



Self-Assessment Report

Hunan Institute of Engineering

For the Bachelor Degree of
Industrial Engineering & Human Resource Management

Prepared by:

PROF. Zou Hongxiang

PROF. Xu Yunbao

School of Mechanical Engineering & School of Business

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Contents

A About the Accreditation Procedure	1
B Characteristics of the Degree Programme(s)	2
C Self-assessment Report	4
1 Degree Program: Concept, Content and Implementation.....	4
1.1 Objectives and Learning outcomes of the program.....	5
1.2 Name of the degree programme	13
1.3 Curriculum	14
1.4 Admission requirements	30
1.5 Workload and credit points	33
1.6 Didactics and Teaching methodology	35
2 Exams: System, Concept & Organisation.....	37
2.1 Examination organization and management	37
2.2 Calculation of the degree of goal achievement	42
2.3 Examination assessment and analysis.....	44
3 Resources	47
3.1 Staff and staff development	47
3.2 Student support and student services.....	53
3.3 Funds and equipment	58
4 Transparency and Documentation	68
4.1 Module descriptions.....	68
4.2 Diploma and Diploma Supplement.....	68
4.3 Relevant rules	69
5 Quality Management: Quality Assessment and Development.....	70
5.1 Internal Quality Management	70
5.2 External Quality Assessment	76
5.3 Employment Data and Analysis	77
5.4 Further development and continuous improvement	78

About the SAR: A Brief Overview

Dear ASIIN Team,

Thank you for giving us the opportunity to participate in the International ASIIN Program Accreditation. We are very pleased to submit the Self-Assessment Report for an International ASIIN Program Accreditation for the Bachelor's Degree in Industrial Engineering Programme, Human Resource Management Programme. A brief overview of our University and School is introduced as follows:

As one of the higher education institutions in China, Hunan Institute of Engineering (HIE) focuses on engineering, with coordinated development of multiple disciplines, covering six discipline categories including engineering, management, liberal arts, science, economics, and arts. It has formed advantageous professional groups in fields such as electrical engineering, machinery, textiles, chemical engineering, management, and information. HIE is one of the first batch of pilot universities to implement the "Outstanding Engineer Education and Training Program" by the Ministry of Education, one of the first batch of universities to implement the "Cultivation of Talents to Serve the Special Needs of the Nation" master's degree pilot, and the chair unit of the National Local Universities' Excellence Engineering Education School-Enterprise Alliance.

The School of Mechanical Engineering is one of the largest and oldest secondary schools at Hunan Institute of Engineering. The school currently offers 1 master's degree program (Energy and Power) and 4 undergraduate programs (Mechanical Design, Manufacturing and Automation; Materials Forming and Control Engineering; Mechatronic Engineering; and Industrial Engineering). Among these: Mechanical Design, Manufacturing and Automation is a National First-Class Undergraduate Major Construction Site, a National Pilot Major for Comprehensive Reform, and one of the first batch of pilot majors for the Ministry of Education's "Excellent Engineer Education and Training Program." It successfully passed the Engineering Education Professional Certification in both 2016 and 2020. Materials Forming and Control Engineering is a pilot major for the Ministry of Education's second batch of the "Excellent Engineer Education and Training Program" and a Hunan Provincial First-Class Undergraduate Major Construction Site. Mechatronic Engineering and Industrial Engineering are both Hunan Provincial First-Class Major Construction Sites. The school has over 2,700 undergraduate students and more than 50 graduate students. The faculty consists of 109 members, including 15 professors, 39 associate professors, and 81 doctors. The total value of the school's experimental instruments and equipment exceeds 50 million yuan, with laboratory space covering over 6,000 square meters. The Industrial Engineering

program was established in 2004 and was approved as a Hunan Provincial First-Class Undergraduate Major Construction Site in 2022.

The School of Business (**formerly School of Management**) is one of Hunan Institute of Engineering's most distinguished and distinctive core faculties, established in 2024 through the merger of the School of Management and the School of Economics. The School boasts outstanding disciplinary strengths, including Hunan Province's Double First-Class applied discipline in Business Administration and a professional master's programme in Textile and Apparel Enterprise Management and Marketing. It offers twelve undergraduate programmes, such as Human Resource Management and Big Data Management and Applications, among which one is a national-level first-class undergraduate programme construction site and five are provincial-level key and distinctive programmes. The faculty is exceptionally strong, comprising over 130 full-time lecturers, with over 30% holding senior professional titles and more than 50 holding doctoral degrees (including those currently pursuing their doctorates). The School operates four provincial-level research platforms and has undertaken five national-level projects and received over ten provincial-level or higher research awards in the past five years. Teaching facilities are excellent, featuring over ten national and provincial teaching practice platforms, including the China Logistics Teaching Demonstration Base. The college has established internship bases in collaboration with nearly 40 industry-leading enterprises. Students achieve outstanding results in academic competitions, winning over 100 national and provincial awards. Graduates demonstrate strong employment competitiveness and are highly regarded by society. The Human Resource Management programme was established in 2001 and was approved as National First-Class Undergraduate Programme Development Site in 2021.

We have tried our best to prepare the SAR based on the SUBJECT-SPECIFIC CRITERIA(SSC) of TC06 and the related template and guidelines. Through this preparation process, we have a full understanding of the International ASIIN Program Accreditation, and it is very helpful for us to improve our professional teaching level and talent training quality.

Thanks again!

Kind regards,

Department of Industrial Engineering & Department of Human Resource Management

A About the Accreditation Procedure

General Data

Name of the Higher Education Institution	Hunan Institute of Engineering
Faculty/Department offering the Degree Programme	School of Mechanical Engineering & School of Business
Website of the Higher Education Institution	https://www.hnie.edu.cn/
Website of the Faculty/Department	https://jxxy.hnie.edu.cn/ https://sxy.hnie.edu.cn/

Seals applied for

Name of the degree programme (in original language)	(Official) English translation of the name	Labels applied for¹	Previous accreditation (issuing agency, validity)	Involved Technical Committees (TC)²
工业工程	Industrial Engineering	ASIIN Seal for a bachelor's degree programme	/	TC 06
人力资源管理	Human Resource Management	ASIIN Seal for a bachelor's degree programme	/	TC 06

¹ [delete as necessary] ASIIN Seal for degree programmes; EUR-ACE® Label: European Label for Engineering Programmes; Euro-Inf®: Label European Label for Informatics; Eurobachelor®/Euromaster® Label: European Chemistry Label; AMSE Label: for medical programmes; EQAS Food Label: for programmes related to food studies.

² TC: Technical Committee for the following subject areas: TC 01 - Mechanical Engineering/Process Engineering; TC 02 - Electrical Engineering/Information Technology; TC 03 - Civil Engineering, Geodesy and Architecture; TC 04 - Informatics/Computer Science; TC 05 - Materials Science, Physical Technologies; TC 06 - Engineering and Management, Economics; TC 07 - Business Informatics/Information Systems; TC 08 - Agriculture, Nutritional Sciences and Landscape Architecture; TC 09 – Chemistry, Pharmacy; TC 10 - Life Sciences; TC 11 - Geosciences; TC 12 - Mathematics; TC 13 - Physics.

B Characteristics of the Degree Programme(s)

Name (English translation)	Final degree (original/English translation)	Areas of Specialisation (if compulsory)	Corresponding level of the EQF ³	Mode of Study	Double/Joint Degree	Duration	Credit points/unit	First time of offer
Industrial Engineering (IE)	工学学士/Bachelor of Engineering		6	Full time	/	8 semesters	214ECTS	Sep.01.2004
Human Resource Management (HRM)	管理学学士/Bachelor of Management		6	Full time	/	8 semesters	197ECTS(155 Chinese domestic credits)	Sep.01.2001

Name	Intake rhythm	Intake Capacity per cohort	Average starting cohort size	Average number of graduates per cohort	Average time required to complete studies
Industrial Engineering (IE)	Annually	Max. 160 students	80 students	80 students	4 years

³ EQF = The European Qualifications Framework for lifelong learning

Name	Intake rhythm	Intake Capacity per cohort	Average starting cohort size	Average number of graduates per cohort	Average time required to complete studies
Human Resource Management (HRM)	Annually	Max. 74 students	68 students	68 students	4 years

C Self-assessment Report

1 Degree Program: Concept, Content and Implementation

Industrial Engineering (IE) is a comprehensive and cutting-edge interdisciplinary field that integrates management science and engineering technology. In the era of “artificial intelligence and big data,” the Industrial Engineering major mainly aims to reduce costs, improve quality and production efficiency, and achieve sustainable development. It adopts systematic, specialized and scientific methods, comprehensively applying knowledge from various disciplines, and conducts data analysis, optimization modeling and algorithm design for production and logistics systems, etc., to explore innovative solutions, making them into more effective and reasonable comprehensive optimization systems.

The Industrial Engineering major was established in 2004 and was approved as a Hunan Provincial First-Class Undergraduate Major Construction Site in Hunan Province in 2022. The major has 1 national-level engineering practice education center and 5 provincial-level experimental and practical teaching platforms. This major is based on the urgent demand of modern manufacturing and service industries for new engineering application-oriented talents, and is oriented towards fields such as new energy, mechanical equipment, and the "Three Highs and Four New" development strategy of Hunan Province (the regional strategic blueprint of Hunan Province). It aims to cultivate advanced application-oriented technical engineering talents with comprehensive development in morality, intelligence, physical fitness, aesthetics, and labor, who can systematically master the basic theories and professional knowledge of mechanical engineering, modern industrial engineering, and artificial intelligence, possess professional attitudes, professional qualities, social responsibility, innovation and teamwork awareness, and be able to engage in analysis, planning, design and management of industrial engineering fields such as process planning, facility layout, logistics distribution, production planning and quality control in the mechanical, new energy, electrical equipment and service industries.

The HRM program has roots dating back to 1981, with the current bachelor's degree format offered since 2001, has two directions: enterprise human resources management and public sector human resources management. Relying on this major, the business administration discipline was approved as an "Double First-Class" applied characteristic discipline in Hunan Province in 2018; was approved as an outstanding undergraduate major in Hunan Province in 2020, and was approved as a national first-class undergraduate major in 2021. This major has 1 provincial-level key laboratory and 2 provincial-level engineering

research centers. This major closely aligns with regional economic and industry development needs, and aims to cultivate professionals who can conduct human resources management analysis using big data, design digital human resource operation systems and plans, possess acute business insight and problem diagnosis and solution capabilities, can accurately identify and address modern human resources management challenges, and deeply integrate digital and intelligent technologies with human resources management.

Graduates should master the basic theories and profound knowledge and skills of the human resources management major, and be able to solve complex management problems. As well-rounded graduates, they should have a strong comprehensive innovative consciousness, independent ability and teamwork spirit in the management field; possess good cultural literacy, professional ethics, social responsibility, international vision, as well as strong competitiveness and creativity; meet the requirements of the human resources management industry and the internationally recognized engineer professional qualifications, thus laying a solid foundation for international recognition.

1.1 Objectives and Learning outcomes of the program

The construction and talent cultivation of the Industrial Engineering major and the Human Resources Management major are in line with the 14th Five-Year Development Plan of the university and the college (for details, please refer to the **Appendix 04.1 University Construction and Development Plan**, the **Appendix 20.3 School of Mechanical Engineering 14th Five-Year Plan for Construction and Development**, the **Appendix 20.3 School of Management 14th Five-Year Plan for Construction and Development**), closely align with the new demands for industrial transformation and upgrading in the era of intelligent manufacturing and digital economy.

The Industrial Engineering major has established a modern curriculum system integrating courses such as management, operations research, systems engineering, facilities planning and logistics analysis, as well as production planning and control. It aims to cultivate application-oriented industrial engineering professionals who are capable of optimizing production operations, improving system efficiency, and empowering enterprises to achieve high-quality development.

The human resources management major constructs a modern curriculum system integrating management, psychology, law, and information science, with the aim of cultivating strategic human resources professionals who can drive organizational talent advantages.

1.1.1 The objective of the Industrial Engineering major

The Industrial Engineering major aims to cultivate students who are comprehensive development in moral, intellectual, physical, and aesthetic aspects, and who are capable of meeting the needs of the "Three Highs and Four New" development strategy of Hunan Province. They will systematically master the basic theories and professional knowledge of modern industrial engineering, possess professional attitudes, professional ethics, social responsibility, innovation and teamwork awareness, and be able to engage in systematic analysis, planning, design, management and operation in the field of industrial engineering and related interdisciplinary areas. They will be technical and management-oriented applied professionals.

After graduation, students will achieve the following goals through approximately 5 years of engineering practice:

Objective 1: Possess good humanistic scientific literacy and professional ethics, be familiar with the national laws and regulations of the industry they are engaged in, have environmental protection awareness and social responsibility, understand and be able to correctly evaluate the impact of the designed engineering objects and engineering practice activities on culture, health, safety, environment and social sustainable development.

Objective 2: Be able to apply mathematics, natural sciences, engineering basic theories and their related field professional knowledge and modern tools to solve practical complex engineering problems in the field of industrial engineering, and have the ability to engage in technical development, intelligent simulation and optimization design, experimental research and operation management in this professional field.

Objective 3: Be able to demonstrate independent work, teamwork and leadership abilities in professional practice and multidisciplinary teams, be proactive in adapting to social development and environmental changes, and have an international perspective, good communication and project management skills.

Objective 4: Have a lifelong learning awareness and ability, be able to continuously update knowledge and enhance capabilities through further education or other means, continuously track and understand new knowledge, new technologies, new products, new standards and norms in this professional field, and apply them to professional practice. (for details, please refer to the **Appendix 05.1 Objectives and Learning Outcomes_IE**)

1.1.2 The objective of the Human Resources Management major

The Human Resources Management major aims to cultivate students who are well-rounded in terms of morality, intelligence, physical fitness, aesthetics, and labor skills, and who are capable of meeting the requirements of the national strategy of strengthening the country and the regional economic development. They should have a solid theoretical

foundation in multiple disciplines such as management, economics, law, and psychology, and possess systematic professional knowledge and practical skills in modern human resources management. They should be able to work in various organizations and engage in tasks such as human resources planning, recruitment and allocation, training and development, performance management, compensation and benefits management, and employee relationship management.

The Objectives that graduates should achieve after 5 years of graduation are as follows:

Objective 1: Possess good professional ethics and social responsibility, practice socialist core values, be dedicated to their jobs, and be able to serve enterprises, institutions, government departments, etc., to enhance the organizational performance level and achieve long-term sustainable development.

Objective 2: Systematically master the basic theories and knowledge of modern human resources management, possess critical thinking and innovation capabilities, and be able to apply the professional theories and technical methods of human resources management to effectively solve the challenges in the management of enterprises, government departments, and human resource service institutions in the fields of organizational design, job analysis, human resources planning, recruitment and talent assessment, training and development, performance management, compensation and benefits, and employee relationship management, thereby improving the operational level of human resources management and promoting sustainable development.

Objective 3: Have an innovative spirit, be able to proficiently use digital tools such as big data, cloud computing, and artificial intelligence, carry out human resources management and operation activities, and solve complex human resources management problems, and promote the optimization and innovation of human resources management.

