

Doc. 300.1.2

Higher Education Institution's Response

Date: 11 March 2022

- **Higher Education Institution:**
American College

- **Town:** Nicosia

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

In Greek:

Πληροφορική (4 έτη, 240 ECTS, Πτυχίο)

In English:

Computer Science (4 years, 240 ECTS, Bachelor)

- **Language(s) of instruction:** English / Greek
- **Programme's status:** Currently Operating
- **Concentrations (if any):**

In Greek: Concentrations

In English: Concentrations



The present document has been prepared within the framework of the authority and competencies of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, according to the provisions of the “Quality Assurance and Accreditation of Higher Education and the Establishment and Operation of an Agency on Related Matters Laws” of 2015 to 2021 [L.136(I)/2015 – L.132(I)/2021].

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.*

We have studied the report of the External Evaluation Committee (EEC) consisted of Prof. Christina Lioma, Prof. Xianghua Xie, Prof. Paolo Ciancarini, Mr. Christos Charalambous and Mr. Michael Michael regarding the educational evaluation-accreditation of the Bachelor in Computer Science carefully and thoroughly. We find that their report is objective and positive. Below we provide our response to all the recommendations for revisions/improvements noted in the EEC report. In addition, we refer to issues we felt they needed us to provide clarifications or further information. The revisions/improvements we made, have already been implemented and they are fully documented below and in the appendices provided.

1. Study programme and study programme's design and development

(ESG 1.1, 1.2, 1.7, 1.8, 1.9)

EEC - Findings:

It is not clear when the program started, despite the EEC requesting this information repeatedly. It is not clear what is the average intake and graduation rate of students from this program throughout the years it has been offered, despite the EEC requesting this information repeatedly.

American College's Response:

The program was registered with Cyprus Ministry of Education, Culture, Youth and Sports (it was then called Ministry of Education and Culture) in October 1991. Registration of a program of study with the Ministry did not require the program to be active. So up to October 1998 the program was inactive. Since October 1998 the program has been operating with a small number of students. The program did not attract a good number of students because it was not accredited. For Cypriot, European Union and International students the absence of accreditation meant that the Bachelor Degree title would not be recognized. For Cypriot students it also meant that students could not get the annual government student sponsorship of up to € 3.420. The non-accreditation of the program of study was the reason why the program did not attract a good number of students.

Within a week following the accreditation virtual visit we have provided the committee with important statistical data including average intake and graduation rate of students for the last 4 academic years. The picture for the years before these last 4 years was the same since the number of students was small.

EEC – Areas of Improvement and Recommendations:

It was not possible for the EEC to find a publicly available description of the formal composition of the committee, the regularity of their meetings, and the accessibility of the respective minutes of these meetings. The Organisation, Administration and Faculty Handbook does not include this information; it states only the responsibilities of the committee.

Furthermore, the two student members were absent from all four meetings, the minutes of which were provided to the EEC. The EEC received no minutes of the committee meetings where students actually attended the meeting. Therefore, the EEC cannot establish that the student involvement in the work of the committee is substantial enough. The EEC notes that the role of students in such committees is to be actively involved together with staff in providing and analysing information and planning follow-up activities. Student involvement needs to be active, not passive (for instance by being absent from meetings).

During the online visit, the EEC learned that the student representatives to the Quality Assurance Committee were selected by the faculty and not by the student body. The student body should elect itself its representatives to the Quality Assurance Committee.

It is not clear whether the Quality Assurance Committee supports the involvement of external stakeholders, either directly as members of the Quality Assurance Committee, or by consulting them on an ad-hoc basis.

According to the standards of quality assurance, the EEC recommends that the following is formalised and made publicly available: the composition of the Quality Assurance Committee, the dates of past and future meetings, the respective minutes of these meetings, the involvement of external stakeholders in the quality assurance work of the committee. The EEC also recommends that student participation to the Quality Assurance Committee is ensured in all meetings and that the student body itself elects its representatives to the committee, instead of them being appointed by faculty.

The programme under review was developed by an ad hoc committee composed of a number of relevant faculty members. This committee considered similar programs in other institutes. The application of A. C. American College to CYQAA states that these institutes were in Cyprus, UK, Europe and USA. However, according to the extra material provided to the EEC by the college, these institutes were the University of Cyprus, the European University of Cyprus, and the Aristotle University of Thessaloniki in Greece. B.Sc. curricula in Computer Science from the UK, USA, ACM, IEEE and other top-tier international professional bodies were not considered. No information is provided to show the involvement of external stakeholders, such as industrial partners, in the design of the program.

The responsibilities of the Academic Committee are stated in the Organisation, Administration and Faculty Handbook; however, no information about the formal composition of the committee, the regularity of its meetings, or the public accessibility of the minutes of these meetings was found by the EEC. The program was evaluated as per the institute's quality assurance procedures. These procedures were provided to the EEC (Annex4b – Quality Assurance). The EEC did not receive any of the reports, meeting minutes, or any other form of paper trail resulting from these procedures.

According to the application material of the college to CYQAA, each semester comprises five courses of 6 ECTS points each, totalling 30 ECTS points per semester, and 240 ECTS points after eight semesters. Overall the EEC has received contradictory information about the placement of courses per year in the program.

It is not clear to the EEC why 3 elective courses are offered in the English language, when an English language placement test or English language qualifications are a prerequisite to be admitted to the programme. Furthermore, the elective courses on Principles of Microeconomics, European History, History of Cyprus, Introduction to Philosophy, Political Studies, Introduction to Psychology, Principles of Sociology are not relevant to the programme.

The EEC recommends that the Computer Science component in the programme is enhanced. The EEC also recommends that courses which are offered by departments outside Computer Science are adapted to demonstrate the link between Computer Science and other disciplines, thus enhancing the overall programme cohesion.

The compulsory course Introduction to Artificial Intelligence CSC410 uses an outdated textbook (from 2008). This is an area that has seen massive developments in recent years, and that, like most topics in Computer Science, moves very quickly. This textbook needs to be updated.

