



**ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ**  
HELLENIC REPUBLIC



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# Accreditation Report for the New Undergraduate Study Programme in operation of:

**Biomedical Sciences**

**Institution: International Hellenic University**

**Date: 27 May 2023**



Επιχειρησιακό Πρόγραμμα  
Ανάπτυξη Ανθρώπινου Δυναμικού,  
Εκπαίδευση και Διά Βίου Μάθηση  
Με τη συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης



Report of the Panel appointed by the HAHE to undertake the review of the New Undergraduate Study Programme in operation of **Biomedical Sciences** of the **International Hellenic University (IHU)** 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 **Biomedical Sciences** of the **International Hellenic University** comprised the following four (4) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

- 1. Prof. Thimios Mitsiadis (Chair)**  
Universität Zürich, Switzerland
  
- 2. Prof. Antonia Dimitrakopoulou-Strauss**  
German Cancer Research Center & University of Heidelberg, Germany
  
- 3. Dr Nikos Ktistakis**  
Babraham Institute, Cambridge, UK
  
- 4. Mr Georgios Noutsos (student)**  
National and Kapodistrian University of Athens, Greece

## **II. Review Procedure and Documentation**

The members of the External Evaluation and Accreditation panel for the review of the new undergraduate study programme (UGP) of the Biomedical Sciences Department of the International Hellenic University (IHU) were selected from the Hellenic Authority for Higher Education (HAHE) of the Register of Independent Experts on February 2, 2023, in accordance with Laws 4009/2011 & 4653/2020. Official invitation letters were sent to panel members on May 5, 2023.

The external evaluation and accreditation reviews of the new UGP of Biomedical Sciences Department of IHU were implemented by on-site visit by the panel members, who evaluated the facilities on-site, met and discussed with the students and Staff members.

The evaluation/accreditation procedure was scheduled for the period from 22nd to 27th May 2023. The site visit took place on the 22nd and 23rd May.

The panel received all relevant documentation from HAHE, including the guidelines regarding the purpose and standards for evaluation and quality accreditation of the new UGP of the Biomedical Sciences Department of IHU. The HAHE also forwarded a comprehensive set of documents related to the structure and organization of IHU and the Biomedical Sciences Department. The documents included a detailed description of the proposal of academic certification for the new UGP of the Biomedical Sciences Department, strategic planning, facilities, and services offered from IHU, and the School of Health and Care Sciences (SHCS). The documents also included a detailed description of the courses offered in each semester, departmental rules, examples of questionnaires assessing quality of teaching and regulations of internal quality assurance policies of internal evaluation reports in the new UGP of the Biomedical Sciences Department.

### **First day, 22<sup>nd</sup> of May, 2023**

09:30-11:30. Two of the Accreditation Panel members (Prof. Mitsiadis and Dr. Ktistakis) initiated the accreditation mission by a private meeting at Grand Hotel, in order to schedule and discuss the content and structure of the final report and the allocation of the individual tasks. Two member of the panel (Prof. Dimitrakopoulou-Strauss and Mr. Noutsos) participated in the session via Zoom.

11.30. Panel members (Prof. Mitsiadis and Dr. Ktistakis) were welcomed at the hotel by the president of the Department, Prof. Maria Chatzidimitriou, and were transported with a private car to the campus.

12:30-13:00. The site-visit started with a meeting at the conference room of the Biomedical Sciences Department. Prof. Dimitrakopoulou-Strauss and Mr. Noutsos participated in the session via Zoom. The vice-Rector and President of Internal Quality Assurance Unit (MODIP), Prof. Kalliopi Makridou, and the Head of the Department, Prof. Maria Chatzidimitriou welcomed the members of the panel. Thereafter, Prof. Kalliopi Makridou gave a briefing on “The International Hellenic University in numbers”. The presentation included Facilities, the Department, Study Programmes, Students, Alumni, Teaching Staff, material and technical infrastructure.

Prof. Maria Chatzidimitriou initially presented a short overview of the Biomedical Sciences Department (including history, vision, philosophy, organization, Staff members, employment prospects, place on the academic map), followed by a short overview of the UGP, academic profile, current status and presented possible areas of concern. Postgraduate studies, research activities, extroversion actions and contribution to the Community were also mentioned.

13:15-15:15. The panel continued the on-site evaluation by meeting with the vice Rector President of MODIP, Prof. Makridou, OMEA member Prof. Eleftheriou, the Head of the Department Prof. Chatzidimitriou, and OMEA & MODIP representatives. The aim of this session was to discuss the degree of compliance of the UGP with the Standards for Quality Accreditation including review of students’ assignments, thesis, examination materials and papers.

The OMEA member Prof. Eleftheriou then prepared a power point presentation (177 slides), that obliged members of the panel to skip many slides in order to order to discuss and be informed about important issues:

- **The Quality Policy of the Department**, including Mission – Vision – Values/Axes – Quality Policy Guidelines, Publication of Quality Policy, Planning, Approval and Quality Monitoring of the UGP, Promotion of Continuous Improvement.
- **The Design, Approval and Quality Monitoring of New UGP**, including, Curriculum Structure, Course Categories, Learning Outcomes, ECTS Award Procedure, Traineeships, Mobility, Relevance to the Labour Market – Employment of Graduates in the Labour Market, Curriculum Guide – Outlines, Amendments to the Programme by the Commission, GA and MODIP.

Prof. Eleftheriou spoke on “**Student-Centred Learning in Teaching and Student Assessment**”, including Basic Principles of Student-Centred Learning, teaching methods and learning strategies/tools, Evaluation of Student Performance, Evaluation process of the UGP by students, Rules of Procedure of the Academic Advisor, Regulation of Operation and Management of Complaints and Objections of Students, and Thesis/Internship.

In addition, she discussed about **Admission, Attendance, Recognition of Academic Qualifications and Award of Degree Title and Certificate of Skills of The new UGP**, including support for new students, student information, student progress monitoring, mobility

(Erasmus+), attendance, quality standards of dissertation, internship, Faculty advisor regulation for Students with Disabilities, Diploma Supplement Form.

Prof. Eleftheriou emphasised the **Ensuring the adequacy and high quality of teaching Staff**, including procedures and criteria for selection, categories of teaching Staff, regulations or employment contracts, Staff obligation, mobility, extroversion, support and Staff development, quality of teaching and scientific work, evaluation of Staff.

Members of OMEA and MODIP also in attendance were Assoc. Prof. Papoutsi, (OMEA), Assoc. Prof. Makri (OMEA), Assist. Prof. Lymperaki (OMEA), Prof. Tsiantos (MODIP) and Mrs Tsantouka (MODIP Staff).

16:15-17:00 The panel met with teaching Staff members, and discussed professional development opportunities, mobility, workload, evaluation by students, competence and adequacy of the Staff to ensure learning outcomes, links between teaching and research, Staff's involvement in applied research, projects and research activities directly related to the UGP, possible areas of weakness.

Teaching Staff in attendance were Prof. Skepastianos, Prof. Mitka, Prof. Eleftheriou, Assoc. Prof. Papaliagkas, Assis. Prof. Bobos, Assis. Prof. Konstantinidou, Assis. Prof. Giannakou and Assis. Prof. Andreadou.

The function of the zoom was problematic, with constant failures on the sound. This contributed to a less qualitative meeting that compromised the overall picture of the presentations and discussions, especially for the members of the panel who were zoom-dependent.

### **Second Day 23<sup>rd</sup> May, 2023**

09:30-10:15. The panel was welcomed at the hotel by Prof. Chatzidimitriou and travelled to the campus. They met 10 Biomedical Sciences students (3 from 1<sup>st</sup> year, 2 from 2<sup>nd</sup> year, 2 from 3<sup>rd</sup> year and 3 from 4<sup>th</sup> year; one of them participated in the session via zoom). The panel discussed among other topics, the students' satisfaction, experience, and access to facilities of the Department and the University. Furthermore, the panel discussed their participation in quality assurance procedures, and their use of athletic, pastoral activities and perspectives about future employment, labour rights and career opportunities.

