

打造高铁新专业 传播高铁新技术

Developing High-speed Railway Specialties
Spreading High-speed Railway Technology

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以武汉为中心高速铁路5小时辐射图

Wuhan-Centered Radiation Chart within 5 Hours of High-speed Train



Morning Tea in Guangzhou
Lunch Chou Doufu in Changsha
Afternoon Huqing Spring in Xian
Evening World Expo in Shanghai

“早上到广州喝早茶，
中午到长沙吃臭豆腐，
下午到西安泡华清池温泉，
晚上到上海看世博会。”

两小时圈

三小时圈

五小时圈

和谐号

2020年中国高速铁路网 China's High-speed Rail Network in 2020

规划建设“四纵四横”高速铁路以及三个城际客运系统。建设高速铁路1.6万公里以上，列车时速200公里-350公里。

Plan to build 4 vertical and 4 horizontal high-speed railway network and 3 city-city passenger transportation systems. Plan to build 16,000 km high-speed railway lines with the target speed for passenger train 200 km/h to 350 km/h



超前准备，以新视野率先开办高速铁路新专业
Preparation in Advance with New Vision -- Taking the Lead in
Establishing High-speed Railway Specialties



高速铁路专业建设的需要

Need of High-speed Railway Specialty Construction



动车组检修
EMU overhaul

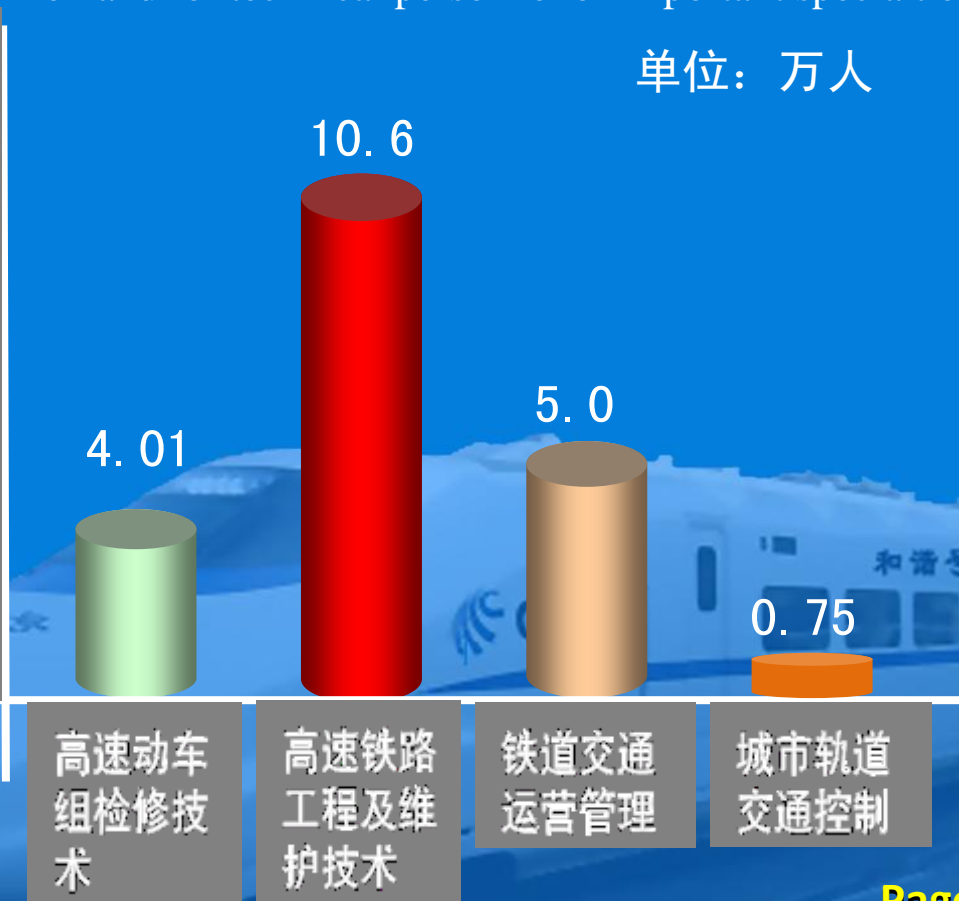


动车组驾驶
EMU driving

2006年专业调研数据
(Specialties Investigation Data in 2006)
Demand for technical personnel of important specialties

