Internationalization Report (RI.0708)
UNIVERSITY OF PORTO
Academic year 2007/2008

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# 1. Introduction

Internationalization is a strategic target for the University of Porto. This is the perfect foundation to support the elaboration of this report, characterizing the situation, explaining the guidelines supported by the priority targets of the University and outlining the course of action to be undertaken by the University. This document is similar to the report prepared last year, and dissiminated in the academic community. Throughout this document, we will attempt to show and analyse, in detail, the information on: (i) Student mobility, in and out of the University of Porto, under the framework of the Erasmus programme, and other programmes, namely the Cooperation Programme with Lusophone and Latin-American countries, the Leonardo da Vinci programme, focused on vocational training, and the activities of the EURAXESS Centre to help researchers under mobility programmes; (ii) Pregraduate and post-graduate foreign students who come to the University of Porto to obtain a degree; (iii) Foreign students in non-degree granting specialization courses; (iv) Foreign post-doctorate researchers; (v) Teaching staff mobility in and out of the University of Porto, under the framework of the Erasmus programme; (vi) Foreign teachers conducting regular activities in the University of Porto; (vii) Cooperation agreements with foreign universitites; (viii) Participation in European Programmes; (ix) Joint training programmes with foreign universities; (x) Scientific papers; (xi) Organization of major international meetings; and (xii) The University of Porto in renowned international rankings.

# 2. Student mobility

#### 2.1. Mobility Out

#### 2.1.1. European countries

Table 1 shows the student mobility from the U.Porto to other universities, under the framework of Erasmus programmes, in the academic year 2007/2008. Data includes *Erasmus Student Mobility for Studies and Erasmus Student Mobility for Placements*, students under the framework of cooperation agreements and the so-called "freemovers". This chart describes the number of countries and universities of destination in each country, and the number of students from the U.Porto who chose to conduct their programmes abroad.

Chart 1: Mobility *Out\**: Countries, number of Higher Education Institutions (hereinafter "HEIs") of destination and no. of students from U.Porto.

Country	HEIs	Traineeship Centres	U.Porto students
Germany	11		17
Austria	5	1	10
Belgium	6		16
Bulgária	1		1
Cyprus		1	1
Denmark	6		13
Slovakia	3		10
Slovenia	2		10
Spain	24	7	140
Estonia	2		3
Finland	8	1	19
France	20	5	46
Greece	2		4
Hungary	6		15
Ireland	2		3
Italy	25		119
Latvia	1		2
Lithuania	2		7
Norway	4		5
The Netherlands	10	2	29
Poland	12		35
United Kingdom	13	2	23
Czech Republic	8		32
Romania	7		23
Sweden	5		15
Switzerland	5		8
Turkey	1		4
TOTAL: 27	191	19	610

<sup>\*</sup> It includes Erasmus Studies, Erasmus Placements, Agreements and "freemovers". Source: SRI.

The countries of destination in Europe were 27 (two more than in the previous year) and 610 students from the U.Porto (67 more than in the previous academic year) were selected to enter those programmes, in 191 universities (10 more than in the academic year 2006/2007).

Most of the students from the University of Porto (42.5%) chose Spain (140 students) and Italy (119) to carry on their studies, which represents a slight decrease (about 4%) when compared to the previous year. The group of countries that includes France, Germany, the United Kingdom and the Netherlands was chosen by about 18.9% of the mobility students (1.2% more than in the previous year), and the Nordic countries (Sweden, Denmark, Finland and Norway) were chosen by about 8.5% (1% less than in the previous year) of the U.Porto students.

The percentage of U.Porto students who chose universities in the former socialist countries is quite significant (22.6%, corresponding to 138 students). When compared to the previous year, growth stood at 2.3%. Poland, with 35 students, secured the 4<sup>th</sup> position as a country of destination, after Spain, Italy and France.

Chart 2 relates to the U.Porto student mobility to other universities, taking into consideration the faculty of origin. Furthermore, data shows the ratios for each faculty

between the number of students participating in mobility programmes and the total number of undergraduate degrees and integrated masters degrees.

Chart 2: Mobility Out Erasmus\*: U.Porto Faculties - number of participants and ratios.

Faculties	Participants	R (p:t)**
Architecture	67	<b>(1:16)</b> (1010)
Fine Arts	46	<b>(1:15)</b> (681)
Sport	23	<b>(1:36)</b> (828)
Sciences	26	(1:109) (2846)
Law	7	<b>(1:106)</b> (743)
Economics	88	<b>(1:25)</b> (2153)
Engineering	150	(1:38) (5669)
Pharmacy	48	<b>(1:21)</b> (1029)
Arts	56	(1:53) (2968)
Dental Medicine	8	(1:51) (404)
Medicine	50	<b>(1:29)</b> (1458)
Psychology and Education Science	9	(1:100) (896)
Biomedical Sciences	32	<b>(1:44)</b> (1419)
Nutrition		<b>(:)</b> (373)
TOTAL	610	<b>(1:37)</b> (22477)

<sup>\*</sup> It includes Erasmus Studies, Erasmus Placements, Agreements and "freemovers". Sources: SRI and Continuous Improvement Service.

The faculty with the highest number of students was Engineering, with 150 participants. Three faculties secured half (305 students) of the University of Porto's participation in the mobility *out* programmes – Engineering, Economics and Architecture.

The group of faculties formed by Nutrition, Law, Psychology and Education Science and Dental Medicine had the lowest participation (24 students, in other words 3.9% of U.Porto students) in the mobility *out* programmes. This was the same as in the previous year. Surprisingly enough, the Faculty of Nutrition and Food Science had no students involved in the mobility programmes.

If we attempt to understand the rate of participation of each U.Porto faculty in the mobility programmes, and taking into consideration the said relation – students involved in mobility programmes in each faculty/ total number of students from each faculty –, we have a more precise idea of which faculties invest more in the participation of their students in student mobility programmes in Europe.

The faculties that send the highest number of students are Fine Arts – in every 15 students, 1 takes part in mobility programmes – and Architecture – in every 16 students, 1 takes part in mobility programmes. Other faculties showing a relevant participation are Pharmacy (1:21), Economics (1:25) and Medicine (1:29). These faculties have improved the 2006/07 ratios slightly, bar the FMUP who maintained the same ratio (1:29).

<sup>\*\*</sup> Ratio (mobility students: total no. of students per faculty).

The faculties with the lowest participation ratios are, in this order, Nutrition (no participation), Sciences (1: 109 – in the previous year 1:206), Law (1: 106 – in the previous year 1:129) and Psychology and Education Science (1: 100 – in the previous year 1:150). We must nevertheless highlight that, except for Nutrition, there have been substantial improvements compared to the previous year.

Finally, we must point out the general ratio (total number of mobility students /total number of U.Porto students) of 1: 37, which improved slightly compared to the year before (1: 40).

Chart 3: Mobility of Erasmus students between the University of Porto and the top 100 European universities.

Chart 3: Mobility of Erasmus students between the Univ		
Universities	Euro Rank	U.Porto students
Univ Cambridge (UK)	1	
Univ Oxford (UK)	2	
Univ Coll London (UK)	3	
Swiss Fed Inst Tech - Zurich (SWI)	4	
Imperial Coll London (UK)	5	1
Univ Manchester (UK)	6	
Univ Paris 06 (FRA)	7	3
Univ. Copenhagen (DEN)	8	
Univ Utrecht (NET)	9	1
Univ Paris 11 (FRA)	10	
Univ Bristol (UK)	16	2
Univ Oslo (NOR)	17	1
Univ Heidelberg (GER)	18	1
Univ Helsinki (FIN)	19	1
Univ Nottingham (UK)	26	1
Stockholm Univ (SWE)	27	1
Lund Univ (SWE)	33	2
VUUniv Amsterdam (NET)	35 - 58	4
Swiss Fed Inst Tech – Lausanne (SWI)	35 - 58	2
Univ Geneva (SWI)	35 - 58	1
Univ Ghent (BEL)	35 – 58	6
Univ Leeds (UK)	35 - 58	2
Univ Leuven (BEL)	35 - 58	2
Univ Libre Bruxelles (BEL)	35 - 58	2
Univ Liverpool (UK)	35 - 58	1
Univ Milan (ITA)	35 - 58	4
Univ Pisa (ITA)	35 - 58	3
Univ Roma - La Sapienza (ITA)	35 - 58	22
Delft Univ Tech (NET)	59 - 79	8
Tech Univ Denmark (DEN)	59 - 79	2
Univ Barcelona (SPA)	59 - 79	13
Univ Grenoble 1 (FRA)	59 - 79	1
Univ Pádua (ITA)	59 - 79	3
Univ Paris 05 (FRA)	59 - 79	1
Univ Turin (ITA)	59 - 79	10
Chalmers Univ Tech (SWE)	80 - 124	7
Charles Univ Prague (CR)	80 - 124	12
Norwegian Univ Sci & Tech (NOR)	80 - 124	12
Tech Univ Aachen (GER)	80 - 124	1
Tech Univ Berlin (GER)	80 - 124	2
Univ Aberdeen (UK)	80 – 124 80 – 124	2
Univ Autonoma Madrid (SPA)	80 – 124 80 – 124	8
` /		4
Univ Complutense – Madrid (SPA)	80 – 124	
Univ Florence (ITA)	80 – 124	14
Univ Karlsruhe (GER)	80 – 124	1
Univ Lausanne (SWI)	80 – 124	1
Univ Liege (BEL)	80 – 124	2
Univ York (UK)	80 – 124	1
TOTAL		162

Sources: Academic Ranking of World Universities 2008, Institute of Higher Education, Shanghai Jiao Tong; and SRI.

Chart 3 shows us the mobility of U.Porto students to the top 100 European universities, according to the Academic Ranking of World Universities 2008, prepared by the Institute of Higher Education, Shanghai Jiao Tong University.

Here, we can see that 162 students from the U. Porto (14 more than last year), representing a total of 26.6% of mobility students, carried out mobility programmes in universities ranked among the Top 100 universities in the world ranking. Of these 162 students, 5 were admitted to the Top 10 universities (no student was admitted last year) and 10 (5 more than last year) to universities ranking among the Top 25. Sixty-three students (21 more than in the previous year), i.e., about 38.9% (28.4% in the previous year) came out in the first half of the list (Top 50 universities).

# 2.1.2. Lusophone and Latin-American countries

Chart 4 shows the mobility of U.Porto students to Lusophone and Latin-American countries (PLLA), in the academic year 2007/2008. It also shows the universities of destination in each country, their position in the Ibero-American Ranking of Research Institutions (RI<sup>3</sup>) and the number of students from the U.Porto who chose to carry out their study programmes in each of those countries.

Chart 4: Mobility Out to PLLA universities.

University of destination in the PLLA countries	Country	Position in the RI <sup>3</sup>	No. of students
Universidade de São Paulo	Brazil	2 <sup>nd</sup>	13
UNICAMP	Brazil	6 <sup>th</sup>	1
Universidade Federal Rio Janeiro	Brazil	9 <sup>th</sup>	10
Universidade de Buenos Aires, ARG	Argentina	11 <sup>th</sup>	3
Universidade Estadual Paulista	Brazil	15 <sup>th</sup>	1
Universidade Federal Rio Grande Sul	Brazil	22 <sup>nd</sup>	7
Universidade Federal Minas Gerais	Brazil	23 <sup>rd</sup>	1
Universidade Federal Santa Catarina	Brazil	63 <sup>rd</sup>	15
Universidade Federal Pernambuco	Brazil	65 <sup>th</sup>	1
Universidade Estado Rio Janeiro	Brazil	66 <sup>th</sup>	1
Universidade Nacional de Brasília	Brazil	71 <sup>th</sup>	1
Universidade Federal Ceará	Brazil	90 <sup>th</sup>	1
Universidade Federal Bahia	Brazil	98 <sup>th</sup>	13
Universidade Federal da Paraíba	Brazil	123 <sup>rd</sup>	1
Universidade Federal do Rio Grande do Norte	Brazil	133 <sup>rd</sup>	1
PUC Valparaíso	Chile	211 <sup>th</sup>	2
Universidade Federal de Alagoas	Brazil	270 <sup>th</sup>	1
Universidade Estado de Santa Catarina	Brazil	578 <sup>th</sup>	5
Centro Golfinho Rotador, Fernando Noronha	Brazil		1
Universidade Tecnológica Federal do Paraná	Brazil		3
Universidade Regional de Blumenau	Brazil		1
Universidade de Fortaleza	Brazil		1
TOTAL: UNIVERSITIES 22	3		84

Source: SCPLLA.

Students from the U.Porto moved to 22 universities in 3 countries: Brazil, the majority, Argentina and Chile. The universities who received the highest number of students were, in this order: the Universidade Federal de Santa Catarina, the Universidade de São Paulo, the Universidade Federal da Bahia and the Universidade Federal do Rio de Janeiro. In all, these universities welcomed 51 students (61% of the total). These results were similar to the ones in the previous year, with the said universities receiving the highest number of students from U.Porto. We must note that these universities rank among the Top 100 in the RI<sup>3</sup>. The USP (2<sup>nd</sup>) and the UFRJ (9<sup>th</sup>) rank among the top universities in this list.

Chart 5 shows the U.Porto faculties students come from. The faculties most involved in the mobility to the PLLA are, in this order, the FEUP, the ICBAS, the FADEUP and the FEP. In all, they secure 67% of the mobility (56 students). All faculties sent students to this mobility programme. We must note that in the previous academic year, 5 faculties from the University did not send any students. The FAUP was the sole faculty to mobilize students to Hispanic countries.

Chart 5: U.Porto faculties involved in mobility Out to the PLLA

U.Porto faculties	Brazil	Argentina	Chile	TOTAL
FADEUP	11			11
FAUP	1	3	2	6
FBAUP	1			1
FCNAUP	5			5
FCUP	1			1
FDUP	2			2
FEUP	32			32
FLUP	1			1
FPCEUP	2			2
FEP	6			6
FFUP	1			1
FMDUP	2			2
FMUP	1			1
ICBAS	13			13
TOTAL	79	3	2	84

Source: SCPLLA.

#### 2.1.3. North America

Chart 6 gives us an overview of the U.Porto student mobility to North-American universities under the framework of cooperation agreements, in the academic year 2007/2008.

Chart 6: Mobility Out (Agreements) to North-American universities.

Chart of Mobility Out (Agreements) to North-American universities.		
University of destinationin the USA	No. of students	
University of Georgia	1	
San José State University	1	
TOTAL: UNIVERSITIES 2	2	

Source: SRI.

Two students from U.Porto moved to 2 USA universities - *University of Georgia* and *San José State University*.

These students come from 2 faculties, namely FCUP and FCNAUP.

# 2.1.4 Leonardo da Vinci programme

Chart 7 gives an account of the U.Porto mobility to other institutions, under the framework of the Leonardo da Vinci programme. This chart reports the number of countries and institutions where the vocational traineeships/internships took place (Higher Education Institutions, hospitals, companies, laboratories, etc.) in each country, and the number of newly-graduate students from the U.Porto who took part in these traineeships/internships abroad.

Chart 7: Leonardo da Vinci Mobility *Out*: Countries, number of institutions of destination, and number of U.Porto newly-graduates.

Country	Institutions	Newly-graduates
Germany	3	4
Spain	11	13
Estonia	1	1
France	5	5
Italy	2	2
The Netherlands	3	3
United Kingdom	5	5
Turkey	1	1
TOTAL: 8	31	34

Source: SRI.

Thirty-four newly-graduates from U.Porto participated in the Leonardo da Vinci programme, in 31 institutions and 8 countries. Spain received the majority of these students.

The faculties with the highest participation rate (Chart 8) were Architecture and Arts. Two faculties – Dental Medicine and Nutrition and Food Sciences - were not represented.

Chart 8: Leonardo da Vinci Mobility Out: number of participants per school.

Faculties	Undergraduates
Architecture	8
Fine Arts	5
Sport	2
Sciences	3
Law	1
Economics	2
Engineering	1
Pharmacy	2
Arts	6
Dental Medicine	
Medicine	1
Psychology and Education Sciences	2
Biomedical Sciences	1
Nutrition and Food Sciences	
TOTAL	34

Source: SRI.

# 2.1.5. Mobility *Out*: summary

Chart 9, which shows a summary of the participation of U.Porto students in mobility programmes, highlights the involvement of 732 students (9 more than in the previous year), who took part in mobility programmes in 261 universities and institutions (46 less than in the previous year) in 31 countries (2 more than in the year before).

Chart 9: Summary chart of Mobility Out of U. Porto

Framework	Students/Undergraduates	Universities/Institutions	Countries
Erasmus	610	191	27
PLLA	84	22	3
Leonardo da Vinci	34	31	8
North America	4	2	1
Total	732	215	31

Chart 10 summarizes the total participation in mobility *out* programmes, taking into account the faculty of origin.

Chart 10: Mobility Out Total\*: Number of participants and ratios per faculty

Faculties	Participants	R (p:t)**
Architecture	81	(1:12) 1010
Fine Arts	52	(1:13) 681
Sport	36	(1:23) 828
Sciences	31	(1:92) 2846
Law	10	(1:74) 743
Economics	96	(1:22) 2153
Engineering	183	(1:31) 5669
Pharmacy	51	(1:20) 1029
Arts	63	(1:47) 2968
Dental Medicine	10	(1:40) 404
Medicine	52	(1:28) 1458
Psychology and	13	(1:69) 896
Education Sciences		
Biomedical Sciences	46	(1:31) 1419
Nutrition and Food	6	(1:62) 373
Sciences		
TOTAL	730	(1:31) 22477

<sup>\*</sup> It includes Erasmus Studies, Erasmus Placements, Leonardo da Vinci, Agreements and "freemovers". Sources: SRI and Continuous Improvement Service.

Sources: SRI and SCPLLA.

Bearing in mind the relative size of the faculties, in other words, the number of students in each faculty, those with the highest number of students involved in mobility programmes continue to be, similarly to last year, Architecture (1 in every 12 students participated in a mobility programme) and Fine Arts (1:13, in the previous year it was 1:15). Among the faculties with the lowest participation rate is Sciences (1:92) and Law (1:74), yet revealing significant improvements compared to last year, when they showed a ratio of 1:115 and 1:111 respectively.

<sup>\*\*</sup> Ratio (mobility participants: total no. of students in faculty).

The University ratio was of 1:31 (1:30 in the previous year), or, to see it in a different perspective, we can say that in the academic year 2007/2008, 3.3% (the same as in the previous year) of the U.Porto students took part in mobility programmes in a foreign higher education institution. When compared to other European higher education institutions, the European Commission, on the 20<sup>th</sup> anniversary of the Erasmus Programme, informed that, in the last 20 years, 1% of the European Higher Education students had participated in an Erasmus mobility programme.

#### 2.1.6. Mobility *Out* in Portuguese higher education institutions

Lastly, chart 11 shows us the numbers on mobility *out* in Portuguese higher education institutions, for the period 2000/2001 to 2007/2008.

Chart 11: Students from the Portuguese higher education institutions involved in mobility *out* programmes, for the period 2000/2001 to 2007/2008

HEI	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06*	2006/07**	2007/08**	TOTAL
U.Porto	361	407	437	467	546	524	723	732	4197
U. Coimbra	378	395	420	436	380	401			2410
UTL	279	271	309	336	314	172			1681
UNL	212	228	242	325	363	409			1779
U. Lisboa	137	182	184	250	200	231			1184
U. Minho	154	173	185	209	211	207			1139
UCP	126	128	172	157	169	195			947
U. Aveiro	112	147	135	129	96	132			751
UTAD	60	58	79	99	119	133			548
ISCTE	64	62	68	61	111	98			464
UBI	46	55	64	54	97	119			435
Totals					3860	4145			
Country									

<sup>\*</sup> Non-official data. Source: Agência Nacional Erasmus.

Although the data is not updated, as we are still missing the information on the academic years 2006/07 and 2007/08 – it has not yet been issued by the National Erasmus Agency, what stands out the most is that the U.Porto is the Portuguese higher education institution with the highest number of students participating in mobility programmes. For the period 2000/01 to 2004/2005, showing the total numbers for all the HEIs in our country, the University of Porto was responsible for sending 13.81% Portuguese students to these mobility programmes. In the academic year 2005/06, the Portuguese HEIs sent 4,145 students, of which 524 (12.6% of the total number of Portuguese students) came from the University of Porto.

<sup>\*\*</sup> Data is still not available in Portugal (total U.Porto already includes the last two years).

#### 2.2. Mobility In

# 2.2.1. European countries

Chart 12 gives us an account of the mobility of European students to the U.Porto, in the academic year 2007/2008, and it includes the movements under the Erasmus programme, the cooperation agreements and *freemovers*. The chart shows the countries of origin, the number of HEIs in each country and the number of students from those countries that chose to conduct their programmes at the U.Porto.

Chart 12: Mobility in (Europe)\*: Countries, numbers of HEIs per country, and of students.

Country	HEIs	Students
Germany	20	36
Austria	5	9
Belgium	5	13
Bulgaria	2	4
Slovak Republic	3	5
Republic of Slovenia	1	3
Spain	30	128
Finland	4	9
France	19	30
Greece	5	14
Hungary	3	9
Ireland	1	1
Italy	30	98
Latvia	4	8
Lithuania	2	5
Norway	1	1
The Netherlands	5	5
Poland	18	67
United Kingdom	10	22
Czech Republic	9	36
Romania	6	19
Sweden	3	4
Switzerland	2	3
Turkey	9	38
TOTALS: 24	197	567

<sup>\*</sup> It includes the Erasmus Studies, Erasmus Placements and "Freemovers". Source: SRI.

The students who seeked the U.Porto came from 24 countries, the same number as in the previous year. These students, totalling 567 (526 in the previous year), belonged to 197 universities (199 in the previous year).

The largest group of students (128) came from Spain (102 students in the year before) and Italy (98 students; 91 in the previous year), which, altogether, took the total number of European students received by the U.Porto to 40.6% (36.7% in the previous year).

The group of countries formed by France, Germany, United Kingdom and the Netherlands contributed with about 16.4% (20% in the previous year) of the students, and the Nordic countries (Sweden, Denmark, Finland and Norway) with only 2.5% (3.2% in the previous year). We have to highligh the U.Porto ability to attract students

from the former Eastern countries: 156 students (about 27.5% of the total number of students who came to the U.Porto) from 9 countries, notably Poland (67 students), the Czech Republic (36), Romania (19) and Hungary (15).

Chart 13 shows us the U.Porto faculties chosen by European mobility students.

Chart 13: Mobility in\*: U.Porto faculties chosen by European mobility students.

Faculties	European students
Architecture	63
Fine Arts	44
Sport	22
Sciences	31
Law	8
Economics	45
Engineering	74
Pharmacy	36
Arts	138
Dental Medicine	5
Medicine	48
Psychology and Education Science.	17
Biomedical Sciences	32
Nutrition	2
TOTALS	565**

<sup>\*</sup> It includes Erasmus Studies, Erasmus Placements and "Freemovers". Source: SRI.

The preferred U.Porto faculties for the European mobility students were the Faculty of Arts (138 students), the Faculty of Engineering (74) and the Faculty of Architecture (63), which together welcomed 24.2% of the total number of European mobility students. The less chosen faculties were Nutrition (2 students), which is still conditioned by its premises, and the Faculty of Dental Medicine (5). Remarkable progress was made at the Faculty of Pharmacy, which increased significantly the number of students received (from 11 to 36).

Chart 14 shows us the movements of Erasmus students from the top 100 European universities (according to the *Academic Ranking of World Universities 2008*, prepared by the Shanghai Jiao Tong University) to the U.Porto.

Of a total number of 567 students, only 97, i.e., about 17.1% (17.7% in the previous year), came from the top 100 universities. Of these, 2 (1 less than in the previous year) came from the top 10 European universities in the ranking, and only 15.5% (15.1% in the previous year) came from the top 25 universities in the ranking. The percentage increases to about 53.6% (51% in the previous year) when the analysis focus on the top 50 places in the ranking.

<sup>\*\* 2</sup> of the 567 mobility students completed their programmes at the SRI.

Chart 14: Movements of Erasmus students among the top 100 European universities and the University of Porto (Academic

Ranking of World Universities, 2008, Institute of Higher Education, Shanghai Jiao Tong).

Ranking of World Universities, 2008, Institute of High University	Euro Rank	Students in the U.Porto
Univ Manchester (UK)	6	2
Tech Univ Munich (GER)	15	1
Univ Bristol (UK)	16	1
Univ Oslo (NOR)	17	1
Univ Heidelberg (GER)	18	2
Univ Helsinki (FIN)	19	6
Univ Sheffield (UK)	24	2
Univ Nottingham (UK)	26	3
Stockholm Univ (SWE)	27	1
Univ Goettingen (GER)	29	1
Univ Geneva (SWI)	35 - 58	1
Univ Ghent (BEL)	35 – 58	5
Univ Leeds (UK)	35 - 58	3
Univ Leuven (BEL)	35 - 58	1
Univ Liverpool (UK)	35 - 58	1
Univ Louvain (BEL)	35 - 58	4
Univ Mainz (GER)	35 - 58	4
Univ Milan (ITA)	35 - 58	5
Univ Pisa (ITA)	35 - 58	1
Univ Roma - La Sapienza (ITA)	35 - 58	6
Univ Wuerzburg (GER)	35 - 58	1
Delft Univ Tech (NET)	59 - 79	1
Univ Barcelona (SPA)	59 - 79	3
Univ Koeln (GER)	59 - 79	6
Radboud Univ Nijmegen (NET)	59 - 79	1
Univ Pádua (ITA)	59 - 79	2
Univ Turin (ITA)	59 - 79	2
Univ Vienna (AUT)	59 - 79	2
Charles Univ Prague (CR)	80 - 124	12
Umea Univ (SWE)	80 – 124	1
Univ Athens (GRE)	80 – 124	7
Univ Autonoma Madrid (SPA)	80 – 124	1
Univ Complutense – Madrid (SPA)	80 – 124	3
Univ Florence (ITA)	80 – 124	2
Univ Karlsruhe (GER)	80 – 124	1
Univ Leipzig (GER)	80 – 124	1
TOTAL		97

Sources: Academic Ranking of World Universities 2008, Institute of Higher Education, Shanghai Jiao Tong; and SRI.

# 2.2.2. Lusophone countries and Latin-American countries

Chart 15 gives us a picture of the participation of students from the PLLA in mobility programmes, at the U.Porto.

The University of Porto welcomed 456 student mobility programmes (126 more than in the previous year), from 51 HEIs (9 more than in the previous year), from 3 (the same as the year before) Latin-American countries - Brazil, Chile and Peru.

The overwhelming majority of students (99%) came from Brazilian HEIs. Of the 51 HEIs who sent students, more than half (55%) were from the following 10 HEIs: Universidade Federal de Ouro Preto (33 students), Universidade de São Paulo (32), Universidade Nacional de Brasília (30), Universidade Federal de Alagoas (26), Centro Universitário de Belo Horizonte (25), Universidade Federal do Rio de Janeiro (24), Universidade Federal de Pernambuco (22), Universidade Federal do Rio Grande do Sul (21), Universidade Federal de São Paulo (20) and the Universidade Federal de

Uberlândia (20). Six of these ten universities rank in the top 100 universities in the RI<sup>3</sup>.

