT Statement on Oracle The SELECT and FROM Clauses Conditions and the WHERE Clause
	61.	Chapter 4: Logical Operators on Oracle The ORDER BY Clause Column Aliases Arithmetic Expressions Precedence of Operators
	62.	Chapter 5: AGGREGATE FUNCTIONS on Oracle Overview of Built In Aggregate Functions The GROUP BY Clause The HAVING Clause
	63.	Chapter 5: AGGREGATE FUNCTIONS on Oracle Overview of Built In Aggregate Functions The GROUP BY Clause The HAVING Clause
	64.	Chapter 6: JOINING TABLES on Oracle Overview of Table Joins Inner Joins Table Aliases Outer Joins
	65.	Chapter 6: JOINING TABLES on Oracle Overview of Table Joins Inner Joins Table Aliases Outer Joins
	66.	Mid-Term Examination
	67.	Chapter 7: Introduction to Two-Tier and Three-Tier Architectures, and the Internet Database Environment. The Internet database environment, including Web-enabled databases, Web-enabled system design, and programming in two-tier and three- tier architectures. XML and data exchange on the Internet.

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	68.	Chapter 8: Introduction to Data Warehousing. The fundamental concepts of data warehousing. The data warehouse architectures and OLAP tools.
	69.	Chapter 15: Overview of Object-Oriented Databases. The object-oriented data model, and the implementation of object persistence using relational databases.
	70.	Revision
Methodology		Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations
Bibliography		**COURSE BOOK:** **5.** Modern database management, 10th Edition. Author: Hoffer, J. A., Venkataraman, R., & Topi, H., Prentice Hall, 2010. ISBN: 9781491978917 **6.** Mastering Oracle PL/SQL: Practical Solutions Author: CONNOR MCDONALD, WITH CHAIM KATZ, CHRISTOPHER BECK, JOEL R. KALLMAN, AND DAVID C. KNOX ISBN (pbk): 1-59059-217-4
Evaluation		40% coursework and 60% final examination Passing mark: 50%
Language		English

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Appendix 20 **Equality and Anti-Discrimination Policy at C.D.A. College**

According to Article 28 of the Constitution, with the Equal Treatment in Employment and Labor Law of 2004 (58 (I) / 2004) and the Law on Persons with Disabilities of 2000 (127 (I) / 2000), C.D.A. College adopts the Policy Equality and Anti-Discrimination. C.D.A. College recognizes and accepts diversity. All kind of students, no matter their gender or race, can apply and get accepted to C.D.A College.

C.D.A. College believes in and urges the fair and impartial treatment of all people. C.D.A College's philosophy is to respect diversity and encourage equal treatment among all students. Any kind of racism or physical bullying is prohibited.

C.D.A College is multicultural and policies are adopted that encourage equal opportunities, respect for all religions or doctrines, sexual orientation, etc.

Policy Statement

C.D.A. College is committed to a free and meritocratic work and educational environment that does not promote any direct or indirect form of discrimination.

More specifically:
All employees and students of the College are required to comply with the College's Equality and Anti-Discrimination Policy.
- It is strictly prohibited any form of discrimination on the basis of racial or ethnic origin, religion or belief, age or sexual orientation or disability by all members of the College (academic, research, teaching and administrative staff, students).

A non-compliance with any Code and / or Policy and / or Directive and / or a Circular issued
by C.D.A College constitutes a disciplinary misconduct.

C.D.A College is committed to following the measures below so as to achieve the Equality and Anti-Discrimination Policy at C.D.A. College.
- Incorporate policies and strategies into the College's Internal Regulations regarding equal opportunities and respect for diversity.
- Creation of informative workshops or seminars for information on gender equality, etc.
- Record ways to deal with cases of racial, sexual and / or religious harassment or bullying, situations of discrimination and / or harassment and informing staff and students.
- Involvement of employees in the implementation of measures related to issues of equality and diversity.
- Creation of an Office for Diversity, Integration and Equality
- Transparency in decision-making issues and an early information of staff on issues of equality and combating any discrimination.
- To create a work environment that respects diversity
- Develop policies and procedures to promote equal treatment and equal opportunities for men and women and respect for diversity.
- Adoption of measures to deal with harassment and / or sexual harassment in the workplace.
- Gender representation on academic and administrative committees, in College bodies and in official positions (where possible).

- Avoidance of discrimination in the selection, position, promotion, training and development of staff.
- Regular evaluation of this effort and improvement of measures.

Useful Vocabulary
Useful Terms

"Direct discrimination" means the less favorable treatment of a person because of his/ her racial or ethnic origin, religion or belief, age or sexual orientation or disability, than that which another person has suffered, or would suffer in a similar situation.

"Indirect discrimination" means any seemingly neutral provision, criterion or practice which may give rise to degrading treatment on grounds of racial or ethnic origin, religion or belief, age or sexual orientation or disability in relation to other persons, unless that provision: criterion or practice is objectively justified by a legitimate aim and the means to achieve that aim are appropriate and necessary.

"Harassment" means unwanted behavior that is expressed in words or deeds and is linked to racial or ethnic origin, religion or belief, age or sexual orientation or disability, with the aim or effect of insulting a person's dignity and creating intimidation, degrading, humiliating or aggressive environment.

Sources:
- European Commission, Promoting Gender Equality in Research and Innovation**, 2019.** https://ec.europa.eu/programmes/horizon2020/en/h2020-section/promoting-gender-equality-research-and-innovation
- European Commission, Strategic Engagement for Gender Equality, 2016-2019. https://ec.europa.eu/antitrafficking/sites/antitrafficking/files/strategic_engagement_for_gender_equality_en.pdf
- The University of Manchester Equality and Diversity Policy, 2014.
- Uppsala University Equal Opportunities Programme, 2016.
- Wagner, C. (2019). *Measuring Inequality- Creating an indicator to assess gender bias in universities.* https://blogs.lse.ac.uk/impactofsocialsciences/2019/05/15/measuring-inequality-creating-an-indicator-to-assess-gender-bias-in-universities/
- University of Cyprus - https://ucy.ac.cy/legislation/volumea/7.11.html

Appendix 21

Policy and Code of Practice for dealing with Harassment and Sexual Harassment at C.D.A.

According to the Law on Equal Treatment of Men and Women in Employment and Vocational Education of 2002 (Law 205 (I) 2002), C.D.A. College adopts with the Code of Practice for dealing with Harassment and Sexual Harassment. C.D.A College created rules and procedures of prevention and / or management of incidents of harassment or sexual harassment. Behaviour of this nature constitutes a disciplinary offense and a criminal offense.

As an additional form of gender discrimination, the College takes a zero-tolerance position recognizing that sexual harassment hinders the application of equality in work and education. Sexual violence is contrary to the Legislation and the Regulations of C.D.A College, but also to its fundamental values.

The Purpose of the Code of Practice

The Code of Practice aims to prevent and deal with harassment and sexual harassment and in particular:

- Inform college staff about the terms "harassment" and "sexual harassment", about the protection provided by applicable law against conduct that may constitute sexual harassment or harassment, and about their rights and the actions they must take when they consider themselves to be victims of harassment or sexual harassment.
- To inform and educate employees about the principle of equal treatment between the sexes.
- Prohibit racial or sexual harassment
- To inform about the prevention and handling of harassment or sexual harassment.
- Encourage employees to participate in informative seminars, workshops and / or gatherings and to contribute to the prevention and dealing of harassment and sexual harassment in the workplace and to the creation of a friendly working environment for all their employees. regardless of gender or sexual orientation.
- Adopt and implement a policy to prevent harassment and sexual harassment in the workplace.
- Promote cooperation between management and employees to maintain a healthy and safe work environment.
- To guide each competent authority for the correct and immediate handling of complaints of harassment or sexual harassment.

