

Higher Education Institution's Response

Date: 18/03/2021

- **Higher Education Institution:**
Cyprus University of Technology
- **Town: Limassol**

Program 1 – BSc in Agricultural Sciences, Biotechnology & Food Science , (4 years, 251 ECTS)

In Greek: Πτυχίο Γεωπονικών Επιστημών, Βιοτεχνολογίας και Επιστήμης Τροφίμων

In English: BSc in Agricultural Sciences, Biotechnology & Food Science

Language(s) of instruction: Greek

Program 2 – MSc in Agricultural Biotechnology, (3 semesters, 107 ECTS)

In Greek: Μάστερ στη Γεωπονική Βιοτεχνολογία

In English: MSc in Agricultural Biotechnology

Language(s) of instruction: Greek

Program 3 – PhD in Agricultural Sciences, Biotechnology & Food Science, (3 years, 182 ECTS)

In Greek: Διδακτορικό στις Γεωπονικές Επιστήμες, Βιοτεχνολογία και Επιστήμη Τροφίμων

In English: PhD in Agricultural Sciences, Biotechnology & Food Science

Language(s) of instruction: Greek

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

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 2019” [N. 136 (I)/2015 to N. 35(I)/2019].

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) 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 deficiencies noted under the quality indicators (criteria)*
 - *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).*
- *In case of annexes, those should be attached and sent on a separate document.*

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

(ESG 1.1, 1.2, 1.8, 1.9)

Findings for BSc in Agricultural Sciences, Biotechnology and Food Science

The objective of the BSc undergraduate program is to provide education in Agriculture covering all areas of agricultural activity and processing of agricultural and livestock products. The educational program aims to make graduates capable of working as consultants in the crop or animal science and production and/or food science and technology of agricultural products, depending on the direction they choose, and / or as consultants for rural development.

The policy for quality assurance of the program of study is well in place and follows the quality assurance system installed by the university. The formal cycle of evaluation, feedback and improvement of the study program is complemented with informal feedback moments provided by the students during and at the end of the courses. Academic integrity and plagiarism are well addressed and systems are in place to prevent fraud. External stakeholders have a say in the design of the program, safeguarding that the content of the study program aligns with the needs of the field.

The design, approval, on-going monitoring and review of the study program complies to international standards. It is in line with the strategy of the department to educate students in the area of agri-food. Teachers have regular contacts with stakeholders in the field, keeping the program up to date and in line with the needs. The course program is well-designed following a structure of increasing complexity, yet providing the students with plentiful options to give direction to their own learning program. Learning objectives are communicated to the students and the study load seems to resemble the ECTS workload. The study program is continuously monitored and improved according to the evaluation cycle. Approval process for innovations or new courses is highly bureaucratic, requiring many levels of discussions and gremia for approval.

Public information about the study program, selection, learning outcomes, assessment procedures, employment information is well in place, either via the website, study guides and career services.

Information management of the study program is performed via the university student information portal SIS through which teachers and students are monitored and informed. It must be noted that a lot of administrative tasks are placed on the shoulders of the academic teaching staff, which unnecessarily distracts from their core business: teaching and performing research.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the BSc program is compliant to all standards described under 1.1, 1.2., 1.3 and 1.4.

Findings for MSc in Agricultural Biotechnology

The MSc program aims to provide postgraduate education of a high standard and generate graduates in the field of Agricultural Biotechnology in its broad sense, able to support the country's competitiveness and productivity, by providing services, expertise and research, leading to direct and indirect positive effects on the social and economic developmental at the regional and national level. The program of study has been designed to generate graduates able to support the country's competitiveness and productivity, by providing services, expertise and research, leading to direct and indirect positive effects on the social and economic development in the field of Agricultural Biotechnology at the regional and national level.

The MSc program is designed as a follow-up of the above-described BSc program, using the same departmental and university teachers and systems. Hence, the findings of the EEC related to the MSc study program and MSc study program's design and development (Sub-areas 1.1 to 1.4) are very similar to those described under the Findings for the BSc program.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the MSc program is compliant to all standards described under 1.1, 1.2., 1.3 and 1.4.

Findings for PhD in Agricultural Sciences, Biotechnology and Food Science

The PhD program provides specialized knowledge and research skills in broader field of Agricultural Sciences, Biotechnology and Food Science. The primary purpose of the program is to ensure scientific competence, specialization, and the cultivation of high-level skills and knowledge in research in a range of research areas. Doctoral studies aim at achieving high quality scientific research, as well as developing the candidate's potential to work in science. The doctoral program trains researchers in being able to work on their own or in groups to carry out research, from the design to the execution and publication of the results.

For PhD candidates without a MSc degree, the course program of the MSc program Agricultural Biotechnology is compulsory and the findings described above apply here as well. Applicants with a Master's degree are exempted from the coursework of the PhD program, with the exception of the course "Experimental Design and Biostatistics" and the course "Post-graduate seminars". The PhD program further consists of a comprehensive examination and submission of a research proposal, performing research and preparation and submission of a dissertation, and a public defense of the dissertation. The policy for quality assurance and student mentoring and monitoring is well in place.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the PhD program is compliant to all standards described under 1.1, 1.2., 1.3 and 1.4.

Strengths

Strengths for BSc in Agricultural Sciences, Biotechnology and Food Science

The BSc program offers a comprehensive, state-of-the-art, contemporary curriculum in Agricultural Sciences, Biotechnology and Food Science. As the only broad BSc curriculum on Agricultural Sciences/Agri-Food in Cyprus, it excellently serves an important national purpose. The study program is well-designed, continuously monitored and improved involving teachers, students and stakeholders.

Strengths for MSc in Agricultural Biotechnology

The MSc program is focused on three distinct specializations: Plant, Animal or Food Biotechnology, each serving an important part of the stakeholders in the Agri-food sector. The study program is a good follow-up of the BSc program. It is well-designed, and similar to the BSc program continuously monitored and improved involving teachers, students and stakeholders.

Strengths for PhD in Agricultural Sciences, Biotechnology and Food Science

The PhD program is focused on achieving high quality scientific research in the science fields of the academic staff. The coursework is based on the MSc program described above. The PhD specific course program is designed towards academic skill training and in-depth knowledge about the state of the art of the science field.

Areas of improvement and recommendations

Areas of improvement and recommendations for BSc in Agricultural Sciences, Biotechnology & Food Science

The administrative burden for the academic teaching staff is unnecessarily high for activities related to course evaluations and course administration. Administrative workload should be relieved by administrative clerks dedicated to the department. This would further increase the quality of the study program as teachers can dedicate their time to their core business.

The design and approval process for innovations or new courses is highly bureaucratic, requiring many levels of discussions and gremia for approval. Again, the majority of the workload is placed on the shoulders of the teachers. The EEC strongly advises to revisit the complexity of the different procedures to reach a good balance between quality assurance and administrative workload.

Potential fields of making the study program (throughout BSc, MSc and PhD) even more complete could be Bioinformatics, Agricultural Economics, Agricultural Engineering, and Digital Agriculture.