The elective course Computer Applications CSC102 uses the textbook: Microsoft Office 2019 Step by Step. This is a textbook on one specialised commercial application. The scope of the course is much broader than this, as stated in the intended learning outcomes of the course. A broader textbook must be used.

Furthermore, the EEC has discovered that no industrial internship or other form of paid or unpaid stay at an industrial partner is part of the programme's curriculum. The college informed the EEC that local Cyprus laws forbid students outside the EU to work in Cyprus. However, no unpaid placement or project collaboration with industrial partners was found in the programme's design.

The college's response to the EEC's request of graduate employment information was that all students enrolled in this programme are international students, and that it was therefore not possible to track down the graduates' destination after employment. It is not clear to the EEC if all the graduates of the programme since the beginning of this program have always been exclusively international, or if the more recent graduates have been exclusively international. This information was requested by the EEC but was not provided by the college. It is not clear to the EEC why the college cannot collect employment information from international graduates, i.e. in which ways the college has tried to collect this information, if at all, and how the college has addressed, if at all, the reasons why it could not collect this information. Based on the information provided, the EEC cannot establish that the college sufficiently collects, monitors and analyses information on the career paths of graduates.

Another point that is unclear to the EEC is why the program graduates are exclusively international. It is not clear if this is by design or not. It is not clear what action the college has taken to analyse and rectify the fact that there are no local students from Cyprus in this programme. Furthermore, the EEC notes that according to the application material of the college to CYQAA, this programme is offered in Greek/English. However, all the courses of the programme are taught in English. It is not clear which elements of the programme, if any, are in Greek.

As stated also above, it is not clear if all students of this programme since its beginning have always been exclusively international, or not.

Furthermore, it is not clear when this programme started, despite the EEC requesting this information both during the online visit and as extra material to be supplied later.

Based on the information provided, the EEC cannot establish that the college sufficiently collects, monitors and analyses information on student progression, success and drop-out rates. Furthermore, the college management informed the EEC that, in order for this programme to be viable, at least 10 students per year are needed. The statistics provided for the last 4 years do not therefore support the viability of this programme.

The rate of students who have withdrawn from this programme is too high. In the last 4 years, 12 students have graduated and 8 have withdrawn. The college did not provide any strategy for addressing this.

American College's Response:

The formal composition of the Quality Assurance Committee and the regularity of their meetings have been made publicly available on the College's Website (<https://www.ac.ac.cy/en/the-college/quality-assurance>). This information has also been included in the Organization, Administration and Faculty Handbook (Annex 1, pg. 5). However, making minutes of the Quality Assurance Committee publicly available is not a standard practice shared by Academic Institutions

in Cyprus; still, minutes are available and at the disposal of visiting accreditation committees and other governmental bodies.

To ensure the students' involvement in the work of the Quality Assurance Committee a clause was added that at least one student must be present in the meetings of the Committee. If both students are absent, then the meeting is postponed. This clause has been added both in Annex 4b (Quality Assurance), in the Organization, Administration and Faculty Handbook (Annex 1, pg. 5), and on the College's Website (<https://www.ac.ac.cy/en/the-college/quality-assurance>).

Changes have been made so that the student representatives to the Quality Assurance Committee are elected by the student body, that is the Student Union. The change was added in Annex 4b (Quality Assurance), in the Organization, Administration and Faculty Handbook (Annex 1, pg. 5), and on the College's Website (<https://www.ac.ac.cy/en/the-college/quality-assurance>).

Furthermore, the Quality Assurance Committee supports the involvement of external stakeholders, as external consultants on an ad-hoc basis. This provision was added in Annex 4b (Quality Assurance), in the Organization, Administration and Faculty Handbook (Annex 1, pg. 5), and on the College's Website (<https://www.ac.ac.cy/en/the-college/quality-assurance>).

The composition of the Quality Assurance Committee details, the provision for external stakeholders' involvement, the student participation clause, and the provision that students' representatives are elected by the student body have been formalized, and made publicly available including also the dates of past and future meetings (see Annex 4b, Annex 1, pg. 5, <https://www.ac.ac.cy/en/the-college/quality-assurance>). Making minutes of the Quality Assurance Committee publicly available is not a standard practice shared by Academic Institutions in Cyprus; still, minutes are available and at the disposal of visiting accreditation committees and other governing bodies.

In the application for Accreditation of a program of study, we always write that when designing programs of study, we consider similar programs in other institutes in Cyprus, UK, Europe and USA. This is a general policy we follow when designing or revising programs. In the current program under accreditation, we considered similar programs offered by the University of Cyprus, the European University of Cyprus, and the Aristotle University of Thessaloniki in Greece; therefore, it was incorrect to write the above general statement. Instead we should have written that we have examined similar programs from other countries. Furthermore, for the particular program under accreditation, we also had the involvement of Mr. Angelos Gregoriou, CEO of Dynamic Works (<https://www.dynamicworks.eu/>), an external stakeholder (Annex 2 – Minutes (External Stakeholder)).

The formal composition of the Academic Committee and the regularity of their meetings along with other information have been made publicly available on the College's Website (<https://www.ac.ac.cy/en/the-college/academic-committee>). This information has also been included in the Organization, Administration and Faculty Handbook (Annex 1, pg. 2). However, making minutes of the Academic Committee publicly available is not a standard practice shared by Academic Institutions in Cyprus; still, minutes are available and at the disposal of visiting accreditation committees and other governmental bodies. Furthermore, the minutes regarding the approval of the program are attached in Annex 3 (Minutes (Approval)).

There is no contradiction between the application material and the additional material provided. In the additional material we did not provide information about the year and the semester each course is offered. In the additional material we explained how courses are linked together for those courses applicable (therefore we did not provide information about all the courses). In table 2 (page 28) of

the Application for Evaluation-Accreditation we provide the structure of the program i.e. the course distribution per semester and information on which courses are compulsory and which are optional.

