# Annex 1.

- 1. Study program for a <u>TCU Student</u> enrolled in "Environmental Science and Engineering" program wishing to obtain the Laurea magistrale through "Engineering and Innovative Technologies for the Environment" curriculum in Environmental Science and Engineering (LM35) at the UNIPA
- 1.1. List of Subjects to be taken at the HOME Institution

TCU STUDENT - SUBJECTS AT TCU			
Name and Subject at the Home Institution			
Advanced organic chemistry			
Modern detection technology			
Principles of environmental engineering			
Fundamentals of applied mathematics			
The study on the theory and practice of socialism with Chinese characteristics			
Introduction to dialectics of nature or Marxism and social science methodology			
English			
Listening and speaking			
Professional elective course			
Others (academic report, social practice, experiment Skills or engineering practice)			
Thesis proposal			
Specific academic achievements of the TCU Master's degree requirements			
Master thesis (>30000 Chinese words)			

# 1.2. List of Subjects to be taken at the HOST Institution

# TCU STUDENT - SUBJECTS AT UNIPA Name and Subject at the Host Institution Sustainability of industrial processes (cod. 20559 – SSD. ING-IND/27) Advanced processes and environmental models - integrated course (cod. 20706 – SSD. ICAR/03) Management of sanitary and environmental systems (cod. 18086 – SSD. ICAR/03) Safety management (Cod. 16079 - SSD. ING-IND/25)

At the end of the program, the TCU student must complete a final thesis in English of more than 10,000 English words. The final thesis will be defended at the HOME Institution (TCU) in English (the Defence Committee decided by HOME Institution (TCU) may also include Members of HOST Institution(UNIPA) and the defence could be conducted via online video or conference call). The final thesis might be co-tutored by both HOST Institution(UNIPA) and HOME Institution(TCU), and should be preserved in both Institutions. In addition, if the student of TCU successfully defends his/her research, he/she will get the Master's degree at both TCU and UNIPA.

- 2. Study program for a <u>UNIPA Student</u> enrolled in "Engineering and innovative technologies for the environment" curriculum in Environmental Science and Engineering (LM35) wishing to obtain the Master's Degree in "Environmental Science and Engineering" program at the TCU.
- 2.1. List of Subjects to be taken at the HOME Institution

### **UNIPA STUDENT - SUBJECTS AT UNIPA**

### Name and Subject at the Home Institution

Complements of environmental hydraulics (cod. 08999 - SSD ICAR/01)

Reclamation of contaminated sites (cod. 09005 – ICAR/03

Energy efficiency and system and process eco-design - integrated course (cod. 20552 – ING-IND/11)

Chemical industrial processes and treatment of gaseous effluent (cod. 09002 –ING-IND/27)

Hydrogeological risk mitigation (cod. 20553 – ICAR/02)

Principles of construction technique (cod. 13675 – ICAR/07)

Final examination (cod. 05917)

Free Subjects

**STAGES** 

### 2.2. List of Subjects to be taken at the HOST Institution

### **UNIPA STUDENT - SUBJECTS AT TCU**

### Name and Subject at the Host Institution

Environmental biotechnology

Bioremediation for polluted soil and water

Theory and technology of air pollution control engineering

Environmental impact assessment and case study

At the end of the program, the UNIPA student must complete a final thesis in English of more than 10000 English words. The final thesis will be defended at the HOME Institution (UNIPA) in English (the Defence Committee decided by the HOME Institution (UNIPA) may also include Members of the HOST Institution (TCU) and the defence could be conducted via online video or conference call). The final thesis might be cotutored by both HOST Institution (TCU) and HOME Institution (UNIPA), and should be preserved in both Institutions. In addition, if the student of UNIPA successfully defends his/her research, he/she will get the Master's degree at both UNIPA and TCU.

# 3 List of equipollence between the two Master's study programs

Name of the Subject at UNIPA	Name of the Subject at TCU	UNIPA ECTS	TCU Credits
Complements of environmental hydraulics (cod. 8999 – ICAR/01)	Advanced organic chemistry	9	2
Sustainability of industrial processes (cod. 20559 – SSD. ING-IND/27)	Bioremediation for polluted soil and water	6	2
Reclamation of contaminated sites (cod. 09005 – ICAR/03)	Modern detection technology	9	2
Energy efficiency and system and process ecodesign - integrated course (Cod. 20552 - ING-IND/11)	Principles of environmental engineering	12	2
	Professional elective course		1
Chemical industrial processes and treatment of gaseous effluent (cod. 09002 – ING-IND/27)	Environmental biotechnology	9	2
Hydrogeological risk mitigation (Cod. 20553 – ICAR/02)	Fundamentals of applied mathematics	12	3
Free Subjects	English	9	3
	Listening and speaking		1
Principles of construction technique (Cod. 13675 – ICAR/07)	Others	6	1
Advanced processes and environmental models - integrated course (Cod. 20706 – ICAR/03)	Theory and technology of air pollution control engineering	9	2
Safety management (cod. 16079 - ING-IND/25 )	Environmental impact assessment and case study	9	2
Management of sanitary and environmental systems (cod. 18086 – ICAR/03)	Professional elective course	6	1
Stages	The study on the theory and practice of socialism with Chinese characteristics Introduction to dialectics of nature or Marxism and social science methodology	12	2
Final examination (Cod. 05917)	Professional elective course	12	2
	Thesis proposal		1
	Specific academic		
	achievements of the TCU		
	Master's degree		
	requirements		
	Thesis (>30000 Chinese words)		
	Others		2
TOTAL WHOLE MASTER CREDITS		120	32