单位：万人

重点建设专业
人才需求量



已批准开办的高速铁路新专业
Establishment of high-speed railway specialties

高速铁路运营管理
High-speed railway operation management

高速铁路工程及维护技术
**High-speed Railway Engineering and Maintenance
Technology**

高速动车组驾驶
High-speed EMU Driving

高速动车组检修技术专业
High-speed EMU Overhaul Technology

和谐号

高速铁路运营管理

High-speed railway operation management

培养目标: Training objectives:	培养掌握高速铁路运输专业技能, 能从事铁路运输运营管理生产、经营与服务工作的高素质技能型专门人才。 Train professional talents with skills of railway high-speed transportation and capable of engaging in operation, management and service of railway transportation.
主要课程: Main courses:	铁路运输设备、铁路行车组织、铁路客运组织、铁路企业管理、市场营销、经济法规等。 Railway Transportation Equipment, Organization of Railway Operation, Railway Enterprise Management, Marketing and Economic Laws and Regulations, etc.
从业方向: Direction of employment:	可从事铁路运输企业经营管理工作、行车调度指挥工作、客运服务工作及安全工作等。 Engage in operation management, train dispatching direction, passenger transportation service work and safety work, etc.

高速铁路工程及维护技术 High-speed Railway Engineering and Maintenance Technology

培养目标: Training objectives:	培养掌握高速铁路线路工程专业技能,能从事高速线、桥、隧工程的施工、维护保养工作的高素质技能型专门人才。 Train professional talents with line engineering skills of high-speed railway and capable of engaging in construction and maintenance of high-speed line, bridge and tunnel products.
主要课程: Main courses:	高速铁路概论、工程材料及材料性能试验、水力水文学、土力学及路基、铁路工程地质、高速铁路隧道施工及维护、高速铁路轨道施工及维护等。 Introduction to High-speed Railway, Engineering Materials and Material Performance Test, Hydraulics and hydrology, Soil Mechanics and Road Base, Railway Engineering Geology, High-speed Railway Tunnel Construction and Maintenance, High-speed Railway Track Construction and Maintenance, etc.
从业方向: Direction of employment:	可从事高速铁路线路施工及维护等岗位工作 Engage in of high-speed railway line construction and maintenance

高速动车组驾驶 High-speed EMU Driving

培养目标: Training objectives:	培养具有动车组驾驶、运用、管理知识和技能，在动车组驾驶方面有较强业务能力高素质技能型专门人才。 Train professional talents with knowledge and skills of high-speed EMU driving, application and management and stronger professional capability and high skills in terms of high-speed EMU driving.
主要课程: Main courses:	动车组构造、动车组牵引与运用、动车组安全与规章、动车组制动机、动车组电机电器、动车组辅助系统、动车组牵引与控制系统、动车组网络系统。 Structure of EMU, Traction and Application of EMU, Safety and Regulations of EMU, Brake of EMU, Electrical Motors and Appliances of EMU, Auxiliary System of EMU, Traction and Control System of EMU and Network System of EMU.
从业方向: Direction of employment:	可在铁路、城市轨道交通等单位从事高速动车组驾驶、整备保养和运用管理。 Engage in high-speed motor train unit driving, preparation and maintenance and application management in such units as railway units and urban rail transit units.

高速动车组检修技术专业 High-speed EMU Overhaul Technology

培养目标:
Training
objectives:

培养具有现代机电使用、维修和管理基础知识，在高速列车检修方面有较强业务能力的高素质技能型专门人才。
Train professional talents with basic knowledge of modern motor application, maintenance and management and stronger professional capability and high skills in terms of high-speed train overhaul.

主要课程:
Main courses:

机械制图及计算机绘图、电工技术、电子技术、高速动车组电器、高速动车组电机、高速动车组机械部分、动车组制动机、高速动车组控制、高速动车组检修等。
Mechanical Drawing, Computer Aided Drawing, Electrotechnics, Electronic Technology, Electrical Appliances of High-speed Motor Train Unit, Motor of High-speed Motor Train Unit, Mechanical Part of High-speed Motor Train Unit, Brake of Motor Train Unit, Control of High-speed Motor Train Unit, High-speed Motor Train Unit Overhaul, etc.

