

APPENDIX N° 2
DOUBLE DEGREE PARTNERSHIP AGREEMENT
MASTER IN MATHEMATICS

Between :

Department of Mathematics, SHANGHAI JIAO TONG UNIVERSITY, hereafter “SJTU”

And :

Department of Mathematics, UNIVERSITY LILLE 1, hereafter “ULILLE1”

Applicable to the corresponding degrees

Master Degree in Mathematics of SJTU

Master Degree in Mathematics of ULILLE1

ARTICLE I: AIM

The present partnership agreement between Department of Mathematics, Shanghai Jiao Tong University (SJTU) in Shanghai, China and Department of Mathematics, University of Lille 1 (ULILLE1) in Villeneuve d'Ascq, France is to agree to develop a joint Master programme in Mathematics.

ARTICLE II: ACADEMIC CONDITIONS

2.1 This agreement applies to :

SJTU students :

- who have successfully finished the first year of their master studies in mathematics and passed the corresponding examinations ;
- and are well-versed in the English language to participate in master programme of Scientific computing of ULILLE1 ;
- and are well-versed in the French language to participate in the master programme of pure or applied mathematics of ULILLE1.
- Master programs of the department of Mathematics of the University of Lille 1 can be found in the web site : <http://math.univ-lille1.fr/~cempi/formations/FR/diploboursmast.php>

ULILLE 1 students :

- who have successfully finished the first year of their master studies in mathematics and passed the corresponding examinations ;
- and are well-versed in the English language to participate in master program of pure or applied mathematics of SJTU ;
- and have a basic knowledge in Chinese ;
- Master programs of the department of Mathematics of Shanghai Jiao Tong University can be

found in the web site : http://www.math.sjtu.edu.cn/down.aspx?info_lb=601&flag=514

2.2 Structure of the program and mobility schedule

SJTU students enrolled in the Program will study the 3rd and 4th semesters at ULILLE1. They are expected to validate 60 ECTS during the year (see examinations regulations below) in ULILLE 1.

During the 3rd Semester, the Master Degree in Mathematics provides 5 basic teaching units (TU):

- Functional analysis (10 ECTS);
- Algebra (10 ECTS);
- Geometry (10 ECTS);
- Stochastic Process (10 ECTS);
- Introduction to non linear partial differential equations (10 ECTS).

It also provides specific TU for the specialty “Applied Mathematics “. It concerns the two special following TU:

- Statistics (5 ECTS);
- Modeling and numerical analysis of partial derivative equations (5 ECTS).

And two following numerical TU:

- Tools for probability and statistics (5 ECTS);
- Tools for scientific computing (5 ECTS).

According to the field of specialization the SJTU students will choose:

1. For the Pure Mathematics specialty: 3 basic TU for 30 ECTS;
2. For the Applied Mathematics specialty: 2 basic TU for 20 ECTS, 1 special TU for 5 ECTS and 1 numerical TU for 5 ECTS.

During the 4th Semester, SJTU students in Pure Mathematics and Applied Mathematics have to choose 2 TU for 16 ECTS. The list of TU is renewed each year. SJTU students may choose one TU in a specialty different from their own. Moreover, they write a training report and present it at a public defense. This report enables to get 14 ECTS. At the end of the second year, SJTU students who will have successfully finished the Program will obtain the Master Degree in Mathematics from both institutions.

ULILLE 1 students enrolled in the Program will study the 3rd and 4th semesters at SJTU. They are expected to validate 18 credit units during the year (see examinations regulations below) in SJTU.

During the 3rd Semester, the Master Degree in Mathematics provides the following teaching units (TU) which are subject to change:

- Algebraic topology (3 credits);
- Complex analysis (3 credits);
- Data analysis (3 credits);
- Mathematical programming (3 credits);
- Advanced Numerical analysis (3 credits);
- Stochastic Process (3 credits);
- Dynamical systems (3 credits);
- Introduction to non linear partial differential equations (3 credits).

According to the field of specialization ULILLE1 students will choose 3 TU.

During the 4th Semester, ULILLE1 students have to choose 2 TU for 6 ECTS. The list of TU is renewed each year. Examples of TU are: Advanced topics in algebra; number theory; complex analysis; partial differential equations; mathematical physics; scientific computing; stochastic analysis. Moreover, they write a training report and present it at a public defense. This report enables to get 3 credits. At the end of the second year, SJTU students who will have successfully finished the Program will obtain the Master Degree in Mathematics from both institutions. At the end of the second year, ULILLE 1 students who will have successfully finished the Program will obtain the Double Master Degree in Mathematics from both institutions.

