Annex No. 1- cohort 2016

to co-operation agreement

concluded on 30 April 2014

between

University of L'Aquila (Italy)

represented by its Rector, *Prof. Paola Inverardi*

and

Brno University of Technology (Czech Republic)

represented by its Rector, *Prof. Petr Štěpánek*

regarding detailed co-operation framework in the field of **InterMaths**

programme (Applied and Interdisciplinary Mathematics)

PREAMBLE

1. Having regard to article 5 of the Cooperation Agreement between the Brno University of Technology (Czech Republic) and the University of L'Aquila (Italy), signed on 30 April 2014 to establish a joint master's programme leading to a double degree in Applied and Interdisciplinary Mathematics, the parties agree that the cooperation between them shall be based on the rules hereafter stated.

Art. 1 – DEFINITIONS

If not elsewhere specified:

2. **InterMaths (or InterMath)** is an acronym referring to the joint master's programme in *Applied and Interdisciplinary Mathematics* implemented by the Brno University of Technology (Czech Republic) and the University of L'Aquila (Italy) in the major of mathematics.

3. **UAQ** is hereafter used to refer to the University of L'Aquila (Italy).

4. **BUT** refers to the Brno University of Technology (Czech Republic).

5. **Executive Committee** is composed of two professors, one from each institution: Prof. Bruno Rubino, responsible for this agreement for the UAQ side and Prof. Josef Slapal, responsible for this agreement for the BUT side.

Art. 2 – CANDIDATE SELECTION

1. To apply for selection for the InterMaths programme, candidates must:

   a) be admitted to the first year of full-time second-cycle studies in the area of mathematics,

   b) submit an application for participation in InterMaths by the scheduled deadline via email to the Executive Committee <ec.but-uaq@intermaths.eu>.

2. The Executive Committee will evaluate the submitted applications and notify eligible students via email.

Art. 3 – STRUCTURE OF THE JOINT PROGRAMME, MOBILITY AND STUDY PLAN

1. InterMaths is undertaken in two academic years.

2. InterMaths requires students to achieve 120 credits to gain the final qualification.

3. Students will spend their first year at UAQ and their last year at BUT, achieving at least 60 ECTS credits in each Institution.

4. An overview of how each academic year is structured is provided below:

First year (University of L'Aquila); A.Y. 2015/16

MODULE NAME	ECTS credits
Applied partial differential equations	6
Control systems	6
Dynamical systems and bifurcation theory	6
Functional analysis in applied mathematics and engineering	9
Combinatorics and cryptography	6
Mechanics of solids and materials	6
Data analytics and data mining	6
Complex analysis	6
Parallel computing	6
Stochastic processes	6
ALL	**63**

Second year (Brno University of Technology); A.Y. 2016/17

MODULE NAME	ECTS credits
Mathematical structures	4
Financial mathematics	4
Fundamentals of optimal control theory	4
Mathematical methods in fluid dynamics	4
Modern methods of solving differential equations	5
Elective modules	$\geq$24
Diploma Seminar I	2
Diploma project I	4
Diploma Seminar II	3
Diploma project II	6
Total	**$\geq$60**

5. A list of elective modules will be announced before the beginning of the relevant academic year.

6. Individual study plans may also be taken into account, if appropriately motivated, but they will have to be approved by the Executive Committee.

Art. 4 – DEGREE TITLES AWARDED

Upon revising the title of the Master's Degrees stated in Article 1 of the Cooperation Agreement, to which this Annex refers, the parties agree that

1. BUT will award a Master Degree in *Mathematical Engineering*

2. UAQ will award a Master Degree in *Mathematical Engineering*.

Art. 5 – LANGUAGE POLICY

1. **Language policy at BUT** – The second year of the InterMaths programme (to be spent at BUT) is taught in English. To this purpose students are required to prove a satisfactory level of both spoken and written English. In addition, it will be compulsory for non-native students to acquire a basic level of proficiency in Czech language (A1, according to C.E.F.R.) before the end of the second semester.

2. **Language policy at UAQ** – The first year of the InterMaths programme (to be spent at UAQ) is taught in English. To this purpose students are required to prove a satisfactory level of both spoken and written English. In addition, it will be compulsory for non-native students to acquire a basic level of proficiency in Italian language (A1, according to C.E.F.R.) before the end of the first semester and to pass a secondary test of competence in Italian (A2 level) before the end of the second semester.

Art. 6 – CREDIT TRANSFER POLICY

1. Student's performance is documented through the national grading system in force at each partner institution.

2. The transfer and recognition of grades from an institution to the other will be based on the scales below:

Grades gained at BUT	
BUT	**UAQ**
A	30
B	28
C	25
D	22
E	19
F	< 18

Grades gained at UAQ	
UAQ	**BUT**
30 e lode, 30	A
27, 28, 29	B
24, 25, 26	C
21, 22, 23	D
18, 19, 20	E
< 18	F

Art. 7 – STUDENT OBLIGATIONS

1. For students studying at BUT, the Study Regulations in force at BUT are applied.

2. For students studying at UAQ, the Study Regulations in force at UAQ are applied.

Art. 8 – PARTICIPATION COSTS

1. Students participating in the InterMaths programme will be enrolled in both institutions but will pay tuition fees (and any other fees) to their home institution. Any other fee that might be required for the enrolment and registration at the Hosting Institution, being a party to this Agreement, will be covered by this Institution, local authorities, public bodies and private corporations available at the Hosting Institution.

2. Students will be required to pay for any other personal expenses during their exchange period (including travelling, lodging and food expenses), unless otherwise specified.

3. Students participating in the InterMaths programme are required to obtain (prior to beginning of their mobility period) a document allowing the insured to receive medical treatment in the EU states (EHIC European Health Insurance Card) or private health insurance covering personal accident insurance and civil liability insurance during travelling and studying.

4. Parties to the Agreement may obligate themselves to cover symmetrical accommodation costs in a student's hall.

Art. 9 – AMENDEMENTS AND VALIDITY

1. This Annex may be amended or modified by written agreement signed by both of the institutions involved and it is valid for students of the cohort 2016.

Signed in L'Aquila, _____   Signed in Brno, _____

University of L'Aquila   Brno University of Technology
Legal Representative   Legal Representative
Prof. Paola Inverardi, Rector   Prof. Petr Štěpánek, Rector