Areas of improvement and recommendations for MSc in Agricultural Biotechnology

The recommendations mentioned under the BSc program also applies for the MSc program. Specific for the MSc program: in order to minimize the administrative burden when applying for new study programs, one may consider organizing additional "tracks" in the existing MSc program. This allows for administrative-light improvements/changes in the curriculum. Additionally, both students and stakeholders noted that besides Greek, communication in the English language would be appreciated. MSc students with the ambition to go abroad will benefit from it. The MSc program may also attract more international students. And the

stakeholders find it important because in their work field communication with international partners is performed in English.

Areas of improvement and recommendations for PhD in Agricultural Sciences, Biotechnology & Food Science

The design and quality assurance of the PhD program is in line with international standards. Involvement of stakeholders may be further improved, for instance by organizing annual or bi-annual meetings with stakeholders during which the research of the PhD candidates can be showcased. This may improve further engagement of stakeholders in research projects and promote awareness of the PhD students about their career perspectives.

There is room for improvement for increasing the awareness of the PhD students about their career perspective. Opportunities in academia are limited, hence a dedicated course or training on career perspective is advised.

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

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>		
		<i>BSc in Agricultural Sciences, Biotechnology & Food Science</i>	<i>MSc in Agricultural Biotechnology</i>	<i>PhD in Agricultural Sciences, Biotechnology & Food Science</i>
1.1	Policy for quality assurance	Compliant	Compliant	Compliant
1.2	Design, approval, on-going monitoring and review	Compliant	Compliant	Compliant
1.3	Public information	Compliant	Compliant	Compliant
1.4	Information management	Compliant	Compliant	Compliant

R1: Departmental Reply to EEC Comments - Study programme and study programme's design and development

We thank the EEC for its thorough evaluation of the Department and its study programs. We provide below replies to the valuable points raised by the EEC. Detailed responses are also provided in the document 300.1.2. "Higher Education Institution's Response".

Areas of improvement and recommendations for the BSc program

Administrative support: The Department has been raising the issue of inadequate administrative support to University Authorities through the years, including in the Departmental self-evaluation report completed two years ago. The Rector of the University informed the Department in a formal meeting in February 2021 that he expects that the Faculty of Geotechnical Sciences and Environmental Management will receive the support of one administrative officer in the coming months. The officer will allocate half of their time to the ABF Department and half of their time to the Chemical Engineering Department, the other entity in the Faculty of Geotechnical Sciences. In addition, to further support the administration of Department, the Chair of the Department requested the allocation of part-time student-employees to the Department to help with administrative tasks. The part-time student-employee program has been employed by the University for many years now, but the student employees were assigned to the administrative services rather than to the Departments. The assignment of part-time student employees will help alleviate the administrative burden allocated to the Department.

Design and approval process for innovations or new courses: We recognize that the design and approval process for innovations or new courses goes through substantial bureaucratic procedures, which is viewed as a means of ensuring the quality of the academic programs. While the procedures required for the inclusion of new courses is beyond the control of the Department, we forwarded the recommendation made by the EEC to the appropriate University bodies (Quality Assurance Committee, Studies Committee) for further evaluation, and where possible for actions aiming at simplifying the procedures.

Potential fields for making the study program more complete: We agree with the EEC that the addition of the proposed disciplines (Bioinformatics, Agricultural Economics, Agricultural Engineering, and Digital Agriculture) would add to the programs of study offered by the ABF Department. An ad-hoc committee has been formed by the Departmental Council with the aim of evaluating the proposals made by the EEC and incorporate them where possible in new hiring positions in the short- and middle term hiring plan of the Department.

Areas of improvement and recommendations for MSc in Agricultural Biotechnology

Additional tracks for the MSc in Agricultural Biotechnology: Currently virtually all members of the teaching and research staff of the Department have a full teaching load, and therefore the establishment of additional tracks in the MSc of the Department will be investigated in conjunction with the hiring of new staff members in the next two to three years. Based on the expertise of the newly hired staff, the Department will be in position to evaluate the viability of the organization of new tracks in the MSc program.

Communication in English language: We recognize the importance of a good command of the English language for the career prospects of our graduates, as well as for the appeal of the program to international students. The Department will investigate the possibility of either offering a number of MSc courses in English, or offering the whole MSc program in the English language. A concern about offering the MSc in English only is that it will discourage Greek speaking students who are not comfortable with the English language. Unfortunately, it is beyond the capacity of the Department to offer the MSc in both English and Greek.

Areas of improvement and recommendations for PhD in Agricultural Sciences, Biotechnology & Food Science

Involvement of stakeholders: The Department agrees with the recommendation of the EEC about the need for organizing a bi-annual meeting during which the research of PhD candidates will be showcased. The issue has been discussed in the past among Department staff, but because of the small critical mass of PhD candidates and teaching/research staff, we decided against the organization of the meeting. We feel that the Department has reached a development milestone where the organization of a bi-annual meeting is both possible and important in increasing awareness among local stakeholders on the research carried out by students and staff members. We will therefore initiate the organization of a bi-annual meeting / conference from 2022 onwards.

Increasing the awareness of PhD students about their career prospects: While efforts have been made in the past to increase the awareness of PhD students about their career prospects, we recognize that more work is needed on the topic. To address the point raised by the EEC, the content of the seminar ABF 512 “Postgraduate Seminars” has been modified to include talks on career prospects of PhD graduates. The seminar will now feature invited talks from researchers / PhD holders working in academia, research institutions and the private sector to enhance the understanding of students about potential career paths.

2. Teaching, learning and student assessment

(ESG 1.3)

Findings

Findings for BSc in Agricultural Sciences, Biotechnology and Food Science

The program of study has been designed to educate, train and support the individual academic and social development of students in the Agricultural field. The diversity of students and their interests and needs is taken into account in the course planning. Students with specific educational support are acknowledged and the Student Development Center assists students when needed.

Used teaching methods, tools and materials allow flexibility and support the use of modern technologies where appropriate, such as Moodle-based essays and quizzes. In the discussions with personnel and students, the excellent student-teacher relationships were highlighted. Furthermore, the internships not only support practical learning but also push students to apply their theoretical knowledge in practice.

In the program of study the theoretical and practical part are interconnected and several practical training methods are included in the program, for example field trips, laboratory practice, projects, and workshops. Since stakeholder opinions are taken into account while planning the program of study, the learning outcomes also support the needs of the stakeholders.

The assessment methods and criteria are published in advance by the beginning of each semester. Nearly all courses emphasize continuous assessment, which allows continuous evaluation of the learning process thus supporting the development of the learner. Even though assessment is carried out mainly by one examiner, common assessment criteria are used which ensures objective and appropriate assessment.

The program of study follows the procedures defined at the level of the Department and the University for student's complaints and appeals.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the BSc program is compliant to all standards described under 2.1, 2.2. and 2.3.

Findings for MSc in Agricultural Biotechnology

The diversity of students and their needs is taken into account in the course planning. Students can choose either full or part time studies which is also accounted for in timing of courses. Students with specific educational support are acknowledged, the Student Development Center assists students when needed.