10:30-11:30. The panel continued the programme by visiting classrooms and laboratories, where students were being taught, and other facilities ensuring a successful provision of the programme.

Administration and Staff in attendance were, Prof. Chatzidimitriou, Prof. Mitka, Prof. Skepastianos, Mrs Mavridou (Medical Laboratory technologist, administrative Staff) and Mrs Katsarou (Secretary).

11:30-12:15. The panel continued the meeting with external stakeholders/social partners from the private and the public sector, discussing their relations with the UGP.

In attendance were Mrs Papadimitriou, Medical Biopathologist, Papageorgiou General Hospital, public sector, Prof. Chatzidimitriou, AUTH, Medical Biopathologist, Labnet private sector, Mr Vlachopoulos, ex-director of Medical Laboratories of Papageorgiou General Hospital, Prof. Lialiaris, director of Master Programme being held in collaboration with the Department, Prof. Papamitsou, director of Master Programs of Medical School, AUTH, Mr Papalexis, special advisor for scientific matters of PETIE (Panhellenic Association of Medical Laboratory Technologists, member of IFBSL & EPBS), Mrs Konidari, Biopathology Department of Papageorgiou General Hospital and Prof. Jones, King's College, UK, honorary doctorate and collaborator of the Department. Last one stakeholder was present via zoom. During this time the discussion was held on English with Prof. Jones, and thereafter in Greek with the other stakeholder members. An interruption of the internet connection occurred having as result the change of the remote connections.

12:15-13:15. The panel continued the site visit by seeing lecture halls, the library, as well as the cafeteria and some amphitheatres that are being used for teaching mandatory courses.

14:30-18:00. The panel met the OMEA & MODIP representatives and Staff, discussed preliminary findings and different points of interest and concern, which need further clarification.

OMEA & MODIP representatives and staff members in attendance were Prof. Makridou (Vice Rector/President of MODIP), Prof. Chatzidimitriou, Head of the Department, Prof. Eleftheriou (OMEA), Assoc. Prof. Papoutsis (OMEA), Assoc. Prof. Makri (OMEA), Assist. Prof. Lymperaki (OMEA), Prof. Tsiantos (MODIP), and Tsantouka (MODIP staff)

The panel expressed their gratitude to the faculty and the administrative staff of MODIP OMEA for the organization of the evaluation visit and their availability and help in whatever the panel needed. The panel found a cooperative posture of the faculty members, excellent interaction with the students and the external stakeholders/social partners. All were actively engaged in the accreditation process. Mr Noutsos could not participate during the whole day due to a personal obstacle. Prof. Dimitrakopoulou-Strauss was not able to easily participate in parts of this session due to the Zoom-linked technical problems.

### **Third to Sixth Day, May 24-27, 2023**

The panel met at the Hotel and worked on the draft of the Accreditation Report of the new UGP-IHU. Prof. Dimitrakopoulou-Strauss and Mr. Noutsos participated in the session via Zoom.



### **III. New Undergraduate Study Programme in operation Profile**

The International Hellenic University (IHU) was founded in May 2019 by the National Law 4610. The newly established University came from the merging process of the former Alexandrian Technological Educational Institute (ATEI) of Thessaloniki, Technological Educational Institute of Central Macedonia (Serres) and Eastern Macedonia and Thrace Institute of Technology (Kavala). IHU operates with high educational and research standards and strives to respond to the ever-increasing demands of a modern society for the creation of executives that have attained a solid scientific and technological background.

Today, IHU includes 30 departments, organized into 7 Schools. The School of Economy and Administration, the School of Social Sciences, School of Health Sciences, School of Engineering, the School of Design Science, the School of Natural Sciences and the School of Geotechnical sciences. The newly established University is one of the largest in the country in terms of student numbers. It has approximately 53000 (according to Wikipedia), undergraduate, doctoral students and postgraduate students. IHU has expanded to four Campuses within the metropolitan region of Macedonia. The Thessaloniki Central Campus (in Sindos), the Kavala Campus, the Serres Campus and the Drama Campus.

Postgraduate education is a high priority at IHU and offers a wide range of programmes (departmental, interdepartmental, inter-institutional and interstate ones), covering a variety of scientific and professional fields, thus enabling graduates to achieve competence in science and be well trained for the labour market.

The Department of Biomedical Sciences of IHU was founded by the Department of Medical Laboratories belonging to the ATEI of Thessaloniki in May 2019 by the National Law (4610/2019). The average number of students admitted to the Biomedical Sciences programme ranges from 240 to 260 per year. The department stated that about 1271 students are trained annually.

The aim of the Department is to offer a four-year course of study leading to a University Level Biomedical Sciences degree in analogy with corresponding Departments of Biomedical Sciences abroad. The Department provides comprehensive academic knowledge and technical training in the field.

The aims of the new UGP are:

1. Adequate knowledge of the sciences on which the activities of Biomedical Sciences are based.
2. Adequate knowledge of professional ethics and legislation.
3. Detailed knowledge of biological function, anatomy, and physiology.
4. Clinical skills in recognized institutions under the supervision of specialised personnel in Biomedical Sciences.

The UGP also offers innovative courses in technology applications and intelligent technology applications in Biomedical Sciences.

Upon successful completion of the studies, the students receive the Diploma in Biomedical Sciences

The UGP Biomedical Sciences Department is composed of 13 staff members (5 Professors, 3 Associate Professors, 5 Assistant Professors), 1 special technical laboratory Staff members, 1 Administrative staff member (Medical Laboratory Technologist) seconded to the laboratories and 3 administrative staff members.

In addition, the Department offers four Inter-institutional Postgraduate Programmes one of them in English. The Inter-institutional Postgraduate Programme "Vaccines and Infectious Diseases" and "Applied Geriatrics and Gerontology" are in collaboration with the Medical School of the Aristotle University of Thessaloniki. In addition, it operates the Inter-institutional Postgraduate Programme "Biomedical and Molecular Sciences in Diagnosis and Treatment of Diseases" in Greek and English, which is in collaboration with the Medical School of the Democritus University of Thrace.

## 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 placed 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, supply-demand, 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

The Department of Biomedical Sciences of the International Hellenic University (IHU) was founded in 2019 within the reformation of the IHU and is an evolution of the former Department of Medical Laboratories of the Technological Educational Institute (TEI) of Thessaloniki. It is one of the six departments of the School of Health Sciences of the IHU. The Department offers a Bachelor's Degree for Biomedical Sciences according to European standards (level 6, European Qualification Framework, Bologna). The average number of students admitted to the Biomedical Sciences programme ranges from 200 to 250 per year. The active number of students currently is 1271.

Furthermore, the Department offers four postgraduate programmes, two in cooperation with the Medical School of the University of Thessaloniki and two with the same topic (one in Greek and one in English) on "Biomedical and Molecular Sciences for Diagnosis and Treatment" together with the Medical School of the University of Thrace (master's degree) as well as a PhD programme. They plan to offer another postgraduate programme in English entitled "Biomedical advances in the diagnosis of infectious disease".

Furthermore, the Department has a research laboratory named for "Biomedicine and Molecular Diagnosis and Research".

The aim of the Department is to provide comprehensive academic knowledge and technical training in the field of Biomedical Laboratory Sciences. These include:

- Theoretical and practical training in several laboratory fields, like microbiology, virology, biochemistry, haematology, immunology, laboratory techniques in nuclear medicine, endocrinology, toxicology, pathology, cytology, molecular biology/genetics, animal experiments, neurophysiology.
- Adequate knowledge of professional ethics and legislation.
- Adequate skills to perform all laboratory tests within the fields mentioned above.
- Adequate skills to supervise and educate technical personnel with lower-level academic education in this field.
- Adequate skills to organize, regulate and plan the laboratory workflow including knowledge of the appropriate equipment.
- Adequate skills to perform and supervise quality control, standard operation procedures, data archiving.
- Upon successful completion of the studies, the students receive the Diploma in Biomedical Sciences upon completing 240 ECTS.
- Ability to attend postgraduate programmes, and the preparation for doctoral studies.

