

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ

HELLENIC REPUBLIC



Εθνική Αρχή Ανώτατης Εκπαίδευσης Hellenic Authority for Higher Education

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Accreditation Report

for the New Undergraduate Study Programme in operation of:

Agriculture-Agrotechnology

Institution: University of Thessaly Date: 23 November 2022







Report of the Panel appointed by the HAHE to undertake the review of the New Undergraduate Study Programme in operation of **Agriculture-Agrotechnology** of the **University of Thessaly** for the purposes of granting accreditation

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PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the new undergraduate study programme in operation of **Agriculture-Agrotechnology** of the **University of Thessaly** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

- 1. Prof. Ioannis Tzanetakis (Chair) University of Arkansas, Arkansas, USA
- 2. Prof. Andronikos Mauromoustakos University of Arkansas, Arkansas, USA
- **3. Dr. Eleni Maloupa** Hellenic Agricultural Organization_DIMITPA
- 4. Mr. Spyridon Rizos Geotechnical Chamber of Greece
- 5. Mrs Maria Vargiami Aristotle University of Thessaloniki

II. Review Procedure and Documentation

The Hellenic Authority for Higher Education (HAHE) decided to implement the accreditation review process for the undergraduate program (UGP) of the Department of Agriculture-Agrotechnology (AgrTec) of the University of Thessaly (UTh) virtually. Before the visit, the External Evaluation & Accreditation Panel (EEAP) received the Proposal for Accreditation of AgrTec and other relevant material. EEAP met on November 12th online to discuss the strategy and issues to be considered during the accreditation review and putative task allocations for each panel member. Scheduled briefings and meetings were conducted efficiently using ZOOM without technical difficulties yet there were server-related issues with mail communications between EEAP and AgrTec leadership which was eventually resolved.

The accreditation review initiated on November 14thth at 6.45pm according to the schedule provided by the HAHE. The EEAP met with the UTh Vice Rector Professor Theodorakis, the President of UTh Quality Assurance Unit (QAU/MODIP) and the Department Head, Professor Kamboukou-Vogiatzi. The Department Head presented the AgrTec's profile, its labs and facilities as well as other issues related to the study programme. The meetings continued with members of the AgrTec Internal Evaluation Group (IEG/OMEA), Professors Liakos, Alamanis, Strotos, Papaioannou, Vyrlas; the MODIP Director Ms Tsironi, members Professors Tsiropoulos and Papadopoulos and staff Ms Della and Mr Rouvolis. Discussions focused on the compliance of the UGP to the standards for quality accreditation as well as research/teaching balance, faculty numbers and work load, the transition between the previous study program from the Technological Educational Institute (TEI) to AgrTec, student questionnaires and assignments amongst others. At the end of the day, the EEAP had a short internal debriefing meeting to reflect on the impressions of the first day and questions that need to be addressed by AgrTec.

The following day, November 15th started at 5.00pm with the meeting between EEAP and teaching staff Professors Vasilakoglou and Iakovakis and External Academic Personnel (EDIP) Dr. Raptis and Mr. Papathanasiou. The group discussed the undergraduate study program, professional development opportunities, mobility, faculty workload, student evaluations and promotion opportunities for EDIP. Following, the EEAP met with undergraduate students of the 3rd, 5th and 7th semesters to discuss student satisfaction with teaching and research, facilities and career paths including graduate education.

AgrTec had provided two videos (<u>https://www.ertflix.gr/en/vod/vod.171663-axones-anaptuxes-15</u> and <u>https://www.youtube.com/watch?v=5uaL1DkRv7A</u>). The former provided information about several departmental research groups and facilities. The latter provided additional but unnarrated footage of the departmental infrastructure other than dormitories and library. The meeting with administrative staff, Mrs Mpatzogianni and Mr. Mpalafas, Professors Papachatzis, Vlachogiannis, Gravalos, Petrotos, Eliopoulos and Strotos as well as EDIP Mr. Karanikas and Platis focuses on services provided to students and the quality of the infrastructure. EEAP received their take on the balance between the Agricultural and Agrotechnological characteristics of the department.

The meeting with stakeholders were held in a good atmosphere. Attending were Dr. Tsiropoulos, the CEO of AgEnso, Dr. Vlachostergios from ELGO Dimitra Thessalias, Dr. Andreadis from ELGO Dimitra Thessalonikis, Mrs. Zaxaria of Agrotech John Deere and Mrs Skarlatou representing the Association of Importers and Dealers of Agricultural Machinery. The meeting focused on the AgrTec extroversion and the connectivity between department,

industry and society. The industry stakeholders noted the need for scientists/technologists with the AgrTec graduate profile. Following the stakeholder meeting, EEAP had a short internal debriefing meeting to reflect on the overall impressions of the visit and the communication with UTh and AgrTec leadership.

EEAP had a short debriefing meeting with the Vice Rector, Department Head and OMEA. The EEAP acknowledges the excellent atmosphere during all discussions and the spirit of AgrTec staff cooperation. All parties involved conducted themselves professionally and the process was smooth, effective and efficient. The Department provided the written answers to the questions imposed by EEAP in a timely manner including a revised business plan (B5) which was though not considered in the preparation of this report as of HAHE's directive. From November 16thth to 23rd, the EEAP worked on the Accreditation Report.

IMPORTANT NOTE: The five-year UGP has completed its first three years with two of them completed during the COVID pandemic. Therefore, the EEAP conducted the evaluation and drew conclusions based on the experiences of the programme already completed, the documents provided regarding its strategic planning and studies program, and the discussions during the meetings.

III. New Undergraduate Study Programme in operation Profile

AgrTec was established by law in 2019 (Law 4589/2019) and incorporated into UTh. AgrTec provides education at the undergraduate level covering Agronomy-Agrotechnology whereas there are two postgraduate programs focusing on management of aromatic and medicinal plants and precision agriculture. The AgrTec mission is to provide high quality university level education in the field of agronomy and agrotechnology, excel in innovative knowledge and technology and transfer knowledge to stakeholders for the benefit of the society at-large (local, national and international).

The number of incoming students is determined yearly by the Ministry of Education and Religious Affairs. The total number of registered undergraduate students is 459. There are also 81 graduate students and 6 PhD candidates studying in the department.

The programme seeks accreditation for an Integrated MSc degree (National and European Qualifications Framework 7) within 10 semesters (5 years), requiring a total of 300 ECTS. The curriculum is organized into two groups of courses (Background: general (45 ECTS)/specialized (175 ECTS) and specialization (45ECTS). Integral parts of the Curriculum are the Diploma Thesis (30 ECTS) and a 2-month Internship (5 ECTS). Based on the data received ~77% of the total ECTS account for mandatory courses and ~13% are attained through electives.

Today, the Department is comprised of fifteen (15) Faculty members, five (5) EDIP, five (5) Special Technical Laboratory personnel (ETEP) and two (2) Administrative Staff.

The Department includes seven (7) (6 institutionalized) laboratories:

- Irrigation engineering and technology
- Technology of aromatic, medicinal and field crops
- Management technology of agricultural waste and byproducts
- Plant health management
- Precision agriculture
- Arboriculture and soil resources
- Weed science (not institutionalized)

PART B: COMPLIANCE WITH THE PRINCIPLES

Principle 1: Strategic Planning, Feasibility and Sustainability of the Academic Unit

Institutions must have developed an appropriate strategy for the establishment and operation of new academic units and the provision of new undergraduate study programmes. This strategy should be documented by specific feasibility and sustainability studies.