The 3 elective courses offered in the English language are essential to the program as they are higher level courses compared to the English language admission requirements, and they prepare students for professional writing and provide advance language skills. At American College we follow the American system of education where bachelor degrees are 4-year degrees and they include general education courses such as Principles of Microeconomics, European History, History of Cyprus, Introduction to Philosophy, Political Studies, Introduction to Psychology and Principles of Sociology.

In order to enhance the Computer Science component of the program we have increased the number of Major Requirements to 132 ECTS and decreased the number of General Education Requirements to 54. The courses CSC314 Game Design and Development and MAJ101 Internship were added to the list of Major Requirements courses. In Annex 5 (Revised Curriculum) you may find the revised curriculum of the program and in Annex 6 (CSC314 Syllabus) and Annex 7a (MAJ101 Internship Syllabus) you may find the syllabus of the courses added (Annexes 7a to 7b refer to supplementary material for MAJ101). In addition, in order to enhance program's cohesion, faculty members teaching the General Education courses of the computer science were asked where possible to give examples to students as to how the specific discipline is useful and/or linked to Computer Science.

The text book of the course CSC410 Introduction to Artificial Intelligence was revised to a more recent one. In Annex 8 (CSC410 Syllabus) you may find the revised syllabus of the course.

For the elective course Computer Applications CSC102 the textbook was replaced with three other textbooks to cover the whole scope of the course. The new text books are found in the attached revised syllabus (Annex 9 – CSC102 Syllabus).

Aligned with the recommendations of the EEC, we have added an optional Internship module in the major requirements of the curriculum. "MAJ101 Internship" is an optional internship program. Internship can only be optional since the current legislation cannot guarantee to permit foreign students to do internship/work, even if it is a mandatory part of their studies and/or unpaid internship/work. In Annex 7 we enclose the module's Syllabus entitled "MAJ101 Internship" together with all necessary documents describing the methodology, eligibility criteria and procedure for organized internships and related forms (Annexes 7b-7e).

All students enrolled in this programme are international students, and therefore it was difficult to track down the graduates' destination after employment. However, we will intensify our efforts to effectively collect, monitor and analyse information on the career paths of our graduates.

The program is designed to admit students from any nationality. The reason for having only international students at the moment is that the program is not currently accredited. This is a major discouraging factor for Cypriot students as they cannot be employed (especially in the Public Sector) with a non-recognized degree. Similarly, Cypriot students enrolled in a non-accredited degree are not eligible to receive the government's student sponsorship when they study in a non-accredited program of study. This is a serious drawback of any program that is not accredited and it certainly discourages local students to enrol in a non-accredited program. Hopefully the above matters will most likely be addressed once the program is accredited. Further, as there are currently only International students enrolled, the program is offered solely in English. Once Cypriot student numbers increase then the program can also be offered in Greek as well.

As stated previously, since the beginning of this program all students enrolled have been exclusively international.

The program was registered with Cyprus Ministry of Education, Culture, Youth and Sports (it was then called Ministry of Education and Culture) in October 1991. Registration of a program of study with the Ministry did not require the program to be active. So up to October 1998 the program was inactive. Since October 1998 the program has been operating with a small number of students. We have provided to the committee important statistical data including student progression, success and drop-out rates for the last 4 academic years. The picture for the years before these last 4 years was the same since the number of students was small.

Another problem with running a non-accredited program is that with the small number of students you cannot really make any decent statistical analysis. When the program gains accreditation many more students will join the program and it will then be possible to collect information and make decent statistical analysis.

It is true that for this program to be viable, at least 10 students per year are needed. The running of the program is subsidized by other profit making programs of the College. After the program gains accreditation the minimum of 10 students per year will be achieved and the program will become viable.

The feedback we have for most students who have withdrawn from this programme is that the main reason for withdrawing is the non-accredited status of the program. In spite of knowing that the program was not accredited at the time the students enrolled, they have later on made the decision of withdrawing. This issue will be resolved upon accreditation of the program.

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

EEC - Findings:

The teaching methods are quite conventional and traditional, with no evidence of innovative, more interactive, methods. We found neither evidence of student-centered approaches to teaching or learning nor any effort on developing and supporting autonomous learners. The systematic use of a Moodle platform is appreciated.

The class videos with which we were supplied displayed clear competence by the instructors and some good familiarity with relevant material, however only not all instructors hold degrees in fields closely related to computer science.

Based on videos and on interviews with students, it was clear that lectures are traditional. It did not appear that any visiting employer or even academics had been involved to provide guest lectures in order to variate the teaching approach.

The students interviewed by the EEC commented however, that more activities were needed for students in class. The fact that class sizes are quite small provides a base for a more personalised learning experience.

As the programme has no external internship offer, adding some opportunities for work-based learning would be advantageous. Pursuing some partnerships with companies interested in Computer Science products and ICT applications and improving relations with employers which have been discussed during the presentations might be a way of facilitating such developments.

American College's Response:

After a meeting with the program faculty we have decided to enrich our teaching methods with a mixture of contemporary and innovating methods. These methods include lectures, power point presentations (offline and online teaching), problem solving, class discussion, group work, individual assignments, groups projects, case study discussion, simulation exercises, article and case discussion and project presentations. In addition, we utilize class practical trainings, practical trainings in laboratories, social media integrations in class, guest speakers, and field trips. Another teaching technique that we have adopted is the formative assessment to provide immediate feedback, understanding and evaluation before the end of a taught material. This promotes active learning in between the lessons. Moreover, we are creating learning stations by splitting the students and by rotating them as we consider this an effective learning technique. Stations could for instance contain either listening to a lecture, watching videos, reading an article, or completing an exercise or puzzle. Then, we conclude with a class discussion or allocate questions to students. Furthermore, another teaching technique we have adopted is experiential learning which allows students to comprehend theory and academic content and how the taught content is applied to real-life experiences. Additionally, we apply the blended learning technique that combines classroom instructions with online learning resources and content and related software to deeper grasp the essence of that communicated material. The above were presented to all faculty members in a training session, and we have put it into implementation ever since.

