

Annex 1 DOUBLE DEGREE PROGRAMME

The two years Double Degree Programme, SWIMinCHEM, foresees 120 ECTS (each credit being equivalent to 25-30 hours).

Students will simultaneously gain two university titles:

one is the Italian title “*Laurea Magistrale in Scienze Chimiche (classe LM-54)*” awarded by the University of Sassari;

the other is the Polish title “*Chemia –studia międzynarodowe*” awarded by the University of Wrocław.

The master training runs over a period of four semesters.

To obtain the double degree, students will have to attend courses, pass exams and spend minimum one semester abroad, according to the following scheme:

Scheme

Students enrolled at University of Sassari

First year

1st semester

UNISS

2nd semester

UNISS

Second year

3rd semester

UNIWROC

4th semester

UNISS

Students enrolled at University of Wrocław

First year

1st semester

UNIWROC

2nd semester

UNIWROC

Second year

3rd semester

UNISS

4th semester

UNIWROC

3rd semester for Wroclaw students at UNISS

Students enrolled at the University of Wroclaw, and participating to the SWIMinCHEM, will spend abroad the 3rd semester to gain 30 ECTS: 20 ECTS will be gained by exams of courses at Sassari University chosen within the list of optional courses reported below, and 10 ECTS by traineeship related to the preparation of the Master Degree Thesis.

Title	Subject	ECTS
OPTIONAL	I.C. Basic Aspects of Catalysis	6
OPTIONAL	Sensors for Analytical Chemistry	4
OPTIONAL	Advanced Materials for Energy	4
OPTIONAL	Molecular Modeling	4
OPTIONAL	Nonlinear Dynamics of Complex Systems	4
OPTIONAL	Multistep Synthesis and Organic Materials	4
OPTIONAL	Macromolecular Synthesis	4
OPTIONAL	Physical Methods for Cultural Heritages	4

3rd semester for Sassari students at UNIWROC

Students enrolled at the University of Sassari, and participating to the SWIMinCHEM, will spend abroad the 3rd semester to gain 30 ECTS: 14 ECTS will be gained by exams of courses at Wroclaw University: one compulsory course, **Catalysis and Green Chemistry** (6 ECTS), and optional courses (for minimum 8 ECTS) chosen within the list reported below, and 16 ECTS by traineeship related to the preparation of the Master Degree Thesis.

Title	Subject	ECTS
OPTIONAL	Combinatorial Chemistry	2
OPTIONAL	Contemporary Organic Synthesis	3
OPTIONAL	Applications of Chemical Materials	2
OPTIONAL	Computer Design and Modeling of New Materials	3
OPTIONAL	Chemistry in Action: Ideas and Applications	3

**Study plan of “*Laurea Magistrale in Scienze Chimiche*”
for DDP students enrolled
at University of Sassari**

1st Year		
1st semester		
Title	Subject	ECTS
COMPULSORY	Analytical Chemistry	6
COMPULSORY	Physical Chemistry	6
COMPULSORY	Inorganic Chemistry	6
COMPULSORY	I.C. Advanced Organic and Macromolecular Chemistry	12
2nd semester		
Title	Subject	ECTS
COMPULSORY	I.C. Synthesis and Instrumental Characterization of Molecular Systems	10
COMPULSORY	I.C. Synthesis and Instrumental Characterization of Advanced Materials	6
COMPULSORY	Compulsory courses that characterize each curriculum *	18
2nd Year		
1st semester		
Title	Subject	ECTS
COMPULSORY	Catalysis and Green Chemistry	6
OPTIONAL	Optional courses**	8
COMPULSORY	Experimental Project for Thesis	16
2nd semester		
Title	Subject	ECTS
COMPULSORY	Project and management of research activity and intellectual property defense	2
COMPULSORY	Experimental Project for Thesis	16
COMPULSORY	Thesis writing and defence	8

120

**Study plan of “*Chemia –studia międzynarodowe*”
for DDP students enrolled
at University of Wrocław**

1st Year		
1st semester		
Title	Subject	ECTS
COMPULSORY	Specialization course I	15
COMPULSORY	Advanced Experimental Method	8
COMPULSORY	Informatics II	7
2nd semester		
Title	Subject	ECTS
COMPULSORY	Specialization course II	15
COMPULSORY	Molecular Modeling	11
COMPULSORY	Foreign Language (PDW II° - 3)	4
2nd Year		
1st semester		
Title	Subject	ECTS
OPTIONAL	Optional courses*	20
COMPULSORY	Master Research Project (PDW II° - 5)	10
2nd semester		
Title	Subject	ECTS
COMPULSORY	Entrepreneurship and protection of IP	2
COMPULSORY	The Image Communication	5
COMPULSORY	Physical Training (PDW II° - 4)	1
COMPULSORY	MSc Project (PDW II° - 5)	16
COMPULSORY	MSc Seminar (PDW II° - 7)	6

120

* Compulsory courses that characterize each curriculum		
Curriculum GREEN CHEMISTRY		
Title	Subject	ECTS
COMPULSORY	Green Polymer Chemistry	4
COMPULSORY	Green Organic Chemistry	5
COMPULSORY	Environmental analyses and environmental law	4
COMPULSORY	Structural Chemistry and Quantum Spectroscopy	5
Curriculum MATERIALS CHEMISTRY		
Title	Subject	ECTS
COMPULSORY	Nanochemistry and Nanomaterials	5
COMPULSORY	Theoretical and Computational Chemistry	4
COMPULSORY	Physics of Ionization Radiations	4
COMPULSORY	Structural Chemistry and Quantum Spectroscopy	5
Curriculum CHEMISTRY APPLIED TO CULTURAL HERITAGE		
Title	Subject	ECTS
COMPULSORY	Physics of Ionization Radiations	4
COMPULSORY	Materials, Technologies and Conservation of Cultural Heritage	5
COMPULSORY	Archeometallurgy	4
COMPULSORY	Structural Chemistry and Quantum Spectroscopy	5

**Optional courses		
Title	Subject	ECTS
OPTIONAL	Combinatorial Chemistry	2
OPTIONAL	Contemporary Organic Synthesis	3
OPTIONAL	Applications of Chemical Materials	2
OPTIONAL	Computer Design and Modeling of New Materials	3
OPTIONAL	Chemistry in Action: Ideas and Applications	3

***Optional courses		
Title	Subject	ECTS
OPTIONAL	I.C. Basic Aspects of Catalysis	6
OPTIONAL	Sensors for Analytical Chemistry	4
OPTIONAL	Advanced Materials for Energy	4
OPTIONAL	Molecular Modeling	4
OPTIONAL	Nonlinear Dynamics of Complex Systems	4
OPTIONAL	Multistep Synthesis and Organic Materials	4
OPTIONAL	Macromolecular Synthesis	4
OPTIONAL	Physical Methods for Cultural Heritages	4

Annex 2–GRADING CONVERSION TABLE

Table of equivalent marks for exams in the Programme

UNISS grade	UNIWROC grade
30L	5
30	
29	
28	4,5
27	
26	4
25	
24	3,5
23	
22	
21	3
20	
19	
18	
<18	2

Table of equivalent marks for diploma examination and dissertation

UNISS grade	UNIWROC Grade
110 e lode	5,5 z wyróżnieniem
110	5,0
109	
108	4,5
107	
106	4,0
105	
104	
103	
102	
101	
100	
99	3,5
98	
97	
96	
95	

94		
93		
92		
91		
90		
89	3,0	
88		
87		
86		
85		
84		
83		
82		
81		
80		
79		
78		
77		
76		
75		
74		
73		
72		
71		
70		
69		
68		
67		
66		
<66		2,0