By decision of the institutional Senate, the Institutions should address in their strategy issues related to their academic structure in academic units and study programmes, which support the profile, the vision, the mission, and the strategic goal setting of the Institution, within a specific time frame. The strategy of the Institution should articulate the potential benefits, weaknesses, opportunities or risks from the operation of new academic units and study programmes, and plan all the necessary actions towards the achievement of their goals.

The strategy of their academic structure should be documented by specific feasibility and sustainability studies, especially for new academic units and new study programmes.

More specifically, the feasibility study of the new undergraduate study programmes should be accompanied by a four-year business plan to meet specific needs in infrastructure, services, human resources, procedures, financial resources, and management systems.

During the evaluation of the Institutions and their individual academic units in terms of meeting the criteria for the organisation of undergraduate study programmes, particular attention must be place upon:

a. The academic profile and the mission of the academic unit

The profile and mission of the department should be specified. The scientific field of the department should be included in the internationally established scientific fields of Higher Education, as they are designated by the international categorisation of scientific fields in education, by UNESCO (ISCED 2013).

b. The strategy of the Institution for its academic development

The academic development strategy for the operation of the department and the new study programme should be set out. This strategy should result from the investigation of the factors that influence the studies and the research in the scientific field, the investigation of the institutional, economic, developmental, and social parameters that apply in the external environment of the Institution, as well as the possibilities and capabilities that exist within the internal environment (as reflected in a SWOT Analysis: strengths, weaknesses, opportunities, and threats). This specific analysis should demonstrate the reason for selecting the scientific field of the new department.

c. The documentation of the feasibility of the operation of the department and the study programme

The feasibility of the operation of the new department should be justified based on:

- the needs of the national and regional economy (economic sectors, employment, supplydemand, expected academic and professional qualifications)
- comparison with other national and international study programmes of the same scientific field
- the state-of-the-art developments

 the existing academic map; the differentiation of the proposed department from the already existing ones needs to be analysed, in addition to the implications of the current image of the academic map in the specific scientific field.

d. The documentation of the sustainability of the new department

Mention must be made to the infrastructure, human resources, funding perspective, services, and all other available resources in terms of:

- educational and research facilities (buildings, rooms, laboratories, equipment, etc.)
- staff (existing and new, by category, specialty, rank and laboratory). A distinct five-year plan is required, documenting the commitment of the School and of the Institution for filling in the necessary faculty positions to cover at least the entire pre-defined core curriculum
- funding (funding possibility from public or non-public sources)
- services (central, departmental / student support, digital, administrative, etc.)

e. The structure of studies

The structure of the studies should be briefly presented, namely:

- **The organisation of studies:** The courses and the categories to which they belong; the distribution of the courses into semesters; the alignment of the courses with the European Credit Transfer System (ECTS).
- Learning process: Documentation must be provided as to how the student-centered approach is ensured (modes of teaching and evaluation of students beyond the traditional methods).
- Learning outcomes: Knowledge, skills and competences acquired by graduates, as well as the professional rights awarded must be mentioned.

f. The number of admitted students

- The proposed number of admitted students over a five-year period should be specified.
- Any similar departments in other HEIs with the possibility of student transfers from / to the proposed department should be mentioned.

g. Postgraduate studies and research

- It is necessary to indicate research priorities in the scientific field, the opportunities for interdisciplinary research, the challenges towards new knowledge, possible research collaborations, etc.
- In addition, the postgraduate and doctoral programmes offered by the academic unit, the research projects performed, and the research performance of the faculty members should be mentioned.

Relevant documentation

- Introductory Report by the Quality Assurance Unit (QAU) addressing the above points with the necessary documentation
- Updated Strategic Plan of the Institution that will include its proposed academic reconstruction, in view of the planned operation of new department(s) (incl. updated SWOT analysis at institutional level)
- Feasibility and sustainability studies for the establishment and operation of the new academic unit and the new study programme
- Four-year business plan

Study Programme Compliance

 Members of the EEAP have participated in accreditation reviews where institutions provided in-depth analyses of the strategic plan and detailed SWOT, including an institutional feasibility and sustainability study for the establishment and operation of new departments. In general terms, strategic plans have goals that are supported by objectives, action items, inputs, outputs, outcomes and provide a clear timetable for implementation. The UTh strategic plan (as assessed in documents B2, B3 provided by HAHE) provide metrics associated with AgrTec (input) but does not provide measurable outputs and outcomes making what accounts for success open to interpretation. EEAP did not find the feasibility and sustainability study (Δ . In B2) sufficient as there was just mention of the status quo and not the future need for the AgrTec UGP. EEAP would also expect that the provided text would have gone into more depth onto the placement of the department other than mentioning that AgrTec belongs to UNESCO (ISCED 2013) category 08 (Agriculture, Forestry, Fisheries and Veterinary), a given for any academic department working on primary industries

- The AgrTec strategic plan (as assessed by documents B1, B4 and B5) follows the same approach as that of UTh with all the challenges described above. AgrTec defines their scientific field of education but did not related it to ISCED 2013
- AgrTech clearly articulates its academic profile, mission and vision
- EEAP found that the 4-year business plan and feasibility/sustainability analyses are incomplete (document B5). Some examples of the issues identified: Predicted outputs/outcomes are missing in several goals/objectives (B5 pages 29, 30, 35, 36, 39, 40); the predicted budget is blank (B5 pages 41-45); predicted outcomes are virtually the same as the status quo (e.g. page 38 on the balance between sexes f/m ratio change from 10 to 12%); inconsistencies e.g. ArgTec aims for 10 doctoral students (page 23) with 5 students graduating every year (page 28). Using a very rudimentary calculation this translates to a PhD awarded after two years of study.
- EEAP could not fully assess the structure of the studies given that AgrTec just got into the 7th semester of its existence. Still, the department provided data that were used in the present assessment: Courses and the categories they belong are not clearly described as courses such as Animal Science and Agricultural Politics and International Commerce are under the umbrella of "Plant cultivation" (OMEA presentation slide 18)
- AgrTec has a strategy on the number of admitted students to assure high quality education, yet this is dictated by the Ministry
- Based on the discussions with stakeholders it became clear that there is a need for scientists/technologists with the AgrTec profile. Yet faculty cannot prioritize research as judged by the limited funding and the below average number of peer review publications (as judged by comparisons with sister domestic Agriculture departments). Faculty need to seize opportunities for interdisciplinary research and advancement of science through collaboration with other disciplines
- The current number of graduate students is high for a department of the AgrTec size with a ratio of ~ six graduate students/faculty. Yet there is a lag in the doctoral student numbers. When it comes to scientific output ArgTec is a two-tier department: There is a number of faculty with high grant activity and research output (as just by h-index and citations) whereas there are others that have minimal input in both areas
- UTh and AgrTec have articulated goals yet they lag on appropriate action items and clear metrics by which the success of the AgrTec will be judged.
- AgrTec need to become more extroverted, identify issues affecting the local society and work to address issues as they arise. This will help attract funds for research purposes
- The curriculum of the first six semesters are well received by the students. Yet the number of elective courses (to be taught in the future) is rather small minimizing the flexibility of UGP
- The last criterium for principle 1 is multifaceted as the mission of a TEI does not perfectly align that of a University. It may have been that in the past TEI faculty did not have to publish or

aggressively pursue external funding something that is the cornerstone for a successful university faculty career

UTh and AgrTec need to better define their role in local and Greek society, having a clear mission and vision. Both entities have prepared a rather vague SWOT analyses and they have not clearly articulated business and feasibility/sustainability plans for the near future. EEAP understands that nothing is perfect, especially when it comes to a newly founded Department. EEAP feels that there are areas of improvement including a. A thorough strategic plan; b. feasibility/sustainability studies with clear metrics; and c. Increase of the output of several faculty members that does not correspond to what is expected from a university faculty member.

