

Decision of the Committee for Sciences of Unibasq

on the master degree programme

“Erasmus Mundus Master of Science in Environmental Contamination and Toxicology (ECT+)”

offered by Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU) – (Spain)

in cooperation with Norwegian University of Science and Technology (Norway), University of Porto (Portugal), University of Pau et des Pays de l'Adour (France), Université de Bordeaux (France) and Université de Liège (Belgium).

Based on the report of the expert panel on the 30th March 2023 the Committee for Sciences decides:

1. The master degree programme “Erasmus Mundus Master of Science in Environmental Contamination and Toxicology (ECT+)” offered by Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU) – (Spain) in a consortium with Norwegian University of Science and Technology (Norway), University of Porto (Portugal), University of Pau et des Pays de l'Adour (France), Université de Bordeaux (France) and Université de Liège (Belgium) is accredited according to the criteria and procedures defined in the European Approach for Quality Assurance of Joint Programmes. The study programme complies with the requirements defined by the European Approach for Quality assurance of Joint Programmes and the European Qualifications Framework (EQF) in their current version.

2. The accreditation is given for a period of six years and is valid until 30/03/2029. The following recommendations are given for further improvement of the programme:

1. The coordinators could make efforts in the future to try to reach a joint degree among all partners, in order to avoid the two kinds of degrees awarded by ECT+ (joint degree and double degree) because the differences in national regulations.
2. Recruiting a new Visiting Validator to continue with the verification of the achievement of the Intended Learning Outcomes and the general assessment of the quality of the programme.
3. Regarding the workload, always ascertain that it is evenly distributed and that it is not heavier during the first semester when students coming from abroad are still adapting to the new situation and are particularly stressed by surrounding issues. In addition, considering it is a new programme, special attention should be given to the workload on the different pathways, just in case some adaptations are needed.
4. Detailed information should be given to students regarding the courses and the suggested pathway based on their previous studies.
5. Exams period should be scheduled before the beginning of the next semester, avoiding the overlapping at the beginning of a new semester.
6. Adopting a deeper involvement with the industry for a higher feed-back with ECT+ and promoting potential advantages.
7. Clearly state on the relevant documents, without leaving doubts, the language of instruction. Learning of the local language is of course also recommended by the EMJMD regulations.
8. Coordinators could look into potential communication channels to make information more accessible and to increase the information regarding the support services. Maybe a mentoring programme among graduates (ECT alumni network) and new students could be an option. Further use of social media could also be of interest.

9. More support for students in the process of obtaining a visa and finding accommodation. The delays on the visa delivery by the Embassies is common to all Erasmus Mundus Joint Master Degrees (EMJMD); thus, a further improvement of integrated work among EACEA, National Focal Points and other Consortia is suggested. Maybe additional resources could be devoted to the support services (coordinators and secretariat) already available.
10. Promoting the improvement of the language skills of the academic staff.
11. Formalizing and implementing staff exchange and encouraging participation of staff in mobility activities.
12. As further improvement, for future evaluations, instead of including the facilities' description, as an annex, the consortium could describe in detail the actual facilities involved in the course in the specific section of the Self-Evaluation Report.

With regard to the reasons for this decision the Committee refers to the attached assessment report. Unibasq would like to receive a follow-up report containing the coordinators' reactions to all recommendations within three years of its decision, i.e. by March 2026.

Iñaki Heras Saizarbitoria

Unibasq Director

Assessment report

on the Erasmus Mundus Master of Science
in Environmental Contamination and
Toxicology (ECT+)

offered by

Universidad del País Vasco/Euskal Herriko
Unibertsitatea (UPV/EHU)

Norwegian University of Science and
Technology (NTNU)

University of Porto (UPorto)

University of Pau et des Pays de l'Adour (UPPA)

Université de Bordeaux (UBx)

Université de Liège (LU)

Review coordinated by Unibasq – Agency for Quality of the Basque
University System

Following the
European Approach on Quality Assurance for Joint Programmes

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Executive Summary

This report is issued by the panel appointed by Unibasq in the framework of the accreditation request of the Erasmus Mundus Master of Science in Environmental Contamination and Toxicology (ECT+) submitted by the UPV/EHU on behalf on the ECT+ consortium:

- *Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU) - Spain*
- *Norwegian University of Science and Technology (NTNU) - Norway*
- *University of Porto (UPorto) - Portugal*
- *University of Pau et des Pays de l'Adour (UPPA) - France*
- *Université de Bordeaux (UBx) - France*
- *Université de Liège (LU) - Belgium*

The application concerns a joint master programme of 120 ECTS offered as a full-time two-year programme distributed in four semesters: three teaching semesters and a semester for research to elaborate a Final Master Project. The programme started in 2020 and has enrolled 3 cohorts (2020-2021; 2021-2022; and 2022-2023) with the first graduations in July 2022.

The self-assessment report, the extensive programme materials before the site visit and on site and the conversations with highly motivated delegations have provided the panel with a comprehensive view of the programme. According to the panel, who based its assessment on the standards of the European Approach for Quality Assurance of Joint Programmes, the ECT+ programme fulfils all standards. Consequently, the panel assesses the overall quality of the programme as positive.

1. The review process

On behalf of the Erasmus Mundus Master of Science in Environmental Contamination and Toxicology (ECT+), the UPV/EHU, which coordinates the programme, submitted its accreditation request following the European Approach for Quality Assurance of Joint Programmes on 16 October 2022.

The panel of reviewers was appointed on 24 October 2022 with the following composition:

- Prof. Maria J Bebianno (University of Algarve, Portugal)
- Prof. Stéphanie Bordenave (University of La Rochelle, France)
- Prof. Elena Fabbri (University of Bologna, Italy)
- Dr. Nicolas Pade (EMBRC-ERIC, France)
- Carme Pacín Salvador, PhD student (University of Santiago de Compostela, Spain)

Short CV's of the panel members are provided in annex 12.1. The review process was coordinated by Eva Fernández de Labastida on behalf of Unibasq. All panel members signed a statement of independence and confidentiality.

The panel based its assessment on the Standards for Quality Assurance of Joint Programmes in the European Higher Education Area (EHEA) approved by the EHEA ministers in May 2015.

The panel members studied the application documentation of the proposed programme and reported on their preliminary findings. At the preparatory meetings on 9 December 2022 and 3 January 2023, the panel discussed the preliminary findings, identified the most important issues for discussion on site and prepared the sessions with the delegations.

The site visit took place on 17 and 18 January 2023. The panel discussed with the management of the consortium and the programme, as well as with lecturers, students and graduates, international officers, and labour market representatives. The schedule of the visit is available in annex 12.2. Annex 12.3 lists the materials made available by the programme either before or during the site visit.

Right after the discussions, the panel formulated its considerations and preliminary conclusions. These are based on the findings of the site

visit and build upon the assessment of the programme documents.

The coordinator of the review then drafted the report and circulated it to all panel members for review and feedback. The comments of the members were incorporated in a final version, which was validated by the chair on 30 March 2023. The draft report was sent to the programme coordinators for comments, but there were none.

2. Eligibility

2.1 STATUS

The institutions that offer a joint programme should be recognised as higher education institutions by the relevant authorities of their countries. Their respective national legal frameworks should enable them to participate in the joint programme and, if applicable, to award a joint degree. The institutions awarding the degree(s) should ensure that the degree(s) belong to the higher education degree systems of the countries in which they are based.

EVIDENCE

As described in the SER, the Erasmus Mundus Master of Science in Environmental Contamination and Toxicology (ECT+) is a joint programme focused on the understanding of the interactions between chemical pollution and living organisms and ecosystems. Additionally, the programme aims to offer formation for the management on the risk posed for the health of humans and the environment by the use and disposal of chemicals in a scenario of global change. Norwegian University of Science and Technology (NTNU, Norway), University of Porto (UPorto, Portugal), University of Pau et des Pays de l'Adour (UPPA, France), Université de Bordeaux (UBx, France), Université de Liège (LU, Belgium) and the University of the Basque Country conceived the programme together with a global network of associate partners. All these institutions are well recognized as higher education institutions in their countries. This programme started in 2020 as ECT+ EMJMD 2020-2025 Erasmus Mundus programme and has enrolled 3 cohorts (2020-2021; 2021-2022; and 2022-2023) with the first batch graduating in July 2022.