Used teaching methods, tools and materials allow flexibility and support the use of modern technologies where appropriate, such as Moodle-based essays and quizzes. In the discussions with personnel and students, the excellent student-teacher relationships were emphasized and highlighted.

In the program of study the theoretical and practical part are interconnected and several practical training methods are included in the program. The importance of combining research into studies is obviously increased at the MSc level. Since stakeholder opinions are taken into account while planning the program of study, the learning outcomes also support the needs of the stakeholders.

The assessment methods and criteria are published in advance by the beginning of each semester. Teachers are encouraged to use continuous assessment in their courses to support the development of the students. There is a continuous feedback system in the form of informal student-teacher discussions. MSc thesis and related research have a major role in the studies. The Department regulates the process of preparing and evaluating MSc theses, following well-defined internal specific rules. Furthermore, the MSc thesis is independently evaluated by at least two reviewers.

The program of study follows the procedures defined at the level of the Department and the University for student's complaints and appeals.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the MSc program is compliant to all standards described under 2.1, 2.2. and 2.3.

Findings for PhD in Agricultural Sciences, Biotechnology and Food Science

The coursework for the PhD program is the same as that for the MSc in Agricultural Biotechnology and is mandatory for PhD students without a MSc degree. Upon entering the program students are assigned a three-person Supervisory Committee that guides the candidate through the program.

Used teaching methods, tools and materials allow flexibility and support the use of modern technologies where appropriate, such as Moodle-based essays and quizzes. In the discussions with personnel and

students, the excellent student-teacher relationship was highlighted. The connection between theoretical and practical studies is emphasized in the PhD program to ensure PhD candidates can translate scientific theory into experimental design and implementation.

The assessment methods and criteria are published in advance by the beginning of each semester. Teachers are encouraged to use continuous assessment in their courses to support the development of the students. There is a continuous feedback system in the form of informal student-teacher discussions. The Supervisory Committee is in charge of the assessment of comprehensive examination and dissertation proposal. The PhD evaluation process is clearly defined, transparent and objective evaluation is guaranteed by the use of a three-member Examination Board involving also the Chair of the Department, the Dean and the Senate.

The program of study follows the procedures defined at the level of the Department and the University for student's complaints and appeals.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the PhD program is compliant to all standards described under 2.1, 2.2. and 2.3.

Strengths

Strengths for BSc in Agricultural Sciences, Biotechnology and Food Science

The extensive list of courses is well balanced and designed and provides an appealing curriculum for BSc students with diverse interest and backgrounds. A wide variety of teaching methods are described in the compulsory and elective courses as well as in practical training. The synergy between teaching and research is evident, for example in the practicals. The students are encouraged to participate in the learning process actively, for example in workshops, group work, and seminars. Academic tutors are assigned for the first-year students. The academic teaching personnel is highly qualified, motivated and involved. The EEC applauds the close contacts between students and teaching staff.

Strengths for MSc in Agricultural Biotechnology

The MSc program offers an appealing and state-of-the-art educational program containing a variety of teaching methods in the courses as well as in practical training. The synergy between teaching and research is evident, for example in laboratory research projects where the students use advanced technologies and equipment. The students are encouraged to participate in the learning process actively, for example in workshops, group work, and seminars. The MSc program has a clearly defined system for the MSc thesis process and evaluation. Academic tutors are assigned for the first-year students, and later an Academic Advisor is assigned. Financial support for students is available. The academic teaching personnel is highly qualified and motivated and has short lines with the students.

Strengths for PhD in Agricultural Sciences, Biotechnology and Food Science

The PhD candidates are encouraged to present their work during international meetings and to reflect their own work to the international standards. A seminar program for soft skills such as scientific writing, time management, library/literature handling, and scientific communication is in place. A three-member committee is assigned to all students to safeguard. The path towards PhD degree as well as the PhD evaluation process are clearly defined and monitored systemically. The academic teaching and research supervision personnel is highly qualified and motivated.

Areas of improvement and recommendations

Areas of improvement and recommendations for BSc in Agricultural Sciences, Biotechnology & Food Science

In the future, the teaching personnel could be given the opportunity to develop and diversify their teaching skills by providing support by pedagogical experts, for example by utilizing cooperating universities or networking communities if it is not possible to have someone in the university to advise the personnel. That could advance their capability to utilize teaching methods such as problem-based learning, co-operative learning, student-led project work, flipped classroom, and life-long learning as well as giving students more responsibility in teaching activities.

To involve students more actively in learning process and teaching, also student tutors and student peers should be considered. PhD students may be involved more in the teaching process of undergrad students. This will familiarize them with evaluation teaching and evaluation methods and better-equip them in case they want to pursue an academic career path.

The University could develop a system for teachers to acquire a “basic teaching qualification” and a “senior teaching qualification”. In such a system, teachers can develop a teaching portfolio at different levels, which is evaluated by a university committee. Teaching is one of the most important core businesses of the university. Acknowledging the importance of teaching activities and rewarding it as equally important as research output can be highly motivating for the teaching staff. This also stimulates diversification among the teaching staff ranging from predominantly research oriented to predominantly teaching oriented, depending on the interests and capacities of the staff member.

Areas of improvement and recommendations for MSc in Agricultural Biotechnology

Students should be encouraged to take part in teaching more actively and give them more responsibility in the learning process. This could be done by applying new methods in higher education, such as problem-based learning, project learning, and student-led learning (e.g. student peers).

Another suggestion relates to the language of the MSc program of study. It was clearly stated by the former students and the stakeholders representatives that it could increase the employment possibilities and increase the number of incoming international students when the MSc program would be offered (also) in English. For many future employers of the MSc students, a good proficiency of the English language was considered important in order to communicate with international partners.

Areas of improvement and recommendations for PhD in Agricultural Sciences, Biotechnology & Food Science

The responsibility of the PhD students to their learning processes should be increased, for example by giving them responsibilities in organizing international PhD courses (e.g. Summer school), meetings and online seminars/journal clubs. This could increase the international interaction in the quite isolated research unit. Furthermore, a system to support the students financially could be established. The system could aid both in their living costs (stipends) as well as even more importantly in the possibility to participate in international conferences, for example once a year, and have short term research visits abroad. A system to provide the students also the possibility to gain knowledge and experience in higher education could be considered. **The student interviews also indicated a clear demand for courses of scientific writing, conference presentation, English language teaching, and awareness of career perspectives.**

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

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>		
		<i>BSc in Agricultural Sciences, Biotechnology & Food Science</i>	<i>MSc in Agricultural Biotechnology</i>	<i>PhD in Agricultural Sciences, Biotechnology & Food Science</i>
2.1	Process of teaching and learning and student-centred teaching methodology	Compliant	Compliant	Compliant
2.2	Practical training	Compliant	Compliant	Compliant
2.3	Student assessment	Compliant	Compliant	Compliant

R2: Departmental Reply to EEC Comments on Teaching, learning and student assessment -

Areas of improvement and recommendations for BSc in Agricultural Sciences, Biotechnology & Food Science

Teaching skills: The recommendation on providing teaching personnel with opportunities to develop and diversify their teaching through support by pedagogical experts has been forwarded to the University Quality Assurance Committee for possible implementation at University level. In the last year, the University has established the Learning Network to support its teachers further develop their teaching approach and methodologies. Several seminars have been organized on pedagogical topics in the past year, and several more are being planned for the future. The teachers of the Department are highly encouraged to participate in such seminars.

