

# 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 Technische Universität Berlin

– hereinafter referred to as "TUB" –

and

the Tomsk Polytechnic University

– hereinafter referred to as "TPU" –

establish herewith a Double Degree Master Program in Engineering Science

– hereinafter referred to as "DDMPES" –

The present agreement lays down the rights and obligations of the parties in arranging Master Studies during the DDMPES at the TUB and TPU.

### I. General Regulations

I.1. The DDMPES results in the awarding of two degrees:

(a) Master Degree of Engineering and Technology with specialization in "Physics of High Technology in Mechanical Engineering" at the TPU

and

(b) Master of Science in "Engineering Science/Physikalische Ingenieurwissenschaft" at the 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) Russian students:

(1) Four year bachelor at TPU or other Russian University of Technology in Mechanical Engineering or other relevant course of studies.

(2) Knowledge of German language of the medium level in accordance with the Goethe-Institute.

b) German students:

(1) Three year bachelor at a German University of Technology.

(2) Knowledge of Russian and English language of a level determined by TPU.

I.5. By enrolling in the DDMPES a personal study plan will be written and approved by both parties.

I.6. The studies structure is described in detail in the attachment to this agreement. It is to be approved by the academic council of the 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 the program regulations attached to 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.

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 24 credits + project (6 credits) in one of the strong points listed below
- at least 24 credits + project (6 credits) in the second one of the strong points listed below
- at least 12 elective credits in technical subjects
- at least 12 elective 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 12 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 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. The partner university is to receive an extended abstract of the thesis of about 4 pages in the language of the partner university.

### 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).

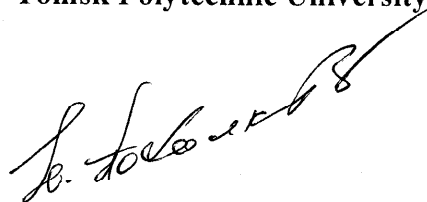
III.3. Partner universities may assist in arrangements connected with traveling abroad (student dormitories accommodation, bringing in of grants for the program).

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.

**The Technische Universität Berlin**

**Tomsk Polytechnic University**



Prof. Dr. Jörg Steinbach  
First Vice President

Prof. Dr. Yu.P. Pocholkov  
Rector

Tomsk, February 27, 2007

Tomsk, February 27, 2007