The ECT+ programme has been jointly designed to provide graduates with common and integrated competences, skills and learning outcomes identified by the ECT Consortium partners and gathered in the ECT Consortium agreement (Annex 2) and related documents, as the Catalogue of courses (Annex 5). The programme runs full-time over 24 months (120 ECTS) and consists of advanced courses (90 ECTS) and a Master Thesis, with a dissertation (30 ECTS). Every student follows an individually tailored study programme, by combining the different

disciplines of the partner universities. Students can choose among 9 alternative mobility pathways (Figure 1 and annex 6).

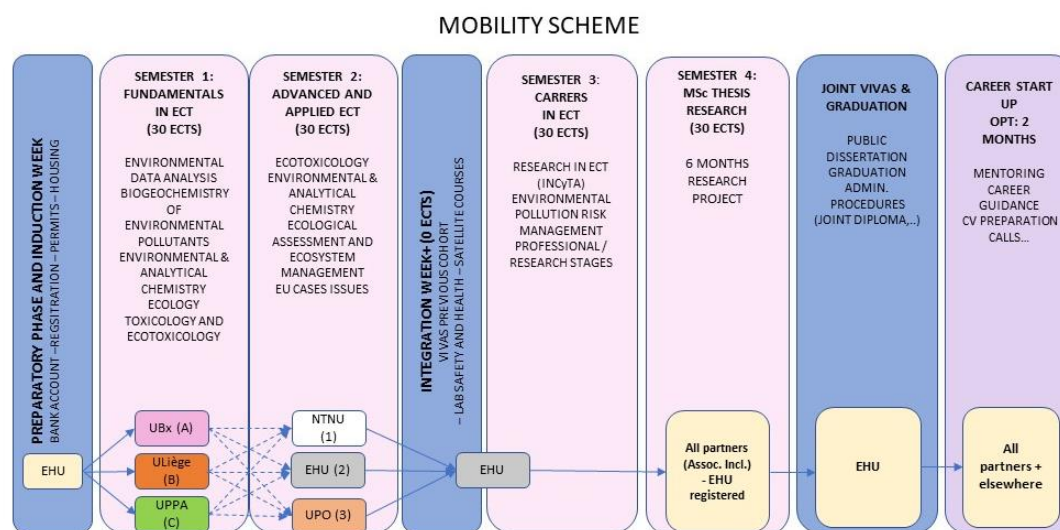


Figure 1. ECT+ general overview and mobility scheme.

A full list of courses and their associated learning outcomes, credits, assessment methods, and pre-requisites are available in the Catalogue of courses (Annex 5).

The institutions delivering the programmes are recognised as higher education institutions by the authorities of their countries as stated in the SER and evidenced by the legal documents of creation of each entity provided as Annex 1. All of them can participate in the joint programme and the programme is fully integrated within the national degree catalogues of the partner universities as is described in the SER and in the Consortium agreement (Annex 2).

The SER describes that depending on the national regulations, a different kind of degree is awarded:

- Joint degree: *UPV/EHU, ULiège, NTNU and UPorto will award a joint degree, issued by UPV/EHU. Graduates will receive a joint diploma from either UPV/EHU-NTNU, either UPV/EHU-UPorto, UPV/EHU-ULiège-NTNU, or UPV/EHU-ULiège-UPorto depending on the study pathway. The Joint MSc Degree Diploma is issued by the Coordinating Partner University on behalf of all Partner Universities and signed by the authorised signatories of the Partner Universities delivering the Joint Degree, is granted by all Partner Universities in recognition of a single body of work and incorporates all logos and/or coat of arms of the Partner Universities. UPV/EHU, ULiège, NTNU and UPorto follow existing national regulations and procedures*

needed to officially register each graduate's individual diploma in their respective country.

- Double degree: A separate parallel Diploma (Double degree) is issued by either UBx or UPPA for students following Semester 1 in those institutions.

This aspect was discussed during the interviews with the management of the partner universities and the coordinators of the programme, and even if there are efforts to deliver just one joint degree in all cases, the French regulations do not allow for it yet.

ASSESSMENT

The panel considers the institutions that offer the joint programme are recognised as higher education institutions by the relevant authorities of their countries. Their respective national legal frameworks enable them to participate in the joint programme. Each student who successfully completes the programme and who has fulfilled the requirements of the applicable national legislations will receive either a joint degree (of the institutions involved in their individual pathway) or an additional double degree if they follow the pathway in the UBx or UPPA (France).

During the discussion, the Universities of UBx and UPPA inform the panel that they are making the necessary effort to be able in the future to offer the joint degree together with the other institutions.

The panel concludes that the standard is fulfilled and suggests that efforts could be made in the future to try to reach a joint degree among all partners.

2.2 JOINT DESIGN AND DELIVERY

The joint programme should be offered jointly, involving all cooperating institutions in the design and delivery of the programme.

EVIDENCE

As commented in the previous section, the ECT+ programme started in 2020. The SER describes how the programme was jointly designed taking advantage of the opportunities provided by the regular cooperation activities among the partners as joint programmes like MER+ EMJMD and doctoral programmes, joint research projects and scientific congresses

(SETAC and SICTA). Evidence of this jointness are the joint procedures and documents produced and attached as annexes and the community sense felt during the interviews.

The ECT Consortium Agreement (Annex 2) explains how the programme relies on a variety of joint management bodies, procedures and practices, programme and activities. The SER describes that it was jointly designed based on a common and integrated strategy, structure, practices and activities. It also lists the joint management bodies including the Joint Programme Board (JPB), the ECT Secretariat, the Joint Selection Board and the Joint MSc Thesis Examination Board. Besides, the joint structure recognizes University Academic Boards (UABs) established at the partner universities as functional management elements within the ECT Consortium framework. The ECT Secretariat's role is to harmonise administrative and academic matters related to visibility of the programme and global networking; student selection, recruitment, progress assessment, examination, academic recognition (e.g., joint degree), career prospects; and quality assurance assessment.

Joint procedures and practices include among others:

- Joint calendar.
- Joint process of application, selection and recruitment (Joint Selection Board).
- Mandatory student mobility scheme, including a Joint MSc Thesis Examination Board and a Joint Graduation Ceremony.
- Joint management tools and documents such as the on-line application & management tools, the student agreement, self-funded student declaration, thesis progress reports and thesis evaluation forms.
- Consensus Mark Converter tool (Annex 9) to recognise each partner university grading systems for evaluating academic achievements, transferring marks among partner universities and awarding the degree.
- Joint QA procedures (questionnaires, student assembly, etc.), supervised by the jointly appointed visiting validator, as established in the ECT Consortium Agreement.
- Joint repository of partner universities' support and services (Joint Help Bench).

The ECT+ programme has been designed to provide graduates with common and integrated competences, skills and learning outcomes identified by the ECT+ Consortium partners and gathered in the ECT+ Consortium Agreement (Annex 2) and related documents, as the

Catalogue of courses (Annex 5). Figure 1 shows the general structure of the ECT+ programme and the mobility pathways available.

In semesters 1 and 2, each student follows an individually tailored programme, by combining the different disciplines that can be studied at each of the partner universities. In semester 3, all the students follow advanced courses in UPV/EHU, with a relevant imprint for career development in the field of environmental contamination and toxicology. This common semester largely stimulates cohesion and thus contributes to create and consolidate the incipient ECT Community. The last semester is devoted to the master thesis undertaking research under the supervision of a PhD holder. The MSc Thesis is judged by an international Joint Examination Board approved by the ECT Consortium JPB.

