



AGREEMENT FOR A DOUBLE MASTER DEGREE PROGRAM

between

L'UNIVERSITÀ DEGLI STUDI DI PERUGIA

and

THE HEBREW UNIVERSITY OF JERUSALEM

PREAMBLE

Following the Student Exchange Program signed in 2016 between the Institute of Chemistry at the di Hebrew University and Dipartimento Chimica, Biologia e Biotecnologie Università di Perugia, the both parties are interested in establishing a joint Double Master Degree program. The program is intended to strengthen existing scientific relations and to create new academic links at the level of academic cooperation between research groups, as well as to broad the scope of cultural exchange between our countries. The parties agree to exchange their knowledge in accordance with the Bologna process, and, specifically, their approaches to evaluation of teaching. The parties agree as to the fundamental importance of promoting interuniversity cooperation for the development of joint courses of study.

1. PARTICIPATING PARTIES

The Hebrew University of Jerusalem (HUJI): Institute of Chemistry

L'universita Degli Studi di Perugia (UNIPG): Dipartimento di Chimica, Biologia e Biotecnologie

2. RATIONALE

The program offers HUJI and UNIPG students an opportunity to spend one semester in the host institution while being exposed to a collection of high-level courses, state-of-the-art research infrastructure, scientific expertise of the Israeli and Italian faculties (especially, in the fields related to the chemistry of materials for harnessing sustainable energy), as well as rich social and multicultural life. The program provides the participating students with the opportunity to receive MSc degrees from ones of the top universities in Israel and Italy.

3. PLANNED START OF THE PROGRAM

The Double Master Degree Program is planned for the academic year 2017-2018 and will commence from the date at which the agreement is signed.

Each party keeps the right to terminate the agreement, also in consideration of possible modifications of the academic offer, by written communication to be sent to the other party before the beginning of the subsequent academic year. In case of termination, the right of students already enrolled in the program to complete their study shall be safeguarded.

4. THE PROGRAM

4.1. Degree

Participants of the project, who fulfill the graduation requirements in both universities, will obtain a double degree from the two participating universities.

UNIPG students will receive a Master of Science degree in the field of "Chemical Sciences" (Class LM-54) and "EuroMaster[®] in Chemistry" from UNIPG and a Master of Science degree in the field of Chemistry from HUJI. HUJI students will receive a "Master of Science" degree in the field of

"Chemical Sciences" (Class LM-54) and "EuroMaster[®] in Chemistry" from UNIPG and a Master of Science in Chemistry from HUJI in the field of Chemistry.

Within the grade transcript sheet, there will be a sentence of reference to the other certificate.

"The degree was done within a Double Degree Program with the Hebrew University of Jerusalem and L'universita Degli Studi di Perugia.

4.2.Admission

Both universities will publish a joint annual Call for Applications in December that will be open to 3^d year Bachelor students and Master students.

Each university should complete its selection and nominate students for the project in the following academic year to the host university within a reasonable timeframe to be mutually agreed between the two universities.

Both parties guarantee that participants of the dual degree program will be selected according to their academic, personal, and linguistic qualifications.

Applications are evaluated first by the home institution and then presented to the host institution for review and approval. To be admitted to the program, students must meet all graduate admission policies at both institutions.

The host institution retains the right to approve or reject the recommendation based on the students' qualifications in meeting the admission requirements at the host institution.

Both the home and the host institutions must provide their written approval before a student can be accepted to participate in the double degree program.

4.3. Language requirements

This agreement applies to UNIPG students in the Master Program in Chemistry and HUJI students in the Master Program in Chemistry who are well-versed in the English language, as demonstrated by a B2 level test out or any other English language certificate approved by the regulations of both parties.

4.4. Exchange contingent

Up to five students will be admitted by the host institution per year.

The parties may agree upon a higher number of students in the future.

4.5. Period of study

The standard period of study at both HUJI and UNIPG is four semesters. The proposed period of student mobility is one semester. The second semester maybe considered upon mutual agreement.

4.6. Academic Program

After admission to the program, students will submit a complete individual study program that corresponds to the frame agreed and given in the Appendix A. The program will be approved by program coordinators at the host university. Depending on the local regulations, the program coordinators the may delegate this competence to the Dean (at UNIPG) or the Head of School (at HUJI). The program should specify the courses taken by the student at the host and home universities. In justified cases, the study program can be modified. The changes require the approval of the Dean (at UNIPG) or the Head of School (at HUJI). The program must fulfill all requirements of both HUJI and UNIPG curricula.

UNIPG students are required to gain 120 ECTS in total at HUJI and UNIPG (1 HUJI credit corresponds to 1.5 ECTS, see Appendix B). UNIPG will recognize up to 30 ECTS (20 credits) from the list of elective courses studied at HUJI for the UNIPG diploma (See Appendix A for HUJI courses).

HUJI students are required to gain 31 academic credits in total at HUJI and UNIPG (See Appendix B). HUJI will recognize up to 14 credits from the list of elective courses studied at UNIPG for the HUJI diploma. (See Appendix A for UNIPG courses).