Policy Statement

C.D.A College is fully committed to fully protecting the dignity of the individual and ensuring respect for the personality of every college employee and student.

The above Policy provides the following:

- All staff and students are obliged to comply with the C.D.A. College Policy and Code.
- "Gender Discrimination", "harassment" and "sexual harassment" is strictly prohibited by all members of the College, regardless of rank, gender and hierarchy over any student, employee, or visitor to the College's premises.
- Definition and application of terms and conditions of employment.
- Defining terms and conditions of dismissal from any job position.
- Gender discrimination, harassment and sexual harassment are illegal and will be severely punished.

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- Complaints of harassment or sexual harassment will be handled promptly with seriousness and complete confidentiality.
- All employees and students are obliged to keep a low profile in the event of a report of an incident which will be under investigation. The commentary and feedback of confidential information is expressly prohibited. They have an obligation of complete confidentiality in case they submit evidence as part of a complaint investigation. Commenting on confidential information and / or spreading rumors will not be tolerated.
- All those involved in a harassment incident will be protected from victimization and ill-treatment.

Useful vocabulary

"Gender Discrimination" means any direct or indirect discrimination, including sexual harassment or less favorable treatment, as a result of rejection of such behaviour or submission to it. "Gender discrimination" includes any less favorable treatment of a woman in connection with pregnancy, childbirth, lactation, motherhood or illness due to pregnancy or childbirth, and any directive or order for discrimination against persons on the grounds of sex is discrimination.

"Harassment" is the unwanted behaviour of the recipient related to gender, which has as its purpose or effect the insult of dignity, especially when it creates a threatening, hostile, humiliating, or aggressive environment.

"Sexual harassment" means any unwanted behaviour by a recipient of sexual conduct which has as its object or effect the violation of his or her dignity, in particular when he or she creates a degrading, intimidating, hostile, humiliating or aggressive environment in employment or education or training or access to employment or vocational education or training, and is expressed in words or deeds.

Ingredients of the terms "harassment" and "sexual harassment" are:

i. The unwanted behaviour.

ii. Gender-based behaviour and sexual behaviour respectively.

iii Behaviour that can reasonably be considered, under the circumstances, offensive, intimidating and humiliating by the recipient and which creates a hostile work environment.

"Unwanted Behaviour" is any behaviour that is unpleasant and offensive to a person. It does not matter if such behaviour is a remote incident or repetitive. It also does not matter how the perpetrator perceives his / her behaviour towards the recipient or what the perpetrator intended, nor does the recipient of the behavior need to inform the perpetrator that his / her behavior is undesirable.

It is understood that whether the conduct itself is acceptable and not undesirable by other employees or that it was previously considered an acceptable feature of the work environment does not invalidate the term undesirable behavior as defined above.

"Sexual Behaviour" is any behaviour that has a sexual element or tone or implication and is manifested in actions or words. Examples of sexual behavior are (but are not limited to) the following:

Behaviour expressed through actions is any unwanted physical contact, aimed at attacking or pressuring for sexual intercourse.

- Behavior expressed in words may include unnecessary or unwanted intimacy, sexual or immoral or offensive comments or eroticisms, jokes, jokes or gestures, sexually explicit or sexually explicit comments, sexually explicit, sexually explicit to other people, unwanted and immoral suggestions or suggestions, suggestions or pressure for sexual acts, indiscriminate questions about personal or sexual life, sexually implied or obscene comments, insults,

obscene remarks, annoying flirtations outside of work and continuous activity , while it has become clear that these proposals are undesirable.

- Behaviour not expressed in words may include displaying pornographic magazines, obscene images or objects, whistling, sly or obscene gestures, sexual or obscene gestures, gestures and gestures with the eyes, hands or tongue, unnecessary carelessness close physical distance, messages via mobile phones or other electronic means with offensive content or erotology.

- **"Quid pro quo sexual harassment"** is the behaviour where a supervisor, hierarchically superior or teacher tries to influence working conditions, promotions, training, salary increase, employee or candidate benefit for work or degree, graduation student or admission of a prospective student in exchange for sexual favors.

- **Sexual favoritism** is the behaviour of a person in a position of power that only rewards those who respond to his sexual proposals, while those who do not respond (but deserve) are deprived of promotion, benefits or degrees.

- It is understood that they do not constitute sexual harassment or sexual intercourse, courtships or friendships, which are mutually acceptable to the persons concerned.

"Responsible authority" means the persons who are responsible for dealing with complaints or grievances regarding incidents of harassment or sexual harassment and taking measures to prevent and deal with such incidents. Adequate training in the prevention and treatment of incidents of harassment or sexual harassment is the responsibility of the competent authorities

Responsible authorities of C.D.A College:
- Chairman of the College
- General Manager
- Peripheral Directors
- Head of the programs of study
- Directors of Public Relations & Student Welfare
- Librarians

Guidelines for preventing sexual harassment and harassment
- information on harassment and sexual harassment legislation and safeguards
- Participation and encouragement of participation of employees and / or students in programs related to gender discrimination and harassment in general.
- Avoid discussions, comments, hints that either target or ridicule the personality of anyone.
- Correct your behaviour when you realize that it bothers or offends another person and do not hesitate to apologize.
- You set your individual limits & boundaries.
- Collaborate with the responsible authority for the improvement of the work / student environment and the implementation of the Code of Practice.

Instructions for dealing with harassment and sexual harassment
- Do not ignore or underestimate the unpleasant feelings it causes you.
- Trust your appreciation for the behaviour of the person who is harassing you.
- Do not feel uncomfortable, ashamed or blame yourself for the behaviour of the offender (man or woman)
- Do not choose isolation from others
- Do not justify the behavior of the offender (man or woman).
- Take responsibility for doing the right thing:

- Set your limits on the offender (male or female) and repel or deal calmly and decisively with his / her behaviour.
- Inform the relevant authority.
- Submitting a written complaint to the relevant authority or complaint to the competent body stating all the relevant information.
- Consult the Commissioner for Administration and Protection of Human Rights, as an Equality and Anti-Discrimination Agency, or the Gender Equality Committee in Employment and Vocational Training or the Inspectors of the Department of Labor of the Ministry of Labor and Employment.

Duties and responsibilities of the Relevant Authority
- Ensuring a decent working environment.
- Recognizes that harassment and sexual harassment are forms of sexual violence.
- Has a legal responsibility to ensure a safe, dignified, healthy and friendly working environment
- Has the responsibility to prevent and deal with harassment and sexual harassment.

Each Relevant Authority must:
- Protect employees and students from any act that is considered harassment, intimidation or even sexual harassment.
- Has an obligation to the employee and to the student who has been sexually harassed or harassed and / or directly or indirectly ill-treated.
- Otherwise the Relevant Authority is co-responsible with the person who committed the prohibited acts in question.

Measures of the Relevant Authority to prevent harassment and sexual harassment
- The Relevant Authority communicates either in writing or in other ways the Code of Practice to the employees and students of the College, taking measures in any case that the employee, student does not comply.
- Ensuring a safe and friendly work and student environment.
- Informs and educates employees, students through workshops, seminars, experiential workshops regarding all forms of harassment in the work and student environment.
- Recommendation of an "Equality Committee" to monitor the implementation of the Code of Practice, which will meet regularly and conduct training seminars on harassment.
- Encourage College staff to be informed and to work with the Equality Committee.