	Principle 1: Strategic planning, feasibility and sustain the academic unit	ability of
a.	The academic profile and the mission of the academic	unit
	Fully compliant	х
	Substantially compliant	
	Partially compliant	
	Non-compliant	
b.	The strategy of the Institution for its academic develo	pment
	Fully compliant	
	Substantially compliant	
	Partially compliant	х
	Non-compliant	
c.	The documentation of the feasibility of the operation	of the
	department and the study programme	
	Fully compliant	
	Substantially compliant	
	Partially compliant	х
	Non-compliant	
d.	The documentation of the sustainability of the new	
	department	
	Fully compliant	
	Substantially compliant	
	Partially compliant	х
	Non-compliant	
e.	The structure of studies	
	Fully compliant	
	Substantially compliant	Х
	Partially compliant	
	Non-compliant	
f.	The number of admitted students	
	Fully compliant	Х
	Substantially compliant	
	Partially compliant	
	Non-compliant	
g.	Postgraduate studies	
	Fully compliant	
	Substantially compliant	Х
	Partially compliant	
	Non-compliant	

Principle 1: Strategic planning, feasibility and sustainability of the academic unit (overall)		
Fully compliant		
Substantially compliant		
Partially compliant	х	
Non-compliant		

Panel Recommendations

• Even though the AgrTec vision is clear the Unit should work on making it more 'marketable'; transforming them into statements. As an example, EEAP provides those prepared for a sister unit

Vision

The Department is a global leader in; promotingenvironmental sustainability and food security.

Mission

The Department serves science and society through discovery, translation and dissemination of knowledge and resources to promote environmental sustainability and food security.

Core Values

Foster interdisciplinary and synergistic collaboration.

Champion a supportive, diverse, and inclusive environment.

Support innovation and excellence.

Ensure scientific integrity.

Engage and serve stakeholders.

- A strategic plan and the feasibility/sustainability study are the cornerstones for a new academic Unit. EEAP insists that AgrTec go back to the drawing board and develop meaningful plans that will guide the department into the future
- UTh and AgrTec should implement standards (e.g. a minimum h-index, citations) for faculty promotion
- There needs to be a coordinated effort to recruit higher numbers of doctoral students

Principle 2: Quality Assurance Policy of the Institution and the Academic Unit

The Institution should have in place an accredited Internal Quality Assurance System, and should formulate and apply a Quality Assurance Policy, which is part of its strategy, specialises in the operation of the new academic units and the new study programmes, and is accompanied by annual quality assurance goals for the continuous development and improvement of the academic units and the study programmes.

The quality assurance policy of the Institution must be formulated in the form of a published statement, which is implemented by all stakeholders. It focuses on the achievement of special annual quality goals related to the quality assurance of the new study programme offered by the academic unit. In order to implement this policy, the Institution, among others, commits itself to put into practice quality procedures that will demonstrate: the adequacy and quality of the academic unit's resources; the suitability of the structure and organisation of the curriculum; the appropriateness of the qualifications of the teaching staff; the quality of support services of the academic unit and its staffing with appropriate administrative personnel. The Institution also commits itself to conduct an annual internal evaluation of the new undergraduate programme (UGP), realised by the Internal Evaluation Group (IEG) in collaboration with the Quality Assurance Unit (QAU) of the Institution.

The quality assurance policy of the academic unit includes its commitment to implement quality procedures that will demonstrate: a) the adequacy of the structure and organisation of the curriculum, b) the pursuit of learning outcomes and qualifications in accordance with the European and National Qualifications Framework for Higher Education, c) the promotion of the quality and effectiveness of the teaching work, d) the adequacy of the qualifications of the teaching staff, e) the promotion of the quality and quantity of the research work of the members of the academic unit, f) the ways of linking teaching with research, g) the level of demand for graduates' qualifications in the labour market, h) the quality of support services, such as administration, libraries and student care, i) the implementation of an annual review and audit of the quality Assurance Unit (QAU) of the Institution.

Relevant documentation

- Revised Quality Assurance Policy of the Institution
- Quality Assurance Policy of the academic unit
- Quality target setting of the Institution and the academic unit (utilising the S.M.A.R.T. methodology)

- AgrTec complies with the quality assurance policy (QAP). The University has established a MODIP to define the review processes, oversee improvement efforts, and calculate Key Performance Indicators (KPIs). The MODIP monitors AgrTec OMEA. AgrTec has set goals for the UGP that are specific, measurable and have clear timetables. Overall, the EEAP noted the academic unit's well-structured QAP. The Department is fully committed to implement a quality policy that promotes the academic profile and orientation of the UGP
- AgrTec created the 5 year UGP in 2019 and is of the quality expected at the national levels. It
 is deemed appropriate and similar but unique in relationship to the other nine sister
 Agriculture programs

- AgrTec monitors and measures KPIs that are available to students and stakeholders
- The linkage between education and research is a vital component of the programme. It gives the students an excellent chance to create a strong bond with the many opportunities they may pursue after graduation. Furthermore, students and future graduates acquire experience(s) that assist them in job placement
- The program complies with the European and the National Qualifications Framework for Higher Education regarding learning outcomes and qualifications.
- The academic staff is qualified but several closes to retirement. The average research output is adequate but can be improved with the addition of faculty lines
- Students overwhelmingly stated that the teaching staff is qualified and knowledgeable. They
 provide substantial and unwavering tutoring and support to help academically struggling
 students
- AgrTec demonstrated that it has a process in place which allows for monitoring and corrections to meet its goals

Panel Judgement

Principle 2: Quality assurance policy Institution and the academic unit	of the
Fully compliant	х
Substantially compliant	
Partially compliant	
Non-compliant	

- AgrTec must conduct exit interviews with all graduates and collect reliable census data based on a structured questionnaire. In addition, comments about all aspects of the student experience should be collected and analyzed regularly. Sentiment analysis and text analytics should be used to tell the story of the alumni experience
- Close contact with the stakeholders and social partners should be maintained. Regular retreats, where the UGP is discussed, should include alumni and stakeholder input
- EEAP noted that all stakeholders are eager to continue working with AgrTec, which should maintain excellent collaborations with the Agricultural industry OMEA reports with the yearly KPIs should be published on the AgrTec website, promoting transparency, and assisting with future improvements

Principle 3: Design, Approval and Monitoring of the Quality of the New Undergraduate Programmes

Institutions should design the new undergraduate programmes following a defined written process, which will involve the participants, information sources and the approval committees for the programme. The objectives, the expected learning outcomes, the intended professional qualifications and the ways to achieve them are set out in the programme design. The above details, as well as information on the programme's structure, are published in the Student Guide.

The Institutions develop their new undergraduate study programmes, following a well-defined procedure. The academic profile, the identity and orientation of the programme, the objectives, the subject areas, the structure and organisation, the expected learning outcomes and the intended professional qualifications according to the European and National Qualifications Framework for Higher Education are described at this stage. An important new element in the structure of the programmes is the introduction of courses for the acquisition of digital skills. The above components should be taken into consideration and constitute the subject of the programme design, which, among other things, should include: elements of the Institution's strategy, labour market data and employment prospects of graduates, smooth progression of students throughout the stages of the programme, the anticipated student workload according to the European Credit Transfer and Accumulation System (ECTS), the option of providing work experience to the students, the linking of teaching and research, the international experience in study programmes of similar disciplines, the relevant regulatory framework, and the official procedure for the approval of the programme by the Institution.

