

Double Degree Master Program in Engineering Science

Agreement

between

Technische Universität Berlin
Straße des 17. Juni 135, 10623 Berlin, Germany

and

Tomsk Polytechnic University
30, Lenin ave., 634050 Tomsk, Russian Federation

Preamble

The present agreement is concluded between
the Technische Universität Berlin

– hereinafter referred to as "TUB" –

and

the Tomsk Polytechnic University

– hereinafter referred to as "TPU" –

The present agreement changes and specifies the regulations of the agreement on Double degree Master Program in Engineering Science

– hereinafter referred to as "DDMPES" –

from 27.02.2007. It replaces the agreement from 27.02.2007.

I. General Regulations

I.1. The Universities award their degrees to the graduates upon successful completion of the DDMPES:

- Master of Science in "Physics of High Technology in Mechanical Engineering" (TPU);
- Master of Science in "Engineering Science/Physikalische Ingenieurwissenschaft" (TUB).

I.2. The program shall have a shared curriculum. All program credits obtained will be recognized by both TUB and TPU.

I.3. The courses will be offered in German at TUB and in Russian or English at TPU. Projects and Master theses may be completed in English.

I. 4. Following conditions must be fulfilled to enroll in the DDMPES:

a) For Russian students:

- (1) Bachelor of Science Degree in Mechanical Engineering or other relevant field of study;
- (2) knowledge of German language of at least the level B2.

b) For German students:

- (1) Bachelor of Science Degree in Mechanical Engineering or other relevant field of study;
- (2) knowledge of Russian and English language of a level determined by TPU.

I.5. By enrolling in the DDMPES a personal study plan shall be drafted and approved by both parties for the whole period of study for the Program.

I.6. The studies structure is described Section II.3. of this agreement and in the attachment (Appendix I.) to this agreement. It is to be approved by the Department of Physics of High Technology in Mechanical Engineering of TPU and the examining board in Engineering Science of the Faculty V Mechanical Engineering and Transport Systems of the TUB. Amendments and changes in the program come into force after being coordinated and confirmed by the above bodies of the partner universities.

I.7. Responsibility for carrying out the Double Degree Master Studies and its development rests with the heads of the DDMPES of the both universities. The faculty councils of the partner universities appoint these responsible persons.

II. Master Studies Arrangements

II.1. The planned duration of the DDMPES will be 2 years. To earn the master's degree one should complete at least 120 credits according to the rules set forth in §II.3. of this agreement. At least 60 credits should be earned at the home university, and at least 60 credits at the partner university. For the duration of studies at the partner university, the students will be enrolled at the partner university according to the rules of the partner university and the DDMPES agreement. Due to valid reasons, the duration of enrollment at the partner university may be extended up to the total time of 2,5 years.

II.2. Guest professorships are encouraged. Part of the courses may be taken during such guest professorships instead of a stay at the partner university. The guest lectures will be given in English. The awarding of honorary professorships to professors actively participating in DDMPES is strongly encouraged.

II.3. The DDMPES shall consist of the following categories:

- at least 18 credits advanced mathematical courses
- at least 54 credits in two strong points listed below. In particular
 - at least 24 credits in one of the strong points listed below
 - at least 24 credits in the second one of the strong points listed below
 - furthermore, at least 24 credits should be from the core areas of both strong points
- at least 6 credits from the group of “projects”
- at least 24 elective credits. In particular,
 - at least 9 credits in technical subjects
 - at least 9 credits in non-technical subjects
- Master thesis (18 credits at TUB and 24 credits at TPU).

The list of the strong points:

- numerics and simulation
- fluid dynamics
- mechatronics

- solid state mechanics
- thermodynamics
- technical acoustics

Courses assigned to particular categories or strong points are listed in module catalog. Advanced language courses may be chosen to fulfill non-technical elective credits.

II.4. For each category of the DDMPEs a module catalogue will be created. The modules descriptions provide in detail:

- the title of the course
- the responsible person and its address and E-mail
- the language
- the contents
- the qualification aims
- the workload calculation
- credit points
- qualification requirements for successful participation in the course

II.5. The Universities agree on the essential equivalence of the evaluation system and accept the results of students' attestation on courses/modules of the Program. The Universities exchange by students' academic transcripts at the end of each term.

II.6. The master thesis shall be carried out according to the regulations of the university, where the thesis is written. Each student is to have two supervisors, one from each university. The master thesis may be written in German, Russian or English. Both Universities are to receive a copy of the master thesis. The partner university is to receive an extended abstract of the thesis of about 4 pages in the language of the partner university. The examination commission evaluating the thesis has to be appointed by examination boards of both universities. Master's thesis has to be defended in one of the following ways:

- In two colloquia, one at TUB and one at TPU.
- In a joint colloquium either at TUB or TPU provided representatives of the partner University are on site.
- In a video conference or a telephone conference, provided there are technical possibilities for visual presentation of results.

III. Financial Commitments

III.1. The partner universities incur expenses connected with the preparation, carrying out of DDMPEs, enrollment, and realization of the program.

III.2. Students incur expenses connected with traveling abroad (i.e. passport and visa costs, international transportation, health insurance, accommodation).

III.3. Partner universities may assist in arrangements connected with traveling abroad (student dormitories accommodation, bringing in of grants for the program).

III.4. Taking part in the DDMPEs is free of charge for German students; it may or may not be free of charge for Russian students. In the case one university should charge fees, the partner university is to receive a dividend accordingly to the number of program credits completed at the partner university.

In the case that both universities waive tuition, students are still required to pay other university fees.

IV. Other provisions

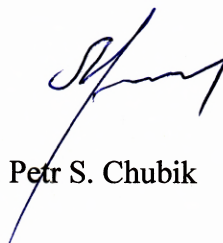
IV.1. The Agreement comes into force on the date it is signed by both Universities and is valid for 5 years. The agreement is automatically renewed at the end of the five years unless one or both of the universities propose otherwise. Either University may withdraw from this Agreement upon delivery of written notice to the other party but not before the expiry of all agreements with the students.

Technische Universität Berlin

Tomsk Polytechnic University



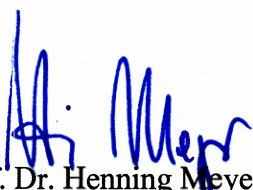
Prof. Dr. Jörg Steinbach
President



Prof. Dr. Petr S. Chubik
Rector

Berlin, Dec. 19th 2012

Tomsk, _____



Prof. Dr. Henning Meyer
Dean of the Faculty of Mechanical
Engineering and Transport Systems



Prof. Alexander I. Chuchalin, DSc
Vice-Rector for Academic and
International Affairs

Berlin, 2012-10-16

Tomsk, Aug. 9, 2012