Submitting and reviewing complaints to address harassment and sexual harassment.
Internal / Informal Procedure
There are clear guidelines and procedures for filing and dealing with complaints about harassment and sexual harassment in the work and student environment.
- aims to investigate and deal with incidents within the College.
- The complainant addresses the Relevant Authority he/she wishes and submits his / her complaint in writing.
- The Relevant Authority records the history of the incident and investigates the possibility of direct communication or mediation.
- Depending on the history, and after written consent of the complainant, the Relevant Authority either (a) encourages the complainant to explain to the person causing the

- undesirable behaviour that it is not welcome, that it is offensive, that creates dissatisfaction and that he intervenes in his / her work / study, or (b) undertakes mediation.
- The Relevant Authority only takes action if the harassment and / or sexual harassment occurs for a short period of time, and if the alleged offender seems willing to discuss and only if the complainant wishes to be mediated.
- In case the complainant chooses the direct communication with the alleged offender, then the Relevant Authority has the responsibility to monitor its outcome.
- In case of mediation, the Relevant Authority assumes the responsibility of communicating with the alleged perpetrator.
- In any case, the Relevant Authority handles the case with complete confidentiality and ensures its completion within a reasonable time.
- The process of examining complaints of harassment or sexual harassment is clear, has been explained and is understood by all members and is conducted with confidentiality and objectivity.
- Approaches and treats the complainant with respect;
- The complainant is not victimized and any witnesses are not victimized;
- Produces results within a reasonable time from the date of submission of the complaint.
- Encourages the complainant to report incidents of harassment or sexual harassment, either orally or in writing.
- asks the complainant if he / she wishes to deal with the situation himself / herself or if he / she needs any help.
- Informs the complainant about his / her right to file a formal complaint.
- Without stigmatizing anyone, professional cooperation between them is avoided and / or they move away if they are in nearby offices or on the same floor

The internal / informal procedure does not concern the submission of a complaint. It concerns a complaint submission **and in no case** replaces the official one
procedure for filing and examining a complaint of harassment or sexual harassment
harassment.

Internal / Formal Procedure
In order to begin the formal process of examining a complaint of sexual harassment or harassment, a relevant complaint must be submitted in writing by the College member to the relevant bodies or to the relevant disciplinary committee. The submitted complaint will be examined according to the procedures provided by the Laws and Regulations that are in force and applied by the College, for disciplinary control of the members of the Academic Staff, the members of the Administrative Staff and the Students, depending on where the complainant belongs.
It is understood that in any case, harassment or sexual harassment may
reported to the Police, which will conduct a relevant investigation in relation to the commission of a criminal offense.

Criminal and civil proceedings
A victim of sexual abuse has the right to bring separate criminal or civil charges against one alleged perpetrator; the rights of the victim are in no way limited or affected by the Disciplinary Rules and Rules of the college and the present
policy.

Government institutions and other bodies for filing a complaint

- Commissioner for Administration and Protection of Human Rights, Equality and Anti-Discrimination Agency.
  Address: Era House, 2 Diagorou, 1097, Nicosia. Tel.: 22405500/501 Website: www.ombudsman.gov.cy E-mail: ombudsman@ombudsman.gov.cy
- Committee on Gender Equality in Employment and Vocational Education.
  Address: 9 Klimentos, 3rd floor, office 312, Nicosia Tel: 22400894/5 Website: www.eif.gov.cy E-mail : genderequalitycommittee@mlsi.gov.cy
- Inspectors of the Department of Labor, Ministry of Labor, Welfare and Social Insurance
  Address: 9 Klimentos, 4th floor, Nicosia. Tel: 22400801 E-mail: director@dl.mlsi.gov.cy
- Police Force
  Address: Police Force Headquarters, Evangelou Floraki 1478, Nicosia Tel: 1460 (citizen line) & 22808080 Website: http://www.police.gov.cy E-mail: police@police.gov.cy

Confidentiality Statement

"I understand and acknowledge that the process of investigating his / her complaint ………………………………………………………………………………… …………… .. ………………… against /. ……………… …………………………………………… regarding an alleged sexual harassment, is strictly confidential. I undertake not to report anything to anyone, inside or outside the College, either element of the complaint or the existence of that complaint or any aspect of the ongoing process, either now or at any time in the future. I also undertake as much as I can to prevent the leakage of any information regarding the above and if I have the ability to prevent the receipt of knowledge by any third party. In case I do not honor this commitment, I will be subject to disciplinary action not excluded and the dismissal / expulsion of students

Date
Name & Signature

Appendix 22   The Process of Introducing New or Monitoring and Revising Current Programmes of Study

1. Conduct a Feasibility Study for the new/ or current program of studies:
   – Current Situation and Market Opportunities
   – Model of Business
   – Target Market - The Potential Students
   – The Market Competition
   – The Competitive Advantage of CDA College
   – Conduct primary or secondary research to identify and analyze the needs, feasibility and profitability of the new program
   – Financial Analysis for 5 years
   – Employability Opportunities of the Graduates

2. Inform and educate all faculty staff about the importance of educational quality assurance, through:
   – Meeting before the commencement of each academic semester
   – Seminars during the semester
   – Meetings before each External Evaluation

3. Application of internal policies and mechanisms for educational of quality assurance
   – Application of about 28 mechanisms for quality assurance

4. In collaboration with the Academic Committee to review, evaluate and recommend changes to the curriculum of the existing or new program of study and other educational policies.

5. In collaboration with the Staff Development Committee to select the necessary faculty staff, holders of the appropriate academic qualifications for the new program of study. (if needed to recruit new faculty staff)
   • As per the educational law, at least the 70% of the teaching staff must hold PhD degree and the rest 30% may hold equivalent degree as per the program of study.
   • Assign the Coordinator of the new program of study
   • Selection of faculty staff for current and/or new programs of study

6. In collaboration with the Resource Standing Committee to approve and allocate the additional resources for the new or revised program of study.
   • Number of teaching classrooms
   • Library fully equipped with the relevant books, editions
   • Computer Labs
   • Any additional Labs & equipment according to the requirement of each program of study

7. Then the IEC will approve the new or revised program and the College proceeds to the Development of the curriculum.

8. All the selected teaching members will prepare the course syllabuses of the new or revised program. Then the IEC will prepare the Application for the External Evaluation of the program of study.

9. The External Evaluation Committee visits (either face-to-face or Online) the College to evaluate and suggests certain improvements. After the suggestions are materialized then the CY.Q.A.A approves the new or revised program of study.

10. After the successful Approval of the program, the College proceeds to the Promotion, Publication and Implementation of the program, through:
    − Prospectus
    − Web site/Social Media
    − Printed material
    − Moodle electronic platform etc.
11. Continuous observation and management of the curriculum of all the accredited programs of study.

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Appendix 23   COM140 Business English

Course Title	**Business English**
Course Code	**COM140**
Course Type	Compulsory
Level	Information and Communication Technology Diploma
Year / Semester of Study	1st Year A Semester
Lecturer's Name	Kyriaki Iesou

ECTS	4	Lectures / week	3	Labs / week	

Course's Aim and Objective	Students learn to adapt their language to specific readers and to select the most effective words for use in business communication. Basic patterns of routine business letters are explored through model letters, authentic material and learner-generated writing pieces. Students are introduced to techniques of indirect writing to be used to convey bad news or to persuade. The range of business reports from informal to formal, internal to external will be discussed. Standard and Physical Aspects of Communication. Students learn how to use graphic aids effectively in their written work. Here the students learn how to use the accepted standards of English grammar and punctuation in written Business Communication. Spoken Communication and Listening: students learn how to communicate orally in business using speaking and listening techniques. The significance of physical appearance, posture, facial expressions, gestures, and voice quality are explained. Audience analysis, the several techniques for conducting and participating in meeting as well as good interviewing and listening techniques are explored. Recent developments and contemporary issues pertaining to the subject-matter of the course
Learning Outcomes	• Learn the Fundamentals of Business Writing • Be able to Construct Clear Sentences and Paragraphs • Use Writing for Effect • Broaden their knowledge on Business Correspondence: • Use Basic Patterns of Routine Letters • Answer Routine Letters • Be effective in Spoken Communication and Listening
Prerequisites	None