The procedure of approval or revision of the programmes provides for the verification of compliance with the basic requirements of the Standards by the Quality Assurance Unit (QAU).

Relevant documentation

- Senate decision for the establishment of the UGP
- Curriculum structure: courses, course categories (including courses for the acquisition of digital skills), ECTS awarded, expected learning outcomes according to the EQF, internship, mobility opportunities.
- Labour market data regarding the employment of graduates, international experience in a related scientific field.
- Student Guide
- Course outlines
- Teaching staff (list of areas of specialisation, its relation to the courses taught, employment relationship)
- QAU minutes for the internal evaluation of the new study programme and its compliance with the Standards

Study Programme Compliance

AgrTec is proposing an Integrated MSc degree (National and European Qualifications Framework 7) of 10 semesters (5 years), requiring 300 ECTS. The curriculum is organized into

two groups of courses (Background: general (45 ECTS)/specialized (175 ECTS) and specialization (45ECTS). Integral parts of the Curriculum are the Diploma Thesis (30 ECTS) and a 2-month Internship (5 ECTS). Based on the data received, ~77% of the total ECTS account for mandatory courses, and ~13% are attained through electives. The strengths of the AgrTec UGP lie in the spectrum of fields covered as well as in the integration of fieldwork and practical training. Links between research and teaching do exist. These will become more obvious as the program evolves and matures. AgrTec should regularly update course content and objectives to provide additional learning and critical analysis skills. The course syllabi included the required learning outcomes.

- Students actively participate in the pedagogical process through laboratory and hands-on exercises in most courses, and they do.
- The high number of admitted students in the first two years (~180) of the program could curtail the student progress potential and, indirectly, the quality of the study program. EEAP foresees that the number of admitted students may result in an unsustainable faculty/student ratio affecting the timeline at which students can complete their theses
- Although the UGP is still in its infancy, EEAP notes that AgrTec maintains a monitoring committee and an Advisory Board, which in collaboration with other authorities, can oversee the implementation, progress, and future needs of the program
- Stakeholders were positive when it came to undergraduate knowledge and abilities. They all commented on the dedication of faculty and staff to AgrTec success. They attested that future graduates would meet the expectations of the Geotechnical Chamber of Greece provided they pass this and future accreditations.

Panel	Judgement
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Principle 3: Design, approval and monitoring quality of the new undergraduate programmes	of the
Fully compliant	х
Substantially compliant	
Partially compliant	
Non-compliant	

- The UP should offer direct, quantitative comparisons to similar curricula in renowned global programs to meet self-imposed requirements for excellence and enhance its reputation and status. The program will benefit from eight new faculty strategically requested until 2026. Newer expertise is needed to offer more elective courses in big data analytics.
- The number of incoming students should stabilize to current admissions levels (~100)
- Key stakeholders, along with an Advisory Board and external partners, should be consulted in future changes to the UGP

Principle 4: Student-centred Approach in Learning, Teaching and Assessment of Students

The academic unit should ensure that the new undergraduate programmes are delivered in a way that encourages students to take an active role in creating the learning process. The assessment methods should reflect this approach.

In the implementation of student-centered learning and teaching, the academic unit:

- ✓ respects and attends to the diversity of students and their needs, enabling flexible learning paths
- ✓ considers and uses different modes of delivery where appropriate
- ✓ flexibly uses a variety of pedagogical methods
- ✓ regularly evaluates and adjusts the modes of delivery and application of pedagogical methods aiming at improvement
- ✓ regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys
- ✓ reinforces the student's sense of autonomy, while ensuring adequate guidance and support from the teaching staff
- ✓ promotes mutual respect in the student-teacher relationship
- ✓ applies appropriate procedures for dealing with students' complaints

Relevant documentation

- Questionnaires for assessment by the students
- Regulation for dealing with students' complaints and appeals
- Regulation for the function of the academic advisor
- Reference to the planned teaching modes and assessment methods

- From the discussion the EEAP had with the students, it was communicated that the students were satisfied with the teaching staff regarding its educational work both in classes and the laboratories during the exercises and its eagerness to hear their complaints. The laboratory's equipment is of high quality and serves to a great extent the educational and researching needs, something the students clarified
- Though having established office-hours, both the parties prefer to discuss at any time a problem occurs and for as much as it is required. As a result, even 1st year students, prefer to turn to their teachers rather than the study advisor
- Concerning the books provided, the authors are the teachers themselves and are the most recent
- About score ratings, the average score is between 6 and 7 points which is relatively low. Students attribute this to the labor of their studies including taking exams at many different time-periods during the semester, laboratory exams and projects, all contributing to the overall score of the course and that requires them to study all year long for all courses
- Regarding the assessment procedures, though the questionnaires are well-structured, the students need help connecting through VPN, which prevents them from fulfilling it and thus leads to an extremely low participation rate. While some students are eager to participate and send their complaints to MODIP, faculty have a different opinion. They claim that the VPN has

no issues and that the mentality and ignorance of the benefits of the assessment, which dates back in school days, is to blame

- Not all lecturers have a PhD but are postgraduate students or have not yet acquired their PhD and the same goes for the instructors of the laboratory exercises, not those that design and decide the exercises' structure, and that would make the teaching methods questionable
- Teachers inform the students about the examination procedure, material and way of grading in advance so the latter may study efficiently and organize their time properly
- Though the slides of the lectures can be found online (e-class), there are no recorded lectures for those who are not capable of attending classes or happened to be sick and missed important lectures or even for those who would like to revise them some other time or catch up with the others. There are, however, videos made by the teaching staff which are describing laboratory and processing methods
- There is mutual respect from both sides and eagerness to solve problems. The necessary procedures for dealing with students' complaints and incidents of harassment and bullying are followed (<u>https://www.uth.gr/zoi/ypostirixi/ parenohlisi-ekfobismos</u>).
- The students benefitted from the laboratory exercises and the projects assigned. Thus, they feel confident to apply that knowledge in the field, but in reality, the curriculum lacks data analysis and programming. Faculty have also detected an increasing interest on behalf of the students about this and even motivating their fellow students
- Participation in assessment is extremely low.
- All in all, the curriculum requires improvements to help students meet the demands of the work market in the future, the qualified teaching staff must increase, and incentives must be given to students to increase their participation in the assessment.

Panel Judgement

Principle 4: Student-centred approach in le	earning,		
teaching and assessment of students			
Fully compliant			
Substantially compliant	х		
Partially compliant			
Non-compliant			

Panel Recommendations

• To facilitate educational outcomes, the lectures should be recorded and put online, enabling students to watch them at any time, so no one is excluded. Adopting this

hybrid system of synchronous and asynchronous teaching could help motivate studying and increase scoring

- The advantage of AgrTec, which produces professional agronomists-agrotechnologists, should be supported by structuring a more integrated curriculum that includes more data analysis-related courses and introduces students to specialized big data analytics and programming languages such as 'R' and 'Python'
- Due to the difficulty of the courses and the large load, lecturers should also focus on creating guidelines for taking exams successfully that lead to higher grades. The idea is that a good teacher may as well convey the knowledge once and, combining the existing detailed laboratory exercises and useful assigned projects, would help students achieve higher grades. The recorded lectures mentioned above as a suggestion would also help
- To increase the extremely low participation in the assessment procedure rates, students must have easier access to the questionnaires since, in their own words, they have technical difficulties in entering the questionnaire. Otherwise, let there be alternative conditions under which the assessment is held, such as a specific time during class or a specific time during the day appointed by the professor, maintaining the voluntary nature of the process

Principle 5: Student Admission, Progression, Recognition of Academic Qualifications and Award of Degrees and Certificates of Competence of the New Study Programmes

Academic units should develop and apply published regulations addressing all aspects and phases of studies of the programme (admission, progression, recognition and degree award).