Some other joint academic activities can be highlighted as:

- The International Postgraduate Course in Research in Environment Contamination and Toxicology (INCyTA; Annex 13) constitutes an important opportunity for staff to exchange new ideas with colleagues during one-week-long course in October;
- The Ingurudok PhD workshop at UPV/EHU, and the Marine Women Scientist and the Turquoise Days, as well as the Internships, Professional Placement and Career-Start-up Training.

In addition, there is a joint web site (ectplus.eu) and online application platform.

ASSESSMENT

The panel considers that the programme is offered jointly, involve all cooperating institutions in the design and delivery of the programme. The panel would like to highlight the joint procedures that make this a real joint programme with an interdisciplinary approach.

The panel considers that the standard is fulfilled.

2.3 COOPERATION AGREEMENT

The terms and conditions of the joint programme should be laid down in a cooperation agreement. The agreement should in particular cover the following issues:

- Denomination of the degree(s) awarded in the programme

- Coordination and responsibilities of the partners involved regarding management and financial organisation (including funding, sharing of costs and income etc.)
- Admission and selection procedures for students
- Mobility of students and teachers
- Examination regulations, student assessment methods, recognition of credits and degree awarding procedures in the consortium.

EVIDENCE

The ECT Consortium Agreement (Annex 2) covers the following issues:

- Denomination of the degree(s) awarded.
- Coordination and responsibilities of the partners involved regarding management and financial organisation.
- Admission and selection procedures for students.
- Mobility of students and teachers.
- Examination regulations, student assessment methods, recognition of credits and degree awarding procedures.

Moreover, joint management procedures, practices, academic activities and administrative rules have been agreed and are detailed in the ECT Consortium Agreement. This agreement establishes that the partners (a) have overall responsibility for the academic standards and quality of the programmes delivered, and (b) recognize the equivalence of each other's QA procedures (when students are at the site of one of the partners, the relevant institutional QA protocols of this partner will apply).

According to the ECT Consortium agreement, the ECT Secretariat assumes the administration and day-to-day management of the overall programme, always supported by the JPB Chair and by the coordinators of the six partner universities. Main roles imply the organisation of the application/selection and enrolment procedures, as well as the management of the joint transcript of records with the marks approved by the JPB and issuing the joint degree and the corresponding EDS. However, all the partners participate in the Selection Board and in the MSc Thesis Examination Board and the JPB meetings that approve the final marks for the whole programme.

ASSESSMENT

The panel considers that the Consortium agreement covers adequately the terms and conditions to provide a joint programme. The panel considers that the standard is fulfilled.

3. Learning Outcomes

3.1 LEVEL

The intended learning outcomes should align with the corresponding level in the Framework for Qualifications in the European Higher Education Area (FQ-EHEA), as well as the applicable national qualifications framework(s).

EVIDENCE

The programme is designed as a research master which gives access into a PhD programme. Nevertheless, it provides a sufficiently applied background, such that students can apply directly for employment, once graduated preparing students to undertake integrated, multidisciplinary research. The intended learning outcomes should make it possible for graduates to integrate into multidisciplinary teams, contributing expertise in a given environmental discipline or multiple disciplines within the field.

As stated in the SER, at ECT+ MSC programme “*All the students receive advanced multidisciplinary courses (Biogeochemistry, Environmental Analytical Chemistry, Toxicology, Ecotoxicology, Ecology, Environmental Risk Assessment) and a translational science viewpoint*”. The flexibility of the programme (see Figure 1) provides the students the opportunity to develop their own curriculum with different approaches (chemical, toxicological, ecological and managerial; or combinations of them), including advanced training in practical field techniques, chemical and biological analysis and data analysis. It also includes the option of professional placement internships (very positively valued by students and graduates), and additional courses and workshops as can be seen in Annex 13.

Table 4 in the SER describes the general learning outcomes to be achieved (competences, subject specific skills and general and transferable skills). More details are given in the Catalogue of Courses (Annex 5). Annex 4 provides a matrix of correspondence of the learning outcomes with the Framework for Qualifications in the European Higher Education Area (FQ-EHEA).

ASSESSMENT

The intended learning outcomes align with the corresponding level in the Framework for Qualifications in the European Higher Education Area (FQ-EHEA). The panel considers that the programme provides to students a joint structure of learning outcomes guaranteeing consistency among graduates in all key areas, while at the same time allowing students a choice between different pathways.

The panel considers that the standard is fulfilled.

3.2 DISCIPLINARY FIELDS

The intended learning outcomes should comprise knowledge, skills, and competencies in the respective disciplinary field(s).

EVIDENCE

The SER states that *"All the students receive advanced multidisciplinary courses (Biogeochemistry, Environmental Analytical Chemistry, Toxicology, Ecotoxicology, Ecology, Environmental Risk Assessment) and a translational science viewpoint (from cellular and molecular biology, to long-term and large-scale processes; from laboratory experimentation to field studies; from soils to the ocean, with the river catchments as core elements; from advanced training in emerging analytical and diagnostic technologies to management)"*.

The intended learning outcomes described in Table 4 and Annex 4 of the SER comprises competences, subject specific skills, general and transferable skills and soft skills in the respective disciplinary fields.

The knowledge is more detailed in the learning outcomes described in each of the subjects in the Course Catalogue (Annex 5).

ASSESSMENT

The panel considers that the CET+ programme consists of a suitable mix of theoretic knowledge, work experience and analytical skills, with enough flexibility allowing students to customise their own learning itinerary.

The panel considers that the standard is fulfilled.

3.3 ACHIEVEMENT

The programme should be able to demonstrate that the intended learning outcomes are achieved.

EVIDENCE

The SER explains that the structure and content of the curriculum is organised to enable students to achieve the Intended Learning Outcomes (ILOs). The syllabus per course includes the aims and ILOs, as well as the details of the learning and teaching approaches, ad hoc designed to achieve the ILOs. The examination regulations and the assessment of the achieved learning outcomes are aligned with the ILOs and are applied consistently among ECT Consortium partners, as detailed in the ECT Consortium Agreement (Annex 2).

The achievement of the ILOs is verified at various stages:

- comparing levels and trends in marks obtained by selected students at different partner universities along the diverse mobility pathways.
- feedback provided by guest lecturers and external supervisors, including the feedback of the international Joint MSc Thesis Examination Board.
- reporting by the Visiting Validator based on the information provided by the JPB (comparative marks, feedback reports ...). Although by the time of the review the selection of a new Visiting Validator was still pending.

In addition, accreditation and verification following the regulations and procedures established by national QA agencies as a part of the institutional QA procedures in force at each partner university also evidence the achievement of the ILOs.

During the site visit some master theses of the first graduates (2020-2022 cohort), with different grading were reviewed which confirmed the acquisition of the ILOs. The interviews with the labour market representatives and the graduates also evidenced that the graduates are well prepared for their careers. In addition, the coordinators explained that more than 75% of the master thesis end up in publications with high impact factors.

ASSESSMENT

The panel considers that the intended learning outcomes of the programme are effectively achieved upon graduation based on the master thesis reviewed and the interviews with the labour market representatives and the graduates.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends recruiting a new Visiting Validator to continue with the verification of the achievement of the ILOs and the general assessment of the quality of the programme.

3.4 REGULATED PROFESSIONS (Not Applicable)

If relevant for the specific joint programme, the minimum agreed training conditions specified in the European Union Directive 2005/36/EC, or relevant common trainings frameworks established under the Directive, should be taken into account.

4. Study Programme

4.1 CURRICULUM

The structure and content of the curriculum should be fit to enable the students to achieve the intended learning outcomes.