从业方向:
Direction
of
employment:

可在铁路、城市轨道交通等运营企业从事动车组设备使用、检修、维护、管理等工作。
Engage in motor train unit equipment application, overhaul, maintenance and management in such units as railway units and urban rail transit units .

倾力创新，用新理念推进新专业人才培养模式改革
Innovation in Effects with *New Ideas* – Promoting the Transformation
of Personnel Training Model of High-speed Railway Specialties

坚持以服务为宗旨，
以就业为导向，走产
学研结合发展道路。
Insist on service-purpose,
employment-oriented and
taking the path of
development of
combination with
production, study and
research.

合作办学

Cooperatively-run School

合作育人

Cooperatively- cultivate Talents

合作就业

Cooperative Employment

合作发展

Cooperative Development

创新“校企合作、工学结合”的人才培养模式

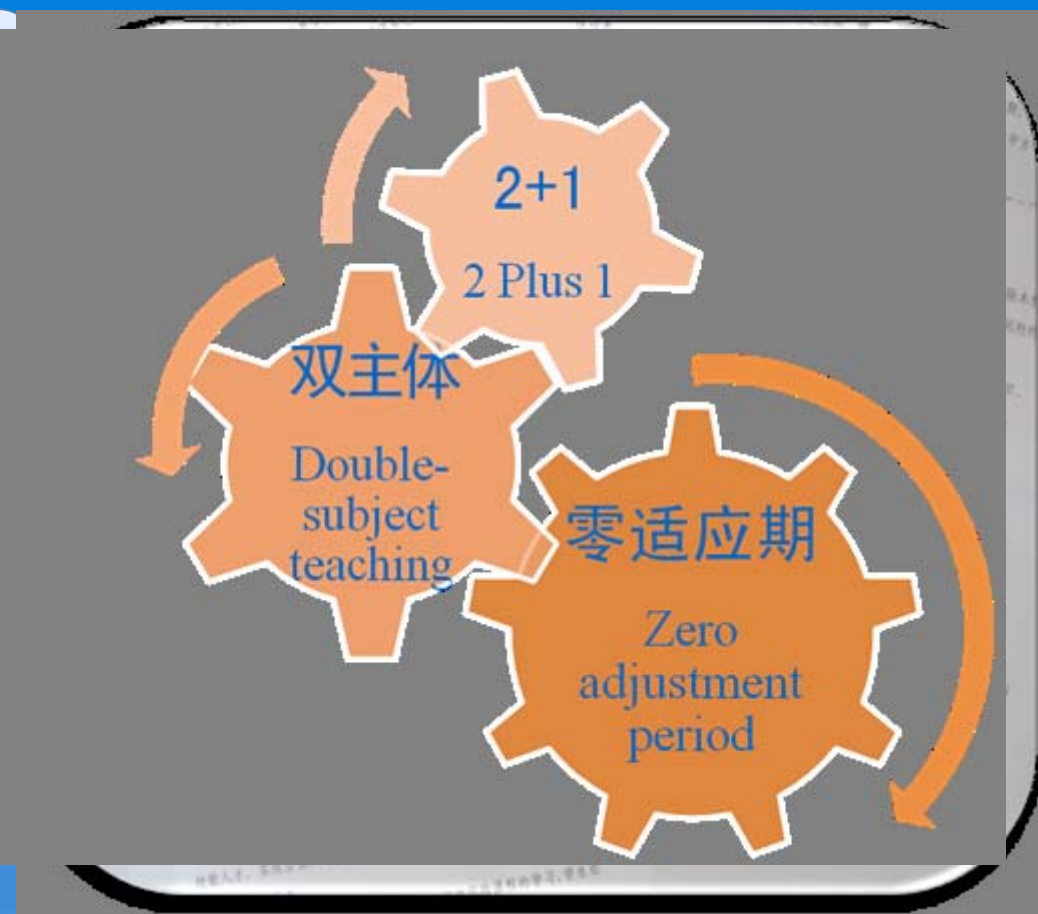
The school-industry cooperation plus the work-study combination training mode

