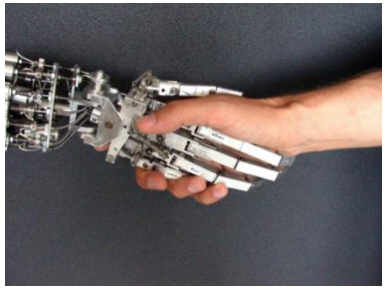
Berlin

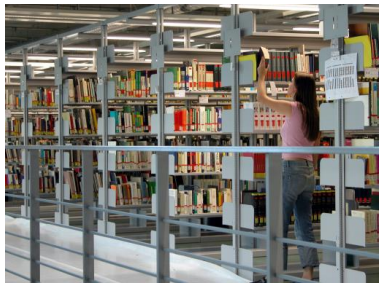
2017

Technische Universität Berlin

Technische Universität Berlin, a university with international reputation in Germany‘s capital:

- third largest University of Technology in Germany, member of TU 9
- research and teaching ranging from engineering and natural sciences to humanities and social sciences
- intensive cooperation between science and industry
- joint research projects with numerous non-university research institutes
- alliance between technology and humanities to meet the challenges of the future





Technische Universität Berlin

1770 - 1821

Founding of the antecedent academies:
Mining Academy, Building Acadamy and Vocational Academy

1879
Unification into Royal Technical College of Berlin

1945 - 1946
After World War II Re-Establishment as Technische Universität

1950
Establishment of the Faculty for Humanities

2005
Formation of Research and Teaching in 7 Faculties

2006
Reforms in administrative and committee structure

Facts and Figures

Students	32.000
female	10.300
international	6.000
Faculties (Schools)	7
Degree programs	109

Professors	400
Scientific staff	2.364
Other Staff	4.402
PhD/year	460

Budget:

From government	280 Mio. €
Additional (third party) funds	170 Mio. €

Technische Universität Berlin

Faculty	Name	Institutes
I	Humanities	7
II	Mathematics and Natural Sciences	6
III	Process Sciences	6
IV	Electrical Engineering and Computer Sciences	6
V	Mechanical Engineering and Transport Systems	7
VI	Planning – Building - Environment	8
VII	Economics and Management	3

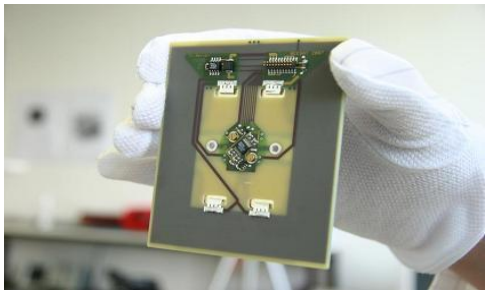
International Orientation

Cooperation programs with foreign universities	>130
Student exchange programs with foreign universities	>330
Dual Degree Programs with foreign universities	> 40
European Elite Programs:	
Erasmus Mundus	4
EIT ICTLabs	7

Campus El Gouna (Egypt)