EVIDENCE

The programme runs full-time over 24 months (120 ECTS) and consists of advanced courses (90 ECTS) and a Master Thesis, with a dissertation (30 ECTS). Every student follows an individually-tailored study programme, combining the different disciplines of the partner universities:

- Pollutant Biogeochemistry and Integrative Ecotoxicology in UBx;
- Water and Wastewater Pollution in UPPA;
- Marine Ecology and Ecotoxicology in ULiège;
- Arctic Contamination and Toxicology in NTNU;
- Applied and Regulatory Ecotoxicology in UPorto;
- Advanced Analytical Chemistry and Translational Ecotoxicology in EHU.

The coursework is arranged in several modules (summarized in Figure 2):

1. Biogeochemistry of Environmental Pollutants
2. Fundamentals in Toxicology and Ecotoxicology
3. Environmental Analytical Chemistry
4. Advanced Ecology
5. Environmental Data Analysis
6. Advanced Environmental and Analytical Chemistry
7. Applied Ecology and Ecophysiology
8. Advanced and Applied Ecotoxicology
9. Environmental Risk Assessment and Management
10. Researcher's Career

MODULE	COURSE	ects	TYPE	SEM	UNIV	
MODULE 1. BIOGEOCHEMISTRY OF ENVIRONMENTAL POLLUTANTS	Biogeochemistry of environmental pollutants	6	C UBx	1	UBx	
	Biogeochemical cycles in the ocean	6	OP		ULiège	
	Carbon, nutrient, greenhouse gases dynamics in marine ecosystems and geological oceanography	6	OP			
	Hydrology, water cycle and global change	4	C UPPA			UPPA
MODULE 2. ECOLOGY AND ECOPHYSIOLOGY	Terrestrial and Aquatic Ecology and Ecophysiology	6	C UBx	2	UBx	
	Biology of marine mammals	6	OP		ULiège	
	Marine ecology	6	C ULiège		ULiège	
	Functional ecology in aquatic systems	6	C UPPA		UPPA	
	Sustainable management of ecosystem services	7,5	OP		NTNU	
	Stress ecology	6	C UPO		UPO	
	Ecological Quality assessment in coastal ecosystems	4	OP		EHU	
	Eutrophication and harmful algae	4	OP			
	Degradation and rehabilitation of estuaries	4	OP			
	Physiological energetics of marine organisms	4	OP			
MODULE 3. ENVIRONMENTAL AND ANALITICAL CHEMISTRY	Environmental and Analytical Chemistry	6	C UBx	1	UBx	
	Metrolgy in aquatic systems	6	C UPPA		UPPA	
	Monitoring networks	4	C UPPA	2	NTNU	
	Analytical environmental chemistry	7,5	OP			
	Techniques for detection of organo-chemical pollutants in the Arctic environment	10	OP			
	Advanced instrumental analysis	4	OP			
	Applied environmental analytical chemistry	4	OP			
	Environmental chemometrics	4	OP			
MODULE 4. FUNDAMENTALS IN TOXICOLOGY AND ECOTOXICOLOGY	Fundamentals in Aquatic Ecotoxicology	6	C UBx	1	UBx	
	Ecotoxicology and risk quantification	6	C ULiège		ULiège	
	Ecotox & biodegradation of marine pollutants	6	C ULiège		UPPA	
	Ecotoxicology	5	CUPPA	2	UPO	
	Environmental risk assessment: fundamentals	3	OP			
	Environment and public health	3	OP			
MODULE 5. ENVIRONMENTAL DATA ANALYSIS	Data Analysis in Environmental Sciences	6	C UBx	1	UBx	
	Mathematical analysis and modelling methods applied to the environment / Introduction to Marine Ecosystems modelling	6	OP		ULiège	
	Univariate & multivariate analysis	5	OP		UPPA	
MODULE 6. ADVANCED ENVIRONMENTAL TOXICOLOGY	Genetic toxicology	7,5	OP	2	NTNU	
	Arctic environmental toxicology	10	OP			
	Arctic environmental pollution, distribution and processes	10	OP			
	Advanced Ecotoxicology	6	C UPO			
	Genetic resistance to pollutants	3	OP		UPO	
	Toxicogenomics and toxicoproteomics	6	OP			
	Envir monit & risk assess in aquatic systems	4	C EHU		EHU	
	Environmental (toxic)genomics	4	OP			
	Cellular and molecular biomarkers	4	OP			
	Comparative Endocrinology and Endocrine Disruption	4	OP			
	Histology and histopathology of aquatic animals	4	OP			
	Soil & sediment contamination and toxicology	4	OP			
	In vitro toxicity assays	4	OP			
	MODULE 7. ENVIRONMENTAL RISK ASSESSMENT OF CHEMICALS	Environmental risk assessment: REACH & CPL	6			C
Environmental biosafety		4	OP			
Risk communication (online)		4	OP			
Advanced course on Euclid (online)		4	OP			
MODULE 8. RESEARCHER CAREER IN ECT	Special syllabus for Master Degree	7,5	OP	2	NTNU	
	Free choice: /Practicum / Multicultural integrat in EU/ ...	6	OP		UPO / EHU	
	Profesional practice - research	9	OP		EHU	
	Profesional practice I - research stage /external	6	OP			
	Profesional practice I I - research stage /external	4	OP	3	EHU	
	Introduction to research activities	4	OP			
	Research in environmental contamination & toxicology	6	C			
	Contamination social awareness & environ ethics	6	C			
	Master thesis	30	C	4	ALL	

C UBx, compulsory in UBx-Semester 1; C UPPA, compulsory in UPPA-Semester 1; C ULiège, compulsory in ULiège-Semester 1;
C UPO, compulsory in UPO-Semester 2; C EHU, compulsory in EHU-Semester 2;
OP, optional; C, compulsory to all ECT+ EMJMD students;

Figure 2. Overview of the programme.

The Catalogue of Courses (Annex 5) provide a full list of courses and their associated learning outcomes, associated credits, assessment methods, and pre-requisites.

Students can select between alternative mobility pathways as shown in Figure 1, with semester 1 in either UBx, UPPA or ULiège, semester 2 in either NTNU, UPorto and UPV/EHU. Choosing one of these pathways is not

a requirement and they will not appear as specialisation in the Joint Diploma and EDS. Regardless of the mobility pathway, all the students follow together semester 3 in UPV/EHU.

The MSc Thesis research is undertaken during Semester 4 (30 ECTS) and consists of a 5-6 months research under the supervision of a PhD holder.

ASSESSMENT

The panel considers that the proposed structure and content of the curriculum enable the students to achieve the intended learning outcomes.

The panel concludes that the standard is fulfilled.

4.2 CREDITS

The European Credit Transfer System (ECTS) should be applied properly and the distribution of credits should be clear.

EVIDENCE

The programme has a total study load of 120 ECTS (60 ECTS per year or 30 ECTS per semester), one credit is the equivalent to 25 hours of workload. The SER states that *"The number of ECTS points of each course were defined by the estimation of the total amount of time that a student devotes to particular course activities (weather the theoretical parts, practical assignments, experimental lab work), independent learning (through homework, projects, research papers)"* and is provided in the description of each course (Annex 5). As described in annex 5, the workload of each course varies between 3 and 10 ECTS. The workload of the MSc Thesis is 30 ECTS. The SER explains that *"the workload per semester (30 ECTS) is the consensus unit for harmonisation. All the students must follow exactly 30 ECTS per semester by combinations of courses of different workload for instance: 4 courses of 7.5 ECTS or 3 of 10 in NTNU; 5 of 6 ECTS in UBx or ULiège; 6 compulsory courses at UPPA; 3 compulsory of 6 ECTS (INCyTA, CSAEE and ERA) and 3 optional courses of 4 ECTS in EHU; 3 compulsory courses (1 of 9 ECTS and 2 of 6 ECTS) and 9 ECTS of optional courses (3 to 9 ECTS each) with flexible choice of the individual courses by the students in UPorto, etc... Irrespective of the*

combination, every semester (30 ECTS) each student will complete 15 working weeks with a maximum of 50 h per week”.

ASSESSMENT

The panel considers that the European Credit Transfer System (ECTS) is applied properly, and the distribution of credits is clear.

