# **Agreement for Dual Degree in Medical Engineering**

# SJTU Shanghai Jiao Tong University - KTH Royal Institute of Technology

## **About SJTU**

Shanghai Jiao Tong University is a public research university located in Shanghai, China. Established in 1896 by an imperial edict issued by the Guangxu Emperor, the university is renowned as one of the oldest and most prestigious and selective universities in China. The two main campuses are located in the Xuhui District and the Minhang District of Shanghai. The Dual Master for Medical Engineers is conducted at the School of Biomedical Engineering. All courses will be in English and you will be enrolled to pursue a degree at both SJTU and KTH.

## **Student Population**

Undergraduates: 16 000

Postgraduate students: 20 000 International students: 2 000

### **School of Biomedical Engineering**

bme.sjtu.edu.cn/en

### **Tuition and Financial Matters**

- The student will pay regular tuition fee to the home institution. For Swedish students the program is completely free.
- The student will not pay tuition fee to the host institution.
- KTH students will receive a free full covering insurance for the entire stay at SJTU.

## **Services and Accommodation**

- If students need dormitory on campus, room reservation should be made when applying.
- The accommodation fees of the university dormitories are paid by semester and will not be refunded if students leave during the semester.

## **Studies**

Generally, in order to fulfil the requirements for the two masters' degrees, the studies are expected to cover one year in the home institution followed by 1 to 1.5 years of studies in the host university.

- One (1) SJTU credit corresponds to two (2) ECTS credits at KTH.
- No grades are transferred from SJTU to KTH.

#### Research and thesis

A master thesis at SJTU is normally conducted during one year parallel with courses. As you will not be taking the full course load during the year you are there, it should be possible to finish both the thesis and the courses in two semesters. Please note however that the thesis might take longer and take into consideration that you might need to stay a few more months.

- The student is enrolled with SJTU during the thesis.
- The thesis examination shall be undertaken jointly by KTH and SJTU.
- The thesis and the examination procedures as well as examination documentation shall meet the requirements of both KTH and SJTU.
- It is possible to do the thesis with a company in Shanghai if we find a suitable spot for you.

Semester	KTH students		
Semester 1	Courses at KTH		
Semester 2	Courses at KTH		
Semester 3	Courses + thesis at SJTU		
Semester 4	Courses + thesis at SJTU		
(Semester 5	Thesis at SJTU)		

## Degree awarded

SJTU: Master of Engineering in Biomedical Engineering (30 SJTU credits)

KTH: Master of Science (120 credits)

# SJTU: Courses and eligibility criteria

In order to get the degree from SJTU, the following is required for KTH students.

# Mandatory (>=9 credits/18hp)

4 credits Chinese Language courses (Overview of Chinese Culture-2 credits; Chinese -2credits); 5 credits Mathematic course (Computational Methods-3credits; Matrix Theory-3credits, or equivalent)

# Elective (<=21 credits/42hp)

6+ credits from course list of SJTU-Elective;

15- credits from the KTH-Mandatory, KTH-Conditionally Elective, or KTH-Elective

	Code	Course	Credit	Time	Course Director	Note
Mandatory	G090512	Dialectics of Nature	1	Fall		Compulsory for Students of Chinese citizen
	G230001	Socialism	2	Fall		
	G140501	English	3	Fall		
	G090511	Chinese	2	Fall		Compulsory for Students of non-Chinese citizen
	G090510	Overview of Chinese Cultures	2	Spring		
	G071503	Computational Method	3	Fall		Compulsory
	G071555	Matrix Theory	3	Fall		
Elective	X416006	Neural Control and Neuroprosthesis	2	Fall	Ning Lan	Select 6 credits from the list
	X082009	Biomedical Optics	2	Fall	Xunbin Wei	
	X082008	Neural Signal Processing	3	Spring	Shanbao Tong	
	X082020	Advanced Digital Image Processing	3	Spring	Lixu Gu	
	X080534	Bioheat and Mass transfer	3	Spring	Aili Zhang	
	X082014	Neuroimaging	3	Fall	Yao Li	
		Systems Biology: concepts, methodologies and applications	3	Spring	Shengce Tao	
	X082016	Biomaterials and Tissue Engineering	2	Spring	Haiyan Li	
	S416001	Frontiers in Biomedical Engineering Seminar Series	2	Spring / Fall	Weiliang Xia/Liqin Xiong	Compulsory
	Courses in K1	<=15 credits				