Student involvement in the learning process: The inclusion of student tutors in the learning process is already implemented at the University level. Such student tutors act on a paid-basis to support students with learning disabilities. We see the value of involving students as peers in the learning process and we will evaluate further options of applying such a scheme. For instance, students who have successfully passed a course with a high grade can help in the teaching of laboratory sections of courses. The recommendation has been forwarded to the University Quality Assurance Committee for evaluation, and implementation if feasible.

PhD students participate as teaching assistants in virtually all laboratory sections of Department courses. Teaching assistants are evaluated by students for their performance. Following the EEC recommendation, the Department will invite PhD students to present topics relevant to their research in the theoretical section of courses, where this is possible.

Establishment of a teaching qualification scheme: The establishment of a teaching qualification scheme will add to the teaching capabilities of teaching staff. We see the value of the proposal made by the EEC and the recommendation has been forwarded to the University Quality Assurance Committee for further evaluation, and implementation if feasible.

MSc in Agricultural Biotechnology

Student involvement in teaching: The Department has requested from teaching staff to increase the application of new methods of teaching in their courses, such as problem-based learning, project learning, and student-led learning (e.g. student peers). Please note that virtually all MSc courses include such activities to some extent, but we recognize the need for increasing reliance on alternative teaching methodologies. Please see also our reply to the comments for the BSc program.

Language of the MSc program: While we recognize the importance of offering the MSc program in both Greek and English, this is beyond the current capacity of the Department, as such an action would substantially increase the already heavy teaching load of teaching staff. The Department will investigate the possibility of offering either the MSc program or a number of MSc courses in English, and/or offer some lectures within some of the courses in English. In addition, the Department requested instructors to involve students in more activities that will familiarize them with the English language, such as for example the writing of short reports and presentations in English. Please see our reply to the relevant comment for the MSc in section 1 of the current report.

Areas of improvement and recommendations for PhD in Agricultural Sciences, Biotechnology & Food Science

Student involvement in the learning process: Following the EEC recommendation, the Department will highly encourage PhD students to hold a journal club in fields of relevant expertise. PhD students in the Department participated in the organization of virtually all meetings (International Conferences) and summer schools (especially through COST Actions) that were organized by staff members up to now. The

Department plans to continue involving students in the organization of such events, and encouraging them to organize online seminars / journal clubs.

Financial support for students: The Department provides teaching and research/technician assistantships to admitted PhD students, based on a sufficient progress towards their degree. Several students receive a monthly salary and opportunities for travelling to international conferences through their participation as research collaborators in externally funded projects. We recognize that such opportunities are depended on the participation of the student in a research project, and we will investigate further possibilities for providing students with additional financial support opportunities. The University has recently established a PhD scholarship program that will increase opportunities for student funding.

Demand for courses in scientific writing, conference presentation, English language teaching, and awareness of career perspectives: The Department recognizes the importance of providing training in the above-mentioned topics. Following the EEC recommendation, the Department has included training in the syllabus of the seminar ABF 512 "Post-graduate seminars". Department staff included such topics in the seminar in the past, but we recognize the need for re-organizing the seminar and focusing on the topics raised by the students during their meeting with the EEC. Please see our reply in section 1 for the PhD program on the inclusion of career prospects training in ABF 512. In addition, please see our reply for English language teaching in section 1 of the current report.

3. Teaching Staff

(ESG 1.5)

Findings

Findings combined for BSc, MSc and PhD study programs

Concerning the competence of the teaching staff Chapter 3 in the Self Evaluation Report (SER) reflects on Learning and Teaching and provides clear and transparent regulations and procedures; it also includes a listing of the teaching staff with comments on respective qualifications and expertise in addition to the individual CV. The discussions with teaching staff during the remote onsite visit confirmed a good impression to the members of the External Expert Committee (EEC).

Fair, transparent, and clear processes for the recruitment and development of the teaching staff are set up in Annex IIIb - Academic Personnel Selection as part of the SER describes the Announcement of Academic positions at CUT in a quite transparent way. If this announcement form becomes regularly applied it can be assumed that these are quite clear processes.

Teaching staff qualifications are adequate to achieve the objectives and planned learning outcomes of the study programme, and to ensure quality and sustainability of the teaching and learning. It has been observed in the remote on-site visit that there is quite good English language proficiency in the group of the teaching staff.

The teaching staff is not regularly engaged in professional and teaching-skills training and development. It has been mentioned by teaching staff members during the discussions in the remote onsite visit that there is no such professional and teaching skills training by special experts at CUT. It has been reported by the EEC that in other countries such trainings are offered at a federal or even national level to ensure that potentials of such experienced trainers become fully absorbed.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the BSc, MSc and PhD programs are compliant to all standards described under 3.1, 3.2. and 3.3.

Strengths

Strengths combined for BSc, MSc and PhD study programs

A vital Visiting teacher Network is available; however no sufficient budget is provided by the University to make sufficiently use of it.

The Department has sufficient and well-educated teaching staff.

Research activities are visible and are linked to teaching; they also provide possibilities for involvement of students, particularly at the MSc and PhD levels. It can be summarized that research and teaching are mutually well connected.

There is good English language proficiency observed at all levels (Academic staff, Students/Graduates, Administrative staff).

Experiment research farms are linked to the Department and provide opportunities for (applied) research, which is mainly offered at the MSc and PhD levels.

The staff produces a sufficient number of scientific publications in journals of good international standard; this indicates that there is sufficient experience and quality among the teaching staff.

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Areas of improvement and recommendations

Areas of improvement and recommendations combined for BSc, MSc and PhD study programs

A comprehensive teaching staff (pedagogical) training should be implemented and offered at University level. This and other improvements would ask for allocating more budget to the Department.

Permanent technical staff should be recruited for maintaining and fostering the experimental research farms and the high-end research equipment, and to support the academic staff in teaching and research.

Collaborative research with private companies could be increased and improved.

Additional teaching contents such as Bioinformatics, Agricultural Economics and Agricultural Engineering could be included, for instance by making use of expertise from visiting teaching personnel (e.g. from Greece).

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

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>		
		<i>BSc in Agricultural Sciences, Biotechnology & Food Science</i>	<i>MSc in Agricultural Biotechnology</i>	<i>PhD in Agricultural Sciences, Biotechnology & Food Science</i>
3.1	Teaching staff recruitment and development	Compliant	Compliant	Compliant
3.2	Teaching staff number and status	Compliant	Compliant	Compliant
3.3	Synergies of teaching and research	Compliant	Compliant	Compliant

R3: Departmental Reply to EEC Comments on Teaching Staff

Areas of improvement and recommendations combined for BSc, MSc and PhD study programs

Pedagogical training: Please see our reply to the comment on section 2 regarding the establishment of a teaching staff training program for teachers at the University level.