The studies provided by the Department are comparable to the Biomedical Sciences Department of UNIWA for the field Medical Laboratories.

The training duration is of 8 semesters. Within this time the students have to absolve 4 months of practical laboratory training and have the possibility to do an additional 2-month practical training on a voluntary basis.

The completion of a Bachelor thesis is not obligatory but can be performed on a voluntary basis.

Staff members of the Department meet the qualifications of a University Staff.

Besides the theoretical part of education, the Department has a strong element of students' training in laboratory/technical and clinical practice skills, which is well developed and cohesive.

A website in Greek exists for the Department and provides limited information ([www.ihu.gr/tmimata/vioiatrikon-epistimon](http://www.ihu.gr/tmimata/vioiatrikon-epistimon)). Some further information is provided in the older website of the TEI prior to the restructuring ([www.mls.teithe.gr](http://www.mls.teithe.gr)). The information provided in English is in both websites very limited.

Teaching is realised mainly through on-site face-to-face activities. Assessment is mainly through written exams combined with essays and laboratory practices. Education and learning are supported using also online and digital material via Zoom. This service is provided by the IHU, but a serious problem with internet connection exists. The teaching takes place often in the research laboratories.

The Department of Biomedical Sciences of the IHU is composed of 13 staff members (5 Professors, 5 Associate Professors, 3 Assistant Professors), 1 special technical laboratory Staff members, and 3 administrative staff members. Teaching is supported by Scientific Associates. The Department offers four postgraduate programmes, two in cooperation with the Medical School of the University of Thessaloniki and two with the same topic (one in Greek and one in English) on "Biomedical and Molecular Sciences for Diagnosis and Treatment" together with the Medical School of the University of Thrace (master's degree) with a duration of 4 semesters. They plan to offer another postgraduate programme in English entitled "Biomedical advances in the diagnosis of infectious disease".

Furthermore, the Department offers a PhD programme with 9 PhD candidates currently. The Staff supervise and support the students to complete their PhD studies.

The Department meets current market needs. The students receive a range of learning experiences allowing them to develop their professional careers further. Overall, the job growth and security are high for medical laboratory scientists with the volume of laboratory tests continuing to increase due to both population growth and the development of new types of tests and new laboratory methods, like omics technologies. Job opportunities are expected to increase faster.

## Panel Judgement

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

<b>Principle 1: Strategic planning, feasibility and sustainability of the academic unit (overall)</b>	
Fully compliant	
Substantially compliant	<b>X</b>
Partially compliant	
Non-compliant	

### **Panel Recommendations**

The number of students of the Department of Biomedical Sciences of the IHU is very large and opposes to the small number Faculty members. This unusually high number of students compromises good intentions and efforts from Faculty members and constitutes an alerting concern for the functionality of this unique Department. The Education Ministry should take this fact into account and urgently act for establishing a correct and viable student to Faculty ratio.

It is recommended to define the Bachelor Degree of Biomedical Science by adding e.g., “for Medical Laboratory Technologies” or an equal term including the term “Laboratory”. The term “Biomedical Science” is new and used broadly including different specialities, mainly from life sciences, physiological sciences, bioengineering and even more. The definition of “Biomedical Science” varies worldwide and even between European countries. It should be clear for the scientific community and the students what are the contents and the labour rights as well as the professional perspectives. The provided links do not support the idea of a general bachelor degree of Biomedical Science. For example, the Leeds Beckett University has different directions within the Department of Biomedical Science like Medical Biochemistry Pathway, Medical Microbiology Pathway, Pharmacological Sciences Pathway, Molecular Biotechnology Pathway.

To expand the ongoing internationalisation and quality of the UGP, it is necessary to enhance the collaboration with national and international Institutions, clinics and partners. Similarly, it is important to organise international conferences, workshops, symposia etc. It is furthermore important to enhance students’ Institutional exchanges through the Erasmus programme or other programmes and to offer selected courses and lectures at the Postgraduate programme in English.

The Staff is very limited and should be increased by hiring highly qualified scientists who have the scientific background to supervise and educate students, are interested in research and are able to get funding from European grants.

The Department website provides only limited information about the undergraduate and postgraduate programmes. There is almost no information in English regarding in particular the postgraduate programmes, and not all links work. Therefore, there is an urgent need for significant improvement of the Department’s website.

E-learning tools need to be implemented like they are in all other Universities.



## 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 system of the UGP through the cooperation of the Internal Evaluation Group (IEG) with 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)

### Study Programme Compliance

The Department of Biomedical Sciences of the IHU has presented and used essential tools/committees for a substantial, pragmatic, and implementable quality assurance process. The Institution, demonstrated to have an adequacy and quality of the academic units' resources and a suitable structure and organisation of the Biomedical curriculum with a focus on Medical Laboratory Technologies, which should be clarified. In addition, demonstrated qualified Staff, and a good quality support and services by the academic units' adequate administrative personnel.

The Institution conducts annually an internal evaluation of the new UGP, realised by the Internal Evaluation Group (MODIP) in collaboration with the Quality Assurance Unit (OMEA) of the Institution. The whole efforts are based on the current legislation and the relevant European Directives. MODIP and OMEA are established and are in full operation. The General Assembly of the Department are dutifully involved in the control process, thus ensuring

transparency and a more general consensus process for the best implementation of the objectives. These two bodies operate and control the whole process with regular consensus meetings ensuring that the expected result of quality education inevitably becomes possible. At the same time, the vision, mission, and values of the Department guarantee the high-quality academic and technical education.

Members of the Faculty of the IHU of the Biomedical Sciences Department work towards the same goals, in order to provide high quality and state-of-the-art teaching. The panel finds the faculty members very enthusiastic and satisfied in their work, and seek continuous improvement, which is a constant requirement of the Department. It is also pointed out that the Department seeks to implement the quality policy, which is fully consistent with international guidelines.

Students evaluate the quality of lectures electronically. Statistical analyses of the evaluation data are available.

Administrative services are available and provide to the students all necessary documentation (e.g., provision of hard copy of diplomas, certificates, and transcripts in both Greek and English). The University has established procedures to address student welfare issues, such as specialized Staff for students' consultation in case of extenuating or troubling circumstances.

Faculty members and administrators of the Department appeared committed to ensuring the high-quality services for students' support. The Quality Assurance Policy of the Department is made public, disseminated, and constantly announced to the faculty members (ΔΕΠ, ΕΔΙΠ, ΕΤΑΠ), administrative employees and students so that they all take responsibility of the quality assurance that belongs to them.

### Panel Judgement

<b>Principle 2: Quality assurance policy of the Institution and the academic unit</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

### Panel Recommendations

It is well known that quality improvement is a continuous process, the panel recommends a written assurance that constant efforts to maintain and improve quality are necessary to sustain and improve quality.

Because of the high number of students (250 students) and the low number of Staff, the high quality of the studies maybe vulnerable. This can result in challenges to keep the high quality of academic and technical teaching.

### **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*

#### **Structure of the Undergraduate Programme**

The Department of Biomedical Sciences of the IHU has been prepared based on the corresponding study programmes of international Departments, following recent research in the subject of Biomedicine Science for Medical Laboratory Technologists and considering the instructions of the Hellenic Quality Assurance and Accreditation Authority (ADIP). However, this focus on "Medical Laboratory Technologists" is not further specified. The Department does not have any other Divisions.

