



**Reform of Education THru
International Knowledge exchange**



Double Degree Agreement

on

**Master in Science in Environmental Science,
Technology and Management/Master in Science in
Environmental Protection**

between

University of A Coruna

and

**National Polytechnic University
of Armenia**



The University of A Coruna, hereinafter referred as UDC, represented by the Rector Xosé Luis Armesto Barbeito and the National Polytechnic University of Armenia is the legal successor of State Engineering University of Armenia, here in after referred as NPUA, represented by Rector Hovhannes V. Tokmajyan.

Agree on the following terms regarding a **DOUBLE DEGREE PROGRAMME** on Master in Science in Environmental Science, Technology and Management/Master in Science in Environmental Protection

1. PURPOSE OF THE AGREEMENT AND RELEVANCE FOR THE RETHINKe PROJECT

The aim of this agreement is to establish a double degree programme with regard to these official degrees:

- a) Master in Science in Environmental Science, Technology and Management, official degree of the current academic offer of UDC.
- b) Master in Science in Environmental Protection, official degree of the current academic offer of NPUA.

By means of this agreement, students enrolled in one of these programmes could be awarded with both degrees, providing that they fulfil the conditions and requirements established in the following clauses.

The double degree set up by this agreement is intended to be a relevant academic tool to achieve the following basic objectives of the RETHINKe project in the field of Environmental Sciences:

- a) To promote the reform and modernisation of higher education in Armenia.
- b) To enhance the quality and relevance of higher education in Armenia.
- c) To build up the capacity of higher education institutions in Armenia and Spain, in particular for international cooperation and for a permanent modernisation process, and to assist them in opening themselves up to society at large, the world of work and the wider world.
- d) To foster the reciprocal development of human resources in both institutions.
- e) To enhance networking among UDC and NPUA.
- f) To enhance mutual understanding between peoples and cultures of Spain and Armenia.

2. MUTUAL CREDIT RECOGNITION UNDER THIS AGREEMENT

Students taking part in this double degree programme will have to get a total of 120 ECTS credits to be awarded with both degrees. Part of those total ECTS credits must be earned at the student's home institution and other part at the other university involved in this double degree programme.



All the ECTS credits and grades awarded by one university to students taking part in this double degree programme will be fully recognized by the other institution, according to the terms and conditions established in the Annex to this agreement.

3. DOUBLE DEGREE STUDY PROGRAMME

Students participating in the double degree programme must follow the study programme set out in this agreement's Annex in order to be awarded with both degrees.

The administrative procedure to obtain each official degree after having completed the study programme is defined and managed by the issuing institution.

A new edition of the double degree programme will take place every academic year, only provided that both titles are officially implemented during that year at the partner institutions.

It is agreed and understood that each University has the right and responsibility to make changes to its curricula to meet accreditation standards. Any such changes that impact upon the Double Degree program will be promptly and duly communicated to the other University in writing.

4. NUMBER OF STUDENTS

Every year a maximum number of 3 students from each party will take part in this double programme. Each partner institution will reserve the necessary places for these students in the programmes affected by this agreement.

This number may be increased by mutual written consent.

5. ENROLMENT CONDITIONS

Both institutions will set up a proper internal procedure to select the students that will take part in the double degree among those enrolled in the degrees affected by this agreement. The conditions of access to the double degree will be stipulated by each institution.

A) ENGLISH LEVEL

In any case, every student taking part in this programme must, at least, accredit a CEFRL «B1» level in English language.

Students will accredit their language level by means of internationally wholly recognised certificates (Cambridge, TOEFL, IELTS, TELC, etc.) or official national certificates at the students' home country.

Students without one of the aforementioned certificates could be exceptionally admitted to the double programme, provided that both universities agree on an assessment procedure to ensure that they have the proper language level.

B) REGISTRATION PROCEDURE

NPUA will communicate to UDC by 20th July a list with the name, passport and other relevant data of all the students taking part in the double degree programme each year. All the students included in this list that fulfil the masters' requirements will be registered as ordinary degree seeking students at UDC in September.

UDC will communicate to NPUA by 30th June a list with the name, passport and other relevant data of all the students taking part in this programme. All the students included in this list that fulfil the masters' requirements will be also registered as ordinary degree seeking students at the other institution.