Course Syllabus	Weeks	Content of the Course
	1	Explain the Fundamentals of Business Writing. Adaptation and Selection of words Considering the Reader Time and expressions

		Introductions Small talk Ending conversations
	2	Draw attention to Construction of Clear Sentences and Paragraphs Need for Simple Construction Emphasis on Short Sentences Care in Paragraph Design Dates
	3	Writing for Effect Need for Goodwill Conversational Style Avoiding Officialese Achieving appropriate emphasis
	4	Emphasize Business Correspondence: Basic patterns of routine business letters are explored through model letters, authentic material and learner-generated writing pieces.
	5	Outline Basic Patterns of Routine Letters Routine inquiries (services –Goods-People) Claims Orders Faxes Emails
	6	Draw attention Answering Routine Letters Routine Responses Personnel Evaluation Adjustment Grants. Revision for mid-term examination
	7	Mid-Term Examination.
	8	Introduce Indirectness for Bad News and Persuasion: Students are introduced to techniques of indirect writing to be used to convey bad news or to persuade.
	9	Refused Requests Adjustment refusals Credit refusals Persuasive Requests.
	10	Types of meetings, Meeting etiquette,Making a presentation at a meeting,Time management,Making travel arrangements,Travel necessities.
	11	Team Building,Fundamentals of Report Writing: The range of business reports from informal to formal, internal to external will be discussed, Memos.
	11	Fundamentals of Report Writing: The range of business reports from informal to formal, internal to external will be discussed.
	12	Basic of Report Writing Short Reports Longer Reports Standard
	13	Physical Aspects of Communication *Graphic Aids to communication,* *Correctness of Communication*
	14	Revision for the Final examinations
Methodology		Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations

Bibliography		**Required Textbooks**
		
		Title: Career Paths: *Business English*
		Author(s): John Taylor, Jeff Zeter
		Edition/Year: Express Publishing
		Textbooks, References, Other Bibliography
		    1. Title: Business & Administrative Communication
		       Author(s): Kitty O. Locker
		       Publisher: McGraw Hill Higher Education
		       Edition: 9th rev. ed.

	Year: 2009 ISBN13: 978-007-016-718-6 / ISBN10: 007-016-718-4 2. Title: Excellence in business communication Author(s): John V. Thill, Courtland L. Bovee Publisher: Pearson Edition: 11th ed. Year: 2014 ISBN13: 978-013-354-417-6 / ISBN10: 013-354-417-6
Evaluation	50% continuous assessment (coursework) and 50% final examination. Passing marks: 50%
Language	English

Appendix 24   COM100 Introduction to Information Technology

Course Title	**Introduction to Information Technology**			
Course Code	**COM100**			
Course Type	Compulsory			
Level	Diploma			
Year / Semester of Study	? Semester			
Lecturer's Name	Dr. Pavlos Panayi			
ECTS	6	Lectures / week	3	Labs / week
Course's Aim and Objective	This course is designed to provide students with a foundational understanding of Information Systems (IS) as they apply to the computer industry. Topics will include Information Systems fundamentals; IS infrastructure; organizational and business strategies for Information Systems, Managing Information Systems; Information Systems for commerce and collaboration; business intelligence and Enterprise Information Systems; security, privacy and ethics for Information Systems.			
Learning Outcomes	The student will demonstrate an understanding of the scope, purpose and value of information systems in an organization. 2 2. The student will demonstrate an understanding of the principles, issues and trends in managing information systems infrastructure and services. 3. The student will demonstrate an understanding of the Information Systems and processes involved in utilizing the Internet for interacting with consumers. 4. The student will demonstrate an understanding of Enterprise Information Systems as they relate to enhancing business intelligence and processes. 5. The student will demonstrate an understanding of the processes involved in developing and securing Information Systems. 6. The student will demonstrate an understanding of the processes involved in securing Information Systems. 7. The student will demonstrate an understanding of the ethical issues associated with the integration of information systems into society.			
Prerequisites	Consent of Instructor			
Course Syllabus	**Weeks**	**Content of the Course**		
	1	**1. Introduction to Computer** Introduction; Digital and Analog Computers; Characteristics of Computer; History of Computer; Generations of Computer; Classification of Computer; The Computer System; Application of Computers		
	2	**2. The Computer System Hardware**		

		Introduction; Central Processing Unit; Memory Unit; Instruction Format; Instruction Set; Instruction Cycle; Microprocessor; Interconnecting the Units of a Computer; Inside a Computer Cabinet
	3	**Computer Memory** Introduction; Memory Representation; Memory Hierarchy; CPU Registers; Cache Memory; Primary Memory; Secondary Memory; Access Types of Storage Devices; Magnetic Tape; Magnetic Disk; Optical Disk; Magneto-Optical Disk; How the Computer uses its memory
	4	**Input and Output Devices** Introduction; Input-Output Unit; Input Devices; Human Data Entry Devices; Source Data Entry Devices; Output Devices; I/O Port; Working of I/O System
	5	**Data Representation** Introduction; Number System; Conversion from Decimal to Binary, Octal, Hexadecimal; Conversion of Binary, Octal, Hexadecimal to Decimal; Conversion of Binary to Octal, Hexadecimal; Conversion of Octal, Hexadecimal to Binary; Binary Arithmetic; Signed and Unsigned Numbers; Binary Data Representation; Binary Coding Schemes; Logic Gates
	6	**Computer Software** Introduction; Types of Software; System Software; Application Software; Software Acquisition; Operating System (Introduction, Objectives of Operating System, Types of OS, Functions of OS, Process Management, Memory Management, File Management, Device Management, Protection
	7	Revision and Mid-term exam
	8	**Data Communication and Computer Network** Introduction; Importance of Networking; Data Transmission Media; Data Transmission across Media; Data Transmission and Data Networking; Computer Network; Network Types; Network Topology; Communication Protocol; Network Devices; Wireless Networking
	9	**The Internet and Internet Services** Introduction; History of Internet; Internetworking Protocol; The Internet Architecture;

		Managing the Internet; Connecting to Internet; Internet Connections; Internet Address; Internet Services; Uses of Internet; Introduction to Internet of Things (IoT), Wearable Computing, and Cloud Computing, Introduction to E-commerce, E-governance, and Smart City, and GIS
	10	**Fundamentals of Database** Introduction; Database; Database System; Database Management System; Database System Architectures; Database Applications; Introduction to Data Warehousing, Data mining, and BigData
	11	**Introduction to Word Processing**, Inserting, deleting text, save and exit file, open and close file, copy and paste text. Find and replace contents, bold, underline, italic, font and font size, paragraph settings, bullets and numbering, border and shading, columns, tab setting, change case, header and footer, Print preview and print, insert page, page break, date and time, spelling and grammar, mail merge, tables, insert/delete column and row.
	12	**MS- Excel** • Introduction to spreadsheets • Inserting data in a worksheet, save and exit file, open and close, cut copy and paste the data, formatting, cell, column, bold, italic, underline, font and font size, borders. • Formula writing, print preview and print, insert: cell, row, column, pictures, fill and filter data, generating charts, spell checker, find and replace.
	13	**MS- Access** Introduction to database, designing database files, commands in database, working with file, brows and edit, sort, indexing and filter printing and reporting, set command and functions, data importing and exporting, link with the files.
	14	Revision for the final exam
Methodology	Lectures, Practical Exercises, Project Work, and Assignments.	