The undergraduate programme consists of 8 semesters with a total of 42 obligatory courses and 9 elective courses. The courses provide basic knowledge in several laboratory fields of biomedical sciences as well as practical training for medical laboratory examinations.

Upon completion of their UGP, students obtain:

- Theoretical and practical training in several laboratory fields, like microbiology, virology, biochemistry, haematology, immunology, laboratory techniques in nuclear medicine, endocrinology, toxicology, pathology, cytology, molecular biology/genetics, animal experiments, neurophysiology.
- The possibility of obtaining a general bachelor's degree after completing courses of a total 240 ECTS.
- The ability to attend 4 postgraduate programmes, and preparation for doctoral studies.

The purpose of the Department of Biomedical Sciences is to provide high-quality courses for the education and clinical training of students with high level knowledge, abilities and skills in Biomedical Science focussed on Medical Laboratory Technology.

The Department offers four postgraduate programmes, two in cooperation with the Medical School of the University of Thessaloniki and two with the same topic (one in Greek and one in English) on "Biomedical and Molecular Sciences for Diagnosis and Treatment" together with the Medical School of the University of Thrace (master's degree). They plan to offer another postgraduate programme in English entitled "Biomedical advances in the diagnosis of infectious disease".

The academic Head of the Department informs students about student mobility issues. Information on the Erasmus+ programme can be found the website of the [ERASMUS office \(https://erasmus-plus.ec.europa.eu/contacts/national-erasmus-offices\)](https://erasmus-plus.ec.europa.eu/contacts/national-erasmus-offices) but not on the official website of the Department. Prior to restructuring there was an Erasmus+ exchange with a university in Portugal (Instituto Politecnico de Braganca). However, in the last 5 years no attempt was undertaken to support student mobility issues within Erasmus+.

The Department has a cooperation with King's College London, UK (Prof. Jones). At a national level they cooperate with the Medical School of the Aristotle University of Thessaloniki, the Polytechnic School of the University of Thessaloniki, the Medical School, Democritus University, Thrace and the Anatolia American College Alumni of Thessaloniki. A Memorandum of Understanding exists only with AUTH.

The Department carries out internships in private and public institutions. For its optimal connection with the labour market and the increase of the employability of our graduates. The international experience of the Department's degree programme with similar disciplines is limited.

There is strong labour market for the graduates of the Department, but the panel thinks that the students must be better informed about this.

The Department provides a list of the employments name, academic ranking with detailed information like CV, subject and area of teaching, the areas of specialisation, and its relation to the courses taught on the graduates (older Greek website). Information of the teaching Staff in the web page needs improvement.

### Panel Judgement

<b>Principle 3: Design, approval and monitoring of the quality of the new undergraduate programmes</b>	
Fully compliant	
Substantially compliant	<b>X</b>
Partially compliant	
Non-compliant	

### Panel Recommendations

The panel judges that the actual number of Faculty is too low and not sufficient for the number of students attending (approximately 250 per semester). Additional staff members are needed to be recruited in the future, in order to keep high quality education.

The Department should be more aggressive in their policy in the mobility through the Erasmus+ programme.

The prospects for professional employment for graduates of the Department should be clearly and aggressively communicated also on the webpage. The prospects appear to be very promising, ensuring professional security. The job growth and security are high for medical laboratory scientists including technologists with the volume of laboratory tests continuing to increase due to both population growth and the development of new types of tests and new laboratory methods, like omics technologies.

## 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*

### **Study Programme Compliance**

The Department regularly evaluates the quality and effectiveness of teaching, as documented especially through electronic student surveys, and uses these in a formative manner to improve teaching. During visits to the laboratories the panel was satisfied to see a large variety of techniques and appropriate equipment for the benefit of students. During the pandemic it was a transition realised via Zoom teaching. The faculty is committed to their academic roles, and they show appropriate professionalism and integrity. Assessment is done with clearly defined criteria and follows a specific regulation, which is outlined on the webpage.

The Department respects the diversity of the students and applies a fair approach to all. As mentioned above, MODIP utilizes online anonymous questionnaires allowing students to evaluate the quality of teaching. These questionnaires are analysed and are taken into serious consideration by the Staff for course modification. In IHU the Centre for Teaching and Learning ensures the quality of studies. The academic tutor is in place (250 students per 1 Faculty), who provides a valuable guide to every student. However, the students indicated that they feel encouraged to talk to Faculty members informally. There is also a formal way of dealing with student complaints, swiftly and efficiently. The students verified the presence of such a procedure, but they never felt the need to utilize it, as their requests

were heard with empathy by the Staff. The faculty knows the students personally and communicate with them openly and with respect.

The panel also reviewed documentation of questionnaires for assessment by the students, regulation for dealing with students' complaints and appeals, regulation for the function of the academic advisor and reference to the planned teaching modes and assessment methods in the supporting material of the Department.

The faculty uses digital platforms to assist in effective teaching and communication with their students (E-Class, Moodle and Zoom).

Although the students are encouraged by the faculty to take an active role in participating in the committees that design and revise the curriculum, the students have not any representative. Assessments correspond to the European Qualifications Framework (EQF) and are incorporated by a variety of methods as written exams (open questions, multiple-choice questions), laboratory work, and oral presentations.

The panel is pleased with the Team-learning approaches of the Department. They have set a combination of theory, practical/technical and clinical training to address all aspects. The students are active partners in the process of learning as evidenced by the presented material and of the on-site visit. All assessment criteria are predicted in the course outlines, and they are published in advance. MODIP organizes centrally anonymous questionnaires addressing the effectiveness of teaching and the adequacy of the teaching personnel. These are communicated every semester to the faculty and to the Chair of the Department and OMEA, who holds formative meetings with Staff members.

There is an academic tutor assigned to students.

The UGP is delivered in a student-centred approach.

### Panel Judgement

<b>Principle 4: Student-centred approach in learning, teaching and assessment of students</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	



### **Panel Recommendations**

The Department of Biomedical Sciences of the IHU has partially achieved the stated purposes through an appropriate UGP and gives reasonable evidence that it will continue to do so in the foreseeable future. However, there is a need for better technological equipment. The internet access is limited and not available in every room.

More laboratories are needed as well as more teaching rooms.

A main issue that should improve UGP function is the participation of student representatives to the Faculty Senate and the evaluation panels.

The formal procedure for complaints should be clearly communicated and published on the webpage of the department. This would help to address student complaints, which should be taken very seriously.

## **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*
- ✓ *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**

The study programme of the Biomedical Sciences Department of the International Hellenic University (IHU) is clearly outlined in the documents received by the panel. The students enter the programme after National exams; in general, their grades are between 14.5-18 out of 20 which are very good scores, comparable to those required for Biology Departments and close to those for Medical Schools. Although only a very small minority of students indicates the Department as their first choice (less than 5% of the entering class) the level of satisfaction upon entering the UGP is high as judged by various metrics, including course evaluations and the interviews conducted by the panel as part of the evaluation/accreditation process.

The number of students admitted to the programme is over 250, despite the fact that the Department has indicated centrally that only 70-100 students can be accommodated each year. This is a serious problem, which must be mapped to the ministry of education decisions, and the panel considers that the Department is a victim of bad strategic planning.

The first few semesters of the study programme contain basic courses in modern biological sciences, which are all mandatory, including laboratory courses that are initiated as soon as the students enter the Department. Towards the last few semesters of study, the students are offered a number of elective courses in different specialisations. The total number of courses is 51, with 41 mandatory and 10 electives.

At the present time, two different types of students are in the Department. A minority (approximately the one third of the total number of students) entered the Department when it was at a lower educational category (TEI). Those students have to enrol in some additional core courses that complement their previous programme, in order to qualify for a university degree. The majority of students have entered the Department in the last 4 years after the Department gained University status. These students have from the beginning been following the new UGP of Biomedical Sciences.

