

智能运输工程博学实验班专业 2024 版本本科培养方案

Undergraduate Education Plan for Specialty in Intelligent Transportation Engineering Doctoral Experimental Class(2024)

专业名称	交通运输	主干学科	交通运输
Major	Transportation	Major Disciplines	Transportation
计划学制	四年	授予学位	工学学士
Duration	4years	Degree Granted	Bachelor of Engineering

最低毕业学分规定

Graduation Credit Criteria

课程分类 Course Classification 课程性质 Course Nature	通识教育课程 General Education Course	学科基础课程 Disciplinary Fundamental Courses	专业课程 Specialty Elective Courses	个性课程 Personalized Course	集中性实践 教学环节 Specialized Practice Schedule	课外学分 Extra- Course Credits	总学分 Total Credits
必修课 Required Courses	38	38	32.5	\	27.5	10	175
选修课 Elective Courses	9	\	14	6	\		

一、专业简介

1 Professional Introduction

交通运输专业属于交通运输工程一级学科，融合复杂系统科学、计算机与人工智能、数据科学与大数据技术、管理科学、经济分析等多学科领域知识，面向交通运输基础设施、载运工具、技术装备、服务对象、组织机构等，研究和解决交通运输与物流系统的规划布局、运营组织、指挥调度、经营决策、运行管控、融合发展等复杂工程问题的宽口径综合性专业。随着与新兴前沿科技的深度融合，专业应用范围已拓展至综合交通、智慧运输、数字物流等新兴领域。

本专业源于 1952 年创建的武汉水运工程学院水运管理专业，后更名为“交通运输管理工程”、“交通运输”。于 2020 年获批“双万计划”国家级一流本科专业建设点，于 2009 年、2012 年、2015 年、2018 年连续四轮通过教育部中国工程教育专业认证，也是我校最早通过认证的专业。是教育部直属高校同类专业中最早开设以港口、航运管理为特色的专业，在服务国家交通强国、海洋强国战略中专业特色优势突出，注重对学生智能化新技术应用及国际化能力的培养。

本专业立足武汉理工大学交通运输工程特色学科办学，拥有一支以院士为引领，特色专业责任教授、精品课程名师、青年教学名师等优秀中青年教师为骨干的高水平教师队伍。2021 年以来，专业教师承担省部级以上教学研究与改革项目 3 项，荣获国家教学成果二等奖 1 项，国家优秀教材二等奖 1 项等，建设全国重点实验室 1 个、省部级人才培养基地 1 个，发表教研论文 10 余篇。

The major of Transportation belongs to the first level subject of transportation engineering. It involves multidisciplinary knowledge including complex system science, computer and artificial intelligence, data science and big data technology, management science and economic analysis. Oriented to the transport infrastructure, carriers, technical equipment, service objects, organizations, etc., the major specialized in

complex engineering problems such as planning and designing of the transport system, operation and organization, dispatching and commanding, business decision-making, operational control, transportation-logistics integrated development, and so on. With deep integration with the emerging frontier technology, the scope of application of the major has been expanded to new fields such as integrated transport, intelligent transport and digital logistics.

This major originated from the water transport management major of Wuhan Institute of Water Transport Engineering founded in 1952, which was later renamed as ‘Transportation Management Engineering’ and ‘Transportation’. In 2020, it was approved as a national first-class undergraduate major construction site under the ‘State Double Ten Thousand Plan’, and passed 4 consecutive rounds of China's engineering education professional accreditation in 2009, 2012, 2015 and 2018, with being the first major accredited around the whole university. It is the earliest major of its kind in colleges and universities directly under the Ministry of Education to open a major featuring port and shipping management, and has outstanding advantages in serving the national strategy of a strong transport nation and a strong maritime nation, and focuses on the cultivation of students' application of new intelligent technologies and internationalization ability.

