

交通运输工程（0823）

学科门类：工学（08） 一级学科：交通运输工程（0823）

一、专业描述

我校交通运输工程学科肇始于国家重点学科“港口航道与海岸工程”中的水运交通方向和国家重点学科“岩土工程”中的堤坝工程方向。为适应国家交通建设发展需要，于2000年组建本学科并于同年获得交通运输规划与管理硕士学位授予权，2008年被评为校品牌专业，2010年获得交通运输工程一级学科硕士学位授予权。学科作为江苏省交通工程技术中心载体，拥有完善的交通工程试验设备。学科创建以来，积极参与国家交通建设事业，承担过多项国家重大交通工程的科研课题，已成为我国极具特色的交通运输工程学科教学科研基地。

二、培养目标

交通工程专业硕士生的培养目标为：掌握坚实的基础理论和系统的专门知识，了解本学科的技术现状和发展趋势，具有严谨求实和勇于探索的科学态度，具备从事科学研究工作的能力和一定的创新能力，具有解决与交通运输工程相关的科学技术问题的能力。

三、研究方向

- 1、交通运输规划与管理（Transportation planning and management）
- 2、道路与铁道工程（Highway and railway engineering）
- 3、交通信息工程与控制（Traffic information engineering and control）

4、载运工具运用工程（Vehicle operation engineering）

四、申请条件

1、已在我国认可的海内外高校或学术机构获得本科学位/硕士学位者。

2、能够用英语进行课程学习、阅读文献和进行学术写作，能够用英语进行日常交流。

五、培养年限

学术型硕士学制为3年，实行弹性学制，学习年限最短不低于2年，最长不超过5年。

六、学分要求和课程设置

本专业硕士留学研究生课程总学分为28学分，其中学位课程为19学分，非学位课程为9学分。另设教学环节。具体开设课程见附表。

Transportation Engineering (0823)

Discipline: Engineering (08)

First-Class Discipline: Transportation Engineering (0823)

1. Discipline Description

Transportation Engineering in Hohai University started from the Water Transportation in Port Channel and Coastal Engineering (the national key discipline) and Dam Construction in Geotechnical Engineering (the national key discipline). To fulfill the development needs of the transportation construction in China, the discipline of Transportation Engineering was founded in 2000. In the same year, the discipline was qualified for granting master degree in Transportation Planning and Management. Also, the discipline was evaluated as the brand major of Hohai University. Then, the discipline was qualified for granting master degree in the first level discipline of Transportation Engineering.

Transportation Engineering is the carrier of the Jiangsu Traffic Engineering Technology Center which possesses full-equipped testing devices in traffic engineering. Since the foundation of the discipline, we actively participant the national transportation construction, and have undertaken several national key research projects in transportation engineering area. The discipline has already become a full-featured teaching and research base in the area of Transportation Engineering in China.

2. Program Description

The students should be capable of (1) understanding fundamental knowledge and systematic engineering professions in Transportation Engineering; (2) modeling and analyzing complex technical problems; (3) using fundamental theory, advanced computational methods and experimental techniques to conduct research; and (4) undertaking R&D positions in large complex projects; and (5) excelling in education and research in universities and research institutes.

The program is designed to provide students with an intellectual environment to explore the knowledge and principles in Transportation Engineering through research projects under the guidance of supervisors. Through the program, students have opportunities to develop their problem-solving ability with new knowledge and skills.

3. Research Directions

- Transportation Planning and Management
- Highway and Railway Engineering
- Traffic Information Engineering and Control
- Vehicle Operation Engineering

4. Application Requirements

(1) You have received the bachelor degree from the domestic and overseas universities or academic institutions accredited by the Ministry of Education.

(2) You have the ability to read and write academic papers and communicate in English.

5. Educational System and Duration

The master program is 3 years; the duration is minimum 2 years and no more than 5 years.

6. Credits and Courses

A master student must take at least 28 credits of courses, including 19 credits of required course of the degree and 9 credits of Non-required course of the degree.

交通运输工程全英文留学硕士研究生课程设置

Courses for Master Students of Transportation Engineering

课程类别 Categories		课程编号 Course No	课程名称 Course Name	学时 Hours	学分 Credits	开课学期 Term	备注 Note
学位课程 19 学分 Required course of the degree 19 Credits	公共课 General Courses	2015LXS01	*汉语 I Chinese Language I	32	2	秋 fall	必修 Required Course
		2015LXS02	汉语 II Chinese Language II	32	2	春 spring	
		2015LXS03	*中国概况 Introduction to China	32	2	秋 fall	
	学科基础课程 Discipline Basic Courses	2015JC04	最优化方法 Optimization Methods	48	3	春 spring	
		2015JC03	数值分析 Numerical Analysis	48	3	秋 fall	
	专业基础课程 Major Basic Courses	2017TM01	交通工程学 Traffic Engineering	48	3	春 spring	必修 Required Course
		2015JC09	弹性力学 Elastic Mechanics	32	2	春 spring	
	专业课 Major Courses	2017TM02	交通控制 Traffic Control	32	2	春 spring	选修 2 学分 2 Credits at least
		2017TM03	交通规划 Traffic planning	32	2	春 spring	
		2017TM04	路面工程 Pavement Engineering	32	2	春 spring	
2017TM05		高等路基工程 Advanced Subgrade Engineering	32	2	春 spring		
非学位课程 9 学分 Non-required course of the degree 9 Credits	2015LXS05	*跨学科选修 Interdisciplinary Elective	32	2	春 spring	必修课 Required Course	
	2015LXS06	*综合素质课 Comprehensive Quality	16	1	春 spring		
	2015LXS07	科技论文写作 Academic Paper Writing	32	2	秋、春 fall/spring		
	2017TM06	智能交通系统 Intelligent Transportation System	32	2	春 spring	选修 4 学分 4 Credits at least	
	2017TM07	城市交通网络分析 Urban Traffic Network Analysis	32	2	春 spring		
	2017TM08	道路交通安全 Road Traffic Safety	32	2	秋 fall		
	2015LC05	塑性力学 Plasticity Mechanics	32	2	春 spring		
	2017TM09	高等路面材料 Advanced Pavement Materials	32	2	春 spring		
	2015TM06	基础工程分析 Foundation Analysis	32	2	春 spring		
教学环节 Academic Activities	学术活动 Seminar and Conferences					必修 Required Course	
	科学研究 Scientific Research						
	文献阅读与综述 Literature Reading and Reviewing						