

Erasmus+ KA2 Knowledge Alliances project "Greening Energy Market and Finance - GrEnFIn"

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WP4 – D4.1 - Descriptive document of activation of modules in the university of the consortium involved in the existent double degree M21





Work Package (WP)	WP4 – Pilot Class of the Study Plan
WP Leader	UEK
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Authors	Prof. Ewa Dziwok, UEK
Revised and Approved by	Prof. Silvia Romagnoli

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### 1. Introduction

Based on the evidence coming from activities of WP2 and WP3, during the third year of the project a pilot of the study plan is implemented. It involves the activation of the projected study plan inside the existent double degree agreements (UNIBO, LMU, UEK) in a form of "green semester" for participating universities. At the same time the others higer education institutions (HEIs) which still do not participate in double degrees consortium (Birkbeck College, Vienna University of Economics and Business, Université Paris-Dauphine) has been activating the corresponding procedures and processes in order to establish a new course programme.

All the designing/piloting phases have been conceived in view of a final goal reached through a jointly management, QA plan and a development of a curriculum fully compliant to the Erasmus Mundus policy.

The educational path was planned to be tested through 3 Summer Schools:

- 1st GrEnFIn Summer School, 8-11 June 2020, Bologna (organized online due to the Covid-19 emergency)
- 2<sup>nd</sup> GrEnFIn Summer School, 7-11 June 2021, Katowice (organized online due to the Covid-19 emergency)
- Planned 3<sup>rd</sup> GrEnFIn Full Immersion Experience, June 2022, Bertinoro

This document shows the steps of the PILOT CLASS that were undertaken by the universities (UNIBO, LMU, UEK) already involved in double degree agreement.

## 2. Piloting Phase

The study plan projected in WP3 is implemented through the activation of modules in the universities of the consortium already involved in the existent double degree agreement (UNIBO-LMU-UEK). These modules will be attributed in a form of free credits, without any modification of the existing master degree structure. The teaching activities engage also people coming from the industries partners. Moreover, the other activities concerning the teaching, the following evaluation and corrective actions report are done by the contribution of all the consortium. At least 20 students with the possibility to have grant Erasmus were chosen. As a part of the pilot experiment also local students could participate – that is why the "green classes" will be composed of home students and Erasmus students.



## 2.1. Exchange structure

During the academic year 2021/2022 a pilot class will experiment the drafted study path. These three HEI (already connected via double degree agreements) will offer at least 30 ECTS in line with the drafted project.

The mobility of students will be financed by the active Erasmus agreements. Each university will offer 5 Erasmus grants for this exchange. LMU will offer the pilot class in the Winter Semester 2021/2022, while Unibo and UEK at Summer Semester 2021/2022.

Below one can find a scheme that illustrates the periods when students from LMU, UEK and UNIBO will spend their semester abroad.

#### UNIBO ←→ LMU "green" exchange:

#### 1<sup>st</sup> possibility – full year experience (3rd semester at LMU and 4th semester at UNIBO)

	Winter 2020/21	Summer 2020/21	Winter 2021/22	Summer 2021/22
Students from LMU	LMU	LMU	LMU	UNIBO
Students from UNIBO	UNIBO	UNIBO	LMU	UNIBO

#### 2<sup>nd</sup> possibility – one semester experience during an exchange

	Winter 2020/21	Summer 2020/21	Winter 2021/22	Summer 2021/22
Students from LMU	LMU	LMU	LMU	UNIBO
Students from UNIBO	UNIBO	UNIBO	LMU	LMU

## UNIBO ←→ UEK "green" exchange – one semester experience

	Winter 2020/21	Summer 2020/21	Winter 2021/22	Summer 2021/22
Students from UNIBO	UNIBO	UNIBO	UNIBO	UEK
Students from UEK	UEK	UEK	UEK	UNIBO



# 2.2. Pilot Classes at LMU (3rd or 4th semester)

During the "green" semester 2021/22 the LMU will offer the following study plan:

Mandatory Courses: 21 ECTS in total	ECTS
Stochastic Calculus and Arbitrage Theory in Continuous Time	9
Computational Finance and its Object-Oriented Implementation (with Application to Interest-Rates and Hybrid Models)	9
GrEnFIn Seminar	3
Elective Courses: 9 ECTS in total	ECTS
Topics from Statistics	9
Microeconomics	6
Macroeconomics	6
Econometrics	6
Mathematical Seminar	3

During the 4<sup>th</sup> semester of studies the students will participate at a seminar and write their Master thesis about topics related to Greening Energy and Finance. For the thesis they will also be supported by LMU if wished.

# 2.3. Pilot Classes at UNIBO (4th semester)

UNIBO plans to offer 4 courses (24 ECTS) in the second semester of academic year 2021/2022 as well as the thesis supervision in the Greening Energy and Finance (18 ECTS). The offered courses cover topics from three areas that are the base for the whole structure of the future joint master:

- ✓ GrEnFIn-Credit Risk and Climate Change (Risk and Finance Track)
- ✓ GrEnFIn-Asset Management and Transition Risk (Risk and Finance Track)
- ✓ GrEnFIn-Smart Grids for Smart Cities (Scientific/Technological Track)
- ✓ Intensive Program in Energy Market (Social Welfare-Policy and Economics Track)

During the "green" semester 2021/22 the UNIBO will offer the following study plan:

With the support of the Erasmus+ Programme of the European Union



Mandatory Courses: 18 ECTS in total	ECTS
Master Thesis (the topic of the thesis should focus on the area of Greening Energy and Finance)	18
Elective Courses: 12 ECTS in total	ECTS
GrEnFIn-Credit Risk and Climate Change	6
GrEnFIn-Asset Management and Transition Risk	6
GrEnFIn-Smart Grids for Smart Cities	6
Intensive Program in Energy Market	6
Full Immersion experience 2022	6

# 2.4. Pilot Classes - UEK (4th semester)

UEK plans to offer in the second semester of a.y. 2021/2022 (summer green path) in a form of mandatory course – master thesis seminar for 18 ECTS and electives of 12 ECTS.

Mandatory Courses: 18 ECTS in total	ECTS
Master Thesis Seminar (the topic of the thesis should focus on the area of Greening Energy and Finance)	18
Elective Courses: 12 ECTS in total	ECTS
Advanced Topics	6
Advanced Issues in Corporate Financial Management	6
Measurement of Credit Risk	4
Measurement of Market Risk	4
Alternative Investments	2
Structured Products	2
Internship in Partner "green" institution	6

# 3. Selecting Procedure

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Students who are involved in the second year of their Master Degree and are winners of an Erasmus programme between UNIBO-LMU or UNIBO-UEK are selected to take part to the pilot class. They will receive a mobility funds provided by Erasmus grant and they will be requested to agree with the LA suggested above (which will mimic the GrEnFIn project). The consortium plan to select 20 students in order to have:

- ✓ 5 from UNIBO incoming to LMU, 5 from UNIBO to UEK
- √ 5 from LMU incoming to UNIBO
- √ 5 from UEK incoming to UNIBO

**Selection criteria:** The application for the participation at the Erasmus program took place in the beginning of 2021 (January –March). The list of selected students was announced indicatively by the end of March 2021. The choice was base on following criteria:

- ✓ Sufficient knowledge of quantitative finance
- ✓ Interest for "Green Energy and Finance", i.e., environmental topics, economic topics, etc
- ✓ Sufficient knowledge of the English language
- ✓ Good academic achievements

**Leaflet:** The sample of the leaflet (for UE Katowice selection procedure) is available below:



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# Greening Energy Market and Finance































Project website: http://grenfin.eu

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