Permanent technical staff: The Department has requested the allocation of permanent technical staff to its laboratories for several years now. Unfortunately, because of the financial crisis and budgeting limitations, this was not possible up to now. In a meeting with the Rector of the University in February 2021, the Council of the Department was informed that the University authorities plan to assign one permanent technician position to the Department in the next hiring process, hopefully within the coming year. In addition, in a formal letter sent to the University authorities in February 2021, the Committee of Agricultural Farms of the Department has requested a permanent position for the development and maintenance of its Agricultural Farms.

Collaborative research with private companies: The ABF Department represents one of the most active Departments of the University in collaborations with private companies. Collaborations include the crop production, animal husbandry and food sectors. We recognize the importance of continuously striving to attract more public-private partnerships and we will intensify our efforts to seek additional collaborations from the private sector. Actions under consideration to increase collaborations with the private sector include mapping of the industry needs by the Research Service of the University, as well as visits by Departmental staff to relevant companies to showcase the potential for synergies. Please note that students and teachers of the Department visit a number of private companies as part of courses, and many opportunities for collaboration have arisen through such visits. Please see our reply in section 1 on the involvement of stakeholders, where we agree with the EEC proposal on the organization of a bi-annual meeting to showcase the research of the Department to local stakeholders.

Additional teaching contents: Following the evaluation by the EEC, the Department has formed an ad-hoc committee to plan its future development and expertise needed to carry out its mission. The areas proposed by the EEC (Bioinformatics, Agricultural Economics and Agricultural Engineering) are highly relevant and will be discussed in the deliberations regarding the hiring priorities of the Department both at the ad-hoc committee and the Departmental Council, where a final decision will be made.

4. Student admission, progression and certification

(ESG 1.4, 1.6, 1.7)

Findings

Findings for BSc in Agricultural Sciences, Biotechnology and Food Science

The student admission processes and criteria are well defined and available on the CUT website. The admission criteria are in accordance with the rules of the Ministry of Education, Culture, Sport and Youth and the Cyprus University of Technology. Admission criteria and processes are applied consistently. In short, applicants should apply to the Examinations Department and then attend the Pancyprian Exams in specific courses depending on the Access Framework. The Access Frameworks lead to the admission of candidates to the Public Higher Education Institutions of Cyprus, Greece and the Military Schools of Greece. The four courses considered per Access Framework are declared when applying for the Pancyprian Exams. On the other hand, also transfers and second degree applicants are accepted. The process and the criteria are also well defined.

Student progression is monitored in the CUT system (Student Portal), and on constant basis for example in student-teacher discussions and continuous assessment system in the courses. At least once a year, the Council of the Department holds a discussion on student performance / progress on how to improve and solve problems that arise. Students can also get a transcript of their studies at all stages of their studies.

There are pre-defined, clear regulations regarding student recognition. These regulations rely on CUT and international recognized practice and are applied consistently. The maximum total period of study for transferred students in all universities attended, is twelve semesters, of which at least four semesters are attended at the Cyprus University of Technology (CUT). The transcript of transfer students in an undergraduate course or a second degree shows the corresponding modules of the University recognized as well as the corresponding credit units of each module.

Student certification follows the published regulations and the European and international standards. Furthermore, the Department, in collaboration with the Career Office, monitors and records the professional development of graduates. At the end of their studies, students will receive the Diploma and a study transcript, a Diploma or other certificate detailing their achievements.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the BSc program is compliant to all standards described under 4.1, 4.2. and 4.3, and 4.4.

Findings for MSc in Agricultural Biotechnology

The student admission, processes and criteria are well defined and available on the CUT website. The positions are also separately advertised. Admission criteria are appropriate and applied consistently. Applicants must have a recognized University degree, awarded by an accredited institution in the country where it operates, or a degree evaluated as equivalent to University degree by the Cyprus Council for the Recognition of Higher Education Qualifications. Undergraduate students that are about to graduate can apply for the MSc program, considering that they expect to receive their University degree before the commencement of the MSc program. The Service of Studies and Student Affairs reviews the applications and the Coordinator of the Program and the Postgraduate Studies Committee evaluate them according to published criteria. The proposals of the Coordinator and the Postgraduate Studies Committee are submitted to the Department Council for approval.

The program of study can also be accessed by students with background other than BSc in Agricultural Sciences, Biotechnology and Food Science. In fact, the MSc program in Biotechnology retrieves graduates of different fields of study including Biology, Chemistry, Veterinary, and Pharmaceutics as well as other related scientific fields.

Student progression is monitored constantly by teachers for example as student-teacher discussions. A formal monitoring is applied at least once a year, when the Council of each Department holds a discussion on student performance / progress.



There are pre-defined, clear regulations regarding student recognition. These regulations rely on CUT and international recognized practice and are applied consistently. Student certification follows the published regulations and the European and international standards.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the MSc program is compliant to all standards described under 4.1, 4.2. and 4.3, and 4.4.

Findings for PhD in Agricultural Sciences, Biotechnology and Food Science

The coursework for the PhD program is the same as that for the MSc in Agricultural Biotechnology offered by the Department. Applicants with a MSc degree are exempted from the coursework of the PhD program, with a few exceptions.

The student admission, processes and criteria are available on the CUT website. Positions are separately advertised. Students can be accepted into the PhD program without a MSc degree if they have obtained a BSc with a grade of "Excellent". The program of study can also be accessed with other scientific background than agriculture. Applications are evaluated by a three-member committee consisting of academics of the Department.

Upon entering the program students are assigned a three-member Supervisory Committee which will also monitor student progression. Student progression is monitored constantly in official and unofficial meetings with the student and supervisors. Student progression is also monitored through different tasks the student will take care of during the PhD studies, for example comprehensive examination and PhD dissertation proposal.

There are predefined and published regulations for student recognition which rely on CUT and internationally recognized practice.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the PhD program is compliant to all standards described under 4.1, 4.2. and 4.3, and 4.4.

Strengths

Strengths combined for the BSc, MSc and PhD study programs

The whole admission process as well as the student progression monitoring, recognition and certification processes are appropriate, rigorous and transparent. Also, the special student needs are taken into account.

Areas of improvement and recommendations

Areas of improvement and recommendations for the BSc, MSc and PhD study programs

The processes of admission, progression, and recognition seem to be functional as they are. Where possible, the administrative burden for the teaching staff related to these processes could be relieved by assigning an administrative clerk to the department.

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

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>		
		<i>BSc in Agricultural Sciences, Biotechnology & Food Science</i>	<i>MSc in Agricultural Biotechnology</i>	<i>PhD in Agricultural Sciences, Biotechnology & Food Science</i>
4.1	Student admission, processes and criteria	Compliant	Compliant	Compliant
4.2	Student progression	Compliant	Compliant	Compliant
4.3	Student recognition	Compliant	Compliant	Compliant
4.4	Student certification	Compliant	Compliant	Compliant



R4: Departmental Reply to EEC Comments on Student admission, progression and certification.