Objective 4: Have strong abilities in knowledge acquisition and reconfiguration, innovative practice, and team communication and collaboration within the professional field, and be able to adapt to the digital operation management environment of enterprises, government departments, and human resources service institutions, and assume the role of a key member or leader in the work team.

Objective 5: Have a global perspective and the awareness, knowledge, and ability to adapt to globalization, understand the global trends of human resources management, be able to master new human resources management knowledge and skills through on-the-job training, self-study, etc., enhancing professional development capabilities, and expand new career development opportunities. (for details, please refer to the **Appendix 05.1 Objectives and Learning Outcomes_HRM**)

1.1.3 The learning outcomes of the industrial engineering major

The expected learning outcomes or graduation requirements for the Human Resource Management major are as follows:

R1. Professional Knowledge: Be able to apply the basic knowledge of management, economics, psychology, law, and Behavioural Science to identify and solve complex human resource management problems in organizations.

R2. Problem Analysis: Be capable of using the fundamental principles of human resource management and qualitative and quantitative research methods to identify, diagnose, and analyse complex problems in various aspects of talent management within organizations. Combine literature research and practical data to draw effective conclusions.

R3. Solution Design: Be able to design systematic and innovative human resource management plans, systems, or processes (such as recruitment systems, compensation plans, performance improvement plans, etc.) for complex organizational and human resource issues, and consider factors such as legality, fairness, employee motivation, organizational culture, and cost-effectiveness during the design process.

R4. Research: Be able to conduct research on human resource management issues based on scientific principles and using standardized methods (such as questionnaire design, interviews, data analysis), including data collection, processing, analysis, and interpretation. Through information synthesis, reach reasonable and effective conclusions to support management decisions.

R5. Use of Modern Tools: Be capable of selecting and using appropriate information technology tools, human resource data analysis software, and digital platforms to conduct data mining, modelling analysis, process optimization, and decision support for human resource management issues, and understand their limitations.

R6. Law and Society: Be able to evaluate the impact of human resource management systems, practices, and complex problem solutions on internal labour relations, employee rights, social harmony, safety, and health within organizations based on relevant background knowledge and national labour laws, regulations, and policies, and understand the social and legal responsibilities that should be borne.

R7. Environment and Sustainable Development: Be able to understand and evaluate the impact of human resource management and practices on organizational sustainable development (including talent pipeline construction, employer brand, corporate culture, social reputation, etc.).

R8. Professional Ethics: Possess humanistic and social science literacy and a sense of social responsibility, and be able to understand and abide by professional ethics and norms in human resource management practices, adhere to the principles of fairness, impartiality, and confidentiality, and fulfilling responsibilities.

R9. Individual and Team: Be able to take on the roles of individual, team member, and leader in multi-department and multi-background teams when solving complex human resource management and organizational development problems.

R10. Communication: Be able to effectively communicate and exchange with management, business departments, employees, and the public on complex human resource management issues, including writing management systems, analysis reports, and proposal documents, making clear statements and presentations, and conducting negotiations. Have a certain international perspective and be able to communicate and exchange in a cross-cultural context.

R11. Project Management: Understand and master project management principles and economic decision-making methods, and be able to effectively apply them in the planning, implementation, and evaluation of human resource projects such as campus recruitment, training system construction, and e-HR system launch.

R12. Lifelong Learning: Have the awareness of autonomous and lifelong learning, and be able to continuously pay attention to the latest developments in human resource management theory and practice, and keep learning to adapt to organizational changes and industry development needs. (For details, see **Appendix 05.1**)

1.1.4 The learning outcomes of the Human Resources Management major

The expected learning outcomes or graduation requirements for the Human Resource Management major are as follows:

R1. Professional Knowledge: Be able to apply the basic knowledge of management, economics, psychology, law, and behavioral science to identify and solve complex human resource management problems in organizations.

R2. Problem Analysis: Be capable of using the fundamental principles of human resource management and qualitative and quantitative research methods to identify, diagnose, and analyze complex problems in various aspects of talent management within organizations. Combine literature research and practical data to draw effective conclusions.

R3. Solution Design: Be able to design systematic and innovative human resource management plans, systems, or processes (such as recruitment systems, compensation plans,

performance improvement plans, etc.) for complex organizational and human resource issues, and consider factors such as legality, fairness, employee motivation, organizational culture, and cost-effectiveness during the design process.

R4. Research Skills: Be able to conduct research on human resource management issues based on scientific principles and using standardized methods (such as questionnaire design, interviews, data analysis), including data collection, processing, analysis, and interpretation. Through information synthesis, reach reasonable and effective conclusions to support management decisions.

R5. Use of Modern Tools: Be capable of selecting and using appropriate information technology tools, human resource data analysis software, and digital platforms to conduct data mining, modeling analysis, process optimization, and decision support for human resource management issues, and understand their limitations.

R6. Law and Society: Be able to evaluate the impact of human resource management systems, practices, and complex problem solutions on internal labor relations, employee rights, social harmony, safety, and health within organizations based on relevant background knowledge and national labor laws, regulations, and policies, and understand the social and legal responsibilities that should be borne.

R7. Environment and Sustainable Development: Be able to understand and evaluate the impact of human resource management and practices on organizational sustainable development (including talent pipeline construction, employer brand, corporate culture, social reputation, etc.).

R8. Professional Ethics: Possess humanistic and social science literacy and a sense of social responsibility, and be able to understand and abide by professional ethics and norms in human resource management practices, adhere to the principles of fairness, impartiality, and confidentiality, and fulfill responsibilities.

R9. Individual and Team: Be able to take on the roles of individual, team member, and leader in multi-department and multi-background teams when solving complex human resource management and organizational development problems.

R10. Communication: Be able to effectively communicate and exchange with management, business departments, employees, and the public on complex human resource management issues, including writing management systems, analysis reports, and proposal documents, making clear statements and presentations, and conducting negotiations. Have a certain international perspective and be able to communicate and exchange in a cross-cultural context.

R11. Project Management: Understand and master project management principles and economic decision-making methods, and be able to effectively apply them in the planning, implementation, and evaluation of human resource projects such as campus recruitment, training system construction, and e-HR system launch.

R12. Lifelong Learning: Have the awareness of autonomous and lifelong learning, and be able to continuously pay attention to the latest developments in human resource management theory and practice, and keep learning to adapt to organizational changes and industry development needs. (For details, see **Appendix 05.1**, or <https://sxy.hnie.edu.cn/jxgz/xzzx.htm>)

1.1.5 Target Module Matrix Based on SSC06

The correlation between the learning outcomes of the Industrial Engineering major and the SSC of ASIIN TC 06, as well as the correspondence between courses and learning outcomes, are detailed in **Appendix 07.1 Objective-Module Matrix_IE**.

The ability profile (graduation requirements) of the Human Resource Management major basically conforms to some sample learning outcomes of the SSC of ASIIN TC06. The corresponding relationship between the graduation requirements and the sample learning outcomes of SSC06 is detailed in **Appendix 07.1 Objective-Module Matrix_HRM**.

1.1.6 The process of formulating and revising the training plan

The training plan serves as the basis for organizing teaching activities and is the fundamental document for school teaching quality management, monitoring and evaluation. The professional goals, learning outcomes and curriculum system are clearly stipulated in the training plan. The school has formulated the "Management Measures for the Compilation of Teaching Management Regulations of Hunan Institute of Engineering (Revised)", which can be found in **Appendix 02.5**. The professional training plan is jointly drafted by the college and the professional department, in collaboration with industry and enterprise experts. The vice president in charge of teaching organizes the teaching committee to conduct quality monitoring. The training plan is detailed in **Appendix 01.1 Bachelor's Degree Programme _IE** and **Appendix 0.1.1 Bachelor's Degree Programme _HRM**, The process is as shown in figure 1-1.

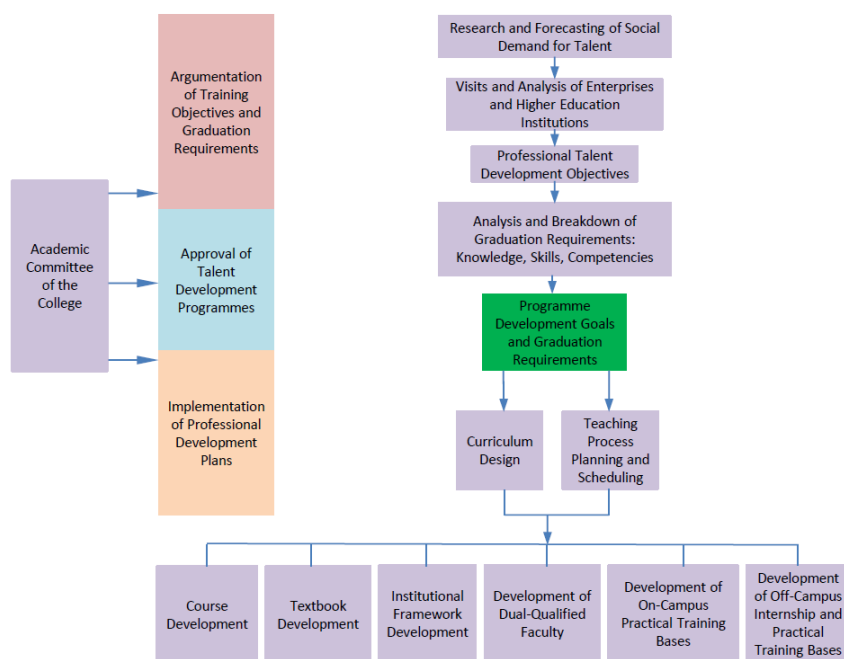
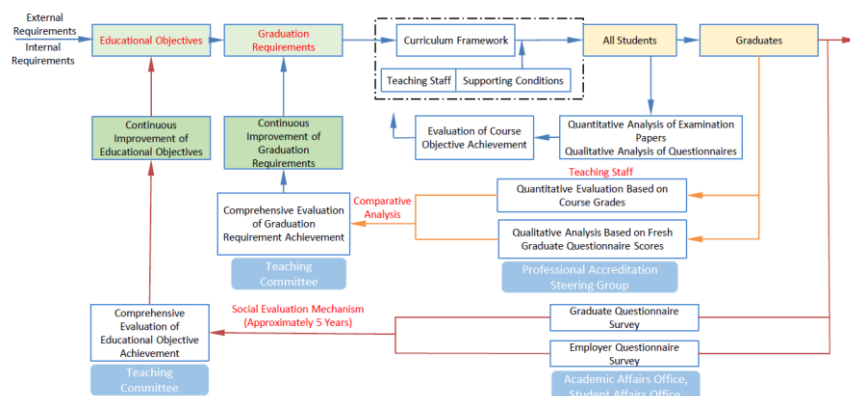


Figure 1-1 Process of Formulating Talent Training Plan

The major attaches great importance to teaching work and the quality of talent cultivation. It closely follows the demand orientation of society and employers for professional talents, and adheres to the core of engineering education accreditation, strictly clarifying the corresponding relationship among the training objectives, graduation requirements and the curriculum system. At the same time, based on the "Personnel Training Plan Management Measures of Hunan Institute of Engineering" (see **Appendix 02.5 The Catalog of the Compilation of Teaching Management Regulation**), a diversified quality supervision mechanism has been established to promote the continuous improvement and dynamic refinement of the talent training plan.

In order to make the talent cultivation of the major better adapt to the requirements of graduates' knowledge structure, practical ability and innovative quality in the new situation, this major completed the latest round of revision of the talent training plan in August 2023, based on the "Implementation Measures for the Evaluation of the Achievement Degree of Talent Training Quality of Hunan Institute of Engineering Undergraduate Programs" (see **Appendix 02.5**).

After the implementation of the major's talent training plan, the development of graduates will be tracked and investigated. Based on the feedback and in accordance with the school requirements, the talent training plan will be revised once every four years and once every two years. The document provided this time is the revised talent training plan in 2023.



1.2 Name of the degree programme

13

planning, design, and optimization of production systems and service systems. The establishment of this major and the formulation of the training plan are mainly based on the urgent demand for compound engineering management talents in the upgrading of intelligent manufacturing, the optimization of modern enterprise management, and the high-quality development of the national real economy. In China, a large number of graduates from the Industrial Engineering major have found employment in the manufacturing, service, and high-tech industries. The career development direction of students is highly consistent with the positioning of the major and the employer's employment requirements.

The Human Resources Management major is an undergraduate major in the field of business administration established by the Ministry of Education of the People's Republic of China in ordinary higher education institutions. The code for this major is 120206, and the duration of study is 4 years. The Human Resources Management major of Hunan Engineering University aims to cultivate compound senior specialized talents capable of conducting recruitment and allocation, training and development, performance management, salary and benefits, employee relations, and human resources strategic planning. The establishment of this major and the formulation of the training plan are mainly based on the long-term demand for professional talents in the human resources management industry and the development of the country. In China, a large number of graduates from the Human Resources Management major have found employment in this industry. The expectations of students and employers are consistent with the name of the major. The Ministry of Education of China formulates/revokes relevant national standards for professional education to standardize the basic teaching content and rationalize the relatively consistent expectations for graduates' files. The latest version of the national quality standards for business administration majors includes two professional directions: enterprise human resources management and public sector human resources management. It should be noted that this standard is the minimum quality requirement for professional construction. The Ministry of Education of China regards the new liberal arts accreditation standards as a higher-quality "quality improvement special assessment" standard. The construction of this major is carried out in accordance with the new liberal arts education accreditation standards with higher quality standards.

1.3 Curriculum

1.3.1 The curriculum of the Industrial Engineering major

The curriculum of the Industrial Engineering major is divided into four categories: general education foundation courses, discipline foundation courses, specialized courses, and practical courses. Corresponding to 9 major ability modules, they mainly include: mathematics and natural sciences, informatics, engineering foundation, engineering application,

practice, foreign language, general knowledge, quality improvement, graduation design (thesis). The total credit is 214. The corresponding relationship between the course categories and the course groups is shown in Table 1-1.

Table 1-1 Correspondence between Course Categories of Industrial Engineering Major and Course Groups

Serial Number	Course category	Course Cluster
1	General Education Foundation Courses	Mathematics and Natural Sciences (C1), Information Technology (C2), Foreign Languages (C6), General Education (C7), Quality Enhancement (C8)
2	Professional Foundation Courses	Engineering Foundation(C3)
3	Specialized courses	Engineering application(C4)
4	Practical courses	Practice training(C5)、Bachelor thesis(C9)

The corresponding relationship between course groups and individual courses is shown in Table 1-2. The corresponding relationship between course groups and individual courses is shown in Table 1-2.

