

International Dual Degree Program of Biomedical Engineering at Shanghai Jiao Tong University(China)-Drexel(United States)

Introduction of STJU and Drexel

Shanghai Jiao Tong University (SJTU), as one of the higher education institutions which enjoy a long history and a world-renowned reputation in China, is a key university directly under the administration of the Ministry of Education (MOE) of the People's Republic of China and co-constructed by MOE and Shanghai Municipal Government. Through 119 years' unremitting efforts, SJTU has become a comprehensive, research-oriented, and internationalized top university in China.

Drexel is a comprehensive global research university ranked among the top 100 in the nation and committed to use-inspired research with real-world applications, and the University's research activities result in more than \$110 million in annual expenditures for sponsored projects. With approximately 26,000 students, Drexel is one of America's 15 largest private universities., and many of its colleges and programs are considered among the best in their fields.

Biomedical Engineering at SJTU and Drexel

The Biomedical Engineering (BME) Program was first established at SJTU in 1979. After more than 30 years of rapid development, the School of BME was formally established. The BME program of SJTU has been ranked consistently in the top three in China and has the following unique advantages to support its rapid development into a world-class BME discipline: SJTU is very strong not only in engineering and physical sciences that have had a history over 100 years, but also in the ranked #1 clinical medicine with 12 top ranked affiliated hospitals in China. BME at SJTU has the following divisions:Biomedical Instrumentation, Neuroengineering, Medical Imaging and Informatics, disease biology, Nano Biomaterial and Systems Biology and Medicine.

For graduate students, the School of Biomedical Engineering, Science and Health Systems, Drexel University, USA offers master's of science (MS) and PhD programs in Biomedical Engineering and Biomedical Science. Areas of specialization available or under development include biomechanics, rehabilitation, biomaterials and tissue engineering, biosensors and biomedical imaging, biostatistics, genome science and bioinformatics, human factors and performance engineering, neuroengineering, and systems biology.



SJTU-Drexel Dual Ph. D./Master's Degree Program

In 2009, SJTU and Drexel signed Memorandum of Cooperation.

In 2011, SJTU and Drexel launched a dual PhD's degree program on biomedical engineering and will start dual master's degree program from 2016.



Semesters for the Dual Master's Degree Programs

	Application in February	Year 1 (Semester 1) Fall (SeptJan.)	Year 1 (Semester 2) Winter (JanJune)	Year 2 (Quarter Terms Fall to Summer an (SeptSept.)	Year 2 (Semester 3) Fall (SeptJan.)		
		SJTU	Drexel	Drexel	SJTU		
101010	or						
Drexel	Application in February	Year 1 (Terms 1-4) Fall-Winter-Spring- Summer (SeptSept.)	Year 2(Semester 1) Fall (Sept – Jan)	Year 2 (Semester 2) (Jan. – June)	Year 2 (Term 5) Summer(July- Sept.)		
UNIVERSITY		Drexel	SJTU	SJTU	Drexel		

Major courses offered in SJTU-Drexel Dual Master's Degree Program of BME

SJTU- Mandatory			Drexel-Mandatory		
\succ	Overview of Chinese Cultures	\succ	Medical Science I		
\succ	Chinese	\succ	Medical Science II		
\succ	Computational Method	\triangleright	Medical Science III		
\triangleright	Matrix Theory	\succ	Biosimulation I		
		\succ	BiosimulationII		
		\succ	Seminar		
	SJTU-Elective		Drexel-Conditionally elective		
\triangleright	Neural Control of Movements	\succ	Medical Imaging Systems I		
\succ	Biomedical Signal Processing	\succ	Medical Imaging SystemsII		
\succ	Computational Methods for Medical Imaging	\succ	Tissue Engineering I		
\succ	Neuroimaging	\succ	Tissue Engineering II		
\succ	Cell biological Photonics	\succ	Biomedical Mechanics I		
\succ	Frontiers in Biomedical Engineering Seminar	\succ	Biomedical Mechanics II		
	Series	\succ	Biomaterials I		
\triangleright	Biomedical Optics	\succ	Biomaterials II		
\succ	Advanced Digital Image Processing	\succ	Medical Imaging Systems III		
\succ	Bioheat and Mass transfer	\succ	Quantitative Systems Biology		
\succ	Systems Biology: concepts, methodologies and	\succ	Pharmacogenomics		
	applications	\succ	Neural Signals		
\succ	Biomaterials and Tissue Engineering	\succ	Biomaterials and Tissue Eng. III		
\succ	Techniques for Neuromodulation	\succ	Cardiovascular Engineering		
\succ	Computer Vision in Biomedical Engineering	\succ	Genome Information Engineering		
\succ	Molecular Sensors and Nanodevices: Principles,	\succ	Principles of Neuroengineering		
	Design and Applications in Biomedical				
	Engineering				

Scholarships

Chinese Government Scholarship for International Students (www.sie.sjtu.edu.cn) Chinese Government Special Scholarship for International Students (www.csc.edu.cn) Shanghai Government Scholarship for International Students (http://www.study-shanghai.org/Scholarship_en.asp)

Deadline for Application

Deadline varies with the specific program, usually the application should be submitted in January, and the decision will be made by the end of March. Please contact the program secretary regarding the deadline of each program. For more information, please contact:

Ms. Yan Wang/Ms. Li Shang, Program Secretary School of Biomedical Engineering, Shanghai Jiao Tong University Tel: +86-21-62932302 Email: yanwang316@sjtu.edu.cn and shangli@sjtu.edu.cn Prof. Andres Kriete, coordinator from Drexel Email: ak3652@drexel.edu





Graduate Application of SJTU

Graduate Application of Drexel