Chart 15: Mobility In PLLA: Universities of origin, ranking in the RI<sup>3</sup> and number of students.

Chart 15: Mobility In PLLA: Universities of origin, ranking in the University of origin in the PLLA	Country	Place in the RI <sup>3</sup>	No. of students
Universidade de São Paulo	Brazil	2 <sup>nd</sup>	32
UNICAMP	Diazn	6 <sup>th</sup>	8
Universidade Federal do Rio de Janeiro		9 <sup>th</sup>	24
Universidade Federal do Rio de Janeiro  Universidade Estadual Paulista		15 <sup>th</sup>	7
		22 <sup>nd</sup>	21
Universidade Federal do Rio Grande Sul			
Universidade Federal de Minas Gerais		23 <sup>rd</sup> 27 <sup>th</sup>	11
Universidade Federal de São Paulo	G1 11		20
Pontifícia Universidad Católica de Chile	Chile	29 <sup>th</sup>	4
Universidade Federal de São Carlos		51 <sup>st</sup>	2
Universidade Federal Santa Catarina		63 <sup>rd</sup>	12
Universidade Federal Pernambuco		65 <sup>th</sup>	22
Universidade do Estado do Rio Janeiro		66 <sup>th</sup>	10
Universidade Federal do Paraná		67 <sup>th</sup>	1
Universidade Federal Fluminense		70 <sup>th</sup>	6
Universidade Nacional de Brasília		71 <sup>st</sup>	30
Universidade Federal Ceará		90 <sup>th</sup>	15
Universidade Federal Bahia		98 <sup>th</sup>	10
Universidade Federal de Santa Maria		121 <sup>st</sup>	6
Universidade Federal do Rio Grande do Norte		133 <sup>rd</sup>	1
Universidade Federal de Uberlândia		164 <sup>th</sup>	20
PUC do Rio Grande do Sul		169 <sup>th</sup>	8
Universidade Federal de Pelotas		191 <sup>st</sup>	1
Universidade Federal de Juiz de Fora		267 <sup>th</sup>	11
Universidade Federal de Alagoas		270 <sup>th</sup>	26
Universidade Federal de Ouro Preto		288 <sup>th</sup>	33
PUC do Paraná		394 <sup>th</sup>	11
Universidade Federal do Maranhão		402 <sup>nd</sup>	4
Universidade Federal de Mato Grosso		407 <sup>th</sup>	5
Universidade Estado de Santa Catarina		444 <sup>th</sup>	17
Universidade Federal de Itajubá		464 <sup>th</sup>	1
Universidade de Caxias do Sul		475 <sup>th</sup>	10
PUC de Minas Gerais		492 <sup>nd</sup>	2
Universidade Federal do Piauí		493 <sup>rd</sup>	1
PUC de Campinas		504 <sup>th</sup>	3
Universidade Estácio de Sá		597 <sup>th</sup>	1
Universidade Federal do Amazonas		629 <sup>th</sup>	1
Universidade Presbiteriana Mackenzie		657 <sup>th</sup>	3
Universidade de Pernambuco		728 <sup>th</sup>	1
Fundação Bahiana para o Desenvolvimento das Ciências		720	1
Universidade de Fortaleza			7
Fundação Armando Álvares Penteado		1	
Universidade Regional de Blumenau			2
Universidade Regional do Noroeste do Estado Rio Grande Sul			4
Universidade Regional do Noroeste do Estado Rio Grande Sul Universidade Tecnológica Federal do Paraná			2
Centro Universitário de Belo Horizonte		+	25
Centro Universitário de Leste de Minas Gerais		+	23
			7
Centro Universitário UNIVATES		1	
Centro Universitário La Salle		1	1
Centro Universitário Nilton Lins			1
Faculdade Ideal		1	1
Universidad Nacional de Educacion	Peru		1
TOTAL UNIVERSIDADES: 51	3		456

It includes the cooperation agreements and "Freemovers". Sources: Ibero-American Ranking of Research Institutions and SCPLLA.

The fact that the University of Porto, through the FBAUP, FLUP and FADEUP, received students from Chilean and Peruvian universities is also noteworthy. Although the number is still low (only 5 students), this is the second consecutive year

it has happened, and it already involves three Faculties. This helps towards the strengthening of new relations and opens up the possibility of being extended to other Hispanic universities, and of a greater involvement of a larger number of faculties in the University of Porto.

Chart 16 lists the faculties that welcomed the PLLA mobility students.

Chart 16: Mobility in PLLA: Countries of origin and faculties chosen at the U.Porto.

UP Faculties	Brazil	Chile	Peru	TOTAL
FADEUP	24		1	25
FAUP	26			26
FBAUP	20	2		22
FCNAUP	21			21
FCUP	17			17
FDUP	50			50
FEP	15			15
FEUP	151			151
FFUP	13			13
FLUP	45	2		47
FMUP	43			43
FMDUP				
FPCEUP	19			19
ICBAS	7			7
TOTAL	451	4	1	456

Source: SCPLLA

Generally speaking (with the exception of the FMDUP which, despite having received applications did not accept students), receptiveness to accepting PLLA students in the faculties was very positive, leading in turn to an increase of acceptances. The most notable cases were the FDUP and the FFUP (who increased four-fold the number of students received, when compared to the previous year), and the FPCEUP (3 times more).

The faculty most involved was the FEUP which, on its own, received 33% of students. Other most involved faculties were the FDUP, the FLUP and the FMUP who together received 31% of students.

# 2.2.3. North America

Chart 17 reports the participation of students from North America in mobility programmes, under cooperation agreements with the U.Porto.

Thirty seven students participated in mobility programmes in the University of Porto (13 more than in the previous year) from 2 U.S.A. universities.

Chart 17: Mobility in North America: Universities of origin, positions in the rankings and no. of students.

University of origin	Place in the SJT	Place in the THES	No. of students
University of California at Berkeley, USA	4 <sup>th</sup>	8 <sup>th</sup>	35
University of Georgia, USA	102 <sup>nd</sup>		2
TOTAL UNIVERSITIES: 2			37

Source: SRI.

#### 2.2.4. Africa

Chart 18 shows us the participation of African students in mobility programmes, under cooperation agreements with the U.Porto.

Chart 18: Mobility in Africa: Universities of origin, positions in the rankings and no. of students.

University of origin in Africa	Place in the SJT	Place in the THES	No. of students
Université des Sciences et de Technologie, Algeria			4
TOTAL UNIVERSITIES: 1			4

Source: SRI.

Note the mobility of 4 post-graduate Algerian students, who studied at the U.Porto.

# 2.2.5. Leonardo da Vinci programme

Chart 19 shows the mobility to the U.Porto under the Leonardo da Vinci programme, in vocational training. This chart shows us the number of countries, of universities of origin and of newly-graduates who conducted their training at the U.Porto.

Chart 19: Leonardo da Vinci Mobility in: Countries, number of universities of origin and newly graduates.

Country	Universities	Newly-graduates
Spain	3	3
Finland	1	1
Poland	3	6
Switzerland	1	1
TOTALS: 4	8	11

Source: SRI.

Eleven newly-graduates trained at the U.Porto, from 8 universities and 4 countries.

# 2.2.6. The EURAXESS Centre supporting researchers' mobility

Chart 20: EURAXESS Mobility in: Countries and number of researchers.

Country	Researchers*
Germany	1
Algeria	1
Argentina	1
Austria	1
Brazil	21
China	1
Cuba	3
Spain	2
France	1
Hungary	1
India	1
Iran	1
Italy	6
Nicaragua	1
Syria	1
Thailand	5
USA	1
TOTAL: 17	49

<sup>\*</sup>Data as at the end of 2007. Source: SRI.

Chart 20 presents the foreign researchers supported by the *EURAXESS* Centre located at the University of Porto, with the number of countries and researchers.

The EURAXESS Centre of the University of Porto provided support to 49 researchers (22 more than in the previous year), from 17 countries (9 more than in the previous year).

# 2.2.7. Mobility *In*: Summary

Chart 21 summarizes the participation of foreign students in mobility programmes at the U.Porto.

Chart 21: Summary chart of mobility in at the U.Porto: students/researchers.

Agreement	Students/Researchers	HEIs	Countries
Erasmus	567	197	24
PLLA	456	51	3
North America	37	2	1
Africa	4	1	1
Leonardo da Vinci	11	8	4*
Totals	1075	259	29

<sup>\*</sup> Countries already included in Erasmus.

Sources: SRI and SCPLLA.

We can see that 1,075 students conducted their studies at the University of Porto, under the framework of mobility programmes, in the academic year 2007/08 (154 more than in the previous year), from 259 universities and 29 countries.

Chart 22 summarizes the number of students who conducted their studies at each U.Porto faculty, under all mobility programmes.

Chart 22: Total Mobility in\*: U.Porto faculties – number of students and ratios per faculty.

Faculties	Erasmus	PLLA	Other programmes	Total	Ratios*
Architecture	63	26		89	<b>1: 12</b> (1062)
Fine Arts	44	22		66	1: 13 (870)
Sport	22	25		47	<b>1: 27</b> (1291)
Sciences	31	17		48	<b>1: 75</b> (3623)
Law	8	50		58	1: 14 (824)
Economics	45	15		61	1: 43 (2646)
Engineering	74	151	4	229	<b>1: 29</b> (6730)
Pharmacy	36	13		49	<b>1: 25</b> (1207)
Arts	138	47	37	222	1: 17 (3865)
Dental Medicine	5			5	<b>1: 91</b> (453)
Medicine	48	43		91	1: 26 (2402)
Psychology and	17	19		36	<b>1: 42</b> (1511)
Education Science.					
Biomedical Sciences	32	7		39	1: 50 (1944)
Nutrition	2	21		23	1: 18 (425)
TOTAL	565	456	41	1062***	<b>1: 27</b> (28901)

<sup>\*</sup> Ratio (mobility participants: total number of students-faculty).

<sup>\*\* 2</sup> out of 567 mobility students completed their programme at the SRI.

<sup>\*\*\*</sup> It does not include 11 newly-graduate students who are training in companies, and 2 who are training at the SRI. Sources: SRI, SCPLLA.

Considering the size of the faculties, we can see that the faculties that received the majority of mobility students were Architecture, Fine Arts and Law. We can also say that in the academic year 2007/08, the ratio is 1 foreign mobility student for every 12, 13 and 14 students, respectively. We can likewise say that for evey 27 students who studied at the University of Porto in 2007/08, 1 was a foreign mobility students.

# 3. Foreign students seeking a degree

Charts 23, 24 and 25 provide us with the data on the students who, in different levels of education, conducted their activities at the U.Porto in the academic year 2007/08, to obtain a degree. These charts give as an idea of the countries of origin and the U.Porto faculties chosen for their studies.

# 3.1. Undergraduate and integrated masters students

Chart 23: Foreign undergraduate and integrated masters students at the U.Porto in 2007/08: countries of origin and U.Porto faculties where studies were conducted.

racuities w.	FAUP	FBAUP	FADEUP	FCNAUP	FCUP	FDUP	FEP	FEUP	FFUP	FLUP	FMDUP	FMUP	FPCEUP	ICBAS	TOTAL
South Africa	FAUP	FBAUP	FADEUP	FUNAUP	3	FDUP	FEP	6	FFUP	2	FMDUP	FMUP	FPCEUP	ICBAS	101AL 11
								1		2					
Albânia															1
Germany	1	1			1		1	3		8		_		1	16
Angola	1				3		1	5		4	3	3	1	2	23
Australia					1										1
Austria								1							1
Belgium								1							1
Belarus (R)										2					2
Brazil	35		11	2	19	2	7	24	4	20	5	2	2	4	137
Bulgaria	1				1			1							3
Cape Verde	8			3	16	9	21	26	4	11		3	10	4	115
Canada					3			1							4
China					1			2						1	4
Congo (DR)								1							1
Korea	1										ĺ				1
Cuba			1												1
Spain	13	1	_	2	3			1		2	1		1	1	25
USA	1	<u> </u>	l	<del></del>	1	1		4			1		1	•	8
Finland	1				1					1	-				3
France	9	1			11			24		5	1		2		53
Greece	,	1			11		1	24		J	1				1
Guinea (R)							1	1			1				2
				1	-	_	1	1			1			1	
Guinea-				1	1	2	1							1	6
Bissau (R)															
Netherlands	1	1						1							3
Hungary										1					1
India								1							1
Israel									1						1
Italy	34				1		1	1		1					38
Luxembourg	1							3							4
Macau					3										3
Mexico					1										1
Mozambique	1				2	3	3	3		3	1	1	3	2	22
Namibia (R)										1					1
Poland					1						1				2
Kenya (R)					1										1
United	1				1			1		2	ĺ				5
Kingdom						l					l				1
Czech	2										ĺ				2
Republic						l					l				1
Romania	İ						1				i				1
Russia	İ		1		1		2		1		i				5
São Tomé	1				2	2	1	2	1		2	3	1	4	19
and P. (R)	1				l ~	l ~	-	~	•		l ~				1
Swaziland		1								1					2
Sweden	1	<u> </u>			1	l	f	-							1
Switzerland		1			1			5		3					10
East Timor	1	1			1	<b> </b>	1	,		3	1	1			7
	1	2			1	<del>                                     </del>	3	-		3	1	1			6
Ukraine	1		-			<u> </u>	3	12		-					21
Venezuela	440	_	- 40	_	4			12		5		- 10			
TOTAL: 46	113	8	13	8	85	18	44	131	11	74	17	13	21	20	577

Source: Continuous Improvement Service.

Chart 23 lists the 577 students, from 46 countries, who study at the U.Porto: 22 in Europe, 11 in Africa, 6 in Asia, 3 in North America, 2 in South America, 1 in Central America and 1 in Oceania.

57% of these students are from CPLP countries, among which Brazil and Cape Verde, which are clearly the most highly represented countries.

The faculties attracting the largest number of foreign students are, in this order, the FEUP (131 students from 25 countries), the FAUP (113 students from 18 countries) and the FCUP (85 students from 27 countries), which, all in all, welcomed 57% of foreign undergraduate and integrated masters students.

#### 3.2. Masters students

Chart 24 lists the 332 foreign masters students who studied, or study, at the U.Porto, from 32 countries: 12 countries in Europe, 7 in Africa, 6 in South America, 4 in Asia and 3 in Central America. At the U.Porto, there are no masters students from North America or Oceania.

81% of these students are from CPLP countries, with Brazil (194 students) being clearly the most highly represented country.

Chart 24: Foreign masters students at the U.Porto, in 2007/2008: countries of origin and faculties where studies were conducted.

	FAUP	FBAUP	FADEUP	FCNAUP	FCUP	FDUP	FEP	FEUP	FFUP	FLUP	FMDUP	FMUP	FPCEUP	ICBAS	EGP	TOTAL
South Africa		1			1											2
Germany		1	1					2							1	5
Angola		1					1	1		1		5			1	10
Argentina													1*			1
Belgium										1						1
Bangladesh								1**								1
Brazl	12	9	83	5	10		13	18	7	6		16	11*	4		194
Cape Verde			1		2		7	4		34						48
China					1		1									2
Chile												1				1
Colombia			2													2
Congo (DR)													1*			1
Cuba								1					1*			2
Slovenia (R)							1									1
Spain								3				1				4
France			1				2	1		1	2		2		1	10
Guinea (R)										1		1				2
Italy		1							1	1		1				4
Japan										1						1
Mozambique		1						2	1	2		2	1*		1	10
Nicaragua													1*			1
Panama								1								1
Peru			2													2
Poland							2									2
United					1										1	2
Kingdom																
Romania							3	1								4
Russia					1											1
São Tomé					1		1	1				1	2			6
and P. (R)																
Switzerland							1									1
East Timor					1				1							2
Turkey							2									2
Venezuela		1	1				2	1		1						6
TOTAL: 32	12	15	91	5	18	0	36	37	10	49	2	28	20	4	5	332

Sources: Continuous Improvement Service and SRI – Euraxess Centre.

<sup>\*</sup>SMC data does not include the 7 Mundisfor Masters from the FPCEUP: 1 Argentina, 1 Cuba, 1 Mozambique, 1 Congo, 2 Brazil and 1 from Nicaragua.

<sup>\*\*</sup> SMC data does not include 1 FEUP Masters student from Bangladesh.

The faculty attracting the largest number of foreign students is the FADEUP (91 students from 7 countries), which represents 27% of the foreign master's students.

# 3.3. PhD students

Chart 25 lists the 215 foreign PhD students who studied, or study, at the U.Porto, from 36 countries: 16 countries in Europe, 6 in Africa, 6 in Asia, 4 in South America, 2 in North America, 1 in Central America and 1 in Oceania.

57% of these students are from the CPLP countries, with Brazil (108 students) being clearly the most highly represented country.

The faculties attracting the largest number of foreign students is the FEUP (56 students from 22 countries) and the FADEUP (44 students from 4 countries), to which correspond 48% of the PhD foreign students.

Chart 25: Foreign PhD students at the U.Porto: countries of origin and U.Porto faculties where studies were conducted in 2007

Chart 25. F	FAUP	FBAUP	FADEUP	FCNAUP	FCUP	FDUP	FEP	FEUP	FFUP	FLUP	FMDUP	FMUP	FPCEUP	ICBAS	TOTAL
South Africa								1							1
Germany					1			1						1	3
Angola					1			2		1				1	5
Australia					1										1
Austria					1*									1	2
Belgium					1				1	1					3
Brazil		1	37	3	9		2	22	1*	12		4	13	4	108
Bulgaria								1*							1
Cape Verde										1			1		2
Colombia					1			3							4
China								2							2
Croacia					1										1
Cuba					2			1	2					1	6
Slovakia					1										1
Spain	1			1	1		1	1				1		2	8
USA							1							1	2
France					1		1	3		1					6
Greece					1*			2							3
Netherlands					1										1
India						1		2							3
Iran					1*										1
Israel			3												3
Italy	1						1			1				2	5
Macedonia								1							1
Mexico								1							1
Mozambique					2			1		3					6
Pakistan					1										1
Peru			1					1							2
Czech Rep.								1							1
Romania					1		1	5		1*			1		9
Russia					1		1							1	3
São Tomé								1							1
and P.															
Syria								1							1
Thailand			3							1			1*	7	12
Turkey								2		1					3
Venezuela								1							1
TOTAL: 36	2	1	44	4	29	1	8	56	4	23	0	5	16	21	215

 $Sources: Continuous \ Improvement \ Service \ and \ SRI-Euraxess \ Centre.$ 

\*The SMC does not include: 1 PhD student from Austria, 1 PhD student (co-tutelage) from Iran and 1 PhD student (co-tutelage) from Greece, all at the FCUP; 1 PhD student from Bulgária, at the FEUP; 1 PhD student from Brazil, from the FFUP; 1 PhD student from Thailand, at the FPCEUP; and 1 PhD student (co-tutelage) from Romania, at the FLUP.

# 4. Students in Specialization Courses

Chart 26 shows the list of 22 students, from 8 countries, who studied, or study, at the U.Porto, in non-degree granting specialization courses - 3 countries in Europe, 3 in Africa and 2 in South America. Only 4 faculties welcomed these specialization course students, the majority of which are at the FMUP.

Chart 26: Foreing students in non-degree granting specialization courses: countries of origin and U.Porto faculties where the studies were conducted.

	FAUP	FBAUP	FADEUP	FCNAUP	FCUP	FDUP	FEP	FEUP	FFUP	FLUP	FMDUP	FMUP	FPCEUP	ICBAS	TOTAL
Angola								1							1
Brazil												2			2
C. Verde								1		2		1			4
Spain												11			11
France										1					1
Italy												1			1
Mozamb.										1					1
Venezuela													1		1
TOTAL:8								2		4		15	1		22

Source: Continuous Improvement Service.

# 5. Post-Doctorate Researchers

At the end of 2007 (chart 27), 43 post-doctorate researchers (14 less than in the previous year), from 14 countries (2 less than in 2006), studied at the U.Porto. These students were from 6 countries in Europe, 2 in South Africa, 3 in Asia and 1 in Central America. These numbers do not include other researchers who conducted their activities in associated laboratories, as there is no information available yet.

Chart 27: Foreign post-doctorate researchers at the U.Porto, in 2007: countries of origin and U.Porto faculties where studies were conducted.

	FAUP	FBAUP	FADEUP	FCNAUP	FCUP	FDUP	FEP	FEUP	FFUP	FLUP	FMDUP	FMUP	FPCEUP	ICBAS	TOTAL
Brazil	1		2		1		1	2	1	2			7	1	18
Chile									1						1
China					1			1							2
Cuba					1										1
Spain					7			2							9
France								1							1
Greece					1										1
India					1			4							5
Italy					1										1
United Kingdom					1				1						2
Russia								1							1
Thailand														1	1
TOTAL 12	1	0	2	0	14	0	1	11	3	2	0	0	7	2	43

Source: Faculties.

The CPLP countries were represented only by Brazil who, with 18 students, was also the most represented country among all those that sent researchers (41.8% of the total). Europe sent 15 researchers (34.9%) and three Asian countries - China, India and Thailand – sent 8 post-doctorate researchers (18.6%).

The FCUP and the FEUP are still the preferred faculties (58% overall). There are also 5 faculties (3 less than in 2006) that did not receive any post-doctorate researchers.

# 6. Summary

#### 6.1 Foreign students and researchers at the U.Porto

The most recent survey on foreign students who seek the U.Porto to conduct their preand post-graduate studies, in non-degree granting specialization courses or in postdoctorate studies, reveals the following (Chart 28):

In the academic year 2007/2008, 2,264 post-doctorate students and researchers (7.83% of a total of 28,901 students at the U.Porto) conducted activities at the University of Porto. These numbers correspond to an increase of 351 students, in absolute terms, and of 1.26% in relative terms. An also important part of the foreign students seeking the U.Porto for their studies (47.5%: in the previous year they were 48.7%) is formed by mobility programme students. However, the number of students who chose the U. Porto to obtain a degree was of 1,124, i.e., 49.6% of the total number of foreign students and researchers. We can, then, say that, for the first time, the number of foreign students seeking the University to obtain a degree was higher than the mobility students.

Chart 28: Foreign students and researchers studying at the U.Porto in the academic year 2007/2008.

STUDENTS	NUMBER	% OF THE TOTAL
Mobility In students	1075	4.78% *
Undergraduate degree and integrated masters	577	2.57%
Specialization	22	4.15%
Masters	332	8.63%
PhD	215	10.49%
Post-doctorate	43	
TOTAL	2264	7.83%

<sup>\*</sup> Percentage of the total no. of undergraduate and integrated masters (22477). Sources: Continuous Improvement Service, SRI, SCPLLA and Faculties

Of the total number of foreign students who chose the U.Porto to obtain a degree, the majority (721, corresponding to 64.1% - in the previous year: 586 and 65.5%, respectively) came from CPLP countries. Of these CPLP students, 329 are in undergraduate courses and integrated masters courses, 270 are in masters courses and 122 are doing their PhDs.

Note also the marked growth of foreign masters students (332, corresponding to 8.63% of the total master's students – in the previous year: 253 and 3.14%, respectively) and PhD students (10.49% of the total PhD students at the U.Porto), areas where the percentages are higher than the average percent values of foreign students at the University (7.83%).

#### **6.2.** Targets

When submitting his candidature, the Rector proposed to conduct a more thorough and coordinated work with the component units, aiming to broaden the scope and internationalization level and also to develop and stimulate cooperation with the universities of Lusophone countries. As such, he proposed to conduct a series of initiatives, as follows: (i) To create a programme designed to increase substantially the number of foreign students enrolled at the U.Porto to obtain a degree, focusing particularly on the 2<sup>nd</sup> and 3<sup>rd</sup> cycles of studies. As a target, the Rector aimed to achieve, from the second year of his term of office, an annual growth of 20% of foreign students enrolled; (ii) To create a specific programme for the recruitment of students from developing countries, in particular from the CPLP. Furthermore, he suggested the annual recruitment of 200 new students, from the third year of his term of office; (iii) To stimulate the expansion of existing student mobility programmes, in order to increase the number of students and the number and geographical diversity of the universities involved. Furthermore, and until the end of his term of office, he proposed to achieve a growth of 100% of the number of students and of 50% of the number of universities involved, when compared to the 2005 numbers.

Chart 29 provides the information on the annual growth and the targets to be achieved until the end of the term of office, with regard to the number of students and foreign universities.

Chart 29: Foreign students at the University of Porto: Annual growth and targets until the end of the term of office – number of students and universities.

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	TARGETS
Mobility students	575	921	1075				<b>1150</b> students (100% more than in 2005/06)
Foreign mobility universities	214	270	259				<b>321</b> universities (50% than in 2005)
Students and specialization			22				
Undergraduate and integrated masters students	658	465	577				
Masters students	137	253	332				
PhD students	184	177	215				
Students obtaining a degree (TOTAL)	979	895	1124	20% + than in 2005/06	20% + than in 2006/07	20% + than in 2007/08	1564 20% + students year, from the 2 <sup>nd</sup> year term of office)
CPLP students obtaining a degree (TOTAL)	558	586	721		20% + students than in 2008	20% + students than in 2009	958 20% + students year, from the 3 <sup>rd</sup> year term of office)
Post-doctorate researchers		57	43				
TOTAL (students and researchers)	1554	1913	2264				10% of the total no. of U.Porto students

<sup>\*</sup> Source: Continuous Improvement Service, SRI, SCPLLA.

The numbers of student mobility in 2007/08 grew 16.7% compared to the previous academic year, and are already close to those intended for the 2010/11 academic year (1,150 students). With regard to the number of higher education institutions of origin of the mobility students, there was a slight step-back (11 HEIs) in the number of partnerships.

In terms of the numbers of students obtaining a degree, there was a growth of 25.6% when compared to the previous year, which means that the growth was higher than the average estimate (20%) for the 2007/2008 growth to achieve the targets determined for 2011. These numbers increased in a sustainable way, in all levels of education:  $1^{st}$  cycle -24.1%;  $2^{nd}$  cycle -28.1%;  $3^{rd}$  cycle : 17.5%.

Regarding the CPLP students obtaining a degree, there were 135 more students, which indicates an increase of 23%, and we foresee a growth in line with the targets projected for 2011.

Globally speaking, i.e., considering the global number of foreign students and researchers at the U.Porto, there has been an increase in absolute terms (351) and in relative terms (18.3%). Based on the target set for 2011 (10% of the total number of students at the University), on the current numbers (7.83%) and on the growth felt over the past year (1.26%), we are somewhat optimistic about the success of these numbers.

# 7. Academic staff under the framework of mobility programmes – ERASMUS 7.1. Mobility Out

Chart 30: U.Porto academic staff under the framework of mobility programmes abroad in 2007/08.

Country	Universities	Teachers
Germany	4	4
Austria	1	1
Belgium	2	3
Denmark	1	1
Spain	14	19
Finland	2	3
France	8	9
Netherlands	2	2
Hungary	1	1
Italy	9	12
Lithuania	2	2
Poland	4	4
United Kingdom	2	3
Czech Republic	2	2
Romania	4	4
Sweden	3	3
Turkey	3	3
TOTALS 17	64	76

Chart 30 (for more detailed information, see Annex 1) presents the Erasmus mobility numbers for the academic staff, from the U.Porto to European universities, in the academic year 2007/08.