The panel concludes that the standard is fulfilled.

4.3 WORKLOAD

A joint bachelor programme will typically amount to a total student workload of 180-240 ECTS-credits; a joint master programme will typically amount to 90-120 ECTS-credits and should not be less than 60 ECTS-credits at second cycle level (credit ranges according to the FQ-EHEA); for joint doctorates there is no credit range specified. The workload and the average time to complete the programme should be monitored.

EVIDENCE

The programme runs full-time over 24 months (120 ECTS) and consists of advanced courses (90 ECTS) and a Master Thesis, with a dissertation (30 ECTS). The use of ECTS by all partners makes it possible to create and document learning pathways, allowing better flexibility and comparability. The allocation of the workload among modules and course units has been jointly agreed. This guarantees that the workload is evenly distributed among all students, independently of their mobility pathways and their choice of modules available from the ECT+ study plan (Figures 1 & 2).

The workload and the average time to complete the programme are monitored with information from several sources:

- feedback provided by student representatives at the ECT JPB (at least 2 meetings per year).
- questionnaires by the students (course and mobility).
- MSc Thesis monitoring report by students and supervisors.

- Report by the visiting validator (based on the general student assembly questionnaire, the course and mobility questionnaires and the MSc Thesis monitoring reports).

During the interviews it was clear that this a demanding programme which does not allow for a part-time job, as stated by students and academic staff. The students stated that workload was particularly high during 1st and 2nd semester, although it might depend on the chosen pathway.

ASSESSMENT

The panel considers that the workload is evenly distributed on the 120 ECTS of the master programme. The workload and the average time to complete the programme are monitored through different means and sources of information. Nevertheless, the workload during the first two semesters should be closely monitored to avoid additional stress to new students. As this is a new programme, special attention should be given to the workload on the different pathways, just in case some adaptations are needed.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends to always ascertain that the workload is evenly distributed and that it is not heavier during the first semesters when students coming from abroad are still adapting to the new situation and are particularly stressed by surrounding issues.

5. Admission and Recognition

5.1. ADMISSION

The admission requirements and selection procedures should be appropriate in light of the programme's level and discipline.

EVIDENCE

The entry requirements and admission criteria for the ECT+ programme are common for all students. Applicants will be required to complete the admission procedure, providing documents and forms available at the ECT+ web page (www.ectplus.eu). The admission and selection procedures are established in the Consortium Agreement (Annex 2).

The programme is open to holders of a first cycle higher education degree (Bachelor degree or equivalent) from European and third country universities in the field of biosciences, chemical sciences, geosciences, physical sciences and engineering, provided that the degree gives access to the official postgraduate programmes (EQF – Level 7) in the country where the degree was awarded. Applicants with a mother tongue other than English need to prove that they have sufficient fluency in English according to Clause 8.2. of the ECT Consortium Agreement.

Specific individual requirements will be established for each applicant, according to their qualifications/prior learning, selected courses and expected academic and professional prospects. These individual requirements will be developed by the JPB (i.e. through a system of mentor assignment) for pre-registered applicants.

The decision to offer or reject applications is based on the following common admission criteria:

- study and academic merits (transcript: 20%; curriculum vitae: 20%): 40%
- motivation: 25%
- coherence and prospects: 20%
- support by external advisors (recommendation letters): 15%

The application procedure for the programme is centralised by the coordinator, which will collect the applications and make all preparations for the selection process, which is a responsibility under the JPB.

The JPB will review all applications. A mentor (appointed by the JPB) will recommend the most suitable subjects and mobility pathways for an applicant based on the information contained in the application form. The JPB will notify the applicants of its final decision to offer or reject their application based on the common admission criteria outlined above and chances of success in the Programme (possible pursuit of a PhD programme or integration in an industry research unit in the student's home country may also be considered).

The selection process will take place early enough to allow for notification of final decision in good time before the commencement of the Programme. Applicants will be admitted only when they have obtained the necessary visas, permits and insurance policies. The ECT Secretariat will assist with these procedures. Wherever possible, Partners will help students through their respective International Offices.

All the applicants are informed of their right to appeal the decision of the Selection Board regarding their eligibility to the programme. Appeals (duly signed letters) can be submitted by email as pdf attachments to the ECT Secretariat and after revision of the application documents, status and procedures the appeal is considered. Then a reply is provided and the applicant is duly informed by the ECT JPB Chair.

Transparency of the application, admission and selection procedures are guaranteed by the publication of the relevant information procedures.

ASSESSMENT

The panel considers that the joint admission requirements and selection procedures are appropriate considering the programme's level and discipline.

The panel concludes that the standard is fulfilled.

5.2. RECOGNITION

Recognition of qualifications and of periods of studies (including recognition of prior learning) should be applied in line with the Lisbon Recognition Convention and subsidiary documents.

EVIDENCE

According to the ECT Consortium Agreement, each partner formally recognises the modules offered within the joint programme and the credits awarded *"The individual grades per student are communicated to the ECT Consortium Secretariat and recorded in the UPV/EHU academic management system. At the same time, an integrated ECT Consortium transcript will be produced and signed by the JPB Chair and submitted to the involved partner universities for their records."*

The recognition of qualifications and periods of study is handled by each university according to its own regulations.

ASSESSMENT

The panel considers that the Consortium applies fair recognition procedures to facilitate recognition of the modules and credits awarded in the partner institutions.

The panel concludes that the standard is fulfilled.

6. Learning, Teaching and Assessment

6.1 LEARNING AND TEACHING

The programme should be designed to correspond with the intended learning outcomes, and the learning and teaching approaches applied should be adequate to achieve those. The diversity of students and their needs should be respected and attended to, especially in view of potential different cultural backgrounds of the students.

EVIDENCE

ECT+ programme is designed considering the alignment between learning outcomes, learning and teaching activities and the assessment procedures as described in the course catalogue (Annex 5).

ECT Consortium partners are committed to delivering improved and effective learning and teaching practices, enhancing students' learning performance and staff professional competences. The learning and teaching approaches include conventional lectures, seminars, laboratory and field practices, together with novel educational practices like active learning modes and new technologies.

The SER presents some examples of innovative teaching and learning methods:

- Field Course on the Marine Ecology Module (Stareso (ULiège). With a Problem-Based learning (PBL) approach students learn about a subject through the experience of solving an open-ended problem found in trigger material. The aim of the PBL process is not to give a defined solution but to develop other desirable skills and attributes (i.e. knowledge acquisition, enhanced group collaboration and communication).

- INCyTA. The compulsory INCyTA (Investigación en Contaminación y Toxicología Ambientales – Research in Environmental Contamination and Toxicology) course constitutes an example of the innovation, competitiveness, visibility, cooperation with non-European universities and good practices. All the students participate in this course in the Plentzia Marine Station (UPV/EHU) at the beginning of semester 3. During these courses, the students will meet more than 40 lecturers (academic and

research staff from partners and associated Partners; and invited lecturers from Europe and overseas), students from the previous cohort and the ECT+ graduates carrying out their PhD in those locations providing an opportunity to enhance communication between all. The main topics are emerging pollutants (nanotoxicology, microplastics, ...), high throughput analyses, toxicity mechanisms, monitoring and environmental specimen banking, risk assessment of chemical, ecosystem health in a global change scenario, and EU environmental policies. Lectures are combined with tutorials, round-table type workshops and a "cine-forum" session. During the interviews it was explained that students' participation in the discussions is promoted.

- Professional Placement traineeships. The Professional Placement allows the student to understand how knowledge acquired on the programme may be applied to solving problems in real world situations while being immersed in the working environment. Professional Placements consist of 8 ECTS before semester 4; it is carried out under the supervision of a professional mentor in the host organisation and an academic tutor from the partner universities. A Professional Placement agreement arranges the rights and duties of both the student and professional placement provider and detail the Activity Plan. After the traineeship, the student submits the Activity Report, and the professional mentor submits the Evaluation Report (student's performance and achievements). The academic tutor considers both reports and might have interviews with both the student and the mentor and proposes a mark to be ratified by the JPB. During the interviews the students and graduates expressed their satisfaction with the professional placements, which is a very demanded activity as confirmed by the coordinators.