Table 1-2 Correspondence between the course group of Industrial Engineering major and individual courses

Course Cluster	Related courses	ECTS
C1	Advanced Mathematics A (1), Advanced Mathematics A (2), Linear Algebra, Probability Theory and Mathematical Statistics, University Physics (1), University Physics (2), University Physics Experiment (1), University Physics Experiment (2)	22
C2	C language programming, Matlab mathematical modeling and simulation, Python language programming, literature review and thesis writing	8.5
C3	Professional Ethics and Responsibilities of Engineers, Introduction to Intelligent Manufacturing, Engineering Mechanics B, Mechanical Drawing (1), Mechanical Drawing (2), Fundamentals of Mechanical Design A, Fundamentals of Interchangeability and Technical Measurement, Materials for Mechanical Engineering B, 3D CAD Technology, Fundamentals of Mechanical Manufacturing A	21.5

C4	Management, Engineering Economics, Human Factors Engineering, Fundamentals of Industrial Engineering, Engineering Statistics, Introduction to Systems Engineering, Operations Research, Quality Management and Reliability, Facility Planning and Logistics Analysis, Production Planning and Control, Production System Modeling and Simulation, Project Management, Management Information System, Lean Production	38
C5	National Defense and Entrance Education, Practice of English Application Ability, Professional Cognitive Education, Comprehensive Practice in Ideological and Political Theory Courses, Course Design of C Language Programming, Mapping of Mechanical Parts and Components, Metalworking Practice (2), Voluntary Labor, Course Design of Fundamentals of Mechanical Design, Course Design of Human Factors Engineering, Social Investigation, Course Design of Fundamentals of Industrial Engineering, Production Practice, Course Design of Facility Planning and Design, Course Design of Production Planning and Control, Comprehensive Course Design of Industrial Engineering Project Optimization, Graduation Practice.	54
C6	College English (1), College English (2), College English (3), College English (4)	11
C7	Morality and Fundamentals of Law, Basic Principles of Marxism, Outline of Modern and Contemporary Chinese History, General Introduction to Mao Zedong Thought and the Theoretical System of Socialism with Chinese Characteristics, Introduction to Xi Jinping Thoughts on Socialism with Chinese Characteristics for a New Era, Situation and Policy.	15
C8	Physical Education (1) (2) (3) (4), Cultural Literacy Education (Chinese Culture, Natural Sciences, etc.), Cultural Literacy Education (Public Art), Military Theory and National Security Education, Mental Health Education for College Students, Second Classroom, Career Development and Employment Guidance for University Students(1)(2), Innovation and Entrepreneurship Education(1)(2).	14
C9	Bachelor Thesis	30
	In total	214

The supporting relationships of each course group to the graduation requirements (expected ability profiles) are shown in Table 1-3 below.

Table 1-3 Supporting Relationships of Industrial Engineering Course Groups to Graduation Requirements (Expected Ability Profiles)

Graduation Requirements Course Cluster	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12
C1	√	√		√								
C2	√	√	√		√					√		√
C3	√	√	√	√		√		√		√		√
C4	√	√	√	√	√	√	√		√			
C5			√	√	√	√	√	√	√	√		
C6										√		
C7						√	√	√		√		√
C8						√		√		√	√	√
C9		√	√	√	√					√	√	√

1.3.2 The curriculum of the Human Resources Management major

The curriculum of the Human Resources Management major is divided into four categories: general education foundation courses, professional basic courses, professional courses, and practical courses. There are 9 course groups corresponding to these: mathematics and natural sciences, informatics, management foundation, management application, practice, foreign language, general education, quality enhancement, and graduation thesis. The total credits are 197. This major is divided into two directions: enterprise human resources management and public sector human resources management. The courses in the C4 course group are different, but the class hours and credits are the same. The other course groups have the same courses. The correspondence between the categories of Human Resources Management major courses and course groups is shown in Table 1-4.

Table 1-4 Correspondence between Course Categories of Human Resources Management Major and Course Groups

Serial Number	Course category	Course Cluster
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1	General Education Foundation Courses	Mathematics and Natural Sciences (C1), Information Technology (C2), Foreign Languages (C6), General Education (C7), Quality Enhancement (C8)
2	Professional Foundation Courses	Management Foundation (C3)
3	Specialized courses	Management Application (C4)
4	Practical class	Practical Training (C5), Graduation Project (Thesis) (C9)

Table 1-5 Correspondence between the course group of Human Resources Management major and the individual courses

Course Cluster	Related courses		ECTS
C1	Advanced Mathematics B (1), Advanced Mathematics B (2), Linear Algebra, Probability Theory and Mathematical Statistics		12
C2	Fundamentals of College Computing, Python Programming		6.5
C3	Management A, Microeconomics C, Macroeconomics C, Accounting A, Statistics A, Organizational Behavior, Human Resource Management A, Financial Management B, Marketing B, Theory of the Firm and Corporate Governance B, Operations Management B, Strategic Management, Employee Career Management, Management Psychology, Social Security Studies		34
C4	Enterprise Human Resource Management Direction	Labor Relations and Labor Law, Digital Recruitment and Talent Assessment, Compensation and Benefits, Big Data Analysis and Application in Human Resources, Performance Management, Organizational and Job Design, Training and Development, Digital and Intelligent HRM, Management Communication, Corporate Culture, Public Relations, Logistics B, E-commerce B, Strategic Human Resource Planning	31
	Public Sector Human Resource	Management Direction: Labor Relations and Labor Law, Digital Recruitment and Talent Assessment, Compensation and Benefits, Big Data Analysis and Application in Human Resources, Performance Management, Organizational and Job Design, Training and Development, Digital and Intelligent HRM, Civil Service Management, Public Administration, Management Communication, Public Relations, Digital Innovation and Entrepreneurship, Video Creativity and Production	31

		B	
C5	National Defense Education and Orientation, Labor Practice, Practice of English Application Ability, Professional Orientation Internship, Comprehensive Practice in Ideological and Political Theory Courses, Social Survey, Human Resource Simulation Case Analysis, Business Etiquette Training, Big Data Analysis and Application in Human Resources Professional Internship, HRM Simulation: Sand Table Exercises, Comprehensive Training in Human Resource Management, Literature Review and Thesis Writing B, Graduation Internship		48
C6	College English (1), College English (2), College English (3), College English (4)		11
C7	Morality and Fundamentals of Law、Basic Principles of Marxism、Outline of Modern and Contemporary Chinese History、An Introduction to Mao Zedong Thought and the Theoretical System of Socialism with Chinese Characteristics、Introduction to Xi Jinping Thoughts on Socialism with Chinese Characteristics for a New Era、Situation and Policy (1) Situation and Policy (2), College Chinese B (with Technical Writing)		16.5
C8	Physical Education (1), Physical Education (2), Physical Education (3), Physical Education (4), Cultural Literacy Education, Mental Health Education for College Students, Military Theory and National Security Education, Second Classroom, Career Development and Employment Guidance for University Students (1), Career Development and Employment Guidance for University Students (2)		14
C9	Graduation Project (Thesis)		28
	Total (ECTS credits for both directions are counted only once)		197

Table 1-6 The Support Relationship between the Course Group of Human Resources Management and the Graduation Requirements (Expected Competency Portfolio)

Graduation Requirements Course Cluster	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12
C1	√	√										
C2					√							
C3	√	√	√	√							√	
C4		√	√		√		√	√	√	√	√	

C5		√	√			√			√	√		
C6										√		√
C7								√				√
C8						√			√			√
C9			√	√	√	√				√		

The definition of a course is established by the course director and team members in accordance with the procedures and methods set by the school, with the joint support and approval of the professional construction committee and the course construction committee. It is defined in alignment with the training objectives and graduation requirements, and is subject to regular review and revision. Additionally, the support relationship of each course to the graduation requirements is shown in Tables 1-4 and 1-7.

Course study is completed over eight semesters. The study plan, specific credits and class hours for each semester are clearly presented in the form of charts. For details, please refer to **Appendix 08.1 Study Plan_IE** and **Appendix 08.1 Study Plan_HRM**.

1.3.3 Content

1.3.3.1 The support of the course for achieving the expected competency profile

From the perspectives of the responsible persons and the participants of the degree programs, in order to meet the graduation requirements (the expected competency profile) of R1 to R12, the Industrial Engineering program has established a corresponding curriculum system and defined 74 courses, among which there are 14 professional courses. The Human Resources Management program has also established a corresponding curriculum system and defined 78 courses. Please refer to **Appendix 09.1 Module Description _IE** and **Appendix 09.1 Module Description _HRM** for details. The curriculum definitions (and their revisions) were jointly completed by the responsible persons and the degree program participants, in accordance with the school's established procedures, under the support and supervision of the Professional Construction Committee and the Curriculum Construction Committee, in line with the requirements of the expected competency profile.

In the course manual, it can be seen that each course has several course learning outcomes (CLO). Each CLO has a supporting relationship with the graduation requirements (the expected competency profile, R1 to R12). We call this the third-level graduation requirement supporting relationship.

Based on the supporting relationships of the CLOs within the courses for the graduation requirements, the supporting relationships of the courses for the graduation requirements (the expected competency profile, R1 to R12) were obtained. Please refer to **Appendix 01.1** for details. We call this the second-level graduation requirement supporting relationship.

Similarly, the supporting relationships of the course groups C1 to C9 for the graduation requirements (the expected competency profile, R1 to R12) can also be summarized and formed, as shown in the tables 1-3 and 1-6 above. We call this the first-level graduation requirement supporting relationship.

1.3.3.2 Recent adjustments to the courses

During each revision of the talent training plan, the matching relationship between the courses and the expected ability requirements is re-examined. Based on each discussion, adjustments are made to the course modules (or the addition or reduction of courses, or the modification of the course manual). The most recent adjustment for the Industrial Engineering and Human Resources Management major is shown in Tables 1-7 and 1-8.

Table 1-7 Adjustment of Courses in the Talent Training Plan of Industrial Engineering Major

versions	adjustment	cause
V2023	Add the courses "Introduction to Intelligent Manufacturing" and "Python Language Programming".	Strengthen the indicators R3 and R5 of the graduation requirements, ensuring that they can be supported by the use of modern tools and new technologies.
V2023E	Introduce the ECTS system and the calculation method for workload	Improve the quality of education, enhance international recognition, ensure academic integrity, and promote international cooperation and exchanges.

Table 1-8 Course Adjustment Situation Table in the Talent Training Plan of the Human Resources Management Major

versions	adjustment	cause
V2023	Add "Digital Human Resources Management", "Python Language Programming", "Human Resources Big Data Analysis and Ap-	Strengthen the indicators R5 and R11 of the graduation requirements, ensuring that they can be supported by the use of modern tools and new technologies.

	plication", "Digital Recruitment and Talent Assessment"	
V2023E	Introduce the ECTS system and the calculation method for workload	Improve the quality of education, enhance international recognition, ensure academic integrity, and promote international cooperation and exchanges.

The revised training plan will be promptly uploaded and updated to the school website. The feedback information collected through the dean's mailbox and the principal's mailbox indicates that both students and teachers are quite satisfied with these adjustments.

While ensuring the achievement of the set goals, the optimization and adjustment of the teaching content, cases, and teaching methods of courses led by the instructors are common practices and are not included in the above-mentioned course adjustments.

1.3.3.3 Evaluation of the effectiveness of the internship/practice phase

Internship and practical courses are important and integral parts of the professional curriculum system. To ensure the implementation of applied talent cultivation, the training emphasizes practicality and builds a progressive "three-level" practical teaching system, namely: basic skills → comprehensive application ability and preliminary design ability → engineering practice and innovation ability.

Among them, the professional internship for industrial engineering includes: orientation internship, metalworking internship (2), production internship, graduation internship, etc., totaling 14 credits and 350 class hours. The professional internship for human resource management includes: professional orientation internship, professional internship, business etiquette training, human resource big data analysis and application, graduation internship, etc., totaling 22 credits and 374 class hours.

The university and the college have formulated regulations such as “**Practice (Practical Training) Teaching Management Measures** of Hunan Institute of Engineering”, in which the implementation of teaching, quality assurance, and assessment of grades in the internship and practical training must be carried out in accordance with the regulations. See **Appendix 17.3** for details.

批注 [cz1]: 修改的与电气一致了。

The industrial engineering practical courses involve multiple courses (including graduation design (thesis)), with a total of 84 credits and 2100 class hours, accounting for 39.25% of the total credits; the practical courses for human resource management involve a total of 76 credits and 1900 class hours (34 weeks), accounting for 34.19% of the total class hours.

The syllabuses of IE programme and HRM programme for the internship and practical training can be found in Appendix 09.1 Module Description_IE & 09.1 Module Description_HRM respectively.

批注 [cz2]: 工业工程周数还没有添加。

(1) Internship and practical courses support the training objectives

The setting of internships and practical courses has multiple supporting roles in the training of both majors, specifically manifested as: enhancing practical and innovative abilities, deepening the understanding of theoretical knowledge, broadening career perspectives and employment channels, cultivating professional qualities and teamwork abilities, and promoting teaching reform and innovation. It supports the industrial engineering major in achieving training goals R3, R4, R5, R6, R7, R8, R9, R10, etc., and supports the human resource management major in achieving training goals R3, R4, R5, R6, R10, R11, R12, etc.

(2) Evaluation of internship effectiveness

During the students' internships, there are indeed difficulties in supervision, as students are in an off-campus environment and the centralized management of the school is different. To ensure the effectiveness and quality of the students' internships and to guarantee their safety, a series of effective measures have been taken.

1) Prepare various preparations before the internship and formulate internship discipline, while strengthening the approval, learning guidance, assessment management and data summary of students' individual out-of-school internships;

2) Conduct internship mobilization and safety education before the internship, and organize daily teaching work during the internship;

3) Confirm the internship unit before the internship, and the internship unit should have a strong sense of social responsibility, be professionally relevant, meet the requirements of the internship outline; and the production is normal, the technology and management are advanced, and the internship is valued by the students; internship safety is guaranteed.

The school issued the "Hunan Institute of Technology Internship (Practical Training) Teaching Management Measures", detailing the purpose, requirements, organization management, internship process management and internship score assessment of the internship, providing comprehensive guidance and guarantees for the internship work, ensuring the smooth progress of the internship.

(3) Evaluation of practical effectiveness

Evaluating the effectiveness of practical courses in the training of both majors is a comprehensive and complex process. We conduct effectiveness evaluations of practical courses from multiple aspects.

1) Student feedback survey:

Collect students' opinions and feedback through questionnaires, face-to-face interviews, etc. Ask students whether they think the practical courses help deepen the understanding of theoretical knowledge, improve practical skills, and cultivate innovative thinking, etc.

2) Practical outcome display:

Require students to submit practical reports, project results and experimental data, etc., as direct evidence for evaluating the effectiveness of practical courses. By checking students' practical outcomes, we can understand their learning situation and the degree of ability improvement during the practical process.

3) Teacher Evaluation:

Invite the teachers of the practical courses to evaluate the students' performance. Teachers can assess the students' learning attitude, teamwork ability, problem-solving ability, etc., to provide important references for evaluating the effectiveness of the practical courses.

4) Enterprise Feedback:

Establish a partnership with enterprises and invite them to evaluate the students' practical abilities and performance. Enterprise feedback can reflect whether the skills and abilities cultivated by the students in the practical courses meet the market demands and the requirements of the enterprises.

5) Comparison Before and After the Course:

Compare the changes in the students' knowledge level, skill level, innovative thinking, etc. before and after the practical course to evaluate the effectiveness of the practical course. The pre-test and post-test methods can be used to conduct quantitative assessment of the students' abilities.