Student progress is monitored internally, both unofficially by Faculty during teaching, and officially by the student advisor (which is a relatively new policy). The Department is just about to graduate its first intake of students (who started 4 years ago), so it is difficult to know percentage of completion within the 4 years. From previous years, it appears that the majority of students finish within the first 5 years (over 70%).

In addition to course work, the students are also expected to undertake practical training (mandatory) and a thesis project (voluntary). Both of these options are also available to students who join the Erasmus+ programme, and a small number of students (expected to grow) is already taking advantage of this opportunity.

The small number of Staff and the large number of students potentially looking for thesis work are likely to create a problem in the Department. The panel would like to express some concern about this.

The study programme complies with European standards, and the degree awarded to the students is recognised abroad and in Greece as a bachelor's degree. Available to the students at no cost are documents (Παραρτημα Διπλωματος, Diploma Certificate), which show the nature of their study programme, the courses taken, and the degree awarded.

One discussion during the visit had to do with whether the title "Biomedical Sciences" without any qualifications is too broad to be useful and understood, and whether some qualification such as "Biomedical Laboratory Sciences" is a better description.

The panel asked several students both during the allocated interview time but also during the laboratory visits how many intend to look for employment as soon as they graduate vs how many intend to continue with graduate studies (MSc, PhD etc). A vast majority indicated that

they want to continue their studies and only a small minority wishes to find employment. This is a puzzling statistic as far as the panel is concerned, especially given the excellent employment opportunities of the graduates of this UGP, and the dire current employment opportunities of those following advanced studies in biology/biomedicine. The panel was not sure that the students know these facts, and it is worth finding ways to make these facts known to them during their studies (see recommendations).

### Panel Judgement

<b>Principle 5: Student admission, progression, recognition of academic qualifications, and award of degrees and certificates of competence of the new study programmes</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

### Panel Recommendations

Before significant expansion into post graduate programmes, consider the need of current undergraduate students to find places for thesis work and job placements. In the opinion of the panel, accommodating the undergraduate cohort should come first, and then any expansion may follow.

Consider making the thesis mandatory.

Expand the number of students choosing to do Erasmus+ placements. Similarly, expand significantly the number of institutions to which Erasmus+ students can go.

Consider inviting outside stakeholders to talk to the students about employment opportunities, so that a majority of the graduates aims to start working as opposed to continuing their education in MSc and PhD programmes.

The panel considers the title of the programme without any qualifications (“Biomedical Sciences”) too broad, and difficult to put into the right context of European bachelor’s programmes in similar areas. One option is to qualify the title of the programme as “Biomedical Laboratory Sciences”.

## **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.)*

### **Study Programme Compliance**

The Department relies on 13 full-time Faculty members and an equal number of adjunct Faculty (ακαδημαϊκοί υποτροφοί) for teaching all of the courses. All of the Faculty are very experienced in teaching, but the teaching load is extremely high if one considers that there are 250 active students for each year. Nevertheless, the panel received very positive comments from the students and from the external stakeholders on the high level of theoretical and practical training offered in the Department. However, without a very generous allocation of additional Faculty members, the panel believes that current trends cannot continue, and ultimately the quality of teaching will suffer. Along those lines, it is worth emphasising that the number of incoming students was increased centrally by the Ministry by 100% without any consultation with the Department and without the allocation of additional resources. As the panel investigated this phenomenon it became clear that the closure of another TEI with similar orientation probably led to the doubling of the students that this Department was obliged to accept.

As mentioned above, the Department relies on a large number of adjunct Faculty for sharing the teaching load. Typically, these are professionals who have an outside job, and who in addition want to have a connection with the University and with the teaching process. The

advantage of this group of Faculty is that they are intimately connected with the profession that the students may consider in the future, and in this way, training can be excellent and up to date. The disadvantage of such a group is that they constitute a pool of potential new Faculty members and having them already in the Department may discourage more open and fair hiring practices. The panel recognises the difficult situation that the absence of permanent Faculty creates for the teaching process and the necessity to solve the problem by creative means. Nevertheless, this is not an ideal solution.

The very suboptimal Faculty to student ratio also affects the ability of the present Faculty to undertake sabbatical and other training breaks from teaching. This is something that needs to be changed by addition of more Faculty and lightening of the teaching load.

The procedures for recruiting new Faculty appear to follow the requirements as outlined centrally by the Ministry. In recent years, only one new Faculty has been appointed who nevertheless already had a long-term connection with the Department. The panel emphasised that whenever new Faculty are recruited, a lot of consideration must be given to the strategic aims of the Department, and that for such a small Department the most appropriate strategy may be to strengthen by the new appointments already existing areas of excellence so as to enhance critical mass. It is also important to be as open and fair as possible during new recruitments. The ideal Faculty candidate will be somebody who has already an excellent publication record in areas of strength of the Department, has good teaching experience, and has the potential to attract outside funding. For a small Department such as the present one, 2 or 3 excellent appointments have the capacity to change the academic profile of the Department.

For the evaluation of the research activity of the Department, the panel notes that finding the appropriate information either in Google scholar or elsewhere was an adventure, not helped by the various ways that Faculty spell their names in English.

As for all Departments making the transition from TEI to University status, it is difficult and unfair to expect that the academic profile of the faculty will be at the same level as pre-existing and older University Departments. Therefore, the academic profile of the Faculty of this Department is a work in progress and what is important at the present time is to see hopeful signs. One such sign is that there already exist in the Department Faculty with a respectable academic research profile, indicating that such work can be done. Another hopeful sign is that enhancing their research profiles - without neglecting the strong core of excellent teaching already taking place - by grant funding and by the intake of graduate students is a top priority of the faculty. A reasonable aim for the next 5 years would be the presence of 1-3 new Faculty with strong research profiles and the acquisition of funding from Greek sources and, if possible, from abroad.

## Panel Judgement

<b>Principle 6: Ensuring the competence and high quality of the teaching staff of the new undergraduate study programmes</b>	
Fully compliant	
Substantially compliant	<b>X</b>
Partially compliant	
Non-compliant	

## Panel Recommendations

All Faculty should have an easily accessible and fully up to date Google scholar profile.

Hiring decisions for new Faculty should be done with a view to strengthening present critical mass, and for attracting outside funding.

The Department should consider creating an external advisory panel (board) made up of knowledgeable colleagues who can help in strategic decisions within the Department and with making connections nationally and internationally. The connections with Professor Trevor Jones, who spoke enthusiastically about the Department, is an excellent first step.

Attracting grant funding from within Greece and/or from abroad should constitute a strategic aim of the Department.

The panel is worried that the creation of too many MSc programmes with the same amount of Faculty and resources may spread out resources too thin.

The panel sees the presence of adjunct Faculty as absolutely essential for the smooth functioning of the teaching process. Nevertheless, the panel expects that future appointments of full-time Faculty will not be restricted from this group.

## 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

### Study Programme Compliance

The students of the Biomedical Sciences UGP of IHU are given strong support as far as the Department is concerned. Lab spaces were clean and inviting, and the overall level of infrastructural support is adequate. Of note, some serious funding has been approved for the modernization of the technical equipment of the laboratories, and the panel believes that this will provide material improvement to what already exists. In Departments such as this that rely heavily on hands-on education, having first-rate laboratory equipment is of paramount importance, and very strongly appreciated by the students.

During the pandemic, the panel was told that courses were very quickly migrated to online platforms, and this is something worth keeping. However, the absence of a Wi-Fi connection (see below) will need to also be solved.

Secretarial support and overall student communication with the Department are without problems. The panel was given plentiful evidence that the well-being of the students is at the core of the faculty concerns.



Library space for the students exists in the small local library as well as in the larger and better-equipped library of the whole campus. Two areas for eating are available, and according to both students and Faculty the food is very decent and affordable. A gym has been built but is not in operation at present. It is worth noting that the gym was functional at the pre-COVID times and has closed during the COVID period. The panel was not able to fully understand the reasons behind the actual closure of the gym and whether it is something likely to be quickly solved.