The courses listed in the Appendix A shall be offered in English.

4.7. Master thesis

The master thesis is expected to be written by the participants of Dual Degree "Master in Chemical Sciences" (at UNIPG) and "Master of Science in Chemistry" at the end of 2nd year of the program at both Universities. Students will have two thesis supervisors, one from each institution. Supervisors will be identified at the outset of the program with guidance from the program coordinators.

The thesis must be written in English on the agreed topic in the student's specialization area. It must be accepted either by one advisor and /or the program coordinator from both institutions.

The master thesis is graded by respective examination diploma boards at the home institution according to the respective regulations.

4.8. Examinations

During the studies of HUJI students at UNIPG, the examination regulations of UNIPG apply in the current version.

During the studies of UNIPG students at HUJI, the examination regulations of HUJI apply in the current version.

Both partner institutions will hand out a transcript of records in English to students. The Transcript of Records is an official inventory of the courses taken, the achieved number of ECTS credit points, and national grades earned by the students throughout their stay in the host institution. Details of the course programs can be found in Appendices A and B.

5. FINANCIAL AGREEMENT

Participating students will pay tuition fees to their home university. Each university will waive the tuition fees for the visiting students.

Participants of the dual degree program are responsible for their own travel and living expenses during the exchange, if there is no third party funding. It is mutually recognized that funding is important in order to ensure the success of the program and that it is available to all students regardless of their socio-economic background. Therefore, both sides will endeavor to raise scholarships for their students. Both institutions will make efforts to provide financial support to defray all or part of those expenses.

6. INSURANCE

UNIPG guarantees their students about risks of accidents which might occur during their period of stay abroad and their responsibility for damages which they may involuntarily cause to third parties (persons or property) within the framework of the activities inherent to the present agreement. The student is fully responsible for acquiring appropriate accident and medical insurance, according to the regulations of the Host University.

7. ACCOMMODATION

Dorms will be available for HUJI students at UNIPG.

Dorms will be available for UNIPG students at HUJI.

8. OTHER SERVICES

Students participating in the program may use all services offered by the host university to its own students.

9. ADVERTISING

UNIPG and HUJI will make efforts to publicize the program and recruit high level students for this program.

10. OTHER STUDENT RESPONSIBILITIES AND EXPENSES

Transfer students shall be subject to the laws of the host state and the rules and regulations of the host institution. They will also have the rights and privileges enjoyed by other students at the host institution.

Accommodation, board, books, travel, and other expenses are the responsibility of Transfer Students.

Transfer Students participating in this agreement will be governed by the same regulations and performance standards that pertain to other students at Host Institution. Transfer Students must abide by campus behaviour as set forth in the Campus Code for Academic Conduct. If the participating student voluntarily withdraws or is dismissed for disciplinary reasons before the end of the program, he/she will be considered as terminated from this program.

11. MODIFICATIONS

The parties may, by mutual written consent, make modifications to the present agreement.

12. PROGRAM COORDINATORS

Both institutions appoint a program coordinator responsible for the implementation of the program. In the case of any difficulty the two program coordinators are expected to solve the problems by mutual consent.

The coordinator shall:

• Coordinate the academic and administrative relationships with the partner university.

• Follow the academic progress of his/her university's students participating in the exchange program, advising them on drawing up their study program and keeping in contact with them for the entire duration of the program.

• Welcome students from the partner university participating in the exchange since the date of their arrival at the host university.

• Follow the academic performance of the students from the partner university, periodically checking the progress of their study program during their stay at the host university;

• Ensure the proper administrative management of the exchange program.

This agreement will be signed in two identical copies one for each of the Parties.

Università degli Studi di Perugia

The Hebrew University of Jerusalem

Faculty of Science

Data: _____

Date: _____

APPENDIX A

COURSES OFFERED FOR THE MOBILITY SEMESTER

COURSE PROGRAM OF AN ITALIAN STUDENT IN ISRAEL							
FOLLOWED AT HUJI					RECOGNIZED AT UNIPG		
NAME	CODE	Credits (ECTS)	ECTS		NAME	CODE	
Principles of Green Chemistry	69625	4 (6)		8	Green Chemistry	CHIM/06	
Reactors and Bioreactors	69684	3 (4.5)		•	creen enemery	crimi, oo	
Nanomaterials-based solar cells	69913	3 (4.5)		6	Materials for Renewable Energies (<i>Materiali per energie</i> <i>rinnovabili</i>)	CHIM/06	
Advanced Analytical Chemistry Lab	69501	4 (6)		8	ntrumental echniques for environamental CHIM/0	CHIM/07	
Nanofabrication and characterization lab	69902	3 (4.5)			sciences (Tecniche strumentali per le scienze ambientali)		
Geochemistry and fossil fuels	69669	3 (4.5)		7	Chemistry for the Enviroment (<i>Chimica</i> <i>Ambientale</i>)	CHIM/12	
	SUM	20 (30)		29			

