

Master of Biology Program

■ Program Overview

A Full-time student should study for two and a half years.

The program includes at least 30 credits in total, among which at least 19 credits in Degree Courses. Generally, all courses should be completed within the first school year. At least one research paper admitted BY SJTU should be published. In this paper, SLSB should be the first sender and the master student himself or herself should be the first author. Publications on SCI, SCIE, EI, ISIP magazines are encouraged. The Master should understand the basic theories of biology and experimental techniques, and be familiar with the current development situation in his or her research area. The Master should have the ability to be a well-qualified teacher in higher education area, and have the capacity of development and management in scientific research and scientific-oriented production.

■ Main Courses

Type		Code	Course	Credits	Schedules	others
Degree courses	public	G090511	Chinese	2	Spring/Fall semester, in English	Compulsory
	courses	G090510	A survey of Chinese culture	2	Spring semester, in English	Compulsory
		G071503	Calculation Methods	2	Fall semester, in English	Alternatives
		G071555	Matrix Theory	2	Fall semester, in English	
		B080702	Academic Writing	1	Fall semester, in English	Compulsory
Degree or Non-degree courses	Specialized Courses	BI6008	Cell and Developmental Biology	3	Fall semester, in English	Tutors can decide , whether these courses degree or non-degree are. Students choose
		BI6009	Molecular Signal Transduction	3	Fall semester, in English	
		BI6010	Metabolic engineering and Synthetic Biology	3	Fall semester, in English	

		BI6011	Genetics and Development	3	Fall semester, in English	several of them, but remember: 30 credits must be obtained and 19 in degree courses.
		BI6001	Bimolecular structure and function	3	Fall semester, in Chinese/English	
		BI5001	The scientific study of etiquette	3	Fall semester, in Chinese/English	
		BI6004	Mathematical Biology	3	Fall semester, in Chinese/English	
		BE6001	Modern biological engineering	3	Fall semester, in Chinese/English	
		BI6003	Environment and microbial evolution	3	Spring semester, in Chinese/English	
		BI6006	Biochemical technology principle and Application	3	Fall semester, in Chinese/English	
		BI6007	Bio-safety	2	Fall semester, in Chinese/English	
		BI6002	Senior Bioinformatics (Alternative to BI436)	3	Spring semester, in Chinese/English	
		BI6005	Structural bioinformatics (Alternative to BI371)	2	Spring semester, in Chinese/English	
Non-degree	Specialized	F080608	Laboratory Innovation Training	3	Spring/Fall semester	Compulsory
		S080501	Academic report	2	Spring/Fall semester	Compulsory
		BI436	Computer Aided	2	Fall Semester, in English	Elective, not

			Drug Design			applicable with BI6005 Structural bioinformatic s
		BI371	Principal Algorithm of Bioinformatics	3	Fall Semester, in English	Elective, not applicable with BI6002 Senior Bioinformati cs
		PM6001	Introduction to pharmaceutical research	3	Fall Semester, in English	Elective
		PM6003	Introduction to pharmacology	3	Fall Semester, in English	Elective