

**INTERNATIONAL COOPERATION AGREEMENT
FOR ESTABLISHMENT
OF A DOUBLE DEGREE AGREEMENT**

BETWEEN:

University of Lorraine, a professional, cultural and scientific public institution, founded as a large scale institution, with its official address at 34 Cours Léopold – CS 25233 – 54052 Nancy Cedex France, SIRET N° 130 015 506 00012, represented by its officiating President, xxxxxxxxxxxx,

and in particular its subsidiary unit: ENSIC, with its address at 1 rue Grandville, BP 20451, 54001 Nancy, France, represented by its Director, xxxxxxxxxxxx, member of the Collegium LORRAINE-INP, directed by xxxxxxxxxxxx.

hereinafter referred to as “UL-ENSIC”

AND

University of Chemistry and Technology Prague, a Czech public higher education institution, with its official address at Technická 5, 166 28 Praha 6 – Dejvice, Czech Republic, represented by its currently officiating Rector, xxxxxxxxxxxx.

hereinafter referred to as “UCT Prague”

The UL-ENSIC and UCT Prague hereinafter each individually referred to as the "Party" (and collectively as the "Parties").

PREAMBLE

This agreement follows a previous multilateral agreement signed in 2006 by the Rovira i Virgili University, the Institute of Chemical Technology Prague and the Institut National Polytechnique de Lorraine regarding a European Master Program in Chemical and Process Engineering (PRODESINT). Given the few interactions between the Rovira i Virgili University and its two other partners, and due to the institutional changes underwent by the Institut National Polytechnique de Lorraine (now Université de Lorraine) and the Institute of Chemical Technology Prague (now University of Chemistry and Technology, Prague), the latter have decided to sign a new agreement, and to put an end to the former one. This Agreement replaces the one signed on October 30, 2006.

The purpose of this agreement is to facilitate and intensify pedagogical and technical exchanges between the Parties by means of establishing a double degree: *Master GPBP – Génie des Procédés et des Bioprocédés (Process and Bioprocess Engineering Master) for ENSIC, and Master of Science in Chemistry and Chemical Technologies for UCT Prague*, hereinafter referred to as the “Programs”. The purpose of this agreement is to lay down the precise boundaries of this collaboration, in accordance with the accreditation received by each Party.

COORDINATION

Within the scope of this agreement:

- the UL acts on behalf of its subsidiary unit: *École Nationale Supérieure des Industries Chimiques ENSIC*, with its address at 1 rue Grandville, BP 20451, 54001 Nancy, France, represented by its Director, xxxxxxxxxx.
- the UCT Prague acts in its own capacity.

For the application of this agreement,

- the UL appoints xxxxxxxxxx as the Degree Coordinator;
- the UCT Prague appoints xxxxxxxxxx as the Degree Coordinator and xxxxxxxxxx as a Degree Administrator,

hereinafter referred to as the “Managers”.

In the event of any change of coordinator and/or administrator by either Party, the Party concerned shall inform the other Party. An amendment shall be signed at the earliest opportunity.

1. APPLICATION PROCEDURE FOR INCOMING STUDENT

1.1. Prerequisites

Nominated UL-ENSIC students shall be registered in the second year at ENSIC, and in the first year of the Master degree. They should be within one (1) year of receiving their Master degree diploma.

Nominated UCT Prague students shall be registered in the first year of the Master degree at UCT Prague. They should be within one (1) year of receiving their Master degree diploma.

Language level requested:

	At UCT Prague (for UL-ENSIC students)	At UL-ENSIC (for UCT students)
English	B2 Level	
French	-	B2 level

1.2. Pre-selection

A student needs to be qualified as a candidate of the double degree program through the Home Institution’s pre-selection.

Concerning ENSIC' student: The candidate's dossier shall include a student application, certificate of English knowledge, Transcript of Records including a certified copy of the degree obtained, Learning Agreement, copy of ID, and a detailed curriculum vitae. The dossier shall be drawn up in English and clearly indicate the double degree program nomination.