Pastoral care for the students is provided by the faculty mentor and by a dedicated support facility in the campus. These are judged to be adequate.

However, the students have to work in a campus that is in very serious need of modernization and improvement. For example, Wi-Fi connection is not available in the majority of spaces of the main building of the Department despite the fact that Eduroam infrastructure is installed and functional in the library. Doors, windows, grassy areas and road pavements resemble a war zone. The panel urges the new administration of the campus, which has been recently selected, to look at all of those problems and urgently solve them.

The teaching classrooms of the Department are simply inadequate for the needs of the large number of students attending, and consequently most teaching of mandatory classes is done in amphitheatres common to the whole campus. This is a workable solution, but also having one dedicated amphitheatre for the Department would be a really important addition.

Another major source of problems is the transportation to and from the campus. Sindos, which is the main village where the campus is located, has a distance of over 20 km from the city of Thessaloniki, most of it on a highway with very fast-moving cars. The only means of transportation for the students living in Thessaloniki is the municipal bus service. It takes on the average 2 hours each way for students to come to the campus or go back home, and this is assuming that the bus service is running smoothly. This situation, which is really unacceptable, creates a lot of problems for student well-being and for the educational process. The panel was told that most students try to squeeze their courses as close as possible during the day, and on as few days as possible, in order to avoid spending the majority of their time on buses going back and forth. This is of course not the fault of the Department, but the panel highlights it as a factor that limits the quality of student life.

## Panel Judgement

<b>Principle 7: Learning resources and student support of the new undergraduate programmes</b>	
Fully compliant	
Substantially compliant	<b>X</b>
Partially compliant	
Non-compliant	

## Panel Recommendations

The panel urges the Department, through their representatives, to push the new administration of the IHU to prioritise improving the infrastructure of the campus. One reason for the visible decay of the outside areas is that the current leadership of the University campus spent all of the last few years with matters concerning the integration of the new organization, legal matters of its existence etc. Now that this stage is finished and a new elected administration is in place, items such as those on the quality of the campus should be at the forefront.

Concerning facilities within the Department, the panel urges the installation of Wi-Fi in all relevant areas. Given the fact that Wi-Fi exists in one room of the Department, and that Eduroam exists in the library, solving this problem should be possible. Having a good connection with the outside world would allow the Department to initiate interactions with colleagues abroad, teaching of electives etc. The panel understands that this is already being done to some extent, but we would like to see it happening routinely.

Transportation is a huge problem that affects quality of student life and education. Several options were discussed during the visit (installation of a new 20 km rail line from the train main station to the campus with frequent transportation times). Perhaps the quicker and easiest to implement is creation of a dedicated bus service 3 times each day from the city of Thessaloniki to the campus and back.

## **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*

### **Study Programme Compliance**

The Biomedical Sciences Department at IHU collects student data through the φοιτητολογιο ΠΥΘΙΑ, as well as via the regular questionnaires given to the students during course work. Overall, the panel felt that the Department did an adequate job here, although the percentage of students who chose to participate in course evaluation is still low overall.

Upon our questioning, the students were aware of the function of ΜΟΔΙΠ but not that of ΟΜΕΑ. It will be important for the Department to make the function of those two important evaluation organizations better known to the students.

In terms of follow up work concerning the employment of graduates, and their career trajectories in general, the panel feels that the Department needs some help by specialised IT personnel. Although the numbers are still low (first graduates of the programme are expected this year) such data are critical for establishing an identity of the department and for gathering success stories that can be used for networking as well as employment opportunities for future graduates. Gathering such data and curating the information on a permanent basis is a demanding job best allocated to somebody who is familiar with IT systems and can be constantly on alert for best practices. In an ideal world, such a person may replace retiring support personnel whenever it happens.

The panel agrees with the Department that evaluating course satisfaction by graduates, especially as it relates to job prospects and success is a very important undertaking, which will allow the Faculty to gauge the success of their teaching methods and the scope of the taught material in an ever-changing landscape of employment opportunities and needs. Again, we believe that this is best assigned to a specialised IT person.

Some or all of the information from present and past graduate performance, satisfaction and job opportunities should be communicated to the visitors of the department via the web site. In general, the web site of the Department requires some revamp.

The Department uses two websites to disseminate information to the public:

<https://www.ihu.gr/tmimata/vioiatrikon-epistimon#%CE%A0%CF%81%CE%BF%CF%83%CF%89%CF%80%CE%B9%CE%BA%CF%8C>

[http://www.mls.teithe.gr/?page\\_id=7178](http://www.mls.teithe.gr/?page_id=7178)

Both webpages are inadequate for a University Department and should improve by adding significant information. Especially the English language version should become more complete in view of the international orientation of the Department.

### Panel Judgement

<b>Principle 8: Collection, analysis and use of information for the organisation and operation of new undergraduate programmes</b>	
Fully compliant	
Substantially compliant	<b>X</b>
Partially compliant	
Non-compliant	

### Panel Recommendations

Improve the website both in Greek as well as in English.

Make a stronger effort to increase participation of students in course evaluation. One option is to make the practice semi-mandatory by asking students to do it during the last few minutes of a laboratory course. Of course, having a functional Wi-Fi would help in this.

Communicate better to the students the importance of ΜΟΔΙΠ and ΟΜΕΑ, and the fact that their opinion in the evaluation process matters and can change things.

Try to encourage student participation in the evaluation committees mentioned above.

Start to create a database of graduates and their employment trajectories.

## **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*

### **Study Programme Compliance**

Information on the Department and UGP is provided in the IHU website. The content of the course descriptions and learning outcomes during the 8 semesters of the studies and the ECTS attributed are presented in the Greek version of the website. Although an English version exists, this is not yet constructed, and significant information is lacking.

The Department disseminates information about academic events linked to the Biomedical Sciences fields. Information about Masters, PhDs and various other activities within the Department is available in the Greek version of the website. Information includes the objectives, the organization of the studies, the mandatory and elective courses, and the requirements for laboratory and technical/clinical activities. The website also contains the description of the Department, information about the personnel, hours and resources of the library, teaching methods, the student coursework evaluation, a guide for undergraduate studies and areas of focus, Erasmus+ mobility, study advisors etc. However, the quality of the web page has not reached the high standards that are required for a Greek or international University. These points of weaknesses should be fixed as soon as possible. The profile of all Staff members should be well designed and detailed, and incorporate their research activities and their list of publications. The English version has to reach a good qualitative level, providing important information and clarity. The present English version of the website is not ensuring visibility of the UGP internationally and does not offer information to international Institutions. The website dedicates a page on the Erasmus+ students and staff mobility.

Students of the UGP in Biomedical Sciences should be exposed to excellent theoretical and laboratory/practical/technical courses. Similarly, they should be initiated in qualitative research practices. The Department has created strong links with other Institutional

Departments (Democritus University, AUTH) and Hospitals (Papageorgiou) that provide opportunities for collaborations and students' training.

The IHU does not publicise information concerning the activities of various Departments and UGPs through additional media (e.g., Institutional monthly newspapers and/or television channels, Tweeter) and other similar platforms. The panel was informed that a Facebook web page exists for the Department, which is not so active. The Staff envisages the more active use of this platform, and the creation of other social media platforms in the near future. The Staff should more actively promote the Biomedical Sciences UGP abroad by advertising it in the few existing international collaborators (KCL, UK).

The Department organises a small number of presentations and seminars for students. These events promote the Biomedical Science UGP. The panel believes that the number of seminars/workshops/symposia should increase and organised in a way that internationally recognized Academics would participate in these events upon invitation. Initiatives towards this direction are strongly encouraged by the panel.