76 teachers from the University of Porto participated in this programme, travelling to 64 universities in 17 European countries. The Spanish (19 teachers), Italian (12) and French universities (9) attracted the highest number of teachers from the University of Porto (52.6% of the total). If we consider the positions of the universities of destination in the Shangai Jiao Tong University ranking, we see that out of the 76 teachers, only 15 (19.7%) were in programmes in the top 100 universities in the ranking.

Chart 31 provides the information on the participation in mobility programmes of academic staff from the U.Porto, in the academic year 2007/08, listing the faculties of origin.

Chart 31: Participation of U.Porto faculty academic staff under the framework of

Faculties	Teachers	
Architecture	2	
Fine Arts		
Sciences	3	
Sport	12	
Law		
Economics	1	
Engineering	6	
Pharmacy	7	
Arts	29	
Dental Medicine		
Medicine		
Psychology and Education Science	13	
Biomedical Sciences	2	
Nutrition	1	
TOTAL	76	

Sources: Faculties and SRI.

The Faculty of Arts was responsible for sending the highest number of teachers (38%). Four faculties did not involve any teachers in mobility programmes.

Concerning the involvement of the academic staff at the U.Porto under the framework of Erasmus mobility programmes (chart 32) in the last 10 years, the numbers also show a marked growth, since the last *Plano de Reorientação Estratégica da Universidade do Porto 2000 -2004* [Plan for the Strategic Guidelines for the University of Porto 2000-2004].

Chart 32: U.Porto academic staff under the framework of Erasmus mobility programmes, from 1998/99 to 2007/08.

ACADEMIC YEAR	TEACHERS	% of the total
1998/99	13	
1999/00	23	
2000/01	51	
2001/02	44	
2002/03	55	
2003/04	64	
2004/05	70	
2005/06	67	
2006/07	42	
2007/08	76	4.09%
TOTAL	505	

Source: SRI.

In the last 10 years, 505 teachers from the U.Porto participated in Erasmus mobility programmes in foreign universities, and the numbers are increasing over time. In 2006, with 76 teachers involved in these programmes, it represented an important increase of mobility flows involving academic staff from the U.Porto. The percentage of teachers from the U.Porto who, in the last academic year, participated in Erasmus mobility programmes was of about 4.1 % (total of FTE [full-time equivalent] teachers in 2007/2008: 1855). Although this number is low, it is nevertheless higher than the European average over the last years. The numbers of the European Commission reveal that 1.9% of all the teachers of European higher education institutions participated in mobility programmes from 1987 to 2005.

# 7.2 Mobility In

Chart 33 (for more detailed information, see Annex 2) shows the numbers of Erasmus Mobility of foreign teachers to the U.Porto, in the academic year 2007/08, taking into consideration the countries and universities of origin.

Chart 33: Foreign academic staff at U.Porto under the framework of mobility programmes.

Country	Universities	Teachers
Germany	4	4
Austria	1	1
Belgium	2	4
Bulgaria	1	1
Slovakia	1	1
Spain	18	30
Finland	3	4
France	6	8
Hungary	1	3
Italy	8	8
Lithuania	2	2
Poland	4	4
United Kingdom	3	3
Czech Republic	5	7
Sweden	1	1
Turkey	4	6
TOTAL 16	64	87

A total of 87 teachers from 64 universities and other higher education institutions, from 16 European countries, participated in this programme. The majority of teachers came from the Spanish universities (30) to the University of Porto, which corresponds to 34.5% of the total.

If we consider the positions of the universities of destination in the Shangai Jiao Tong Universidade ranking, we see that out of these 87 teachers, only 14 (16.1%) were in programmes in universities placed in the top 100 bracket.

Chart 34 provides the information on the participation in Erasmus mobility programmes, of academic staff from foreign universities who came to the University of Porto, in the academic year 2007/08, listing the faculties of destination where activities took place.

Chart 34: Participation of foreign university teachers under the framework of

Erasmus mobility programmes at the U.Porto: distribution per faculty.

Faculties	Teachers
Architecture	3
Fine Arts	4
Sciences	3
Sport	15
Law	
Economics	9
Engineering	7
Pharmacy	2
Arts	26
Dental Medicine	
Medicine	1
Psychology and Education Science	15
Biomedical Sciences	2
Nutrition	
TOTAL	87

Source: Faculties.

Three Faculties – the Faculty of Arts (26 teachers), the Faculty of Sport (15) and the Faculty of Psychology and Education Science (15) – received the majority of foreign teachers (64.4%). Three Faculties did not receive any teachers in mobility programmes.

Chart 35 provides us with information on the participation of teachers under the framework of Erasmus mobility programmes, from foreign universities, in the period from 1998/99 to 2007/08, at the U.Porto.

In the last 10 years, 420 foreign teachers were involved in mobility programmes at the U.Porto. By reading the chart above, we clearly see that the steady growth was enhanced in the last 5 years, showing its peak in the last academic year. In the

academic year 2007/08, the percentage of foreign mobility teachers was of 4.69%, compared to the total FTE of the U.Porto in 2007/08 (1,855).

Chart 35: Academic staff mobility from foreign universities to the U.Porto, under the framework of the Erasmus programme, in the period from 1998/99 to 2007/08.

Academic year	Teachers	% of the total
1998/99	0	
1999/00	0	
2000/01	11	
2001/02	14	
2002/03	46	
2003/04	64	
2004/05	62	
2005/06	70	
2006/07	66	
2007/08	87	4.69%
TOTAL	420	

Sources: Faculties.

# 8. Foreign teachers and researchers with regular activities in the University of Porto

Chart 36 presents the information on the foreign teachers conducting regular activities in the U.Porto, at the end of 2007.

Chart 36: Foreign teachers and researchers conducting regular activities in the U.Porto, at the end of 2007

COUNTRY OF ORIGIN	Teachers/Researchers	ETI
Germany	5	4.4
Angola	7	5
Argentina	1	1
Austria	1	1
Belgium	2	2
Brazil	7	7
China	1	0.5
Colombia	1	1
Denmark	1	1
Spain	10	7.2
France	3	3
India	1	0.3
Ireland	1	1
Italy	4	3.5
Former Yugoslavia	1	1
Lebanon	1	1
Mozambique	4	2,7
United Kingdom	6	6
Romania	1	1
Russia	3	3
Switzerland	2	2
Ukraine	2	1.2
Venezuela	1	1
TOTAL COUNTRIES: 23	66	55.8

Source: Continuous Improvement Office.

This chart reveals that 66 foreign teachers and researchers conducted their activities at the U.Porto, at the end of 2007 (56 teachers and 10 researchers), in other words, 19 more than in the previous year, which shows an increase of about 40%. These

numbers correspond to 3% of the total number of regular teachers and researchers of the University of Porto, and came from 23 countries - 14 countries in Europe, 4 in the Americas, 2 in Asia, 2 in Africa and 1 from the Middle East.

The positions held by the teachers were as follows: 9 Associate Professors, 24 Assistant Professors, 14 lecturers and 9 Assistants.

Chart 37 below gives us the number of foreign teachers and researchers in the U.Porto, sorted by faculty where activities took place.

Chart 37: Foreign teachers in the University of Porto, sorted by faculties.

Faculties	Teachers	Researchers	Total
Architecture	1		1
Fine Arts	1		1
Sport			
Sciences	12	2	14
Law			
Economics	1	1	2
Engineering	3	3	6
Pharmacy			
Arts	18	1	19
Dental Medicine	1		1
Medicine	12		12
Psychology and Education Science	1		1
Biomedical Sciences	6		6
Nutrition			
Rectory		3	3
TOTAL	56	10	66

SOURCE: Continuous Improvement Office.

Four of the faculties had no regular contributions from foreign teachers or researchers. Three faculties (FLUP, FCUP and FMUP) received the majority of these teachers and researchers (68%). Of these, 36% are Assistant Professors.

# 9. Cooperation agreements with foreign universities

In chart 38 below, we have the number of Erasmus agreements signed with foreign universities.

Chart 38: Erasmus agreements in the academic year 2007/2008.

Countries	Agreements
Germany	56
Austria	5
Belgium	14
Bulgaria	3
Denmark	7
Slovakia	5
Slovenia	2
Spain	43
Estonia	3
Finland	9
France	70
Greece	5
Hungary	7
Ireland	4

Italy	45
Latvia	5
Lithuania	2
Norway	5
The Netherlands	8
Poland	18
United Kingdom	27
Czech Republic	7
Romania	14
Sweden	11
Switzerland	9
Turkey	7
TOTAL COUNTRIES: 26	393

Source: SRI.

The University of Porto has signed agreements with 393 universities from 26 European countries. The majority of these agreements (61%) were signed with universities from five countries – France (70), Germany (56), Italy (45), Spain (43) and United Kingdom (27). (For more information on the foreign partner HEIs, see Annex 3).

Chart 39: Bilateral Cooperation Agreements with foreign higher education institutions 2007/2008.

COUNTRIES	AGREEMENTS
Germany	2
Angola	1
Algeria	1
Argentina	1
Australia	1
Belgium	2
Brazil	58
Cape Verde	1
Canada	2
Chile	2
China	2
Colombia	1
Cuba	2
Slovenia	2
Spain	8
ÛSA	6
Finland	1
France	6
Georgia	1
Guinea-Bissau	2
Ireland	1
Israel	2
Italy	3
Japan	1
Lebanon	1
Macau	2
Morocco	1
Mexico	3
Mozambique	4
Oman	1
Peru	2
Poland	3
United Kingdom	1
Romania	1
Russia	2
Serbia	1
Sweden	1
Thailand	4
TOTAL COUNTRIES: 38	136

Sources: SRI and SCPLLA.

Chart 39 gives an account of the number of bilateral cooperation agreements with foreign HEIs, in force in 2007/2008.

The University of Porto has signed agreements with 136 HEIs from 38 countries in the 5 continents. The majority of these agreements (58) were established with Brazilian HEIs. (For more information on the foreign partner HEIs, see Annex 3).

Furthermore, at the end of 2007/2008, the University of Porto (chart 40) had also signed 24 co-tutele PhDs, European PhDs and double-degree diploma agreements with HEIS from 9 European countries.

Chart 40: Co-tutele, European PhD and double-degree PhD diploma agreements with foreign universities at the end of 2007/08.

COUNTRIES	Co-tutele	European PhD	Double-degree diploma	TOTAL
Belgium	1			1
Spain	1	4		5
France	9		1	10
Greece		1		1
Italy	1			1
The Netherlands	2			2
United Kingdom	2			2
Romania	1			1
Sweden		1		1
Total: Countries 9	17	6	1	24

Sources: SRI and SCPLLA.

Chart 41 summarizes the agreements established between the University of Porto and the HEIs in the world (553 agreements). The highest number (71%) is formed by ERASMUS agreements.

Chart 41: Agreements of the University of Porto: summary.

Type of agreements	Countries	HEIs with agreements		
Erasmus agreements	26	393		
Bilateral agreements	38	136		
Co-tutelage agreements	7	17		
European PhD	3	6		
Double-degree diploma agreements	1	1		
TOTAL		553		

Sources: SRI and SCPLLA.

The following tables provide us with a qualitative overview of the universities with which we have agreements, based on their position in the *Academic Ranking of World Universities (ARWU) of the Shangai Jiao Tong University*. For additional information on the foreign HEIs in the top positions of the ranking, which the University of Porto has partnerships with, see Annex 3.

The University of Porto has signed 28 agreements with Universities ranking among the Top 100 in the world (Chart 42), although the majority of these agreements (78%) fall under the Erasmus mobility programmes.

Chart 42: Number of agreements with HEIs in the top 100 positions in the world, according to the ARWU 2008 prepared by the Shangai Jiao Tong University

	POSITION	1-5	6-10	11-25	26-50	51-100	TOTAL
Bilateral Cooperation		1				3	4
Co-tutelage PhD					1		1
Joint-degree diploma							
European PhD						1	1
Erasmus			1	1	5	15	22
	TOTAL	1	1	1	6	19	28

Sources: SRI, SCPLLA and the Shangai Jiao Tong University.

The University of Porto (Chart 43) signed 93 agreements (15 more than in the previous year) with Universities ranking in the Top 100 in Europe, although the majority of these agreements (86% - in the previous year 94%) fall under the Erasmus mobility programmes.

Chart 43: Number of agreements with HEI in the first 100 positions in Europe, according to the ARWU 2008 prepared by the Shangai Jiao Tong University

	POSITION	1-5	6-10	11-25	26-50	51-100	TOTAL
Bilateral Cooperation				2	1	4	7
Co-tutele PhD			1		1	3	5
Double-degree diploma							
European PhD				1			1
Erasmus		3	4	9	26	38	80
	TOTAL	3	5	12	28	45	93

Sources: SRI and teh Shangai Jiao Tong University.

With regard to these, 7 have been signed with HEIs ranking among the top 10 universities in the ranking, 9 HEIs ranking among the top 25 universities and 26 with HEIs ranking among the top 50. Therefore, this means that at the level of student mobility, we have established agreements with a significant number of reputable European universities. The same can not be said with regard to the remaining types of agreements — bilateral, co-tutele PhDs, European PhDs and joint/multiple programmes. Nevertheless, comparing to the previous year, we have more than doubled (from 5 to 13) the number of agreements in these categories, with HEIs positioned in the top 100 universities in the ranking.

Chart 44 lists the number of Ibero-American universities positioned in the *Ibero-American Ranking of Research Institutions* (RI<sup>3)</sup>, with which the University of Porto has cooperation agreements.

Chart 44: Agreements with universities in the RI<sup>3</sup>\* Ranking.

	POSITIONS	Top 5	6 - 10	11 to 25	26 to 50	51 to 100	Total
Argentina				1			1
Brazil		1	2	3	1	8	15
Chile					1		1
Mexico		1					1
	TOTAL	2	2	4	2	8	18

<sup>\*</sup> Positions in the last ranking (2005).

Sources: SCPLLA and RI3.

18 of the agreements were signed with universities occupying a place among the top 100 in the ranking. We must also add that 8 of these agreements were signed with universities ranking among the top 25.

# 10. University consortia to apply to European programmes

In the academic year 2007/08, the University has been committed to preparing applications for Higher Education support programmes funded by the European Commission. In light of this, the U.Porto prepared the applications or participated in applications prepared by other universities and university consortia, for various European programmes, namely the Erasmus Mundus External Cooperation Window (EMECW), the Erasmus Mundus, the ALFA III Programme, the Edulink Programme and the Tempus IV Programme. What follows is a description of the participation and the respective results.

#### 10.1. Erasmus Mundus External Cooperation Window (EMECW)

The Erasmus Mundus External Cooperation Window is a programme designed to foster institutional cooperation in the field of Higher Education between the European Union and Third Countries, through a mobility scheme addressing pre-graduate and post-graduate students, academic staff and researchers.

The University of Porto has participated in 2 EMECW programmes for Latin America, a region of strategic importance for the University: one of the programmes is for Brazil - the University was responsible for this application, and the other is for Mexico, as part of a university consortium coordinated by the University of Groningen, in the Netherlands. Both applications were successful. In 2008, the University of Porto also applied for an EMECW programme for Africa, in a consortium led by the University of Bordeaux IV, but this application was not

successful.

#### Brazil: EURO BRAZILIAN WINDOWS Project

The University of Porto coordinated a consortium involving 10 European universities and 10 Brazilian universities. This consortium applied for one of the 3 funding programmes of the European Commission, to the global amount of €9.3 million, i.e., a sum of €3.1 million for each winning consortium, designed to foster the relations between the European Union and Brazil. The priority areas focused in the application were Engineering/Technologies, Social Sciences and Education. The University of Porto was one of the 3 winning consortia (the other two were the Technische Universität München and the University of Coimbra).

This consortium was formed by the following universities:

EUROPE: University of Porto (Consortium Coordinator), Universitat Politècnica de Catalunya, Spain, Universidad Politécnica de Valencia, Spain, Universidad de Deusto, Spain, University of Ghent, Belgium, Technische Universiteit Eindhoven, Netherlands, Institut National Polytechnique de Grenoble, France, Technische Universität Dresden, Lunds Universitet, Sweden, and the Technical University of Budapest, Hungary.

BRAZIL: Universidade Federal de Pernambuco, University of São Paulo, Universidade Federal de Rio de Janeiro, Universidade Federal de Rio Grande do Sul, Universidade Federal de Minas Gerais, Universidade Federal de Santa Catarina, Universidade Estadual de Campinas, Universidade Federal de Mato Grosso, Universidade Federal de Amazonas and Universidade Federal de Pará.

The participation of the U. Porto as consortium coordinator has two key significances: (i) On the one hand, it makes its statement as a privileged partner in the relations between the HEIs in the European Union and in Brazil, thus projecting the U.Porto image near the reputable European universities; (ii) On the other hand, it strengthens the position of the U.Porto as the key-point in the internationalization strategy of the Brazilian HEIs near their European counterpart institutions.

This cooperation programme will provide 200 mobility flows covering pre-graduate and post-graduate students, post-doctorate researchers and academic staff, 70% of which will be awarded to the Brazilian HEIs and the remaining 30% to the European HEIs.

#### **Mexico: External Cooperation Window for México**

The University of Porto is part of the winning consortium – which included 9 European universities and 11 Mexican universities – that applied to this European Commission programme, to the amount of €4 million, designed to foster the relations between the European Union and Mexico.

This consortium was formed by the following universities:

EUROPE: University of Groningen and Universidad de Deusto (project Coordinators), Technische Universität München, Universidad Autónoma de Madrid, Universitat Politècnica de Catalunya, Université des Sciences et Technologies de Lille, Jagiellonian University of Krakow, University of Porto, Università degli Studi di Padova.

MEXICO: Universidad Nacional Autónoma de México, Instituto Tecnológico y de Estudios Superiores de Monterrey, Universidad Veracruzana, Universidad de Guadalajara, Universidad Autónoma de Chiapas, Benemérita Universidad Autónoma de Puebla, Universidad Iberoamericana, Universidad Autónoma Metropolitana, Universidad Autónoma de Nuevo León, Universidad Autónoma de Baja California, Universidad Autónoma del Estado de Hidalgo.

The participation of the U.Porto in this winning consortium that sent the only application to the call for proposal for Lot 18 has two outcomes: (i) On the one hand, it strengthens the relations with reputable European universities, for example the universities that form the consortium; (ii) On the other hand, it allows us to develop and deepen the relations with a country (Mexico) and with a region (Latin America), so very important for the future, and with universities which up until now had no relations established with the University of Porto. In effect, the U.Porto has only very recently established cooperation relations with the main Mexican university, which is also one of the most important ones in Latin America: the Universidad Nacional Autónoma de México. Therefore, we expect the first flow of Mexican students to come to the University of Porto, supported by the 200 mobility scholarships provided by the programme for the next 2 years, which we hope will increase in the near future.

## **Africa: AFCARE Project**

The AFCARE **Project** proposed to organize 250 student mobility flows in a 3-year period, enabling these students to take part in master programmes in European universities in the consortium, in specialized areas not covered by the African

universities included in the consortium. The aim of this application was also to provide the European training programmes with an international scope. The project also antecipated 60 academic staff mobility flows, the results of which would spring from the experience aquired in the universities of origin and in the host universities.

This Erasmus Mundus External Cooperation Window application was steered by the University of Bordeau IV, and included the following universities:

EUROPE: Université Montesquieu-Bordeaux IV (France), Universitat Bayreuth (Germany), Aristoteleio Panepistimio Thessalonikis (Greece), Università degli Studi di Bari (Italy), Universidade do Porto (Portugal), Universidad Rey Juan Carlos (Madrid, Spain), Universidad Pontificia Comillas (Madrid, Spain) and the University of East Anglia (United Kingdom).

AFRICA: Yaoundé 2 University (Cameroon), Omar Bongo University (Gabon), University of Burundi (Burundi), Pedagogical University of Mozambique, University Sonfonia Conakry (Guinea), University of Dakar (Senegal), University of Cape Verde, Ibero-American University (Dominican Republic) and the Quisqueya University (Haiti).

However, this application was not successful. In fact, it was rejected during the 1<sup>st</sup> phase of evaluation.

## 10.2. Erasmus Mundus / Action 4 programme: Enhancing Attractiveness

In the scope of this programme, one of the University of Porto projects was approved: the EACOVIROE - Enhance the Attractivity in COmupter VIsion and RObotics in Europe Project, designed to foster the attractiveness in the area of "Computer Vision and Robotics" in Europe, for the following target public: Asian students and European universities (quality handbook) and European students (job opportunities).

Participants in the consortium are as follows:

Coordination: Université de Bourgogne (France)

Partners: Ecole Centrale Nantes (France), Université Jean Monnet Saint Etienne (France), INSA de Rouen, (France), Universidad de Girona (Spain), Universidad de Granada (Spain), Heriot Watt University (Scotland), Warsaw University of Technology (Poland), University of Genova (Italy), University of Joeensu (Finland), Gjovivk University College (Norway), University of Iceland (Iceland), Mayence, Frank Boochs, (Germany), Technische Universitaet Graz (Austria), University of Rousse, (Bulgaria), University of Porto (Portugal), Technical University Kosice,

(Slovakia) and the Center for Machine Perception (Czech Republic).

The U.Porto participated through the FEUP, and Professor Armando Padilha, with an estimated project length of 3 years, funded to the amount of 652,700 Euros. There was only one evaluation phase and the project was approved.

## 10.3. ALFA III Programme

This programme aims to contribute towards the development of the Higher Education in Latin America through the cooperation between the European Union and the Latin American countries, and thus contribute to the economic and social progress in the region.

As a participant, the University of Porto applied to 5 ALFA III projects; in one of these projects, in charge of the coordination and in the remaining four as associate in university consortia. In the first case, the proposal was successful. However, in the other four, the projects were rejected. The participation in the ALFA III programme was as follows:

## Alfa Observatory Project (Component III Accompanying Measures)

Coordinated by the University of Porto, and headed by Professor Alberto Sereno, this project makes full use of the experience provided by the Alban Office and aims to: (i) establish synergies between the components I and II projects, setting up an observatory at the University of Porto with antennas in Uruguai (AUGM – Montevideo Group of Associated Universities), Mexico (UDUAL – Associations of Universities from Latin America and the Caribbean), Brazil (FAUBAI – Forum of Advisory to Brazilian Universities for International Affairs) and Colombia (ASCUN – Colombia Associated Universities), and also contact points in the Universidad de Buenos Aires and the Universidade Nacional do Litoral in Santa Fé, Argentina, in the Pontifícia Universidade Católica do Peru, Lima, Peru, in the Universidade Nacional de Assunção, Paraguai and in the Universidade Federal de Pernambuco, Brazil; (ii) provide methodological support to these projects; and (iii) collect and disseminate the best practices of each of the projects.

This project, expected to last 48 months and with a funding of €2.5 million, has passed the three evaluation phases and has been selected.

# Campus Virtual Latinoamericano Project (CAVILA) [Latio-American Virtual Campus]

The consortium includes the Universidad de Extremadura, España (Project Coordinator), the Universidad de Guadalajara, Mexico (Technical Coordination), the Universidad Nacional de La Plata, Argentina, the Universidad Nacional de Córdoba, Argentina, the Universidad Nacional de Entre Ríos, Argentina, the Universidade Federal de Santa Maria, Brazil, the Universidad de Santiago de Chile, and the Universidade do Porto.

The aim is to create a Latin-American Virtual Campus (CAVILA), the purpose of which is to train the future "workers of knowledge", committed, as citizens, to human rights and peace, to solving regional problems and to business innovation. It involves the setting up of a virtual higher education space, with quality academic and research staff, made possible through the various scientific and technical contributions from each university.

The capital contribution of the European Commission amounts to 1,236,038 Euros. The application qualified in the first evaluation phase, but was not approved by Brussels.

Then came the invitation to the University of Porto to be part of the Latin American Associated Universities (AULA) together with the following universities: Universidad de Extremadura (España), Universidade do Porto (Portugal), Universidad de Guadalajara (Mexico), Universidade Federal de Santa Maria (Brazil), Universidad Nacional de Córdoba (Argentina), Universidad Nacional de La Plata (Argentina), Universidad Nacional de Entre Ríos (Argentina) and the Universidad de Santiago de Chile (Chile).

# CONVERGENCIA Project: Convergencia de la Educación Superior en América Latina y su articulación con el EEES

This project, coordinated by the Universidad Nacional de Tres de Febrero, in Buenos Aires, Argentina, aims to: (i) develop work and studies to contribute to intersect the national university systems of the Mercosul, of the Andean Community, of Central America and latina América, identifying assymetries in higher education and drawing policies and strategic actions; (ii) to promote the intersection of the different associations and inter-university networks; (iii) analyse, in a joint effort with the

European universities, the policies, good practices and positive experiences under the framework of the ESHE – European Space for Higher Education (Bologna Process); and (*iv*) analyse the possible ways of articulation with the Latin American higher education to build a Latin-American Space for Higher Education.

This project did not receive any funding from the European Commission but resulted in a proposal put forward to build a network of 62 university institutions: 46 in Latin-American countries and 16 in 7 European countries.

# PROTERMI Project: Promoción de la Tercera Misión en las Universidades Latinoamericanas

This project is coordinated by the Institute of Education, University of London, United Kingdom, involving the following universities: Universidad Politécnica de Valencia, Spain, Universidade do Porto, Portugal, Universidad Nacional de Tres de Febrero, Argentina, Pontifícia Universidade Católica do Rio Grande do Sul, Brazil, Universidad Técnica Federico Santa Maria, Chile, Universidad Autónoma del Caribe, Colombia, Universidad Tecnológica Centroamericana, Honduras, Universidad de Guadalajara, Mexico, Pontificia Universidad Católica de Perú, Peru. The associate partner for this project is the Consejo Nacional de Rectores, Costa Rica.

The project aims to: (i) Contribute to setting up a common space for higher education between Latin-America and Europe, also linked to issues related to the third mission of universities; (ii) foster the exchange of experiences between Latin-America and Europe in issues related to the third mission of universities; (iii) Strengthening the relations between universities and the surronding socio-economic context by promoting the third mission of universities.

The estimate was for it to last 36 months, with an European Commission funding of 842,485 Euros. However, the project was not funded.

#### Project - Dirección de Educación a Distancia

This project is coordinated by the Universidad Nacional de La Plata de Argentina and includes the Universidade da Extremadura, Spain, the Universidade do Porto, Portugal, the Universidad Nacional Autónoma de México, the Universidad Nacional de San Marcos, Peru, and other universities in Paraguai and Chile.

It aims to train distance learning tutors, as there is no conceptual, and especially no methodological, framework representing the tutorial support field needed in the areas

of selection, tasks, competencies, training and evaluation. Once again, the project was not funded by the European Commission.

## 10.4. Edulink Programme

## **ACP - EU Cooperation Programme in Higher Education**

The University of Porto sent five applications to this Cooperation programme for Higher Education between the European Union and African, Caribbean and Pacific countries. One of the applications was approved, three were rejected and one is currently being evaluated. In fact, there were four applications because one of them, which was not approved in a first call for proposal, was reorganized and presented in a second call for proposals.