高速铁路高技能人才培养特点 Features on high-speed railway technical personnel training

岗位精细化
Clear-cut post responsibilities

职业能力要求个性化
Personalized professional
ability

职业成长层级化
Hierarchical career growth



高速铁路专业工学结合人才培养模式

Personnel Training Model of school-industry cooperation of High-speed Railway Specialties

高速动车组检修技术专业
High-speed EMU Overhaul Technology

项目教学、柔性管理
Project teaching,
Flexible Management

高速动车组驾驶专业
High-speed EMU Driving

岗位导向、学练一体
Professional job-oriented, Learning
and practicing integration

高速铁路工程及维护技术专业
High-speed Railway Engineering and
Maintenance Technology

分段培养、能力递进
Staged training, progressed ability

高速铁路运营管理专业
High-speed railway operation
management

循岗施教
Instructing according to positions'
requirements

构建新专业人才培养标准体系

Constructing Talents Criterion System of New Specialties

建设思路

Construction
Thoughts

融合职业标准

Integrating Professional Standards

重组课程体系

Reconstructing Curriculum Systems

强化能力培养

Strengthening Students' ability Training

突出精品建设

Giving Priority to Quality Course
Construction

新专业人才标准体系建设

Talents criterion system construction of new specialities

调查研究
Investigate

确定培养目标
Identify Professional Training
Objectives

开发课程体系
Develop Curriculum System

形成标准
Form Standard

推进校内外实训基地建设

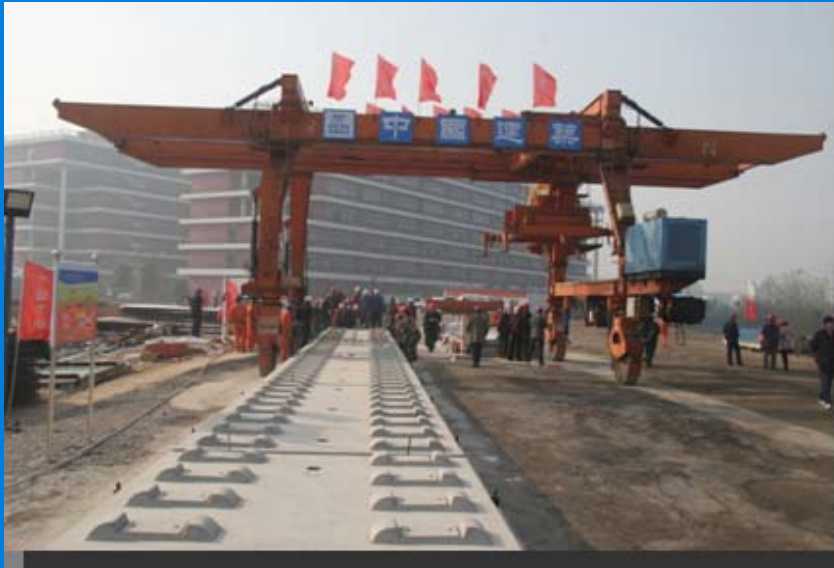
Promote internal and external training base construction



教育部、财政部重点支持建设的国家高速铁路实训基地
State-level High-speed Railway Training Base Constructed by
The Finance Ministry and The Education Ministry