Bibliography	**Required Textbook**	
	Title:	Introduction to Information Systems: People, Technology and Processes
	Author(s):	Patricia Wallace, Johns Hopkins University
	Publisher:	Prentice Hall
	Edition:	3rd
	Year:	2018
	ISBN:	978- 0134670959
	Textbooks, References, Other Bibliography	
	Title:	Fluency With Information Technology,.
	Author(s):	Snyder & Henry
	Publisher:	Prentice Hall
	Edition:	7th
	Year:	2018
	ISBN:	978- 0133591620
Evaluation	50% coursework and 50% final examination	
Language	English	

Appendix 25   Computer and Lab Resources at Nicosia

Our college has invested in providing state of the art technology equipment to it academic staff and students. There is wireless internet for the students, photocopier for print out, network printers in all computer rooms, several available PCs in the lecturer's room and in the computer lab, and three computer rooms with the most popular market software.

The resources provided by the College for the effective delivery of the curriculum are as follow:

Our college has invested in providing state of the art technology equipment to it academic staff and students. There is wireless internet for the students, photocopier for print out, network printers in all computer rooms, several available PCs in the lecturer's room and in the computer lab, and three computer rooms with the most popular market software.

The resources provided by the College for the effective delivery of the curriculum are as follow:

Computer Rooms

Three Inverted U-shape Computer Rooms all equipped with ceiling data-video projector system, and network laser printer. The Instructor has his own computer workstation next to the Interactive board.

Inverted U-shape Computer Labs offers engagement between instructors and students. In addition, the layout allows for the most convenient method of monitoring students. A network laser printer allows the students to print their class work and the shared share folder to save their exercises in their instructor PC.

44 Workstations and 17 new ones at Aeschylus Building

Hardware Specifications for 18 PC's Room 1 (2nd floor):

LENOVO PC ALL IN ONE

THINKCENTRE M820Z
INTEL i3-8100
4GB, 128GB SSD
WIFI
21.5" Full High Definition
3 Year Warranty

Hardware Specifications for 18 PC's Room 7 (2nd floor):

Processor: INTEL CPU E5500 DUAL CORE 2.8GHz, 2MB CASHE
Motherboard: MSI MB G41, S775, mATX, DDR3, VGA
Ram: Kingston memory 3GB 1333 MHz DDR3
Hard Disk Drive: WD 8.9cm (3.5") 160 GB SATA WD 1600AAJS 7200 8mb SE
Graphics Accelerator:
Case: JNC CASE P4 MEDIUM TOWER, ATX400W
Monitor: 17'' TFT Monitor
Mouse: Microsoft PS/2
Keyboard: Microsoft Natural PS/2
CD-Rom/DVD-ROM: Sony CD-ROM CDU 5221

Modem/Ethernet: 10/100 Mbps
Optical Drive:LG DVD REWRITER SATA BLACK 22X

Hardware specifications for 8 PC's at 1st Floor lab:

Processor: INTEL CPU E5500 DUAL CORE 2.8GHz, 2MB CASHE
Motherboard: MSI MB G41, S775, mATX, DDR3, VGA
Ram: Kingston memory 2GB 800 MH$_Z$ DDR2
Hard Disk Drive: WD 8.9cm (3.5") 160 GB SATA WD 1600AAJS 7200 8mb SE
Graphics Accelerator:
Case: CASE P4 MEDIUM TOWER, ATX400W
Monitor: 17''TFT Monitor
Mouse: Microsoft PS/2
Keyboard: Microsoft Natural PS/2
CD-ROM/DVD-ROM: Sony CD-ROM CDU 5221
Modem/Ethernet: 10/100 Mbps
Optical Drive: LG DVD REWRITER SATA BLACK 22X

Hardware specifications for 17 PC's at Aeschylus lab:

LENOVO PC ALL IN ONE

THINKCENTRE M820Z
INTEL i3-8100
4GB, 128GB SSD
WIFI
21.5" Full High Definition
3 Year Warranty

Furthermore, the College has also established a state-of-art computer engineering laboratory.

We are also equipped with a File Server, windows server 2008

SOFTWARES
OPERATING SYSTEM
- MS WINDOWS (Dual installation of 7 and XP in some PCs)
- LINUX (Using Live CDs)

APPLICATIONS
1. MS Office Professional -includes MS Access
2. MS Office Language Pack for Greek
3. MS SharePoint Designer 2007
4. Visual Basic
5. Adobe Reader
6. Internet Explorer, Firefox and/or Chrome
7. SPSS or PSPP
8. Java Development
9. WinRAR /7zip
10. Photoshop
11. Flash

12. Premier
13. CCNA Discovery 4 – Networking for Home and Small Business
14. OpenProject / Microsoft Project
15. MatLab
16. JGRASP
17. Html Editor

Computer Lab (Technical) Equipment

- Cable testers
- Digital Multimeters
- Screwdrivers (Flat and Philips)
- Wire and Paer Cutters
- All in telephone Tool Set:
  - Modulator Crimping Tools
  - RJ-45 Connectors
  - Wire Stripper Tool (UTP/STP Multiconductor Cable)
- Professional Plier
- Soldering Irons with Soldering Iron Stands
- Cored Solder Wires
- Desoldering Tools
- Plastic Tool Boxes
- PCs and Monitors (depending upon the number of registered students)

Networking Equipment:
- switch,
- modems,
- hubs,
- switches and intelligence switches
- routers/Cisco routers
- hubs
- transceivers wireless access points, etc.

Other Academic equipment

- Ten overhead projectors in all classed connected with a PC. The PCs are all connected to the college network and they have internet access.
- Two interactive boards.
- Three projectors for the lecturer's meetings and other academic events.
- 15 PCs, connected with the network for administrative purposes.
- Photocopier machines, Colour and Monochrome Printers, faxes and scanners.

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Appendix 26   **8 Tips for Great Online Presentations**

 Here are 8 tips that will help you to enhance the impact fullness of your presentations.

1 Know your result
What do you want to achieve by the end of the presentation? What will be your evidence of success? Is it to obtain 'buy-in,' secure a sale, or simply to share information? Remember, a presentation is only ever a means to an end, so be clear on your end goal.
Know the 3 or 4 key things you want to communicate during your presentation. Make sure you hit these core messages several times. An audience is unlikely to remember more than 3 or 4 key points anyway. Ensure the audience knows what is expected of them, particularly if you are seeking input or decisions from them.

2 Answer the questions the audience are thinking
Who are you? Are you credible? Why should I care?
Unless you are already known to the audience, they will want to learn something about who you are, so they can decide whether to engage with you or not. They will engage when they feel they can trust you and when they sense you care about them.
Audiences listen to radio WII FM – What's in it for me? As a presenter, you have to link what you are saying with how it is of benefit to the audience.

3 Keep it Simple
"I wrote him a long letter because I didn't have time to write him a short one."
This quote attributed to Winston Churchill is equally relevant for presentations and doubly so for presentations delivered online.
Simplicity is the ultimate sophistication; keep your slides simple, minimal words, beautiful images. One slide for every three minutes you are speaking is a good timing guide and no more than 5 or 6 bullet points per slide.
If possible bring each bullet point up separately, so the audience is not reading ahead, but focused on what you are saying. Use colour and graphics to keep things interesting, but you never want your slides to detract from what you are saying. The clue is in the term 'visual aid.'

4 See your presentation as a conversation
Try to talk with, not at your audience. To engage attendees, get your face on video so people can see you and ideally you can see your audience too.
Whilst you will use your slides as a prompt for what you are saying, remember to look at your camera, that red dot at the top of the screen. This is how you make eye contact with an online audience.
Buzz words, clichés, jargon and emotionless business speak will make the audience switch off. Of course, reading from slides wastes everyone's time because an audience can read for themselves. As the presenter, you breathe life into your presentation. Use simple language, share your own experiences and opinions, speak from the heart as well as the head.