This major is based on the characteristic discipline of Transportation Engineering of Wuhan University of Technology, and has a high-level teaching team led by academicians, with outstanding young and middle-aged teachers as the backbone, including responsible professors of characteristic majors, renowned teachers of high-quality courses, and renowned young teaching teachers. Since 2021, professional teachers have undertaken 3 teaching research and reform projects at the provincial and ministerial levels, won 1 item of the second prize for national teaching achievements and one second prize for national excellent textbooks and built 1 key laboratory and 1 base for provincial and ministerial level talent training with publication of more than 10 teaching research papers.

二、 培养目标与毕业要求

2 Educational Objectives & Requirements

(一) 培养目标

以交通运输领域的最新技术和国家经济社会发展对人才的需求为导向，以培养爱国爱党、求真务实、德才兼备且适应性强、实干精神强、创新意识强的高级技术及管理人才为宗旨，培养具备坚实的工程数学、计算机、外语基础知识，运筹学、交通运输组织学以及必要的土木工程、信息与控制、经济与管理、人文科学等专业知识，掌握交通运输工程的基本原理以及以智慧港航和多式联运为特色的专业技能和方法，具有社会责任感和国际交流能力，能在港口、航运及综合物流等相关工程领域从事科学研究、项目策划与设计、生产运营与组织及经营管理等工作的高素质复合型专业人才。

本专业期待毕业生经过五年左右的工作实践，具有的职业能力和取得的职业成就如下：

- 1.能在交通运输与物流行业、学术界、教育界成功地开展与专业职业相关的规划设计、运营组织、学术研究及创新创业等工作，适应独立和团队工作环境；
- 2.能够在社会大背景下理解、分析和解决交通运输工程实践问题
- 3.以重要的法律、伦理、监管、社会、环境和经济等方面宽广的系统视角管理多学科项目
- 4.能与国内外同行、专业客户和公众有效沟通；
- 5.能够通过研究生教育、继续教育或其他终身学习渠道增强知识的积累和综合能力的提升，适应职业发展，在交通运输领域具有职场竞争力。

2.1 Education Objectives

With the latest technology in the field of transportation and the development of national economy and society as the guide to the demand of talents, we should cultivate the advanced technology and

management talents with good ability and political integrity and strong adaptability, hard work spirit and strong sense of innovation, and cultivate solid engineering mathematics, computer and foreign language basic knowledge, Transport histology and the necessary professional knowledge of civil engineering, information and control, economy and management, master the Basic principles of transportation engineering as well as the specialized skills and research methods based on waterway transportation engineering, with social responsibility and international communication ability, can be engaged in scientific research in the field of transportation and logistics and other related engineering fields.

This major expects graduates to have the following professional abilities and achievements after about five years of work practice:

- 1.Be able to carry out professional career-related planning and design, operational organization, academic research and innovative entrepreneurship in the transportation and logistics industry, academia, education sector to successfully, and adapt to independent and team work environment;
- 2.Be able to understand, analyze and solve the problem of transportation engineering practice under the social background;
- 3.Be able to Management of multidisciplinary projects in a broad system of legal, ethical, regulatory, social, environmental and economic perspectives
- 4.Be able to communicate effectively with domestic and foreign counterparts, professional customers and the public
- 5.Be able to enhance the accumulation of knowledge and improve comprehensive ability by postgraduate education, continuing education or other channels of lifelong learning, therefore the students will have career competitiveness in the field of transport and transportation.