6) Continuous Improvement:

Based on the evaluation results, continuously improve and optimize the practical courses. Adjust the content, form, teaching methods, etc. of the practical courses to better meet the needs of students and improve the effectiveness of the practical courses.

1.3.4 Structure of the program

The nine course groups of the Industrial Engineering and Human Resources two majors form an organic whole. The C7 general education and C8 quality expansion course groups conduct ideological and belief education, patriotism education, and life perspective education for students, as well as physical fitness training. This helps students form correct academic attitudes and professional concepts during their study of professional courses, enabling them to master professional knowledge while also possessing good moral qualities and professional ethics.

Interdisciplinary courses integrate knowledge from different disciplines to provide students with a broader academic perspective. It helps students correlate and integrate knowledge from different disciplines to form a comprehensive knowledge system, thereby deepening their understanding of professional courses.

Industrial Engineering and Human Resources Management Major: Engineering Foundation/Management Foundation (C3), Engineering Application/Management Application (C4), Practical Training (C5), Graduation Design (Thesis) (C9) are the core modules of the major. The course settings within these modules have a logical (progressive) relationship.

1.3.5 Student mobility

(1) International Exchange and Cooperation Platform

The school adheres to the strategy of open education and has actively carried out international exchanges and cooperation. It has established friendly cooperative relations with over 50 universities in 20 countries including the United Kingdom, the United States, Australia, New Zealand, and Germany.

In 1998, the school began cooperative education with the TAFE College in Australia, admitting students majoring in "International Business Management". It was one of the earliest institutions in Hunan Province to carry out Sino-foreign cooperative education; in 2000, it cooperated with the University of Canberra in Australia to offer the "Business Administration" program; in 2003, it cooperated with the University of Southern Queensland in Australia to offer the "Business Administration" program. The school has established a scholarship reward and assistance system for students' overseas (abroad) exchange and study.

With the approval of the Ministry of Education, in 2011, the school began cooperative

education with the University of the Highlands and Islands in the UK; in 2012, it also began cooperative education with the University of the Highlands and Islands in the UK. Currently, there are 1,251 undergraduate students from both domestic and foreign countries participating in the cooperative education programs at the school. The school actively conducts education for international students coming to China, and currently, students from various countries along the Belt and Road are studying Chinese language and undergraduate courses at our school.

To help students who are not proficient in Chinese to study in the Industrial Engineering program at our school, the English proficiency of the teachers in this major will be further improved, and more bilingual courses will be offered. For students applying to study in China, Chinese language training will be strengthened to help them adapt to the campus life and learning environment of Hunan Institute of Engineering as soon as possible.

(2) Overseas (Abroad) Exchange and Study

The scholarship for students' overseas (abroad) exchange and study is established by the school to explore international talent cultivation and enhance the quality of education. To standardize the management of students' overseas (abroad) study at the school, ensure that the selection and arrangement of overseas (abroad) study for students is carried out in a standardized, healthy, and orderly manner, the "Management Measures for Students Studying Abroad (Abroad) at Hunan Institute of Engineering" (see **Appendix 13.1**) has been issued. This management measure sets the methods and rules for the recognition of grades and credits for courses taken by students abroad.

In 2022, 1 graduate from the School of Mechanical Engineering went on to further study at Newcastle University in the UK; 1 graduate went to work in the Philippines in 2024; 2 students from the School of Business Administration participated in the exchange student program between Hunan Institute of Engineering and Macau University of Science and Technology in 2025; 2 students from the School of Business Administration participated in the exchange student program between Hunan Institute of Engineering and Malaysia's University of Ramann in 2025; 1 graduate from the Human Resources Management program went to Hong Kong Baptist University in 2023, and 1 graduate from 2022 and 2023 went to Hong Kong Lingnan University to continue their studies.

(2) Changing Majors and Its Procedures

To fully mobilize and utilize students' learning enthusiasm and effectiveness, and give students greater autonomy and choice in their studies, students at this school can apply to change their majors in the second and third semesters. According to the relevant provisions of "Undergraduate Student Status Management Regulations (Revised)" and "Management Measures for Transferring Undergraduate Students (Revised)" of Hunan Institute of Engineering, see **Appendix 01.2 Undergraduate Student Status Management** and **Appendix 01.3 Student Transfer Management**, the procedures for major change are as follows:

- 1) Students submit an application;
- 2) The transferring college conducts a review, and after approval, the list of students to be transferred is announced and reported to the Academic Affairs Office;
- 3) The Academic Affairs Office reviews;
- 4) The transferring college organizes an assessment (examination) for the students to be transferred;
- 5) The list of transferred students is determined and announced, and reported to the Academic Affairs Office;
- 6) The Academic Affairs Office summarizes the list of transferred majors submitted by the transferring college and reports it to the principal for approval. 7) Students report to the transferred college;
- 8) Transfer of academic records.

Over the past three years, the transfer situation of students from Industrial Engineering to Human Resources Management is shown in Table 1-9.

Table 1-9 Number of Students Changing Major in the Last 3 Years

Major	Year	2025	2024	2023
Industrial Engineering	Transfer In	16	2	0
	Transfer out	0	7	7
Human Resources Management	Transfer In	3	1	0
	Transfer out	7	7	1

The increase in the number of students transferring from industrial engineering to other majors is closely related to the rapid development of intelligent manufacturing in the country at present. The increase in the number of students transferring from human resources management to other majors is closely related to the current business environment.

(3) Transfer In and Transfer Out from Other Schools

Students admitted by our school should complete their studies as required. In case of special circumstances, they can apply for transfer. The college entrance examination scores of students applying for transfer out or transfer in should reach the corresponding college entrance examination admission scores of the proposed transferring school or our school's relevant majors in the corresponding year in the source area.

After students transfer to our school, they can apply for the recognition of the grades of the courses they have taken. If the courses offered by the original school and the courses offered by our school have the same name or similar content, after review by the teaching department and the academic affairs office of our school, they will be recognized and entered into the academic management system according to the original grades; otherwise, they will not be recognized and students should go through the supplementary study procedures.

Students transferring to our school must complete the credits required by the talent cultivation plan of the grade and major they are transferring to before they can graduate; if they meet the conditions for awarding a bachelor's degree of the school, they will be awarded a bachelor's degree.

At present, there are no students transferring in or out from other schools for our major.

1.3.6 Periodic review of the curriculum

The school has a well-established system and procedures to support the performance of the assessment courses in achieving the professional (degree) program goals. The collection of relevant policy documents can be found in the "Charter of the Teaching Committee of Hunan Institute of Engineering (Revised)" and other institutional documents, as detailed in **Appendix 02.2 Teaching Committee Charter**.

"The Charter of the Teaching Committee of Hunan Institute of Engineering (Revised)" is a charter formulated based on the "Charter of the Academic Committee of Hunan Institute of Engineering" (see **Appendix 02.1 Academic Committee Charter**), clearly stating that under the leadership of the teaching committee, the planning, research, review, guidance,

service, and coordination of the entire school's curriculum construction work are carried out. The teaching committee is also an important component of the school's quality assurance system.

"The Teaching Management Measures of Hunan Institute of Engineering for Teacher Course Teaching" is a management system for improving the quality of courses in the school. Through evaluations of course teaching by the school, students, and peers, the actual situation of course teaching is comprehensively understood, the quality of teachers' course teaching is evaluated, and suggestions for improvement are proposed. See **Appendix 02.3 Teaching Management Measures**.

"The Catalog of the Compilation of Teaching Management Regulation of Hunan Institute of Engineering" stipulates the goals and principles of course construction, including the establishment of the "student-centered" educational and teaching concept, the coordination of knowledge, ability, and quality, etc. It also specifies the course setting and attribution, course construction planning and content, course construction application and approval, and course construction review and evaluation, etc. See **Appendix 02.5**.

"The Implementation Measures for Evaluation of the Achievement of Talent Training Quality of First-Class Undergraduate Courses" is an important basis for the evaluation of course achievement and the achievement of graduation requirements. The evaluation of the achievement of course goals is conducted once each semester, and the evaluation objects are the theoretical courses and practical courses listed in the curriculum plans of each undergraduate major. See **Appendix 17.6 Evaluation of Talent Training Quality Attainment**.

In summary, the entire assessment process is carried out in accordance with the requirements of the documents (not limited to the above documents) and through the dual checks of the college and the school. The entire assessment process consists of two major parts.

The first part: setting of course evaluation indicators and their rationality review, and achievement evaluation

The course evaluation indicators such as basic information of the course, teaching staff (teaching team), course objectives, course construction and application situation, course characteristics and innovation, course construction plan, and list of attachment materials are set by the instructor as the responsible person, and their rationality is reviewed by the professional supervisor.

The second part: course quality evaluation

The teaching committee evaluates the course quality in accordance with the "Catalog of the Compilation of Teaching Management Regulation of Hunan Institute of Engineering" and organizes a course evaluation expert group to verify and review the self-evaluation of the course according to the assessment procedures. The course leader and members of the course group summarize the experience and shortcomings of course construction, formulate a rectification plan, and carry out a new round of course construction work based on the review and evaluation opinions.

1.4 Admission requirements

1.4.1 Admission and entry conditions

All students who enter Hunan Institute of Technology to pursue undergraduate and bachelor's degrees must take the National College Entrance Examination of the People's Republic of China or the college entrance examinations organized by some provinces and municipalities. The college entrance examination admission system in our country ensures that the undergraduate students of our school must reach or exceed the undergraduate admission score for that year. This score indicates that the students who are admitted have achieved the top 30% (top 30%, the denominator is all ordinary high school students or all college entrance exam candidates) of their high school academic performance.

The annual enrollment plan (number of students) of Chinese universities is determined in advance by the superior education authorities. College entrance candidates are admitted to each university and each major through the college entrance examination results, subject selection, and preferences (university and major) on a fair system.

The Industrial Engineering major and the Human Resources Management major are no exception. In addition to meeting the undergraduate admission score requirements, students must also choose physics (for Industrial Engineering) or physics or history (for Human Resources Management) as a compulsory subject to be eligible and have the opportunity to be admitted to the major, as detailed in **Appendix 11.3 Undergraduate Admissions Regulations**.

1.4.2 Admission process

The admission of students in Chinese universities is determined by each province and municipality based on the number of candidates and their test scores. During the admission process, the admissions department of Hunan Institute of Engineering evaluates candidates comprehensively in terms of morality, intelligence, and physical fitness. They mainly make

the selection based on the candidates' test scores. The typical admission process is as follows: submission of application, review of documents, pre-admission, admission inspection and announcement, and issuance of admission notices.

When new students of Hunan Institute of Engineering enroll, they need to present the admission notice and identification documents. Then, according to the suggestions in the registration instructions, they should go to the corresponding departments for registration. The admission process for new students is as follows: confirmation of registration, payment of tuition fees, and registration of academic status.

1.4.3 Transparent admission procedures

The admission and enrollment process for freshmen at Hunan Institute of Engineering strictly follows the relevant procedural documents and is highly transparent. According to the "Education Law of the People's Republic of China", the admission and recruitment process of universities in our country adopts the "school is responsible, the admissions office supervises" admission mechanism. "The admissions office" refers to the provincial admissions office where the candidates are located, rather than the admissions office of the university. If candidates pass the ideological and political, moral character, and physical fitness examinations, and reach the same batch admission scores in the unified examination and meet the requirements of the university for transferring files, the university can decide to admit them.

The university has the responsibility to explain to the candidates who were not admitted and to resolve other remaining issues. The provincial admissions office of the candidate's province stores the electronic files of qualified candidates for the university, supervises the university to implement the national admission policy plans and adjustments, and corrects behaviors that violate national policies and regulations.

The "Undergraduate Admissions Regulations" issued by our school in 2025 can be found in **Appendix 11.3**. The admission scores and numbers of each province for the Industrial Engineering and Human Resources Management majors in the past five years are shown in **Appendix 11.1 Admission Regulations and Statistics_IE** and **Appendix 11.2 Admission Statistics_HRM**. The admission rate is shown in **Appendix 12.1: Admission Rate Statistics**.

1.4.4 Student admission evaluation

Since 2020, the admission scores of Hunan Institute of Technology have been higher than those of the national first-class undergraduate admission scores in the national unified

college entrance examination in China. Our school strictly follows the relevant regulations stipulated in the college admission charters and admission brochures for admission, and has established the Hunan Institute of Technology Admission Work Leading Group to be responsible for studying and deciding on major matters such as the school's admission scale and policy formulation. The School's Admission and Employment and Innovation and Entrepreneurship Guidance Office is responsible for the daily work of admission organization and implementation. During the admission process, the school's discipline inspection and supervision department conducts full-process supervision and inspection of the admission work to ensure that it is carried out in a standardized and orderly manner, and is fair and just. The Admission Leading Group is fully responsible for the admission matters.

The admission numbers and related information of the major from 2021 to 2025 are shown in Table 1-10.

As shown in Table 1-10, enrollment in the Industrial Engineering major has remained relatively stable and has increased steadily over the past five years, rising from 130 to 160. The enrollment numbers in this province increased significantly in 2025, while the numbers in 2022 and 2023 were the lowest. From 2021 to 2025, the school's admission score was higher than the lowest admission score in this province. The increase in the number of admissions is also closely related to the current development of the national intelligent manufacturing industry.

Enrollment numbers for the Human Resources Management major have remained relatively stable over the past five years, ranging from 64 to 74. The enrollment numbers in this province increased in 2022 and 2023, but decreased by 5.4% compared to 2024 in 2025. From 2021 to 2025, the school's admission score was on average 46.8/61.2 points higher than the lowest admission score in this province (historical category/physics category), with little fluctuation, reflecting the stable enrollment intention of the Human Resources Management major in the current business environment.

Table 1-10 Admission Situation of the Major in the Past Five Years

Major	Year	2025	2024	2023	2022	2021
Industrial Engineering	Number of admissions	160	145	130	130	130
	Number of provinces admitted	8	6	9	6	5
	Number of admissions in this province	138	123	114	114	126
	Admission rate in this	86.3%	84.8%	87.7%	87.7%	96.9%

	province					
	Admission score of the school (in this province)	471	487	472	468	505
	Minimum admission score in this province	453	476	362	389	476
Human Resources Management	Number of admissions	70	74	70	64	64
	Number of provinces admitted	8	8	5	5	6
	Number of admissions in this province	36	40	56	47	47
	Admission rate in this province	51.43%	54.05%	80.00%	73.44%	73.44%
	Admission score of the school (for history/physics)	497 / 471	489 / 481	470 / 472	490 / 467	517 / 505
	Minimum admission score in this province (for history/physics)	446 / 405	438 / 422	428 / 415	451 / 414	466 / 434

1.5 Workload and credit points

In order to apply for the ASIIN certification, we carefully studied the practices and requirements of ECTS, corresponding and converting Chinese credits with ECTS, and began to attach importance to the data collection and statistics of the overall workload of students, and formulated the measures for monitoring and managing the self-study workload of ASIIN certification project students and the questionnaires, as detailed in **Appendix 14.1** and **Appendix 14.2**. Based on the current teaching work and the current learning situation of students, we specially formulated the temporary conversion rules for ECTS credits:

When calculating credits at our school and other domestic universities, the face-to-face teaching hours are the sole basis. The theoretical courses in domestic universities usually convert 16 class hours to 1 credit. In principle, 1 domestic credit is equivalent to 1 ECTS

credit. The credits for practical training and training courses (including graduation design/thesis) are calculated based on the number of training weeks. In most cases, 1 week of practical training and training is equivalent to 1 credit, and the specific conversion is 22 class hours. Practical training and training courses usually have two or more instructors, and students need to invest more time in self-study. Therefore, 1 domestic credit for practical training and training courses is equivalent to 2 ECTS credits. See **Appendix 15.1 Conversion Rules_IE**, **Appendix 15.1 Conversion Rules_HRM** and **Appendix 15.2 Curriculum credits of Conversion Chinese to ETCS_IE**, **Appendix 15.2 Curriculum credits of Conversion Chinese to ETCS_HRM**.