### Panel Judgement

<b>Principle 9: Public information concerning the new undergraduate programmes</b>	
Fully compliant	
Substantially compliant	<b>X</b>
Partially compliant	
Non-compliant	

### Panel Recommendations

The panel has been informed by the vice Rector that an active alumni network does not exist yet within IHU. Similarly, such alumni do not exist within the Department of Biomedical Sciences. An alumni platform, which promotes the connection of the students and Staff with professionals and colleagues, should be created by the Department. It is highly recommended by the panel to promote and activate this networking tool.

Important distinctions should be communicated and promoted, in order to increase the visibility of the Department. The present version of the web site of the Department is not informative and detailed in comparison to other Greek Universities. A correct and updated version of the English version of the site will increase the international visibility of the Department and facilitate the foreign students (Erasmus+).

It is highly recommended to all Faculty members to create a Google Scholar profile that allows visibility of the Department. Similarly, incorporation in the web page of the Department of the research interests and orientation, as well as the list of publications of each Staff member is expected. This information should be provided in Greek and English.

Staff from the Department could inform the public about their specific academic activities and knowledge by having monthly spots in the local national television and contribute with regular articles in the local newspapers. This initiative will reveal to the public the significance of their academic work in their specialised domain.

## 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

### **Study Programme Compliance**

There is regular monitoring and revision of the new UGP that is delivered by the UGP Committee, the General Assembly and OMEA. OMEA collects, analyses and evaluates research indicators, course satisfaction questionnaires and internal evaluation reports. Input from undergraduate students is taken into consideration for the modifications of the curriculum. Therefore, the study programme assessment is performed according to the quality principles as required by HAHE.

Monitoring of students' workload and progression is satisfactory. The students are appreciative of the dedication of Staff in teaching, thus revealing the teaching commitment of the Staff of the Biomedical Sciences Department of IHU. Progression of the students is pursued via the faculty advisor programme. Procedures for evaluation of the students' performance are discussed regularly. The procedures for evaluating students' performance are in line with these already established for Greek Universities. Students' expectations, needs, satisfaction and evaluation of Staff members are assessed via the electronic evaluation for each course. The participation of students in this procedure is estimated to be low (25%), but higher when compared to other Departments of Greek Institutions (10-15%). Laboratories are well organised, clean, and equipped with the necessary equipment and instrumentation. Clinical and practical parts of the studies are realised in hospitals (e.g., Papageorgiou), private laboratories/clinics and companies, according to the needs of each focus area of the UGP. Delivery of the curriculum by Faculty and well-qualified adjunct Faculty ensures good quality



of lectures and laboratory courses. Interactions and communication between the students and Staff are excellent and appreciated by the students. The Department relies on the participation of 13 adjunct Faculty for the delivery of specific theoretical and laboratory courses.

### Panel Judgement

<b>Principle 10: Periodic internal review of the new study programmes</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

### Panel Recommendations

It is recommended to involve postgraduate students and stakeholders during the programme content review and discuss implementation with additional areas of knowledge and expertise. For the stakeholders, this could also be realised through an informal advisory team.

Regular open meetings with whole year cohorts may be attempted in order to discuss course content, work rights etc. These are important communication/information initiatives that will dissipate areas of doubt and not clarity.

Promote regular meetings with post-graduates (alumni) and stakeholders that will help in knowing the current societal needs. This information could be used to eventually supplement the curriculum.

## **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 programs. 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.*

### **Study Programme Compliance**

This is the first external UGP evaluation/accreditation for this newly established (2019) Biomedical Sciences Department of the IHU. Members of the current panel were not members of the evaluation committee of the UGPs-TEI 10 years ago, and thus it was not easy to compare the quality standards of the new UGP-IHU to the previous one. The evaluation procedure was conducted very well, however technical problems arose during this period (internet failure). Some of the relevant material was too much detailed (177 slides power-point presentation for a limited time of presentation and discussion), not highlighting enough the main points. Discussions with students, stakeholders, Staff and Vice Rector of IHU were conducted in a pleasant, friendly and sincere atmosphere (fair and honest discussions). The panel discussed matters in depth with the Staff. Staff members requested additional ideas and help from the panel in order to implement the new UGP-IHU. This spirit indicates that Staff members are receptive towards the continuous adaptation and betterment of the UGP. Tools for regular evaluation and update of the UGP curriculum are clear and functional. The panel felt that the commitment and support of the IHU authorities (not the department) towards students' life and education needs significant improvement.

Suggestions for further UGP quality improvements, revisions of the curriculum, international competitiveness, students' mobility (Erasmus+) are envisaged and discussed. An external expert panel has not been used for the design of this new UGP-IHU. However, this could tremendously help these initial decisions and building of the new UGP. The panel suggests that external experts could be used on a regular basis. Regular UGP external evaluations are planned.

## Panel Judgement

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

## Panel Recommendations

The panel recommends the organisation of an informal or formal yearly meeting with the Staff of the UNIWA Biomedical Sciences Department for discussing important issues of mutual concern. This initiative can continue until both Departments will go through the transition stage and hopefully will contribute to the increase of the quality of the Biomedical Sciences UGP in both Institutions.

An external expert panel has to be established and used for the proper design and periodic adaptations of the new UGP-IHU.

## **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**

Courses of the previously running UGPs-TEI are retained, supplemented and revised by a committee established by the Biomedical Sciences Department in order to match the new UGP of the IHU. This new UGP gives the opportunity to the remaining active students from the previous TEI to attend them. 250 students are actually enrolled each year in the new UGP-IHU. A total number of 1271 active students are enrolled within the Department. Approximately one third of these students (370) of the previous UGP-TEI are active. Although some of these students will complete their studies by 2024-2025 after they take extra courses to comply with the new UGP, the majority of them (348) are not expected to complete their studies for various reasons.

Undergraduate and postgraduate research activities have been established (master's and PhDs) within the Department and some publications have already appeared. The panel believes that the actual number of Staff members (13) is not sufficient to adequately educate and train the students (1:19 Faculty to students ratio per year, 1:77 per total undergraduate class). Lack of Staff is partly compensated by 13 adjunct Faculty members.

The stakeholders praised the high-quality education, knowledge and skills of students from the new UGP and emphasised the importance of their laboratory and clinical training.

The transformation of the UGPs-TEI to the UGP-IHU is documented by various minimal changes that were introduced in the new curriculum (Masters, elective courses during the 8th semester, small supplementations of pre-existing mandatory courses), by introducing research topics and activities, and by supplementing the laboratory equipment by a recent grant for the acquisition of new equipment. It is expected that these actions will further promote the academic and technical knowledge of the students. However, it is difficult for the panel to definitively evaluate the success of the transition of UGPs-TEI to the present UGP-IHU and compare it with other equivalent UGPs within Greece, due to the lack of other evaluations. The panel estimates that all necessary actions are accomplished, and a clear academic direction of the Department exists, especially in the laboratory training. The panel believes that this laboratory/technical training has to continue and modernised in the UGP-IHU and was pleased to see that a similar desire exists between Staff members. However, the panel has not perceived a clear aim from the Department to use new educational skills and methods giving to the students the possibility to follow the advancement of their discipline once they graduate. More emphasis should be given to learning from the primary literature and to evaluate this literature. These are skills that will be very useful for the students to keep up with the advancements in their fields.

The panel appreciates that all necessary actions were taken to provide a UGP in Biomedical Sciences equivalent to a University education level.

### Panel Judgement

<b>Principle 12: Monitoring the transition from previous undergraduate study programmes to the new ones</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

## **Panel Recommendations**

The panel thinks that the number of students of the new Department is very large, and the Faculty to student ratio is too high for the Greek and international standards. This compromises good intentions and efforts from the Faculty and constitutes a visible danger for the future of the Department. The panel judges that the Education Ministry should take this fact seriously into consideration and establish a good balance concerning the student to Faculty ratio.