The qualifications of the instructors teaching the computer science courses of the program have qualifications in computer science or qualifications closely related to computer science (e.g. Computer Engineering). All instructors' qualifications are presented in Table 4 of the Application for Evaluation-Accreditation of the program.

Having guest speakers (academics and employers) to teach at the College was always a standard practice for all programs offered at American College. Guest speakers' invitations have been reduced due to the pandemic restrictions, but the practice will be resumed upon lessened Covid-19 measures.

The enriched teaching methods mentioned above provide more opportunities for a more personalized learning experience especially to small size classes. Thus, we are utilizing more in-class activities such as problem solving, simulation exercises, case discussion, practical trainings in laboratories, video discussion, exercises and quizzes, and discussion on real life scenarios.

Aligned with the recommendations of the EEC, we have added an optional Internship module "MAJ101 Internship" in the major requirements of the curriculum. In Annex 7a we enclose the module's Syllabus entitled "MAJ101 Internship" together with all necessary documents describing the methodology, eligibility criteria and procedure for organized internships and related forms (Annexes 7b-7e). In Annex 5 you can also find the revised curriculum. Moreover, students are strongly encouraged to work with the College's external partners when compiling their Thesis. This is also supported by their supervisor and the Career Office.

EEC – Areas of Improvement and Recommendations:

- The program is traditionally taught with no special examples of the adoption of advanced or innovative approaches. The teaching approach is scarcely student-centered. Consideration should be given to moving away from the traditional didactic approach to teaching to a more interactive teaching style.
- There are too few instructors with expertise in Computer Science. Add some more instructors with degrees in Computer Science, and help the current staff to innovate their teaching approach, for instance by offering to staff didactic training, or making such training compulsory to newly hired staff with no teaching experience.
- Consideration should also be given to varying activities in the 1-hour teaching blocks, possibly including some team-based exercises and small in-class projects.
- More variety in assessment techniques would be benefit. The exams viewed were mostly in the format of multiple-choice or open-ended questions, which is only appropriate for testing some dimensions of knowledge in computer science and not well suited to problem solving. The topics on the assignments that were viewed seemed quite descriptive.
- Based on the assignments viewed, more training on report writing would be appropriate.
- There appears to be a heavy reliance on exams throughout the program. There is increasing concern globally that written exams based on closed questions are not the best way to assess student knowledge. Activities based on team projects should be incentivized.
- In order to align the programme with contemporary practice, we recommend a strategy of gathering best practices in highly regarded schools or departments and consequent training for staff. In addition, the production of a standard approach to assessment criteria is recommended, consideration of more innovative teaching and assessment methods, the introduction of teaching and assessment linked to practical situations.
- Since Computer Science studies are internationally based on both theory and practice, inviting some experts from the outside world to talk about the jobs and careers available in ICT and

software development could help students to mature an autonomous view of their future profession.

- There is no thesis element, and we recommend to include in the programme some kind of final thesis, possibly linked to a project. There are two courses (CSC414 and CSC415) on Computer Science projects, offered in semesters 7 and 8, however each of these courses is worth 6 ECTS points, which is not sufficient to replace a BSc thesis. Adding a thesis element would help students to improve their autonomy, and also to progress in their studies as many universities have this as a requirement for admission to further studies.

American College's Response:

We have enriched our teaching methods with a mixture of contemporary and innovating methods, including lectures, power point presentations (offline and online teaching), problem solving, class discussion, group work, role play, individual assignments, groups projects, case study discussion, simulation exercises, article and case discussion and project presentations, class practical trainings, practical trainings in laboratories, social media integrations in class, guest speakers, and field trips.

Pursuant to the recommendation of the EEC we have agreed to employ Dr. Ioannis Filippopoulos (Annex 18 – Pre-employment Agreement), to amplify and strengthen our Computer Science Department. Dr Filippopoulos holds an MSc in Information Technology (Kapodistrian University of Athens), an MBA from Middlesex University, and a PhD in Computer and Networks Engineering from the University of Thessaly, Greece. He is specialized in Geographical Information Systems. IoT, Big Data, AI, ML and Blockchain platforms, and has various journal publications and conference presentations. We have recently implemented compulsory training sessions for faculty members in areas such as pedagogy (e.g. June 23, 2021, 'Teaching Models Seminar by Pedagogy Expert'), using technology in teaching, and intelligence gathering in higher education which has analysed all stages in data gathering, analysis, and dissemination of results. For newly hired faculty we hold biannual orientation seminar which cover teaching methods and practices, student pedagogical approaches, effective communication, college policies and regulations, faculty right, duties and responsibilities, organizational structure, and many more. The most recent orientation seminar took place on Wednesday, 02 February 2022.

Varying activities will also be included in the 1-hour teaching blocks, comprising of team-based exercises and small in-class projects to achieve student interaction.

According to the Ministry of Education regulations final exams should carry a weight of at least 50%, with the other 50% on coursework assessment. Although faculty members currently implement 'authentic' assessment (e.g. Case Studies, Field Trips, Role Play, and Problem Solving), we are enriching this practice by utilizing more 'authentic' assessment tools, such as simulations and laboratory exercises, depending on the nature of each course. One addition to 'authentic' assessment is the inclusion of MAJ101 Internship into the course. In respect to assessment criteria, in Annexes 10a, 10b, and 10c we enclose guidelines for students written work, used at the College for student assessment. Faculty members are free to design their examination question papers as they see proper according to the nature and level of the course. However, we have decided and informed our faculty that they need to include in their examination question papers a variety of question types, so that to test students' academic knowledge and to examine students' ability to apply this knowledge.

Based on your suggestions, we have scheduled the following workshops and coaching sessions for students in order to enhance their research and report writing skills:

1. Public Speaking and making Presentations – Presenter: Mr. M. Charalambous (scheduled for April 2022)
2. The Literature Review; A Step-by-Step Guide - Presenter: Dr. C. Tsolaki (scheduled for April 2022)
3. Analysing your Data and Drawing Implications - Presenter: Dr. C. Louca (scheduled for May 2022)

According to the Ministry of Education regulations final exams should carry a weight of at least 50%, with the other 50% on coursework assessment, which also includes a mid-term examination (approximately 15%). Faculty are instructed to allocate the remainder assessment weight on activities based on team projects and student interaction.