**Project -** A name for Health – A Network Approach in Medical Education in the Pursuit of Quality of Higher Education Institutions and Health Systems.

This application was presented by the University of Porto and Professora Maria Amélia Ferreira of the Faculty of Medicine, and aims to improve health through medical education.

The consortium involved the following universities: Universidade do Porto (Consortium Coordinator), Portugal, Universidade Agostinho Neto, Luanda, Angola, Universidade Eduardo Mondlane, Maputo, Mozambique, and the Universidade Lurio, Nampula, Mozambique.

The application passed the first evaluation phase, but was later rejected. Although it was carefully planned, the evaluation of the concept note did not meet the minimum requirements to be accepted in the subsequent phase. Nevertheless, it turned out to be a useful experience for future applications.

**Project -** A Name for Health (II) – A Network Approach in Medical Education in the Pursuit of Quality of Higher Education Institutions and Health Systems.

Presented by the University of Porto (Faculty of Medicine), this project aims to improve health through medical education. This project is the reformulation of the application above, and involves the following universities: Faculty of Medicine of the Universidade do Porto (Consortium Coordinator), Universidade Agostinho Neto, Luanda, Angola, Universidade Eduardo Mondlane, Maputo, Mozambique, and Universidade Lurio, Nampula, Mozambique.

The European Commission funding is for the amount of 490,0000 Euros and the consortium activies are expected to last 36 months. This application passed all three evaluation phases and was approved.

LICO Project – Lusophone Interinstitutional Cooperation for Graduation, Postgraduation and Research between the Universidade do Porto, the Universidade Pedagógica de Moçambique, the Universidade Eduardo Mondlane, Moçambique and the Universidade de Cabo Verde.

This application passed the first evaluation phase, but was later rejected – competition was strong and we knew our application was not. The evaluation of the concept note was 2.5 points below the minimum score required, which, considering the hasty preparation involved, was not a poor result.

**Project - Healthy Africa Network (HAN)**: Consortium of human growth and development, physical activity, and health research.

This project was coordinated by the University of Porto, and aimed to set up a network for the research/promotion of programmes and campaigns to stimulate normal growth, promote health and physical activity linked to health and healthy eating habits.

This consortium involved the following universities: Universidade do Porto (Portugal), Universidade Pedagógica de Moçambique, Universidade de Cabo Verde, Universidade Eduardo Mondlane (Mozambique), Université de Kinshasa (Democratic Republic of the Congo), University of Cape Town (South Africa), Kenyatta University (Kenya), Katolieke Universiteit Leuven (Belgium).

The application passed the two first evaluation phases, and the selection committee recommended the pre-selection of the Concept Note. Nevertheless, the application was not approved in the 3<sup>rd</sup> phase.

#### ACP – Information and Communication Technologies [ACP-ICT] Programme

Action title: New technologies of information and comunication as instruments for development.

A programme headed by the University of Porto, namely through Professor José Paiva of the FBAUP, with the participation of institutions in Cape Verde and Mozambique.

Objective: Make Information and Communication Technologies accessible and user-friendly to the info-excluded groups involved in sustainable development processes. The programme is estimated to last 24 months, and the funding requested from the European Commission is of about 500,000 Euros. This application is still under assessment.

#### 10.5. TEMPUS IV Programme

**Projecto MODEP:** Modernisation et DEveloppement de cours Professionalisés.

Benefiting countries: Moldavia, Belarus, Ukraine and Morocco.

Coordinator: Université d'Auvergne Clermont 1, France.

Partners: FR IUP "Management et Gestion des Entreprises", Université Ouest de Timisoara, Romania, Université "Ovidius" de Constanta, Romania, Université Francis Skorina de Gomel, Belarus, Université Bielorusse-Russe - Institut de Formation Professionnelle, Belarus, Université de Commerce et d'Économie de Kiev, Ukraine, Université d'Économie et de Commerce de Donetsk, Ukraine, Académie de Commerce de Lviv, Ukraine, Université de Poltava, Ukraine, Université de Mariupol, Ukraine, Université Chouaib Doukkali, Morocco; Académie d'Études Économiques de Moldavie, Moldavia, Université de Cahul "B.P. Hasdeu", Moldavia, Université de Balti "A. Russo", Moldavia, Confédération Générales des Petites et Moyennes Entreprises Région Auvergne (CGPME), France, University of Porto, is in charge of this project. The project was also approved by the European Commission.

## 10.6. Summary

Chart 45 presents a summary of the projects submitted and those approved in each programme.

Overall, the University of Porto submitted or applied to 15 European programmes, and was successful in 6 of them. Of these six, it is responsible for coordinating 3 University Consortia: 1 for the EMECW, 1 for the ALFA III and 1 for the EDULINK programmes. As part of the activities of these three consortia, coordinated by the University of Porto, the university will be in charge of managing the funding to the global amount of 6,090,000 Euros.

Chart 45: Projects submitted and approved in the European programmes.

Programme	Projects approved	Projects rejected	Under analysis	Total
EMECW	2	1		3
ERASMUS MUNDUS	1			1
ALFA III	1	4		5
EDULINK	1	3	1	5
TEMPUS IV	1	0		1
TOTAL	6	8	1	15

## 11. Joint training programmes with foreign universities

Chart 46 addresses the involvement of the University of Porto in training programmes – with or without a joint degree – with foreign reputable universities. For more detailed information, see Annex 4. Some of these projects are still being prepared. Other have already been created but they were not operational in the academic year 2007/08 (see annex).

Chart 46: Training programmes – with or without joint degrees – with foreign universities.

PROGRAMMES	Post-graduate Specialization	Integrated Masters	Masters	PhD	TOTAL
Fine Arts				1 <sup>(a,e)</sup>	1
Sport				1 <sup>(b)</sup>	1
Economic				1 <sup>(a,e)</sup>	1
Engineering		1 <sup>(c)</sup>	1 <sup>(b)</sup>	7 <sup>(d,e)</sup>	9
Arts	1				1
Medicine	1		1		2
Psychology and Educ. Science			2 <sup>(b)</sup>		2
TOTAL	2	1	4	<b>8</b> <sup>(f)</sup>	15 <sup>(f)</sup>

<sup>(</sup>a) A joint degree is expected to be granted solely between Portuguese universities; (b) Without a joint degree; (c) With joint degree; (d) 4 of these programmes are expected to grant joint degrees solely between Portuguese universities and 4 of them are also expected to grant a joint degree with a foreign university - Carnegie Mellon University; (e) One single programme - "Digital Media" - with the following participants: from the University of Porto, the FBAUP, the FEP and the FEUP. Therefore, the total number of PhD programmes is not 11 but 9, and the total number of programmes is not 17 but 15; (f) See note (e). Source: Faculties.

Currently, the University also participates in 15 joint training programmes with foreign universities: 7 PhD or 3<sup>rd</sup> cycle programmes, 1 advanced studies programme, at 3<sup>rd</sup> cycle level, and 5 Masters and Integrated Masters programmes. Eight of these programmes are covered by the protocols signed between the Portuguese State and the MIT (Massachusetts Institute of Technology), the CMU (Carnegie Mellon University) and the UTA (University of Texas, Austin). One of these programmes – signed with the UTA – is still in a preparatory phase.

These protocols signed between the Portuguese State, the University of Porto and the North-American universities also involve other Portuguese universities: the

Universidade de Lisboa, the Universidade Técnica de Lisboa and the Universidade do Minho, in the protocol with the MIT; the Universidade do Minho and the Universidade de Aveiro, in the protocol with the CMU; and the Universidade Nova de Lisboa, in the protocol with the University of Texas, Austin. Seven of these programmes are expected to grant joint/multiple degrees diplomas: 2 joint degrees and 1 joint diploma of advanced studies – only between the participating Portuguese universities – for the programmes with the MIT; 1 joint degree – only between the participating Portuguese universities - for the programmes with the UTA; and 4 joint degrees – between the Portuguese universities and the North-American university – for the programme with the Carnegie Mellon University.

In addition to the said programmes, the Faculty of Sport also offers, for many years now, a PhD programme with its counterpart in the Universidade de São Paulo and the Universidade Federal do Rio Grande do Sul, Brazil, which is not expected to grant a joint degree. In a future amendment to the agreement, we expect the programme to grant this multiple degree to students of all three universities.

As the result of an agreement signed between the FEUP and the *École Nationale de Ponts et Chaussées*, France, the University of Porto also takes part in an Integrated Masters programme, which is expected to grant the double degree to the students.

The FPCEUP participateds in two international Masters programmes, one being an European Masters and the other is the first Masters from the University of Porto approved under the scope of the Erasmus Mundus applications. This Masters started in September 2007.

The FMUP also organized a Masters programme in cooperation with the University of Barcelona.

Finally, the FLUP and the FMUP also participated in post-graduate specialization courses with foreign universities.

Only 7 faculties in the University of Porto took part in the joint programmes with foreign universities – FADEUP, FBAUP, FEP, FEUP, FLUP, FMUP and FPCEUP.

Chart 47: Other joint training programmes: Co-tutelage PhDs and European PhDs.

PROGRAMMES	Co-tutele	European PhDs	TOTAL
Architecture	1	•	1
Sciences	4	2	6
Law		1	1
Economics	2	1	3
Engineering	4	3	7

Pharmacy	1		1
ICBAS	2		2
Arts	7		7
TOTAL	21	7	28

Chart 47 deals with other joint training programmes involving the University of Porto: co-tutele PhDs and European PhDs.

In the academic year 2007/08, the University of Porto offered 21 co-tutele PhD programmes and 7 European PhD programmes, involving 8 Faculties. These programmes were established with 10 countries (see Annex 4): France - 12 programmes, Spain - 6, Netherlands and Italy - 2, and Belgium, Canada, Greece, United Kingdom, Romania and Sweden all with 1 programme.

## 12. Scientific papers

Chart 48 shows the number of scientific papers indexed in the *Web of Science*, sorted by Faculty, in 2007, taking into consideration: the total number of scientific papers, including those that are not affiliated to the University of Porto; the number of scientific papers without affiliation to the University of Porto; the percentage of scientific papers that do not mention the affiliation to the University of Porto; and the total number of scientific papers with the proper reference to the University of Porto.

Chart 48: ISI/Web of Science Scientific Papers of the University of Porto, in 2007: Numbers sorted by Faculty.

FACULTIES	Total	Without affiliation	% of articles without affiliation	With proper reference to the U.Porto
FAUP	-	-	-	•
FBAUP	-	-	-	-
FADEUP	30	-	-	30
FCNAUP	32	1	3%	31
FCUP	410	32	8%	378
FDUP	2	-	-	2
FEP	32	2	6%	30
FEUP	287	12	4%	275
FFUP	190	14	7%	176
FLUP	1	1	100%	-
FMDUP	5	-	-	5
FMUP	479	229	48%	250
FPCEUP	25	1	4%	24
ICBAS	313	114	36%	199
TOTAL	1721	417	24%	1304

Source: Continuous Improvement Office.

With regard to 2006, there was an increase (168 more papers, i.e., an increase of 10.8%) in the total number of scientific papers, and an increase of scientific papers (92, i.e. 28.3%) whose authors did not mention the affiliation to the University of Porto.

The faculty with highest number of scientific papers was the Faculty of Medicine, with 27.8% of the total number of scientific papers submitted by the U.Porto. However, when we take into account the scientific papers with proper affiliation only, the Faculty of Sciences takes the leading position (21.1%). Four faculties of the University of Porto – FMUP, FCUP, ICBAS and FEUP – were responsible for 1,489 scientific papers, in other words, for 86.5% of all the scientific production of the University of Porto.

Two of the faculties - FAUP and FBAUP – have no scientific production and three of the faculties show a very low production – FLUP, FDUP and FMDUP.

Chart 49 lists the number of scientific papers indexed in the *Web of Science*, sorted by Faculty, for the period 2001 to 2007, showing the total production indicators (with and without reference to the U.Porto).

Chart 49: ISI/Web of Science scientific papers of the University of Porto: Numbers sorted by Faculty, between 2001 and 2007.

	2001	2002	2003	2004	2005	2006	2007	TOTAL
FAUP	1	-	-	-	-	-	-	1
FBAUP	-	-	-	-	-	-	-	0
FADEUP	6	13	10	13	14 (1)	23 (2)	30	109 (3)
FCNAUP	2	7	8	17	22	24 (2)	32 (1)	112 (3)
FCUP	237	200	246 (19)*	284 (22)	348 (32)	406 (38)	410 (32)	2131 (143)
FDUP	-	-	-	-	-	-	2	2
FEP	12	11	20(2)	27 (5)	24 (3)	47 (3)	32 (2)	173 (15)
FEUP	151	160	220 (27)	285 (27)	305 (23)	319 (23)	287 (12)	1727 (112)
FFUP	64	64	90 (14)	121 (8)	128 (10)	142 (10)	190 (14)	799 (56)
FLUP	3	2	2	5	3	7	1(1)	23 (1)
FMDUP	9	2	1	11 (2)	5	6	5	39 (2)
FMUP	192	249	230 (116)	268 (147)	330 (181)	335 (129)	479 (229)	2083 (802)
FPCEUP	12	7	6	8 (1)	13	17 (1)	25 (1)	88 (3)
ICBAS	107	135	201 (64)	178 (47)	215 (79)	280 (96)	313 (114)	1408 (400)
	796 (220)	828 (244)	1046 (293)	1179 (282)	1374 (353)	1553 (325)	1721 (417)	8695 (1540)

<sup>\*</sup> In brackets, the number of articles ommitting the reference to the U.Porto. Source: Continuous Improvement Office.

The Faculty of Sciences is also the faculty with the largest aggregated production, although the Faculty of Medicine has come close in 2007.

The faculties showing a higher production compared to the previous year were, in this order: FPCEUP (47%), FMUP (43%), FFUP (33.8%), FCNAUP (33.3%), and FADEUP (30.4%).

Chart 50: Portuguese and University of Porto articles indexed in the Web of Science from 1998 to 2007 (Sources: Science Citation Index Expanded, Social Sciences Citation Index and Arts & Humanities Citation Index).

YEARS	PORTUGAL	U.Porto (1)	U.Porto (2)	U.Porto TOTAL	% U.Porto	% U.Porto w/o reference (4)	Annual growth - U.Porto (5)
1998	2896	350	217	567	19.6	38.3	
1999	3495	487	190	677	19.4	28.1	19.4
2000	3592	482	214	696	19.4	30.7	2.8
2001	4188	576	220	796	19.0	27.6	14.4
2002	4288	584	244	828	19.3	29.5	4.0
2003	5491	753	293	1046	19.0	28.0	26.3

2004	5612	897	282	1179	21.0	23.9	12.7
2005	6635	1021	353	1374	20.7	25.7	16.5
2006	7639	1228	325	1553	20.3	20.9	13.0
2007	7700	1304	417	1721	22.4	24.2	10.8
TOTAL	51536	7682	2755	10437	X = 20	X = 27.7	X = 13.3

<sup>(</sup>i) U.Porto with proper affiliation; (i) U.Porto without proper affiliation; (ii) Percentage of U.Porto articles in the national total, including those ommitting the reference to the U.Porto; (ii) Percentage of articles ommitting the reference to the U.Porto; (iii) Total no. of U.Porto articles with and without proper affiliation. Source: Continuous Improvement Office.

Chart 50 lists the number of scientific papers of the University of Porto and of Portugal indexed in the *Web of Science*, from 1998 to 2007.

In 2007, the University of Porto confirmed the tendency already visible in the previous years of being the Portuguese university with the highest number of scientific papers circulating at international level, with 1,721 scientific papers, corresponding to 22.4% of all WoS scientific papers in the country. If we take into account the scientific papers with proper affiliation only, these numbers will correspond to, respectively, 1,304 and 16.9%, thus confirming the U.Porto as the largest scientific producer in our country.

In fact, even though the number of scientific papers without proper affiliation has diminished in the last 10 years (from 38.3% in 1998 to 24.2% in 2007), in other words, papers that make no reference to the U.Porto, the annual average number in the last 10 years is still quite high (27.7%). Looking at this data from another angle to understand better the scope of these numbers, we can say that the 2,755 papers that, in the last 10 years, were not credited to the U.Porto as they were not properly affiliated, corresponds to 3 years and 7 months of work of all the researchers that mentioned the affiliation to the University of Porto in their scientific papers.

Furthermore, we must comment on the increase of the University of Porto scientific production, which came to 10.8% last year and stood at 13.3% in the last 10 years. In terms of impact that these scientific papers have (Chart 51), the University of Porto needs to improve if it aims to make a statement as a "research university". The fact is, it has been successful in doing so.

Chart 51: Positions of the main Portuguese universities based on the criterion "Weighted average impact factor" of the RI3: Positions in the ranking in the last 15 years, and in the last year.

INSTITUTION	RI <sup>3</sup> Position	FIMP (1995 to 2005)	FIMP in 2005	2005*Position
Universidade Aveiro	77 <sup>th</sup>	1.022	1.057	224 <sup>th</sup>
Universidade Nova (Monte Caparica)	246 <sup>th</sup>	0.936	1.043	267 <sup>th</sup>
UTL	248 <sup>th</sup>	0.934	1.055	230 <sup>th</sup>
Uni. Minho (Braga)	254 <sup>th</sup>	0.93	0.994	436 <sup>th</sup>
UPorto	280 <sup>th</sup>	0.921	1.06	209 <sup>th</sup>

Uni. Lisboa	357 <sup>th</sup>	0.888	1.032	303 <sup>rd</sup>
Uni. Coimbra	423 <sup>rd</sup>	0.87	1.03	309 <sup>th</sup>
Uni. Minho (Braga)	273 <sup>rd</sup>	0.971	0.994	436 <sup>th</sup>

<sup>\*</sup> If the classification relates to the last year of evaluation (2005).

In effect, the weighted average impact factor of the scientific papers of the University of Porto was of 0.921 for the period 1995 to 2005, and of 1.06 in 2005 (last year of evaluation in this ranking – the RI<sup>3</sup>). That is, from 280<sup>th</sup> in the evaluation relating to the last 10 years, we have climbed to the 209th in the 2005 evaluation, ahead of the other Portuguese universities. This goes to show that the University of Porto is the best Portuguese university in terms of scientific production. In other words, if the University of Porto was already the Portuguese university with the highest number of scientific papers in the last years, now it shows the highest average impact factor in terms of scientific production, despite its size and the eclectic selection of study fields offered in the largest Portuguese university. Whilst this influences favourably the total number of scientific papers, it also reflects, adversely, on the quality of the scientific papers, something seen in all major universities. Note that when we take into consideration the quantity of the scientific production, all large Ibero-American universities and research institutions ranking in the first positions decrease when we consider the impact factor of these scientific papers. This is visible in chart 52, with the positions of the first 25 universities and research centres in the RI<sup>3</sup>, in 2005, that ranks the impact factor of scientific papers.

The chart shows that the University of Porto seems to be consolidating its position as one of the five best universities in Ibero-America, in terms of scientific production –  $10^{th}$  position, among the universities in the number of scientific papers, and the  $4^{th}$  among those best positioned with regard to the quality of scientific papers, leading to the weighted average impact factor of the scientific papers (it is outrun only by the Universidad de Barcelona, the Universidad Autónoma de Barcelona and the Universidad de Valencia). It seems only natural than that the U.Porto aims to conquer its space among the top 5 universities in the RI<sup>3</sup> for 2011.

Chart 52: Scientific production of the RI<sup>3</sup> universities, in 2005: ranking of the overall production, weighted average impact factor (FIMP) and FIMP ranking.

University/Research Institute	Ranking overall production (2005)	FIMP (2005)	FIMP Ranking (2005)
Consejo Superior Investigaciones Cientificas (Madrid)	1 <sup>st</sup>	1.126	108 <sup>th</sup>
Universidade de São Paulo	$2^{\rm nd}$	1.008	383 <sup>rd</sup>
Universidade Nacional Autónoma do México	$3^{\rm rd}$	1.004	396 <sup>th</sup>
Universidade de Barcelona	4th	1.095	147 <sup>th</sup>
Universidade Estadual de Campinas	5 <sup>th</sup>	1.011	373 <sup>rd</sup>
Universidade Complutense de Madrid	$6^{ m th}$	1.034	293 <sup>rd</sup>
Universidade Federal do Rio Janeiro	$7^{\mathrm{th}}$	0.988	459 <sup>th</sup>

Universidade Autónoma de Barcelona	8 <sup>th</sup>	1.091	154 <sup>th</sup>
Universidade de Valência	9 <sup>th</sup>	1.091	155 <sup>th</sup>
Universidade Estadual Paulista	10 <sup>th</sup>	0.952	567 <sup>th</sup>
Universidade do Porto	11 <sup>th</sup>	1.06	209 <sup>th</sup>
Universidade Autónoma de Madrid	12 <sup>th</sup>	1.052	243 <sup>rd</sup>
Universidade de Buenos Aires	13 <sup>th</sup>	1.013	362 <sup>nd</sup>
Universidade Federal do Rio Grande do Sul	14 <sup>th</sup>	0.98	487 <sup>th</sup>
Universidade de Granada	15 <sup>th</sup>	0.983	469 <sup>th</sup>
Universidade de Chile (Santiago de Chile)	16 <sup>th</sup>	0.995	432 <sup>nd</sup>
Universidade de Santiago de Compostela	17 <sup>th</sup>	1.043	270 <sup>th</sup>
Hospital Clínico e Provincial de Barcelona	18 <sup>th</sup>	1.156	73 <sup>rd</sup>
Universidade Técnica de Lisboa	19 <sup>th</sup>	1.055	230 <sup>th</sup>
Universidade Federal de Minas Gerais	20 <sup>th</sup>	0.992	444 <sup>th</sup>
Universidade Politécnica de Catalunha (Barcelona)	21 <sup>s</sup>	1	408 <sup>th</sup>
Universidade de Sevilha	22 <sup>nd</sup>	1.024	330 <sup>th</sup>
Universidade Federal de São Paulo	23 <sup>rd</sup>	1.004	399 <sup>th</sup>
Universidade de Saragoça	24 <sup>th</sup>	1.039	278 <sup>th</sup>
Universidade do País Vasco	25 <sup>th</sup>	1.047	255 <sup>th</sup>

However, this is all at regional level, in the Ibero-American space. If the University of Porto aims to take a stand internationally as a "research university", it has to increase the average impact factor of its scientific papers to more than 1.20, the threshold limit that places the impact of an university above or below the world average (See *Downsizing and specialising: the university model for the 21<sup>st</sup> Century? In: Science and Technology Indicators 2004. The latest data on Europe's R&D performance - ftp://ftp.cordis.europa.eu/pub/indicators/docs/3rd\_report\_snaps10.pdf)*.

## 13. Organization of international scientific conferences

Chart 53 focuses on the organization of international scientific conferences, in 2007, by the U.Porto. For more detailed information, see Annex 5.

Chart 53: Organization of international scientific conferences in 2007.

	Iberian	Lusophone	Ibero-American	International*	European	World**	TOTAL
FADEUP			1				1
FEP				4	1		5
FEUP	1		2	10	4		17
FFUP	1						1
FLUP	1	1		6			8
FMUP		2		1			3
FPCEUP		1		2			3
TOTAL	3	4	3	23	5	-	38

<sup>\*</sup> All those that not fit in the other categories. \*\* Groups all the top specialists in a specific field of study, from many countries. Source: Faculties.

In 2007, the University of Porto organized 38 (12 more than in 2006) international scientific conferences: 5 European, 23 international, 4 Lusophone, 3 Ibero-American and 3 Iberian. These conferences were organized by 7 faculties of the University of Porto (the same number as last year), with the Faculty of Engineering taking the lead (44.7% overall), similarly to the previous years, including the number of conferences.

The number of "European" conferences totalled 5 (13% overall), i.e., 3 more than in 2006. The University of Porto did not organize any world conference in 2007. In 2006, there had been 3 such conferences.

## 14. The University of Porto in the international rankings

The two most reputed international rankings, that is, those in which the position of the U.Porto may help it achieve international projection, are the *Academic Ranking of World Universities* (ARWU), prepared by the *Shanghai Jiao Tong University* and the *Times Higher Education - QS World University Rankings*, the THES ranking (Supplement on Higher Education of the Times magazine).

Secondly, the *Performance Ranking of Scientific Papers for World Universities*, of the Higher Education Evaluation and Accreditation Council of Taiwan, has grown increasingly stronger in the last two years, which, unlike the first two – more generalist and steered to the evaluation of different aspects of the University mission – focuses solely on the performance indicators related to the scientific activity.

Thirdly, reference must also be made to a ranking that has gained some international recognition – the "Webometrics Ranking of World Universities", conducted by the Cybermetrics Lab (CINDOC), a unit part of the National Council for Research (CSIC), in Spain. Its indicators are based on the presence of the universities and research institutions in the Internet, thus exposing the commitment of the institutions on issues such as online scientific papers, and freely-accessed learning.

These rankings will be used by the University of Porto in its effort to position itself among the 100 top universities in Europe, by 2011. To show its commitment to achieving this goal, the University of Porto aims for a position among the top 100 places in Europe in at least 3 of these 4 rankings.

At a different level, there are two additional rankings that must be taken into consideration by the University: the "Ranking Iberoamericano de Instituciones de Investigación" (RI³), a regional ranking that focuses solely on the scientific production, which is particularly interesting for the U.Porto, and the "4ICU Web Popularity Ranking", a ranking that focuses on the popularity of universities only. Of all the rankings, this is the least important.

Below is a summary of the positions held by the University of Porto in the various rankings.

## Academic Ranking of World Universities (ARWU)

Chart 54 shows the growth in positions of the University of Porto in the *Academic Ranking of World Universities*.

Chart 54: Positions of the U.Porto in the ARWU.

ARWU (Shangai Jiao Tong University)	2006	2007	2008
Top 500 World Universities		403-510	402-503
European Ranking		173-208	169-210
National Ranking		1*	1*

<sup>\*</sup> Joint position with the Universidade de Lisboa

As we can see, in 2008 the University of Porto consolidated its position among the top 500 Universities in the world, a place secured for the first time in 2007. At European level, the University is in positions 169 to 210, confirming the position in the previous year, and also visible in the ranking of the Portuguese universities – 1<sup>st</sup> position – together with the Universidade de Lisboa.

## Times Higher Education - QS World University Rankings

The University of Porto was, for the first time, included in this ranking, which is nevertheless unusual as the U.Porto has always been the first Portuguese university in all the other rankings, and there are other Portuguese universities that have been a part of this ranking for some years now.

Chart 55 lists the positions of the Portuguese universities in this ranking.

Chart 55: Positions of the Portuguese universities in the *Times Higher Education - QS World University Rankings* 

	2005	2006	2007	2008
World Ranking	UNL 340	UC 266	UC 319	UC 387
	UCP 391	UNL 277	UNL 341	UNL 401-500
	UC 452	UCP 338	UCP 401-500	UCP 401-500
				U.Porto 500+
National Ranking (U.Porto)				4

Caption: UC: Universidade de Coimbra; UNL: Universidade Nova de Lisboa; UCP: Universidade Católica Portuguesa.