Areas of improvement and recommendations for the BSc, MSc and PhD study programs

Reduction of the administrative burden of teaching staff: Please see our reply in section 5 – BSc recommendations – on the issue of administrative support.

5. Learning resources and student support (ESG 1.6)

Findings

Findings for BSc in Agricultural Sciences, Biotechnology and Food Science

The teaching and learning resources of the study program are at a high standard. Classrooms are adequately equipped and so are the laboratories used for practicals.

The physical resources are at a good level. The teaching staff and students praise the library and its services. Also IT support is at a high level and very supportive to teaching staff and students. The students have access to state-of-the-art equipment. The space available for practicals is of high quality, but limited in size which would hamper a further increase in student numbers. The teaching facilities are shared with the research facilities, which promotes student-teacher interactions.

Human technical support for the preparation of and assistance during practical courses, and the operation and maintenance of high-level scientific equipment is lacking due to replacement of technical personnel that was previously appointed for these purposes at the department. This poses an extra workload on the existing academic teaching staff.

Human support resources such as tutors, mentors and counsellors are available to the students, although a number of these tasks are taken up by the teaching and managing staff of the department. Administrative staff is abundantly present at the university (ratio administrative staff: teaching/scientific staff ~ 2:1). However, their expertise and services seem not adequately positioned to sufficiently relieve administrative burden of the scientific/teaching staff. Hence, human teaching and learning resources could be more effectively balanced over support administrative staff and teaching staff. Human support resources at the library and IT level adequately support the study program.

At the university level, an effective student support system is at place.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the BSc program is compliant to standards described under 5.1, 5.2. and 5.4, and partly compliant to the standards described under 5.3 (better balance administrative/technical/academic teaching staff).

Findings for MSc in Agricultural Biotechnology

The teaching and learning resources for the MSc program are very similar to those available to the BSc program. Hence, the findings of the EEC related to the teaching and learning resources of the MSc study program (5.1 to 5.4) are very similar to those described under the findings for the BSc program.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the MSc program is compliant to the standards described under 5.1, 5.2. and 5.4, and partly compliant to the standards described under 5.3 (better balance administrative/technical/academic teaching staff).

Findings for PhD in Agricultural Sciences, Biotechnology and Food Science

The PhD candidates have access to well-equipped laboratories, library, and IT infrastructure. The research topics are focused on laboratory studies, but recently the department gained a university farm which allows for field experiments under agricultural field conditions. This is a major improvement also for the PhD program as it allows the PhD candidates to translate their knowledge to practical, real life situations.

PhD student support in terms of mentoring and training towards the delivery of an academic dissertation is well in order. Student support related to career perspectives may be improved.

The teaching and learning resources for the PhD program are for the rest very similar to those available to the BSc and MSc program described above. Hence, the findings of the EEC related to the teaching and learning resources of the PhD study program (Sub-areas 5.1 to 5.4) are very similar to those described under the Findings for the BSc program.

Based on the self-evaluation and accompanying documents and the onsite visit the EEC concludes that the PhD program is compliant to the standards described under 5.1, 5.2. and 5.4, and partly compliant to the standards described under 5.3 (better balance administrative/technical/ academic teaching staff).

Strengths

Strengths for BSc in Agricultural Sciences, Biotechnology and Food Science

Teaching rooms and labs are at high level and are well-equipped. Library and IT services provide a good level of support to the study program.

Strengths for MSc in Agricultural Biotechnology

Same as for the BSc program: teaching rooms and labs are at high level and are well-equipped. Library and IT services provide a good level of support to the study program.

Strengths for PhD in Agricultural Sciences, Biotechnology and Food Science

The university farm is an important new asset which allows the laboratory-oriented studies of the PhD candidates to be expanded to real-life agricultural settings. Considering the career perspective of the average PhD student, this will likely turn out to be highly valuable for the societal relevance of the performed research and for the future employability of the PhD candidates.

Areas of improvement and recommendations

Areas of improvement and recommendations for BSc in Agricultural Sciences, Biotechnology & Food Science

The teaching lab facilities are largely the same as the research lab facilities. This can have severe limitations in the number of students that can be taught at the same time and it hampers the research at times that the lab facilities are occupied for teaching purposes. General teaching lab facilities (e.g. shared with other departments) would help to relieve the pressure on lab space and time.

The study program would greatly benefit from the availability of technical support staff, e.g. for the preparation of practicals, operation and maintenance of equipment, etc. It is strongly advised to hire technical staff for these purposes, which allows the academic teaching staff to focus on teaching, research and acquisition of research fund.

Administrative human resources could be more effectively positioned within the department to specifically support the teaching staff and to take over parts of the administrative workload. In this way, human teaching and learning resources embodied by the teaching staff will be more effectively and efficiently be allocated to the benefit of the students.

Areas of improvement and recommendations for MSc in Agricultural Biotechnology

The recommendations for the BSc program also apply to the MSc program.

Areas of improvement and recommendations for PhD in Agricultural Sciences, Biotechnology & Food Science

The fact that the PhD candidates have to share their lab facilities and space with the students in BSc and MSc courses is not ideal. Also the fact that the buildings with the laboratories and the offices are separate is not ideal. This hampers natural interactions between teachers/supervisors and the PhD candidates.

In order to perform research at a competitive level, technical support staff responsible for optimal and effective use of expensive high-level scientific equipment is essential. It allows the PhD candidates to make optimal use of the technical resources of the department. The same holds true for the management and maintenance of the university farm. At the moment, such human resources are not available. The EEC highly recommends the university to take action on this point as it will greatly benefit both research and teaching.

The PhD candidates mentioned that they are often not well aware of their career perspectives. Since positions in academia are scarce, career expectation management and alignment with needs from the field are important. The EEC recommends a more active role of the University's Career Services department in this respect, e.g. by organizing networking opportunities between PhD candidates and future employers.

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

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>		
		<i>BSc in Agricultural Sciences, Biotechnology & Food Science</i>	<i>MSc in Agricultural Biotechnology</i>	<i>PhD in Agricultural Sciences, Biotechnology & Food Science</i>
5.1	Teaching and Learning resources	Compliant	Compliant	Compliant
5.2	Physical resources	Compliant	Compliant	Compliant
5.3	Human support resources	Partially compliant	Partially compliant	Partially compliant
5.4	Student support	Compliant	Compliant	Compliant

R5: Departmental Reply to the EEC comments on Learning resources and student support

Areas of improvement and recommendations for BSc in Agricultural Sciences, Biotechnology & Food Science

Teaching and research lab facilities: We recognize the problems (and opportunities) resulting from the sharing of teaching and research lab facilities. The availability of facilities for research and teaching is one of the major problems faced by our Department and University. Efforts have been made in the past to design and move to new facilities for teaching and research, but financial and other issues hampered the efforts. The University has requested from the Department to outline its research and teaching facilities infrastructure requirements, and a letter composed by the Council of the Department was sent to the University authorities in February of 2021. We hope that in the coming years, the Department will move to new facilities that will better match its research and teaching requirements.