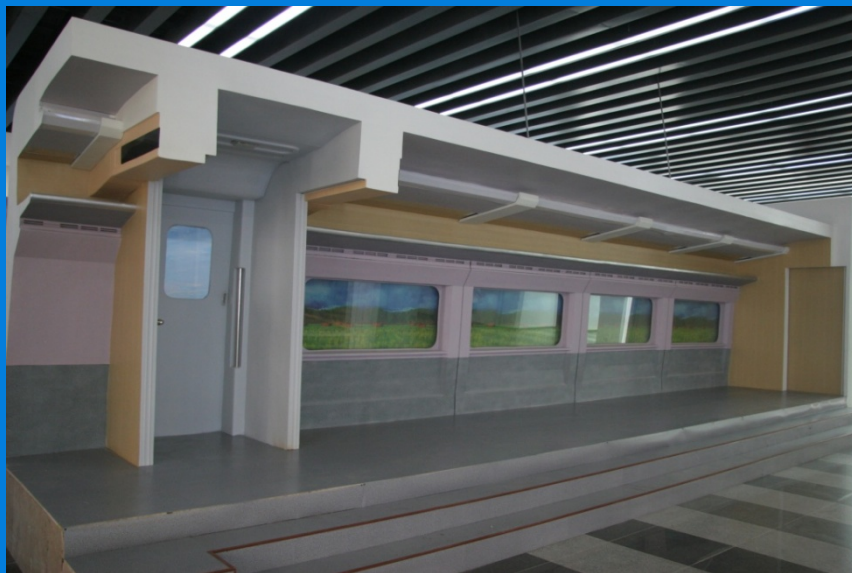
CRTSIII型整板式高速铁路无砟轨道试验段

Test Section of High Speed Railway Ballastless CRTSIII Slab Track



高速铁路安全警示与事故救援培训中心

High-speed Railway Security Warning and Accident Rescue Training Center



动车组仿真培训系统

Simulation Training System of EMU





调度集中实训室
CTC practical room

驾驶现场教学
On-the-spot driving instruction

电动转辙机实训室
Electric Point Machine
practical room



提高“双师型”专业教师队伍建设水平

Optimize team capability of high-speed Railway specialties

安排专业教师到校外实训基地顶岗实践

To arrange professional teachers internship programs in out-campus training bases

加大教师继续教育力度

To reinforce teachers' continuing education

从企业引进专业技术人员充实教师队伍

To introduce outstanding professional and technical personnel from enterprises as supplements

调整、充实从行业企业聘请的兼职教师队伍

To adjust and consummate part-time teachers from industries and enterprises

高速铁路专业教师队伍建设 Construction of High-speed Railway Specialties' Team



教师在澳大利亚进修
Teachers' further study in Australia



教师在德国进修
Teachers' further study in Germany

高速铁路专业教师队伍建设 Construction of High-speed Railway Specialties' Team



德国高速铁路专家在我院讲学
A lecture on high-speed railway by a
German expert in college



高速铁路师资培训同济班
High-speed railway teacher-training class
in Shanghai Tongji Uni.

学院高速铁路专业于2006年开始招生，2009、2010年毕业生就业率达到100%，学生就业质量高，深受企业好评。

Our college began to enroll students in high-speed railway specialty in 2006. Employment rate of graduates reached 100% in the year of 2009 and 2010. High quality of students employment are well received by many companies.



学生工作现场
Students' fieldwork

真诚服务，用新精神助推铁路事业快速发展
Sincere Service with New Spirit—Propelling Rapid
Development of Railway Enterprise



构建铁路特色校园文化
To construct campus culture
characteristic of Railway

积极为企业服务 To provide active service for enterprises



学生在武昌站售票
Internship in Wuchang railway station



高速铁路知识培训
High-speed railway training



学院领导与奋战在春运一线的学生合影
College leaders with students who worked for railway during
the Spring Festival Transport

赶超世界先进技术

Catch up with world advanced technology

日本新干线
Japanese
Shinkansen

安全管理技术
Security Management
Technology

德国ICE
Germany ICE

铁路装备制造
Railway Equipment
Manufacture

香港地铁
HongKong
MTR

交通运营技术
Transportation
Operation Technology



“以明天的技术, 培训今天的学生, 为未来服务”

——努力将高速铁路专业建成国家级示范专业, 为高速铁路发展培养更多、更优秀的高素质技能型人才。

——抓住我国高速铁路职工新技术新知识培训教育的机遇, 努力承担社会责任。

——加强国际交流与合作, 让我们优质的高速铁路专业教育资源和中国高铁一同走向国门。

To train students with tomorrow's technology to serve for the future.

To build national model high-speed railway specialties to provide excellent professional talents.

To grasp opportunities of high speed railway workers' new technology training to actively undertake social responsibilities.

To strengthen international exchanges and cooperation to spread China's high-speed railway professional education.