The contacts we have established over the last year with the organizers of this ranking have allowed us to understand why the HEIs (some of them barely known) featuring in all other rankings, in both Portugal and abroad, behind the University of Porto, or that are not even part of those rankings, appear in better positions than the University of Porto. In previous reports (cf. Internationalization Report 2006/07), we have mentioned that this could be due to the reputation held by some universities – giving

as example the case of the Universidade de Coimbra, for leading the so-called Coimbra Group – or due to its activity in the financial area – and mentioned the example of the Universidade Nova de Lisboa and the Universidade Católica Portuguesa, with its reknowned MBAs. We believe that this is the reason behind the results in rankings. We also know that in the case of the University of Porto, the underlying reason can only be the lack of knowledge on the activities developed by this university. For instance, of about 17,000 HEIs all over the world, the THES Ranking has only evaluated about 600. In 2007, the University of Porto has been systematically collecting and providing the organizers with all the relevant information, the result of which was the inclusion of the university, for the first time, in its 2008 edition.

Nevertheless, in our opinion, the fact that the evaluation assigns 40% for the universities' reputation, as the result of a subjective opinion collected in a survey, is a good enough reason why we are in this position in the ranking  $-4^{th}$  in Portugal and 500+ in the world. This is why the University of Porto must deal with its international reputation very thoroughly, starting with the careful preparatory work for its participation in the QS -THE higher education exhibit to take place in March 2009, in London.

## Performance Ranking of Scientific Papers for World Universities (Taiwan)

This ranking was published for the first time in 2007, and as we can see in chart 56, the University of Porto is part of this ranking since its first edition. It is, in fact, the only Portuguese HEI to be included in this ranking.

Chart 56: Positions held by the U.Porto in the *Performance Ranking of Scientific Papers for World Universities*.

	2007	2008
Top 500 Universities (World Ranking)	459	375
European Ranking	195	161
National Ranking	1	1

Special reference must be made to the strong upgrade in the 2008 ranking edition. At world level, the University has climbed 84 positions, and at European level 34 positions, which gives us a strong indication of the substantial dynamics in the scientific activity conducted by the U.Porto over the last year.

Note that, if it were not for the ranking indicators relating to the productivity and impact of research (see chart 57) in the last 11 years, a period during which the dynamics of the scientific activity could not be compared to those in the last 5 years, the position of the University of Porto would surely be better. We are, therefore, optimistic regarding the years to come, as the weak production shown at the end of the 90s will impact less on the position of the U.Porto in this ranking.

Chart 57: Criteria, indicators and weighting factors used in the *Performance Ranking of Scientific Papers for World Universities*.

#### RESEARCH PRODUCTIVITY - 20%

Number of articles in the last 11 years (1997-2007)	10%
Number of articles in the previous year (2007)	10%
IMPACT OF RESEARCH – 30%	·
Number of citations in the last 11 years (1997-2007)	10%
Number of citations in the last 2 years (2006 - 2007)	10%
Average number of citations in the last 11 years (1997-2007)	10%
EXCELLENCY OF RESEARCH – 50%	
H-index of the last 2 years (2006 - 2007)	20%
Number of articles most cited (1997-2007)	15%
Number of articles in 2007 in scientific journals with a high impact factor (2007)	15%

This ranking also publishes a Top 300 for each of the following scientific areas: Agriculture, Clinical Medicine, Engineering, Life Sciences, Natural Sciences, and Social Sciences.

Only two Portuguese universities are listed in these rankings: the U.Porto - Agriculture,  $253^{rd}$  in the world and  $102^{nd}$  in Europe; and the Universidade de Aveiro - Engineering,  $171^{st}$  in the world and  $49^{th}$  in Europe.

Something interesting that could be done with the data collected from these rankings would be to analyse the place occupied by the University of Porto should it belong to the countries listed in chart 58, in each of the five continents.

In Europe, the University of Porto would rate among the top 5 national universities in 10 countries, but in 5 other countries it would only take up a position from the 12<sup>th</sup> place onwards.

In the Americas, the University of Porto would feature among the first 3 national universities in the 4 most developed countries in South America, but it would be assigned to the 19<sup>th</sup> position in Canada, and to a rather modest 137<sup>th</sup> position in the USA.

In Asia and in the Middle East, the University of Porto would stand among the first national universities in India and Thailand, but would again be relegated to the 19<sup>th</sup> position in Japan.

Chart 58. Positions of the University of Porto in the *Performance Ranking of Scientific Papers for World Universities*, if it belonged to those countries.

EUROPE	AMERICAS	ASIA AND THE MIDDLE EAST	OCEANIA	AFRICA
Hungary: 1	Chile: 1	India: 1	New Zealand: 3	South Africa: 2
Slovenia: 1	Argentina: 2	Thailand: 1	Australia: 9	
Greece: 2	Mexico: 2	Israel: 6		
Poland: 2	Brazil: 3	South Korea: 7		
Czech Rep.: 2	Canada: 19	China: 9		
Russia: 2	USA: 137	Japan: 19		
Ireland: 3				
Austria: 4				
Norway: 4				
Denmark: 5				
Spain: 6				
Finland: 6				
Belgium: 8				
Switzerland: 8				
Sweden: 9				
Netherlands: 12				
France: 16				
Italy: 19				
United Kingdom: 34				
Germany: 36				

<sup>\*</sup> Together with the University of Twente.

In Oceania, it would rank 3<sup>rd</sup> in New Zealand and 9<sup>th</sup> in Australia.

In Africa, the University of Porto would be well positioned, overtaken only by one South African university.

#### **Webometrics**

Chart 59 relates to the position of the U.Porto in the last *Webometrics Ranking of World Universities* edition, and the evolution in the last years.

Chart 59. Positions of the U.Porto in the Webometrics Ranking of World Universities

Webometrics (CSIC, Madrid)	2 <sup>nd</sup> Sem 2005	1 <sup>st</sup> Sem 2006	2 <sup>nd</sup> Sem 2006	1 <sup>st</sup> Sem 2007	2 <sup>nd</sup> Sem 2007	1 <sup>st</sup> Sem 2008*
World Ranking	447	269	264	261	251	267
Top Europe	163	96	93	96	87	99
National Ranking	2	1	1	1	1	1

<sup>\*</sup> In this latest edition, changes have been made in the ranking's terms of reference.

Highlights in this ranking: (*i*) The constant presence of the U.Porto in world and European rankings since 2005, in other words, since the first ranking edition; (*ii*) The position of the U.Porto among the top 100 European HEIs since 2006 and among the top 270 in the world, in 5 consecutive ranking editions; (*iii*) The U.Porto being the first Portuguese HEI in all the rankings, except for the 2<sup>nd</sup> semestre in 2005.

There is also a slight drop in position in the last edition, due to the introduction of changes in the ranking's terms of reference.

## A summary of the U.Porto participation in the most important rankings

If we were to analyse the positions held by the University of Porto in the European Top of these 4 main rankings (Chart 60), and to the reference framework we defined, the U.Porto would still not meet the targets set for 2011, in other words, to be part of, at least 3 of the 4 rankings, in the 100 top positions in Europe. This requirement would only be met for one of the rankings.

Chart 60: Positions of the U.Porto in the European Top of the 4 reference rankings.

	2008
ARWU	169-210
THES	223-266
Taiwan	161
Webometrics	99

Note: Positions of other Portuguese universities in the THES Top European Universities: UC: 169, UNL: 181; UCP: 200-222

## Ranking Iberoamericano de Instituciones de Investigación (RI<sup>3)</sup>

This ranking has not been updated since 2007. The analysis already presented in the 2006/07 report is, therefore, still in force.

Chart 61 shows the position of the U.Porto in this ranking, and the growth of its position.

The chart shows that the University of Porto is, in the Ibero-American space, and with regard to the scientific production – which is the central focus of the  $RI^3$ : (i) the  $20^{th}$  Ibero-American HEI, taking into account the overall scientific production in the last 15 years, and the  $11^{th}$  if we consider this production in the final year of evaluation; (ii) the  $1^{st}$  Portuguese HEI.

Chart 61: Positions of the U.Porto in the RI<sup>3</sup>

Iberoamericano de Instituciones de Investigacion RI <sup>3</sup> (Grupo Scimago, Granada) Ranking	2006	2007	2008
Ibero-American Ranking in the last 15 years	24	20	20
Ibero-American Ranking in the previous year	13	11	11
National Ranking in the last 15 years	2	1	1
National Ranking in the previous year	1	1	1

We must also mention that the University of Porto (Chart 62), in addition to leading the classifications of the overall production, of the citable production, of the weighted production and the weighted average impact factor, is also well positioned in this ranking with regard to 4 disciplinary areas: Chemistry Technology (3<sup>rd</sup>); Molecular, Cellular and Genetic Biology (8<sup>th</sup>); Chemistry (8<sup>a</sup>); Science and Food Technology (9<sup>th</sup>); Physiology and Pharmacology (10<sup>th</sup>); Medicine (15<sup>th</sup>); Plant and Animal Biology, Ecology (21<sup>st</sup>).

Chart 62: Summary 2005: Portuguese universities in the RI<sup>3</sup> in the last year of evaluation – general production, citable production, weighted production, weighted average impact factor and production in disciplinary areas in the final year of evaluation.

POSITION	U.Porto	UTL	UL	UC	UAv.	UNL	UMin.
OVERALL	11 <sup>th</sup>	19 <sup>th</sup>	$26^{th}$	$33^{rd}$	31st	39 <sup>th</sup>	61 <sup>st</sup>
Citable production	13 <sup>th</sup>	16 <sup>th</sup>	$28^{th}$	$33^{rd}$	$27^{th}$	$37^{th}$	55 <sup>th</sup>
Weighted production	12 <sup>th</sup>	14 <sup>th</sup>	$27^{th}$	34 <sup>th</sup>	26 <sup>th</sup>	37 <sup>th</sup>	60 <sup>th</sup>
Weighted average impact factor	209 <sup>th</sup>	230 <sup>th</sup>	303 <sup>rd</sup>	309 <sup>th</sup>	224 <sup>th</sup>	267 <sup>th</sup>	436 <sup>th</sup>
Plant and Animal Biology, Ecology	21 <sup>st</sup>	58 <sup>th</sup>	$24^{th}$	69 <sup>th</sup>	59 <sup>th</sup>	55 <sup>th</sup>	226 <sup>th</sup>
Computer Sciences and informatics technology	7 <sup>th</sup>	6 <sup>th</sup>	31 <sup>st</sup>	18 <sup>th</sup>	$28^{th}$	32 <sup>nd</sup>	35 <sup>th</sup>
Law	52 <sup>nd</sup>	15 <sup>th</sup>	46 <sup>th</sup>	51st	n.c.	19 <sup>th</sup>	53 <sup>rd</sup>
Physics and Sciences of Space	26 <sup>th</sup>	5 <sup>th</sup>	18 <sup>th</sup>	32 <sup>nd</sup>	24 <sup>th</sup>	62 <sup>nd</sup>	82 <sup>nd</sup>
History and Art	139 <sup>th</sup>	88 <sup>th</sup>	15 <sup>th</sup>	32 <sup>nd</sup>	86 <sup>th</sup>	36 <sup>th</sup>	141 <sup>st</sup>
Mechanical, naval and aeronautics Engineering	4 <sup>th</sup>	1 <sup>st</sup>	70 <sup>th</sup>	12 <sup>th</sup>	9 <sup>th</sup>	n.c.	24 <sup>th</sup>
Psychology and Education Science	46 <sup>th</sup>	n.c.	31st	45 <sup>th</sup>	$37^{th}$	n.c.	21 <sup>st</sup>
Chemistry Technology	3 <sup>rd</sup>	7 <sup>th</sup>	69 <sup>th</sup>	34 <sup>th</sup>	12 <sup>th</sup>	28 <sup>th</sup>	27 <sup>th</sup>
Agriculture	19 <sup>th</sup>	10 <sup>th</sup>	47 <sup>th</sup>	56 <sup>th</sup>	18 <sup>th</sup>	28 <sup>th</sup>	64 <sup>th</sup>
Science and food technology	9 <sup>th</sup>	15 <sup>th</sup>	60 <sup>th</sup>	61 <sup>st</sup>	68 <sup>th</sup>	25 <sup>th</sup>	39 <sup>th</sup>
Earth Sciences	17 <sup>th</sup>	9 <sup>th</sup>	16 <sup>th</sup>	26 <sup>th</sup>	15 <sup>th</sup>	31 <sup>st</sup>	67 <sup>th</sup>
Economics	50 <sup>th</sup>	14 <sup>th</sup>	138 <sup>th</sup>	49 <sup>th</sup>	97 <sup>th</sup>	7 <sup>th</sup>	19 <sup>th</sup>
Physiology and Pharmacology	10 <sup>th</sup>	99 <sup>th</sup>	36 <sup>th</sup>	44 <sup>th</sup>	109 <sup>th</sup>	91 <sup>st</sup>	110 <sup>th</sup>
Civil Engineering and Architecture	10 <sup>th</sup>	1 <sup>st</sup>	52 <sup>nd</sup>	11 <sup>th</sup>	13°	55 <sup>th</sup>	25 <sup>th</sup>
Mathematics	17 <sup>th</sup>	6 <sup>th</sup>	18 <sup>th</sup>	19 <sup>th</sup>	32 <sup>nd</sup>	49 <sup>th</sup>	55 <sup>th</sup>
Chemistry	8 <sup>th</sup>	11 <sup>th</sup>	36 <sup>th</sup>	24 <sup>th</sup>	10 <sup>th</sup>	28 <sup>th</sup>	53 <sup>rd</sup>
Molecular, Cellular and Genetic Biology	8 <sup>th</sup>	35 <sup>th</sup>	$22^{nd}$	21st	75 <sup>th</sup>	$20^{th}$	61st
Materials Science and Technology	13 <sup>th</sup>	10 <sup>th</sup>	44 <sup>th</sup>	26 <sup>th</sup>	2 <sup>nd</sup>	27 <sup>th</sup>	6 <sup>th</sup>
Social Sciences	66 <sup>th</sup>	19 <sup>th</sup>	20 <sup>th</sup>	87 <sup>th</sup>	88 <sup>th</sup>	12 <sup>th</sup>	34 <sup>th</sup>
Philology and Philosophy	42 <sup>nd</sup>	151st	27 <sup>th</sup>	67 <sup>th</sup>	147 <sup>th</sup>	35 <sup>th</sup>	93 <sup>rd</sup>
Livestock and Fishing	24 <sup>th</sup>	23 <sup>rd</sup>	37 <sup>th</sup>	92 <sup>nd</sup>	131st	27 <sup>th</sup>	52 <sup>nd</sup>
Electrical, Electronic and Automatic Engineering	10 <sup>th</sup>	2 <sup>nd</sup>	49 <sup>th</sup>	27 <sup>th</sup>	13 <sup>th</sup>	51 <sup>st</sup>	89 <sup>th</sup>
Medicine	15 <sup>th</sup>	153 <sup>rd</sup>	50 <sup>th</sup>	55 <sup>th</sup>	171 <sup>st</sup>	124 <sup>th</sup>	127 <sup>th</sup>
Electronic and Communications Technology	18 <sup>th</sup>	2 <sup>nd</sup>	54 <sup>th</sup>	40 <sup>th</sup>	15 <sup>th</sup>	49 <sup>th</sup>	143 <sup>rd</sup>

Source: Ranking Iberoamericano de Instituciones de Investigación. Data as at 16 May 2007.

## 4ICU Ranking

Chart 63 shows the position of the U.Porto and its evolution in the last years in the 4ICU, a ranking that focuses on the popularity of universities.

Highlights: The regular participation of the University of Porto in the European Top 100 since 2006, except for the 1<sup>st</sup> semestre in 2008. In the same period, the U.Porto

was always the first Portuguese HEI, except in the already mentioned period in 2008, when it was overtaken by the University of Madeira.

Currently, it is in both rankings – the Top 200 World Ranking, in 162<sup>th</sup> position, and Top 100 Europe Ranking, in 56<sup>th</sup> position.

Chart 63: Position of the U.Porto and evolution in the last years in the 4ICU.

4ICU	2nd	4 <sup>th</sup>	1 <sup>st</sup>	22 Mar	23 Apr	1 <sup>st</sup>	27	2	20	
	Quarter20	Quarter	Semester	2007	2007	Semester	Aug	Oct	Nov	
	06	2006	2007			2008	2008	2008	2008	
Top 200 World			128	155	122				162	
Top 100 Europe	56	55	16	20	14		100	100	56	
National Ranking	1	1	1	1	1	2	1	1	1	

## **CWTS University-Industry Cooperation Scoreboard 2008 (Universidade Leiden)**

A study has recently been published (*UIC intensity of the World's Top 350 research-active universities by world region and UIC performance - 2002-2006*) by the University of Leiden, Netherlands, proposing a ranking of the top universities in the world based on the value of relations between the universities and the business world – the *CWTS University-Industry Cooperation Scoreboard 2008*. This ranking uses a seriation approach of the 350 largest research universities in the world, taking into account the number of scientific papers indexed in the WoS 2002-2006, sorted by the *UIC intensity* indicator (University-Industry Co-publications intensity), in other words, the proportion of UICs in the overall number of scientific papers published by the university.

This case study aims to be the first step towards solving the problem of inexisting comparative information on the higher education institutions in terms of research in cooperation with the business world. The UIC - University-Industry Co-publications – includes *articles*, *reviews*, *notes* and *letters*, with at least one university and one company mentioned in the affiliation. The intention is to assess the quality of the universities' interventions (the study only assesses the University-Industry cooperation leading to scientific publications), as this is one of the areas in which the universities' mission is anchored on.

Chart 64 shows the ranking of the top 10 European universities, and of the Portuguese universities that are rated in this ranking.

As we can see from the chart, the University of Porto is the first Portuguese university that has almost doubled the percentage of the Portuguese university ranking 2<sup>nd</sup>, which is the UTL, and is fast approaching the top 100 European universities. In other

words, the U.Porto has the highest percentage of co-publications with the industry and labour market in our country.

Chart 64: Position of the U.Porto in the CWTS University-Industry Cooperation Scoreboard 2008 of the University of Leiden.

Rank	University	Country	All fields of science
1	Eindhoven Univ Technol	Netherlands	10.5%
2	Delft Univ Technol	Netherlands	8.3%
3	Tech Univ Denmark	Denmark	7.4%
4	Kungliga Tekniska Hogskolan	Sweden	7.2 %
5	Chalmers Univ Technol Goteborg	Sweden	7.2 %
6	Med Univ Wien	Austria	6.7%
7	Helsinki Univ Technol	Finland	6.1%
8	Ecole Polytecn Federale Lausanne	Switzerland	6.0%
9	Univ Aachen (Rwth)	Germany	6.0%
10	Med Hochschule Hannover	Germany	5.8 %
132	Univ Porto	Portugal	2.2%
149	Univ Técnica Lisboa	Portugal	1.3%

Note also that if the U.Porto's position were to be considered in this ranking within each European Union country, its position would be as follows (chart65):

Chart 65: Positions of the U.Porto in the CWTS University-Industry Cooperation Scoreboard 2008 of the University of Leiden if we belonged to the following EU countries.

Country	Position
Slovenia	2
Greece	2
Czech Republic	2
Ireland	2
Austria	3
Denmark	5
Spain	4
Finland	4
Belgium	9
Sweden	9
Netherlands	13
France	10
Italy	9
United Kingdom	25
Germany	33

The University of Porto would be in first place in 10 countries and in the 2<sup>nd</sup> place in 4 countries. On the other hand, it would be in a very modest position in the United Kingdom and in Germany.

## 15. Summary and recommendations

#### 15.1. Student Mobility

Mobility Out

In the academic year 2007/08, 732 students from the U.Porto (3.26% overall) took part in mobility programmes in 261 universities and other institutions, in 31 countries. In other words, 1 in every 31 U.Porto students participated in mobility programmes in

a foreign higher education institution. The faculties with the highest participation were Architecture (1 in every 12 students) and Fine Arts (1:13). The faculties with the lowest participation were Sciences (1:92) and Law (1:74).

The majority of U.Porto students chose Spain (153 students) and Italy (121) to study. The 3<sup>rd</sup> most chosen country (79) was Brazil. For the second time now, 5 students travelled to 2 Ibero-American countries where Spanish is spoken. The North-American universities are beggining to surface as host institutions, having received 2 students from the U.Porto.

Mobility has increased by 1.2% to the group of countries formed by France, Germany, United Kingdom and the Netherlands, and diminished to Nordic countries (1% less than in the previous year), and increased (2.3%) to the former socialist countries.

Of all the U.Porto students who participated in mobility programmes, 162 (26.6% overall) moved to universities positioned among the top 100 European ranking. Of these 162 students, 5 were accepted in one of the top 10 universities and 10 students in universities among the top 25.

#### Mobility In

In the academic year 2007/08, 1,075 students studied at the University of Porto under the framework of mobility programmes (4.78% of the total number of pre-graduate University students), from 259 HEIs and 29 countries. That is, for every 21 pregraduate students studying in the University of Porto in 2007/08, 1 was a foreign mobility student.

As in previous years, the largest group of European students came from Spain (128) and Italy (98), and these numbers increased when compared to the previous year. Nevertheless, the most significant fact was the very strong increase in Brazilian students. The 451 students from Brazilian universities surpassed by far the overall number of Spanish and Italian students.

The number of students from France, Germany, the United Kingdom and the Netherlands decreased by 3.6%, when compared to the previous year, and there is also a reduction of 0.7% in the number of students from Nordic countries. With regard to mobility *in*, the ability of the U.Porto to attract students from the former Eastern block is great - 156 students, thus confirming the growth seen in the previous year.

For the second consecutive year, 5 students from 2 Ibero-American, Spanish-speaking countries participated in mobility programmes, which is still quite new in the University of Porto, as well as 4 African from non-Lusophone students (Algeria).

The faculties that received most students were Architecture (1:12), Fine Arts (1:13) and Law (1:14), and we can say that these faculties welcomed nearly 1 foreign mobility student for every 10 students. On the other hand, the Faculties of Dental Medicine (1:91) and Sciences (1:75) were the ones that received the lowest number of mobility students.

The number of students from European universities placed in the top 100 places in the rankings reduced by 0.6%, although the number of students from the HEIs positioned in the top 50 places increased (2.6%).

#### Recommendations

Bearing in mind the significance of mobility dynamics (*in* and *out*) previously mentioned, we recommend that special attention be paid to the increase of mobility to the more developed countries in Europe, currently in decline, and the reinforcement of mobility to the top 50 universities in the European rankings.

Furthermore, the strengthening of participation in the Ibero-American regional space is also important, including the universities in Spanish-speaking countries, with a potential of recruiting students aiming to obtain a degree. We also recommend that the less involved U.Porto faculties step-up in the participation in mobility programmes.

The financial crisis foreseen for 2009 advises us to take full advantage of the financial programmes to support mobility, including the European programme fundings and private fundings, especially in mobility *out*, as this number has not increased as expected. We must recall the University of Porto objectives for mobility *In* and *Out*, aimed respectively at 1,250 and 1,000 students. These objectives are related to the end of 2008; whereas in the case of mobility *in* they can still be achieved, this is not likely to happen in mobility *out*.

## 15.2. Foreign students in the U.Porto to obtain a degree

In the academic year 2006/07, 1,124 students (about 49.6% of foreign students) studied in the University of Porto, with the aim of obtaining a degree. This number was, for the first time, higher than the number of mobility students.

As in pre-graduate mobility programmes, most of these students (about 40.7%) come from 1 country - Brazil.

The 577 undergraduate and integrated masters students are from 46 countries: 22 countries in Europe, 11 in Africa, 6 in Asia, 3 in North America, 2 in South America, 1 in Central America and 1 in Oceania.

The 332 foreign masters students are from 32 countries: 12 countries in Europe, 7 in Africa, 6 in South America, 4 in Asia and 3 in Central America.

The 215 foreign PhD students are from 36 countries, of all continents: 16 countries in Europe, 6 in Africa, 6 in Asia, 4 in South America, 2 in North America, 1 in Central America and 1 in Oceania.

The majority of foreign students studying to obtain a degree (64.1%) are from CPLP (Portugueses Speaking Countries Community) countries. Of these CPLP students, 329 are enrolled in undegraduate and integrated masters courses, 270 in masters courses and 122 are doing their PhD. The percentages of foreign PhD students in the U.Porto (about 10.5% of the overall PhD students) and of foreign masters students (about 8.6%) are higher than the average percentage numbers of foreign students in the University (7.83%).

#### Recommendations

Our recommendation is that the University of Porto directs its focus to the CPLP space to consolidate these numbers, and especially to the recruitment of better students. Furthermore, we must bear in mind the still rather poor offer of post-graduate studies in Brazilian universities, and turn this to our advantage by attracting the Brazilian students.

In the Ibero-American space, which is of great interest for the internationalization of the university, we recommend that the U.Porto focus on the Spanish-speaking countries as a potential recruiting target, especially the south part of the South-American continent, where we find the best universities. These concerns must likewise be coordinated within the framework of programmes jointly set up with the most reputable Brazilian and Ibero-American universities. The coordination and/or participation in university consortia supported by European funding must be seen as essential instruments to support this strategy.

Identical concerns must be assumed with regard to Spanish students and universities. The set up of double/multiple degrees and joint degrees with reputed universities in

Europe and in the world must be the privileged strategy to be adopted – in particular within the new Erasmus Mundus programme – to attract high potential foreign students to the University of Porto.

#### 15.3. Post-doctorate researchers

At the end of 2007, 43 post-doctorate researchers from 14 countries conducted their studies at the U.Porto. Brazil, with 18 researchers, was the highest represented country (41.8% overall). Europe, with 34%, and China, India and Thailand, with 18.6%, are also represented.

These numbers do not consider other researchers active in associate laboratories, as the complete information is not yet available. In effect, the University of Porto has only very recently provided a register of these post-doctorate researchers, who often arrived and left the country and the people in charge at the universities had no record of their whereabouts.

#### Recommendations

The University of Porto, similarly to other Portuguese universities, does not have a time-honored practice of hosting post-doctorate researchers.

Given that there are still 5 faculties that have not received any post-doctorate researchers, we highly recommend that they start doing so, and give it more importance.

Nowadays, there are financial instruments, namely in European projects, ensuring the optimum support offered to foreign post-doctorate researchers. Therefore, the U. Porto must apply more frequently, and successfully, to these projects.

#### 15.4. Academic staff mobility

In the previous academic year, 76 U.Porto teachers (4.1 % of the overall FTE teachers) participated in mobility programmes in 64 universities, in 17 European countries, under the framework of the Erasmus Programme. This has represented a slight increase (34 more teachers) when compared to the year before. Note that a significant number of faculties (4) had no teachers involved in mobility *out* programmes.

Regarding the mobility *in*, in academic year 2007/08, the percentage of foreign academic staff (87 teachers from 64 universities and 16 European countries) in

mobility programmes at the University of Porto was of 4.69%, regarding the FTE total of the U.Porto. Most mobility teachers were clustered in three U.Porto faculties, and three university faculties did not receive any foreign teachers.