5 Take the audience on a journey
Great presentations take the audience on a journey; you tell them a story with a beginning, middle and end. You speak about how challenges were overcome, lessons learned and how everyone lived happily ever after.
Or in business terminology you balance realism (how things are) with optimism (how things could be.)

6 Know your opening & close

Know the first two or three sentences that will come out of your mouth – plan your opening, whether it is an introduction, highlighting what you plan to cover, or posing a question to get the audience thinking. If you've delivered presentations in the past, you probably felt that after a minute or two you got into the flow of it. Knowing your opening will help you bridge that gap.

Bookend your presentation by knowing exactly how you plan to close, that is, the last sentence or two that you will utter. And close with something more engaging than 'any questions?' Even turning it into a sentence 'I'd welcome any questions you might have,' is stronger.

7 Use pauses and silences.

Skilled presenters use silence and pauses to add to the effectiveness and polish of a presentation. Short pauses, one or two seconds are for the simple purpose of separating your thoughts. All you have to remember is to slow down. Give the audience a chance to absorb what you are saying. Long pauses, more than two seconds are very powerful. They prompt the audience to think about what you just said. It is also a way of regaining the audiences' attention.

8 Audiences remember how you make them feel

Don't stress out about forgetting everything you plan to say. Audiences will never know what you didn't tell them! Studies show that people forget 90% of what is said during a presentation. What audiences take away is how you made them feel and the actions they were inspired to take.

The best presentations are conversational in tone and the best presenters are the best of themselves. They tap into their strengths and communicate with the audience in an easy, elegant way that is consistent with their sense of self. In other words, they demonstrate authentic leadership.

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Appendix 27   **Innovative Control Mechanisms for Students' Performance**

1. Lecture presentations by teacher
2. Use of PowerPoint presentations
3. Class discussion conducted by teacher
4. Recitation oral questions by teacher answered orally by students
5. Lecture presentations by another instructor(s) from a special field (guest speaker)
6. Debate on current issues by students from class
7. Practical exercises, Laboratory experiments performed by more than two students
8. Audio-visual lectures
9. Role Playing and Interviews
10. Problem solving or case studies
11. Supervised individual/group project work
12. Textbook assignments
13. Reading assignments in journals, periodicals etc.
14. Assignments, tests, quizzes
15. Library research on topics or problems
16. Field trips
17. Open textbook tests, take home tests
18. Group projects
19. Individual projects
20. Use of interactive board as aid in teaching
21. Use of diagrams, tables, graphs, and charts by instructor in teaching
22. Conduct Surveys
23. Coaching: assistance provided for students having difficulty in the course
24. Oral reports Presentations by students
25. Students Reading aloud
26. Brainstorming small group, students identify a list of techniques and strategies to solve the problems found in a case study.
27. Blended learning
28. Problem Base Learning (PBL)
29. Flipped learning

Appendix 28   Student's Welfare Services and Support

The Student Welfare Services deals with the basic facilities for the installation and living of students. This service ensures the quality of life of students. Some services are:

- Provide assistance to get the Government Students Subsidy

- Student Affairs Office

- Help in finding accommodation

- Medical care

- Student Activities and Events

- Consulting Services

- Free access / facilities for students with special abilities

- Students Union

- Participation of students in all the College Committees

- Alumni Association

- Provide assistance in finding a job

- Continuous counselling in their future carrier

- Participate in Research projects

- Financial Aid to students facing financial problems & Scholarships

Appendix 29   **Library**

THE NUMBER OF THE BOOKS IN THE LIBRARIES OF THE C.D.A COLLEGE

• The number of books in the **Nicosia** library is: **3717**
• The number of books in the **Limassol** library is: **3660**
• The number of books in the **Larnaca** Library is: **2018**
• The number of books in the **Paphos** library is: **1291**

 • The Total Number of books in the **4 college libraries**: Nicosia, Limassol, Larnaca
   and Paphos are: **9860**.

Teaching materials (books, manuals, journals, databases, and teaching notes) are updated regularly:

Library Resources: Text Books and Online Platforms

Upgraded Library Services for Students and Academic members

• Cooperation with EBSCO & Emerald Electronic Libraries
• Insertion of the Internet Program openAbekt cloud system for classification
• Add of Virtual Private Network (VPN) and upgraded VPS services
• Electronic Platform Moodle & Electronic Evaluation

In addition, CDA College has fully equipped the library with updated editions and scientific journals, new electronic platforms, Databanks, Infotrack, upgraded VPN services for students and academic staff. Additionally, CDA College has four (4) libraries in Limassol, Nicosia, Larnaca and Pafos capitalizing on interlibrary loans. The students can immediately borrow books from one library to the other. Moreover, the library is regularly enriched with new editions of textbooks, magazines and e-databases. The new e-libraries EBSCO and Emerald has also many textbooks and scientific journals on all areas. Here below you can find the detailed numbers of books in the libraries.

• The number of books in the Limassol library is: 3,660
• There are 550 books on the ICT sector.
• Most of the text books editions are from 2000 – 2019.
• Journals-Articles: 72, EBooks: 26, Databases: 25, General Information websites: 15, e-Libraries: 8.
• The total number of books in the other 3 libraries of the College (Nicosia, Larnaca and Pafos) is 6,200.
• The College is a member of electronic libraries and databases.
• College has an interlibrary loan service with the University of Cyprus, Cyprus University of Technology and several Data Banks.
• The library is using DEWEY a worldwide known library classification system for organizing the library collections,
• OpenAbekt a cloud base system for cataloguing, loading and searching of books.
• There are computers with Internet connection and searching software

- Easy access to books, periodicals, scientific journals and other reference material
- IFRS Foundation (International Financial Reporting Standards) so as to be-updated on the latest Accounting manuals and books.
- SearchBank databases through its Internet facilities, stock of videos,
- Connected with internet so that students will have free access.
- the library is regularly upgraded with new editions of textbooks, magazines and e-databases.
- CDA Library is also using e-libraries such EBSCO and Emerald and also students have VPN services through these e-learning platforms which they provided us with a lot of books, articles and researches on all programs.
- "Moodle" the e-platform of CDA College has all the tutors teaching notes updated and available to all the students.
- Easy access to books, periodicals, journals and other reference material
- SearchBank databases through its Internet facilities, stock of videos,
- Connected with internet so that students will have free access.
- CDA Library is also using e-libraries such EBSCO and Emerald and also students have VPN services through these e-learning platform.

Both the faculty staff and students have mutual and effective communication through Moodle the global electronic platform. All staff and students can find the current and new editions on books, journals and periodicals through the College computers, Wi-Fi access or from their home. They all have their personal login username and password. They can immediately borrow books from one library to the other. Additionally, the library is regularly upgraded with new editions of textbooks, magazines and e-databases.

LIST OF DATABASES AND ELECTRONIC JOURNALS

Below there is a list of online magazines, articles and books, databases and catalogues of academic libraries, online encyclopedias and general informational websites where the libraries of CDA College either have access or a subscription. Further below there is a list for accessing the library catalogues and the databases of online books and magazines of the University of Cyprus, the Technological University and the Neapolis University of Paphos that our college works with and have given us access to them.