All the issues from the beginning to the end of studies should be governed by the internal regulations of the academic units. Indicatively:

- ✓ the registration procedure of the admitted students and the necessary documents according to the law - and the support of the newly admitted students
- \checkmark student rights and obligations, and monitoring of student progression
- ✓ internship issues, granting of scholarships
- ✓ the procedures and terms for writing the thesis (diploma or degree)
- ✓ the procedure of award and recognition of degrees, the duration of studies, the conditions for progression and assurance of the progress of students in their studies

as well as

✓ the terms and conditions for enhancing student mobility

Appropriate recognition procedures rely on relevant academic practice for recognition of credits among various European academic departments and Institutions in line with the principles of the Lisbon Convention on the Recognition of Qualifications concerning Higher Education in the European Region. Graduation represents the culmination of the students' study period. Students need to receive documentation explaining the qualification gained, including achieved learning outcomes, and the context, level, content and status of the studies that were pursued and successfully completed (Diploma Supplement).

All the above must be made public within the context of the Student Guide.

Relevant documentation

- Internal regulation for the operation of the new study programme
- Regulation of studies, internship, mobility and student assignments
- Printed Diploma Supplement

Certificate from the President of the academic unit that the diploma supplement is awarded to all graduates without exception together with the degree or the certificate of completion of studies

Study Programme Compliance

 Even though the number of subjects, including obligatory laboratory exercises, is large, as is the number of attending students regardless of them being divided into groups of 15-20 individuals, still an inconvenient number for laboratory conditions, all of them agreed that they equally spent enough time utilizing the equipment and familiarizing with laboratory conditions so that they felt ready to apply that knowledge in the field or at work

- Students do not seem to understand the importance of their graduate degree being Integrated Master which means they can continue to acquire a PhD immediately without delaying on postgraduate studies and at the same time having a more competitive qualification in their hands and at a younger age
- Due to the imbalance between students and teaching staff, there more students than faculty are able to manage and that may induce future difficulties in organizing degree and doctoral theses as well as administrative work
- During accreditation, the ratio between females and males was imbalanced (only two females were present) while, to students' surprise, the majority of students in the Department as a whole consisted by females.
- Though a graduate of this Department isn't considered a pure Agronomist or pure Agrotechnologist but a professional of both, some students prefer agricultural over agrotechnical subjects and vice versa. In addition, the students declared satisfaction with the ratio between pure agricultural and agrotechnological courses and that they receive equal knowledge from both fields and have an advantage over others that are not taught both. However, even for such an interesting and innovative Department specializing in upcoming and already established abroad agricultural practices, the curriculum is deficient in respective courses. The students are taught a few Analytics courses without deepening their knowledge, have no experience with the subject from the start of their studies to build up the required skills, and lastly, they do not have adequate contact with programming languages such as 'R' and 'Python'. That contradicts faculty and student claims concerning their eagerness to develop digital skills through the courses. However, students would like to develop their skills, so they turn to other alternatives outside of the University (e.g. attending certification programs)
- The Department can very well meet modern society demands in agriculture because of its fields of study and that needs to be supported through a more integrated curriculum. A good example is the running «Horizon» (2022) which applies state-of-the-art technology (photovoltaics inside greenhouses) in Agriculture.
- Faculty should communicate to the students the importance and possibilities of the acquired degree.
- Since this new Department is perceived by HAHE as the continuation of the respective, late TEI, the transition of the students into the new curriculum must happen smoothly
- Overall, there is an imbalance between number of students and teaching staff which might induce a problem in organizing properly educational and administrative work
- Students appear to achieve low grades due to the excessive labor on account of projects and laboratories
- The Diploma acquired can also lead directly to doctoral studies to acquire a PhD with no need of postgraduate studies first

Panel Judgement

Principle 5: Student admission, progression, recog	nition of
academic qualifications, and award of degree	ees and
certificates of competence of the new study program	nmes
Fully compliant	
Substantially compliant	Х
Partially compliant	
Non-compliant	

- The transition of students from high school education to the university should happen smoothly. The curriculum should be constructed in a way that meets the demands of an AEI Institute
- AgrTec must keep track of its graduate student development, when that time comes, be it postgraduate studies or introduction to the work market. That way, the Institution will keep its connections with companies and research institutions alive, create new ones and gain prestige. It may also help attract funding and get included in more research programmes
- To motivate students to study, continue their studies post-graduation and recognize their hard work, the Institution should continue allocating scholarships to PhD candidates, and establish awards and honors for excelling members of AgrTec

Principle 6: Ensuring the Competence and High Quality of the Teaching Staff of the New Undergraduate Study Programmes

Institutions should assure themselves of the competence, the level of knowledge and skills of the teaching staff of the academic units, and apply fair and transparent processes for their recruitment, training and further development.

The Institution should attend to the adequacy of the teaching staff of the academic unit, the appropriate staff-student ratio, the suitable categories of staff, the appropriate subject areas and specialisations, the fair and objective recruitment process, the high research performance, the training – development, the staff development policy (including participation in mobility schemes, conferences and educational leaves- as mandated by law).

More specifically, the academic unit should set up and follow clear, transparent and fair processes for the recruitment of properly qualified staff and offer them conditions of employment that recognise the importance of teaching and research; offer opportunities and promote the professional development of the teaching staff; encourage scholarly activity to strengthen the link between education and research; encourage innovation in teaching methods and the use of new technologies; promote the increase of the volume and quality of the research output within the academic unit; follow quality assurance processes for all staff members (with respect to attendance requirements, performance, self-assessment, training, etc.); develop policies to attract highly qualified academic staff.

Relevant documentation

- Procedures and criteria for teaching staff recruitment
- Regulations or employment contracts, and obligations of the teaching staff
- Policy for staff recruitment, support and development
- Performance of the teaching staff in scientific-research and teaching work, also based on internationally recognised systems of scientific evaluation (e.g., Google Scholar, Scopus, etc.)

- The AgrTec faculty roster was established with the inception of the department. The vast majority had corresponding appointments to the TEI of Larisa and transferred to AgrTec
- All faculty have doctoral degrees. The hiring process is based on applicant merit, credentials, and is administered by the Department. AgrTec does not have hiring autonomy, and the Ministry controls faculty lines. Hiring opportunities for permanent or tenure-track positions are limited. Faculty are assisted by temporary hires, known as '407 plan' appointments. Some of those appointees carry a doctoral degree
- The expertise of all faculty is closely affiliated with 'traditional' agriculture and newer precision agriculture disciplines, most of whom are agricultural engineers. Effort distribution (teaching/research/service) is not formalized
- The mean 2021-2022 faculty h-index is 10.6 but varies significantly between individuals. This
 number is well-below index values observed in sister institutions. The 2019-2022 average
 number of peer-reviewed Journal articles per faculty per year shows an upward trend were
 1.9, 2.5 and 2.6, respectively. Similarly, the average number of citations per faculty per year
 was 53, 65, and 81, respectively