Table 1-11 provides the statistics of class hours for courses C1 to C9.

Table 1-11 Statistics of class hours for each course group

Specialty	Course Group	Contact hours	Self-study hours	Total study hours	Required course	Elective course
Industrial Engineering	C1	352	308	660	660	
	C2	136	119	255	150	105
	C3	344	301	645	645	
	C4	608	532	1140	945	195
	C5	594	756	1350	1350	
	C6	176	154	330	330	
	C7	240	210	450	450	
	C8	224	196	420	420	
	C9	160	590	750	750	
	In total	2834	3166	6000	5700	300
Human Resources Management	C1	192	203	395	395	
	C2	104	71	175	175	
	C3	544	306	850	850	
	C4	488	279	767	567	200
	C5	320	880	1200	1200	
	C6	158	154	312	312	
	C7	264	148.5	412.5	412.5	
	C8	324	171	495	495	
	C9	224	476	700	700	
	In total	2618	2688.5	5306.5	5106.5	200

Students majoring in Industrial Engineering and Human Resources Management must complete 214 and 197 ETCS credits respectively upon graduation and obtaining a bachelor's degree. In addition, students can also participate in extracurricular activities such as tech-

nological innovation or academic competitions according to their own preferences, and obtain multiple national and provincial awards. The average participation rate of undergraduate students in innovation and entrepreneurship activities exceeds 20%. Relying on the teaching team, we actively build communication and exchange platforms between undergraduate students and professional teachers, and use the university student innovation studios as the carrier to promote the development of various innovation and entrepreneurship projects for college students.

1.6 Didactics and Teaching methodology

The profession adopts a student-centered teaching strategy. The main responsibility of the teachers is to guide and facilitate students' learning and their overall understanding of the materials. Student learning is measured through formal and informal assessment forms, including group projects, student portfolios, and classroom participation. Teaching and assessment are interrelated; during the teacher's guidance, the students' learning is constantly measured.

In practical applications, teachers are encouraged to use a combination of various teaching methods, uniformly adopting the classification of teaching methods proposed by Weston and Granston. Based on the medium and means of communication between teachers and students, teaching methods are divided into four categories:

- (1) Teacher-led methods, mainly including lecturing, questioning, and argumentation methods;
- (2) Interactive methods, including class discussions, group discussions, peer teaching, and group design methods;
- (3) Individualized methods, such as programmed teaching, unit teaching, independent design, and computer teaching;
- (4) Practical methods, including on-site and clinical teaching, laboratory learning, role-playing, simulation and games, and practice methods.

In the definition of each course, it is described based on the above teaching method classification system. Please refer to **Appendix 09.1 Module Description _IE** and **Appendix 09.1 Module Description _HRM** for details.

The profession widely conducts online teaching. The online teaching platform provides dedicated pages for most courses, providing rich resources to enhance students' autonomous learning ability. Common online teaching platforms include Rain Classroom and StudyLink, etc. Teachers can use online teaching platforms such as Rain Classroom and

StudyLink to upload course resources, issue pre-class tasks and post-class assignments, monitor students' learning status through real-time answering, pop-up interaction, etc., and also use the platform's data analysis function to accurately identify teaching weak points; students can complete course learning, submit assignments, participate in classroom interaction and Q&A discussions, use the platform's learning records and error correction book functions to identify and correct mistakes, and achieve autonomous and personalized learning.

2 Exams: System, Concept & Organisation

2.1 Examination organization and management

The organization and management of course assessment are the responsibility of the Academic Affairs Office. (For specific requirements, please refer to **Appendix 17.1 Management of the Course Assessment** and **Appendix 17.5 Student Academic Performance Management**). The school has established a course assessment leading group, with the school leader in charge of teaching serving as the group leader and the director of the Academic Affairs Office as the deputy group leader. The members include the heads of departments such as the Academic Affairs Office, the Student Affairs Office, the Publicity Department, the Security Department, the Logistics Department, and the Network Information Center. The leading group is mainly responsible for formulating policies and making decisions on major matters related to the school's curriculum assessment work. The leading group has established an examination affairs office, which is located in the Examination Center of the Academic Affairs Office. The deputy director in charge of examination work at the Academic Affairs Office concurrently serves as the director of the Examination Affairs Office, responsible for organizing, coordinating, and inspecting the assessment of all courses in the school, as well as handling various issues that arise during the course assessment process.

Each teaching college (department, center) should give full play to its leading role in the management of course assessment, establish a course assessment working group of the teaching college (department, center), carefully handle all aspects of the assessment work, and fully implement the organization and management of course assessment within its department. This includes the arrangement of course assessment, the review of students' assessment qualifications, the handling of students' deferred examination procedures, the arrangement and training of invigilators, the promotion of honest examination, the rectification of examination discipline, the inspection of examination rooms, the cooperation with the school in investigating and handling assessment violations and cheaters, organizing the marking of examination papers, and summarizing and reporting the results, among other tasks.

Each teaching and research section should hold a special meeting, appoint a person in charge of course assessment, and organize the work of course assessment, including question setting, review, marking, re-examination of test papers, score entry, test paper analysis, and test paper archiving.

2.1.1 Examination format

Course assessment is an important way to test the degree of achievement of course objectives. The degree of achievement of course objectives, along with the quality of experiments, internships and graduation projects, jointly supports the degree of achievement of graduation requirements.

Our school has a complete set of assessment systems. (For details, see **Appendix 02.5 The Catalog of the Compilation of Teaching Management Regulation.**) To clarify the extent to which the course objectives have been achieved, the following steps are generally followed: defining the learning objectives, designing the examination content, conducting the examination, scoring and analyzing, evaluating the degree of achievement of the learning objectives, and providing feedback and making improvements.

(1) Course Assessment

The results of the course assessment are recorded in the student's file in the form of a total score. The course assessment process is divided into centralized assessment and process assessment. Centralized assessment focuses on evaluating students' learning outcomes, and it mainly refers to the centralized examination at the end of the term or after the course concludes. The process assessment focuses on evaluating students' learning process. The content of the process assessment includes regular assignments, in-class questions and answers (discussions), reading reports, investigation reports, regular tests, experimental reports, case analyses, literature reviews, experimental operations, and demonstrations of technical skills, etc.

The course assessment score is composed of the centralized assessment score (generally referring to the written test score) and the process assessment score (generally referring to the regular performance score), and the proportion of the two is shown in **Table 2-1**.

Table 2-1 Proportion of Components in Course Assessment Scores

Assessment Method Proportion Course Type	Centralized Assessment	Process Assessment
Examination Courses	60%	40%
Assessment Courses	50%	50%

For those whose course centralized assessment scores (including examination courses and assessment courses) are lower than 40 points, the assessment score of that course is failed and only the centralized assessment score will be recorded.

The assessment results of examination courses are rated on a 100-point scale, while those of assessment courses are rated on a 100-point scale or a five-level scale (excellent, good, medium, pass, fail). The assessment results of practical links are rated on a five-level scale (excellent, good, medium, pass, fail). The conversion criteria are as follows: Excellent >90 points, 80 points $\leq$ good <90 points, 70 points $\leq$ medium <80 points, 60 points $\leq$ pass <70 points, fail <60 points. (For details, see **Appendix 17.1 Management of the Course Assessment**)

(2) Experimental Course Assessment

The assessment of laboratory course grades is conducted on a 100-point scale or a five-level grading system of excellent, good, medium, pass, and fail.

1) The grade assessment for separate experimental courses is as follows: The regular performance accounts for 60% of the total grade, and the final examination score accounts for 40% of the total grade. The regular performance is comprehensively evaluated based on five aspects: previewing, questioning, experimental operation, experimental attitude and experimental report. The form of the final exam can be divided into two types: theory and operation. For specific operations, one can choose either one or both. Among them, theoretical assessment can be conducted through written tests or oral examinations, or a combination of both. However, regardless of the form, the content of the assessment related to experimental skills should not be less than 50%.

2) The grade of the experimental course attached to the theoretical course is calculated based on the proportion of the class hours of the experimental course to the theoretical course, but the minimum score should be no less than 15%. There is no final exam, and the grade of the experimental part is based on regular performance.

3) Students who fail to complete one-third of the experimental projects are not allowed to take the final exam of the corresponding theoretical or experimental course, and the course must be retaken. (For details, see **Appendix 17.2 Experimental Teaching Management Measures**)

(3) Internship (Training) Assessment

Students must complete all the tasks of the internship and submit the internship report before they can participate in the internship assessment. The assessment content includes: ideological and political performance, internship attitude, organizational discipline,

task completion status, internship notes, reports, personal internship summaries, on-site operation situations, etc. Internship performance is evaluated on a five-level scoring system: excellent, good, medium, pass and fail. (For details, see **Appendix 17.3 Practice (Practical Training) Teaching Management Measures**)

(4) Graduation Project (Thesis) Assessment

The grade of the graduation project (thesis) is determined by three parts: the grade evaluated by the supervisor, the grade evaluated by the reviewer, and the defense grade. The final grade of the graduation thesis is comprehensively evaluated. The overall assessment score adopts a five-level scoring system of excellent, good, medium, pass and fail. The proportion of those rated as excellent (90 points or above) shall not exceed 20%. (For details, see **Appendix 17.4 Graduation Design (Thesis) Work Management Measures**).

2.1.2 The transparency of assessment criteria

To make the examination assessment standards transparent to both students and teachers, we have taken the following measures:

1) Notify the examination time in advance: To ensure that students have sufficient time to prepare and take the exam. The instructor will plan the course progress in advance (teaching schedule), analyze the difficulty of the course, track students' learning and mastery progress through classroom performance, homework, etc., communicate with students in a timely manner, provide sufficient learning resources such as reference materials and online courses, so that students can study independently. After the course ends, there will also be a one-week dedicated review and preparation time.

2) Clearly announce the assessment criteria: At the beginning of each semester, clearly announce the proportion of grades. Before the exam, teachers should inform students of the exam content, question types, and score distribution, etc. Make sure these standards are clear, specific and easy to understand, and avoid ambiguity or ambiguity. All evaluations are carried out in accordance with the relevant teaching and assessment management regulations of Hunan Institute of Engineering. For detailed management measures, please refer to See **Appendix 01.5 The Catalog of the Student Handbook** and **Appendix 02.5 The Catalog of the Compilation of Teaching Management Regulation**.

3) Provide examples and sample questions: Offering students examples and sample questions from past exams can help them better prepare for the exams and also assist teachers in more accurately assessing students' performance.

4) The assessment process is institutionalized: The "Regulations on Course Assessment Management of Hunan Institute of Engineering (Revised)" provides detailed provisions on the mechanisms for question setting, marking, and student appeal.

5) Strengthen supervision and management: The school will supervise and manage the examination and assessment process. The Academic Affairs Office will inspect the examination materials every semester to ensure that the implementation and application of the assessment standards comply with norms and requirements.

Through the implementation of the above measures, the examination and assessment standards can be made transparent to both students and teachers, enhancing the fairness and effectiveness of the assessment process, thereby promoting students' development and the improvement of teaching quality.

2.1.3 Remedial measures under unfavorable examination conditions

The "Regulations on Course Assessment Management of Hunan Institute of Engineering (Revised)" (For details, see **Appendix 17.1**) clearly stipulates the circumstances and applicable conditions for students to take make-up exams, retake courses (make-up courses), postpone exams, and be absent from exams, fully providing students with opportunities to complete course assessment and evaluation. For students who are unable to take the exam on time due to special reasons (such as health issues, family emergencies, etc.), a fixed exam date may seem unfair. This may cause them to miss the normal examination and assessment opportunities. For such cases, the school will arrange additional make-up examination opportunities for the relevant students. **Students who, for specific physiological reasons, are unsuitable for physical education lessons may be exempted from attending these lessons with their class, but must participate in the health and physical education courses, exercise sessions and related sporting activities organised by the school; assessment of their participation shall be the responsibility of the School of Sports Science and Engineering.**

批注 [cz3]: 这个放在这里也不太对。

2.1.4 Student Academic Dishonesty

To ensure the fairness, impartiality and integrity of the school's examinations and academic environment, the school has clear management policies for examination violations, fraud and academic misconduct.

For any violations or cheating that occur during students' examinations, strict implementation shall be carried out in accordance with Chapter 10 of the "Revised Course Assessment Management Regulations of Hunan Institute of Engineering". (For details, see **Appendix 17.1**)

For any violations that occur in the experimental process, strict implementation shall be carried out in accordance with Articles 12 to 13 of Chapter 2 of the "Experimental Teaching Management Measures of Hunan Institute of Engineering". (For details, see **Appendix 17.2**)

For any disciplinary violations during the internship period, strict implementation shall be carried out in accordance with Chapter 10 of the "Internship (Practical Training) Teaching Management Measures of Hunan Institute of Engineering". (For details, see **Appendix 17.3**)

For academic misconduct in graduation design, it shall be strictly implemented in accordance with Chapter Five of the "Management Measures for Graduation Design (Thesis) Work of Hunan Institute of Engineering (Revised)". (For details, see **Appendix 17.4**)

2.2 Calculation of the degree of goal achievement

The examination results of each student for each course need to be transformed into the degree of achievement of course objectives, and ultimately form the degree of achievement of the entire major's training objectives (graduation requirements). Each semester, the achievement of each student's graduation requirements is continuously summarized and monitored.

The grading scale for the achievement of professional objectives (including the achievement of course objectives and the achievement of professional training objectives and graduation requirements) all uses a five-level assessment: $4 \leq \text{excellent} \leq 5$, $3 \leq \text{good} < 4$, $2 \leq \text{medium} < 3$, $1 \leq \text{pass} < 2$, $\text{fail} < 1$. The grade point average of the course is used as the degree of achievement of the course objectives.

For courses scored on a 100-point scale, the final grades of the courses are summarized according to their respective marking rules. Course grade point average = course grade (out of 100) / 10-5. If the course grade is less than 60 points, the grade point average will not be calculated and will be taken as 0.

For courses, experiments, internships and graduation projects evaluated at five levels, the calculation method for grade point average is: Excellent -4.5; Good -3.5; Medium -2.5; Pass -1.5; Fail -0.