- Περιοδικά-άρθρα/Journals-Articles: 72
- Ηλεκτρονικά Βιβλία/EBooks: 26
- Βάσεις Δεδομένων/Databases: 25
- Πανεπιστήμιο Κύπρου Βιβλιοθήκη/University of Cyprus
- Τεχνολογικό Πανεπιστήμιο Κύπρου/ΤΕΡΑΚ
- Ελληνικό Ανοικτό Πανεπιστήμιο/Open University of Greece
- Νεάπολης Πανεπιστήμιο Πάφου/Neapolis University of Pafos
- Γενικοί Πληροφοριακοί Ιστότοποι/General Information Sites: 15
- Συλλογικοί Κατάλογοι Ακαδημαϊκών Βιβλιοθηκών/Union Catalogue Academic
- Libraries: 8
- Εγκυκλοπαίδειες/Encyclopedias: 2
- Journals in Library: 27

LIST OF ACADEMIC DATABASES AND SEARCH ENGINES

This page contains a representative list of major databases and search engines useful in an academic setting for finding and accessing articles in academic journals, repositories, archives, or other collections of scientific and other articles. As the distinction between a database and a search engine is unclear for these complex document retrieval systems, see:

- the general list of search engines for all-purpose search engines that can be used for academic purposes
- bibliographic databases for information about databases giving bibliographic

LIST OF ONLINE DATABASES

This is a list of **online databases** accessible via the Internet.

LIST OF ONLINE DICTIONARIES

An **online dictionary** is a dictionary that is accessible via the Internet through a web browser. They can be made available in a number of ways: free, free with a paid subscription for extended or more professional content, or a paid-only service. Some online dictionaries are organized as lists of words, similar to a glossary, while others offer search features, reverse lookups, and additional language tools and content such as verb conjugations, grammar references, and discussion forums.

LIST OF INTERNET ENCYCLOPEDIAS

This is a **list of encyclopedias accessible on the Internet**. Access Free

Appendix 30

College's International Collaborations with other Institutions
ERASMUS+ and International Agreements

CDA College collaborates with European Higher Education Institutions under ERASMUS +. CDA College has signed agreements with 26 European Universities for the exchange of number of students and professors between the Universities for study and teaching respectively in all academic areas.

These partnerships with foreign Universities support the internationalization of the CDA College student and academic community, the mutual exchange of international good teaching practices and the continued pursuit of scientific excellence in the European unified Higher Education Area.

This is overall information of the activities that our office had in the year 2015 – 2021. This Erasmus period it has been an excellent year for the College, we had an increase number of students' mobilities.

CDA College had a number of professors from all over Europe visiting for teaching and training in the areas of Business, Accounting, Computing Languages and other areas.

The CDA College has 26 agreements with other foreign universities.

Herebelow are the CDA Instructors and Students visited foreign Universities:

- 23 CDA Instructors as visiting professors and
- 30 CDA Students participating in foreign universities lectures

Herebelow are the Foreign instructors and students visited CDA College:

- 120 foreign instructors visited CDA College as visiting professors.
- 150 foreign students from France, Lithuania, Poland, Romania, Hungary and Portugal participating in CDA College lectures.

The Erasmus office of CDA College expecting better results and more success next year due to several programs that we applied, we hope that all will be accepted.

CDA College
Erasmus Office
Officers: Dr. (c) Tonia Georgiou
                Mrs Stella Michaelidou
                Dr. Valentina Christodoulou
                Mrs Katerina Ioannou
                Mrs Karolina Kyprianou – Dissemination officer

International Agreements with CDA College						
No	**University Name**	**Institution Code**	**Coordinators Name**	**Coordinators E-Mail**	**Website**	**Country**
1	**Guarda Polytechnic Institute**	P GUARDA01	Av. Dr. Francisco Sá Carneiro, 50	E-mail: gmc@ipg.pt	www.ipg.pt	Portugal
2	**DUNAÚJVÁROSI FŐISKOLA /COLLEGE OF DUNAÚJVÁROS/**	HU DUNAUJ01	Dániel Árpád KISS	kissdaniel@mail.duf.hu	www.duf.hu	Hungary
3	**zegedi Tudomanyegyete m - University of Szeged**	HU SZEGED01	Dr. habil. Jozsef	galj@mk.u-szeged.hu	www.u-szeged.hu	Hungary
4	**Alexandru Ioan Cuza University of Iasi Faculty of Economics and Business Administration**	RO IASI02	Prof.dr. Henri Luchian or Dorina Moisa	erasmus@uaic.ro dorina.moisa@uaic.ro	www.uaic.rom	Romania
5	**Klaipeda University**	LT KLAIPED01	Dalia Želvytė-Mockuvienė	Dalia.Zelvyte-Mockuviene@ku.lt	www.ku.lt	Lithuania
6	**Klaipeda State University of Applied Sciences**	LT KLAIPED09	Mrs Jurate Danieliene	j.danieliene@kvk.lt	www.kvk.lt	Lithuania
7	**WYZSZA SZKOŁA HANDLOWA W RADOMIU (Radom Academy of Economics)**	PL RADOM04	MA Izabela Kopycka	ikopycka@wsh.pl	www.wsh.pl	Poland

8	**Małopolska Wyższa Szkoła Ekonomiczna w Tarnowie (Malopolska School of Economics in Tarnow)**	PL TARNOW01	MSc Radoslaw Pyrek MSc Anna Mikos	iro.mwse@mwse.edu.pl anna.mikos@mwse.edu.pl	www.mwse.edu.pl	Poland
9	**Universitatea din Oradea**	RO ORADEA01	Ms Carmen Buran	cburan@uoradea.ro	www.uoradea.ro	Romania
10	**Vilnius College of Technologies and Design**	LT VILNIUS14	Nijole Popoviene	n.popoviene@vtdko.lt	www.vtdko.lt	Lithuania
11	**WEST LITHUANIA UNIVERSITY OF SCIENCE**		Angele lIleikiene	angele.lileikiene@ltvk.lt	www.ltvk.lt	Lithuania
12	**UNIVERSITE DE BRETAGNE-SUD**	FR VANNES04	FR VANNES04	sandra.vessier@univ-ubs.fr	www.univ-ubs.fr	France
13	**University Of Craiova**	RO CRAIOVA01	Vice-rector of International Relations and Academic Image Professor Cristiana Teodorescu, PhD	cteoroscu05@yahoo.fr	www.ucv.ro/en/	Romania
14	**Vytautas Magnus University**	LT KAUNAS01	Greta Brazaitytė Position International relations coordinator	greta.brazaityte@vdu.lt	K. Donelaičio g. 58, LT-44248, Kaunas, Lithuania	Lithuania
15	**Newton College**	CZ BRNO08	Jan Orava, Mgr	ja.orava@newtoncollege.cz	WWW.NEWTONCOLLEGE.CZ	czech republic
16	**Georg-August-Universität Göttingen**	D GOTTIN01	Dr Uwe Muuss Karen Denecke	karen.denecke@zvw.uni-goettingen.de	https://www.uni-goettingen.de/en/	Germany

17	**Kaunas University of Applied science**	LT KAUNAS02	Jolanta Valiaugiene Head of the Department of International Relations	jolanta.valiaugiene@go.kauko.lt	www.kaunokolegija.lt	Lithuania
18	**Jade University of Applied Sciences**	D WILHELM02	Dr. phil. Julia Blandfort	julia.blandfort@jade-hs.de	https://www.jade-hs.de/en/	Germany
19	**Freie Universität Berlin**	D BERLIN01	Student Exchange Office / SSC Nicole SCHINDLER ERASMUS Programme Administrator	incoming@fu-berlin.de	https://www.fu-berlin.de/en/index.html	Germany
20	**Università degli Studi di Foggia**	I FOGGIA03	Giulio Esposito	giulio.esposito@unifg.it	https://en.unifg.it/	Italy
21	**Glyndwr University**	UK DEESIDE01	Stewart Milne Head of Research Services Glyndwr University	"Stewart Milne" <S.Milne@glyndwr.ac.uk>	www.glyndwr.ac.uk	UK
22	**Szent Istvan University**	HU GODOLLO01	Dr. Kiss Csilla / Csilla Kiss, PhD Head of Department of Foreign Languages Erasmus Coordinator	"Csilla Kiss" <Kiss.Csilla@gk.szie.hu>	http://gk.sziu.hu/	Hungary
23	**TURKU UNIVERSITY OF APPLIED SCIENCES**	SF TURKU05	Anniina Jaranne	TEBinternational@turkuamk.fi	www.tuas.fi	Finland
24	**UNIVERSIDAD DE ALMERIA**	E ALMERIA01	University of AlmeriaINTERNATIONAL OFFICE Erasmus coordinator MARÍA SAGRARIO SALABERRI RAMIRO	erasmusual@ual.es	http://cms.ual.es/UAL/buscar/index.htm?q=erasmus&hl=en	Spain
25	**UNIVERSITAET GRAZ**	A GRAZ01	Mag. Sabine Pendl	international@uni-graz.at	www.uni-graz.at	Austria