The dates established in the previous paragraphs could vary. Each institution will give notice to its partner of any change regarding those dates as soon as they happen.

C) TUITION FEES**a) Fees and taxes when the same number of students from each university takes part in the programme**

As long as an equal number of students from each university takes part in the double programme during the same period, these students will pay only their regular tuition fees and taxes at the home institution*. No further tuition costs will be charged by the host institution, except for the following:

- At UDC, students from NPUA will have to pay a «degree issuance tax» of 123.10 €, when they finally request the official diploma from the university authorities. This tax cannot be waived according to Spanish internal regulations.

b) Fees and taxes when there are more students from NPUA than from UDC taking part in the programme

Each additional student coming from NPUA will pay the following tuition fees and taxes at UDC at the beginning of the second year of the double programme:

- Tuition fees corresponding to official local regulations for 60 ECTS credits: 2352.0 €.

* UDC students taking part in the double programme will enrol in one of these doctoral programmes:

- Science and environmental technology.
- Environmental and fundamental chemistry.
- Agriculture and forestry research.

These students will get academic recognition for the period spent at NPUA during the programme's second year as a part of these doctoral programmes.

If a student does not want to enrol in one of these doctoral programmes, he/she will have to pay tuition fees for this second year at NPUA.



- Additionally students will have to pay a «degree issuance tax» of 123.10 €, when they finally request the official diploma from the university authorities.

These prices and fees could vary from year to year due to governmental decisions. UDC undertakes to communicate to NPUA any change regarding fees and taxes as soon as it is officially published.

b) Fees and taxes when there are more students from UDC than from NPUA taking part in the programme

Each additional students coming from UDC will pay the following tuition fees at NPUA at the beginning of the second year of the double programme:

- Tuition fees corresponding to official local regulations (currently: 2280 €) TOTAL: 2280 €.

6. MANDATORY STUDENT MOBILITY

Mobility in accordance to this agreement's clauses is mandatory for every student taking part in the double degree programme. Teaching staff mobility could be eventually required as well.

Whenever available, student and teaching staff mobility will be carried out under the Erasmus+ programme. The parties agree on establishing a specific Erasmus+ exchange agreement suitable to implement this provision.

Should the Erasmus+ programme be not available to finance the mobility, this double degree agreement, in itself, is considered by both parties a valid agreement for exchanging students and staff. These exchanges will take place according to the following terms:

6.1. Duration of student exchanges

The exchange period shall not exceed the provisions of the learning programme included in the Annex.

6.2. Exchange conditions

- a) Exchanges students will conform to the requirements established in this agreement and will be subject to all the rules and procedures of the home and the host institutions.
- b) Exchange students will be enrolled as regular degree seeking students in the programme of the host institution affected by this agreement. During the exchange period all of them will be registered and attend the courses and activities established in the learning programme included in the Annex.
- c) Exchange students will be provided with the same academic resources and supporting services as normally provided to regular students at the host institution of the same academic level.

- d) Exchange students shall take out appropriate health, life and non-life insurance.
- e) Both institutions undertake to award official transcripts of academic records to the students. These transcripts shall be communicated to the other party in order to get the full academic recognition established in section 2.
- f) The host institution will help exchange students in the search of accommodation by providing all the available information.

6.3 Financial Responsibilities

Exchange students will be responsible for the payment of housing-related costs, transportation, food, life, non-life and medical insurance, medical treatment and all other personal expenses.

7. FACULTY EXCHANGES

Both parties agree on the possibility of exchanging Faculty. This mobility will be governed by specific arrangements between the parties. The details of such arrangements will be negotiated at the appropriate time, according to the academic needs of the double programme and the available funding.

8. ACADEMIC COMMISSION

In order to ensure the good development of the double degree programme, an Academic Commission will be formed including the coordinators of both degrees and one additional representative named by each institution.

This Academic Commission will be responsible to examine the efficiency of the learning programme and the academic results achieved by the students, as well as the resources supplied by both institutions.

The Academic Commission will also be in charge of suggesting modifications suitable to improve the programme quality. The members of this Commission will meet, either personally or on-line, at least once a year.