Concerning UCT Prague's student: The candidate's dossier shall include a student application, certificate of French knowledge (B2 level), Transcript of Records including a certified copy of the degree obtained, Learning Agreement, copy of ID and a detailed curriculum vitae. The dossier shall be drawn up in French (or English) and clearly indicate the double degree program nomination.

1.3. Nomination

Nominated students shall be in good academic standing. The Home Institution will select their nominated students according to their academic standing and their motivation.

The final decision on admission of nominated students lies with the Host Institution. Rejection of students must be based on objective criteria.

Both Parties shall confirm and agree to the up-to-date conditions of the application procedure including application deadlines, selection criteria and student quota as defined each year by the institutions.

Liaison Officers at the Home Institution shall submit nominated student applications to the Liaison Officer at the Host Institution no later than Host Institution's published deadline which corresponds with the date for Erasmus+ applications.

2. ADMISSION

Following the nomination list of students received by the partner, the Host institution will hold an Admission Commission, to assess the candidates according to their academic standing and motivation. An acceptance letter/e-mail will be sent to the selected student and the Host Institution after the decision on students' acceptance is made.

2.1. Entry to Program at Host Institution

UCT Prague	UL-ENSIC
Once a year (September)	Once a year (September)

2.2. Number of students and their status

- a) A maximum of 4 students may be admitted per institution each academic year.
- b) The students will have a degree-seeking full-time student status at both UCT Prague and UL-ENSIC during their enrolment in the Program.

3. PROGRAMS

3.1. Learning Agreement

Detailed conditions regarding the study plan, mobility program as well as an individual student agreement shall be specified by the Home Institution in a written form (“Learning Agreement”) for each student admitted by the Host Institution. The study plan initially proposed can be reviewed and, if needed, modified, prior to final admission of the Host institution. The Learning Agreement must be established and signed by both institutions for each student, prior to the student arrival at the Host institution. This Learning Agreement may be revised, if necessary, in a written form with seal of approval from the academic representatives of the two institutions. A Study Plan previewed by this Agreement is enclosed in Appendix 3.

3.2. Supervisors

3.2.1. Before Enrolment

Supervisors of both UCT Prague and UL-ENSIC need to communicate with each other in advance of their student’s enrolment in order to share necessary information on each other’s curriculum, degree requirements and student’s readiness for the Program, and to achieve quality-assured program implementation and conferment of two degrees for their students.

3.2.2. Program Upgrade and Maintenance

The supervisors and/or administrators of academic affairs of both institutions will meet regularly and discuss the Program in order to keep the Program upgraded and to maintain the quality.

3.2.3. Implementation Model

The implementation model at respective Host institution is shown in the Appendix 1.

3.2.4 Exchange of teacher-researchers

Once a year, a teacher-researcher from each of the two universities may spend a period of 5 days in the Host Institution during which time they shall teach courses. This exchange shall be covered by the Home Institution.

The list of teachers hosted on each side shall be communicated in advance enough, in order to insure the set-up of the activities.

With regard to the costs inherent in lecturer mobility, whether in the context of teaching or of participation in panels assessing theses, all available sources of funding and policies for finding synergies shall be considered: Erasmus program, existing invitations to tender regarding internationalisation of education, applications by posts invited to the university, synchronising presence of the lecturer with their research activity.

3.2.5 Organisation of work placements

The students of both universities can validate company internships / laboratory experience in the host country, which shall be the subject of an individual agreement dependent upon the provisions currently in force in each institution. (Appendix 2: Confidentiality Publication and Intellectual Property Clauses)

4. DEGREE AWARDED

4.1. Accreditation of the Master Study Program

- Specialism accredited in France, accreditation between 2018/2022: Master in “Génie des Procédés et des Bioprocédés” GBPB (“*Process and Bioprocess Engineering Master*”) for the UL-ENSIC. The official language of the Program is French, all the courses offered to the incoming students are in French. Except during the S9, where some options are taught in English.