As recommended by the EEC, to align the program with contemporary practice, the Director of Academic Affairs and the Department Head and Program Coordinator continuously look for best practices for assessment criteria and techniques, innovative teaching and faculty training. Some of the highly regarded institutions in the area of Computer Science in Europe to look for and benchmark best practices include -but not limited to-: The University of Edinburgh, the Technical University of Munich, the University of Manchester, the Technical University of Catalonia, The National (Metsovian) Technical University of Athens, and others.

Guest employers and practitioners have always been a standard practice for all programs offered at American College. Quest speakers' invitations have been reduced due to the pandemic restrictions, but the practice will be resumed upon lessened Covid-19 measures, hence students are presented with recent technology and software developments, employment issues and career progression, and future trends on the field of Networks and Information Technology in general.

The two courses CSC414 and CSC415 is basically one course broken down into two semesters, and totalling 12 ECTS. CSC415 is a continuity of CSC414. Both courses are actually the final year thesis of the program. 12 ECTS is usually the expected amount of ECTS assigned to a bachelor degree thesis or final year project according to Computer Science programs offered by other institutions in Cyprus.

3. Teaching staff (ESG 1.5)

EEC - Findings:

The Department of Computer Science consists of 4 full-time lecturers and 3 part-time lecturers. Regrettably, the College failed to clarify full time equivalent (FTE) number of staff, despite repeated requests for this figure.

A staffing growth plan and associated pay budget were presented to the panel, upon request. The investment plan seems to be rather modest. With 1 FTE to be added 2 years after accreditation and 1 further the year after, the student staff ratio would become too high.

The College presented an example staff recruitment material, which contains very little information on job description. This level of brevity is unusual in higher education sector.

The panel discussed with current lecturing staff on various issues of staff training and development. From the conversation, it seems that there is a lack of understanding on, for instance, promotion. The College documentation on promotion and its process could be more detailed, particularly on criteria for promotion. They should cover teaching, research, admin and leadership, professional development and esteem.

The normal teaching load of 12 hours (delivery) for lecturers is relatively high, considering normally twice as much time is needed to prepare the delivery, marking, and deal with student enquiries.

The College makes no distinction between research enhanced/focused lecturers and teaching enhanced/focused lecturers. There is one singular academic career pathway, and teaching load is rank specific, i.e. senior academics are expected to carry out more research but with less teaching. Support for research, e.g. annual research budget, is modest.

There is no clear evidence to suggest that regular professional and teaching focused training have taken place.

Research activity in the department is an area that requires growth and investment. External collaboration should be encouraged and better supported (financially). From the discussion, there is very little activity on external research grant capture.

American College's Response:

According to our teaching load policy (see Annex 1 - Organization, Administration and Faculty Handbook) which is in accord with other private academic institutions in Cyprus and abroad the teaching load of a full-time Lecturer and Assistant Professor is 12 hours per week per semester (24 hours per week per 2 semesters). According to Table 3 of the Application for Evaluation-Accreditation, part-time faculty members teaching Computer Science courses teach 4 courses (12 hours) per 2 semesters, hence their full time equivalent (FTE) is 0.5 (12/24).

2 years after accreditation we will employ 1 Full-time equivalent (FTE) teaching personnel to satisfy the additional teaching needs of Year 1. 3 years after accreditation we will employ another 1 FTE equivalent teaching personnel to satisfy the additional teaching needs of Year 2 and so forth. With a maximum intake of 30 students per year, 5 years after accreditation the student/full-time faculty ratio will be 14 to 1 (120 / 8.5 FTE). The ratio 14 to 1 is considered low enough.

Based on your comment we have revised our Academic Vacancy Advertisement template. In Annex 11 you may find the revised template (sample). The template provides adequate information concerning the vacancy appropriate for higher education sector.

Based on your comment regarding our promotion criteria and procedure we have made the necessary revisions. In Section 2.9 (page 42) and Section 2.3 (page 14) of the enclosed Organization, Administration and Faculty Handbook you may find all the revised information related to Faculty Promotion including the criteria (you need to refer to the Faculty Rank minimum requirements found in section 2.3) and procedure. The revisions are in accord with the Agency of Quality Assurance suggested regulations. The revised sections were communicated and explained to all academics of the College.

12 hours teaching load is the norm for private institutions of higher education in Cyprus. Anything less would make our operation non-viable. However, this teaching load can be reduced in the case of increased research or administrative work.

A distinction exists between research focused and teaching focused faculty. Section 2.5.3, pg. 18 of the Organization, Administration and Faculty Handbook (Annex 1), clarifies that faculty members can choose a Research or Less Research track. Academics on a Research track teach less hours than those on a Less Research track. Faculty members, can change tracks throughout their career, depending on their current and future research activities. Their choice is communicated to the Director of Research through the Track Declaration Form (Annex 12), submitted every academic year. In addition, following the recommendations of the EEC, the annual research budget was increased from € 15.000 to € 25.000 (Annex 14).

At American College we believe that in order to increase and improve the quality of education of the programs of study offered, faculty should also continuously upgrade their knowledge and skills. In that framework, we implement specialised in-house training seminars and workshops throughout the year, addressed to all faculty ranks and positions; for full time faculty, these sessions are compulsory. In Annex 13 (Staff Development activities) all faculty training activities are listed, including training seminars, conferences and more. In addition, the College provides subsidy for participation in non-in-house seminars and other professional development activities.