9. FINANCIAL CONDITIONS

The signature of this agreement does not mean any financial commitment for any of the parties.

10. PROCEDURE FOR DISPUTE RESOLUTION

The parties agree to resolve any dispute arising from the interpretation or performance of the present agreement by common consent. In case that the dispute could not be solved that way, it will be resolved by arbitration of a technical commission formed by three members. Each party will designate a member of the arbitration commission and the third member will be agreed by both parties.



Reform of Education Thru
International Knowledge exchange



11. ENTRY IN FORCE AND DURATION OF THE AGREEMENT

The present agreement shall entry in force after being signed by both parties.

The agreement is valid for a period of 5 years and may be renewed for identical periods with the express written consent of the two parties.

12. CONTACT DATA FOR NOTICES REGARDING THIS AGREEMENT:

University of A Coruña

Contact: Fernando Peña López

Position: Head of International Office

Address: Casa do Lagar. Campus de Elviña s.n, 15071, A Coruña

Phone: +34 9811670000 ext. 1973/1953

E-mail: erasmus@udc.es

National Polytechnic University of Armenia:

Contact: Artashes Tadevosyan

Position: Dean of faculty of Chemical Technologies and Environmental Protection

Address: Teryan 105, campus 1, 0009, Yerevan, Republic of Armenia

Phone: (+374 10524832)

E-mail: tadartashes@gmail.com

In witness whereof, the present agreement is signed in duplicate by the official representatives of both institutions.

Hovhannes V. Tokmajyan
Rector
National Polytechnic University of Armenia

Xosé Luis Armesto Barbeito
Rector
University of A Coruña

Date: _____



Date: _____

25/21/2015

ANNEX

STUDY PROGRAMME

Section 1

- The study programme for the students participating in the Double Degree whose home institution is NPUA, are provided in the following table:

Semester	Chairs	ECTS
1 (NPUA)	Science history and methodology	2
	Foreign language	2
	Information technology	4
	Mathematics	4
	Scientific seminar	4
	Basic Problems of Gas Emissions in Antropogenic Ecosystem	5
	Research Internship	3
	Research Work	4
	Final Thesis Completion	2
2 (NPUA)	Foreign language	2
	Information technology	4
	Scientific seminar	4
	Research Internship	3
	Research Work	4
	Final Thesis Completion	3
	Research physical methods	5
3 (UDC)	<i>Elective Chair</i> ¹	5
	Legislation, regulation and environmental management	6
	Analytical strategies applied to environmental studies	6
	Statistical methods applied to environmental data	3
	Ecology and biomonitoring	3
	Water quality	6
	Soil quality	3
	Air quality	3
4 (UDC)	<i>Elective Chair</i> ²	6
	Energy resources	3
	Wastes	3
	Masters Degree Project	18
TOTAL		120

¹ The students will have to choose one of the following chairs:

Elective chair	ECTS
Technological processes of cleaning and reuse municipal stream water	5
Cleaning and reuse of industrial stream water	5
Environmental catalysis	5
Basics of biotechnology	5
Information technologies and the automation systems in environmental engineering	5
Prediction of ecological catastrophes and the solutions problems	5
Ecological chemistry of the elements	5
Ecological chemistry of mineral waters	5
Chemical Ecotoxicology	5
Electrochemical method cleaning of streaming water	5
Ecological bases of optimum development of power systems	5
Special questions of heat-mass exchange	5
Environmental problems of fuel combustion	5
Automatic systems of the ecological information in power engineering	5
Management problems of engineering protection of environment	5
Human ecology	5
Estimation methods of ecological damage from power facilities	5
Ecological management	5

² The student should pick two or the following elective chairs:

Elective chair	ECTS
Quality management	3
Advanced instrumentation	3
Environmental monitoring	3
Environmental economy	3

- The study programme for the students participating in the Double Degree whose home institution is UDC, are provided in the following table:

Semester	Chair	ECTS
1 (UDC)	Legislation, regulation and environmental management	6
	Analytical strategies applied to environmental studies	6
	Statistical methods applied to environmental data	3
	Ecology and biomonitoring	3
	Water quality	6
	Soil quality	3
	Air quality	3
2 (UDC)	Energy resources	3
	Wastes	3
	<i>Elective chairs²</i>	6
	Masters Degree Project	18
3 (NPUA)	<i>Ecological Mapping</i>	2
	<i>Information technology</i>	4
	<i>Mathematics</i>	4
	<i>Science history and methodology</i>	2
	<i>Research Internship</i>	3
	<i>Research Work</i>	4
	<i>Final Thesis Completion</i>	2
	<i>Elective Chairs¹</i>	5
	Scientific seminar	4
4 (NPUA)	Information technology	4
	Research Internship[3
	Scientific seminar	4
	Research Work	4
	Final Thesis Completion and Defence	10
	Elective Chairs ¹	5
TOTAL		120

¹ The students will have to choose one of the following chairs:

Elective chair	ECTS
Technological processes of cleaning and reuse municipal stream water	5
Cleaning and reuse of industrial stream water	5
Environmental catalysis	5
Basics of biotechnology	5
Information technologies and the automation systems in environmental engineering	5
Prediction of ecological catastrophes and the solutions problems	5
Ecological chemistry of the elements	5
Ecological chemistry of mineral waters	5
Chemical Ecotoxicology	5
Electrochemical method cleaning of streaming water	5
Ecological bases of optimum development of power systems	5
Special questions of heat-mass exchange	5
Environmental problems of fuel combustion	5
Automatic systems of the ecological information in power engineering	5
Management problems of engineering protection of environment	5
Human ecology	5
Estimation methods of ecological damage from power facilities	5
Ecological management	5

² The students should pick two or the following elective chairs:

Elective chair	ECTS
Quality management	3
Advanced instrumentation	3
Environmental monitoring	3
Environmental economy	3

- Entrepreneurship: Each student taking part in the double programme will be offered for free an on-line course on entrepreneurship. This course will be considered as a compulsory part of the double programme. It is intended to strengthen the students' skills and competences to plan, design, develop and manage business activities related to environmental sciences.

- The Master in Environmental Science, Technology and Management takes place at the Faculty of Sciences, Campus da Zapateira, A Coruna, Spain, from Monday to Friday, according to schedules established for every academic year.

- The Master in Environmental Protection takes place at the Faculty of Chemical Engineering and Environmental Engineering Yerevan, Armenia, from Monday to Friday, according to schedules established for every academic year.

Section 2

The learning programmes described in the previous section follow these criteria:

-NPUA gives recognition to 60 ECTS obtained by the student enrolled at UDC in the Master in Environmental Science, Technology and Management during the first year, for the 60 ECTS corresponding to the first year of the Master in Environmental Protection.

Section 3

The weighted average of the students' grades obtained at NPUA will be assigned, as its grade, to each of the UDC courses passed by means of recognition according to the following table.

Grade description	NPUA	UDC
<i>Excellent</i>	81 - 100	9 - 10
<i>Good</i>	61 - 80	7 - 8.9
<i>Satisfactory</i>	40 - 60	5 - 6.9
<i>Unsatisfactory</i>	0 - 39	0 - 4.9
<i>Failed to appear</i>	No grade	No grade

Any possible conflicts about the mechanism of grade conversion shall be solved by the Academic Commission of the Double Master Degree and accepted by both parties.

Section 4

Students from NPUA and UDC taking part in the double programme must successfully complete a master thesis at NPUA and UDC. Any master thesis presented and defended under this programme must fulfil the requirements for such works established by both universities, and each institution will provide the necessary mechanisms for evaluation of the master thesis.

Section 5

Students enrolled in the Double Master degree will have to be awarded, directly or by recognition:

- A minimum of 60 ECTS at UDC to obtain the title of Master in Environmental Science, Technology and Management, and



**Reform of Education THru
International Knowledge exchange**



- A minimum of 120 ECTS at NPUA to obtain the title of Master in Environmental Protection.

Students will receive both degrees in two years, after they have successfully finished all the courses of the Double Master Degree.

Section 6

NPUA reserves the right to establish other national and /or international agreements related to the Master in Environmental Protection.

UDC reserves the right to establish other national and /or international agreements related to the Master in Environmental Science, Technology and Management.