（二）毕业要求

本专业学生毕业时应当达到中国工程教育专业认证协会工程教育认证标准规定的的能力，即：

1. 工程知识:具有较宽的学科背景和综合素养，掌握以港口、航运及综合物流为主要对象的交通运输领域所需的数学、自然科学、工程基础、专业知识，并能将其用于解决复杂工程问题。
2. 问题分析:能够运用数学、自然科学和工程科学的基本原理，识别、表达、并通过文献研究分析交通运输组织、运营与管理过程中的复杂工程问题，以获得有效结论。
3. 设计/开发解决方案:能够针对港口、航运、综合物流等方向复杂工程问题设计解决方案，创造性地设计满足交通运输领域特定需求的系统及工艺流程，并能够在设计环节中体现创新意识，考虑社会、健康、安全、法律与伦理、文化以及环境等因素。
4. 研究:能够基于科学原理并采用科学方法对港口、航运及综合物流为主要对象的交通运输领域复杂工程问题进行研究，包括设计实验、分析和解释数据，并通过信息综合得到合理有效的结论。
5. 使用现代工具:能够针对以港口、航运及综合物流为主要对象的交通运输领域复杂工程问题，开发或选择与使用恰当的技术、资源、现代工程工具、仿真软件和信息技术工具，包括对复杂工程问题的预测与模拟，并能够理解其局限性。
6. 工程与可持续发展:能够基于工程相关背景知识进行合理分析，评价交通运输领域工程实践和复杂工程问题解决方案对健康、安全、法律、经济和社会可持续发展的影响，并理解应承担的责任。
7. 伦理和职业规范:具有工程报国、工程为民的意识以及人文社会科学素养和社会责任感，能够在工程实践中理解并遵守工程职业道德、规范和相关法律，履行责任。
8. 个人和团队:具有较强的人际交往能力及团队合作精神，能够在多样化、多学科背景下的团队中承担个体、团队成员以及负责人的角色。
9. 沟通:能够就交通运输领域复杂工程问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和 design 文稿、陈述发言、清晰表达或回应指令，并具备一定的国际视野，能够在跨文化背景下进行沟通和交流，理解、尊重语言和文化差异。
10. 项目管理:理解并掌握交通运输工程管理原理与经济决策的方法，并能在多学科领域中应用，具备一定的项目管理能力。
11. 终身学习:具有自主学习和终身学习的意识，能够理解广泛的技术变革对工程和社会的影响，适应新技术变革，适应不断变化的人际环境和工作环境，具有批判性思维能力。

2.2 Graduation Requirements

Upon graduation, students in this major should meet the abilities required by the Engineering Education Certification Standards of the China Engineering Education Professional Certification Association, namely:

1.Engineering knowledge: Have wide academic background and comprehensive accomplishment, grasp mathematics, natural science, foundation of engineering and professional knowledge and can use them to solve complex engineering problems.

2.Problem analysis: Have the capability of logical thinking, systematic thinking and innovation, have the capability to discover problem, and can use the basic principles of mathematics, natural science and engineering science to identify, express and analyze complex engineering problems by literature research, in order to obtain an effective conclusion.

3.Solution design/development: Be able to design the solution for complex engineering problems in transportation engineering, creatively design systems, units (components) and process flows that can meet the specific needs of transportation major, and the design can reflect the innovation consciousness in the design process, which considered with other factors, such as social health, safety, law, culture, environment and so on.

4.Research: Be able to research complex engineering problems in the transportation field, mainly focusing on ports, shipping, and integrated logistics, based on scientific principles and by using scientific methods, including designing experiments, analyzing and interpreting data, and obtaining reasonable and effective conclusions through information synthesis.

5.Usage of modern tools: Be able to develop, select and use appropriate technologies, resources, modern engineering tools, simulation software, and information technology tools for complex engineering problems in the transportation field, including predicting and simulating complex engineering problems, and understanding their limitations.

6.Engineering and sustainable development: Engineering and sustainable development: Be able to conduct reasonable analysis based on engineering related background knowledge, evaluate the impact of engineering practices and complex engineering problem solutions in the transportation field on health, safety, legal, economic, and social sustainable development, and understand the responsibilities to be assumed.

7.Ethics and professional standards: Have the awareness of engineering serving the country and the people, as well as humanistic and social science literacy and social responsibility, able to understand and observe the professional ethics, norms, and relevant laws in engineering practice, and fulfill responsibilities.

8.Individual and team: Have strong interpersonal communication skills and team spirit; be able to play a role as individual, team member and director in the multi discipline background team.