Research is essential and significant at American College thus it is supported in various ways. Research is supported financially through Departmental and Individual Budgets (Annex 19 – Internal Funded Policy), which faculty can use any way they see effective in enhancing their research skills and built their network. Furthermore, faculty engaging in research receive teaching load relief as a standard policy. This teaching load deduction is extended further as their research output significantly increases. All research results and output are disseminated to all faculty members, and depending on the topic and nature of the research output, this is also distributed to all students and external collaborators through the College Newsletter. The little activity on external funded research at the moment is due to the fact that currently our faculty are focused on publications in International peer reviewed journals.

EEC – Areas of Improvement and Recommendations:

Given that the current number of students on this programme is modest, i.e. well below 10 each year, the number of staff in the department seems to be adequate, i.e. 4 full time and 3 part time. However, it does mean that each lecturing staff needs to deliver many courses for this programme. This has a very high demand on specialized knowledge in a variety of areas of computer science for each lecturer. Typically, final year courses should align strongly with academic staff research

interest and activity. This is particularly important for a Science programme. With such a small lecturing team, this is challenging to achieve. The investment on research could be much improved. The financial support for academic staff to carry out research activity is rather modest. The teaching load is comparatively high and it is more so because of the diverse courses each academic has to cover in teaching. Research time is thus very limited.

The College's staffing plan is inadequate. With over 120 students in total (projected by the college for this programme), 5 or 6 full time lecturing staff is insufficient. Currently, there are well under 10 students in each year. A growth of multiple times in student number cannot be covered by a growth of 1 or 2 lecturers. The staff recruitment material provided by the College is not in line with common practice in the HE sector. The example job advert provided to the panel does not include proper job description. It does not clearly specify essential criteria and desirable criteria. It provides no information on person specification and required evidence. This is extremely unusual for a highly skilled and specialized professional position. This is a worrying indication of lack of necessary thought process and planning. From the conversation with current lecturing staff, it is apparent that members of staff are not very clear on promotion requirements. Management should carry out more work to make staff aware of their career pathway. Staff performance evaluation should have the aim to empower staff and enable staff to perform. The documentation provided on promotion is inadequate. The career pathway is unclear in several respects. It should provide necessary details on all key aspects, including teaching, research, administration and leadership, professional development, and esteem. It also should include criteria for each aspect and specification on required evidence. Promotion to senior position should also include independent external assessment. Criterion 5 of the promotion criteria is very unusual: "existence of vacancy". Staff should not be declined for promotion for this reason. Promotion process is entirely different to staff recruitment. Research credits as a means to evaluate staff performance is problematic. The system is too simplistic. For example, the quality of a conference cannot be determined solely based on its location and the quality of a paper cannot be solely determined by the venue of publication. The College should take a holistic view of staff's achievement in research, which covers research output, funding capture, professional activity, and esteem. The concerns around staff professional development and review, as outlined above, are significant. These issues can have a major impact on the research environment and academic life as a whole.

American College's Response:

Our staff recruiting planning is the following as student numbers progress: 2 years after accreditation we will employ 1 Full-time equivalent (FTE) teaching personnel to satisfy the additional teaching needs of Year 1. 3 years after accreditation we will employ another 1 FTE equivalent teaching personnel to satisfy the additional teaching needs of Year 2 and so forth. The academics recruited in the following years will be such that the final year courses will align with their research interest and activity.

Following the recommendations of the EEC, the annual research budget was increased from € 15.000 to € 25.000 (Annex 14 – Minutes (Budget)). 12 hours teaching load is the norm for private institutions of higher education in Cyprus. Anything less would make our operation non-viable. However, this teaching load can be reduced in the case of increased research or administrative work.

When the program gains accreditation we estimate to have a maximum of 30 students per year so 120 students after 5 years (we expect student growth to start 1 year after accreditation). As

explained before according to our staff recruiting planning when we will have 120 students we will also have 8.5 FTE academics. The student/full-time faculty ratio will be 14 to 1 (120 / 8.5 FTE). The ratio 14 to 1 is considered low enough.

As explained above we have revised our academic job vacancy advert. In Annex 11 you may find the revised template we are using from now on. In addition, we have revised the description of the requirements for each rank and our promotion criteria and procedure. In Section 2.9 (page 42) and Section 2.3 (page 14) of the enclosed Organization, Administration and Faculty Handbook you may find all the revised information related to Faculty Promotion and Faculty Ranks. The revisions are in accord with the Agency of Quality Assurance suggested regulations. The revised sections were communicated and explained to all academics of the College.

Following the suggestions of the EEC, we have revised the College's policy for faculty performance appraisal and promotion. Initially, we have revised the amount of research credits received by faculty for their research output, as well as the basis for credits allocation; instead of using multiple Journal Quality lists, the research credits will be allocated on the basis of the impact factor of the published work. Details about research credits can be found in Annex 1 (pg. 18). Research credits gained is an essential indicator for the annual appraisal of faculty members mainly for the purposes of salary increments as well as for teaching workload reduction; however, research credits will no more be used as a criterion for faculty promotion, and this has been removed from the Faculty Ranks minimum requirements (Annex 1, pg. 14) and from the promotion criteria (Annex 1, pg. 43). Specific revised minimum requirements for faculty ranks are found in (Annex 1, pg. 14), taking a holistic view of faculty achievement, covering academic qualifications, experience, teaching, and research. In terms of the latter, it covers research output, funding capture, professional activity, esteem, and can take many forms such as papers presented in conferences, articles published in academic journals and daily press, contribution in events, funded research and others (Annex 1, pg.18). Furthermore, the criterion "existence of vacancy" has been removed, as suggested. It should be noted that currently the members of the committee for faculty promotion consisted of the College Director, a Department Head and one Academic. This has been revised so that the Academic should be an external hence to achieve an independent objective assessment. All the above revisions have already been communicated to all faculty members.

4. Student admission, progression, recognition and certification

(ESG 1.4)

EEC - Findings:

The EEC was not provided with detailed numbers on student admission, progression and certification, despite requesting this repeatedly. Some numbers for the last 4 years were provided, but these were largely incomplete. Based on these incomplete numbers, it is not possible for the EEC to assess important aspects of the program, such as: whether the college admits by design only international students, or if this is accidental; how the program deals with the large heterogeneity in the academic background of its students; what is the gender ratio of the students in this program; what is the employment ratio and drop-out ratio of students in this program.