#### Recommendations

The faculties must be stimulated to involve a larger number of teachers in short and medium term mobility programmes with foreign universities. Focus should be placed on the relationship with reputed universities and in programmes where English is the main training language, making full use of sabbaticcal leaves and specific support programmes, for instance the Erasmus programme.

We also recommend the increase in numbers of foreign teachers conducting their activities at the U.Porto, fostering the coming of visiting academic staff for short duration programmes, to teach in PhD and masters courses. In this context, the array of possibilities offered within the Erasmus Mundus External Cooperation Windows programme and the bilateral agreements between the European Union and non-European countries must be put to better use.

#### 15.5. Foreign academic staff with regular activities in the University of Porto

66 foreign teachers and researchers (3% of the FTE teachers) teach, on a regular basis, at the University of Porto, which represents an increase of 40% when compared to the previous year. They are from 23 countries - 14 European countries, 4 countries from the Americas, 2 Asian countries, 2 African countries and 1 Middle-East country – and are mostly (36%) Assistant Professors and work mostly (68%) in three faculties: FLUP, FCUP and FMUP.

#### Recommendations

The faculties should stimulate the coming of teachers and researchers from internationally reputed universities. In light of this, we need to set up specific programmes (salary + supplements) to attract highly qualified teachers and researchers, as the salaries offered may not be sufficient. We also recommend the reduction of factors stimulating inbreeding, and privileging quality when recruiting academic staff, regardless of their origin.

#### 15.6. Cooperation agreements with foreign universities

The University of Porto has 553 cooperation agreements with foreign universities: 393 Erasmus agreements, 136 bilateral agreements, 17 co-tutele agreements, 6 European PhD agreements and 1 double degree diploma agreement.

The number of agreements with universities placed among the top 100 universities in world rankings is still low (28), the majority focusing on Erasmus student mobility programmes (78%). The same can be said for the agreements with universities placed among the top 100 European universities (93 agreements, of which 86% fall under the framework of the Erasmus programme).

#### Recommendations

Our recommendation is for a higher number of partnerships and institutional agreements with foreign universities of European and world reputation, covering strategic training and research activities. With this purpose in mind, the following actions are important: (i) to conduct an internal survey within the University of Porto, with the aim of identifying people and groups already involved in informal cooperation programmes with reputed foreign universities; (ii) to identify, within the U.Porto, the areas already provided with excellency programmes, or those for which the potential is high; and (iii) to establish agreements with universities with analogous areas, or complementary areas, likewise ackowledged at international level, to transform many of the informal cooperation programmes into formal agreements.

## 15.7. University consortia to apply to European programmes

The University of Porto has submitted projects or otherwise participated in applications to 15 European programmes: 3 Erasmus Mundus External Cooperation Windows projects, 1 Erasmus Mundus project, 5 ALFA III projects, 5 Edulink projects, and 1 Tempus IV project. Six of these applications were successful and among these, the U.Porto is responsible for coordinating 3 university consortia: 1 in the EMECW, 1 in the ALFA III and 1 in the EDULINK projects.

Within the framework of acitivites of these three consortia coordinated by the University of Porto, the University will be responsible for managing an overall total of 6,090,000 Euros.

#### Recommendations

The internationalization endeavour desired by the University, namely within research projects and student, researcher and academic staff mobility, will only be possible if the University seeks external funding.

There are considerable fundings and financial resources available in the European programmes. It is, therefore, necessary to gain the experience and learning required to prepare successful applications. The somewhat successful experience last year proves that the University is capable of preparing successful applications and, above all, to be associated with other universities in successful partnerships, bringing obvious advantages to the University of Porto.

## 15.8. Joint training programmes/degrees with foreign universities

The joint programmes with foreign universities, at the level of education, are only slightly looked into. Nowadays, the University of Porto participates in 15 joint/multiple training programmes with foreign universities: 7 PhD programmes, 1 advanced studies programme at 3<sup>rd</sup> cycle level, and 5 masters and integrated masters programmes, or of 2<sup>nd</sup> cycle. Most of these programmes (8) are set within the framework of protocols signed between the Portuguese State and reputed North-American universities – the MIT, the CMU and the UTA.

#### Recommendations

Within the internationalization strategy conducted by the University of Porto, it is important to create joint/multiple programmes with the best European/world universities in each field. We, therefore, recommend that the Faculties that do not have this sort of programmes establish, as their minimum goal, the organization of 1 programme – PhD or Masters – together with a reputed foreign university within 5 years. With this in mind, the high financial resources available under the framework of the *Erasmus Mundus* programme, are felt to be sound supporting instruments. If this is a strategic investment in the university's internationalization, then a tremendous effort will have to made in establishing successful partnerships to apply to that funding.

## 15.9. Scientific papers

Compared to the previous year, there was a slight increase of scientific papers from the U.Porto – 168 papers more, in other words, an increase of 10.8%.

In 2007, the teaching staff and researchers of the University of Porto were responsible for producing about a quarter of the national scientific production (22.4%).

Nevertheless, we must note that, officially, only 1,304 (16.9%) articles were affiliated to the University of Porto, which strongly penalizes the interest shown by the University. To help us understand the significance of these numbers, we can say that the 2,755 papers that, for the past 10 years, have not been credited to the U.Porto as they were not properly affiliated to the university, correspond to 3 years and 7 months of work put in by all researchers who did mention the affiliation to the University of Porto in their scientific papers.

Four faculties of the University of Porto - FMUP, FCUP, ICBAS and FEUP – were responsible for producing 1,489 scientific papers, i.e., for 86.5% of the overall scientific production of the University of Porto.

Some of the Faculties of the U.Porto have a very low, or even null, scientific production, which does not seem to be in consonace with an university that, among other strategic targets, aims to become a "research university". And if some of these Faculties are from fields in which scientific production does not adapt easily to the objective, the same can not be said about the others.

In addition to being the most fruitful, the University of Porto is, among the Portuguese "classic" universities, the university with the highest annual growth rate (13.3%) of scientific production in the last 10 years, and the one with the highest impact factor of international scientific papers produced in the last year for which we have data available (1.06). We can then say that the University of Porto is gaining ground and making its statement as the best Portuguese university.

#### Recommendations

The still too high percentage of articles (24.2%) produced by academic staff and researchers in the University of Porto who omit the reference to the University in the author affiliation registers, is grounds for our recommendation of a serious intervention, through regulations or pedagogical work, in order to reduce these numbers. Special focus must be directed to this problem at the FMUP and ICBAS. Similarly, the faculties of the University of Porto showing the least scientific production must be made aware of the need to commit to the improvement of their indicators.

We have already mentioned the desire shown by the University of Porto to become a research university, at both local and international level. This urges for a special focus on the increase of the quantity of scientific papers produced, acknowledged internationally, and the improvement of the average impact of its publications, which, until 2011, should rise to 1.2 or upwards.

#### 15.10. Organization of major international meetings

The purpose of organizing major international meetings, beyond the scientific goals, is important for the outward projection of the university. In 2007, the University of Porto organized 38 international meetings, of which only five had European projection.

#### Recommendations

We recommend that each component unit foster – individually or in a joint effort – the organization of at least 1 major international event – European, at world level – in the 5 coming years.

#### 15.11. The University of Porto in the renowned international rankings

The University of Porto has gradually improved its position in the rankings, and is now part of the renowned international rankings. Things are beginning to improve gradually from year to year, and we expect that by 2011 the University will be included in 3 of these 4 rankings, thus fulfilling its aim of featuring among the 100 best universities in Europe. It makes no sense that the country, whilst a part of the European Union, does not have one single university placed among the 100 best universities in Europe.

#### Recommendations

Our basic advice is very much the same as in last year's report: (i) To focus more on the improvement of scientific production indicators – number and quality of scientific papers intended for international circulation and, in particular, to be published in journals such as "Nature" and "Science", which greatly influences some rankings (Shangai Jiao Tong); (ii) To value the financial and employability areas, which also

influence some of the rankings (THES); (*iii*) To foster a stronger connection between the institution and the best universities, groups of universities and international research centres, aiming to secure a greater visibility and international reputation; this is likewise reflected on the classifications of some of the rankings. On this issue, we point out that 40% of the THES ranking evaluation is based on peer opinion on the repution of the universities; (*iv*) To affirm the aim of placing the U.Porto among the 100 best universities in Europe, and among the 5 best in the Ibero-American space by 2011.

## 16. Annexes

#### Annex 1. ACADEMIC STAFF MOBILITY (OUT)

Component Unit			No. of days	No. of hours
FADEUP	Jorge Augusto Pinto da Silva Mota	Istituto Universitario di Scienze Motorie	5	8
FADEUP	Jorge Augusto Pinto da Silva Mota	Universidade Castilla La Mancha	4	8
FADEUP	Maria Paula Brandão Botelho Gomes	Universidad Politecnica de Madrid	4	5
FADEUP	Maria Paula Silva	Universidad de Vigo	2	8
FADEUP	Rui Manuel Nunes Corredeira	Universidad de Murcia	6	8
FADEUP	José Carlos Ribeiro	University of Southern Denmark	4	8
FADEUP	Amândio Braga dos Santos Graça	Istituto Universitário de Science Motorie	6	8
FADEUP	Manuel Botelho	Universidad de Valencia	6	8
FADEUP	Ricardo Jorge Fernandes	Université de Rouen	7	5
FADEUP	Susana Maria Soares Ribeiro	Universidad Catolica San Antonio de Murcia	5	8
FADEUP	Cláudia Salomé Dias	University of Bristol (ARWU: 16 <sup>th</sup> )	4	8
FADEUP	Nuno José Alves	University of Bristol (ARWU: 16 <sup>th</sup> )	4	8
FAUP	Rui Braz Afonso	Delft University of Technology (ARWU: 59 <sup>th</sup> -79 <sup>th</sup> )	3	8
FAUP	João Pedro Sampaio Xavier	Universitá degli Studi Firenze (ARWU: 80 <sup>th</sup> -124 <sup>th</sup> )	7	8
FCNAUP	Bela Maria Franchini M. Oliveira	Karolinska Institutet (ARWU: 11 <sup>th</sup> )	6	6
FCUP	Samuel António de S. Dias Lopes	ABANT IZZET BAYSAL UNIVERSITESI	7	5
FCUP	Christian Edgar Lomp	Dokuz Eylul Universitesi	17	6
FCUP	Paula Alexandra Carvalho Lomp	Izmir Institute of Technology	12	5
FEP	Maria da Conceição Ramos	Academia de Studii Economice- Bucuresti	8	8
FEUP	António Lucas Soares	Poznan University of Technology	5	10
FEUP	Clito Afonso	Kaunas University of Technology	5	16
FEUP	Maria da Conceição Ferraz	Academia Medyczna w Lublinie	6	8
FEUP	Carlos Pintassilgo	Masaryk University	5	6
FEUP	António Adão da Fonseca	Universitá degli studi di Palermo	3	6
FEUP	António Torres Marques	University of Timisoara	2	5
FFUP	Maria da Conceição Montenegro	Universitat de Valencia	5	8
FFUP	Maria da Conceição Montenegro	Charles University in Prague ( <b>ARWU: 80</b> <sup>th</sup> -124 <sup>th</sup> )	5	16
FFUP	Maria da Conceição Montenegro	Warsaw University Universitá di Roma La Sapienza (ARWU: 35 <sup>th</sup> -	4	8
FFUP	Maria da Conceição Montenegro	58 <sup>th</sup> )	5	8
FFUP	Maria Fernanda Martins Borges	Universidad de Santiago de Compostela	9	8
FFUP	Maria Fernanda Martins Borges	Universitá Degli Studi di Cagliari	9	9
FFUP	Anabela Cordeiro da Silva	Université de Montpellier I	5	8
FLUP	Adalberto Dias Carvalho	Universite de Rouen	6	24
FLUP	Ana Paula Coutinho Mendes	Université Paris Sorbonne-Paris IV	5	5
FLUP	Belinda Maia	University of Tampere	5	8
FLUP	Celina Silva	Université de Paris VIII	5	8
FLUP	José Francisco Meirinhos	Liberà Universitá Maria Ss. Assunta (LUMSA)	14	15
FLUP	Eduardo Vitor Rodrigues	Jagiellonian University Krakow	8	10
	Lúcia Maria Cardoso Rosas	•	3	
FLUP	Cândida Fernanda Antunes Ribeiro	Universidade de Santiago de Compostela		8
FLUP	João Manuel Pires Veloso	University of Tampere	4	8
FLUP	Luis Carlos Amaral	University of Helsinki	5	6
FLUP	Fantina Maria Pedrosa	Eötvös Loránd University	8	8
FLUP	Armando Malheiro da Silva	Universität Bayreuth	7	6
FLUP		Universidad de La Coruña	3	5
FLUP	Maria Isabel Correia Dias Maria de Fátima Vieira	Universidad de La Coruña	4	16
FLUP		Högskolan Dalarna	8	5
FLUP	Rosa Porfíria Bizarro Soares	Universität Wien (ARWU: 59 <sup>th</sup> -79 <sup>th</sup> )	8	5
FLUP	Maria de Fátima Saraiva	Università degli Studi di Salento (Lecce)	4	5
FLUP	Isabel Margarida Duarte	Universitatea din Bucarest	8	8
FLUP	Jorge Manuel Martins Ribeiro	Université Michel Montaigne -Bordeaux 3	4	5
FLUP	Paulo Eduardo Carvalho	Otto-von-Guericke Universität Magdeburg	8	8
FLUP	John Greenfield	Universiteit van Amsterdam (ARWU: 35th-58th)	5	12
FLUP	Rui Carvalho Homem	University of Essex	8	8
FLUP	Maria Elisa Cerveira	Universidad de Barcelona (ARWU: 59th-79th)	4	5

FLUP	Isabel Maria Rodrigues	Università degli Studi di Roma Tre	7	6
FLUP	Maria Cristina Alegre	Libera Università Maria SS. Assunta	13	30
FLUP	Maria Clara Greenfield	Université Paris VIII Vincennes - Saint-Denis	5	6
FLUP	Alice Lucas Semedo	Universidad de Murcia	5	8
FLUP	João Carlos Garcia	Universidad de Salamanca	4	5
FLUP	Manuel Loff	Universitat Rovira i Virgili	6	8
FLUP	Maria Madalena Fonseca	Universität Frankfurt am Main	5	8
ED CEVED		Université Catolique de Louvain (ARWU: 35 <sup>th</sup> -	_	
FPCEUP	Anne Marie Fontaine	58 <sup>th</sup> )	6	8
FPCEUP	Marta Zulmira Carvalho dos Santos	Université Paris Descartes	4	5
FPCEUP	Marianne Héléne Lacomblez	Universitá degli Studi di Torino (ARWU: 59th-79th)	4	8
FPCEUP	Anne Marie Fontaine	Université de Liége (ARWU: 80 <sup>th</sup> -124 <sup>th</sup> )	4	8
FPCEUP	Helena Araújo	Mykolas Romeris University	4	8
FPCEUP	José Marques	Universidad del Pais Vasco	4	8
FPCEUP	Isabel Abreu Lima	Otto- Friedrich Universität Bamberg	2	14
FPCEUP	Rui Alves	Université de Poitiers	4	8
FPCEUP	Manuel Fernando Barbosa	Universidad de Oviedo	4	10
FPCEUP	Maria José Magalhães	Universidad de Murcia	5	8
FPCEUP	Amélia Lopes	Karlstad University	3	8
FPCEUP	Joaquim Coimbra	Université Catholique Louvain (ARWU: 35 <sup>th</sup> -58 <sup>th</sup> )	3	8
FPCEUP	Joaquim Coimbra	Universitea din Oradea	4	8
ICBAS	Pablo Payo Puente	Universidad Cardenal Herrera - CEU	5	15
ICBAS	Marta Susana Amaro dos Santos	Universitá degli Studi di Milano (ARWU: 35 <sup>th</sup> -58 <sup>th</sup> )	10	10

# Annex 2. ACADEMIC STAFF MOBILITY (IN)

Comp.Unit	Name of HEI of Origin	Name	Surname	No. of hours	No. of days
FADEUP	Univerzita Jana Evangelisty Purkyne V Ústí Nad Labem	Stepan	Vele	8	7
FADEUP	Univ.de Valladolid	António	Fraille	8	7
FADEUP	Univ. da Extremadura	Rafael	Andrara	8	7
FADEUP	Univ. de Castilla la Mancha	Jose	Rave	10	ND
FADEUP	Univ. Autonoma De Madrid (ARWU: 80 <sup>th</sup> -124 <sup>th</sup> )	Ariel	Villagra	12	4
FADEUP	Universidad de Murcia	Jesus	Molina	10	5
FADEUP	Univ. Catolica de San Antonio	Maria	Fiol	8	14
FADEUP	Univ. de Vigo	Águeda	Sanchez	20	60
FADEUP	Univ. de Vigo	José	Soidan	8	6
FADEUP	Univ. de Granada	Gracia	Contreras	16	30
FADEUP	Univ. de Granada	Esther	Ortiz	16	30
FADEUP	Univ. Catolica de San Antonio	Arturo	Abraldes	20	34
FADEUP	Univ. Rouen	Ludovic	Seifert	5	8
FADEUP	Univ. Degli Studi di Roma Tor Vergata	Paola	Sinibaldi	6	ND
FADEUP	Instituto Univ. di Scienze Motorie	Isidori	Emanuele	8	5
FAUP	Università Degli Studi di Catania	Carlo	Truppi	8	ND
FAUP	Università Degli Studi di Firenze (ARWU: 80 <sup>th</sup> -124 <sup>th</sup> )	Sylvie	Duvernois	8	ND
FAUP	Università di Roma La Sapienza (ARWU: 35th-58th)	Luigi	Corvaja	8	ND
FBAUP	National Academy of Art	Bojidar	Bonchev	8	5
FBAUP	Universidad del País Vasco	Mª. Teresa	Escohotado	8	5
FBAUP	University of Art & Design	Marku	Hakuri	8	4
FBAUP	Baskent Universitesi	Ilisulu	Tevfik	8	5

FCUP	Abant Izzet Baysal University	Cenap	Ozel	5	6
FCUP	Abant Izzet Baysal University	Erol	Yilmaz	5	6
FCUP	Abant Izzet Baysal University	Tahire	Ozen	5	6
FEP	University of Masaryk	Lubomír	Popelínský	6.5	9
FEP	University of Masaryk	Lubomír	Popelínský	6	5
FEP	University of Pardubice	Ticiano	Costa Jordão	2	1
FEP	Universidad de "A Coruña"	Rosa	Mariz	5	4
FEP	Universidade de Zaragoça	Begoña	Gutiérrez-Neto	5	3
FEP	Universidade de Zaragoça	Begoña	Pelegrín Martínez	5	3
FEP	Universidade de Zaragoça	Cristina	Ortiz	5	3
FEP	Warsaw School of Economics	Jaroslaw	Olejniczak	5	8
FEP	Robert Gordon University	Rob	Nash	6	7
FEUP	Masaryk University	Vit	Kudrle	5	9
FEUP	Georg-Simon-Hochschule Nurnberg	Rudolf	Lindner-Mieves	8	4
FEUP	Politecnico di Torino	Sebastiano	Foti	6	5
FEUP	Vilnius Gediminas Technical University	Antanas	Sapalas	5	8
FEUP	University of Szcecin - Institute of Marine Scince	Kazimierz	Furmanczyk	8	9
FEUP	University of Zilina	Mária	Franekova	5	8
FEUP	Anadolu University	Altug	Iftar	ND	5
FFUP	Univerzita Karlova (ARWU: 80 <sup>th</sup> -124 <sup>th</sup> )	Petr	Solich	8	5
FFUP	Universidad Cardenal Herrera - CEU	José Martínez	Catalayud	8	5
FLUP	Universität Wien (ARWU: 59 <sup>th</sup> -79 <sup>th</sup> )	Friedrich	Frosch	5	5
FLUP	Univerzita Tomáse Bati ve Zlíne	Radka	Sedláčková	5	5
FLUP	Universität Frankfurt am Main (ARWU: 35 <sup>th</sup> -58 <sup>th</sup> )	Susanne	Heeg	8	4
FLUP	Universität Leipzig (ARWU: 80 <sup>th</sup> -124 <sup>th</sup> )	Ilse	Nagelschmidt	8	5
FLUP	Otto-von-Guericke-Universität Magdeburg	Reinhold	Wandel	5	5
FLUP	Hochschule der Medien Stuttgart	Rafael	Capurro	8	7
FLUP	Universitat de Barcelona (ARWU: 59 <sup>th</sup> -79 <sup>th</sup> )	Francesc	Nadal	8	5
FLUP	Universidad de Granada	Ana	Pérez López	8	12
FLUP	Universidad de A Coruña	Gerardo	Hernandez Rodriguez	8	3
FLUP	Universidad de Salamanca	Teresa	Vicente Mosquete	8	5
FLUP	Universidad de Santiago de Compostela	David Xosé	Chao Castro	8	4
FLUP	Universidad de Vigo	Manuel	Dasilva Fernández	8	9
FLUP	Université d'Angers	Lionel	Guillemot	5	7
FLUP	Université Paris VIII - Vincennes	Lúcia	da Silva	5	6
FLUP	Université Paris VIII - Vincennes	Maria Helena	Araújo Carreira	7	5
FLUP	Eötvös Loránd Tudományegyetem, Budapest	José Jesús	Reyes Nunez	8	3
FLUP	Eötvös Loránd Tudományegyetem, Budapest	Giampaolo	Salvi	5	5
FLUP	Eötvös Loránd Tudományegyetem, Budapest	Pál	Ferenc	5	3
FLUP	Università degli Studi di Perugia	Brunello	de Cusatis	5	5
FLUP	Uniwersytet Lódzki	Joanna	Nijakowska	5	8
FLUP	Göteborgs Universitet (ARWU: 80th-124th)	Edgar	Platen	8	5
FLUP	Jyväskylän Yliopisto	Outi	Merisalo	8	5
FLUP	Tampereen Yliopisto	Kathleen	Moore	7	4
FLUP	Tampereen Yliopisto	Roger	Luke	5	6

FLUP	University of Essex	Jeffrey Alan	Geiger	8	5
FLUP	University of Central Lancashire	Matthew Ian	Gibson	8	6
FMUP	Medical University of Bialystok	Jozwik	Maciej	8	5
FPCEUP	Université Catholique de Louvain (ARWU: 35 <sup>th</sup> -58 <sup>th</sup> )	Isabelle	Roskam	8	4
FPCEUP	Université Catholique de Louvain (ARWU: 35 <sup>th</sup> -58 <sup>th</sup> )	James	Day	8	4
FPCEUP	Université Catholique de Louvain (ARWU: 35 <sup>th</sup> -58 <sup>th</sup> )	Vincent	Dupriez	8	3
FPCEUP	Université de Mons-Hainaut	Willy	Lahaye	8	4
FPCEUP	Universidad Autónoma de Barcelona	António Navío Carmen	Gámez	5	5
FPCEUP	Universidad Autónoma de Barcelona	Ruiz	Bueno	5	5
FPCEUP	Universidad Autónoma de Barcelona	David Rodríguez	Gómez	5	5
FPCEUP	Universidad Autónoma de Barcelona	Óscar Mas	Torelló	5	5
FPCEUP	Universidad de Murcia	Jesus	Molina	8	2
FPCEUP	Universidad de Cádiz	José	Pérez	8	5
FPCEUP	Université PARIS 5 (ARWU: 59 <sup>th</sup> -79 <sup>th</sup> )	Catherine	Delgoule	10	3
FPCEUP	Université PARIS 8	Clarisse Faria	Fortecoëf	5	4
					4
FPCEUP	Université de Poitiers	Thierry	Olive	8	4
FPCEUP	Université de Toulouse II le Mirail	Véronique	Rouyer	10	3
FPCEUP	Mykolas Romeris University (MRU)	Vladislav B.	Sotirovic	10	4
ICBAS	Universitá Degli Studi Di Milano (ARWU: 35 <sup>th</sup> -58 <sup>th</sup> )	Valeria	Grieco	6	4
ICBAS	Ankara Üniversitesi	Belma	Konuklugil	16	14

# Annex 3. COOPERATION PROTOCOLS WITH FOREIGN HEIS

# **BILATERAL COOPERATION AGREEMENTS:**

# **GERMANY**

Deutsche Sporthochschule Koln

Handelshochschule Leipzig

# ANGOLA

Universidade Agostinho Neto

Université des Sciences et de Technology «Houari Boumediene»

ARGENTINA
Universidad de Buenos Aires (RI³: position 11)

**AUSTRALIA** Victoria University of Technology

Université Catholique de Louvain Université Libre de Bruxelles

# BRAZIL

Centro Federal de Educação Tecnológica da Paraíba Centro Universitário de Belo Horizonte Centro Universitário Nove de Julho Centro Universitário UNIVATES Pontifícia Universidade Católica de Campinas

Pontifícia Universidade Católica de Minas Gerais

Pontifícia Universidade Católica do Paraná

Pontifícia Universidade Católica do Rio Grande do Sul

UNILASALLE - Centro Universitário de La Salle

Universidade Católica de Pernambuco

Universidade da Região de Joinville – UNIVILLE

Universidade de Brasília (RI<sup>3</sup>: position 71)

Universidade de Caxias do Sul Universidade de Fortaleza

Universidade de Pernambuco

Universidade de São Paulo (RI<sup>3</sup>: position 2)

Universidade do Estado de Santa Catarina

Universidade do Estado do Amazonas

Universidade do Estado do Rio de Janeiro (RI<sup>3</sup>: position 66)

Universidade do Vale do Rio dos Sinos

Universidade Estadual da Paraíba

Universidade Estadual de Campinas (RI3: position 6)

Universidade Estadual de Maringá

Universidade Estadual Paulista 'Júlio Mesquita Filho' (RI<sup>3</sup>: position 15)

Universidade Federal da Bahia (RI<sup>3</sup>: position 98)

Universidade Federal da Paraíba

Universidade Federal de Alagoas

Universidade Federal de Campina Grande

Universidade Federal de Itajubá

Universidade Federal de Juiz de Fora

Universidade Federal de Mato Grosso

Universidade Federal de Minas Gerais (RI3: position 23)

Universidade Federal de Ouro Preto

Universidade Federal de Pelotas

Universidade Federal de Pernambuco (RI<sup>3</sup>: position 65) Universidade Federal de Santa Catarina (RI<sup>3</sup>: position 63)

Universidade Federal de Santa Maria

Universidade Federal de São Paulo (RI3: position 27)

Universidade Federal de Uberlândia

Universidade Federal do Acre

Universidade Federal do Amazonas

Universidade Federal do Ceará (RI3: position 90)

Universidade Federal do Espírito Santo

Universidade Federal do Estado do Rio de Janeiro

Universidade Federal do Maranhão

Universidade Federal do Pará

Universidade Federal do Paraná (RI<sup>3</sup>: position 67)

Universidade Federal do Piauí

Universidade Federal do Rio de Janeiro (RI<sup>3</sup>: position 9)

Universidade Federal do Rio Grande do Norte

Universidade Federal do Rio Grande do Sul (RI³: position 22)

Universidade Federal Fluminense (RI<sup>3</sup>: position 70)