Technical support staff: Please see our reply on technical support staff in section 3 on Teaching Staff. We recognize that the addition of one permanent technician position will not solve the problem, but it will be an improvement over the current situation.

Placement of administrative human resources in the Department: Please see our reply in Section 1 – Reply for the BSc program – for the administrative human resources in the Department.

Areas of improvement and recommendations for MSc in Agricultural Biotechnology

Please see replies for the BSc program.

Areas of improvement and recommendations for PhD in Agricultural Sciences, Biotechnology & Food Science

Lab facilities: Please see our reply to point 1 for the Teaching and Research lab facilities for the BSc program in the current section.

Permanent technical staff: Please see our reply on the topic in section 3 - Teaching Staff.

Career perspectives of PhD program graduates: The recommendation of the EEC will be forwarded to the University Career Services. Please see our reply on the same topic in section 1 – PhD recommendations - of the current report.

6. Additional for doctoral programmes

(ALL ESG)

Findings

Specific criteria that the potential students need to meet for admission in the programme are clearly defined and explained in the document on “Rules on PhD students transfer to one of CUT’s PhD programme” (Annex 6 to the SER), as well as how the selection procedures are made. Confirmation has been provided by the Department’s Power Point Presentation.

Clear regulations concerning the points listed in Standard 2 can be found in Annex 2 PhD CUT regulations as part of the SER.

- the stages of completion: points 1,2,3,4 of Annex 2
- the minimum and maximum time of completing the programme: not precisely, but there are regulations on “Automatic termination of PhD-student attendance” in Annex 2
- the examinations: points 5,6,7,14
- the procedures for supporting and accepting the student's proposal: “Rules on PhD students transfer to one of CUT’s PhD programme” (Annex 6 to the SER).
- the criteria for obtaining the Ph.D. degree: point 17

Regulations concerning the points mentioned in 6.2/Standard 1 can partially be found in Annex 2 PhD CUT regulations as part of the SER and in Quality Assurance PhD (Annex 12).

- There are quite detailed regulations on Quality Assurance PhD (Annex 12). However, it doesn’t reflect on plagiarism and the consequences. Since this topic hasn’t been stressed in the on site-discussions it remains to be an open question which has to be clarified.
- Regulations concerning the process of submitting the dissertation to the university library this point can partially be found in Annex 2 “PhD CUT regulations” as part of the SER and in Quality Assurance PhD (Annex 12).

Regulations concerning on the composition, the procedure and the criteria for the formation of the advisory committee (to whom the doctoral student submits the research proposal) can be found in Annex 2 “PhD CUT regulations” as part of the SER (points 4,8-15) and partially in Quality Assurance PhD (Annex 12).

Regulations concerning the duties of the supervisor-chairperson and the other members of the advisory committee towards the student can partially be found in Annex 2 “PhD CUT regulations” as part of the SER (point 4 and in Quality Assurance PhD (Annex 12). In the Department’s Power Point Presentation it is mentioned concerning Quality Assurance that only a limited number of candidates is accepted and Annual Progress Reports are compulsory for each candidate.

An exact number of doctoral students that each chairperson supervises at the same time has not been found in the documents provided. However, it can be assumed from the reports and discussions during the onsite visit that the potential of supervision capacities has not absorbed yet. The exact number should be clarified. The numbers of PhD-candidates enrolled totals to max. 20 since 2015. The number of Faculty members involved in the PhD-program is 13.

Strengths

Admission criteria for PhD-candidates are available and suitable.

The number of PhD-candidates is always subject to absolute limits. The regulations for PhD promotion and supervision are complete.

A good relation of number of PhD-candidates and Faculty members for supervision has been observed.

Areas of improvement and recommendations

More teaching in English language should be offered, particularly at the PhD level, e.g. to attract more foreign students.

The number of international students should be increased, particularly at the PhD-level.

Procedures and devices for Plagiarism-check should be implemented and applied on a regular basis.

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

Sub-areas		<i>Non-compliant/ Partially Compliant/Compliant</i>
6.1	Selection criteria and requirements	Compliant
6.2	Proposal and dissertation	Compliant
6.3	Supervision and committees	Compliant

Click or tap here to enter text.

R6: Departmental Reply to the comments made by the EEC - Additional for Doctoral Programs

Areas of improvement and recommendations

Teaching in English language: We agree with the EEC that the availability of courses in Greek only discourages applications from worthy applicants not fluent in the Greek language. Potential non-Greek speaking students can enter the PhD program of the Department, given that they have fulfilled coursework requirements through the award of a Masters degree in another University. Such students from third (non-EU) countries have been accepted in the past, but chose not to join the program because of the bureaucratic difficulties associated with obtaining a visa. The University is in contact with government authorities in an effort to simplify the procedures for visa issuance. Please see also our reply in section 1 – MSc recommendations – for the possibility of offering either the whole MSc program or sections of it in English.

Increase in the number of international students: In addition to the teaching language, another major impediment in the attraction of international students is the limited financial support available to PhD students. The recent establishment of merit-based PhD scholarships at University level could aid in the increase in the recruitment of international students. The recommendation of the EEC has been forwarded to the University Quality Assurance Committee for discussion and further actions if possible.

Plagiarism check: The University has concrete guidelines for plagiarism check (described in detail in section E5 of the Departmental Evaluation Application). The University has access to the state of the art Turn It In software, which is available for use by students and teaching / research staff. We recognize that the issue of plagiarism is not addressed specifically in the Quality Assurance Policy of the University, and we have forwarded the comment of the EEC to the University Quality Assurance Committee for further action.



7. Additional for joint programmes (ALL ESG)

Click or tap here to enter text.

1 Conclusions and final remarks

C. Conclusions and final remarks

Summarizing the above indicated evaluation results on a single standard basis it can be stated that the Study Programs under review should be accredited without major doubts at all levels (BSc, MSc, and PhD).

The Department of Agricultural Sciences, Biotechnology & Food Science organizes a high-level, well-balanced, state-of-the-art curriculum in Agricultural Sciences, Biotechnology and Food Science. As the only broad university-level curriculum on Agricultural Sciences and Agri-Food in Cyprus, it serves an important national purpose. The level of education meets the high international standards, which is reflected by the observation that graduated MSc students have no problems pursuing PhD studies in top research institutes and universities abroad. Also the PhD program can meet with international standards, which is reflected by the fact that candidates graduated in the PhD program successfully obtain post-doctoral positions in top research institutes abroad.