Specialism accredited in the Czech Republic, accreditation of Master in “Chemie a chemické technologie” (“*Chemistry and Chemical Technologies*”) for UCT Prague. Title awarded: “Master of Science”, “MSc”; in Czech “Inženýr”, “Ing.”. The official language of the Program is English and all the courses offered to the incoming students are in English.

4.2. Structure of the Programs

The Master in “Génie des Procédés et des Bioprocédés” GBPB (“*Process and Bioprocess Engineering*”), of the UL-ENSIC, consisting of 120 (ECTS), has a duration of 2 years and can be accessed directly in second year after having obtained a degree of level Master 1 in Process Engineering with 60 (ECTS).

The Master of Science in “Chemie a chemické technologie” (“*Chemistry and Chemical Technologies*”) of the UCT Prague, consisting of 120 (ECTS), has a duration of 2 years and can be accessed after having obtained a degree of level Master 1 with 60 (ECTS).

4.3. Location of Courses

- In *Master 2* “Génie des Procédés et des Bioprocédés” GBPB (“*Process and Bioprocess Engineering*”), the courses will take place in Nancy - France, *for the students from UCT Prague*.
- In *Master 2* “Chemie a chemické technologie” (“*Chemistry and Chemical Technologies*”) the courses will take place in Prague - Czech Republic, *for the students from UL-ENSIC*.

4.4. Degrees

Double Master Degrees are defined as two national degrees issued officially by the partner institutions. The degree issued by either partner institution is fully recognized by the other Party.

	UCT Prague	UL-ENSIC
Degree Awarded:	Master in: «Chemie a chemické technologie » (<i>Chemistry and Chemical Technologies</i>)	Master in : « Génie des Procédés et des Bioprocédés » GBPB (<i>Process and Bioprocess Engineering</i>) <u>Specialisation</u> (choice) : <ul style="list-style-type: none"> • Persee <ul style="list-style-type: none"> ○ Process Engineering for Energy and Environment , or ○ Innovative Product - from Chemistry to Process
Requirement for Master's Degree awarding:	120 ECTS earned	120 ECTS earned
Degree Certificate:	Two independent degree certificates issued by individual Partner Institutions	

4.5. Diploma Thesis

The level Master 2 includes a Diploma Thesis which is 30 ECTS (1 semester) if performed under auspices of UCT Prague and 30 ECTS if performed under auspices of UL-ENSIC. The Diploma Thesis involves a research project and will be conducted under supervision of professor from Host institution. The name of professor will be specified before the start of the thesis.

The Diploma Thesis is discussed at the Host Institution, in front of a committee composed according to the rules of the Host Institution. At UCT Prague the committee is also responsible for a state final oral examination which tests the student's knowledge in selected study topics. This is considered as a part of the Diploma Thesis defence and as a prerequisite for achievement of the Double Degree. Students of UCT Prague are obliged to undergo after they return a state final oral examination which tests the student's knowledge in selected study topics.

5. EVALUATION METHODS

5.1. Grading Systems

The incoming students should follow the study and examination rules in place in the Host Institution. Academic results obtained by the students in the Host Institution throughout the Program will be validated by both institutions.

The students on the Program will be evaluated on their academic performance by each institution in accordance with the evaluation method specified below.

UCT Prague	UL-ENSIC
i) Examination results will be recorded with marks 'A', 'B', 'C', 'D', 'E', 'FX' and 'F' based on the scores. Only 'A' to 'E' deserve credits. Interpretation of each grade varies from school to school. ii) The thesis defence and final examination will be evaluated and recorded by the same marks.	i) Examination results will be recorded with marks 'A', 'B', 'C', 'D', 'E', 'FX' and 'F' based on the scores. Only 'A' to 'E' deserve credits. Interpretation of each grade varies from school to school. ii) The thesis defence and final examination will be evaluated and recorded by the same marks.