9.Communication: Be able to communicate effectively with the industry peers and the public in the complex engineering problems, including writing reports and design documents, presentations, clear expression, and have a certain international perspective, can communicate under the background of cross-culture.

10.Project management: Understand and master the principles of transportation engineering management and methods of economic decision-making, and able to apply them in interdisciplinary fields, possessing certain project management capabilities.

11.Life-long learning: Have the consciousness of self-learning and lifelong learning, able to understand the impact of extensive technological changes on engineering and society, adapt to constantly changing interpersonal and work environments, and possess critical thinking skills.

附：培养目标实现矩阵

毕业要求	培养目标 1	培养目标 2	培养目标 3	培养目标 4	培养目标 5
毕业要求 1		√			
毕业要求 2		√			
毕业要求 3	√		√		
毕业要求 4			√		

交通运筹学(10054124377)	H	L										
交通港站与枢纽(10054124618)			H									
船舶货运技术(10054124620)		H										
国际航运业务与水运商务(10054124625)			L						H			
交通运输大数据分析方法(10054124626)				H	M							
交通运输工程概论 A(10055111054)												
供应链管理技术(10055112001)					L							
运输代理理论与实务 A(10055117004)						L	L					
物流系统规划与设计 A(10055117005)			M									
交通运输安全工程(10055121072)						M	H					
外贸口岸管理(10055121075)										M		
智慧港口与自动化码头(10055121076)									L		L	
交通环境工程(10055121078)						H						
国际集装箱与多式联运(10055121079)			M									
综合运输系统分析(10055121080)		L										
智慧物流概论(10055121081)		L			L							
港航商务函电(10055121083)							L		H			
运输与物流系统仿真(10055121084)		M			H							
交通运输系统优化方法及应用创新 (10055121088)		L	L									
交通人因工程概论(10055124135)							M					
交通运输经济地理(10055124137)										L		
机器学习与智能交通(10055124625)					M							
交通信息与数据库技术(10055124626)					M							
交通运输设备物联网技术(10056124178)						M	L					
交通运输大数据挖掘及机器学习方法 (10056124462)				M	L							
交通调查实训 B(10057312034)			M	H								
港口装卸工艺课程设计(10057313035)			H	M								
船型技术经济论证课程设计(10057313037)			H									
测量实习 C(10057314009)					M							
交通运筹学实验(10057324402)		M										
交通运输专业岗位实习(10057324403)							H	H	H			
水路运输组织模拟综合实验(10057324421)				H								
公路运输组织模拟综合实验(10057324422)				H								
交通运输专业认识实习(10057324432)							M		M			
交通运输专业基础强化训练(10057324433)					H						M	
毕业设计(论文)(10057324435)				H					H		H	
港口生产组织与管理创新实训(10057324439)					M			L				
交通运输专业能力拓展训练(10057324441)					M							
船舶原理 C(10065117215)					L	L						
Python 程序设计基础 A(10121121086)		L	L		M							
计算机基础与 Python 程序设计综合实验 A(10121221090)		L	L		H							

[illegible]

	创新创业类			M							L		
	艺术审美类							M					
	体育健康类								M				
备注：表中用“H”、“M”、“L”分别表示该课程对指标点的支撑强度为“高”、“中”、“低”。													

三、专业核心课程

3 Core Courses

工程图学 B, 工程力学 C, 交通运输规划, 船舶营运组织, 运输经济学, 公路运输组织学, 旅客运营组织, 交通运输法规, 现代物流学, 交通运筹学, 国际航运业务与水运商务, 交通运输安全工程, 交通运输专业岗位实习, 毕业设计（论文）

Engineering Graphics, Engineering Mechanics C, Transportation Planning, Management Shipping Operation, Transportation Economics, Road Transport Organization, Passenger Transportation Organization, Transport Laws and Regulations, Modern Logistics, Transportation Operational Research, International shipping and Waterborne Business, Traffic and Transportation Safety, Practice of Production in Transportation Major, Graduation Thesis