Universidade Presbiteriana Mackenzie

Universidade Regional de Blumenau

Universidade Regional do Noroeste do Estado do Rio Grande do Sul

Universidade Regional Integrada do Alto Uruguai e das Missões

Universidade Salgado de Oliveira – UNIVERSO

Universidade Tecnológica Federal do Paraná

# CAPE VERDE

Instituto Superior de Educação de Cabo Verde

Université de Montreal

Université du Québec à Trois Rivières

Pontifícia Universidad Católica de Chile (RI3: position 29)

Pontifícia Universidad Católica de Valparaíso

# **CHINA**

Beijing institute of technology

Zhejiang University

Universidad Colegio Mayor de Nuestra Señora del Rosario

Universidad Central "Marta Abreu" de Las Villas

Universidad de Pinar Del Rio

# SLOVENIA

Univerza v Mariboru

Euro Mediteranean University

Universidad de Barcelona (ARWU Shangai: 59-79 Europe)

Universidad de La Coruña

Universidad de Múrcia

Universidad de Santiago de Compostela

Universidad de Sevilla

Universidad de Valladolid

Universitat de Valência

Universitat Pompeu Fabra Barcelona

### FINALND

Jyväskylän Yliopisto

Université Claude Bernard - Lyon I (ARWU Shangai: 80-124 Europe) Université de Bordeaux I (ARWU Shangai: 80-124 Europe)

Université de Metz

Université de Rouen

Université de Technologie de Compiègne

Université Michel de Montaigne Bordeaux III

### GEORGIA

Academia Estatal de Belas Artes de Tbilisi

### GUINEA-BISSAU

Escola Nacional de Educação Física e Desportos

Universidade Amilcar Cabral

Dublin University, Trinity College (ARWU Shangai: 80-124 Europe)

### ISRAEL

University of Haifa

Zinman College

Universita Degli Studi Mediterranea Di Reggio Calabria

Universitá Degli Studi di Palermo

Università Degli Studi di Roma Tor Vergata

# **JAPAN**

Universidade de Okayama

## LEBANON

Universidade Saint Joseph de Beirute

# MACAU

Instituto Politécnico de Macau

University of Macau

# MOROCCO

Université Moulay Ismail

# MEXICO

Benemérita Universidad Autonoma de Puebla

Universidad Autónoma de Campeche

Universidad Nacional Autónoma de México (RI3: position 4)

# MOZAMBIQUE

Univ. Pedagógica de Moçambique

Instituto Superior de Ciências e Tecnologia de Moçambique

Universidade Eduardo Mondlane

Universidade Lúrio

## OMAN

University of Nizwa

Universidad Nacional de Educación Enrique Guzman y Valle

Universidad Privada Antenor Orrego

### POLAND

Marie Curie-Sklodowska University Politechnika Wrocławska Uniwersytet Lódzki

### UNITED KINGDOM

University of Bristol (ARWU Shangai: 61 World and 16 Europe)

# ROMANIA

Universitatea Politehnica din Timisoara

Peoples' Friendship University of Rússia Universidade Linguística Estatal de Moscovo

# **SERBIA**

University of Belgrade

### SWEDEN

Uppsala Universitet (ARWU Shangai: 71 World and 21 Europe)

# THAILAND

Burapha University Chiang Mai University Kasetsart University Khon Kaen University

### USA

Brown University (ARWU Shangai: 71 World) Pittsburg State University The Virginia Polytechnic Institute and State University University of California-Berkeley (ARWU Shangai: 3 World) University of Geórgia University of Montana

# **CO-TUTELE PhD**

## **BELGIUM**

Université Catholique de Louvain (1 AGREEMENT)

Universidad Complutense de Madrid (1 AGREEMENT) (ARWU Shangai: 80-124 Europe)

École des Hautes Études en Sciences Sociales (1 AGREEMENT) Ecole Polytechnique (1 ACORDO) (ARWU Shangai: 80-124 Europe) Institut National Polytechnique de Grenoble (1 AGREEMENT) Université de Bretagne Occidentale - Brest (1 AGREEMENT) Université de la Sorbonne Nouvelle (Paris III) (2 AGREEMENTS) Université de Limoges (2 ACORDOS)

Université Pierre et Marie Curie (Paris VI) (1 AGREEMENT) (ARWU Shangai: 42 worlde 7 Europe)

# HOLLAND

Technische Universiteit Delft (2 AGREEMENTS) (ARWU Shangai: 59-79 Europe)

Politecnico di Milano (1 AGREEMENT)

# UNITED KINGDOM

University of Kent (1 AGREEMENT)

University of Leeds (1 AGREEMENT) University of Leeds (1 AGREEMENT) (ARWU Shangai: 35-58 Europe)

Universitatea Alexandru Ioan Cuza Iasi (1 AGREEMENT)

# JOINT DIPLOMA AGREEMENT

# FRANCE

### EUROPEAN PhD

### SPAIN

Universidad de Vigo (1 AGREEMENT) Universidad de Zaragoza (3 AGREEMENTS)

### GREECE

Polytechnio Kritis

# SWEDEN

Karolinska Institutet Stockholm (ARWU Shangai: 51 World and 11 Europe)

# SOCRATES/ ERASMUS agreements - 2007/08

### Germany: 55

- D AACHEN01 Rheinisch-Westfalische Technische Hochschule Aachen (ARWU Shangai: 80-124 Europe)
- D AUGSBUR01 Universitat Augsburg
- D BAMBERG01 Otto-Friederich-Universitat Bamberg NEW
- D BAYREUT01 Universitat Bayreuth
- D BERLIN01 Freie Universitat Berlin
- D BERLIN02 Technische Universität Berlin (ARWU Shangai: 80-124 Europe)
- D BERLIN13 Humboldt-Universität Zu Berlin
- D BONN01 Rheinische Friedrich-Wilhelmsuniversität (ARWU Shangai: 97 World and 33 Europe)
- D BREMEN01 Universität Bremen
- D CHEMNIT01 Tecnische Universität Chemnitz
- D COTTBUS01 Brandenburgishe Technische Universität (BTU) Cottbus
- D DARMSTA01 Technische Universität Darmstadt
- D DRESDEN02 Technische Universität Dresden
- D DRESDEN04 Hochschule für Bildende Künste Dresden
- D DUSSELD01 Heinrich-Heine-Universität Düsseldorf (ARWU Shangai: 80-124 Europe)
- D EICHSTA01 Katholische Universitat Eichstatt
- D ERLANGE01 Friederich-Alexander-Universität Erlangen-Nürnberg (ARWU Shangai: 80-124 Europe)
- D ESSEN04 Universität Duisburg Essen
- D FLENSBU01 Bildungswissenscheftliche Hochschule Flensburg Universität
- D FRANKFU01 Johann Wolfgang Goethe-Universitat Frankfurt am Main (ARWU Shangai: 35-58 Europe)
- D FREIBUR01 Albert-Ludwigs-Ubiversität Freiburg Im Breisgau (ARWU Shangai: 96 World and 32 Europe)
- D GIESSEN01 Justus Liebig Üniversität Giessen
- D GOTTING01 Georg-August-Universität Göttingen (ARWU Shangai: 90 World and 29 Europe)
- D HAMBURG01 Universitat Hamburg (ARWU Shangai: 59-79 Europe)
- D HANNOVE01 Universitat Hannover
- D HEIDELB01 Ruprecht-Karls Universität Heidelberg (ARWU Shangai: 67 World and 18 Europe)
- D HILDESH01 Universitat Hildesheim
- D JENA01 Fredrich-Schiller-Universität Jena
- D KAISERS01 Technische Universität Kaiserslautern
- D KARLSRU01 Universität Karlsruhe (Technische Hochschule) (ARWU Shangai: 80-124 Europe)
- D KARLSRU04 Staatliche Akademie der Bildenden Kunste Karlsruhe
- D KARLSRU07 Berufsakademie Karlsruhe
- D KIEL01 Christian-Albrechts-Universität zu Kiel (ARWU Shangai: 59-79 Europe)
- D KIEL05 Muthesius Kunsthochschule NEW
- D KOLN01 Universität zu Köln (ARWU Shangai: 59-79 Europe)
- D KONSTAN01 Universitat Konstanz
- D LEIPZIG01 Universitat Leipzig (ARWU Shangai: 80-124 Europe)
- D LEIPZIG02 Hochschule Fuer Technik, Wirtschaft Und Kultur Leipzig (Fh)
- D MAGDEBU01 Otto-Von-Guericke-Universität Magdeburg
- D MAINZ01 Johannes-Gutenberg-Universitat Mainz (ARWU Shangai: 35-58 Europe)
- D MERSEB02 Fachhochschule Merseburg
- D MUNCHEN01 Ludwig-Maximilians-Universität München (ARWU Shangai: 55 World and 13 Europe)
- D MUNCHEN02 Technische Universitat München (ARWU Shangai: 57 World and 15 Europe)
- D MUNSTER01 Westfalische-Wilhelms-Universitat Munster (ARWU Shangai: 35-58 Europe)
- D NURNBER02 Georg Simon Ohm Fachochschule Nürnberg
- D OSNABRU01 Universitat Osnabruck
- D OSNABRU02 Fachhochschule Osnabrück
- D POTSDAM01 Universität Potsdam
- D REGENSB01 Universität Regensburg
- D SAARBRU01 Universitat des Saarlandes
- D STUTTGA01 Universität Stuttgart (ARWU Shangai: 80-124 Europe)
- D STUTTGA06 Hochschule der Medien Stuttgart NEW
- D TRIER02 Fachhochschule Trier Hochschule fuer Technik, Wirtschaft und Gestaltung

- D TUBINGE01 Eberhard-Karls-Universität Tubingen (ARWU Shangai: 35-58 Europe)
- D WURZBUR01 Julius-Maximilians-Universitaet Wuerzburg (ARWU Shangai: 35-58 Europe)

- A GRAZ02 Technische Universität Graz Erzherzog Johann Universität
- A GRAZ23 Medizinische Universitat Graz NEW
- A INNSBRU01 Leopold-Franzens-Universitat Innsbruck
- A INNSBRU21 Medizinische Universität Innsbruck NEW
- A KUFSTEIN01 FHS Kufstein Tirol Bildungs GMBH
- A SALZBUR01 Universität Salzburg
- A WIEN01 Universitat Wien (ARWU Shangai: 59-79 Europe)
- A WIEN02 Technische Universitaet Wien NEW

### Belgium: 13

- B ANTWERP57 Hogeschool Antwerpen
- B BRUSSEL01 Vrije Universiteit Brussel
- B BRUSSEL02 Katholieke Universiteit Brussel
- B BRUXEL04 Université Libre de Bruxelles (ARWU Shangai: 35-58 Europe)
- B BRUXEL28 75 Établissement d'Ensignement Supérieur des Arts Plastiques
- B BRUXEL81 Institut supérieur de traducteurs et interprètes (Haute Ecole de Bruxelles)
- B GENT01 Universiteit Gent (ARWU Shangai: 35-58 Europe)
- B KORTRIJ01 Katholieke Hogeschool Zuid-West-Vlaanderen NEW
- B LEUVEN01 Katholieke Universiteit Leuven (ARWU Shangai: 35-58 Europe)
- B LIEGE01 Université de Liège (ARWU Shangai: 80-124 Europe)
- B LIEGE39 Haute École de la Province de Liège NEW
- B LOUVAIN01 Université Catholique de Louvain (ARWU Shangai: 35-58 Europe)
- B MONS03 Université de Mons-Hainaut

- BG SOFIA06 Sofiiki Universitet Sveti Kliment Ohridski
- BG SOFIA08 Natzionalna Hufojestvena Akademia
- BG SOFIA17 Natzionalna Sportna Akademia "Vasil Levski" NEW

<u>Cyprus</u>: 1 CY NICOSIA01 Panepistimio Kyprou – NEW

## Denmark: 6

- DK ARHUS01 Aarhus Universitet (ARWU Shangai: 93 World and 31 Europe)
- DK HORSENS03 University College Vitus Bering Danmark
- DK KOBENHA01 Kobenhavns Universitet (ARWU Shangai: 45 World and 8 Europe)
- DK KOBENHA10 Danmarks Biblioteksskole
- DK LYNGBY01 Danmarks Tekniske Universitet (ARWU Shangai: 59-79 Europe)
- DK ODENSE01 Syddansk Universitet

## Slovakia: 5

- SK BANSKA01 Univerzita Mateja Bela v Banskej Bystrici
- SK BRATISL02 Univerzita Komenskeho v Bratislave
- SK BRATISL04 Vysoká Skola Vytvarnych Umení v Bratislave
- SK KOSICE 02 Univerzita Pavla Jozefa Safarika v Kosiciach NEW
- SK ZILINA01 Zilinska univerzita v Ziline

- <u>Slovenia</u>: 2 SI LJUBLJA01 Univerza v Ljubljani
- SI MARIBOR01 Univerza v Mariboru

# Spain: 44

- E ALCAL-H01 Universidad de Alcalá de Henares
- E ALICANT01 Universidad de Alicante
- E BADAJOZ01 Universidad de Extremadura
- E BARCELO01 Universidad de Barcelona (ARWU Shangai: 59-79 Europe)
- E BARCELO02 Universidad Autonoma de Barcelona
- E BARCELO03 Universitat Politècnica de Cataluña
- E BARCELO15 Universitat Pompeu Fabra Barcelona
- E BILBAO01 EHU Euskal Herriko Unibertsitatea
- E CADIZ01 Universidad de Cádiz
- E CIUDA-R01 Universidad de Castilla la Mancha
- E ELCHE01 Universidad Miguel Hernandez de Elche
- E GIRONA02 Universitat de Girona
- E GRANADA01 Universidad de Granada
- E HUELVA01 Universidad Huelva
- E JAEN01 Universidad de Jaén
- E LA-CORU01 Universidad de La Coruña
- E LAS-PAL01 Universidad de Las Palmas de Gran Canaria
- E LEON01 Universidad de León
- E MADRID02 Universidad Pontificia Comillas

- E MADRID03 Universidad Complutense de Madrid (ARWU Shangai: 80-124 Europe)
- E MADRID04 Universidad Autonoma de Madrid (ARWU Shangai: 80-124 Europe)
- E MADRID05 Universidad Politécnica de Madrid
- E MADRID14 Universidad Carlos III de Madrid NEW
- E MADRID17 Universidad Alfonso X El Sabio
- E MALAGA01 Universidad de Málaga
- E MURCIA01 Universidad de Murcia E MURCIA04 Universidad Politécnica de Cartagena
- E MURCIA05 Universidad Catolica San Antonio de Murcia
- E OVIEDO01 Universidad De Oviedo
- E PALMA01 Universitat de Les Illes Baleares
- E PAMPLON01 Universidad de Navarra
- E SALAMAN02 Universidad de Salamanca
- E SANTAND01 Universidad de Cantabria
- E SANTIAG01 Universidad de Santiago de Compostela
- E SEVILLA01 Universidad de Sevilla NOVA
- E TARRAGO01 Universitat Rovira I Virgili
- E TENERIF01 Universidad de La Laguna
- E VALENCI01 Universitat de Valencia
- E VALENCI02 Universidad Politecnica de Valencia
- E VALENCI08 Universidad Cardenal Herrera CEU
- E VALLADO01 Universidad de Valladolid
- E VALLADO03 Universidad Europea Miguel de Cervantes
- E VIGO01 Universidad de Vigo
- E ZARAGOZ01 Universidad de Zaragoza

### Estonia: 3

- EE TALLINN01 Eesti Kunstiakademia
- EE TALLINN04 Tallina Tehnikaúlikool
- EE TARTU01 Eesti Maaülikool

# Finland: 10

- SF HELSINKI01 Helsingin Yliopisto
- SF HELSINK06 Taideteollinen Korkeakoulu NEW
- SF JYVASKY01 Jyväskylän Yliopisto
- SF KUOPIO01 Kuopion Yliopisto
- SF LAPPEEN01 Lappeenrannan Teknillinen Yliopisto
- SF OULU01 Oulun Yliopisto
- SF SEINAJO06 Seinäjoen Ammattikorkeakoulu
- SF TAMPERE01 Tampereen Yliopisto
- SF TAMPERE02 Tampereen Teknillinen Yliopisto
- SF VANTAA06 Laurea-Ammattikorkeakoulu

## France: 69

- F ANGERS01 Université D`Angers
- F ANGERS04 Université Catholique de l'Ouest NEW
- F AVIGNON01 Université d'Avignon et des Pays de Vaucluse NEW
- F BORDEAU01 Université de Bordeaux I (ARWU Shangai: 80-124 Europe)
- F BORDEAU02 Université Victor Segalen Bordeaux 2
- F BORDEAU03 Université Michel de Montaigne Bordeaux III
- F BORDEAU36 Ecole des Beaux-Arts de Bordeaux
- F BORDEAU37 Institut dEtudes Politiques de Bordeaux
- F BORDEAU41 Université Montesquieu Bordeaux IV
- F CERGY01 Ecole Nationale Supérieure de l'Eléctronique et de ses Applications
- F CLERMON01 Université d'Auvergne CLlermont-Ferrand I
- F CLERMON02 Université Blaise Pascal Clermont-Ferrand II
- F CLERMON22 Ecole Supérieure d'Art de Clermont Communauté
- F COMPIEG01 Université de Technologie de Compiègne F DIJON01 Université de Bourgogne-Dijon - NOVA
- F EVRY04 Université d'Evry-Val d'Essonne
- F GRENOBL01 Université de Joseph Fourier Grenoble I (ARWU Shangai: 59-79 Europe)
- F GRENOBL02 IUT2 de Grenoble Université Pierre Mendes France
- F LE-HAVR04 École Supérieure de Commerce Le Havre Group ESC Normandie
- F LE-MANS11 Ecole Supérieure des Beaux-Arts de Le Mans
- F LILLE02 Université de Lille 2
- F LILLE25 Ecole d'Architecture de Lille Régions Nord
- F LORIENT05 École Supérieure d'Arts
- F LYON01 Université Claude Bernard Lyon I (ARWU Shangai: 80-124 Europe)
- F LYON12 Institut National des Sciences Appliquées de Lyon INSA
- F MARSEIL01 Université de Provence (Aix-Marseille I) NEW
- F MARSEIL02 Université de la Méditerranée (Aix-Marseille II) (ARWU Shangai: 80-124 Europe)
- F METZ01 Université de Metz NOVA
- F MONTPEL01 Université Montpellier I
- F MONTPEL14 ENSAM Ecole Nationale Supérieure d Architecture de Montpellier
- F NANCY01 Université Henri-Poincaré Nancy

- F NANCY22 Institut National Polytéchnique de Lorraine
- F NANTES01 Université de Nantes
- F NANTES34 École Régionale des Beaux Arts de Nantes
- F PALAISE01 Ecole Polytechnique (ARWU Shangai: 80-124 Europe)
- F PARIS003 Université de la Sorbonne Nouvelle (Paris III)
- F PARIS004 Université Paris Sorbonne Paris IV
- F PARIS005 Université René Descartes PARIS V (ARWU Shangai: 59-79 Europe)
- F PARIS006 Université Pierre et Marie Curie (Paris VI) (ARWU Shangai: 42 World and 7 Europe)
- F PARIS007 Université de Paris VII Denis Diderot (ARWU Shangai: 35-58 Europe)
- F PARIS008 Université Paris 8 Vincennes-Saint Denis
- F PARIS009 Université Paris Dauphine
- F PARIS012 Universite De Paris-Val De Marne (Paris XII)
- F PARIS057 Ecole des Hautes Études en Sciences Sociales
- F PARIS062 Ecole Nationale Supérieure dArts et Métiers
- F PARIS085 Ecole Nationale des Ponts et Chaussées
- F PARIS117 Ecole Nationale Supérieure des Beaux-Arts
- F PARIS129 Ecole d'Architecture Paris-Val de Seine
- F PARIS190 Ecole d'Architecture Paris-Belleville
- F PARIS244 Institut des Hautes Etudes Economiques et Commerciales Paris
- F PAU01 Université de Pau et des Pays de l'Adour
- F POITIER01 Université de Poitiers
- F QUIMPER09 Ecole Supérieure des Beaux Arts de Cornouaille
- F RENNES02 Université de Haute-Bretagne (Rennes 2)
- F RENNES10 Institut National des Sciences Appliquées de Rennes INSA
- F RENNES28 Institut d'Études Politiques de Rennes
- F ROUEN01 Université de Rouen
- F ST-ETIE06 Ecole Nationale Sup. des Mines de Saint Etienne F ST-ETIE16 ECOLE SUPERIEURE D'ART ET DESIGN DE SAINT-ETIENNE
- F STRASBO01 Université Louis Pasteur (Strasbourg I) (ARWU Shangai: 35-58 Europe)
- F STRASBO03 Université de Strasbourg III Robert Schuman
- F STRASBO25 Ecole Supérieure des Arts Décoratifs, Strasbourg
- F TOULON01 Université du Sud Toulon-Var NEW
- F TOULOUS02 Université de Toulouse II le Mirail
- F TOULOUS14 Institut National des Sciences Appliquées de Toulouse
- F TOULOUS28 Institut National Polytéchnique de Toulouse
- F TOURS01 Université François Rabelais (Tours)
- F VANNES04 Université de Bretagne-Sud
- F VERSAIL05 Ecole Nationale Supérieure d'Architecture de Versailles

- G ATHINE01 Ethniko kai Kapodistriako Panepistimio Athinon (ARWU Shangai: 80-124 Europe)
- G ATHINE02 Ethniko Metsovio Polytechnio (E.M.P)
- G ATHINE06 Anotati Scholi Kalon Tehnon
- G ATHINE34 Technologiko Ekpedeftiko Idrima (T.E.I.) Athens
- G ATHINE41 Panepistimio Egeou NOVA
- G KOZANI 02 Panepistimio Dytikis Makedonias NEW
- G KRITIS 09 Polytechnio Kritis NOVA
- G THESSAL01 Aristoteleio Panepistimio Thessalonikis

- HU BUDAPES01 Eotvos Lorand Tudomanyegyetem
- HU BUDAPES02 Budapesti Muszaki es Gazdasagtudomanyi Egyetem
- HU BUDAPES03 Budapesti Corvinus Egyetem
- HU BUDAPES08 Semmelweis University
- HU BUDAPES27 Moholy-Nagy Muveszeti Egyetem
- HU DEBRECE01 Debreceni Egyetem
- HU MISKOLC01 Miskolci Egyetem NEW
- HU SZEGED01 Szegedi Tudomanyegyetem

- IRL DUBLIN02 University College Dublin National University of Ireland
- IRL DUBLIN27 Dublin Institute of Technology
- IRL GALWAY01 National University of Ireland, Galway / Ollscoil na hÉireann, Gaillimh
- IRL LIMERIC01 University of Limerick

## Iceland: 1

IS REYKJAV01 University of Iceland / Haskoli Islands - NEW

# Italy: 46

- I BARI01 Università degli Studi di Bari
- BENEVEN02 Università Degli Studi del Sannio Benevento
- I BERGAMO01 Università degli Studi di Bergamo
- I BOLOGNA01 Università Degli Studi di Bologna (ARWU Shangai: 80-124 Europe)
- BOLOGNA03 Academia di Belle Arti di Bologna
- I CAGLIARI01 Università degli Studi di Cagliari

- I CASTELL01 Università Carlo Cattaneo
- I CATANIA01 Università degli Studi di Catania
- I CHIETI01 Università Degli Studi G. Dannunzio Chieti
- I COSENZA01 Università degli studi della Calabria NEW
- I FERRARA01 Università Degli Studi di Ferrara
- I FIRENZE01 Università Degli Studi di Firenze (ARWU Shangai: 80-124 Europe)
- I GENOVA01 Università Degli Studi di Genova
- I LECCE01 Università Degli Studi di Lecce
- I MACERAT02 Accademia di Belle Arti
- I MILANO01 Università degli Studi di Milano (ARWU Shangai: 35-58 Europe)
- I MILANO02 Politecnico di Milano
- I MILANO08 Accademia di Belle Arti de Brera, Milano
- I MILANO16 Università degli Studi di Milano-Bicocca
- I MODENA01 Università degli Studi di Modena e Reggio Emilia
- I NAPOLI01 Università degli Studi di Napoli Federico II
- I NAPOLI02 Universita degli Studi di Napoli "L'Orientale"
- I NAPOLI04 Instituto Universitario Suor Orsola Benincasa
- I NAPOLI09 II Università degli studi di Napoli
- I PADOVA01 Universitá degli Studi di Padova (ARWU Shangai: 59-79 Europe)
- I PALERMO01 Universitá Degli Studi di Palermo
- I PARMA01 Università degli Studi di Parma
- I PAVIA01 Università Degli Studi di Pavia
- I PERUGIA01 Università Degli Studi di Perugia
- I PISA01 Università degli studi di Pisa (ARWU Shangai: 35-58 Europe)
- I POTENZA01 Università degli Studi della Basilicata
- I ROMA01 Università Degli Studi di Roma La Sapienza (ARWU Shangai: 35-58 Europe)
- I ROMA02 Università Degli Studi di Roma Tor Vergata
- I ROMA04 Libera Università Maria Ss. Assunta
- I ROMA05 Instituto Universitario di Scienze Motorie
- I ROMA16 Universita Degli Studi Roma Tre
- I SALERNO01 Università Degli Studi di Salerno
- I SIENA01 Università degli Studi di Siena
- I TORINO01 Università Degli Studi di Torino (ARWU Shangai: 59-79 Europe)
- I TORINO02 Politecnico di Torino
- I TRENTO01 Università degli Studi di Trento
- I UDINE01 Università degli studi di Udine
- I VARESE02 Università degli Studi dell'Insubria
- I VENEZIA01 Università Ca' Foscari Di Venezia
- I VENEZIA02 Instituto Universitario di Architettura di Venezia
- I VITERBO01 Università Degli Studi Della Tuscia

# Latvia: 4

- LV REZEKNE02 Rezeknes Augstskola
- LV RIGA04 Latvijas Makslas Akademija (Art Academy of Latvia)
- LV RIGA14 Rigas Ekonomikas Augstskola
- LV VALMIER01 Vidzemes Augstskola

## Lituania: 3

- LT KAUNAS02 Kauno Technologijos Universitetas
- LT VILNIUS02 Vilnius Gedimino Techninos Universitetas
- LT VILNIUS06 Mykolo Romerio Universitetas NEW

## Norway: 7

- N BEKKEST01 Hogskolen i Akershus NEW
- N BERGEN01 Universitetet i Bergen
- N KONGSBE01 Hogskolen I Buskerud
- N KRISTIA01 Hogskolen i Agder NEW
- N OSLO01 Universitetet i Oslo (ARWU Shangai: 64 World and 17 Europe)
- N OSLO02 Arkitektur Og Designhogskolen i Oslo
- N TRONDHE01 Norges Teknisk-Naturvitenskapelige Universitet (ARWU Shangai: 80-124 Europe)