Reference:

- UL-ENSIC Grading System (The "Master Génie des Procédés et des Bioprocédés" GBPB [*Process and Bioprocess Engineering*] procedures of knowledge exam)

Grades	Notes	ENSIC	
A	Excellent	18/20-20/20	Top 10%
B	Very Good	16/20-18/20	Next 25%
C	Good	14/20-16/20	Next 30%
D	Satisfactory	12/20-14/20	Next 25%
E	Sufficient	10/20-12/20	Lower 10%
FX		Unsatisfactory 06/20-10/20	0.0-9.99
F		Very Poor <06/20	(Fail)

- UCT Prague Grading System :

Grades	Notes	UCT Prague	
		Numerical conversion in %	definition
A	Excellent	100 - 90	Outstanding performance with only minor errors
B	Very Good	89 - 80	Above the average standard but with some errors
C	Good	79 - 70	Generally sound work with a number of notable errors
D	Satisfactory	69 - 60	Fair but with significant shortcomings
E	Sufficient	59 - 50	Performance meets the minimum criteria
FX	Fail	< 50	Some more work required before the credit can be awarded
F	Fail	< 50	Considerable further work is required
Z	Credit granted	-	Course without examination Special UCT Prague symbol

- Grade conversion

	UCT Prague		ENSIC
A	A	Excellent	18/20-20/20
B	B	Very Good	16/20-18/20
C	C	Good	14/20-16/20
D	D	Satisfactory	12/20-14/20
E	E	Sufficient	10/20-12/20
FX	F	Fail	Unsatisfactory 06/20-10/20
F	F	Fail	Very Poor <06/20

5.2. Transcript of Records

In accordance with the notification provided to students during the application process, at the end of the year of studies at UCT Prague, UCT Prague shall send a copy of Transcript of Records of each UL-ENSIC students to ENSIC. And UL-ENSIC shall send a copy of Transcript of Records of each UCT Prague students to UCT Prague.

If any student does not successfully complete all compulsory modules within the Host Institution study plan, s/he will not be eligible to be awarded the degree from that Institution. Be that the case the Home Institution will take a decision concerning awarding the home university degree to the student.

6. STUDENTS FEES AND FINANCIAL MATTERS

6.1. The students will pay:

For ENSIC students: The students will pay application, matriculation and tuition fees only to their Home Institution.

For UCT Prague students: The students will pay application, matriculation and tuition fees only to their Home Institution if applicable.

6.2. The students will be responsible for all other expenses including, but not limited to:

- payment for extra-curricular courses and activities, and related expenses where applicable
- comprehensive medical and accident insurance as required by the Host Institution
- transportation to and from the Host Institution
- room and board expenses
- textbooks, clothing and personal expenses

6.3. Students of the UL-ENSIC shall register with their appropriate student service prior to their departure and shall subscribe to the student social security scheme in France.

At UL-ENSIC, incoming students will be required to pay the additional services fees and student health care coverage (around 217€ in 2017/2018). The student health coverage is not applicable for European students possessing a valid European Health Insurance Card. For European students: when in mobility, the students shall be in possession of a European Health Insurance Card valid for the entire duration of their stay.

6.4. The Host University shall issue a student card to the students for the duration of their stay. The students taking part in this Program remain enrolled at their Home Institution and will be registered at the Host Institution during their exchange. Prior to their departure to the partner university, they shall verify that their insurance regarding health, accident, third party liability and repatriation is sufficient, and if necessary must bear the cost of additional insurance.

Insurance certificates shall be delivered to the Host Institution after the nominated student receives a letter of acceptance.

7. GENERAL TERMS

The Parties shall use their best endeavours to inform their respective staff and students concerned by the exchanges of their obligation to comply with current laws and regulatory requirements in force in each of the respective countries and with all non-disciplinary provisions of the internal regulations and with the health and safety rules currently in force in the Host Institution.

8. TERMS OF AGREEMENT

This Agreement shall be effective on the day of signing by both Parties and valid for five (5) years. Either Party may terminate this Agreement at any time, provided that a written notice of the intent is given at least six (6) months prior to termination. Commitments already in progress shall be fulfilled and students enrolled in the Program will at that time be allowed to complete it.

