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Date: Date.

External Evaluation Report
(Conventional-face-to-face programme of study)

- **Higher Education Institution:** European University Cyprus and Minjiang University
- **Town:** Minjiang University, Fuzhou, Fujian, China
- **School/Faculty (if applicable):** School of Sciences
- **Department/ Sector:** COMPUTER ENGINEERING
  - Programme of study- COMPUTER ENGINEERING (4 ACADEMIC YEARS, 240 ECTS, BACHELOR)

  In Greek:

  In English:
- **Language(s) of instruction: English**
- **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. Introduction

This part includes basic information regarding the onsite visit.

The External Evaluation Committee (EEC) would like to thank the Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA) for the invitation to evaluate the BA in Computer Engineering.

This is a programme that has been accredited and is currently running in Cyprus. At the same time the programme is now currently on offer by the Minjiang University, Fuzhou, Fujian, China. The delivery of the programme is undertaken through the establishment of the International Digital Economy Centre at Minjiang (IDEC).

As the programme is currently accredited the evaluation that took place online on the 19th of May, 2022 and the evaluation focused on the setup / implementation of the programme and the established collaboration between the respective partners: the European University Cyprus and Minjiang University.

The agenda included several meetings with the senior management, the program coordinators, teaching faculty, students and administrative personnel. The evaluation and the findings and recommendations of this report were based on the meetings conducted and the evidence provided in the form of the self-evaluation report.

Given the on-going pandemic restrictions, the evaluation took place online. Consequently, the EEC did not have the opportunity to visit the University and experience in-person the on-offer services and infrastructure. Still, panoramic video captures of teaching, administration and social spaces were provided. These were considered sufficient for the purposes of this evaluation.

The report discusses areas of strength and areas that further consideration may be required. The EEC provides a number of constructive suggestions as to how the European University Cyprus and Minjiang University could address the points raised.

If the two Institutions or the CYQAA have any queries with regards to the report, the EEC members will be more than happy to attend to them in due course.

B. External Evaluation Committee (EEC)

Name	*Position*	*University*
Professor David McGravie	Chair	University of Derby, UK
Professor Savvas Papagiannidis	Member	University of Newcastle, UK
Professor Mihai Adrian Ionescu	Member	École polytechnique fédérale de Lausanne, Switzerland
Professor Michael Andersen	Member	Technical University of Denmark
Mr. George Nicolaou	Student - Member	Cyprus University of Technology

C. Guidelines on content and structure of the report

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

The Computer Engineering programme is currently accredited by the CYQAA. The programme as it is offered in Cyprus is of very good standing offering the disciplinary knowledge and practical skills needed for Computer Engineering and related fields.

The EEC notes that there are policies related to quality assurance set by the European University Cyprus. These are observed and applied by the department and teaching staff when it comes to the programme under consideration. Changes to the program are subject to a formal institutional approval process and accreditation. The policies are clearly articulated and implemented when it comes to setting the standards across all aspects of the program, such as curriculum development, assessment policies and plagiarism, student progression and ECTS credits. ECTS workload is along the expected lines.

Given the above, the current evaluation focused on the implementation of the programme and how the collaboration between the European University Cyprus and Minjiang University was operationalised.

Overall, there the EEC notes that the two Universities have worked together to come up with ways for the programme to be delivered in a meaningful way in the new setting. This applied to local admissions criteria and also the quality of the assurance policies that have been operationalized via very effective leadership and action. For example: when issues were identified, the faculty staff and professional support worked collaboratively to quickly and positively to address the matter in a very timely manner.

Strengths

The EEC notes that the Computer Engineering programme is well aligned with international requirements both as theoretical and practical content, having a very good balance of both and supported by an efficient computing infrastructure (including a supercomputing facility).

The EEC notes the willingness of the teaching team to periodically review the programme so that its learning objectives and outcomes remain relevant to external stakeholder requirements. This is likely to be of increasingly more importance considering the international collaboration established.

It was also very positive to see staff adapting the programme's content to the IDEC setting, e.g. by creating significant interactions between teaching content and hot topics in computer science and engineering research, the development of internships as key learning opportunities, etc…), so that students can relate to most advanced information/skills developed.

Such interactions between teaching and research are leveraged on the Cypriot side too, to help internationalise the curriculum in the long term. Put differently there is an opportunity to not just

adapt the programme as it is offered in Cyprus into the Chinese setting but also to strengthen the programme in Cyprus too, which will results in a win-win cooperation model.

