

Shanghai Jiao Tong University

“The Belt and Road” Satellite Navigation and Remote Sensing Master Program

1. Program Overview

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 now a comprehensive, research-oriented, and internationalized top university in China. School of Electronic Information and Electrical Engineering (SEIEE), as the largest engineering institute in SJTU, owns abundant resources of more than 700 faculty and staff, and more than 8,000 students.

SJTU “The Belt and Road” (B&R) Satellite Navigation and Remote Sensing Program, aiming at serving China “B&R” cooperative development strategy, cradled by two national top and internationally prominent first disciplines “Electronic Science and Technology” and “Information and Communication”, is a program for master of engineering in the school of Electronics, Information and Electrical Engineering (SEIEE).

Supported by “Beidou Navigation and Location Service Shanghai Key Laboratory”, and “Intelligent Detection Shanghai University Key Laboratory”, the program would be managed by the Academy of Information Technology and Electrical Engineering(AITEE), and cooperate with industry in national satellite navigation and remote sensing fields.

2. Research Direction

Global Navigation Satellite Systems

Hybrid Navigation

Visual Navigation

Indoor Localization

Navigation for Unmanned Systems

3. Main Courses

Satellite Navigation and Remote Sensing B&R Program Curriculum						
Module	Departments	Course Code	Course Name	Cre dits	Teaching Language	Remarks
General Compulsory Course (12 Credits in Total)	Graduate School	G090511	Chinese Language	2	English	Compulsory
	Graduate School	G090510	Chinese Culture	2	English	Compulsory
	Graduate School	FL28002	Academic English	2	English	Compulsory
	Dept. of Math	G071555	Matrix Theory	3	English	Compulsory
	Dept. of Math	G071503	Calculating Method	3	English	Compulsory
Core Courses (8 Credits in Total)	SEIEE	TBD	Navigation Technology	3	English	Compulsory
	SEIEE	TBD	Geographic Information System and Its Application	2	English	Compulsory

	SEIEE	TBD	Remote Sensing Information Processing	3	English	Compulsory
Elective Courses (≥8 Credits)	SEIEE	X034522	Modern Signal Processing	3	English	Elective
	SEIEE	X034520	Digital Image Processing	3	English	Elective
	SEIEE	F034605	Array Signal Processing and Space-Time Signal Processing	3	English	Elective
	SEIEE	C032712	Information Fusion	2	English	Elective
	SEIEE	X033525	Machine Learning - Fundamental and Practice	3	English	Elective
					