



International Dual Ph.D. Degree Program of Biomedical Engineering at Shanghai Jiao Tong University(China)-Northwestern University(US)

Introduction of SJTU and NU

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 121 years' unremitting efforts, SJTU has become a comprehensive, research-oriented, and internationalized top university in China.

Northwestern is a leading research university that is home to more than 90 school-based centers and more than 50 University research centers. With an interdisciplinary culture, our research spans a spectrum of areas including neuroscience, nanotechnology, biotechnology and drug discovery.

Biomedical Engineering at SJTU and NU

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.

Northwestern was among the first schools to recognize the value of a biomedical engineering background. Today the Department of Biomedical Engineering offers one of the largest programs in the country at both the undergraduate and graduate levels. We help provide students with the tools, experience, and adaptability to prosper—not only as new graduates but also throughout their careers.



SJTU-NU Dual Ph.D Degree Program

In 2017, SJTU and NU signed Memorandum of Cooperative Research and Education between SJTU-BME and NU-BME to launch a Dual Ph.D Degree Program.



Application Requirements for SJTU-NU Dual Ph.D. Degree Program



- All applicants will be limited to students enrolled in Ph.D. program already.
- Research completed by students should be under the supervision of at least one NU faculty and one SJTU faculty.
- Application materials will include an application form, a one-page personal statement outlining personal goals and research interests, TOEFL and GRE reports, and two reference letters.
- Upon approval by SJTU/NU, students will submit their application materials through NU's/SJTU's online application system by deadline.
- Application fee must be paid by each student.

Major Courses Offered in SJTU-NU Dual Degree Program

<p style="text-align: center;">SJTU- Mandatory</p> <ul style="list-style-type: none">➤ Overview of Chinese Cultures➤ Chinese➤ Computational Method➤ Matrix Theory	<p style="text-align: center;">NU-Mandatory</p> <ul style="list-style-type: none">➤ Experimental Design and Measurement➤ Graduate Research Seminar in Biomedical Engineering
<p style="text-align: center;">SJTU-Elective</p> <ul style="list-style-type: none">➤ Neural Control and Neuroprosthesis➤ Biomedical Optics➤ Neural Signal Processing➤ Advanced Digital Image Processing➤ Bioheat and Mass transfer➤ Neuroimaging➤ Systems Biology: concepts, methodologies and applications➤ Biomaterials and Tissue Engineering➤ Frontiers in Biomedical Engineering Seminar Series➤ Ethics in Biomedical Engineering Research➤ Advanced Biomedical Imaging➤ Biomedical Ultrasound➤ Fiber Optics and Biomedical Optics	<p style="text-align: center;">NU-Research Areas</p> <ul style="list-style-type: none">➤ Biomaterials and Regenerative Medicine➤ Imaging and Biophotonics➤ Neural Engineering and Rehabilitation <p style="text-align: center;"><i>Elective course details TBD</i></p>

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 Online Application

Non-scholarship applicants: **May 31**

SJTU applicants : **Dec. 15**

NU applicants : **Mar. 31**

Tuition and Fees

Fees will be waived by both sides for most of the programs. Please contact with Coordinator for details.

For more information, please contact:

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Official Websites

SJTU Official : <http://en.sjtu.edu.cn/>

BME Official : <http://bme.sjtu.edu.cn/En>