四、 教学建议进程表

4 Course Schedule

开课单位 Course College	课程编号 Course Number	课程名称 Course Title	学分 Crs	学时分配 Including						建议修读学 期 Suggested Term	先修课程 Prerequisite Course
				总学时 Tot hrs.	理论 Theory	实验 Exp.	上机 Ope-ratio.	实践 Prac-tice.	课外 Extra-cur.		
(一) 通识教育必修课程 I General Education Compulsory Courses											
计算机与人工智能学院	10121121086	Python 程序设计基础 A Foundation of Python Programming A	2	32	32	0	0	0	0	2	
计算机与人工智能学院	10121221090	计算机基础与 Python 程序设计综合实验 A Comprehensive Experiments of Foundation of Computer and PYTHON Language Programming A	1	32	0	32	0	0	0	2	
外国语学院	10201121071	大学英语 4 College English IV	2	48	32	0	0	0	16	4	大学英语 2
外国语学院	10201121072	大学英语 3 College English III	2	32	32	0	0	0	0	3	
外国语学院	10201121073	大学英语 2 College English II	2	32	32	0	0	0	0	2	大学英语 1
外国语学院	10201121074	大学英语 1 College English I	2	32	32	0	0	0	0	1	
马克思主义学院	10211124001	思想道德与法治 Morality and the rule of law	3	48	42	0	0	6	0	2	
马克思主义学院	10211124002	毛泽东思想和中国特色社会主义理论体系概论 Introduction to Mao Zedong Thought and Socialism with Chinese Characteristics	3	48	30	0	0	18	0	3	
马克思主义学院	10211124003	习近平新时代中国特色社会主义思想概论 Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era	3	48	36	0	0	12	0	4	
马克思主义学院	10211124004	马克思主义基本原理 Fundamental Principles of Marxism	3	48	42	0	0	6	0	4	
马克思主义学院	10211124005	中国近现代史纲要 Outline of Contemporary and Modern Chinese History	3	48	42	0	0	6	0	1	
马克思主义学院	10218116001	形势与政策 Situation & Policy	0.25	8	8	0	0	0	0	1	
马克思主义学院	10218116002	形势与政策 Situation & Policy	0.25	8	8	0	0	0	0	2	
马克思主义学院	10218116003	形势与政策 Situation & Policy	0.25	8	8	0	0	0	0	3	

马克思主义学院	10218116004	形势与政策 Situation & Policy	0.25	8	8	0	0	0	0	4	
马克思主义学院	10218116005	形势与政策 Situation & Policy	0.25	8	8	0	0	0	0	5	
马克思主义学院	10218116006	形势与政策 Situation & Policy	0.25	8	8	0	0	0	0	6	
马克思主义学院	10218116007	形势与政策 Situation & Policy	0.25	8	8	0	0	0	0	7	
马克思主义学院	10218116008	形势与政策 Situation & Policy	0.25	8	8	0	0	0	0	8	
体育学院	10271117043	体育 4 Physical Education IV	1	32	32	0	0	0	0	4	基础体育, 基础体育 2
体育学院	10271117044	体育 3 Physical Education III	1	32	32	0	0	0	0	3	基础体育, 基础体育 2
体育学院	10271117045	体育 2 Physical Education II	1	32	32	0	0	0	0	2	
体育学院	10271117046	体育 1 Physical Education I	1	32	32	0	0	0	0	1	
学生工作部（处）、武装部	10381121001	军事理论 Military Theory	2	32	32	0	0	0	0	1	
学生工作部（处）、武装部	10381321003	军事技能训练 Military Skills Training	2	136	0	0	0	136	0	1	
学生工作部（处）、武装部	10388117003	心理健康教育 Mental Health Education	2	32	24	0	0	8	0	1	
小 计 Subtotal			38	840	600	32	0	192	16		

修读说明：
NOTE:

(二) 通识教育选修课程 2 General Education Elective Courses	
“四史”类 Education of "Four Histories"	1. 通识课程应修满至少 9 学分; 2. 至少修读“四史”课程以及创新创业类课程各 1 门; 3. 非艺术类专业学生还应在艺术审美类课程中至少选修 2 学分; 4. 学校引进开设的通识教育网络课程采用“学分认定”方式计入通识选修课, 最高计入 4 学分。 5. 必须选修人文社科类中《国家安全教育》课程。 1. Elective courses ≥9 credits. 2. At least one course in Education of "Four Histories" and one course in innovation and entrepreneurship; 3. Non art major students should also take at least 2 elective credits in art aesthetics courses; 4. The general education online courses introduced by the school are included in the general education elective courses through credit recognition, with a maximum of 4 credits.
人文社科类 Humanities and Social Sciences	
科技创新类 Technology innovation	
经济管理类 Economic Management	
创新创业类 Innovation and entrepreneurship	

艺术审美类 Art Aesthetics	5. National Security Education of the Humanities and Social Sciences Courses is the specialized elective course										
体育健康类 Sports and Health											
小 计 Subtotal				9	144						
(三) 学科基础课程 3 Disciplinary Fundamental Courses											
交通与物流工程学院	10053117112	工程图学 B Engineering Graphics	3.5	72	56	0	0	0	16	1	
交通与物流工程学院	10053124001	交通运输类专业导论 Introduction to Specialty	1	16	16	0	0	0	0	1	
交通与物流工程学院	10053124337	工程力学 C Engineering Mechanics C	2	32	32	0	0	0	0	2	
交通与物流工程学院	10055111054	交通运输工程概论 A An Introduction to Transportation Engineering	2	32	32	0	0	0	0	2	
自动化学院	10133121098	电工与电子技术基础 C Fundamentals of Electrical Technology & Electrical Engineering C	3	48	48	0	0	0	0	3	高等数学 1, 高等数学 A 上,高等 数学 A 下
数学与统计学院	10153111001	线性代数 Linear Algebra	2.5	40	40	0	0	0	0	2	
物理与力学学院	10153111005	大学物理 A 上 University Physics A I	3.5	56	56	0	0	0	0	2	高等数学 A 上,高等 数学 A 上
数学与统计学院	10153116002	数值计算 Numerical Calculation	2	32	32	0	0	0	0	4	高等数学 A 上,高等 数学 A 下, 线性代数 A
数学与统计学院	10153121060	高等数学 A 下 Advanced Mathematics A II	5.5	88	88	0	0	0	0	2	高等数学 A 上
数学与统计学院	10153121061	高等数学 A 上 Advanced Mathematics A I	4.5	72	72	0	0	0	0	1	
物理与力学学院	10153213043	物理实验 A 下 Physics Experiment II	1	32	0	32	0	0	0	4	大学物理 A 下
物理与力学学院	10153213044	物理实验 A 上 Physics Experiment I	1	32	0	32	0	0	0	3	大学物理 A 上
物理与力学学院	10154111026	大学物理 A 下 University Physics A II	3.5	56	56	0	0	0	0	3	高等数学 A 上,高等 数学 A 上