Areas of improvement and recommendations

The EEC acknowledges the framework within which the collaboration has been formed and the expectations of each side and notes that there is an ambition to learn and reflect on both parties, as well to remain flexible to develop and adapt the computer science curricula to new emerging international trends like, for instance, Edge Computing.

Any future programme changes though need to actively engage stakeholders on both sides as well from the local industries involved in the digitalisation of economy/industry in order to ensure that their views and needs are sufficiently represented and catered for and clearly must take account of local settings and the industry needs within the China context.

Please select what is appropriate for each of the following sub-areas:

Sub-area		***Non-compliant/ Partially Compliant/Compliant***
1.1	Policy for quality assurance	Compliant
1.2	Design, approval, on-going monitoring and review	Compliant
1.3	Public information	Compliant
1.4	Information management	Compliant

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

Findings

Despite this being the first year of delivery, students appear very satisfied with the programme and support received and would recommend the program to their friends. In particular, the students were very complementary of the support received by the professors and teaching assistants, who assisted students as much as possible when it came to learning in a second language. The teaching assistants have contributed significantly to the successful implementation of the program and should be commended. They played a central role in both supporting the knowledge transfer and removing any specific language barriers in very specialized technical terms.

Overall, the process of teaching and learning appears to be in line with the home programme which features different modes of delivery and use a variety of pedagogical methods that facilitate the achievement of the programme's learning outcomes.

Assessment follows the programme' existing practices and methodology adopted is consistent with the home program in Cyprus.

Students reported that, in their experience, there was a good balance between theory and practice, which is of particular importance for a field like Computer Engineering. In this field, the students appreciated that they are not only software developers but they feel connect with real use cases and applications, the role of labs being crucial. As this is the first year of delivery during which a key objective is to build foundational knowledge, this is rather positive. One would expect that more opportunities to engage practice and industry will become possible in subsequent stages of the programme. This also applies to involving students in research activities that will further enhance their learning experience and this is likely to be a strength of the program in the future.

Being able to study in China and obtain a degree from a European University was considered an important aspect of the programme, not just because of the recognition that such a degree can bring, but also because studying on an international degree exposes the students to new ideas, ways of learning and cultures. The students felt that this was a strength of the program.

As this is the first year that the programme is delivered in Minjiang it is not possible to reliably assess the performance of the students compared to that of students in Cyprus.

Strengths

We were particularly impressed by the connections showed in preparing the students with other field such as robotics, Internet-Of-Things, Wireless Communications, which demonstrates a holistic view and approach, in application-oriented style of Computer engineering, aligned with international standards of this programme. This of particular importance, as this programme could indeed prepare talents in engineering covering a multitude of industrial opportunities.

It was positive to see that despite the inherent challenges in establishing a new partnership and the fact that such challenges are even bigger considering the pandemic, both sides have delivered to a satisfactory level. Both students and staff are enthusiastic about the prospects of the programme and want to see the venture be a success.

Areas of improvement and recommendations
We note that admissions follow typical language criteria. During the meeting with students it was evident that in-sessional English language support is necessary. This is especially important in the first year in order to provide students with the language skills needed to make the most of the rest of their programme. Indeed, a short pre-sessional program or an intensive block delivery of English might prove to be very effective in building a strong basis for learning. Future in-person visits may help more effectively put students' oral and writing skills into perspective.

Considering the regional Fujian interest in Digital Economy, there is an opportunity to consider how to best integrate local industry links and benefit the programme overall. Reflecting on the evaluation of the Cyprus based program, there is a clear strategy and approach to the engagement of the industries relevant to Computer Engineering in Cyprus and Europe, more broadly; this could be used as a model for the future engagement of this sector in Fujian.

IDEC can potentially reinforce even more the prospects that research brings not just in their learning journey but also as a future career option. The Computer Engineering started already very well on this path but more specific activities such as seminars, research-like student projects on emerging topics, etc. could be envisioned on a systematic basis for the future.

Considering the impact that distance can play in such a partnership, student feedback processes across delivery sites need to be formalised and streamlined more so that both sides can have reliable insights into how the delivery is going. Actions and changes need to be clearly communicated back to the students. The IDET Teaching Management Workbook discussed might be a model that can help frame such discussions.

In the future the two partners should consider processes to ensure the monitoring of student performance at each side and take actions as per necessary if there are significant differences.

As stated:

> *"….the teaching assistants have contributed to significantly to the successful implementation of the program and should be commended".*

However, the first year of the program appears to be heavily reliant on these colleagues and thus, careful consideration needs to be given to their workload and the ratio of TA to students, which seems to follow international standards but may be vary across disciplines.

