www.universeh.eu

European Space University for Earth and Humanity

UNIVERSEH is an alliance of five European universities established to develop a new way of collaboration in the field of Space, within the "European Universities" initiative.

The alliance aims to create new higher education interactive experiences for the university community, teachers and students, and for the benefit of society as a whole. Such initiatives will enable broadminded, informed and conscientious European citizens to capture and create new knowledge and become smart actors of European innovation, valorisation and societal dissemination within the Space sector, from science, engineering, liberal arts to culture.

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D3.4 Common diploma supplement

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Version: final

Dissemination level

PU	Public	X
CO	Confidential, only for members of the consortium	

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Document History

Version	Date	Author	Partner	Summary of main changes
V1 – first draft	23-06-2022	Pascal Maussion	UT (INP)	Structure and outline
V2	24-06-2022	Adam Walters	UT (UT3)	Comments and modifications

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Reminder of our commitments in the final application form

The Erasmus program and ECTS system provide a framework for recognition of studies carried out during mobility by equivalence at another European University. However, there is still much work to be done to harmonise and make more flexible national and local regulations in order to work towards awarding of a joint (especially multiple-partner) degree on a collaborative European scale with a program tailored to each student's individual needs. We will work towards this goal within our program tailored on space and humanities. In the short term this can involve the awarding of one or more national degrees together with a Universeh diploma. In the long run this would be a preparation for awarding a European degree if regulations evolve to allow this. One first step could be a "European label" for a Master Thesis as the one that already exists for the doctorate and the use of the Europass model for a diploma supplement. There is also the question of developing a common marking system, for example, through the Egracons European grading conversion system;

3-year target. Common diploma supplement for all students taking part in Universeh Activities;

7-year vision. A common Universeh diploma or joint diploma according to regulatory possibilities

The deliverable is composed of

- this presentation document for the certificate supplement
- our intentions in terms of open badges
- a specific Certificate Supplement adapted to the UNIVERSEH project in Annex 1

Contents

I. Presentation of the Certificate supplement

Task 3.4 task was conducted with the strong will to use and promote the existing European tools from the e-portfolio.

As a consequence, it has been decided to award a specific certificate supplement for awarding recognition to students. It is envisioned that students will receive a supplement for each UNIVERSEH course taken, including the summer and winter schools which have 1 week of presence and 2 weeks of distance work.

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In order to promote multilingualism, this certificate supplement could be issued in two languages, English and the student's home language.

The template of the Certificate Supplement provided in Annex, will be specifically tailored for all the UNIVERSEH courses (presently 16) that are currently being created and which will be given and evaluated in the partnership during the next academic year.

Further work has started with discussions on a grid of equivalent marks, on the way in which the certificate supplement will be awarded and on the use of digital badges.

Moreover, a specific mention of the UNIVERSEH courses and or summer school in which the student was involved, is planned to be added in part 6 – Additional information of the diploma supplement awarded by the higher education institution where he/she is enrolled for their degree.

II. Open badges

An Open badge is a digital record in the form of an image containing (meta)data. It is used to recognize and attest to a skill/capability/ability, a quality recognized by oneself or by others, an achievement, an interest, informal learning, participation, etc.

How to award the UNIVERSEH open badges is still under discussion. There are two possibilities, the Moodle platform of the UNIVERSEH project or the Open badge factory project supported by the DROC Data centeR Occitanie. It is envisioned that the students enrolled in the Student conference in Krakow will be soon, the first to receive an open badge.

Annex: Example/template of a UNIVERSEH certificate supplement

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europass Certificate supplement

UNIVERSEH

Flag of the country where the certificate is issued

1. Title of the certificate and name of the student

UNIVERSEH Course on Elastic metamaterials and actuators for space applications

Ms/Mr Yyyyyy XXXXXX

2. Translated title of the certificate [1]

UNIVERSEH Course on Elastic metamaterials and actuators for space applications (EN)

3. Profile of skills and competences

List the skills and competences acquired by the holder of the certificate. This list should start as follows: "A typical holder of the certificate is able to:" and should include a list of about 5 to 15 items using action verbs to describe skills and competences.

The holder of the certificate is able to:

- mobilize their knowledge on the basics of wave phenomena and interactions in complex materials to propose solutions to valorize the vibratory energy of a system
- identify and quantify the engineering constraints imposed by the space environment
- combine and apply dynamic phenomena to obtain the desired response of a structure
- use the concepts of mechanical impedance and multiple scattering to define models
- design metamaterials and apply them for a particular application
- identify differences in dynamics between discrete and continuous systems
- classify the different actuation technologies and recognize their capabilities
- check the requirements of an application in order to elaborate the specifications
- elaborate multiphysics numerical models to design actuators
- use their skills in team working, problem-oriented thinking and problem solution, task planning and coordination, problem breaking into sub-tasks and their interfacing during work, project scheduling, planning and verification

4. Range of occupations accessible to the holder of the certificate [3]

The holder of this certificate can exercise the skills acquired for

- research and innovation in space-oriented companies
- research and innovation in private and public universities and research labs

1 In the original language. | 2 If applicable. This translation has no legal status. | 3 If applicable.

5. *Official basis of the certificate*

Body awarding the certificate

- AGH University of Science and Technology, Faculty of Mechanical Engineering and Robotics, Krakow, Poland
- Department of Robotics and Mechatronics, INP-ENSEEIHT, Department of Electronics, Electrical Energy and Control, Toulouse, France

Authority providing accreditation / recognition of the certificate

Under the umbrella of UNIVERSEH (Alliance for the European Universities: University for Earth and Humanity) https://universeh.eu/

Signature of the authority (Dean, Director, Head of the program…)

+ Stamp/logo of the awarding institution(s)

Level of the certificate (national or European)

- Master Year 2
- Level 7 in the European Qualifications Framework
  https://europa.eu/europass/en/description-eight-eqf-levels

Access to next level of education / training [1]

In the two partner universities (AGH and Toulouse INP), this course is part of the respective curricula and is mandatory to obtain their respective final diploma/degree

Grading scale / Pass requirements

Exemple (French marking): Pass mark: 10/20

- Good: 12/20
- Very good: 14/20
- Excellent: 16/20

6. *Officially recognised ways of acquiring the certificate*

Be involved in the 3 ECTS of the course on Elastic metamaterials and actuators for space applications and pass the corresponding assignements (exams, practicals, projects).

- part led by AGH: 2 x 8 h on metamaterials for space applications
- part led by Toulouse INP: 2 x 7 h on smart materials for space applications
- 50 h for a common project in cooperation in the context of the space industry
- 2 x 4h for the kick-off and final meetings of the industrial project

Total Estimated Work Volume: **30 h** (supervised work) + **58 h** (unsupervised students work) = **88 h**

7. Additional information

Entry requirements [1]

Either be enrolled respectively:

- For Polish students, as a master student in year 2 with AGH University of Science and Technology, Faculty of Mechanical Engineering and Robotics, Krakow, Poland
- For French students as an engineering 3rd year student (equivalent to M2) with Department of Robotics and Mechatronics, INP-Toulouse ENSEEIHT, Department of Electronics, Electrical Energy and Control, Toulouse, France.

Or upon request: Other UNIVERSEH students, at the M2 level with a background in physics, and after verification of the necessary prerequisites.

[1] As necessary