数学与统计学院	10155111054	概率论与数理统计 B Probability and Mathematical Statistics	3	48	48	0	0	0	0	3	线性代数
小 计 Subtotal			38	656	576	64	0	0	16		
修读说明： NOTE:											
(四) 专业必修课程 4 Specialized Required Courses											
交通与物流工程学院	10054113030	测量学 B Measurement Theory B	2	32	32	0	0	0	0	3	
交通与物流工程学院	10054117074	交通运输规划 Transportation Planning	2	32	24	8	0	0	0	7	
交通与物流工程学院	10054121143	港口生产组织与管理 Port Production Organization and Management	1.5	24	24	0	0	0	0	6	
交通与物流工程学院	10054121144	船舶营运组织 Management Shipping Operation	1.5	24	24	0	0	0	0	6	
交通与物流工程学院	10054121150	国际航运与港口经济学 International Shipping and Port Economics	2	32	32	0	0	0	0	6	
交通与物流工程学院	10054121151	运输经济学 Transportation Economics	1.5	24	24	0	0	0	0	5	
交通与物流工程学院	10054121152	港口装卸工艺 Port Cargo Handling Technology	2	32	32	0	0	0	0	6	
交通与物流工程学院	10054121153	公路运输组织学 Road Transport Organization	1.5	24	24	0	0	0	0	5	
交通与物流工程学院	10054121155	旅客运营组织 Passenger Transportation Organization	1.5	24	24	0	0	0	0	5	
交通与物流工程学院	10054121158	交通运输法规 Transport Laws and Regulations	1.5	24	24	0	0	0	0	4	
交通与物流工程学院	10054121159	现代物流学 Modern Logistics	2	32	32	0	0	0	0	3	管理学,运 筹学 A,运 输经济学
交通与物流工程学院	10054124116	智能运输系统 Intelligent transportation system	2	32	32	0	0	0	0	7	
交通与物流工程学院	10054124377	交通运筹学 Transportation Operational Research	2	32	32	0	0	0	0	3	
交通与物流工程学院	10054124618	交通港站与枢纽 Transport terminals and hubs	2	32	16	0	0	16	0	5	
交通与物流工程学院	10054124620	船舶货运技术 Ship Stowage Technology	2	32	32	0	0	0	0	5	
交通与物流工程学院	10054124625	国际航运业务与水运商务 International shipping and Waterborne Business	2	32	24	8	0	0	0	5	

交通与物流工程学院	10054124626	交通运输大数据分析方法 Transportation massive data analysis method	2	32	32	0	0	0	0	4	
交通与物流工程学院	10055121072	交通运输安全工程 Traffic and Transportation Safety	1.5	24	24	0	0	0	0	4	
小 计 Subtotal			32.5	520	488	16	0	16	0		
修读说明:无 NOTE:/											
(五) 专业选修课程 5 Specialized Elective Courses											
(1) 专业选修											
交通与物流工程学院	10054117079	交通管理信息系统 C Management Information System for Transportation	2	32	24	0	8	0	0	7	
交通与物流工程学院	10054121156	港口与航道工程学 Harbor and Waterway Engineering	2	32	32	0	0	0	0	4	
交通与物流工程学院	10055112001	供应链管理技术 Supply Chain Management Techniques	2	32	32	0	0	0	0	7	
交通与物流工程学院	10055117004	运输代理理论与实务 A Theory and Practices of Transport Agency	2	32	24	8	0	0	0	5	国际航运业务与海运商务
交通与物流工程学院	10055117005	物流系统规划与设计 A Logistics System Planning and Design	2	32	24	8	0	0	0	6	
交通与物流工程学院	10055121075	外贸口岸管理 Port Administration for Foreign Trade	2	32	32	0	0	0	0	7	水路行政管理,管理学
交通与物流工程学院	10055121078	交通环境工程 Traffic Environment Engineering	2	32	32	0	0	0	0	6	
交通与物流工程学院	10055121079	国际集装箱与多式联运 International Container and Multimodal Transport	2	32	24	8	0	0	0	6	
交通与物流工程学院	10055121080	综合运输系统分析 Integrated Transport System Analysis	2	32	32	0	0	0	0	6	
交通与物流工程学院	10055121081	智慧物流概论 Introduction to Intelligent Logistics	2	32	32	0	0	0	0	5	
交通与物流工程学院	10055121083	港航商务函电 English for Port and Shipping	2	32	32	0	0	0	0	4	
交通与物流工程学院	10055121084	运输与物流系统仿真 Simulation of Transportation and Logistics System	2	32	16	16	0	0	0	5	
交通与物流工程学院	10055121088	交通运输系统优化方法及应用创新 Optimization Method and Application Innovation of Transportation System	2	32	32	0	0	0	0	4	