It should be noted that we have not yet calculated the achievement degree of each course objective within the course, but only the achievement degree of the entire course objective, and it is assumed that the achievement degree of each course objective within the course is consistent with the overall achievement degree of the course. For instance, suppose the score of a certain course is 85, then the degree of achievement of the course objective = $3.5 = 85 / 10 - 5$. Therefore, the degree of achievement of each course objective under this course is 3.5.

The achievement degree of each credit in the goal attainment of all courses (including experiments, internships and graduation project evaluations) equivalently supports the achievement degree of the corresponding graduation requirements. For instance, suppose that according to the objective matrix, the graduation requirement R_i is supported by a total of three courses (experiments, internships, and graduation projects can all be included), namely C_1 , C_2 , and C_3 . The credits P_1 , P_2 , and P_3 of the three courses are 1, 2, and 3 respectively, and the achievement degrees D_1 , D_2 , and D_3 of student A in the three courses are 2, 3, and 4 respectively. Therefore, the achievement degree of Student A in the graduation requirement R_i is 3.33. The calculation process is shown in **Table 2-2** below. Examples of students' Attainment of Graduation Requirements are presented in **Appendix 17.8** Graduation Requirements Attainment_IE and **Appendix 17.8** Graduation Requirements Attainment_HRM.

Table 2-2 Calculation Process of Graduation Goal Achievement Degree

Courses	Credit Point P_i	Student A has achieved the desired level of course objectives at D_i	The contribution of the course to the graduation requirement R_i	Contribution Calculation Formula
C1	1	2	0.33	$= D_1 \times P_1 / (P_1 + P_2 + P_3)$
C2	2	3	1	$= D_2 \times P_2 / (P_1 + P_2 + P_3)$
C3	3	4	2	$= D_3 \times P_3 / (P_1 + P_2 + P_3)$
Student A's R_i achievement level			3.33	

The overall assessment method for the achievement of graduation goals is as follows:

$$\text{Overall evaluation score} = \frac{R_1 + R_2 + R_3 + R_4}{4} \times 0.5 + \frac{R_5 + R_6 + R_7 + R_8 + R_9 + R_{10} + R_{11} + R_{12}}{8} \times 0.5$$

R_1 - R_{12} represent 12 graduation requirements.

At the end of the third semester, the data on the achievement of graduation requirements of the sample students are shown in **Figures 2-1 and 2-2**. As the students of the 24th grade are currently in their sophomore year and have not yet studied many courses, the degree of achievement of their graduation requirements is relatively low.

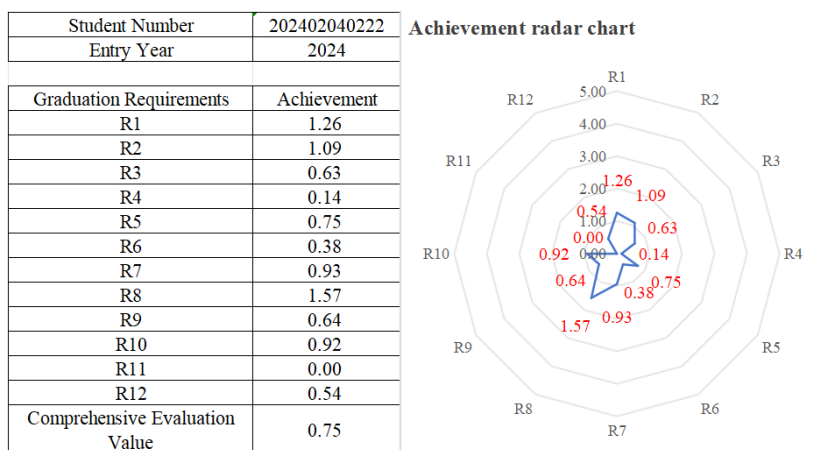


Figure 2-1 Example of Students' Achievement of Graduation Requirements (Industrial Engineering)

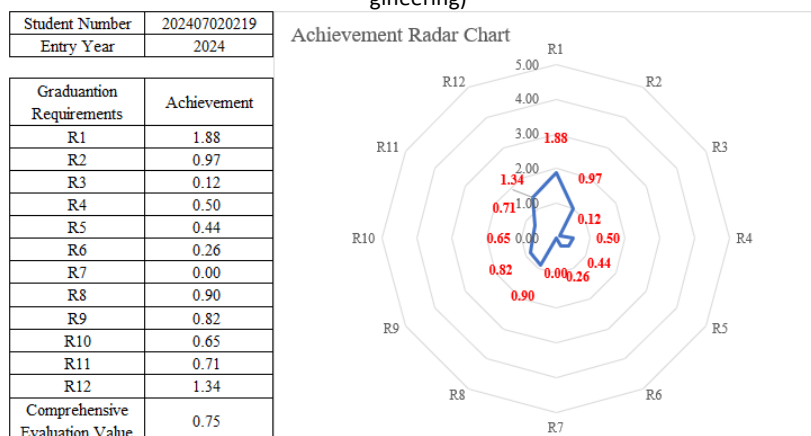


Figure 2-2 Example of Students' Achievement of Graduation Requirements (Human Resource Management)

2.3 Examination assessment and analysis

Pre-exam assessment: Each teaching college (department, center) should do a good job in reviewing the test questions to ensure their quality. After the test paper is set, the test setter shall submit the paper test paper, marking criteria and reference (standard) plan to the director of the teaching and research section for review and signature on the test paper. If the test setter is the director of the teaching and research section, the test paper

reviewer shall be the leader in charge of teaching in the teaching college (department, center). The reviewed examination papers shall be handed over to the academic affairs secretary of the teaching college (department, center) for safekeeping, while the marking criteria and reference (standard) answers shall be returned to the examiners for their own safekeeping. The academic affairs secretary of the teaching college (department, center) shall submit the examination papers and the summary table of the examination papers to the Examination Center of the Academic Affairs Office within the prescribed time and complete the handover registration. (For details, see **Appendix 17.1 Management of the Course Assessment**)

Post-examination analysis: After the marking work is completed, teachers should submit students' examination results and teaching analysis, and based on the analysis results, put forward practical and feasible improvement suggestions to enhance teaching quality and students' learning outcomes from aspects such as adjusting teaching content, optimizing teaching methods, and differentiated teaching. Timely bind and file the relevant assessment materials, including student grade books, process assessment score composition tables, standard (reference) answers and scoring criteria, test paper analysis information tables, and test papers, etc. The archiving of these contents will support the full implementation of examination assessment and be conducive to continuous improvement. For students who fail the course exams, the school will arrange for teachers to provide tutoring. (Sample transcripts are shown in **Appendix 17.7 Sample Course Transcript_IE** and **Appendix 17.7 Sample Course Transcript_HRM**. Sample test paper Analysis is shown in **Appendix 17.9 Sample Analysis of Exam Papers_IE**, **Appendix 17.9 Sample Analysis of Exam Papers_HRM**)

Process supervision: The school has established a school-level teaching supervision team and college-level teaching supervision groups, each responsible for the teaching supervision work within their respective scope of duties. Teaching supervisors go deep into the front line of teaching and adhere to the system of attending classes, evaluating classes and helping classes. Track, inspect and supervise the process of classroom teaching and teaching management as well as each teaching link, and objectively evaluate the performance of teachers in terms of setting a good example, educating and nurturing students, teaching commitment, discipline and management, teaching attitude and teaching effect during the teaching process. Random checks will be conducted on the materials that should be archived from time to time, and the inspection results will be promptly notified to the relevant functional departments and colleges. The relevant functional departments will handle the matter in accordance with the relevant regulations of the school, and the colleges will make timely rectifications based on the notification results. (For details, see **Appendix 02.4 Teaching Supervision Work Procedures**)

Regular inspection: The Academic Affairs Office will inspect the examination materials every semester to ensure that the implementation and application of the assessment standards comply with the norms and requirements. The inspection results are summarized in writing by the inspection units or personnel and submitted to the Academic Affairs Office. The Academic Affairs Office provides feedback through forms such as meetings, symposiums, and announcements. The teaching departments and corresponding teachers make rectifications based on the notification situations. The implementation of the teaching inspection work and the inspection results are included as an important indicator in the teaching work target assessment of the teaching units. (Sample: the Inspection notice and inspection result notification for the Second Semester of the 2024-2025 Academic Year can be found in **Appendix 17.10 Teaching Inspection for the Second semester of the 2024-2025 Academic Year** and **Appendix 17.11 Teaching Inspection Report for the Second Semester of the 2024-2025 Academic Year**)

Course teaching assessment: All course instructors are required to undergo a course teaching assessment every year. The vice president in charge of teaching evaluation serves as the group leader, with the heads of the Higher Education Research and Teaching Evaluation Center, the Academic Affairs Office, the Personnel Office, and the school's teaching supervision team as members. They are responsible for guiding, organizing, and reviewing the course teaching assessment work. The Teaching College is specifically responsible for organizing the evaluation of classes by the members of the teaching College's supervision group, peer teachers and students. It is also responsible for feeding back the conclusion of the course teaching assessment and the main problems existing in teaching to teachers, as well as collecting opinions and suggestions on the course teaching assessment work.

Based on the above measures such as pre-exam assessment, post-exam analysis, process supervision, regular inspection and course teaching assessment (For details, see **Appendix 01.5 The Catalog of the Student Handbook** and **Appendix 02.5 The Catalog of the Compilation of Teaching Management Regulation**), promote the continuous optimization of examination and assessment work, ensure the rationality of course assessment, and guarantee that different students can obtain the corresponding graduation grades.

3 Resources

3.1 Staff and staff development

3.1.1 Composition of faculty

The Industrial Engineering and Human Resource Management programs have established a teaching staff with high academic standards, diverse disciplinary structures, and a reasonable age distribution. The specific composition of the teachers in these two programs is detailed in Table 3-1.

Table 3-1 Teacher Composition

Degree Programme	Professors	Associate Professors	Lecturers	Experimental teacher	Total
IE	3	15	10	7	28
HRM	6	7	12	10	25

The Industrial Engineering major currently has 28 full-time teachers, among whom 15 hold doctoral degrees and 8 have master's degrees. It has one outstanding teaching team in Hunan Province, two candidates for the Ministry of Education's New Century Excellent Talent Program, one outstanding teacher in Hunan Province, two academic leaders in Hunan Province's universities, one young talent of Hunan Province, three candidates for Hunan Province's "121 Talent Project", four backbone teachers in Hunan Province, and twelve master's degree supervisors. There are more than 30 teachers with relevant engineering practical experience in enterprises. The academic structure of the teachers covers areas such as system analysis, planning, design, management and operation, which can meet the needs of engineering foundation teaching, engineering application teaching and elective module teaching in the industrial engineering major. In addition, dozens of teachers from related majors in the school and college are responsible for teaching basic courses such as mathematics, physics, chemistry, information technology and language, as well as general education courses for the industrial engineering major. For detailed resumes of the teachers of this major, please refer to **Appendix 19.1 Staff Handbook_IE**.

The Human Resources Management major currently has 25 full-time teachers, among whom 16 hold doctoral degrees, accounting for 64%. Six have studied or exchanged at high-level overseas universities, making up 24%, and ten have working experience in enterprises, representing 40%. There are also 10 dual-qualified teachers, accounting for 40%. The composition of the teaching staff is shown in Table 3-1. The academic structure of the teachers covers areas such as human resources management, organizational behavior, business

management, management psychology, and digital intelligence management, which can meet the needs of basic teaching, applied teaching, and elective module teaching in the Human Resources Management major. In addition, the school and the college have dozens of teachers from related majors who are responsible for teaching basic courses and general education courses such as mathematics, economics, accounting, information technology, and languages for the Human Resources Management major. Professor Xu Yunbao, as the major leader, has been teaching for 29 years and has received multiple honors in the professional field. He has won one first prize of the Huaxia High-tech Industry Innovation Award and one special prize of the Excellent Educational Achievement Award of the Commercial Economics Society. For detailed resumes of the teachers of this major, please refer to **Appendix 19.1 Staff Handbook_HRM**.

3.1.2 Teaching and research development of faculty

The **Industrial Engineering major** offers a total of 14 specialized courses. Each specialized course has more than four main lecturers, forming a teaching team centered around the course. The main lecturers for professional courses and basic professional courses are all high-level teachers. All the main lecturers have the title of lecturer or above, all have master's degrees or above, 53.6% have doctoral degrees, and all the professors teach undergraduate students. In the past three years, this major has undertaken three provincial teaching reform projects focusing on related disciplines such as industrial engineering. These include winning one third prize in a provincial teaching competition, four provincial first-class undergraduate courses, publishing 20 teaching papers, and publishing two textbooks. In the past three years, professional teachers have completed 20 research projects, including 2 projects funded by the National Natural Science Foundation of China and 10 projects funded by the Natural Science Foundation of Hunan Province. The total research funds amount to over 12 million yuan. In the past three years, professional teachers have published 25 research papers (including 12 articles in domestic EI and SCI second zone or above), and have been granted 23 patents (including 10 invention patents).

The **Human Resources Management major** offers a total of 34 specialized courses. Each specialized course has more than three main lecturers, forming a teaching team centered around the course. The main lecturers for professional courses and basic professional courses are all high-level teachers. All the main lecturers have the title of lecturer or above, all have master's degrees or above, and 64% have doctoral degrees. All the professors teach undergraduate students. In the past three years, this major has undertaken 4 national-level teaching reform projects and 15 provincial-level teaching reform projects around related disciplines such as human resource management. Among them, it has won 2 provincial and ministerial-level teaching achievement awards, 1 second

prize and 1 third prize in provincial-level teaching competitions. The Human Resources Management major is a national-level undergraduate major construction, with one national-level first-class undergraduate course and one provincial-level first-class undergraduate course. Seven teaching papers have been published, and two textbooks and eleven monographs have been published. In the past three years, professional teachers have completed 38 research projects, including one project funded by the National Natural Science Foundation of China, one project funded by the National Social Science Foundation of China, three projects funded by the Natural Science Foundation of Hunan Province, and eight projects funded by the Social Science Foundation of Hunan Province. The total research funds amount to over 9.6 million yuan. In the past three years, professional teachers have published 42 research papers (including 10 articles in the second zone or above of domestic EI and SCI), and have been granted 9 patents (including 4 invention patents and 4 software Copyrights, with 1 transferred). Won two first prizes of the Huaxia High-tech Industry Innovation Award, one special prize of the Excellent Educational Achievement Award of the Commercial Economics Society, one Excellent Award of the Social Science Achievement Appraisal (Think Tank Category) of Hunan Province, one Excellent Award of the Social Science Achievement Appraisal (Paper Category) of Hunan Province, and one second prize of the Artificial Intelligence Application Award of the Hunan Artificial Function Society.

3.1.3 Rated workload for faculty

The minimum rated workload for undergraduate teaching by teachers is 240 hours per year. In addition to necessary theoretical teaching, each teacher must also provide students with sufficient guidance, homework correction and innovation and entrepreneurship guidance. Serve as an academic mentor and undertake the guidance of students' scientific innovation. The above-mentioned work is an important way for teachers to be evaluated for professional titles and promoted. At the same time, it ensures that every student in this major can receive sufficient guidance on relevant courses and extracurricular assignments, helping students complete the courses required by the training plan, acquire various abilities needed for this major, and achieve the training goals stipulated in the training plan.

