

General Information for Master Students in Transportation Engineering 2019 Grade--basic information

I. Brief Introduction

Transportation program in SJTU was started in 1997, as a part of School of Naval Architecture, Ocean and Civil Engineering. It is one of key construction disciplines in the first phase of the National 985 Program, and mainly consists of four disciplines: Transportation Planning and Management, Traffic Information Engineering and Environmental Monitoring, Shipping and Logistics Engineering, Vehicle Operation Engineering. In recent years, we actively expand the disciplines to the Integrated Transport and Logistics Engineering to adapt to the changing situation. The joint Ph. D. students and post-doctors are recruited in the Civil Engineering (Transportation Direction). Nowadays, it boasts with a team of 19 faculty. Based on the development of Integrated Transportation with the characteristics of International Shipping, a water transport and international features of discipline have formed. Relying on national strategy of Shanghai international shipping center construction and strong research strength of the naval architecture, ocean engineering, management science and engineering with SJTU, transportation program has been developed to top discipline in China mainland.

Currently, the Transportation Research Center with characteristics of Integrated Transport has been developed, particular in Traffic Engineering. It provides a good academic platform for the transportation disciplinary research and faculty cultivation, as well as international academic exchanges. International cooperation has been received great attentions in the Department of Transportation and International Shipping. The faculty team, particular for the level of associate professor or above, all hold doctorates from the top 100 universities or colleges in the world. In addition to the school' s overseas study program, transportation program has constructed a continuous academic project, involving undergraduate and postgraduate study with the University of Florida, University of Newcastle, New South Wales University. The objective is to train the international first-class high-end talents and broaden their international perspective.

II. Academic Objective

Transportation Program in SJTU is oriented to the comprehensive transportation, with a focus on shipping management. The area of graduate study includes shipping and logistics management, transportation system planning and management, transportation safety, transportation infrastructure construction and management. The graduate study places more emphasis on innovation talent education, and trains high quality technical and management candidates for shipping industry, logistics and transportation related enterprises, research institute and government bureaus.
The graduate course covers transportation , international shipping, and logistics area, including global and China shipping market, shipping finance, international trade and shipping, shipping trade, modern logistics, logistics management, Chinese enterprise culture and research methodology.

III. Study Period

Two years and a half.

IV. Curriculum and Credits

Students should acquire at least 28 credits, while no less 3 credits from Math module, and at least 16 credits should be GPA courses. Generally courses should be finished within the first year.

V. Research Papers

In compliance with the relevant University policy.

VI. Dissertation

In compliance with the relevant University policy.

Master Students in Transportation Engineering 2019 Grade --curriculum of training programme

Course Type	Course Number	Course Name	Department	Credits	Hours	Season	compulsory/elective	Checkbox
General Courses	FL28002	English for Academic Purposes	School of Foreign Languages	2	32	spring	compulsory	
	G090510	Introduction to Chinese Culture	SJTU Graduate School	2	36	spring	compulsory	
	GS00001	Scientific writing, integrity and ethics	SJTU Graduate School	1	16	spring	compulsory	
	CN16003	Elementary Chinese (1)	School of Humanities	4	64	autumn	elective	One out of Four
	CN16004	Elementary Chinese (2)	School of Humanities	4	64	autumn	elective	
	CN16005	Intermediate Chinese (1)	School of Humanities	4	64	autumn	elective	
	CN16006	Intermediate Chinese (2)	School of Humanities	4	64	autumn	elective	
Specialized Core Courses	G071564	Applied Stochastic Processes	SJTU Graduate School	3	54	autumn	elective	One out of Eight
	MA16008	Syllabus for "Equations of Mathematical Physics"	School of Mathematical Sciences	3	48	autumn	elective	
	MA26070	Numerical Solutions of Partial Differential Equations	School of Mathematical Sciences	3	48	autumn	elective	
	MA26073	Matrix Theory	School of Mathematical Sciences	3	48	autumn	elective	
	MA26074	Numerical Analysis	School of Mathematical Sciences	3	48	autumn	elective	
	MA26075	Basic Mathematical Statistics	School of Mathematical Sciences	3	48	autumn	elective	
	MA26078	Optimization method	School of Mathematical Sciences	3	48	autumn	elective	
	MA26080	Biostatistic	School of Mathematical Sciences	3	48	spring	elective	
Specialized Advanced Courses	F010633	Academic Reports	School of Naval Architecture, Ocean & Civil Engineering	2	32	autumn	compulsory	Two out of Four
	X010606	Transportation Infrastructure Construction and Management System	School of Naval Architecture, Ocean & Civil Engineering	2	32	spring	elective	
	X010609	Transportation Engineering Theory and Method	School of Naval Architecture, Ocean & Civil Engineering	3	48	autumn	elective	
	X010616	Transportation Statistical Analysis and Modeling	School of Naval Architecture, Ocean & Civil Engineering	2	32	spring	elective	
	X010618	Logistics Theory and Technology	School of Naval Architecture, Ocean & Civil Engineering	3	48	spring	elective	

Specialized Optional Courses	F010615	Application of Computer in Transportation	School of Naval Architecture, Ocean & Civil Engineering	2	32	spring	elective
	F010617	Maritime finance	School of Naval Architecture, Ocean & Civil Engineering	3	48	autumn	elective
	F010620	Geographic Information Systems for Transportation	School of Naval Architecture, Ocean & Civil Engineering	2	32	spring	elective
	F010621	Transport Economics	School of Naval Architecture, Ocean & Civil Engineering	2	32	spring	elective
	G071536	Advanced Computation Methods	SJTU Graduate School	2	36	spring	elective
	G071556	Modern matrix analysis	SJTU Graduate School	2	36	spring and autumn	elective
	TR26009	Traffic Environment Engineering	School of Naval Architecture, Ocean & Civil Engineering	2	32	spring	elective
	X010608	Transportation Safety	School of Naval Architecture, Ocean & Civil Engineering	3	48	spring	elective
	X010612	Urban and Traffic Land Utilization	School of Naval Architecture, Ocean & Civil Engineering	2	32	spring	elective
	X010619	Theory and Method in Transportation Planning	School of Naval Architecture, Ocean & Civil Engineering	3	48	spring	elective