Any modification to any of the clauses of this agreement shall be made by means of an amendment submitted in advance for the agreement of the Parties.

9. DISPUTE RESOLUTION

In the event of difficulties arising in the interpretation or performance of the provisions in this agreement, the Parties undertake to attempt to resolve their differences on a friendly basis by means of direct conciliation.

In the event of persisting disagreement, the Parties will choose a third party to act as a mediator or judge.

This agreement is drawn up in 4 original copies - 2 copies in English and 2 copies in French - both versions being equally authentic. They are identical in spirit and interpretation. In case of any discrepancies between the language versions, the English version prevails.

**For the President of University de Lorraine,
by delegation,
XXXXXXXXXX,
Director of the Collegium LORRAINE-INP**

**XXXXXXXXXX
Rector of the University of Chemistry and
Technology, Prague**

**XXXXXXXXXXXX
Director of Ecole Nationale Supérieure des
Industries Chimiques**

**XXXXXXXXXXXX,
Dean of the Faculty of Chemical Technology
University of Chemistry and Technology
Prague**

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Date:

Date:

Appendix 1: IMPLEMENTATION MODEL

Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
		Nomination + Application	Application review by depts and interview (optional) + Acceptation/ Other administrative processes*	UCT Prague: Application review by depts. and interview (optional) Acceptance letter/e-mail and other administrative processes			
*Accommodation / Application for Visa VLS-TS							

Appendix 2: CONFIDENTIALITY PUBLICATION AND INTELLECTUAL PROPERTY “CLAUSES”

CONFIDENTIALITY

Each Party, hereinafter referred to as “RECEIVING Party” shall undertake to consider as confidential, and to not disclose to any third party, under any form whatsoever, all information, whatever the medium, documental characteristics or method of presentation may be, such as in particular, Own Knowledge, documents, systems, software programs, expertise, methods, knowledge disclosed by the other Party, hereinafter referred to as the “DISCLOSING Party” or of which it may have knowledge during the performance of this Agreement and/or may have been obtained by one of the Parties during a visit to the premises of the other Party, hereinafter referred to as the “Confidential Information”, and to make use of the “Confidential Information” solely for executing this Agreement.

The RECEIVING Party undertakes:

- to communicate the Confidential Information solely to its own staff involved under this Agreement,
- to require in particular that its own staff and any persons working for it under this Agreement to comply with its confidential nature and to treat such information with the same care and discretion that it would afford to its own Confidential Information,
- to take all reasonable measures to prevent any staff from disclosing to any third party, unless with the prior written authorisation from the DISCLOSING Party, any or all of the Confidential Information,
- not to file for any patent or any other title of intellectual property including the Confidential Information disclosed to it,
- to refrain from using the Confidential Information for any licensing operation and in particular for any direct or indirect commercial licensing without the written authorisation of the DISCLOSING Party.

Exceptions

The following information does not fall under Confidential Information if the RECEIVING Party can prove:

- That it was accessible to the public or belonged to the public domain on the effective date or following of this Agreement, in the absence of any fault committed by the RECEIVING Party,
- That it held the information lawfully prior to its communication,
- That it received the information from a third party as long as the third party did not receive the information under the protection of confidentiality,
- That it developed the information independently and without any use of the Confidential Information by staff who have had no access to the Confidential Information,

- That it is obliged to disclose the Confidential Information within the context of an administrative or legal procedure. In that event, it shall give warning at the earliest opportunity to the DISCLOSING Party so that the latter may contest the procedure or reduce the extent of the Confidential Information disclosed.

This undertaking shall remain effective during the duration of this Agreement and for five (5) years following its expiry or termination for whatever reason, with respect to the OWN KNOWLEDGE defined hereinafter. The undertaking provided for in this clause shall remain in force for the duration of this Agreement and for a period of eighteen months from the expiry or termination for any reason whatever of this Agreement with regard to the JOINT RESULTS defined hereinafter.