Regarding the diversity of students, even if from the data and the students and graduates interviewed there is a big diversity regarding the countries of origin, the academic staff addressed that the main differences are found because of the background education and specially the bachelor they made. During the interviews some students suggested that more detailed information on the subjects before enrolling could help them choosing their pathways. In addition, and probably due to the fact that the programme is still young, some overlaps on the course organisation were detected as explained by the students. In some cases, while the semester was already beginning in one of the partner institutions some exams were still scheduled in the previous one. Nevertheless, the

coordinators were aware of the issue and made sure that this situation was solved.

Regarding the involvement of industry in the design and update of the programme, the coordinators explained that they considered some input from some of the associated partners during the design. Nevertheless, they agreed this aspect could be enhanced.

ASSESSMENT

The panel considers that the programme is designed considering the alignment between learning outcomes, learning and teaching activities and the assessment procedures. Although education is full-time, there are opportunities for a flexible organisation of learning, teaching and assessment activities to attend to the diversity of students. It should be considered that more detailed information to students regarding the courses and the suggested pathway based on their previous studies is made available. Regarding exam scheduling, it would be good to try not to superimpose exams in the beginning of a new semester. In relation with the industry involvement, the panel suggests to go deeper in this domain and take advantage of the existing collaborations.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends to provide more detailed information to students regarding the courses available to facilitate the choosing of the pathways.

The panel recommends the exams period to be scheduled before the beginning of the next semester.

6.2 ASSESSMENT OF STUDENTS

The examination regulations and the assessment of the achieved learning outcomes should correspond with the intended learning outcomes. They should be applied consistently among partner institutions.

EVIDENCE

As explained in the SER and confirmed during the interviews with the coordinators and the teaching staff, each university is responsible for the

organisation of their courses and examinations. The partner university offering the course and hosting the student will organise examination of each course component. The JPB defines and issues a common framework for examination, related to the specified learning outcomes for each individual course as well as for the whole programme. Examination tools include for example written exams, oral exams, project report, seminars, creation of a poster, or field trip reports. The student receives feedback on all formally assessed work. Examinations are run according to local regulations, which have been laid out by the partner universities and published in the Catalogue of Courses (Annex 5). At the start of the academic year, students are informed of updates by the ECT Secretariat and the corresponding UAB coordinator at the host partner university.

The student must achieve a minimum ECTS grade of E ("pass") in the coursework as a whole (Semesters 1-3; 90 ECTS), to progress to the dissertation (Semester 4).

According to the SER, when available, students could attend classes in the local language and thesis can be presented in English, French, Norwegian, Portuguese Spanish or Basque but in any case, a second language summary must also be included. Nevertheless, during the interviews the coordinators explained that nearly all the theses are written in English and that students are encouraged to use English in all communications. The public dissertation and the discussion will be held in the PiE-UPV/EHU the 3rd-4th week of July at the end of the second year. Invited staff of international prominence participate in the Examination committees as active external examiners with thematic expertise in the corresponding research subject. Dissertation will consist of a 20 min oral presentation of the research work developed plus a questions/discussion session for additional 15 min (all in English).

The academic assessment form (Annex 9) covers the aspects which will be considered for evaluation:

- (1) Integration in the research group where the research has been carried out.
- (2) Basic skills achieved regarding the methods employed.
- (3) Ability to design and plan and carry out a research work.
- (4) Quality of the written scientific report.

(5) Quality of the oral presentation and ability to discuss and defend each one's postulates concerning the MSc thesis.

Overall, it will be evaluated whether the candidate has achieved sufficiency for research to undertake in a next step the realisation of the PhD Thesis or a professional activity as researcher in the field of environmental contamination and toxicology. During the site visit several proofs of assessments, including master thesis, were reviewed.

ASSESSMENT

The panel considers that the examination regulations and the assessment of the achieved learning outcomes correspond with the intended learning outcomes and there are rules to be applied consistently among partner institutions. The SER (page 18, 26 and 36) reports that different languages of instruction are allowed, and the thesis can be written in one of 6 languages, while English is "only" recommended. During the interviews it was clear that in fact English is the language used. This aspect is relevant for students not only during the programme delivery but also for their career as graduates.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends to clearly state on the relevant documents, without leaving doubts, the language of instruction. Learning of the local language is of course also recommended by the EMJMD regulations.

7. Student Support

The student support services should contribute to the achievement of the intended learning outcomes. They should take into account specific challenges of mobile students.

EVIDENCE

The SER describes the different support services available either joint or in each of the partner universities (<https://www.ectplus.eu/services/>). Apart from the ECT Consortium secretariat, there are specific international offices at each university providing support regarding administrative formalities (visas), accommodation options, language training. The information is available on the ECT+ web site and in some guiding documents in annex 14, where detailed information about the programme and all available services is described. In addition, the students are given access to the different intranets or online platforms at each of the universities where they make their mobility pathways to have access to all the information and educational materials needed.

Nevertheless, even if the access to the information is clear, some students complain about some visa issues and accommodation difficulties, even if they are aware of the available information. The coordinators and the staff from the secretariat and the international offices explained that sometimes the expectations of students are too high regarding what they can do for them. The coordinators added that the informal communication among recent graduates and new students which is encouraged during the joint master thesis dissertations at the PIE station might be more valuable than the provided guides as the pathways are individual and each student might have their own issues for instance regarding visas.

ASSESSMENT

The panel considers that there is enough formal support for students but talking to them they do not seem to be aware of some of the possibilities. Maybe the coordinators could look into some ways of facilitating information in a more accessible way. The initiative of facilitating the contact with recent graduates and students during the thesis dissertations could be further promoted/formalized as a mentoring programme.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends that the coordinators look into potential communication channels to make information more accessible and to increase the information regarding the support services. Maybe a mentoring programme among graduates (ECT alumni network) and new students could be an option.

The panel recommends more support for students in the process of obtaining a visa and finding accommodation. The delays on the visa delivery by the Embassies is common to all EMJMDs; thus, a further improvement of integrated work among EACEA, National Focal Points and other Consortia is suggested.

8. Resources

8.1 STAFF

The staff should be sufficient and adequate (qualifications, professional and international experience) to implement the study programme.

EVIDENCE

As described in the SER and made clear in the interviews with the coordinators and the academic staff, a fundamental strength of the programme is that all partners share a common research interest with its own expertise and some synergistic overlaps.

Annex 10 shows the CVs of qualified staff to deliver the programme. Besides regular postgraduate studies, all partners have been involved in pioneering educational networks at European scale, within the field of marine and environmental sciences. Many staff involved in ECT+ also gives lectures around Europe, within the framework of the Erasmus programme. Collaboration involving staff members from the different partners is ongoing in research, teaching and international exchanges.

During the interviews an issue was raised regarding the different English level of the academic staff depending on the partner university. This shouldn't be an issue but should be considered as an option to improve the language skills of some of the staff members.

Staff have options to meet during some of the joint activities, but it seems that those meetings have been only among the coordinators. The mobility of teaching and administrative staff could be further enhanced, and exchanges encouraged. Even if there is a clear communication and sharing of information among partners, it would be good if apart from participating in meetings and INCyTA, there could be a programme of formalized staff exchange.

ASSESSMENT

The panel considers that the staff is sufficient and have adequate qualifications, professional and international experience, to implement the study programme. The panel appreciates the programme's efforts to coordinate the teaching and learning activities between the different

disciplines and universities. There are options for improvement in language skills and mobility of staff should be promoted.

The panel concludes that the standard is fulfilled.

RECOMMENDATIONS

The panel recommends promoting the improvement of the language skills of the academic staff.