交通与物流工程学院	10055124135	交通人因工程概论 Introduction to Transportation Human Factors	2	32	32	0	0	0	0	5	
交通与物流工程学院	10055124137	交通运输经济地理 Transportation Economic Geography	2	32	32	0	0	0	0	7	
交通与物流工程学院	10055124625	机器学习与智能交通 Machine Learning and Intelligent Transportation	2	32	16	0	0	16	0	5	
交通与物流工程学院	10055124626	交通信息与数据库技术 Traffic Information and Database Technique	2	32	16	16	0	0	0	4	
船海与能源动力工程学院	10065117215	船舶原理 C Principle of Naval Architecture	2	32	32	0	0	0	0	3	流体力学 A
管理学院	10175111026	会计学 B Accounting	2	32	32	0	0	0	0	3	
交通与物流工程学院	10271111001	运输市场营销学 Transport Marketing	2	32	32	0	0	0	0	6	
小 计 Subtotal			40	640	560	56	8	16	0		
修读说明:要求至少选修 14 学分。 NOTE:Minimum subtotal credits:14.											
(六) 个性课程 6 Personalized Elective Courses											
交通与物流工程学院	10055121076	智慧港口与自动化码头 Smart Port and Automated Terminal	2	32	32	0	0	0	0	6	
交通与物流工程学院	10056124178	交通运输设备物联网技术 Internet of Things Technology for Transport Equipment	2	32	32	0	0	0	0	4	
交通与物流工程学院	10056124462	交通运输大数据挖掘及机器学习方法 Transportation massive data analysis method	2	32	32	0	0	0	0	7	
小 计 Subtotal			6	96	96	0	0	0	0		
修读说明:学生从全校发布的个性课程目录中选课，要求至少选修 6 学分。 NOTE:Students choose from the personalized curriculum catalog of the entire school, and are required to obtain at least 6 credits.											
(七) 集中性实践教学环节 7 Specialize Practice Schedule											
(1) 实践课											
交通与物流工程学院	10057312034	交通调查实训 B Practice of Traffic Investigation	1.5	24	0	0	0	24	0	7	
交通与物流工程学院	10057313035	港口装卸工艺课程设计 The design of Cargo Handling Technology of Ports	1.5	24	0	0	0	24	0	6	
交通与物流工程学院	10057313037	船型技术经济论证课程设计 The design of The technical economy demonstration for	1.5	24	0	0	0	24	0	6	

[illegible]

五、 修读指导

5 Recommendations on Course Studies

1. 课外培养方案详见《武汉理工大学第二课堂课外学分实施办法》。
2. 汉语授课本科层次国际学生汉语类课程修读要求详见《武汉理工大学本科层次国际学生公共汉语课程设置与修读要求》，其它课程修读与中国学生培养方案保持一致。
3. 各专业应不断强化劳动教育，将劳动要素融入专业教育，充分依托实习实训、社会调查等实践教学环节，设置劳动教育模块，标注含不少于 32 学时（2 学分）的劳动教育，明确劳动教育的目标、内容、形式和考核要求。

1.Please refer to the cultivation plan of the second class-Implementation Measures for Extracurricular Credits of the Second Class of Wuhan University of Technology.

2.Chinese courses for International students accepting Chinese teaching at undergraduate level can be found in detail the Public Chinese Curriculum and Study Requirements for International Students at undergraduate level of Wuhan University of Technology, and the study of other courses should be consistent with the undergraduate training program for Chinese students.

3.All majors should continue to strengthen labor education, integrate labor elements into specialty education, fully rely on practical teaching links such as practical training and social investigation, set up labor education modules, label labor education with no less than 32 class hours (2 credits), and clarify the goal, content, form and assessment requirements of labor education.

1. 选修课程中，推荐优选课程为：船舶原理 C、运输代理理论与实务、港口与航道工程学、交通运输系统优化方法及应用创新。
2. 课外培养方案详见《武汉理工大学第二课堂课外学分实施办法》。

学院教学负责人：祝锋
专业培养方案负责人：郑亚红

附件：课程教学进程图

Annex: Teaching Process Map