At present, there are over 680 students in the **Industrial Engineering major**, 28 full-time teachers, and 10 public course teachers from other colleges of the university. The student-to-teacher ratio is 1:17.8. It can basically meet the development needs of students.

The **Human Resources Management major** currently has 269 students, 25 full-time teachers, and 10 public course teachers from other colleges of the school. The student-to-teacher ratio is 1:10.8, which can meet the development needs of students.

3.1.4 Faculty development

(1) Teacher Development Policies and Plans

Hunan Institute of Engineering attaches great importance to the development policies and plans for its faculty and staff. The teacher development policies for the Industrial Engineering and Human resource Management majors have benefited from the overall policy arrangements of the school. Both the University and the college have formulated relevant documents on Faculty Development policies and plans (For details, see **Appendix 20.1 University Faculty Development Plan** and **Appendix 20.2 High-Level Talent Recruitment Announcement**). The following is a partial summary of the planning.

Development Goals:

During the 14th Five-Year Plan period, the "5321 Plan for Strengthening the University with Talents" will be realized through the implementation of the talent-driven university project. Comprehensively strengthen the construction of the teaching staff in line with the needs of discipline and professional development as well as teaching and management. Improve the mechanisms for talent cultivation, introduction, utilization, evaluation and motivation to stimulate the vitality of all kinds of talents in starting businesses and making achievements. Vigorously introduce and cultivate a group of leading talents and high-level and highly educated talents who are both virtuous and talented and have profound academic attainments. Select a group of teachers and administrative personnel who are loyal to the education cause and full of vigor and vitality to visit and conduct postdoctoral research at well-known universities and research institutions at home and abroad. Build a teaching staff that is sufficient in number, well-structured, led by renowned teachers and with prominent application-oriented characteristics

Key indicators:

Expand the scale of the teaching staff. After taking into account factors such as retirement and resignation, by the end of 2022, the number of full-time teachers in the school had reached approximately 1,250. By 2025, the number of full-time teachers will reach approximately 1,350, with an average of about 60 new full-time teachers needed each year.

Strengthen the introduction and cultivation of talents. During the 14th Five-Year Plan period, about 250 full-time teachers with doctoral degrees (including self-trained doctoral students) will be added, with an average of about 50 new additions each year. By 2025, the number of full-time teachers with doctoral degrees will reach around 500.

Optimize the structure of the teaching staff. We will add over 30 provincial-level young backbone teachers (including potential candidates), over 20 provincial-level high-level talents, and strive to introduce and cultivate around 10 high-level leading talents.

Main Tasks:

- 1) Improve the standards of professional ethics and conduct among teachers.
- 2) Increase efforts to attract high-level talents.
- 3) Strengthen the development of teachers' qualifications and capabilities.
- 4) Deepen reforms in the personnel system.
- 5) Build a team of highly qualified, dual-skilled teachers.
- 6) Enhance the internationalization of the teaching staff.

Safeguard Measures:

- 1) Organizational assurance.
- 2) Mechanism assurance.
- 3) Information assurance.
- 4) Financial assurance.

The Business School will introduce one academic leader in the "14th Five-Year Plan for Construction and Development" (For details, see **Appendix 20.3 School of Management 14th Five-Year Plan for Construction and Development**) from 2021 to 2025. Two academic leaders and twenty doctors will be introduced. At the same time, we encourage and support young teachers under the age of 40 in this discipline to pursue doctoral degrees, and actively establish assistance relations with "Double First-Class" universities to lay a solid foundation for young teachers in this discipline to pursue doctoral degrees. From 2021 to 2025, it is planned to select and send three young teachers each year to pursue doctoral degrees. From 2021 to 2025, 1 to 2 key teachers will be sent to foreign universities for visiting studies each year, 1 to 2 will participate in overseas English training, and 2 to 3 will take part in domestic continuing education. Strengthen the construction of the master's degree supervisor team and cultivate qualified master's degree supervisors.

The School of Mechanical Engineering in the "14th Five-Year Plan for Construction and" (For details, see **Appendix 20.3** The total number of teaching staff will remain at around 100, with the proportion of full-time teachers holding doctoral degrees reaching over 70% and the proportion of "dual-qualified" teachers exceeding 50%. Cultivate or introduce one leading talent in the discipline with a national-level talent title, and add 4 to 5 academic

leaders with provincial or ministerial-level talent titles. One new provincial or ministerial-level or above scientific and technological innovation team and one new teaching team were added. We will vigorously promote international cooperation in talent cultivation and scientific research. We will add two new international institutions for school-level cooperation, build one Confucius classroom with application-oriented characteristics in overseas schools or engineering and technology, and support five undergraduate students and two postgraduate students to study or intern overseas each year. Each provincial and first-class undergraduate major construction point has six graduates with overseas experience. Eight to ten outstanding young teachers will be selected for overseas exchanges, and three to five renowned overseas professors will be hired as part-time teachers to enhance the international perspective and foreign language communication skills and abilities of both teachers and students. Teachers will carry out international cooperation, apply for and implement three to five scientific research projects.

(2) Relevant training

The school has established institutions such as the Personnel Department (Teacher Work Department, Talent Office, Teacher Development Center), Academic Affairs Office, and Teaching Supervision Group. These institutions mainly carry out teaching research, teaching resource construction, teaching assessment, and teacher development. The aim is to conduct teaching quality evaluation and diagnosis through teacher training, teaching exchanges, teaching evaluations, teaching research, and teaching consultations. Provide services for enhancing teachers' teaching abilities, promote teaching reform and innovation, and continuously improve teaching quality. At present, a series of activities in various forms, including teaching training, teaching forums, and teaching demonstration observations, have been organized and carried out. Meanwhile, many experts and teaching masters from both inside and outside the school have been invited to give lectures.

In order to enhance the development of young teachers, Hunan Institute of Engineering arranges a one-month training program for new teachers every summer vacation. At the same time, each newly recruited teacher is assigned a mentor to guide and assist them in quickly familiarizing themselves with teaching and research work. Meanwhile, the Department of Education of Hunan Province has arranged a three-month comprehensive training program for young teachers to enhance their ideological and political qualities as well as their educational and teaching professional capabilities.

In order to enhance teachers' practical experience in enterprises and their international perspective, in accordance with the relevant regulations on professional title evaluation and appointment of the school, lecturers must have at least one year of practical ex-

perience in enterprise engineering before they can be promoted to associate professor. Associate professors are encouraged to have more than one year of overseas research or visiting experience before being promoted to professor. The college encourages its teachers to participate in academic exchanges both at home and abroad. In the past three years, more than 30 teachers have attended various international academic conferences.

(3) Relevant funding

Every year, about 20 teaching and administrative staff members of the school can receive financial support from the Education Department of Hunan Province to undergo overseas training and study for 6 to 12 months. Hunan Institute of Engineering encourages all its faculty and staff, especially the younger ones, to go abroad for training and study, with full financial support.

Hunan Institute of Engineering provides research start-up funds for newly recruited teachers, offering 400,000 to 500,000 yuan per young teacher with a doctoral degree.

3.2 Student support and student services

All departments of the school have always adhered to the student-centered educational philosophy, formulated measures and built platforms in terms of curriculum, practice and innovation, and continuously deepened the reform of the talent cultivation concept.

3.2.1 Academic Affairs

The daily management and training of undergraduate teaching are mainly the responsibility of the Academic Affairs Office. The Academic Affairs Office consists of the General Affairs Section, the Teaching Operation and Quality Management Section, the Practical Teaching Management Section, the Academic Records and Grade Management Section, the Examination Center, and the New Engineering and New Liberal Arts Construction Section. Outside the school teachers and students need to log on to <https://jwc.hnie.edu.cn/index.htm> and click on the school educational administration system website: <https://jwcmis.hnie.edu.cn/>. The login interface of the educational management information system is shown in **Figure 3-1**. You cannot log in to this website without the account and password of the school's faculty and staff. Faculty and staff of this school can log in to this website with their account and password. After logging into the system, students will enter the learning function service interface as shown in **Figure 3-2**.



Figure 3-1 Login Interface of the Educational Management Information System

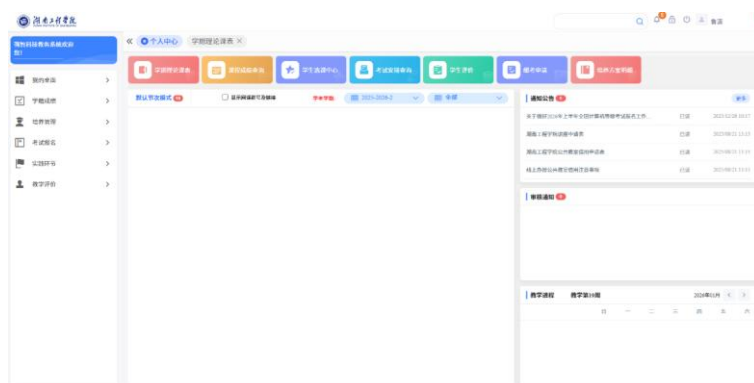


Figure 3-2 Learning Function Service Interface

Each college under the school has a dedicated teaching office, which is responsible for the teaching management of the college under the guidance of the vice dean in charge of teaching.

3.2.2 Student Affairs Office

The Student Affairs Office is a functional department responsible for the ideological and political education, daily management and service of all students in the school. Centering on the fundamental task of fostering virtue and nurturing talent, it adheres to the principle of taking talent cultivation as the core and serving students as the purpose, and comprehensively does a good job in ideological and political education, daily management and service, financial aid work, mental health education, dormitory management and other work for students. Be responsible for the daily work of the school's Leading Group for Ideological and Political Education of College Students, the Leading Group for Student Dormitory Management and Service, the Leading Group for Student Financial Aid Work, and the Leading Group for Mental Health Education of College Students.

3.2.3 Student counselor system

Each major has a full-time undergraduate counselor, who is responsible for providing life guidance and psychological counseling to college students. Be responsible for communication between the school and students' families, organize students to hold various cultural and sports activities, and provide students with a healthy, safe and dynamic learning and living environment. The counselors and the heads of the majors introduce the current development status of the majors and their future career directions to the freshmen, helping them establish reasonable career goals and plans as early as possible.

Most freshmen will make plans for their future career development under the guidance of their counselors in their first year of college life. For students in grades two and three, counselors will assist them in rationally adjusting their career plans and improving their employment goals, enhancing their self-competitiveness and enabling them to stand out in the job market. For fourth-grade students, counselors maintain contact with enterprises and employers, provide them with the latest employment information, guide them to improve their interview skills, and encourage them to establish the concept of lifelong learning to ensure the sustainability of their career development.

For topics of concern to students, counselors will regularly organize experience exchange meetings for students of different grades, enabling lower-grade students to receive study and life guidance from upper-grade students. To help undergraduate students participating in the innovation and entrepreneurship training program enhance their innovation capabilities, counselors from time to time organize specialized skills training seminars, such as inviting experienced professional teachers or enterprise technicians to impart the usage methods and development techniques of various professional engineering software.

3.2.4 Academic tutors

Every new undergraduate student has a designated academic tutor to guide his/her academic, professional and career development. Academic mentors guide students to master the methods of learning knowledge and solving problems, help them set personal academic and life goals, and inspire their motivation for learning and career. Academic tutors and students of different grades can operate in a unified and harmonious manner, allowing students to fully utilize the advantages of learning and inheritance. Academic tutors encourage students to actively participate in their advisors' scientific research projects or apply for university-level, provincial-level and national-level college students' innovation and entrepreneurship projects, and to take part in relevant subject competitions. All full-time teach-

ers majoring in industrial engineering and human resource management can serve as academic tutors. They can determine students' learning needs based on their majors and interests and formulate effective learning strategies, providing constructive suggestions for students in academic research and career planning.

3.2.5 Enterprise mentor

The major implements an enterprise mentorship system, requiring students to carry out industry practice in enterprises, communicate with engineers, and cultivate their innovation and entrepreneurship capabilities. Enterprise mentors are managers or engineers from relevant enterprises who have been certified by the Academic Committee of the School of Mechanical Engineering of Hunan Institute of Engineering. Students can choose their favorite enterprise mentors based on their research interests, and enterprise mentors can also select students. During the internship period in enterprises, the enterprise mentors are responsible for guiding the students' practical training and maintaining communication with the academic mentors of the college for cooperative teaching.

3.2.6 Course website

Online teaching is widely applied in the teaching activities of this major. Professional online courses in Hunan Institute of Engineering of online teaching platform on the corresponding course website (<https://hnie.fanya.chaoxing.com/portal>). The website content includes course introductions, course backgrounds, teaching materials, syllabuses and exercises, etc. Students can find information related to the courses on the website and communicate with the instructors online. They can also ask questions to the teaching staff by sending emails. At the appointed time each week, teachers answer students' questions related to the course and can also communicate with students via email at any time.

3.2.7 Enterprise practice platform

There are a total of 15 off-campus internship and practical teaching bases for the **Industrial Engineering major** and 21 off-campus internship and practical teaching bases for the **Human Resource Management major**, which can provide students with good practical internship opportunities (For details, please refer to **Appendix 03.1 School-Enterprise Cooperation Agreement_IE**). Both the school and the enterprise, based on the talent cultivation goals and the requirements of the training program, jointly formulate the internship teaching syllabus, write the internship guidance book, and establish corresponding safeguard measures. Each base is equipped with stable enterprise internship instructors who,

together with on-campus teachers, guide and manage students' internship work. The on-campus instructor is responsible for clarifying to students the content, tasks, planned progress, schedule and management regulations of the internship, etc. The enterprise instructor, in accordance with the school's requirements and the actual production of the enterprise, does a good job in education on enterprise safety production, rules and regulations, confidentiality systems, etc. These off-campus practice bases can meet the practical teaching tasks such as professional internships and graduation internships for students majoring in industrial engineering and human resource management. Each year, they accept about 300 and 150 students respectively from these majors, enabling students to fully receive good engineering practice and training and improve their ability to handle practical problems. So as to achieve the teaching goal of improving comprehensive abilities.

Internships for the **Industrial Engineering major** include professional awareness internships, metalworking internships (2), production internships, and graduation internships. In professional awareness internships, students visit different types of production sites, such as traditional processing and modern assembly lines, under the guidance of both school and enterprise mentors, and submit internship reports. In metalworking internships (2), students participate in the practice of making complex parts under the guidance of teachers from various workshops in the school's engineering training center and submit internship reports. In production internships, students, under the guidance of both school and enterprise mentors, apply professional knowledge to analyze and understand actual problems in enterprises, conduct preliminary analyses of the relevant businesses of the internship units, identify their strengths and weaknesses, and seek feasible solutions to the problems. In graduation internships, students go to production sites, engage in on-the-job internships under the guidance of enterprise mentors, and complete internship reports under the joint guidance of enterprise mentors and internship instructors.