- For that same period, 2019-2022, each faculty had an average (~0.5) of a half-founded project corresponding to 164K euros per faculty per year
- The faculty/student ratio for the last three academic years was 10, 9, and 4, respectively that combined with the graduate students, exceeds 30 students per faculty currently. In 2019 & 2020, the number of admitted undergraduate students was (~180), almost double of what was requested. In the past two years, admissions linger at ~ 100
- Faculty are formally obliged to teach 8 hours per week, but this has been elevated to about 10 hours, with almost half of the load taught by temporarily hired external partners making professional development activities unrealistic
- Stakeholders endorse AgrTec contributions to the local economy and its positive influence on the local communities
- Faculty should prepare impact statements that can be used to further promote AgrTec
- Several of the faculty lead establishing interdisciplinary research teams and obtaining funding, and providing resources and services to stakeholders
- The imbalance in the faculty/staff ratio compared to its main competition sister programs in Athens needs to be addressed immediately.
- AgrTec is successfully focusing on translational research with strong affiliations with stakeholders
- Being the only AgrTec department in Greece outside Athens offers unique and potentially exciting opportunities
- New expertise needs to be added to support analytics, Big Data, programming bioethics and sustainability. Government and educational institutions should support those efforts in tangible ways

Panel Judgement

Principle 6: Ensuring the competence and high quality of			
the teaching staff of the new undergraduate	study		
programmes			
Fully compliant			
Substantially compliant	х		
Partially compliant			
Non-compliant			

- The Ministry should approve at least eight new tenure-track positions for the Department by 2026; 407-type appointments should not become permanent practice because, with rare exceptions, they are incompatible with the support of research initiatives and Programs
- Attract new faculty that can serve multiple areas of research/teaching given the constraints and needs with emphasis and training on big data analytics

- Encourage and support regular professional development activities for faculty and staff when you build the faculty to an appropriate number so that they can support the programme
- Demand higher research funding and productivity in the form of peer-reviewed publications. This will increase the visibility, standing, and ranking of the department relative to its peers domestically and internationally
- Consider annual teaching and research awards for faculty and staff
- Use refereed publications and funding as indicators of excellence

Principle 7: Learning Resources and Student Support of the New Undergraduate Programmes

Institutions should have adequate funding to meet the needs for the operation of the academic unit and the new study programme as well as the means to cover all their teaching and learning needs. They should -on the one hand- provide satisfactory infrastructure and services for learning and student support and -on the other hand- facilitate direct access to them by establishing internal rules to this end (e.g., lecture rooms, laboratories, libraries, networks, boarding, career and social policy services, etc.).

Institutions and their academic units must have sufficient resources, on a planned and long-term basis, to support learning and academic activity in general, in order to offer students the best possible level of studies. The above means include facilities such as, the necessary general and specific libraries and possibilities for access to electronic databases, study rooms, educational and scientific equipment, information and communication services, support and counselling services. When allocating the available resources, the needs of all students must be taken into consideration (e.g. whether they are full-time or part-time students, employed students, students with disabilities), in addition to the shift towards student-centred learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organised in various ways, depending on the institutional context. Students should be informed about all available services. In delivering support services, the role of support and administration staff is crucial and therefore this segment of staff needs to be qualified and have opportunities to develop its competences.

Relevant documentation

- Detailed description of the infrastructure and services made available by the Institution to the academic unit to support learning and academic activity (human resources, infrastructure, services, etc.) and the corresponding specific commitment of the Institution to financially cover these infrastructure-services from state or other resources
- Administrative support staff of the new undergraduate programme (job descriptions, qualifications and responsibilities)
- Informative / promotional material given to students with reference to the available services

- AgrTec has been housed, since its establishment, mainly in the new building of the School of Agricultural Technologists in the Gaiopolis Complex of the University of Thessaly, whereas it occupies important spaces-laboratories both in the former building of the School of Agricultural Technologists and on the University Farm
- EEAP noted the good quality of an adequate number of facilities dedicated to supporting the study program and students. The teaching facilities of the Department consist of a large number of lecture rooms, research laboratories and analytical equipment. There are two large lecture rooms (amphitheaters) and more special ones, which are expressly assigned to each laboratory unit. The amphitheaters are equipped with state-of-the-art surveillance devices, such as projector computer and microphones that can cover the needs teaching and to host scientific meetings. Moreover, every laboratory has well-equipped rooms-offices and research facilities to cover the needs of both the academic and technical staff, along with the research

students. Facilities and equipment adequately cover each laboratory teaching and research needs

- Students have access to the University Library. Students are well informed of the different support services available and indicated that they have good access to them. Moreover, the entire educational process is supported by the e-class platform, an integrated electronic course management system that supports asynchronous distance education
- The University Farm is 700 acres in which there are educational and research experimental field crops and techniques where students practice their skills. There are also seven greenhouses with a total area of 3,100 m² as well as agricultural machinery and tools for the utilization of arable land and plant processing facilities
- During discussions it became clear that the laboratories and farm facilities satisfactorily cover the learning needs. However, the old laboratory equipment needs to be renewed and strengthened by the supply of new ones
- The Department and the University of Thessaly provide counselling, advocacy and complaint management services to students. It also provides health care and dormitory facilities for students
- The Administrative staff consists of two overworked individuals and there are concerns about speed and overall operation. It is proposed to strengthen its secretarial support. The Department's website is only in Greek and based on discussion with OMEA an English version will be available soon. The site is well- structured and user-friendly but lacking in updates and announcements to students to be aware of all available services and regulations
- The fitness facilities, student club and amenities for extracurricular activities and other support services are located within the Gaiopolis complex and are easily accessible

Panel Judgement

Principle 7: Learning resources and student support of the		
new undergraduate programmes		
Fully compliant		
Substantially compliant	х	
Partially compliant		
Non-compliant		

- The visibility of AgrTec should be strengthened
- The digital organization of the administration office should be further encouraged
- AgrTec in collaboration with the University authorities should maintain the available infrastructure and ensure continuous maintenance of the facilities
- AgrTec should consider strengthening extracurricular skills, such as organizing pedagogical competency training courses

Principle 8: Collection, Analysis and Use of Information for the Organisation and Operation of New Undergraduate Programmes

The Institutions and their academic units bear full responsibility for collecting, analysing and using information, aimed at the efficient management of undergraduate programmes of study and related activities, in an integrated, effective and easily accessible way.

Effective procedures for collecting and analysing information on the operation of Institutions, academic units and study programmes feed data into the internal quality assurance system. The following data is of interest: key performance indicators for the student body profile, student progression, success and drop-out rates, student satisfaction with the programme, availability of learning resources and student support. The completion of the fields of National Information System for Quality Assurance in Higher Education (NISQA) should be correct and complete with the exception of the fields that concern graduates in which a null value is registered.

Relevant documentation

- Report from the National Information System for Quality Assurance in Higher Education (NISQA) at the level of the Institution, the department and the new UGP
- Operation of an information management system for the collection of administrative data for the implementation of the programme (Students' Record)
- Other tools and procedures designed to collect data on the academic and administrative functions of the academic unit and the study programme

- AgrTec has created and operates an information system for the management and monitoring
 of students, teaching staff and course structure data. The main tools used to collect
 information and draw useful conclusions are the integrated MODIP Information System, the
 various documents of the Secretariat including the electronic system of the Secretariat and the
 course evaluation questionnaires of students (undergraduate and postgraduate) who evaluate
 various aspects of teaching work and faculty. Participation rates are rather low.
- Student satisfaction surveys are conducted upon completion of the 9th or 10th teaching week
 of each semester. The department uses online software called e-class to submit the surveys.
 There is no evidence of a formal internal process of analysis and evaluation based on the
 assessment. This is because AgrTec is newly established and although it has recently started
 the evaluation processes, it is not yet in a position to collect and evaluate the information. The
 department is in transition and only limited data was provided to the EEAP.
- It is not clear whether this information is communicated to all faculty and staff.
- Graduate employability and career paths are not available as no students have yet graduated from the current New Undergraduate Study Program

Panel Judgement

Principle 8: Collection, analysis and use of information			
for the organisation and operation	of new		
undergraduate programmes			
Fully compliant			
Substantially compliant	х		
Partially compliant			
Non-compliant			

- Establish an Alumni Association and track the employability and career paths of graduates
- Encourage students to complete the questionnaires, explaining to them the importance of the departmental assessment for their professional careers
- Quality assurance data should be formatted in graphs to allow direct interpretations, demonstrate trends and when key performance indicators are not met, mitigation measures to be implemented.
- The information generated needs to be communicated to all AgrTec staff in an integrated manner that will demonstrate trends and will allow direct interpretations and comparisons

Principle 9: Public Information Concerning the New Undergraduate Programmes

Institutions and academic units should publish information about their teaching and academic activities in a direct and readily accessible way. The relevant information should be up-to-date, clear and objective.