2.3 Selection of students

- (a) The students are selected jointly by both institutions. The selection procedure of each institution should help to ensure that candidates can develop their abilities and skills and succeed in an international academic context.
- (b) Students will be selected by their home institution for participation in the Programme. Students will be selected on the basis of academic merit and/or professional qualifications without regard to race, colour, gender, sexual orientation, civil status, age, religion, political conviction, language, ethnic or national origin, social condition, a disability or the use of any means to palliate a disability.
- (c) The home university propose a list of selected students to the host university. The host university is entitled to inspect the list and to confirm chosen students.

2.4 Numbers of students

For the year 2014/2015, the maximum number of students is 6. This number may be reviewed each year at the request of each partner institution. If the number is not reviewed, it will be renewed.

2.5 Examination regulations

The students are subject to the study and examination regulation which are used by the partner institution where they are studying. Both institutions must validate the results obtained by the students in home and host institution.

A grading scale table will be established by the Institutions to ensure fair transfer and recognition of grades of enrolled students.

Internship and/or research reports can be part of the defence in front of a jury composed with members of both institutions.

2.6 Degree awarding committee

After successful completion of the complete program at both universities, the students receive the degrees of both universities.

2.7 Teacher-researchers mobility

Teacher-researchers mobilities are programmed for each institution as part of the participation in educational and administrative activities. Teacher-researchers expenses will be borne by their home university.

2.8 Responsibilities of participating students

Students will be responsible for:

- a) Applying for and obtaining the appropriate visa (host institution to provide necessary institutional documents);
- b) Applying for and obtaining appropriate insurance (ULILLE1 students attending SJTU are required to subscribe either to the Chinese or French Social Security. SJTU students attending ULILLE1 are required to subscribe to the French Social Security);

Students will:

- a) Have the rights, responsibilities and privileges enjoyed by other students at the host institution; and
- b) Be entitled to participate in any introductory or orientation courses or programs that may customarily be arranged for international students at the host institution.

2.9 Responsibilities of Shanghai Jiao Tong University

SJTU will assist ULILLE1 students participating under the terms of this agreement, as far as possible, in finding suitable accommodation and will provide appropriate assistance in matters of health, language and local custom that may arise. SJTU will appoint an individual, who will provide advisory and other academic services to students participating in the exchange under the terms of this agreement.

2.10 Responsibilities of University of Lille 1

LILLE1 will assist the SJTU students participating under the terms of this agreement, as far as possible, in finding suitable accommodation and will provide appropriate assistance in matters of health, language and local custom that may arise. U LILLE1 will appoint an individual, who will provide advisory and other academic services to students participating in the exchange under the terms of this agreement.

2.11 Finances

- (a) Participants of the double degree programme are responsible for their own travel and living expenses during the exchange. The home as well as the host institution will, however, try to get financial support to defray all or part of those expenses. The aim is to mutually provide grants or fellowships for at least 2 students. The host institution will arrange for accommodations in a student dormitory, if wanted and possible.
- (b) Students participating in this double degree programme will pay their normal tuition and registration fees at their home universities. During the term of the agreement the host universities agree to waive all tuition fees for incoming students visiting under this program.

2.12 The following guidelines apply to all students participating in this agreement:

- a) Students will undertake an academic or co-curricular programme at the host institution, approved in advance by the student's home institution.
- b) Transcripts of results from the host institution will be provided to the home institution as soon as possible after the completion of study.
- c) Students will be enrolled as full time students at the host institution, for a period not exceeding twelve months.
- d) The selected students must demonstrate an excellent academic level by being ranked within the top third of their class at the home university.
- e) Students must have suitable levels of language ability for study at the host institution.
- f) Any academic credit earned at the host institution will be transferred back to the home

institution in accordance with procedures determined by the latter.

ARTICLE III: VALIDITY

- 3.1 The present agreement is entered into for 5 years and starts in the academic year 2015/2016 – subject to the renewal of the authorization of the French Master’s Degree in 2015. At the end of this academic period the programme managers from each institution will establish an assessment of the program. Then the partnership agreement will be renewed subject to possible amendment (teaching content, methods of selection) by each institution. The agreement may be terminated by either side at 6 months written notice upon the understanding that the participants already nominated by their home university at the date of notice shall be permitted to complete the program, and all terms and conditions of the agreement shall apply until the last such program is completed.
- 3.2 This agreement may be modified by mutual written consent. Such amendments, once approved by the parties, will become part of this agreement.
- 3.3 This agreement may only be renewed if, after a review process between the parties, the parties agree in writing to renew it.

Shanghai, on _____

Professor Shi Jin

Director

Department of Mathematics of SJTU

Signature

Villeneuve d’Ascq, on _____

Dr Guoting Chen

Director

Department of Mathematics of LILLE1

Signature

For Shanghai Jiao Tong University

President, Pr. Zhang Jie

Signature

For University Lille 1

President, Pr. Philippe ROLLET

Signature