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Appendix 31   COM505 Hacking & Defensive Technology

Course Title	Hacking & Defensive Technology				
Course Code	COM 505				
Course Type	Compulsory				
Level	Diploma				
Year / Semester of Study	Free Elective				
Lecturer's Name	Christina Agathangelou				
ECTS	3	Lectures / week		Labs / week	
Course's Aim and Objective	The course covers the fundamentals of hacking and the different attack methods. This course provides students with the concepts and skills for defensive technologies. It also includes an introduction to common countermeasures that effectively reduce and/or mitigate attacks.				
Learning Outcomes	Upon successful completion of this course, the student will be able to: • Identify methods used by hackers to gain unauthorized access • Describe the techniques that hackers use to alter system and cover their tracks • Analyse wireless network vulnerabilities • Perform network traffic analysis and sniffing • Compare and contrast defensive technologies				
Prerequisites					

Course Syllabus	Week	Contents of the Course
	1.	Introduction • History and Current State of Hacking • Ethical Hacking • Profiles of Hackers and Cybercriminals
	2.	Legal and Ethical Considerations
	3.	Basic Equipment Controls
	4.	Wireless Network Vulnerabilities
	5.	Web and Database Attacks
	6.	Malware
	7.	Mid-Term Examination
	8.	Network Traffic Analysis and Sniffing
	9.	Social Engineering Attacks
	10.	Incident Handling

	11.	Defensive Technologies
	12.	Threat Assessment Testing
	13.	Concepts and Methods of Mitigation of Risks
	14.	Revision for Final Exams
Methodology	Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations	
Bibliography	Title: Penetration Testing and Network Defense Author(s): Andrew Whitaker, Daniel P. Newman Publisher: Cisco Year: 2006 ISBN: 1-58705-208-3	
Evaluation	40% coursework and 60% final examination Passing mark: 50%	
Language	English	

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Appendix 32   COM506 Digital Forensics

Course Title	Digital Forensics
Course Code	COM 506
Course Type	Compulsory
Level	Diploma
Year / Semester of Study	Free Elective
Lecturer's Name	Christina Agathangelou

ECTS	3	Lectures / week		Labs / week	

Course's Aim and Objective	The course enables students to gain foundation and practical skills in digital forensics using a mixture of problem-based learning and lectures. This course discusses the principles and methods on how investigators collect, recover and examine digital evidence.
Learning Outcomes	Upon successful completion of this course, the student will be able to: • Explain and properly document the process of digital forensics investigation • Investigate incidents and intrusion response • Recover data • Analyse computer forensics • Examine mobile forensics • Perform network analysis
Prerequisites	

Course Syllabus	**Week**	**Contents of the Course**
	1.	Introduction Overview of terminology Digital, Cyber & Computer Forensics
	2.	Key Technical Concepts • File Extensions & File Signature • Storage & Memory • Computing Environments • Data Types • File Systems
	3.	Legal Aspects
	4.	Labs & Tools • Forensic Laboratories • Policies & Procedures • Digital Forensic Tools
	5.	Digital Evidence

		• Removable Media
		• Mobile Devices
	6.	Collecting Digital Evidence
		• Documenting the crime scene
		• Chain of Custody
		• Cloning
		• Live System vs Dead System
	7.	Mid-Term Examination
	8.	Crime Reconstruction in Digital Forensics
		• Evidence Examination
		• Role Classification
		• Event Construction
		• Event Sequencing
		• Hypothesis Testing
	9.	Report Writing for Digital Investigations
	10	Internet & E-mail
		• Internet Overview
		• Web Browsers
		• E-mail Protocols
		• E-mail as Evidence
		• Social Networking Sites
	11	Network Forensics
		• Social Engineering
		• Network Security Tools
		• Network Attacks
	12	Mobile Device Forensics
		• Cellular Networks
		• Global Positioning Systems (GPS)
	13	Challenges & Concerns
	14	Revision for Final Exams

Methodology	Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations
Bibliography	Title: The Basics of Digital Forensics: The Primer for Getting Started in Digital Forensics Author(s): John Sammons Publisher: Elsevier Year: 2012 ISBN: 978-1-59749-661-2
Evaluation	40% coursework and 60% final examination Passing mark: 50%
Language	English

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Appendix 33   COM507 Image Processing

Course Title	**Image Processing**				
Course Code	**COM 507**				
Course Type	Free Elective Courses				
Level	Diploma				
Year / Semester of Study	2nd Year C Semester				
Lecturer's Name	Pelekanou Olga				
ECTS	3	Lectures / week		Labs / week	
Course's Aim and Objective	This course is an introduction to MatLab. Build on your Basic Knowledge of Image Processing. Students will use software programs such as MatLab to present visual examples in the form of Digital Image Processing.				
Learning Outcomes	This course aims to convey the essential concepts of digital image processing • Acquisition: cameras, interfaces, and computers • Processing, theory (Image Processing) • Practical applications of Image Processing • Elementary image analysis algorithms from an operational perspective with some exposure to theory				
Prerequisites	None				

	Week	Contents of the Course
Course Syllabus	1.	Chapter 1: Introduction. Types of Images. Image Geometry. Imaging Devices. Image acquisition.
	2.	Chapter 2: Image Representation in MatLab.
	3.	Chapter 3: Binary Images. Binary Image Processing. Binary Image Generation. Gray-Level Thresholding. Application Example in MatLab
	4.	Chapter 4: Logical Operations on Binary Images Application Example in MatLab
	5.	Chapter 5: Blob Coloring. Binary Morphology. Binary Image Compression.
	6.	Revision for midterm.
	7.	Mid-Term Examination
		Chapter 6: Contour Representation and Chain Coding. Example. Exercises

ΔΙΠΑΕ
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	8.	Chapter 7: Image Histogram and Point Operations. Application Example in MatLab
	9.	Chapter 7: Image Histogram and Point Operations. Application Example in MatLab
	10	Chapter 8: Objectives of Image Compression. Lossless Image Coding.
	11	Chapter 9: Lossy Image Coding. JPEG Image Compression Standard. Exercises in MatLab
	12	Exercises in MatLab
	13	Revision

Methodology	Lectures, presentations, articles discussion, independent and private study, preparation of projects, fieldwork and group work. Preparation for mid-term and final examinations
Bibliography	**COURSE BOOK:** **1.** Image Processing with MATLAB. Author: Kendall T. Publisher: CreateSpace Independent Publishing Platform, 2016. ISBN: 1539784401, 9781539784401 **RECOMMENDED BOOKS** 1. Introductory Digital Image Processing Author: John R. Jensen. Publisher: Pearson; 4th edition (2016). 2. Image Processing and Analysis Author: Stan Birchfield; ISBN-13: 978-1285179520; ISBN-10: 1285179528
Evaluation	40% coursework and 60% final examination Passing mark: 50%
Language	English