Information on the Institutions' activities is useful for prospective and current students, graduates, other stakeholders and the public. Therefore, Institutions and their academic units must provide information about their activities, including the new undergraduate programmes they offer, the intended learning outcomes, the degrees awarded, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students. Information is also provided, to the extent possible, on graduate employment perspectives.

Relevant documentation

- Dedicated segment on the website of the department for the promotion of the new study programme
- Bilingual version of the website of the academic unit with complete, clear and objective information
- Provision for website maintenance and updating

- AgrTec communicates its teaching and academic activities mainly through its website at separate tabs that are easily accessible but only in Greek.
- The website provides details about the structure, human resources, laboratories and infrastructure. Announcements and news are available on the Home page. In addition on the Home page there is a video showing the infrastructure and facilities of the Department and its experimental farm: <u>https://agrtec.uth.gr/2021/12/01/to-tmima-geoponias-agrotechnologiasstous-axones-anaptyxis/</u>
- The AgrTec website does not have the research and collaboration tabs in which the department's publications, research programs and collaborations with other educational institutions will be presented. Furthermore, the departmental activities like meetings, conferences and connecting with various stakeholders are not provided on the website
- The website does not mention anywhere the professional prospects of the students and the involvement of chambers and associations of relevant stakeholders
- In a separate tab, information about the teaching faculty members and staff with their contact details, a brief description of research interests, a link to their CV and current course load is also available
- The UGP Guide, individual course summaries, current year's study guide and course registration information are posted on the Education tab
- Connection to the following services is easily achieved through relevant links from the front page of the website, addressing the needs of students with direct access to: Physical education office, Virtual Private Network (VPN), E-Secretariat, Online Services, Academic webmail, Academic identity, Student care, Counselling and psychological support, Library and information center and Prosvasi

- EEAP advised that the scope of the Department should become more prevalent and the advice was immediately implemented by updating a relevant post the next day (<u>https://agrtec.uth.gr/2022/11/16/gnoriste-to-tmima-geoponias-agrotechnolias-mesa-apoena-syntomo-vinteo/</u>)
- No information exists on the graduates of the Department since its maturity lies in the third year of the study programme, a current deficiency that will surely be rectified in 2024.
- AgrTec has not a strong presence on popular social media, i.e. Facebook and Twitter. The relevant links in the Home page of the website are not active.

Panel Judgement

Principle 9: Public	information	concerning	the	new
undergraduate programmes				
Fully compliant				
Substantially compliant				
Partially compliant			х	
Non-compliant				

- The AgrTec website should be restructured and include additional information
- Data need to be updated and presented in an integrated and easily accessible manner
- The English version of the website should also exist
- AgrTec should take advantage of its social media presence to increase the visibility of its research and teaching activities
- The website should deliver relevant information with environmental, social and economic responsibility contributions addressing local stakeholders and the general public

Principle 10: Periodic Internal Review of the New Study Programmes

Institutions and academic units should have in place an internal quality assurance system, for the audit and annual internal review of their new programmes, so as to achieve the objectives set for them, through monitoring and amendments, with a view to continuous improvement. Any actions taken in the above context, should be communicated to all parties concerned.

Regular monitoring, review and revision of the new study programmes aim at maintaining the level of educational provision and creating a supportive and effective learning environment for students. The above comprise the evaluation of: the content of the programme in the light of the latest research in the given discipline, thus ensuring that the programme is up to date; the changing needs of society; the students' workload, progression and completion; the effectiveness of the procedures for the assessment of students; the students' expectations, needs and satisfaction in relation to the programme; the learning environment, support services, and their fitness for purpose for the programme. Programmes are reviewed and revised regularly involving students and other stakeholders. The information collected is analysed and the programme is adapted to ensure that it is up-to-date.

Relevant documentation

- Procedure for the re-evaluation, redefinition and updating of the curriculum
- Procedure for mitigating weaknesses and upgrading the structure of the UGP and the learning process
- Feedback processes on strategy implementation and quality targeting of the new UGP and relevant decision-making processes (students, external stakeholders)
- Results of the annual internal evaluation of the study programme by the QAU and the relevant minutes

- The AgrTec UGP is periodically reviewed by a Curriculum Committee. According to the teaching staff the course material is under constant review in order to be in line with current educational needs as well as trends in international scientific research and market requirements. The review takes place every academic year after April. Students are requested to evaluate the attended courses using an electronic questionnaire. Each questionnaire includes 19 course-related questions, nine on the course assignments, five on the instructor-related, three on the course laboratory-related and two on students-related. The student uses a 5-point scale (1: Strongly Disagree, 2: Disagree, 3: Neither Disagree Neither Agree, 4: Agree, and 5: Strongly Agree) that allows comparisons of students' opinions through time. The Curriculum Committee gathers proposals for new courses or change/modification of existing courses and recommends them on to the competent bodies of the University.
- Student participation in the evaluation process was 12%, which is very low.
- During the meeting between EEAP and the students, the latter mentioned that sometimes the internet does not work and this is the main reason why participation in the evaluation is low.
 OMEA needs to better inform the students about the evaluation process and encourage participation in any possible way.

Panel Judgement

Principle 10: Periodic internal review of the new	v study
programmes	
Fully compliant	
Substantially compliant	х
Partially compliant	
Non-compliant	

- Develop strategies that will increase course evaluation participation (i.e., demonstrate the value of evaluation, allow time to complete questionnaires during class, or organize special sessions)
- Add open-ended questions in the questionnaire to allow students to develop important aspects or express concerns that have not been addressed elsewhere.
- Post course evaluation results on the AgrTec website

Principle 11: Regular External Evaluation and Accreditation of the New Undergraduate Programmes

The new undergraduate study programmes should regularly undergo evaluation by panels of external experts set by HAHE, aiming at accreditation. The results of the external evaluation and accreditation are used for the continuous improvement of the Institutions, academic units and study programmes. The term of validity of the accreditation is determined by HAHE.

HAHE is responsible for administrating the programme accreditation process which is realised as an external evaluation procedure and implemented by a panel of independent experts. HAHE grants accreditation of programmes, based on the Reports submitted by the panels, with a specific term of validity, following to which revision is required. The accreditation of the quality of the programmes acts as a means of verification of the compliance of the programme with the Standards, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees. Both academic units and institutions must consistently consider the conclusions and the recommendations submitted by the panels of experts for the continuous improvement of the programme.

Relevant documentation

 Progress report on the results from the utilisation of the recommendations of the external evaluation of the Institution and of the IQAS Accreditation Report.