# The Netherlands: 13

- NL AMSTERD01 Universiteit van Amsterdam NEW(ARWU Shangai: 35-58 Europe)
- NL AMSTERD02 Vrije Universiteit Amsterdam (ARWU Shangai: 35-58 Europe)
- NL AMSTERD05 Hogeschool van Amesterdam NEW
- NL DELFT01 Technische Universiteit Delft
- NL EINDHOV17 Technische Universiteit Eindhoven
- NL ENSCHED01 Universiteit Twente
- NL LEIDEN01 Universiteit Leiden (ARWU Shangai: 76 World and 23 Europe)
- NL MAASTRI01 Universiteit Maastricht
- NL NIJMEGE01 Radboud Universiteit Nijmegen NOVA (ARWU Shangai: 59-79 Europe)
- NL ROTTERD03 Hogeschool Rotterdam and Omstreken (Acad. Beeldende Kunsten)
- NL TILBURG01 Universiteit van Tilburg NEW
- NL UTRECHT01 Universiteit Utrecht (ARWU Shangai: 47 World and 9 Europe)
- NL VELP03 Internationale Agrarische Hogeschool Larenstein NEW

# Poland: 22 Instituições

- PL BIALYST02 Akademia Medyczna w Bialymstoku
- PL KATOWIC08 Akademia Sztuk Pieknych w Katowicach (ASP)
- PL KRAKOW01 Uniwersytet Jagiellonski w Krakowie- NEW
- PL KRAKOW05 Akademia Pedagogiczna im. Ken w Krakowie
- PL KRAKOW10 Akademia Sztuk Pieknych Im. Jana Matejki w Krakowie
- PL LODZ01 Uniwersytet Lódzki
- PL LODZ02 Politechnika Lodzka NOVA
- PL LODZ07 Wyzsza Szkola Humanistyozno-Ekonomiczna w Lodzi
- PL LUBLIN01 Uniwersytet Marii Curie Sklodowskiej
- PL LUBLIN05 Akademia Medyczna Im. Prof. Feliksa Skubiszewskiego w Lublinie
- PL POZNAN01 Uniwersytet Im. Adama Mickiewicza NEW
- PL POZNAN02 Politechnika Poznanska
- PL POZNAN05 Akademia Medyczna im. Karola Marcinkowskiego w Poznaniu NEW
- PL SZCZECI01 Uniwersytet Szczecinski
- PL TORUN01 Uniwersytet Mikolaja Kopernika
- PL WARSZAW01 Uniwersytet Warszawski
- PL WARSZAW07 Uniwersytet Kardynala Stefana Wyszynskiego w Warsawie
- PL WARSZAW23 Wyzsza Szkola Pedagogiczna TWP
- PL WROCLAW01 Wyzsza Szkola Humanistyczno-Ekonomiczna we Wroclawiu
- PL WROCLAW02 Panstwowa Wyzsza Szkola Zawodowa we Wroclawiu
- PL WROCLAW05 Akademia Medyczna we Wroclawiu
- PL WROCLAW07 Akademia Sztuk Pieknych we Wroclawiu

# United Kingdom: 25

- UK ABERDEE01 University of Aberdeen (ARWU Shangai: 80-124 Europe)
- UK ABERDEE03 The Robert Gordon University
- UK BRISTOL01 University of Bristol (ARWU Shangai: 61 World and16 Europe)
- UK COLCHES01 University of Essex
- UK COVENTR01 University of Warwick
- UK DUNDEE01 University of Dundee (ARWU Shangai: 80-124 Europe)
- UK DUNDEE03 University of Abertay Dundee
- UK GLASGOW02 University of Strathclyde
- UK GLASGOW03 Glasgow School Of Art
- UK HULL01 University of Hull
- UK LAMPETE01 University of Wales, Lampeter
- UK LEEDS01 University of Leeds (ARWU Shangai: 35-58 Europe)
- UK LIVERPO01 University of Liverpool (ARWU Shangai: 35-58 Europe)
- UK LONDON015 Inperial College of London- NEW (ARWU Shangai: 27 World and 5 Europe)
- UK LONDON049 University of London The School of Pharmacy
- UK LONDON067 Middlesex University
- UK MANCHES01 The University of Manchester (ARWU Shangai: 40 World and 6 Europe)
- UK NORWICH03 Norfolk School of Art and Design
- UK NOTTING01 The University of Nottingham (ARWU Shangai: 82 World and 26 Europe)
- UK OXFORD01 University of Oxford-NOVA (ARWU Shangai: 10 World and 2 Europe)
- UK PRESTON01 University of Central Lancashire- NEW
- UK SALFORD01 University of Salford
- UK SHEFFIE01 The University of Sheffield (ARWU Shangai: 77 World and 24 Europe)
- UK SHEFFIE02 Sheffield Hallam University
- UK YORK01 University of York (ARWU Shangai: 80-124 Europe)

# Czech Republic: 10

- CZ BRNO 01 Vysoke Uceni Technicke v Brne NEW
- CZ BRNO05 Masarykova Univerzita v Brno
- CZ BRNO06 Veterinární a Farmaceutická Univerzita Brno- NEW
- CZ OLOMUC01 Univerzita Palackeho v. Olomuci
- CZ PRAHA01 Vîsoká Skola Chemicko-Technologicka v Praze
- CZ PRAHA03 Akademie Vytvarnych Umeni V Praze
- CZ PRAHA07 Univerzita Karlova (ARWU Shangai: 80-124 Europe)
- CZ PRAHA10 Ceské Vysoké Ucéni Technické v Praze
- CZ USTINAD01 Univerzita Jana Evangelisty Purkyne V Ústí Nad Labem
- CZ ZLIN01 Univerzita Tomáse Bati ve Zlíne- NOVA

# Romania: 14

- RO BRASOV01 Universitatea "Transilvania" din Brasov
- RO BUCURES04 Academia de Studii Economice Bucuresti
- RO BUCURES08 Universitatea Tehnica de Constructii din Bucuresti
- RO BUCURES09 Universitatea din Bucurest- NEW
- RO BUCURES11 Universitatea Politehnica Bucuresti
- RO CLUJNAP04 Universitatea de Stiinte Agricole si Medicina Veterinaria Cluj-Napoca
- RO CLUJNAP05 Universitatea Tehnica din Cluj-Napoca
- RO CONSTAN02 Universitatea Ovidius Constanta
- RO IASI02 Universitatea Alexandru Ioan Cuza Iasi
- RO IASI05 Universitatea Tehnica "Gheorghe Asachi" din Iasi

RO ORADEA01 Universitatea din Oradea

RO PITESTI01 Universitatea din Pitesti

RO TIMISOA01 Universitatea de Vest din Timisoara

RO TIMISOA04 Universitatea "Politehnica" din Timisoara

# Sweden: 12

- S FALUN01 Högskolan Dalarna
- S GOTEBOR01 Göteborgs Universitet (ARWU Shangai: 80-124 Europe)
- S GOTEBOR02 Chalmers Tekniska Högskola (ARWU Shangai: 80-124 Europe)
- S KARLSTA01 Karlstads Universitet NEW
- S LINKOPI01 Linköpings Universitet
- S LUND01 Lunds Universitet (ARWU Shangai: 97 World and 33 Europe)
- S STOCKHO01 Stockholms Universiteit (ARWU Shangai: 86 World and 27 Europe)
- S STOCKHO03 Karolinska Institutet Stockholm (ARWU Shangai: 51 World and 11 Europe)
- S STOCKHO04 Kungliga Tekniska Högskolan
- S UMEA01 UmeÅ Universitet (ARWU Shangai: 80-124 Europe)
- S UPPSALA01 Uppsala Universitet
- S UPPSALA02 Sveriges Lantbruksuniversitet (ARWU Shangai: 80-124 Europe)

# Switzerland: 8

CH FRIBOURG01 Université de Fribourg

CH GENEVE01 Université de Genève (ARWU Shangai: 35-58 Europe)

CH LAUSANN01 Université de Lausanne (ARWU Shangai: 80-124 Europe)

CH LAUSANN06 EPFL - École Polytechnique Fédérale de Lausanne (ARWU Shangai: 35-58 Europe)

CH LUGANO01 Università della Svizzera italiana

CH LUZERN14 Hochschule Luzern, Design & Kunst

CH NEUCHAT01 Université de Neuchâtel - UNINE

CH ZURICH07 Eidgenössische Technische Hochschule Zürich (ARWU Shangai: 24 World and 4 Europe)

### Turkev: 14

TR ANKARA 04 Middle East Technical University- NEW

TR ANKARA01 Ankara Üniversitesi

TR ANKARA06 Baskent Üniversitesi

TR BOLU01 Abant Izzet Baysal Üniversitesi - NEW

TR BURSA01 Uludag Üniversitesi

TR ESKISEH01 Anadolu Üniversitesi

TR ISTANBU 14 Isik Üniversitesi - NEW

TR ISTANBU05 Marmara Üniversitesi - NEW

TR ISTANBU20 Sabanci Üniversitesi

TR IZMIR01 Dokuz Eylul Üniversitesi

TR IZMIR02 Ege Üniversitesi

TR IZMIR03 Izmir Yuksek Teknoloji Enstitusu - NEW

TR KOCAELI02 Kocaeli Üniversitesi - NEW

TR SAKARYA 01 Sakarya Üniversitesi – NEW

# Annex 4. JOINT TRAINING PROGRAMMES WITH FOREIGN UNIVERSITIES

# DOCTORAL PROGRAMME

## FACULTY OF FINE ARTS

"Digital Media": Doctoral programme (joint degree with Portuguese universities) of the University of Porto (Faculty of Fine Arts and Degree in Journalism) in collaboration with the Universidade Nova de Lisboa, under the framework protocol signed between the Portuguese State and the University of Texas, Austin (Programme still under preparation).

## FACULTY OF SPORT

"Sports and Health": Doctoral programme between the Faculty of Sport of the University of Porto, the Universidade de São Paulo and the Universidade Federal do Rio Grande do Sul, Brazil.

# FACULTY OF ENGINEERING

"Leaders for Technical Industries": Doctoral programme (joint degree with Portuguese institutions) of the Faculty of Engineering of the University of Porto – Knowledge field: Design Engineering and product Development -, in collaboration with the Universidade do Minho and the Universidade Técnica de Lisboa, under the framework protocol signed between the Portuguese State and the MIT.

"Technological Management Entreprise": Advanced Studies Programme (joint diploma with Portuguese institutions), 3<sup>rd</sup> Cycle Level, of the Faculty of Engineering of the University of Porto, in collaboration with the Universidade Técnica de Lisboa and the Universidade do Minho, under the framework protocol signed between the Portuguese State and the MIT.

"Sustainable Energy Systems": Doctoral Programme (joint diploma with Portuguese institutions) of the Faculty of Engineering of the University of Porto, in collaboration with the Universidade de Lisboa and the Universidade Técnica de Lisboa, under the framework protocol signed between the Portuguese State and the MIT.

"Transport Engineering and Management": Doctoral Programme in collaboration with the Massachusetts Institute of Technology (MIT).

"Electrical and Computer Engineering": Doctoral Programme (joint diploma) of the Faculty of Engineering of the University of Porto, under the framework protocol signed between the Portuguese Government and State and the Carnegie Mellon University. (This programme was not operational in 2007/08)

"Informatics": Doctoral Programme (joint diploma) of the Faculty of Engineering of the University of Porto, in collaboration with the Universidade do Minho and the Universidade de Aveiro, under the framework protocol signed between the Portuguese State and the Carnegie Mellon University. (In 2007/08, the administrative head-office of this programme was at the Universidade do Minho).

"Informatics Engineering": Doctoral Programme (joint diploma) of the Faculty of Engineering of the University of Porto, the framework protocol signed between the Portuguese Government and State and the Carnegie Mellon University. (This programme was not operational in 2007/08)

"Telecommunications": Doctoral Programme (joint diploma) of the Faculty of Engineering of the University of Porto, in collaboration with the Universidade do Minho and the Universidade de Aveiro, under the framework protocol signed between the Portuguese State and the Carnegie Mellon University. (In 2007/08, the administrative head-office of this programme was at the Universidade de Aveiro).

### MASTERS PROGRAMMES

### FACULTY OF ENGINEERING

"Master Programme in European Construction": European post-graduate course coordinated by the Universidade de Cantábria, Spain, with the participation of the FEUP and the following universities: Universidad Politécnica de Valencia, Spain, Università degli Studi di Bari, Italy, University of Applied Sciences, Giessen-Friedberg, Germany, Universität Luneburg, Germany, Hochschule Buxtehude, Germany, Hochschule für Angewandte Wissenschaften und Kunst / HAWK, Germany, Vitusbering Danmark University College, Coventry University, United Kingdom. (This programme was not operational in 2007/08)

## FACULTY OF MEDICINE

2<sup>nd</sup> cycle of studies leading to the Masters Degree in Orthognatic and Orthodontic Surgery (Protocol with the Universitat de Barcelona – Facultad de Ortodontia).

## FACULTY OF PSYCHOLOGY AND EDUCATION SCIENCE

"MUNDUSFOR - Formation dés Profissionels de la Formation": Erasmus Mundus Masters Course, coordinated by the Universidad de Granada, Spain, with the participation of the FPCE of the University of Porto, the Akershus University College, Lillestrom, Norway, the Université de Reims, France and the Universita Rovira e Virgili, Tarragona, Spain.

"European Master of Development Studies in Social and Educational Sciences - European Perspectives on Social Inclusion": European Masters, with the participation of the FPCE of the University of Porto and the following universities: Hochschule Magdeburg-Stendal, Magdeburg, Germany (coordination), Eotvos Lorand Tudomanyegyetem, Budapest, Hungary, Universidade Técnica de Lisboa (Faculty of Motor Skill Development), Universitatea "Alexandru Ion Cuza" de Iasi, Romania, Karlstads Universitet, Karlstad, Sweden, Edge Hill University College, Ormskirk, England.

# INTEGRATED MASTERS PROGRAMMES

# FACULTY OF ENGINEERING

the Faculty of Engineeringof the University of Porto has a joint degree agreement with the *École Nationale de Ponts et Chaussées*, in the Integrated Masters in Civil Engineering. The FEUP students completing the  $1^{\text{th}}$  cycle (3 years) can choose this joint diploma in their  $4^{\text{th}}$  or  $5^{\text{th}}$  year, provided they are enrolled in both institutions. This joint diploma works as a  $2^{\text{nd}}$  cycle of studies

# POST-GRADUATE SPECIALIZATION COURSES

## FACULTY OF ARTS

"Specialization Course in German Literature during the Middle Ages, in the European Context". University of Porto, Frei Universitaet Berlin, National University of Ireland, University College Gallway, Univ. Bremen, Universidade de Santiago de Compostela, Universidade de Liubliana.

## FACULTY OF MEDICINE

Post-graduation – Specialization in Temporo-Mandibular Disfunction and Orofacial Pain (Protocol with the UNIFESP, São Paulo, Brazil)

## CO-TUTELE PhDs

# FACULTY OF ARCHITECTURE

General Agreement: With the Politecnico di Milano, Italy.

### FACULTY OF SCIENCES

Analyses and Development of Ultra Short Intense Laser Pulses. With the École Polytechnique, France.

Astrophysics. With the Université de Limoges, France.

Chemistry. With the Université Pierre et Marie Curie (Paris VI).

No title: With the University of Kent, United Kingdom.

### FACULTY OF ECONOMICS

Strategic interaction and network externalities: a dynamic perspective. With the Université Catholique de Louvain, Belgium.

Economics. With the Universidad Complutense de Madrid, Spain.

# FACULTY OF ENGINEERING

Metallurgical and Materials Engineering. With the Université Victor Segalen Bordeaux 2, France.

Chemical Engineering. With the Institut National Polytechnique de Grenoble, France.

Design for Lean Construction. With the Technische Universiteit Delft, Holland.

Damage Tolerance of Town-Placed, Variable Stiffness Composite Laminates. With the Technische Universiteit Delft, Holland.

### FACULTY OF PHARMACY

Study of the secretome of Leishmania involved in infection. With the Université Laval, Canada.

### FACULTY OF ARTS

Mediaevel and Renaissance History. With the École des Hautes Études en Sciences Sociales, France.

Comparative Literature/Drama Studies. With the Université de la Sorbonne Nouvelle (Paris III), France.

Ascèse Poétique et Imaginaire Mystique: Esthétique du poème méditatif chez Daniel Faria. With the Université de la Sorbonne Nouvelle (Paris III), France.

Figuration et Défiguration: mise à nu du personnage dans le roman portugais contemporain. Com a Université de la Sorbonne Nouvelle (Paris III), França.

Arts. With the Université de la Sorbonne Nouvelle (Paris III), France.

The construction of the Iberian language and the translation of the Arthurian romance. With the Universitatea Alexandru Ioan Cuza Iasi, Romania.

History. With the Université Michel de Montaigne Bordeaux III, France.

## INSTITUTE OF BIOMEDICAL SCIENCES ABEL SALAZAR

Medicine - Serum type of Toxoplasma gondii. With the Université de Limoges, France.

Medicine: With the Università degli Studi di Siena, Italy.

## **EUROPEAN DOCTORATES**

## FACULTY OF SCIENCES

Automatic ECG Characterization: Application to QT Interval Variability. With the Universidad de Zaragoza, Spain.

Characterization of the cardiorespiratory coupling dynamics. With the Universidad de Zaragoza, Spain.

# FACULTY OF LAW

Law. With the Universidad de Valladolid, Espanha.

# FACULTY OF ECONOMICS

Remuneration of distributed generation - a holistic approach. With the Universidad de Zaragoza, Spain.

# FACULTY OF ENGINEERING

Engineering: With the Universidad de Zaragoza, Spain.

Electrical and Computer Engineering. With the Karolinska Institutet Stockholm, Sweden

Engineering. With the Polytechnio Kritis, Greece.

# Annex 5. ORGANIZATION OF INTERNATIONAL SCIENTIFIC MEETINGS

### FACULTY OF PSYCHOLOGY AND EDUCATION SCIENCE

International Colloquium: Training of Professional Instructors: Contexts and Professional Pracitices of Instructors, Manuela Terrasèca, 28 and 29 May 2007. The Colloquium is closely coordinated with the development of the Master Erasmus Mundus "Mundusfor - Training of Professional Instructors", from October 2007 on, approved by the European Commission. This Colloquium is open to training professionals, post-graduate students, teachers of the various study cycles, and socio-cultural animators, and allows the intersection of perspectives put forward by various national and international researchers who have been involved in the development of innovative research projects.

Seminar: Family Dynamics: from the research to the intervention. International Perspectives, Anne Marie Fontaine, 16 and 17 April 2007, FPCE-UP joint organization with the AIFREF (Association Internationale de Formation et de Recherche en Éducation Familiale).

I SIPE – 1<sup>st</sup> Seminar dedicated to the Research on the Education Problem in Portugal and in Brazil, José Alberto Correia, 21 to 23 June 2007. This initiative aims to foster the sharing of knowledge and practices in the field of Education Science between the two countries. Policies of social difference and social inequality, education practices, teacher training, ethnicity, "race" and identity problems in Brazil and sociability and inclusion of immigrant descendants in a school media are some of the topics addressed in this initiative.

### FACULTY OF ARTS

**International Congress: New West-East Divans**. Instituto de Literatura Comparada Margarida Losa, Of the Department of German Studies of the FLUP and the Inter-University Centre on German Studies (FLUC) of the Faculty of Arts - University of Porto, 16-18 May 2007

International Colloquium: Poetry and Other Arts, 27 and 28 September 2007, Org.: ILCMargarida Losa

**International Conference: Uses and representations of Reproductive Technologies**, 25 Oct. 2007, Org.: Institute of Sociology.

2<sup>nd</sup> International Conferences: Information and Communication in Mass Media, 25 and 26 Oct., Org.: Cetac.Com

4<sup>th</sup> Autumn Conferences on Iberian Cultures – Liberal Arts and Science in the Iberian Peninsula (16<sup>th</sup> - 18<sup>th</sup> centuries), 26 and 27 October 2007, Organization: Institute of Iberian Studies of the University of Porto.

**SOPHIA Network Meeting - Philosophy with Children and Youth**. The Department of Philosophy of the Faculty of Arts - University of Porto, in partnership with the European Foundation for the Advancement of Doing Philosophy with Children – SOPHIA, 21 November 2007, FLUP.

Luso-Brazilian Colloquium: "Politics, Culture and Arts", 26 and 27 November 2007, Organization: Institute of Philosophy - University of Porto, Institute of Sociology - University of Porto.

International Seminar: Secrecy and Memory in Information Age, 29 and 30 Nov. 2007. Org.: Prof.<sup>a</sup> Doutora Fernanda Ribairo

# FACULTY OF ECONOMICS

1st International Seminar on "Regional Innovation Policies", Faculdade de Economia do Porto and CEDRES, University of Porto, Napier University, Edinburgh and Salzburg University, 22-23-24 February 2007, Porto.

14th International Product Development Management, Porto, FEUP and FEP, June 10-12, 2007

"Optimization 2007", Sixth international conference on optimization organized in Portugal since 1991. Faculty of Economics, University of Porto, from 22 to 25 July, 2007.

2nd International Seminar on "Regional Innovation Policies", Salzburg University, University of Porto, Napier University, Edinburgh and University of Cantabria, Santander, 11-12 October 2007, Salzburgo.

19<sup>th</sup> Conference of the European Association for Evolutionary Political Economy (EAEPE) "Economic growth, development, and institutions - lessons for policy and the need for an evolutionary framework of analysis". Organization: Aurora Teixeira (UITT, INESC Porto & FEP-UP), 1-3 Novembro na FEP-UP.

# FACULTY OF ENGINEERING

"First Coastlab Teaching School". FEUP, 26 and 29 November: 1st course on physical modelling applied to Coastal and Port Engineering. Over the four days of the course, internationally renowned experts will share their knowledge and recent results of

cutting-edge research with 30 students, mostly from Europe, but also from Magreb, Indonesia and Kuwait. The initiave falls under the scope of the work developed by CoastLab Network, the network for small and medium coastal engineering laboratories, launched officially at the FEUP during the CoastLab'06 Conference – 1<sup>st</sup> International Conference on Physical Modelling Applied to Coastal and Port Engineering.

"TF-CSIRT Meeting". Faculty of Engineering, 20 and 21 September 2007. A conference engaging over 70 European experts on computer security. The event is sponsored by TERENA - Trans-European Research and Education Networking Association.

4<sup>th</sup> Iberian Congress and the 2<sup>nd</sup> Ibero-Amercian Congress on Sciences and Refrigeration. Organized by the Faculty of Engineering of the University of Porto and the Sociedad Española de Ciencias y Técnicas del Frío, between 11 and 13 November 2007, in Porto. The increasing international visibility of the Spanish Congresses held previously in Cartagena and Vigo, in 2002 and 2003 respectively, and the last congress, an Ibero-American one, held in Barcelona in 2005, led to the organization of this congress in Porto. We hope to strengthen the international nature of this event, clearly marked in the last Congress, by including more Latin American countries and the Portuguese Speaking African Countries.

Composites 2007 - "Workshop "Track-Bridge Interaction on High-Speed Railways", 15 and 16 Oct. 2007, FEUP

Composites 2007 - "Mechanical Response for Composites", 12 -14 Sep. 2007, FEUP

**EUROMEC 483.** EUROMECH Colloquium will be a forum for the presentation and discussion of different aspects – from modelling to applications - concerning geometrically non-linear vibrations of structures. Analytical, numerical and experimental analyses or methods are of interest. FEUP, University of Parma, 9-11 July. (World)

ETC11 - EUROMECH European Turbulence Conferences. The EUROMECH European Turbulence Conferences, first held in Lyon in 1986, have proven to be very popular biannual conferences gathering scientists from all over the world. FEUP, 25-28 Jun

4<sup>th</sup> International Conference on Remote Engineering and Virtual Instrumentation (REV'07), FEUP 25, 26 and 27 June. REV2007 combines an interesting technical programme with the opportunity to contact other researchers. This is an internationally reputed event aiming to discuss the fundaments, applications, and experiences in the field of online engineering, in both the industry and academic-wise.

NUMIFORM'07 The 9th Int. Conference on Numerical Methods in Industrial Forming Processes, FEUP, 17-21 Jun

Congresso Internacional em Métodos Numéricos em Engenharia. CMNE / CILAMCE 2007 will provide a forum for researchers and professionals from academia, industry, and laboratories to discuss recent advancements and future directions in Numerical and Computational Methods in Engineering. FEUP, 13-15 Jun. CMNE / CILAMCE 2007 is a joint organization of the Portuguese (APMTAC), Spanish (SEMNI) and Brazilian (ABMEC) associations for Numerical and Computational Methods in Engineering and is open to the Latin American community.

Workshop "Launching the Institutional Evaluation Project". FEUP, 4 Jun

EVACES'07 - "Experimental Vibration Analysis for Civil Engineering Structures". FEUP, 24 - 26 Oct.

10th International Conference of the NATO/CCMS "Pilot Study on Clean Products and Processes", FEUP, 5 - 9 May.

Congress: "Probability and Statistics in Science and Technology". FEUP 30 August to 1 September 2007. The congress "Probability and Statistics in Science and Technology" is organized under the banner of the Bernoulli Society, an internationally reputed scientific society, it aims to promote research that will contribute to providing answers to solving practical and development issues related to technologies, and in different scientific fields, such as the quality of surface water, the usage of new construction materials, the usage of wind energy, etc.

NECTAR Conference Porto. The NECTAR (Network on European Communications and Transport Activity Research) Conference will be held in Porto, Portugal, 9-12 May 2007. NECTAR is a scientific European network. It is an association which has been developed in the framework of a European Science Foundation Network. The primary objective is to foster research collaboration and exchange of information among researchers in the field of transport, communication and mobility, from all European countries and Israel. NECTAR is a multidisciplinary social science network bringing together a wide variety of perspectives on transport and communication problems and their impacts on society in an international perspective.

**CoMIC'07 - 2<sup>nd</sup> Conference on Methodologies for Scientific Research**. The main motivation for the second CoMIC conference is to offer a space for presenting and debating ideas and PhD projects focused on topics in Informatics Engineering and Computer Science, while trying to improve best practices and methodologies for writing scientific papers. This initiative is promoted by the Doctoral Programme in Informatics Engineering (ProDEI) of the Faculty of Engineering, University of Porto (FEUP), with the contribution of this faculty and of the University of Porto.

# FACULTY OF PHARMACY

First Iberian Meeting on Medicinal Chemistry Anticancer Agents, FFUP, 28 Apr – 1 May.

# FACULTY OF MEDICINE

 $1^{st}\,Meeting\,\,FMUP/HSJ/UNIFESP,\,Institute\,\,of\,\,Anatomy,\,\,June.$ 

 $2^{nd} \, Meeting \, FMUP/HSJ/UNIFESP, \ \, Institute \, of \, Anatomy, \, September.$ 

 $2^{nd}\ International\ Meeting\ on\ Urogynacology.\ I\ IUGA\ Affiliated\ Meeting.\ I\ EUGA\ Affiliated\ Meeting.$  Gynacology and Obstetrics 12 and 13 Jan.

# FACULTY OF SPORT

 ${\it 1^{st}\ International\ Congress-Olhares\ e\ contextos\ da\ performance,\ da\ iniciação\ ao\ rendimento.\ Porto,\ Portugal,\ July\ 2007.}$