4 Main Points at Chair of Space Technology

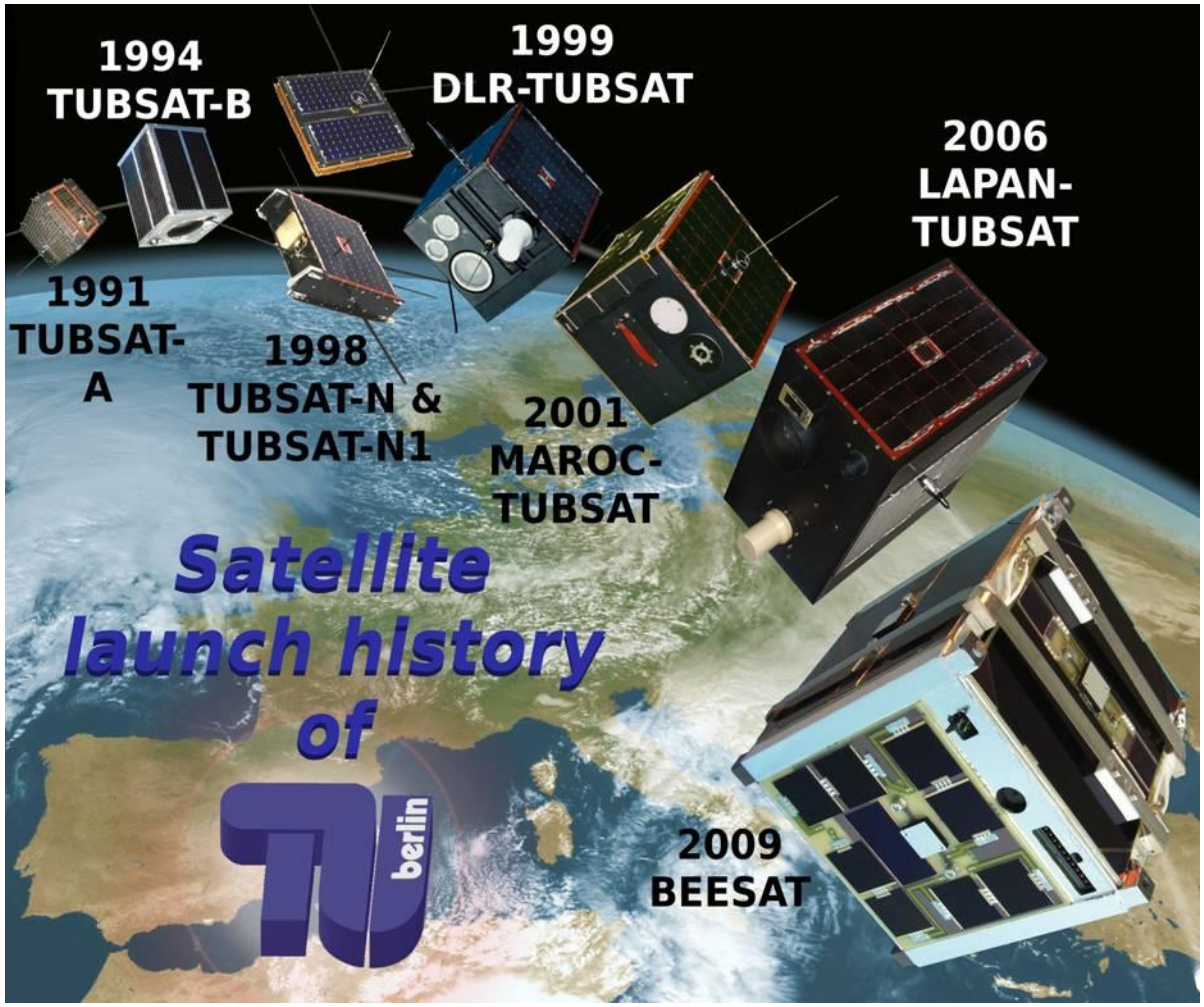
Curricula in Space Technology



Space Technology Research

Theoretical and Hands-on
Education in Satellite Technology

Theoretical and Hands-on
Education in Rocket Technology



1991	TUBSAT A	35 kg
1994	TUBSAT B	40 kg
1998	TUBSAT N	8,5 kg
1998	TUBSAT N1	3 kg
1999	DLR-TUBSAT	45 kg
2001	MAROC-TUBSAT	48 kg
2007	LAPAN-TUBSAT	45 kg
2009	BEESAT-1	1 kg
2013	BEESAT-2	1 kg
2013	BEESAT-3	1 kg
in preparation		
2014	TUBIN	20 kg
2014	BEESAT-4	1 kg
2015	TECHNOSAT	15 kg
2015	S-NET	4 X 10 kg

Educational and Research Projects

Neues Curriculum in Raumfahrttechnik
http://ncr-tgai.eu/ 2007-2009

Curricula Reform in Space Technology
http://www.crist-kru.eu/ 2008-2011

Practice Oriented Master Programmes in Engineering
http://promeng.eu/ 2010-2013

Two cycle E-Commerce curricula to serve Information Society in RU, UA, IL
http://ecommis.eu/ 2011-2014

Strengthening education in space-based remote sensing for monitoring of eco systems
http://sesremo.eu/ 2013-2016

Modernization of two cycles (MA,BA) of competence-based curricula in Material Engineering according to the best experience of Bologna Process
http://mmateng.eu/ 2013-2016

New Model of the Third Cycle in Engineering Education Due to Bologna Process
http://netceng.eu/ 2013-2016

Tempus

SEVENTH FRAMEWORK PROGRAMME

GEO capacity building initiative in Central Asia
http://www.geo-seoca.net/ 2010-2011

Methods and tools for dual access to the EO databases of the EU and Russia
http://medeo-eu-ru.org/ 2011-2012

Problem-oriented processing and database creation for Ionosphere Exploration
http://popdat.org/ 2011-2013

Small explorer for advanced missions
2013-2016

Super light-weight thermal protection system for space application
2014-2017

Erasmus Mundus

Mobility academic network between EU and Central Asia
http://maneca-em.org/ 2010-2014

Role of TUB in the project

-Full administration, coordination and management of the project
-Communication with the Agency and partners
-Schedule of the co-ordination meetings /conferences/master classes/trainings
-Control of the academic achievements
-Control over budget, keeping of all required by the Agency documents/contracts/invoices
-Communication with the Agency
-Reporting to the Agency (intermediate report and final report)
-Keep the work plan updated
-Fill in the Table of Achieved Outcomes as activities completed
-Purchase of the equipment
-Arrangements of the mobility

В марте 2017 года в Берлине подписано СОГЛАШЕНИЕ о партнерстве между Берлинским техническим университетом и Казахским национальным исследовательским техническим университетом имени К.И.Сатпаева по программе ERASMUS +, проект APPLE «Прикладная учебная программа по освоению космического пространства и интеллектуальных роботизированных систем». Номер соглашения 573545-EPP-1-2016-1-DE-EPPKA2-CBHE-JP.

Проект выполняется в период с февраля 2017 года по октябрь 2019 года.

Единым координатором проекта от Европейского Союза выступает Берлинский технический университет.

Со-бенефициарами выступают вузы Казахстана и Европы, включая вузы Беларуси и России:

Kazakh National Research Technical University (KZ), Al-Farabi Kazakh National University (KZ),),
Almaty University of Power Engineering and Telecommunication (KZ),
L.N. Gumilev Eurasian National University (KZ), Université Pierre et Marie Curie (FR),
Institute Thomas More (BE), ECM Space Technologies GmbH (DE), Riga Technical University (LV),
Tallinn University of Technology (EE), Belarusian State University (BY),
Belarusian National Technical University (BY),
Belarusian State University of Informatics and Radioelectronics (BY),
Peter the Great St.Petersburg Polytechnic University (RF),
Southwest State University Kursk (RF), Ural Federal University (RF), Siberian Federal University (RF).

Цель программы заключаются в поддержке развития высшего образования в области исследования и использования космического пространства, интеллектуальных роботизированных систем путем разработки и внедрения учебных программ в соответствии с требованиями рынка труда.

Координатором проекта от КазНИТУ К.И.Сатпаева является профессор кафедры «Эксплуатация космических средств», доктор технических наук Суйменбаев Багдат Темиргалиевич.

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