- The EEAP was unable to evaluate this principle for two reasons: AgrTec is a newly established Department established based on a new transition law of the former TEI structure to a University Department and therefore the department has never had another external evaluation before. The lack of a previous evaluation report does not contribute efficiently to the verification of the programme's continuous evolution and improvements
- Nevertheless, the EEAP evaluates the specific principle taking into account the HAHE documentation under evaluation, the internal review report and the assessment of some of the Principles
- The UGP has been greatly revised compared to what was established under the previous structure of the former TEI by adding one more year of study
- AgrTec teaching staff should be encouraged to publish in peer-reviewed international journals and increase its h-index
- MODIP has produced a report including all the major advantages and deficiencies of the UGP
- The regular internal review of the programme is vital for the newly established UPs. Their success mainly depends on inclusion of all representative stakeholders (academic and administrative staff, students, social partners, primary sector, retail-wholesale trade, industry, etc.). The internal review reports produced currently seem to acknowledge this need and must be continued in the same and more intensive manner

Panel Judgement

Principle 11: Regular external evaluation and accreditation of the new undergraduate programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

Due to the fact that no preliminary external evaluation report was available for the assessment from the EEAP, AgrTec must update its four-year business plan and perform an intermediate internal review of its UGP under the light of the recommendations made in current evaluation

Principle 12: Monitoring the Transition from Previous Undergraduate Study Programmes to the New Ones

Institutions and academic units apply procedures for the transition from previously existing undergraduate study programmes to new ones, in order to ensure compliance with the requirements of the Standards.

Applies in cases where the department implements, in addition to the new UGPs, any pre-existing UGPs from departments of former Technological Educational Institutions (TEI) or from departments that were merged / renamed / abolished.

Institutions should implement procedures for the transition from former UGPs to new ones, in order to ensure their compliance with the requirements of the Standards. More specifically, the institution and the academic unit must have a) the necessary learning resources, b) appropriate teaching staff, c) structured curriculum (courses, ECTS, learning outcomes), d) study regulations, award of diploma and diploma supplement, and e) system of data collection and use, with particular reference to the data of the graduates of the pre-existing UGP. In this context, the Institutions and the academic units prepare a plan for the foreseen transition period of the existing UGP until its completion, the costs caused to the Institution by its operation as well as possible measures and proposals for its smooth delivery and termination. This planning includes data on the transition and subsequent progression of students in the respective new UGP of the academic unit, as well as the specific graduation forecast for students enrolled under the previous status.

Relevant documentation

- The planning of the Institution for the foreseen transition period, the operating costs and the specific measures or proposals for the smooth implementation and completion of the programme
- The study regulations, template for the degree and the diploma supplement
- Name list of teaching staff, status, subject and the course they teach / examine
- Report of Quality Assurance Unit (QAU) on the progress of the transition and the degree of completion of the programme. In the case of UGP of a former Technological Educational Institution (TEI), the report must include a specific reference to how the internship was implemented

Study Programme Compliance

- AgrTec is housed in a newly built building with two amphitheaters, twelve laboratories and classrooms, twenty offices for faculty and staff and auxiliary rooms. In addition, the educational and research needs are also served by the old building of the former TEI, eleven greenhouses and the University of Thessaly's farm.
- The teaching staff includes 22 permanent members and a few visiting members, number that should be increased. EEAP considers that all members have the required education and skills to meet the teaching and research requirements. The programme is supported by a budget for Universities supplied by the ministry of Education, the National Development and Investment Program, by the University's Special Account for Research Funds and by faculty members' research projects.

The Department supports incoming students. It also supports students of the two former TEI Departments who wish to obtain a university-level degree with the requirements of the Law

4589/2019. The latter are required to attend and successful pass an additional twelve courses, which are provided in one year (separate list of courses for those coming from each of the two directions of the former TEI). These courses are taught by the Institution's own teaching staff, together with the newly admitted students. In this context, the University prepared a plan with the courses included in the UGP for the anticipated transitional period until its completion (February 2023). The planning included data on the transition and subsequent development of students in the corresponding new UGP of the academic unit, as well as the specific graduation forecast for students enrolled in the previous regime. Fourteen students have already graduated, but other data such as courses, ECTS, learning outcomes, were not made available to the EEAP. A proposal for a University-level degree with an integrated master (level 7 of the National and European Qualifications Framework) has been submitted.

Panel Judgement

Principle 12: Monitoring the transition from undergraduate study programmes to the new ones	-
Fully compliant	
Substantially compliant	x
Partially compliant	
Non-compliant	

- Improve faculty: student ratio. The EEAP recommend a ratio of 1:20
- The academic unit must create a system for the collection and use of data, courses, ECTS, learning outcomes, with particular reference to the data of the graduates of the pre-existing TEI.

PART C: CONCLUSIONS

I. Features of Good Practice

- The labor market sees a clear need for an AgrTec graduate
- Significant student hands-on experience
- Well-equipped labs located in modern facilities
- Excellent Student amenities
- Ample space to develop experimental fields
- Significant research outputs by some faculty

II. Areas of Weakness

- AgrTec is severely understaffed in all levels, from faculty to support personnel
- Lack of cohesive strategic plan and feasibility/sustainability study
- Unbalanced student to faculty ratio
- Modest research outputs by many faculty
- Lack of courses addressing data management and coding
- Lack of English website that could attract international students and faculty

III. Recommendations for Follow-up Actions

- Redo the strategic plan so goals are supported by objectives, action items, inputs, outputs, outcomes and provide a clear timetable for implementation
- Redo the feasibility/sustainability study and include metrics that are ambitious and pragmatic
- Develop a clearly defined plan towards a balanced faculty/student ratio
- Introduce courses related to data analytics and coding.
- Prioritize the recruitment of new personnel in cutting edge technologies
- Attract faculty that can serve multiple areas of research/teaching given the constraints in recruiting academic personnel
- Define research agenda with areas of prioritization; hires should have stakeholder input
- Annual evaluation audits: Review outputs should be disseminated through the website and mailing lists to students, alumni and stakeholders
- Enhance the role of Academic Advisor
- Reduce the percentage of teaching personnel with low evaluation reports
- Assess and implement approaches to recognize excellence in teaching and research
- Reward outperforming students through awards, funded by key stakeholders
- Enhance incoming mobilities and develop a dedicated webpage listing bilateral agreements, regulations and procedures and/or redirect to relevant Institutional links
- Amend website: focus on improvements and uniformity and incorporate all relevant material regarding the QAP

- Provide courses in English to enhance mobility of international students (Erasmus+ programme)
- Further strengthen networking opportunities with academics and other stakeholders
- Attract academic personnel from abroad through short-, mid and long-term (i.e., sabbaticals) appointments
- Establish a strong presence in social media with an academic profile, using tools that appeal to prospective students
- Provide results of feedback back to the students and stakeholders

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: 2, 3, and 11.

The Principles where substantial compliance has been achieved are: 4, 5, 6, 7, 8, 10, and 12.

The Principles where partial compliance has been achieved are: 1 and 9.

The Principles where failure of compliance was identified are: None.

Overall Judgement	
Fully compliant	
Substantially compliant	
Partially compliant	Х
Non-compliant	

The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

- 1. Prof. Ioannis Tzanetakis (Chair) University of Arkansas, Arkansas, USA
- 2. Prof. Andronikos Mauromoustakos University of Arkansas, Arkansas, USA
- **3. Dr. Eleni Maloupa** Hellenic Agricultural Organization_DIMITPA
- 4. Mr. Spyridon Rizos Geotechnical Chamber of Greece
- 5. Mrs Maria Vargiami Aristotle University of Thessaloniki