Please select what is appropriate for each of the following sub-areas:

Sub-area		***Non-compliant/ Partially Compliant/Compliant***
2.1	Process of teaching and learning and student-centred teaching methodology	Compliant
2.2	Practical training	Compliant
2.3	Student assessment	Compliant

3. Teaching staff *(ESG 1.5)*

Findings

The programme is supported by extremely well balanced (17 Chinese Faculty and 11 ECU Faculty) highly qualified teaching teams. Faculty brings expertise and experience in the program's areas. There is a clear correlation between staff's qualifications, their prior and current expertise and the modules delivered.

It is evident that there is significant commitment and investment in human resources to support the programmes delivered in Minjiang and this is at rates similar to the ones in Switzerland and in France, where I have experience in teaching.

Considering that this is the first year that the programme has been running in China, delivery is heavily supported by teaching assistants. These teaching assistants are contracted by EUC and adhere to the same policies as EUC staff based in Cyprus. This was tested out via questioning in a number of sessions. Therefore the quality of TA and their availability is very important and critical for the sustainability of the programme.

Strengths

European University Cyprus has established policies (e.g. when it comes to recruitment, workload etc). Such policies are expected to apply to this collaboration and discussion indicate that they do. This is important when it comes to ensuring a fair and consistent treatment of staff involved in the delivery of the programme. The high quality and good number of the Faculties in Computer Science is considered a strength. The presentation of the programme was very clear and the answers to the questions were extremely comprehensive and to the point.

It was pleasing to see sufficient strong bonding between faculty members form both China and Cyprus and students, with the students enjoying the diversity of the teaching staff – this type of relation isn't always evident in partnerships and the shared ownership should be applauded.

So far, IDEC have offered a number of initiatives/sessions that aim to support teaching faculty's development and induction. These have taken place online. As the restrictions due to the pandemic are gradually lifted, one would have expected in person visits to become possible. Future sessions will help to strengthen the collaboration and support the sharing of institutional culture(s). Future visits and exchanges will also create wider opportunities for staff and students alike, such as research ones or support the sharing of good practice and engagement in the creative industries.

Areas of improvement and recommendations

Considering the stage of the collaboration, the evidence provided with regards to the investment and commitment of both institutions, the EEC is satisfied with the human resources supporting the program.

So far, teaching assistants have played a critical role in student learning and satisfaction. Going forward and as more students are recruited across the four stages of the programme, the two institutions should ensure that such overreliance is avoided, and more senior members of staff are recruited as per necessary.

More involvement of EUC staff in the recruitment of teaching assistants would have been welcome.

The EEC appreciates that most of the focus and attention has been invested in ensuring that the programme is organised and delivered in an effective manner. The EEC would expect that potential synergies between the two sides will inform efforts to bring more research and professional practice into the delivery of the programme.

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

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

Findings

The EEC observed that there are policies and mechanisms in place that ensure that students develop, progress and are being recognised for their achievements and qualifications. Such policies are made clear to the students from the outset in published guidelines by the department and programme. In the IDEC context, such policies also apply and have been followed since the beginning of the programme (noting that there is only a single cohort in Stage 1).

Strengths

The students expressed their clear satisfaction with the programme and how the delivery of the first year has gone so far, despite the difficult Covid period and including the lab activities. They were particularly complementary of the support received by teaching staff and would recommend IDEC to other applicants.

Areas of improvement and recommendations

The EEC notes that in the first year recruitment was small scale (corresponding to a ramping-uo period of this cooperation) and regionally restricted. As recruitment opens up and the number of students admitted, IDEC will need to adjust their professional support capacity to the increasing demands. The first two years of delivery offer an opportunity to adjust practices and processes so that by the time that the programme runs at full capacity any potential issues and risks are minimised.

The EEC would suggest that review points are agreed and that following each new recruitment cycle, there is a period of review and reflection to help identify any issues or challenges, with corresponding timely actions to be implemented. The finding from such reflection points will help inform future planning and management decisions.

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

5. **Learning resources and student support** *(ESG 1.6)*

Findings

Due to the on-going pandemic restrictions, the EEC did not have the opportunity to visit Minjiang University in person. Consequently, the committee's view related to teaching, physical and human support resources on offer were primarily based on the report submitted by the Universities, the videos provided, the program presentation and the meetings with administrative staff and end-users. It may be useful to evaluate such resources and services in-person when the opportunity arises.