At the end of this Agreement, the RECEIVING Party undertakes to deliver to the DISCLOSING Party all documents containing Confidential Information and in particular any samples which may have been sent to it by the latter Party under this Agreement.

PUBLICATIONS

Any publication or communication of information bearing on the JOINT RESULTS or OWN RESULTS defined hereinafter and issuing from the performance of this Agreement, by either Party, must, over the duration of this Agreement and for eighteen months following expiry, receive the written agreement of the other party, which shall make its decision known within a maximum period of 2 months from the application. Once this period has passed in the absence of any response, agreement shall be deemed as granted. Applications and responses shall be made by any means allowing confirmation of receipt by any non-automatic method. In consequence, any project for publication or communication shall be subject to the opinion of the other Party which may delete or amend details whose disclosure would be of a kind to cause prejudice to industrial or commercial exploitation, under good conditions, of the JOINT RESULTS or OWN RESULTS issuing from this Agreement. Any such deletions or amendments shall not be of such a kind as to damage the scientific value of the publication.

Such publications and communications shall state the assistance brought to bear by each of the Parties to the carrying out of the programme.

In addition, the other Party may delay publication or communication for a maximum period of 18 months from the application, in particular if the information contained in the publication or communication needs to be subject to protection by means of industrial property.

However, these stipulations shall not be a hindrance to:

- the obligation incumbent upon each person taking part in the performance of this Agreement to produce an activity report for the organization of which it is a subordinate part, to the degree that this communication does not constitute a disclosure in the sense of laws on industrial property;
- defending a doctoral thesis by a doctoral student whose scientific activity is related to that of the subject of this Agreement, any such defence being organised whenever

necessary whilst respecting current university regulations in force, and the confidentiality of certain results of research and activity carried out as part of the performance of this Agreement.

INTELLECTUAL PROPERTY

DEFINITIONS

JOINT RESULTS: all information, inventions, innovations, results of trials or calculations, theoretical studies or analyses, final reports, whether capable of being patented or otherwise, designed or developed under or on the occasion of this Agreement between the Parties. It must however be pointed out that the expertise applied and/or developed by one or more of the Parties in the context of this Agreement shall remain the property of the said Party or Parties and shall not be considered as a JOINT RESULT. Expertise is thus an OWN RESULT.

OWN RESULT(S): all information, inventions, innovations, results of trials or calculations, theoretical studies or analyses, final reports, whether capable of being patented or otherwise, designed or developed under or on the occasion of this Agreement between the Parties by one of the Parties alone without the aid of the other Party or any other Party to this Agreement, shall be considered as an OWN RESULT and therefore shall remain the property of this Party.

PROPERTY - EXPLOITATION

Subject to any rights of third parties, each Party shall remain the exclusive owner of its OWN RESULTS and of knowledge (of whatever kind, in whatever form and in whatever medium, whether protected and/or capable of protection by an intellectual property right, and in particular patents, patents for which applications have been made and which are in process, trade names, software, data, intellectual works) in its possession prior to the signature of this Agreement, or which it has obtained independently of this Agreement, referred to hereinafter as "Own Knowledge". Either Party shall not receive as a result of this agreement any right to the Own Knowledge of the other Party.

In the event of communication, by one Party of its OWN KNOWLEDGE, the RECEIVING Party shall comply with the confidentiality clause of this Agreement.

Subject to any rights of third parties, the JOINT RESULTS shall belong to the Parties jointly in depending upon their intellectual and financial contributions.

In the case of JOINT RESULTS generated by a joint research organisation without legal personality (Unité Mixte de Recherche) set up by the UL and another supervisory authority, the latter organisations shall be considered the owners of these JOINT RESULTS, in accordance with the agreements existing between them.

The Parties shall cooperate in deciding whether the JOINT RESULTS are capable of being protected by an industrial property title. A co-ownership agreement shall then be drawn up between them. Unless in the event of a waiver by one of the Parties, joint patents shall be filed in both France and abroad, under the joint names of both Parties.

The Parties shall determine the methods for commercial exploitation of the JOINT RESULTS in a written and signed agreement prior to any commercial exploitation whether direct or indirect of the said JOINT RESULTS.