American College's Response:

The program was registered with Cyprus Ministry of Education, Culture, Youth and Sports (it was then called Ministry of Education and Culture) in October 1991. Registration of a program of study with the Ministry did not require the program to be active. So up to October 1998 the program was inactive. Since October 1998 the program has been operating with a small number of students. The program did not attract a good number of students because it was not accredited. For Cypriot, European Union and International students the absence of accreditation meant that the Bachelor Degree title would not be recognized. For Cypriot students it also meant that students could not get the annual government student sponsorship of up to € 3.420. The non-accreditation of the program of study was the reason why the program did not attract a good number of students. We have provided to the committee important statistical data including student progression, success and drop-out rates for the last 4 academic years. The picture for the years before these last 4 years was the same since the number of students was small.

All students enrolled in this programme are international students, and therefore was difficult to track down the graduates' destination after employment. but we will intensify our efforts to effectively collect, monitor and analyse information on the career paths of our graduates. The program is designed to admit students from any nationality; however, the reason for having only international students at the moment is that the program is not currently accredited, as this is major discouraging factor for Cypriot students as they cannot be employed (especially in the Public Sector) with a non-accredited degree and they are not eligible to receive the annual governmental subsidy. Furthermore, the issue of heterogeneity in academic backgrounds of admitted students is annihilated as the programs begins with introductory courses that demand no computer science prerequisites or previous experience, and gradually advances through the academic semesters. In addition, extra support is provided if needed for all individual components of the courses in the program, through face-to-face and online meetings with student advisors and course mentors.

EEC – Areas of Improvement and Recommendations:

The teaching, learning and assessment procedures related to options after failing an exam, and the number and conditions for re-examination or repetition of a course are not readily accessible. They are not included in the Students Orientation Handbook. The EEC could not readily access this information in any of the written documentation provided, nor on the website of the college. The website of the college provides very little information about how a student can request a re-

examination, but no information on the options after failing an exam, and the number of re-examination or repetition of the course allowed. The college representatives informed the EEC that students who fail a course must repeat the course, unless medical reasons are provided that justify failing the exam (in that case a re-exam can be arranged). The college representatives also informed the EEC that a course can be repeated twice maximum. This is very important information that needs to be formalised, written down and made readily accessible to everyone, both on the Students Orientation Handbook and on the college website. The EEC also notes that when a student fails a course and has to repeat the course, the student has to wait until the course is offered again. This can create delays and complications in the progression of the student across the programme, for instance when the failed course is a prerequisite for further compulsory courses in the upcoming semester. The EEC recommends that all students who fail a course have the opportunity to take a re-exam without having to repeat the course. This is in line with international standards, and it also facilitates the smooth progression of students across the programme.

Regarding the qualification awarded at the end of the program, the EEC notes that one of the students that the EEC interviewed, informed the EEC that even though he had recently graduated from this programme, he was still attending courses at the college to improve the grade on his degree for this programme. If this is indeed true, then this practice goes against the standards required from any qualification awarded at the end of this programme. The final qualification awarded, upon graduation, should be immutable. It should not be possible for students to improve their grades on their degree after they have graduated and the degree has been awarded.

The conversation with the admission team reveals that although admission criteria are available in documentation, student selection is based on the admission personnel's experience. The recruitment and, more importantly, the admission is handled entirely by the administration team. Lecturers have no involvement in admission. Lecturing staff should have input in selecting students, particularly for international students, when the number of qualified applicants exceeds the intake capacity of the programme for a given year. This is currently done solely by administration staff.

It is unfortunate that during the panel interview the management team could not clearly explain the student progression rules. The panel requested such further information after the meeting. Several links to webpages were provided. This information should be clearly written in the student handbook and at least the programme coordinator should be fully aware of these rules and ensure their implementation by the staff in this programme.

American College's Response:

Based on your recommendation the academic committee has revised its policies related to the options a student has after failing an exam. In Annex 15 - Students Orientation Handbook you may find the revised policies which can also be found in the College website (<https://www.ac.ac.cy/en/academic-affairs/make-up-examination> and <https://www.ac.ac.cy/en/academic-affairs/retaking-courses>), According to the revised policies the number and conditions for re-examination or repetition of a course are clarified. The revised policy facilitates the smooth progression of students across the program and is in line with international standards.

When a final qualification is awarded upon graduation, then there is absolutely no possibility for a student to retake courses to improve his/her grades. However, there is a possibility for students who fulfilled a program's requirements, to retake courses to improve their grades, before they graduate.

When the number of applicants who meet the admission requirements (which are based on input provided by the program coordinator and academics of the relevant discipline) are less than the number of students which the College can accommodate in a program of study, then commonly, the admission is handled entirely by the administration team. When the number of qualified applicants exceeds the intake capacity of the programme for a given year, then the program's coordinator with the help of academics in the relevant discipline have an input in selecting students.

All policies relative to students' progression are publicly available on the College's website. For example, the links below direct to information about (i) the grading system, (ii) withdrawal, (iii) retaking courses, (iv) makeup examinations, and (v) graduation requirements. Further, this information has been added and clearly presented in the student handbook (see Annex 15, pg. 14-18):

<https://www.ac.ac.cy/en/academic-affairs/grading-system>

<https://www.ac.ac.cy/en/academic-affairs/withdrawal>

<https://www.ac.ac.cy/en/academic-affairs/retaking-courses>

<https://www.ac.ac.cy/en/academic-affairs/make-up-examination>

<https://www.ac.ac.cy/en/academic-affairs/graduation-requirements>

5. Learning resources and student support (ESG 1.6)

EEC - Findings:

There is no computer laboratory running Linux operating system.

American College's Response:

We have installed the Virtual Box, enabling us to run any operating system, including Linux Ubuntu, in our window desktop. The ISO file for Linux Ubuntu has been downloaded, and installed inside the virtual machine Virtual Box.