The new UGP contains basic knowledge and technical training in 9 biomedical laboratory areas. The panel recommends the creation of 2 or 3 specific themes (creation of 2 or 3 Divisions within the Department), where selected biomedical laboratory areas could be consolidated. A more specialised and updated education should be supplemented within these themes.

The panel believes that the Department should incorporate and establish in the new UGP lessons focusing on educational skills and methods that will give the possibility to the students to follow their disciplines' advancements upon graduation. Emphasis should be given to learning from the primary literature and to adequately evaluate this literature.

## **PART C: CONCLUSIONS**

### **I. Features of Good Practice**

- The study programme complies with European standards, and the degree awarded to the students is recognised abroad and in Greece as a bachelor's degree.
- UGP of the Biomedical Sciences Department of IHU is very much focused on specialised academic and laboratory/clinical training.
- All of the Faculty are very experienced in teaching.
- Willingness by all Faculty members of the Department to comply with the evaluation procedures.
- The panel received very positive comments from the students and from the external stakeholders on the high level of theoretical and practical training offered in the Department.
- Stakeholders showed great enthusiasm and interest in pursuing the already existing partnerships with the Department.
- Some Faculty members have a respectable academic research activity, indicating that research can be performed within the Department.
- The students are given strong academic support as far as the Department is concerned.
- Pastoral care is available.
- Most students are expected to graduate within 4+2 years.
- Lab spaces are clean and inviting, and the overall level of infrastructural support is adequate.
- Administrative services of IHU provide to the students all necessary documentation (e.g., provision of hard copy of diplomas, certificates, and transcripts) in both Greek and English.
- Labour rights for the graduates of the Department are acquired.
- Good interactions between the Department and Universities/Hospitals are present and appreciated.
- Restaurants are functional providing food of good quality.

### **II. Areas of Weakness**

- The strategic planning of the Department needs improvement with respect to content of the provided UGP in order to put into the right context of European bachelor's programmes in similar areas.
- Suboptimal Faculty to student ratio. This is a serious problem, which must be mapped to the ministry of education decisions, and the panel considers that the Department is a victim of bad strategic planning.
- Lack of internet access in most areas of the Department.
- Limited E-learning and web-presence.
- Limited national and international collaborations.
- Limited grant funding.

- Bad transportation of the students to the Campus (a weakness linked to the IHU and not to the Department, but greatly affecting the function of the Department).
- Staff and student mobility (Erasmus+), including sabbatical leaves, is very low.
- The Department's alumni monitoring system does not exist.
- The Department relies on a large number of adjunct Faculty for sharing the teaching load.
- The panel is worried that the creation of too many MSc programmes with the same amount of Faculty and resources may spread out resources too thin.
- The campus is in very serious need of modernization and improvement. Doors, windows, grassy areas and road pavements in the campus are neglected and must be improved urgently.
- Transportation to and from the campus, which is a long distance from Thessaloniki, is a constant problem and frustration for the students.
- Websites of the Department need updating and improving.
- The communication strategy towards society and job market is not yet properly established.

### **III. Recommendations for Follow-up Actions**

- Define the Bachelor Degree of Biomedical Science by adding a qualification e.g., "Biomedical Laboratory Sciences" or an equal term including the term "Laboratory". The title of the programme without any qualifications ("Biomedical Sciences") is too broad, and difficult to put into the right context of European bachelor's programmes in similar areas.
- The new UGP contains basic knowledge and technical training in 9 biomedical laboratory areas. The panel recommends the creation of 2 or 3 specific themes (creation of 2 or 3 Divisions within the Department), where selected biomedical laboratory areas could be consolidated. A more specialised and updated education should be supplemented within these themes.
- Before significant expansion into post graduate programmes, consider the need of current undergraduate students to find places for thesis work and job placements.
- Consider making the thesis for the bachelor's degree mandatory.
- Expand the on-going internationalisation and quality of the UGP. It is necessary to enhance the collaboration with national and international Institutions, clinics and partners. Organise international conferences, workshops, symposia etc.
- Significantly increase the number of Staff members within the Department (serious negotiations with Ministry).
- The webpage should be updated and be organized according to the standards of other national and international Universities.
- All Faculty members should have an easily accessible and fully up to date Google Scholar profile.
- Internet connection and E-learning tools should be improved.
- Attracting grant funding from Greece and abroad should constitute a strategic aim of the Department.
- The creation of a grant office either central from the IHU or from the Department is necessary and would be very helpful.



- The Department should be more proactive and aggressive in their policy in the mobility through the Erasmus+ programme and expand significantly the number of institutions to which Erasmus+ students can go.
- Consider inviting stakeholders to talk to the students about employment opportunities, so that a majority of the graduates aims to start working as opposed to continuing their education in MSc and PhD programmes.
- The prospects for professional employment for graduates of the Department should be clearly and massively communicated also on the webpage.
- Transportation is a huge problem that affects quality of student life and education and should be solved.
- Make a stronger effort to increase participation of students in course evaluation. One option is to make the practice semi-mandatory by asking students to do it during the last few minutes of a laboratory course.
- Create a database of graduates and their employment trajectories.
- Improve communication by e.g., creation of a press office from the IHU or from the Department Staff from the Department could inform the public about their specific academic activities and knowledge.
- An external expert panel has to be established and used for the proper design and periodic adaptations of the new UGP-IHU.
- Before significant expansion into post graduate programmes, consider the need of current undergraduate students to find places for thesis work and job placements. In the opinion of the panel, accommodating the undergraduate cohort should come first, and then any expansion may follow.
- The panel emphasised that whenever new Faculty are recruited, a lot of consideration must be given to the strategic aims of the Department, and that for such a small Department the most appropriate strategy may be to strengthen by the new appointments already existing areas of excellence so as to enhance critical mass.
- A reasonable aim for the next 5 years would be the presence of 1-3 new Faculty with strong research profiles and the acquisition of funding from Greek sources and, if possible, from abroad.
- The Department should consider creating an external advisory panel (board) made up of knowledgeable colleagues who can help in strategic decisions within the Department and with making connections nationally and internationally. The connections with Professor Trevor Jones, who spoke enthusiastically about the Department, is an excellent first step.
- Make the campus attractive (this is a general comment directed at the University leadership).
- Communicate better to the students the importance of ΜΟΔΙΠ and ΟΜΕΑ, and the fact that their opinion in the evaluation process matters and can change things.
- The Department should incorporate and establish in the new UGP lessons focusing on educational skills and methods that will give the possibility to the students to follow their disciplines' advancements upon graduation. Emphasis should be given to learning from the primary literature and to adequately evaluate this literature.

- The Department should continue to encourage and reward excellence of students. Similarly, excellence in teaching by Staff members should be rewarded upon students' voting. These achievements should be presented in a special ceremony.
- Invite Academics from abroad to deliver seminars in the various fields (use digital tools such as Zoom).
- The Department should create and develop its proper alumni.
- Staff must inform the public about their specific academic activities and knowledge by having monthly spots in the local national television network and contribute with regular articles in the local newspapers.
- The panel recommends the organisation of an informal or formal yearly meeting with the Staff of the UNIWA Biomedical Sciences Department for discussing important issues of mutual concern.

#### **IV. Summary & Overall Assessment**

The Principles where full compliance has been achieved are: **2, 4, 5, 10, 11, and 12.**

The Principles where substantial compliance has been achieved are: **1, 3, 6, 7, 8, and 9.**

The Principles where partial compliance has been achieved are: **None.**

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

## The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

- 1. Prof. Thimios Mitsiadis (Chair)**  
Universität Zürich, Switzerland
- 2. Prof. Antonia Dimitrakopoulou-Strauss**  
German Cancer Research Center & University of Heidelberg, Germany
- 3. Dr Nikos Ktistakis**  
Babraham Institute, Cambridge, UK
- 4. Mr Georgios Noutsos (student)**  
National and Kapodistrian University of Athens, Greece