The evidence and answers provided during the evaluation suggests that the two Institutions provide all the services necessary to support a good learning and student experience. This especially applies to the library facilities that feature a wide range of sources from reputable publishers, as well as the IT facilities.

At a program, the student work shown suggests that the students have access to appropriate individual computer facilities am to 29 computer labs and a supercomputing facility (this one being mostly intended for research but open to some student projects). It is worth noting that students at Minjiang have access to a similar range of computing resources available to students based in Cyprus.

The EEC can confirm that there are established systems and safeguards for dealing with student data on both sides.

We note the extra curriculum activities (such as golden classes and workshops) that IDEC has in place that aim to foster a shared culture. Such activities may offer new opportunities for both sides to encourage mobility of student and staff and seem quite appreciated by the students.

Strengths

The programme's support staff have clearly the needed experience and expertise to deal with the specific issues and challenges that arise due to any circumstances surrounding this new partnership. Their interactions seem smooth and the on-site participation of Faculties from Cyprus to China seems now clearly planned for fall 2022. The demonstrated teams engagement, experience and expertise are important when it comes to dealing with administrative problems until the partnership matures.

Areas of improvement and recommendations

Where different systems or processes for accessing resources are in place, it may worth considering how to streamline them so that the experience becomes more seamless and overheads for end-users are minimised. Specifically for Computer Engineering, the students should be even more attracted into research- or application-like type of projects, interconnecting Computer Science with other disciplines or programmes of the University,

Please select what is appropriate for each of the following sub-areas:

Sub-area		*Non-compliant/ Partially Compliant/Compliant*
5.1	Teaching and Learning resources	Compliant
5.2	Physical resources	Compliant
5.3	Human support resources	Compliant
5.4	Student support	Compliant

6. Additional for doctoral programmes *(ALL ESG)*

Not applicable. This was a UG program evaluated.

Please select what is appropriate for each of the following sub-areas:

Sub-area		*Non-compliant/ Partially Compliant/Compliant*
6.1	Selection criteria and requirements	N/A
6.2	Proposal and dissertation	N/A
6.3	Supervision and committees	N/A

D. Conclusions and final remarks

The EEC has provided enthusiastic and constructive feedback on the Computer Engineering programme (4 academic years, 240 ECTS, BA). This programme appears to be well consolidated and benefiting for a balanced team of high-quality complementary Faculty staff.

The report outlines the key findings, highlights areas of strength and proposes actions to improve things further. We hope that the feedback provided in a constructive manner will drive priorities for future developments of the collaboration and help underpin a positive teaching and research experience for all stakeholders.

The following are summative remarks that draw on the earlier recommendations; these are not hierarchical nor replace the recommendations within the individual sections of the report:

- The Administration colleagues from EUC have worked very effectively in support of the parentship and their oversight and diligence should be noted.

- The EUC academic staff should be applauded for their professionalism and commitment to the partnership. They have engaged fully in the setup phase and have demonstrated their ongoing commitment to IDET through their willingness to spend significant periods of time in China. This points to a highly successful collaboration.

    - (One question aside from the evaluation visit is whether EUC should explore the tax status of such colleagues that is if EUC staff are spending 12+ weeks in China)

- The Teaching Assistants play a pivotal role and their contributions should be commended. Consideration should be given to their future engagement and their career progression.

- Student feedback and course evaluation processes across delivery sites need to be formalised and streamlined more so that both sides can have reliable insights into how the delivery is going. Actions and changes need to be clearly communicated back to the students.

- During the meeting with students it was evident that in-sessional English language support is necessary. This is especially important in the first year in order to provide students with the language skills needed to make the most of the rest of their programme.

- Being able to study in China and obtain a degree from a European University was considered an important aspect of the programme. The students felt that this was a strength of the program and should be regarded as a USP.

- Due to the on-going pandemic restrictions, the EEC did not have the opportunity to visit Minjiang University in person. It may be useful to evaluate such resources and services in-person when the opportunity arises.

The EEC would like to take this opportunity and thank the CYQAA coordinator for managing the process both efficiently and effectively.

Finally, once more, should the Cyprus Agency of Quality Assurance and Accreditation in Higher Education require any clarifications with regards to the points raised in the report, the EEC remains at the Agency's disposal.

E. Signatures of the EEC

Name	***Signature***
Professor David McGravie	
Professor Savvas Papagiannidis	
Professor Mihai Adrian Ionescu	
Professor Michael Andersen	
Mr. George Nicolaou	

Date: 27/05/2022