COURSE PROGRAM OF AN ISRAELI STUDENT IN ITALY							
RECOGNIZED AT HUJI					FOLLOWED AT UNIPG		
NAME	CODE	Credits (ECTS)	ECTS		NAME	CODE	
Principles of Green Chemistry	69625	4 (6)		8	Green Chemistry		
Reactors and Bioreactors	69684	3 (4.5)		0	Green Chemistry	CHIM/06	
Nanomaterials-based solar cells	69913	3 (4.5)		6	Materials for Renewable Energies (<i>Materiali per energie</i> <i>rinnovabili</i>)	CHIM/06	
Advanced Analytical Chemistry Lab	69501	4 (6)		8	Intrumental techniques for environamental	CHIM/07	
Nanofabrication and characterization lab	69902	3 (4.5)			sciences (Tecniche strumentali per le scienze ambientali)		
Geochemistry and fossil fuels	69669	3 (4.5)		7	Chemistry for the Enviroment (<i>Chimica</i> <i>Ambientale</i>)	CHIM/12	
	SUM	20 (30)		29			

APPENDIX B

FULL ITALIAN STUDY PROGRAM INCLUDING MOBILITY SEMESTER

I	YEAR
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I SEMESTER					
NAME	CODE	ECTS			
Theory and Practice of Organic Reactions	CHIM/06	6			
Nanostructured systems	CHIM/02	6			
Applied molecular sciences	CHIM/03	6			
Analytical methods for environmental and cultural heritage chemistry	CHIM/12	6			
Other activities (Stage, Seminars on Chemistry Careers)		7			
	SUMMA	31			

II SEMESTER - EXCHANGE						
FOLLOWED AT HUJI]	RECOGNIZED AT UNIPG			
NAME	CODE	ECTS	ECTS		NAME	CODE
Principles of Green Chemistry	69625	6		8	Green Chemistry	CHIM/06
Nanomaterials-based solar cells	69913	4.5	-	6	Materials for Renewable Energies (Materiali per energie rinnovabili)	CHIM/06
Advanced Analytical Chemistry Lab	69501	6	-		Intrumental techniques for	
Nanofabrication and characterization lab	69902	4.5		8	environamental sciences (<i>Tecniche</i> strumentali per le scienze ambientali)	CHIM/07

Geochemistry and fossil fuels	69669	4.5	7	Chemistry for the Enviroment (<i>Chimica</i> <i>Ambientale</i>)	CHIM/12
	SUM	25.5	 29		

ITALIAN STUDY PROGRAM

II YEAR

I SEMESTER				
NAME	CODE	ECTS		
Free-choice training activities		12		
2 elective courses of 6 ECTS among:				
Non-linear optics, Organic reaction				
mechanisms, Chemistry of energy				
sources, Femtochemistry, Materials for				
renewable energy sources, Computational				
chemistry, Photochemistry, Enzymes in				
Organic Chemistry, Bioinorganic				
chemistry, Theoretical methods for	2 x 6			
molecular dynamics, Techniques and	2 X 0			
Methods for Microscopic				
Characterization of Materials,				
Chemoinformatics, Industrial Catalysis,				
NMR spectroscopy, omputational				
approaches to organic reactions,				
Modelling of organic molecules,				
Crystallochemistry				
Internship		12		
	SUM	36		

II SEMESTER		
NAME	CODE	ECTS

Master thesis		21
Advanced English		3
	SUM	27

	ECTS
GLOBAL SUM	120

FULL HUJI STUDY PROGRAM INCLUDING MOBILITY SEMESTER

II SEMESTER - EXCHANGE FOLLOWED AT HUJI RECOGNIZED AT UNIPG NAME CODE ECTS ECTS NAME CODE Principles of Green Chemistry 69625 6 8 Green Chemistry CHIM/06 Materials for Renewable Energies Nanomaterials-based solar cells 69913 4.5 CHIM/06 6 (Materiali per energie rinnovabili) Advanced Analytical Chemistry Intrumental 69501 6 Lab techniques for environamental 8 CHIM/07 sciences (Tecniche Nanofabrication and 69902 4.5 strumentali per le characterization lab *scienze ambientali*) Chemistry for the 7 Geochemistry and fossil fuels 69669 4.5 Enviroment (Chimica CHIM/12 *Ambientale*) SUM 25.5 29

I YEAR

Π	SEMESTER

NAME	CODE	Credits (ECTS)
Organic Chemistry 3	69667	3
Physical Chemistry 3	69601	3
Advanced Materials	69993	3
Scientific writing	69814	2
Research Seminar	69869	1
1	SUM	12 (18 ECTS)

II YEAR

III SEMESTER			
NAME	CODE	Credits (ECTS)	
Quantum Chemistry Methods	69615	4 (6)	
Nanofabrication and characterization	69902	3 (4.5)	
Electrochemistry	69503	3 (4.5)	
Reactors and Bioreactors	69684	3 (4.5)	
Chemical Industry: The Global View	69616	3 (4.5)	
Topics in Advanced Organic Chemistry	69633	4 (6)	
	SUM	20 (30)	

IV SEMESTER			
NAME	CODE	ECTS	
Research project			
Master thesis			
	SUM		

	Credits (ECTS)
GLOBAL SUM	31 (48)