The panel recommends formalizing and implementing staff exchange and encouraging participation of staff in mobility activities.

8.2 FACILITIES

The facilities provided should be sufficient and adequate in view of the intended learning outcomes.

EVIDENCE

The consortium universities have all adequate general facilities for students (campus card, libraries, computer facilities, sport centres ...). A general description of each university is provided in the SER and the specific facilities and equipment for the programme are described in annex 15 with specific links to the information. During the site visit the specific facilities of the Plentzia Marine Station (UPV/EHU) were visited. In addition, the coordinators showed some videos of the facilities in other locations.

The students and graduates were very positive about the facilities.

ASSESSMENT

The panel considers that the facilities are sufficient and adequate. During the site visit the facilities of the UPV/EHU (classrooms, laboratories,...) at the Plentzia Marine Station were visited, which were considered to be excellent. As a suggestion for further improvement, for future evaluations, instead of including the facilities' description as an annex, the consortium could describe in detail the actual facilities involved in the course in the specific section of the SER.

The panel concludes that the standard is fulfilled.

9. Transparency and Documentation

Relevant information about the programme like admission requirements and procedures, course catalogue, examination and assessment procedures etc. should be well documented and published by taking into account specific needs of mobile students.

EVIDENCE

All relevant information about the programme like admission requirements and procedures, course catalogue, examination and assessment procedures etc. is available at the ECT+ website.

Annex 14 shows a guide available for students with all the information about the programme and its corresponding services.

The students and graduates indicated that there is enough information available.

ASSESSMENT

The panel considers that everything relevant can be found online at the ECT+ website.

The panel concludes that the standard is fulfilled.

10. Quality Assurance

The cooperating institutions should apply joint internal quality assurance processes in accordance with part one of the ESG.

EVIDENCE

The ECT Consortium partner institutions recognise the equivalence of each other's QA procedures (when students are at the site of one of the partners, the relevant institutional QA protocols of this partner will apply) integrating some joint processes developed by the programme for internal and external evaluation:

- Periodic internal review of the programme (every 3-4 years), including external input.
- Periodic internal review of the courses (every 3- 4 years).
- Peer observation of teaching.
- Programme review prepared by UAB Coordinator for the Academic Quality & Standards Committee.
- Meetings of the JPB 2-3 times per year.
- Periodic appraisal of academic and non-academic staff.
- Visiting Validator, who produces an annual report on the programme.
- A formal course evaluation, by a high-level visiting international committee.

Some good practices to highlight are:

- Four student questionnaires (course, mobility, thesis and programme).
- The visiting validator and the reports made.
- The online questionnaire and farewell assembly (joint reflection with students), which are also sources for the report made by the visiting validator.

Annex 11 is a compilation of the questionnaires and some of the reports made.

ASSESSMENT

The cooperating institutions apply joint internal quality assurance processes, integrating the specific processes and practices of the ECT+ programme. The panel concludes the standard is fulfilled.

11. Summary and Recommendation

11.1 SUMMARY OF RECOMMENDATIONS

1. The panel recommends recruiting a new Visiting Validator to continue with the verification of the achievement of the ILOs and the general assessment of the quality of the programme.
2. The panel recommends to always ascertain that the workload is evenly distributed and that it is not heavier during the first semester when students coming from abroad are still adapting to the new situation and are particularly stressed by surrounding issues.
3. The panel recommends the exams period to be scheduled before the beginning of the next semester.
4. The panel recommends to clearly state on the relevant documents, without leaving doubts, the language of instruction. Learning of the local language is of course also recommended by the EMJMD regulations.
5. The panel recommends that coordinators look into potential communication channels to make information more accessible and to increase the information regarding the support services. Maybe a mentoring programme among graduates (ECT alumni network) and new students could be an option.
6. The panel recommends more support for students in the process of obtaining a visa and finding accommodation. The delays on the visa delivery by the Embassies is common to all EMJMDs; thus, a further improvement of integrated work among EACEA, National Focal Points and other Consortia is suggested.
7. The panel recommends promoting the improvement of the language skills of the academic staff.
8. The panel recommends formalizing and implementing staff exchange and encouraging participation of staff in mobility activities.

11.2 RECOMMENDATION OF THE PANEL OF EXPERTS

The panel concludes that the standards are fulfilled.

12 ANNEXES

12.1 PANEL OF EXPERTS

- Prof. Maria J Bebianno (University of Algarve, Portugal) Portugal is a retired Full Professor with a PhD in Marine Ecotoxicology from the University of Reading (United Kingdom) and in Oceanography at the University of Algarve (Portugal). She was Director of the following undergraduate courses: Environmental Engineering, Oceanography, Marine Sciences and Marine and Coastal Management and member of the PhD Commission of Earth, Marine and Environmental Sciences. She is presently director of the Research Centre for Marine and Environmental Research (CIMA) and an evaluator for the Portuguese Agency for Evaluation and Accreditation of Higher Education (A3ES). At the international level she is a member of the Group of Experts of the Regular Process for the Evaluation of the State of the Marine Environment including the Socio-Economic Aspects of the United Nations. The research activity addresses the effects of traditional and emerging contaminants in the marine environment. She has published 228 papers in international journals (H index 55 (Scopus)).
- Prof. Stéphanie Bordenave (University of La Rochelle, France) Stéphanie Bordenave-Juchereau is associate professor in biochemistry at La Rochelle Université (France). She is currently involved in European University project EU CONEXUS European University for Smart Urban Coastal Sustainability, in charge of the Joint Marine Biotechnology Master. From 2016 to 2019, She managed A blue Biotechnology Master for a Blue Career, EU project funded by EMFF under grant agreement EASME/EMFF/2016.1.2.1.2/01/512.749559. The research activity is addressed to biotechnological upgrading of aquatic biomasses and their conversion into valuables and characterised bioactive compounds for human health.
- Elena Fabbri (EF) is Full Professor in Physiology at the University of Bologna (Italy). She is currently the University Delegate for Guidance of incoming and ongoing students. From 2017-2022 EF has been the European Coordinator of the Erasmus Mundus Joint Master Degree WACOMA (Water and Coastal Management). She had previously been the Coordinator for the University of Bologna of the Erasmus Mundus Joint PhD in Marine and Coastal Management (MACOMA; 2010-2017) and of the Joint Master in Water and Coastal Management (WACOMA, 2011-2016). The research activity is addressed to the signal transduction of neuromodulators and hormones correlated to the stress response; alteration of cellular functions by contaminants of emerging concern (CECs) in the marine environment (e.g. EDC, PPCPs etc); effects by CECs on cell signaling, gene and protein expression in marine vertebrates and invertebrates and use of biomarkers to assess marine organism health status.

- Dr. Nicolas Pade (EMBRC-ERIC, France) is currently the executive director of the European research infrastructure EMBRC-ERIC, dispersed across nine European countries and more than 50 research organisations. He is a molecular and behavioural biologist by background and currently coordinates two Horizon Europe projects related to marine biodiversity observation and eDNA reference libraries.
- Carme Pacín Salvador, PhD student (University of Santiago de Compostela, Spain) - Carme Pacín is a PhD candidate at the University of Santiago de Compostela (Spain). In her thesis she studies the evolution of marine pollution (heavy metals, lead isotopes, nitrogen isotopes, microplastics, nanoparticles...) using macroalgae as biomonitors. In addition, she has been collaborating for 2 years with different regional quality agencies in Spain, in processes of verification and modification of bachelor degrees, masters and doctoral programmes.