In addition and in particular, the reports formalising the JOINT RESULTS issuing from the Project shall be subject to current legislation in force with regard to copyright. An “Author” [of copy] is defined below as the person who has taken active part in the drawing up of a summary or of a report. As a consequence, if one of the Parties wishes to reproduce and/or portray the reports of which a doctoral student or student or one of the scientific officers is the Author, and in particular if it is desired to communicate such reports to the public, the said Party shall approach the Author for the purpose of determining means of transferring the copyright on these reports.

Each Party may make use of the JOINT RESULTS issuing from the Project for its own research and teaching needs, inclusively with third parties.

APPENDIX 3: STUDY PLAN

Double degree exchange UL-ENSIC (Master 1) → UCT Prague (Master 2)

semester	Module offer (ECTS)	ECTS	location
1	<ul style="list-style-type: none"> - Polymer Chemistry (3) - Industrial Processes and Sustainable Development (7) - Transport Phenomena III (3) - Thermal separation processes (5) - Process Systems Engineering (5) - Management and Economics III (2) - Foreign Languages III (3) - Elective (1) - Industrialists' Conferences (1) 		UL-ENSIC
2	<ul style="list-style-type: none"> - Management and Economics IV (2) - Foreign Languages IV (2) - Industrial Design Project (6) - Operator Internship (4) - Personal Project (3) - Elective (1) - Academic specialisation : A) or B) <p>A) Academic Specialisation : Innovative Products - from Chemistry to Process :</p> <ul style="list-style-type: none"> - Micro-and Nanostructured Products (4) - Introduction to Product Engineering (4) - From Molecules to Products (4) <p>Or</p> <p>B) Academic Specialisation: Process Engineering for Energy and Environment:</p> <ul style="list-style-type: none"> - Advanced Separation Processes and Multiphase Reactors (4) - Sustainable Processes (4) - Process Design and Simulation (4) 	60	
3	<ul style="list-style-type: none"> - Engineering Thermodynamics (7) - Process Design (6) - Inorganic Technology (5) - Laboratory Project II (8) <p>One of:</p> <ul style="list-style-type: none"> - Membrane Processes (4) - Surfaces of Solid Materials: Reactivity and Structure (5) <p>Optional elective courses</p>	≥30	UCT Prague
4	<ul style="list-style-type: none"> - Applied Reaction Kinetics (5) 	≥30	UCT Prague



	Diploma Thesis (30) State Final Exam & Master Thesis Defence		
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Double degree exchange UCT Prague (Master 1) → UL-ENSIC (Master 2)

semester	Module offer (ECTS)	ECTS	location
1	<ul style="list-style-type: none"> - Applied Reaction Kinetics (5) - Engineering Thermodynamics (7) - Process Design (6) - Specialized Laboratory (7) - Surfaces of Solid Materials: Reactivity and Structure (5) <p>Optional elective courses</p>	≥60	UCT Prague
2	<ul style="list-style-type: none"> - Inorganic Technology (5) - Electrochemical Technologies (3) - Laboratory Project I (7) - Specialized Practice (3) - Advanced Chemical Informatics (3) - Membrane Processes (4) <p>Optional elective courses</p>		
3	<ul style="list-style-type: none"> - Management and Economics V (3) - Foreign Languages V (3) - Elective (3 mandatory amongst 5) (6) - Academic specialisation : A) or B) <p>A) Academic Specialisation : Innovative Products - from Chemistry to Process :</p> <ul style="list-style-type: none"> - Specialty Products (6) - Product Properties and Qualities (6) - Case Study – Innovative Product Design Project (6) <p>B) Academic Specialisation: Process Engineering for Energy and Environment:</p> <ul style="list-style-type: none"> - Process Engineering and Energy (6) - Dynamic Optimization and Advanced Control (6) - Process Intensification and Innovation (6) 	30	UL-ENSIC
4	Diploma Thesis Master Thesis Defence	30	UL-ENSIC