However, there is potential for improvement. The most important recommendations are mentioned below:

1. Concerning the teaching contents of the study programs, there could be a stronger emphasis on Bioinformatics, Agricultural Economics, Agricultural Engineering, and Digital Agriculture.
2. Teaching personnel and PhD students could be offered the possibility to improve their skills and knowledge in higher education. A central university system for obtaining higher education teaching qualifications is recommended. This would both lift teaching skills of academic teachers and could provide a system acknowledging the equal value of teaching over research.
3. Students could be encouraged to take more responsibility in their learning and teaching starting from BSc level up to PhD level. This could include student tutors, student peers, and learning activities organized by students.
4. A system for PhD students to offer the possibility to participate in at least one scientific conference per year and short research visits abroad. If possible, perhaps also a scholarship program for PhD students could be established to enable full time studies.
5. Consider offering activities and teaching contents in the English language, particularly at the MSc and PhD level. This would provide potential to attract a larger share of students from international origin.
6. The administrative workload of the academic teaching staff should be relieved. Many administrative activities could be allocated to designated administrative support staff, which should be housed in the physical vicinity of the teaching staff for efficient and effective interactions. More time for teaching and research would immediately have a positive impact on these core businesses of the university.
7. Revisit the complexity of the rather bureaucratic procedures within the university to reach a better balance between quality assurance and workload.
8. Considering that maintaining the high quality of study program relies on the motivation and dedication of the academic teaching staff, the EEC recommends to appoint more permanent staff at the Department, academic staff and, importantly technical staff to support the high level scientific infrastructure (e.g. equipment and experimental university farms).
9. Develop awareness of the career perspective of graduated students (especially PhD students). Besides generic networking skill courses, dedicated courses/events focused on the specific Agri-food area, in concerted action with stakeholders from the field could be organized by the Career



Services department of the university. Regular monitoring of the career path of alumni will also provide important information for current and future students about their career perspective. 10. For the PhD program, fund raising for applied research (in collaboration with private sector companies) could be expanded. This would also result in a better alignment with the field of Agri-food businesses where the graduates may find employability in the future.

Departmental reply to Conclusions and Final Remarks

- 1. New positions:** Following the evaluation by the EEC, the Department has formed an ad-hoc committee to plan its future development and expertise needed to carry out its mission. The areas proposed by the EEC (Bioinformatics, Agricultural Economics and Agricultural Engineering / Digital Agriculture) are highly relevant and will be discussed at the deliberations regarding the hiring priorities of the Department both at the ad-hoc committee and the Departmental Council, where a final decision will be made.
- 2. Establishment of a teaching qualification scheme:** The establishment of a teaching qualification scheme will add to the teaching capabilities of teaching staff. We see the value of the proposal made by the EEC and we have forwarded the recommendation to the University Quality Assurance Committee for further evaluation, and implementation if feasible.
- 3. Student involvement in the learning process:** The inclusion of student tutors in the learning process is already implemented at the University level. Such student tutors act on a paid-basis to support students with learning disabilities. We see the value of involving students as peers in the learning process and we will evaluate further options of applying such a scheme. For instance, students who have successfully passed a course with a high grade can help in the teaching of laboratory sections of courses. PhD students participate as teaching assistants in virtually all laboratory sections of Department courses. Teaching assistants are evaluated by students for their performance. Following the EEC recommendation, the Department will increase the participation of PhD students in lecturing parts of the theoretical section of courses through a number of invited lectures, under the guidance of the instructor, where this is possible.
- 4. Financial support for PhD students:** The Department provides to admitted PhD students through teaching and research/technician assistantships the equivalent of their tuition fees in stipends through their third year of study, based on a sufficient progress towards their degree. Several students receive a monthly salary and opportunities for travelling to international conferences through their participation as research collaborators in externally funded projects. We recognize that such opportunities are depended on the participation of the student in a research project, and we will investigate further possibilities for providing students with additional financial support opportunities.
- 5. English language teaching:** We recognize the importance of a good command of the English language for the career prospects of our graduates, as well as for the appeal of the program to international students. The Department will investigate the possibility of either offering a number of MSc courses in English, or offering the whole MSc program in the English language. A concern about offering the MSc in English only is that it will discourage Greek speaking students who are not comfortable with the English language. Unfortunately, it is beyond the capacity of the Department to offer the MSc in both English and Greek.
- 6. Placement of administrative human resources in the Department:** The issue of placing administrative staff in the Department has been communicated to the University authorities for several years now. In a meeting with the Rector of the University in February 2021, the Council of the Department was informed that the University authorities plan to assign one administrative support position to the Faculty of Geotechnical Sciences in the next hiring process, hopefully within the coming year. We recognize that the allocation of 0.5 FTE of an administrative support position to the Department (the position will be shared with the Department of Chemical Engineering – the second Dept. in the Faculty) will not solve the problem, but it will be an improvement over the current situation. In addition, the Chair of the Department has requested the allocation of part-time student-employees to the Department to help with administrative tasks.

7. **Simplification of bureaucratic procedures:** The problem is beyond the reach of the Department. The recommendation of the EEC has been forwarded to University authorities, who recognize the problems arising because of the highly bureaucratic procedures. Unfortunately, some of the procedures result from State laws and regulations, which cannot be directly influenced by the University.
8. **New faculty positions and permanent technical staff:** The Department is in the process of hiring two academic staff and two special teaching staff. We anticipate that in the coming two to three years, the Department will have the opportunity to hire another two to three academic staff, which will reduce the teaching burden placed on the current staff members. The Department has requested the allocation of permanent technical staff to its laboratories for several years now. Unfortunately, because of the financial crisis and budgeting limitations, this was not possible up to now. In a meeting with the Rector of the University in February 2021, the Council of the Department was informed that the University authorities plan to assign one permanent technician position to the Department in the next hiring process, hopefully within the coming year. In addition, in a formal letter sent to the University authorities in February 2021, the Committee of Agricultural Farms of the Department has requested a permanent position for the development and maintenance of its Agricultural Farms.
9. **Developing awareness of the career perspectives of Department graduates, especially PhDs:** Specialized talks on career opportunities and prospects have been included in the content of the seminar ABF 512 "Post-graduate seminars". The seminar will feature invited talks from researchers / PhD holders working in academia, research institutions and the private sector to enhance the understanding of students about potential career paths. Monitoring of the career path of alumni is being conducted on a regular basis by the Student Affairs Services of the University.
10. **PhD program fundraising for applied research:** We recognize the importance of continuously striving to attract more public-private partnerships and we will intensify our efforts to seek additional collaborations from the private sector. Actions under consideration to increase collaborations with the private sector include mapping of the industry needs by the Research Service of the University, as well as visits by Departmental staff to relevant companies to showcase the potential for synergies. Please see our reply in section 1 on the involvement of stakeholders, where we agreed with the EEC proposal on the organization of a bi-annual meeting to showcase the research of the Department to local stakeholders.

2 Higher Education Institution academic representatives

<i>Name</i>	<i>Position</i>	<i>Signature</i>
Dr. Despoina Miltiadou	BSc Program Coordinator, Department Chair	
Dr. Dimitris Tsaltas	MSc Program Coordinator, Department Vice-Chair	
Dr. Andreas Katsiotis	PhD Program Coordinator Faculty Dean	
Dr. Menelaos Stavrinos	Chair, Dept. Quality Assurance Committee	
Ms. Marina Panayiotou	Student Member, Dept. Quality Assurance Committee	
Click to enter Name	Click to enter Position	

Date: 18/03/2021