12.2 SCHEDULE OF SITE VISIT

DAY 1 (17/01/2023)

9:00 – 9:50 Management of UPV/EHU and other partners (MER and ECT+)

- *Montserrat Maritxalar (Vice-Rector Postgraduate Studies and Life-Long Learning, UPV/EHU)*
- *Fernando Plazaola (Dean Faculty of Science and Technology, UPV/EHU)*
- *Begoña Blanco (Director of QA Services, UPV/EHU)*
- *Susana Mira Leal (Rector of UAc) ONLINE*
- *Laurent Servant (Vice-president International Relations, UBx) ONLINE*
- *Julien Bois (Institutional Manager for Crossborder Relations, UPPA) ONLINE*
- *Manuel João Rua Vilanova (Subdirector ICBAS, UPO) ONLINE*
- *Chris Hauton (Director of Internationalisation for SOES, Soton) ONLINE*
- *Sylvie Gobert (Vice-Dean for Education, Fac Sci, ULiège) ONLINE*
- *Karina Mathisen (Vice-Dean Faculty of Science, NTNU) ONLINE*

10:00 – 10:50 Coordinators of MER Programme

- *Jorg Schafer (UBx)*
- *Cecilia D'Angelo (Soton)*
- *Manu Soto (UPV/EHU)*
- *Ionan Marigomez (UPV/EHU; Coord. Internac.)*
- *Sylvie Gobert (ULiège) ONLINE*
- *Patricia V. Garcia (UAc) ONLINE*

11:00 – 11:50 Students and recent graduates of MER Programme

- *Xabier Larrinaga (2022/24; UBx-EHU-ULiège)*
- *Gema Camacho (2022/24; Soton-EHU-ULiège) ONLINE*
- *Tosca Sala (2021/2023; Soton-EHU-ULiège) ONLINE*
- *Marco A Friedrichsen (2021/2023; UBx-EHU-Soton) ONLINE*
- *Valeriia Vakhitova (2021/2023; UBx-EHU-Soton) ONLINE*

- *MM Mredul (2020/2022; UBx-EHU-ULIège; EMA representative) ONLINE*
- *Joyanta Bir (2016/2018; UBx-EHU-ULIège)*

12:00 – 12:50 Teachers of MER Programme

- *Jerome Bonnin (UBx)*
- *Krishna Das (ULiège)*
- *Jon Saenz (UPV/EHU)*
- *Ikerne del Valle (UPV/EHU)*
- *Ana M Costa (UAc) ONLINE*
- *Annick Wilmotte (ULiège) ONLINE*
- *Aida A Azcarate (ULiège) ONLINE*
- *Duncan Purdie (Soton) ONLINE*

Lunch break

14:00 - 14:50 International Office and Student support team for both programmes (Support services-Administration staff) MER and ECT+

- *Feli Olivares/Jon Bazeta (MER/ECT+ Secretariat, UPV/EHU)*
- *Mónica Vitorica/María Ruigomez (Academic Management Service, UPV/EHU)*
- *Florina Camarasu (IRO, UBx)*
- *Isabelle Noirot (IRO, ULiege) ONLINE*
- *Domique Thewissen (QA Office, ULiege)*
- *Magalie Estevez (IRO, UPPA)*
- *Caroline Hanin (IRO, UPPA) ONLINE*
- *Zélia M. Gomes (Postgraduate Unit-Academic Affairs, UPO) ONLINE*
- *Sara Diana Moreira (IRO, UPO) ONLINE*
- *Maria Amélia Fonseca (Pro-Rector International Affairs; U Azores) ONLINE*
- *Daniel Bech (IRO, NTNU) ONLINE*
- *Gerd Johanne (Student Advisor; NTNU) ONLINE*

15:00 – 15:50 Labour market representatives for both programmes MER and ECT+

- *Alberto Katsumiti (Researcher GAIKER-IK4)*
- *Patrice Gonzalez (Researcher CNRS / Vice-director EPOC laboratory) ONLINE*
- *Vitor Vasconcelos (Director of CIIMAR) ONLINE*
- *Nine Doutreloux (Representative of STARESO) ONLINE*
- *Javier Franco (Researcher AZTI) ONLINE*
- *Mikel Becerro (Researcher CSIC) ONLINE*
- *Joel Knoery (Researcher IFREMER) ONLINE*

16:00 – 16:50 Students and recent graduates of the ECT+ Programme

- *Luis Mauricio Ortiz (2020/22; ULiege-UPO-EHU) ONLINE*
- *Anabella Massa (2020/22; UPPA-EHU-EHU) ONLINE*
- *Júlia Grinyó (2020/22; ULiege-NTNU-EHU) ONLINE*
- *Lizlit Cabag (2021/23; UPPA-UPO-EHU) ONLINE*
- *Kehinde Olajide (2021/23; UBx-EHU-EHU) ONLINE*
- *Yoce Aprianto (2021/23; UPPA-UPO-EHU) ONLINE*
- *Marta Del Castillo (2022/24; ULiege-NTNU-EHU) ONLINE*
- *Oluwafemi Oyekan (2022/24; UBx-EHU-EHU) ONLINE*

17:00 – Visit to the PIE premises, if relevant presentation of some other premises. Review of additional documentation.

20:00 Dinner

Day 2 (18/01/2023)

8:50 – 9:40 Coordinators of the ECT+ Programme

- *Agnés Feurtet-Mazel (UBx)*
- *Nathalie Geneste (UBx)*
- *Mathilde Monperrus (UPPA)*
- *Krishna Das (ULiege)*
- *Lúcia Guilhermino (UPO) ONLINE*
- *Eduardo Rocha (UPO) ONLINE*
- *Bjorn Munro (NTNU) ONLINE*
- *Nestor Etxebarria (UPV/EHU)*
- *Maren Ortiz-Zarragoitia (UPV/EHU; Coord. Internac.)*

9:50 – 10:40 Teachers of the ECT+ Programme

- *Beñat Zaldibar (UPV/EHU)*
- *Maitane Olivares (UPV/EHU)*
- *Marie-Lise Benot (UBx) ONLINE*
- *Eric Villenave (UBx) ONLINE*
- *Charlotte Recapet (UPPA) ONLINE*
- *Celia Joaquim-Justo (ULiege) ONLINE*
- *Vitor Manuel Vieira da Costa (UPO) ONLINE*
- *Luís Gabriel Antão Barboza (UPO) ONLINE*
- *Ase Krokje (NTNU) ONLINE*

10:50 – 11:40 Final meeting with both programmes coordinators and academic staff

Summary of the site visit and farewell.

Lunch

12.3 LIST OF REVIEWED EVIDENCE

Mandatory annexes

- 1) Documents supporting the legal status of the partner institutions (Annex 01 ECT+ Partner legal status)
- 2) Cooperation agreement
(Annex 02 ECT+ CA definitive signed)
- 3) Documents supporting each partner's legal basis for participating in the joint programme (Annex 03 ECT+ partner legal basis for joint programme)
- 4) List of intended learning outcomes, including Annex 04 ECT+ Matrix alignment FQE & NQF.
- 5) Course syllabi of all partners (Catalogue of Courses): Annex 05 ECT+ Catalogue of courses 2020-2025
- 6) Structure of the curriculum / study plan / mobility scheme: Annex 06 ECT+ Curriculum study plan Mobility scheme
- 7) Official documents indicating admission requirements and selection procedures: Annex 07 ECT+ Admission requirements Selection procedures
- 8) Official documents outlining procedure for recognition of qualifications: Annex 08 ECT+ Recognition qualifications
- 9) Students' assessments regulations and Student Agreement: Annex 09 ECT+ Student assessment regulations and SAD
- 10) Academic staff CVs (all partners): Annex 10 ECT+ CVs Partners coordinators
- 11) Relevant documents constituting internal quality assurance system: Joint QA: Reports, Questionnaires,... Annex 11 ECT+ Relevant documents internal QA
- 12) Diploma supplement (sample): Annex 12 ECT+ Diploma and ESD

Additional annexes

- 13) Annex 13 ECT+ INCyTA and professional placement
- 14) Annex 14 ECT+ Student support and integration
- 15) Annex 15 ECT+ Facilities
- 16) ECT+ EMJMD summ indicators
- 17) Videos of facilities and activities
- 18) Master thesis samples