EEC – Areas of Improvement and Recommendations:

Students during the interview asked for more practical and hands-on classes. The EEC believes that this can be achieved among other synergies by upgrading the laboratories to better facilitate the lectures with practical parts. This upgrade will be more essential in the future as the College has a plan to have in the program approximately 25 students/year.

Although during interviews with staff it has been said that the College in general helps non-Cypriot and non- EU students to get a work permit, it is not clear to the students of this programme if they are allowed to work in Cyprus and actually the students said that they are not allowed to work. More needs to be done in this part and especially in better student guidance.

It is not clear that the program can be self-sufficient with adequacy of financial resources and there is no clear strategic plan for this.

Students are not offered personal storage on the server.

According to the additional material provided by the college to the EEC, the college has a Career Service that puts students in contact with employers, that helps students to write a CV, and that helps students prepare for interviews. However, when the EEC asked the administrators of the Career Service about these services, their reply was that they do not help students write CVs and that: "We are not asked to find them jobs. They don't usually ask for help".

The EEC did not see evidence that student mobility is supported within and across higher education systems.

American College's Response:

Constantly improving and upgrading all infrastructure including ICT and learning resources which are accessible to both faculty members and students has been a standard practice at American College. We agree that upgrading the computer laboratories will be more essential in the future, hence, upon accreditation of the program and meeting the target student enrolment, we will upgrade all necessary information technology infrastructure.

American College informs its students as to the regulations related to employment of students outside the EU during the admission procedure and thereafter during the orientation seminars provided to students. Students are provided with all necessary information, and they are also provided with the Migration Department Declaration Form (Annex 16) which they need to read and sign, and with the Employment Regulations for International Students (Annex 17). Further

information are provided on the College's website, on <https://www.ac.ac.cy/easyconsole.cfm?id=719&lang=en> – *International Students*.

At the moment the program is not self-sufficient. The running of the program is subsidized by other profit making programs of the College. The strategic plan is to achieve the accreditation of this program as this will increase the number of students enrolled and it will make the program self-sufficient.

Based on the recommendations of the EEC we have made all necessary amendments and customization to our computer network and servers so that personal storage is provided to all students of the College. Students can now store personal files and can quickly and easily access these from both the College facilities and remotely.

During the EEC visit, the members of the EEC have met the Directors of Administration, Director of Admissions and the Student Welfare Officer, but not Mr Yiannos Ioannou who is offering career services to students. At American College we operate the AC Career Office with the role to link students to the market and especially with the organizations we formed collaborations with. Further, the role of the Career Office is to provide support and advice to students seeking employment. As the program is not yet accredited, we do not have any EU or Cypriot student registered, but only students from third countries, which due to legislation, they face many difficulties in gaining work permit. Still, the Career Office offers services and support activities such as: (i) Announces vacancies to partner organizations and help students get in contact, (ii) Posts tips and advice on the College's Website on writing CVs and preparing for interviews (iii) Organizes seminars employment issues (such as writing a CV and interview preparation), and (vi) Bi-annually seminars on EUROPASS (profile, CV, vacancies, etc.).

The College engages in international mobility programs for the last 10 years, in the following mobility actions of Student Mobility for studies, Student Mobility for Placements, Staff Mobility for Teaching, and Staff Mobility for Training. Due to the unpleasant effects of the pandemic to the society in general, the mobility programs were suspended (except from the student mobility placements). Following the end of the pandemic, we will vigorously engage in all mobility programs.



6. Additional for doctoral programmes (ALL ESG)

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7. Eligibility (Joint programme) (ALL ESG)

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B. Conclusions and final remarks

EEC - Findings:

The EEC recommends that:

- the program is re-designed in line with international top-tier curricula and standards, so that the Computer Science component is strengthened for instance;
- the quality assurance procedure is improved, not only formally, and also in its implementation;
- general housekeeping processes are established to ensure that information vital to the programme, such as intake, drop-out, pass-rate, employability, transfer to other programmes, gender diversity, and so on, is collected, analysed and acted upon;
- detailed student information regarding rules of progression and certification in the program, such as re-examination, industrial stay, and so on, is formalised and made readily and publicly accessible to students (for instance in their handbook);
- detailed information regarding the recruitment, promotion and work load of teaching staff is formalised and made readily and publicly accessible to the faculty;
- the senior management of the college and of the programme should be aware of the above processes, in clear detail, and implement them;
- student instruction is updated with more modern methods of teaching that are centered around student learning.

American College's Response:

As described in our responses in sections 1, 2, 3, 4 and 5 above:

- we have strengthened the program by adding new courses and by revising the content in the current courses
- we have expanded and enriched the information provided publicly, through our website, providing additional information on the Quality Assurance, on the Academic Committee, and other information such as re-sit examinations and retaking courses.
- we have revised the Quality Assurance policy, by adding externals and strengthening the participation and involvement of student representatives
- we have enriched our teaching methods and educational activities with contemporary methods promoting student interaction and team work. In addition, student assessment is allocated on activities based on team projects and student interaction
- we have provided students with personal storage, College email account and remote access
- we have revised the performance appraisal approach and promotion policy for faculty members as to reflect a comprehensive and integrated approach especially in terms of research
- we have significantly increased the annual research budget
- the Student Orientation Handbook has been revised with more information such as re-sit examinations and student progression rules



As a conclusion, we want to state that we took into account all EEC's comments for revisions/improvements and we have implemented all necessary revisions/improvements. Once again we would like to thank the members of the External Evaluation Committee for their very positive report.



C. Higher Education Institution academic representatives

<i>Name</i>	<i>Position</i>	<i>Signature</i>
Dr. Gregoris Liasis	Program Coordinator	
Click to enter Name	Click to enter Position	
Click to enter Name	Click to enter Position	
Click to enter Name	Click to enter Position	
Click to enter Name	Click to enter Position	
Click to enter Name	Click to enter Position	

Date: 11 March 2022