The internship programs for the **Human Resources Management major** include professional orientation internship, business etiquette training, human resources big data analysis and application, comprehensive internship for the Human Resources Management major, and professional internship. The professional orientation internship: Under the guidance of the school and enterprise mentors, students visit and intern at various types of enterprises such as technology companies, mechanical manufacturing, and management services (Details of the internship enterprises can be found in **Appendix 03.1 School-Enterprise Cooperation Agreement_HRM**), and submit an internship report. The business etiquette training, human resources big data analysis and application, and comprehensive internship for the Human Resources Management major: These internships are completed on campus under the guidance of teachers and submission of an internship report is required. The professional internship: Students are arranged to visit the enterprise on-site,

under the guidance of the enterprise mentor, to conduct on-the-job internship in the field of human resources management, and the internship report is completed under the joint guidance of the enterprise mentor and the internship instructor.

3.3 Funds and equipment

3.3.1 Disciplinary research platform and Laboratories

The School of Mechanical Engineering currently has five provincial-level research platforms, including the Hunan Provincial Key Laboratory, namely the Hunan Provincial Engineering Laboratory for Wind Power Operation and Maintenance and Testing Technology, the Hunan Provincial Engineering Research Center for Lightweighting of New Energy Vehicles, and the Hunan Provincial Key Laboratory for Automotive Power and Transmission. The college has established a total of 37 laboratories, including the Industrial Engineering Basic Experiment Center, the Intelligent Manufacturing Laboratory, the Flexible Manufacturing System Laboratory, the Human Factors Engineering Laboratory, and the Mechanical Virtual Reality Technology Laboratory. The total area of laboratories for various specialties is 4,182 square meters, and the total value of experimental equipment is over 50 million yuan. The infrastructure necessary for students to meet the graduation requirements is fully guaranteed. There are dedicated experimental management personnel to manage and maintain the experimental facilities, ensuring that the experimental teaching meets the teaching requirements.

The Business School currently has four national-level practical education bases, namely: Hunan Institute of Engineering - Xiang Tan Electric Machinery Group Co., LTD. Engineering Practice Education Center, Hunan Institute of Engineering - Hunan Dong Xin Group Co., LTD. Engineering Practice Education Center, Hunan Institute of Engineering - Zhu Zhou Gear Co., LTD. Training and Examination Center for Metalworking Practice Teaching Instructors. Meanwhile, the college also has four provincial-level research platforms, namely: the Research Base for Promoting Industrial Transformation and Upgrading through Artificial Intelligence, the Research Base for Transformation and Upgrading of Traditional Industries in Hunan Province, the Research Center for Cultural and Creative Industries in Hunan Province, and the Hunan Engineering Research Center for Unmanned Driving Technology in Smart Logistics, etc. These platforms provide excellent support for the college's disciplinary research. The college has established 17 laboratories, including the Enterprise Informatization Laboratory, the Key Discipline Laboratory of Enterprise Management, the Simulation Recruitment Laboratory, the Etiquette Training Laboratory, the Enterprise Simulation Laboratory, the Logistics Simulation Laboratory, and

the Discipline Competition Training Room. The total area of laboratories for various specialties is 1,622 square meters, with 1,339 sets of experimental equipment, and the total value of the experimental equipment is over 30 million yuan. The infrastructure necessary for students to meet the graduation requirements is fully guaranteed. There are dedicated experimental management personnel to manage and maintain the experimental equipment, ensuring that the experimental teaching meets the teaching requirements.

The school has formulated the "Laboratory Management Regulations of Hunan Institute of Engineering" (For details, see **Appendix 02.5 The Catalog of the Compilation of Teaching Management Regulation**) to strengthen the construction and management of laboratories and ensure the needs of teaching and scientific research.

The school has formulated the "Laboratory Safety Management Measures of Hunan Institute of Engineering" (For details, see **Appendix 02.5**). The laboratory safety management work adheres to the policy of "people-oriented, safety first, prevention foremost, and comprehensive governance", and implements the principle of "whoever is in charge is responsible, and whoever uses is responsible", with safety responsibilities implemented level by level and layer by layer.

Table 3-2 Experiment Types and Locations Where They Are Conducted

Degree Programme	Basic experiments	Comprehensive Experiment	Open Innovation Experiment
IE	Engineering Training Center Physics Experiment Center	Mechanical Engineering College Laboratory	Innovation and Entrepreneurship Training Center
HRM	Engineering Training Center	Business School Lab	Innovation and Entrepreneurship Training Center

The major cultivates students' experimental abilities through three types of experiments: basic experiments, comprehensive experiments and open innovation experiments. The venues for the three types of experiments are shown in **Table 3-2**. Among them, the Innovation and Entrepreneurship Training Center is open to all students. By conducting experiments, students' understanding of theoretical courses can be enhanced, and their design and innovation abilities can be cultivated.

3.3.2 Library and information resources platform

(1) Library, reference materials and digital media information

The library of Hunan Institute of Engineering is the school's literature and information center, with a total construction area of 35,000 square meters. It consists of the main library

in the main campus and a branch library in the south Campus. There are 29 various types of book stacks and reading rooms, with 2,815 reading seats.

The collection is rich in resources, with a total of over 4.01 million volumes of literature, including over 1.79 million volumes of paper literature, over 2.22 million volumes (types) of e-books, and 50 Chinese and foreign electronic literature databases, covering academic journals, doctoral and master's theses, scientific and technological information, business information, national patents, Chinese and foreign standards, reprinted materials of Renmin University of China's newspapers and periodicals, foreign periodicals, multimedia courseware, etc. You can visit the library's website <http://172.30.0.90:8080/index.html> for a one-stop inquiry.

The library offers various forms of services, including document borrowing, document retrieval, information reference consultation, information development and utilization. The library adopts an integrated layout of collection, borrowing and reading, as well as a fully open-shelf service model. It is open for over 100 hours per week, and electronic literature resources are available 24 hours a day.

(2) Information Resource Platform

1) Campus Network Infrastructure Platform

The campus network of the school has an export bandwidth of 2.3G, with a core backbone of 10 gigabit and desktop access of 1 gigabit. The wired network covers all the campus websites in the teaching, research and office environments of the school. The school fully implements identity authentication for Internet access within the campus. The school has carried out the first phase of wireless network construction, with full coverage of wireless broadband network (WIFI).

2) Hunan Institute of Engineering Online Teaching Center

Up to now, the number of courses offered by the Online Teaching Center of Hunan Institute of Engineering has reached over 1,200, making it a high-quality platform for sharing teaching resources for both teachers and students. With the help of the Internet, the limitations of time and place can be broken, and the opportunities for communication between teachers and students can be increased.

3) Teaching Management Information System

The school has established a teaching management information system, which is the main platform for implementing teaching management and ensuring the operation of teaching. It is responsible for the allocation of resources for various teaching businesses of

the school, the arrangement of teachers, and the recording of the entire academic process of students.

This system is equipped with numerous personalized functional points, covering all aspects of teaching management, meeting the requirements of school teaching management and the needs of daily teaching operation management. The platform is powerful and easy to use, serving as the primary platform for conducting teaching management. Students can select courses, evaluate teaching quality and check course evaluation results through this platform. Through this platform, teachers can publish teaching calendars, obtain student information and manage examination results.

4) Graduation Project Management Platform

The school has collaborated with Chongqing VIP Information Co., Ltd. to establish the VIP graduation Design (thesis) Management system. The website is <https://vgms.fanyu.com/>. Teachers can publish the topics of their bachelor 's theses through this platform, and students can freely choose the topics they are interested in. This system can monitor the quality of graduation theses and achieve full-process management from thesis topic selection to mid-term review and defense.

5) Other Information Resources

The school is equipped with abundant computer resources. Among them, the computer resources closely related to this major are mainly distributed in the library, the computing center, and the computer rooms of this college. The School of Mechanical Engineering and the School of Business each have two multimedia computer rooms, with 140 and 314 computers respectively. They are open to students for free throughout the day and are mainly used for daily classes, graduation design (thesis) and other professional teaching links. The computer resources of the school and the school can meet the needs of students' learning, teachers' teaching and research work.

In conclusion, to meet the needs of educational informatization, the school has comprehensively built a safe, efficient, scalable and open information-based campus infrastructure, achieving full coverage of wireless networks in public areas within the campus. It has also realized functions such as networked administrative office work, information-based teaching management, and resource sharing, meeting the needs of students' learning, teachers' teaching and research work. All new laboratories, classrooms and office buildings are equipped with accessible facilities for people with disabilities.

批注 [cz4]: 取自电气

3.3.3 Teaching and office facilities

The main teaching venues of this major include the school's teaching buildings, the engineering training center and the college's experimental center.

The total floor area of the school's teaching buildings is 576,000 square meters, with 312 classrooms, all of which are equipped with multimedia facilities. The facilities and lighting in the classroom comply with national standards and meet the requirements of various classroom teaching and students' self-study. The Asset and Laboratory Management Office has set up multiple management duty rooms in the teaching building to be responsible for the management, maintenance and repair of the building, ensuring the normal use of teaching facilities. In order to enhance the management of teaching facilities and the utilization rate of resources, the usage of all multimedia classrooms in the school can be inquired through the teaching management information system. Faculty and staff can apply through this system to meet the needs of undergraduate teaching.

The Mechanical Building of the School of Mechanical Engineering has a construction area of over 12,000 square meters, and the total area of professional laboratories is over 6,000 square meters, which can meet the requirements of teachers' office work, students' professional course teaching and experiments. Meanwhile, there are seven small meeting rooms, which are used for holding seminars and academic reports by visiting scholars.

The office building of the Business School has a construction area of 10,81.43 square meters, and the total area of professional laboratories is over 1,622 square meters, which can meet the requirements of teachers' office work, students' professional course teaching and experiments. Meanwhile, there are four lecture halls and two small meeting rooms, which are used for holding seminars and academic reports by visiting scholars.

3.3.4 Investment in last three years

Teaching funds are secured, and the total amount is sufficient to meet teaching needs.

The school and the college attach great importance to the construction of the two majors, with sufficient investment in teaching funds to ensure the normal operation of all teaching activities. The undergraduate teaching funds of this major mainly come from the school's teaching business fee allocation, educational and teaching reform funds, special funds for laboratory construction, national and Hunan Province first-class undergraduate major construction funds, teaching and research platform construction funds, etc. The teaching funds are mainly used for teaching operation, experimental teaching, laboratory

construction, course construction, teaching reform, student support, etc. The total amount of teaching funds can meet the teaching needs.

The specific income and expenditure of the teaching funds for the **Industrial Engineering major** in the past three years are shown in **Table 3-3**. The total teaching funds for the major in the past three years were approximately 15.05 million yuan, with an average annual teaching fund of 5.01 million yuan.

Table 3-3 Revenue and Expenditure of Teaching Funds for Industrial Engineering in the Past Three Years

Year	Total revenue (in ten thousand yuan)	Source	Amount (in ten thou- sand yuan)	Expenditure items	Amount (in ten thousand yuan)
2023	225	Nation	80	Course Development	15
		Local area	105	Teaching Equipment	120.5
		Society	40	Daily Teaching Expenses	56.5
		Revenue generation	0	Curriculum Reform	6
		Others	0	Student Support	20
				Other	7
2024	621	Nation	380	Course Development	80
		Local area	191	Teaching Equipment	380
		Society	50	Daily Teaching Expenses	62.5
		Revenue generation	0	Curriculum Reform	9
		Others	0	Student Support	50
				Other	39.5
2025	659	Nation	400	Course Development	50
		Local area	189	Teaching Equipment	400
		Society	70	Daily Teaching Expenses	80

		Revenue generation	0	Curriculum Reform	28
		Others	0	Student Support	52
				Other	49

The specific income and expenditure of the teaching funds for the **Human Resources Management major** in the past three years are shown in **Table 3-4**. The total teaching funds for the major in the past three years were approximately 13.15 million yuan, with an average annual teaching fund of 4.38 million yuan.

Table 3-4 Revenue and Expenditure of Teaching Funds for Human Resource Management Programs in the Past Three Years

Year	Total revenue (in ten thousand yuan)	Source	Amount (in ten thousand)	Expenditure items	Amount (in ten thousand yuan)
2023	421	Nation	302	Course Development	20
		Local area	78	Teaching Equipment	300
		Society	41	Daily Teaching Expenses	40
		Revenue	0	Curriculum Reform	20
		Others	0	Student Support	30
				Other	11
2024	442	Nation	310	Course Development	20
		Local area	94	Teaching Equipment	320
		Society	38	Daily Teaching Expenses	20
		Revenue	0	Curriculum Reform	25
		Others	0	Student Support	30
				Other	27
2025	452	Nation	320	Course Development	20
		Local area	94	Teaching Equipment	330
		Society	38	Daily Teaching Expenses	20
		Revenue	0	Curriculum Reform	24
		Others	0	Student Support	30

				Other	28
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3.3.5 Scholarship

The school has established annual comprehensive scholarships (including special, first, second and third class scholarships), "Five-Education Star" individual scholarships, innovation and entrepreneurship scholarships and other programs. The award amount, evaluation requirements and proportion of the Scholarship are shown in **Table 3-5**. For details, please refer to **Appendix 01.4 Undergraduate Scholarship evaluation and management measures**.

Meanwhile, among the current students, those in their second year or above (including the second year) who are both academically excellent and from economically disadvantaged families can also apply for the National Encouragement Scholarship, with a prize of 5,000 yuan.

Table 3-5: Scholarship Amounts, Selection Criteria, and Allocation Ratios

Award Level	Top Scholarship	First Prize Scholarship	Second Prize Scholarship	Third Prize Scholarship
Reward Criteria (Yuan per person)	3000	2000	1000	500
Selection Requirements (Proportion of students with top scores in comprehensive quality assessments among their peers in the same grade and major)	1%	5%	15%	50%
Evaluation Ratio (Proportion of selected students relative to the total number of students in the same grade and major)	5‰	5%	10%	15%

3.3.6 Response strategies and feedback mechanisms

The school provides full infrastructure guarantees for students' life, study and physical and mental health growth during their school years.

The school has 4 athletics fields, 1 indoor gymnasium and over 50 various ball courts, including 12 volleyball courts. A basketball costs 29 yuan. A badminton court costs 30 yuan. There are six table tennis courts. There are six football fields with a total sports area of 112,500 square meters, which fully guarantees the daily exercise and competition needs of students.

There are six student canteens on campus, offering over 200 flavor counters. They serve more than 30,000 diners daily, ensuring food safety, nutrition and diverse choices.

There are a total of 34 student dormitory buildings with over 5,000 rooms, providing more than 27,000 standardized four to six-person beds. All facilities such as air conditioning and hot water are fully covered, creating a safe and comfortable living environment for students.

The school supports the registration of 108 clubs and has specially equipped a club activity center and multiple lecture halls. Every year, hundreds of various cultural and sports activities are held, which greatly enriches the campus cultural life.

3.3.7 Response strategies and feedback mechanisms

Both the School of Mechanical Engineering and the School of Business attach great importance to the management and maintenance of equipment and facilities, and have formulated corresponding response strategies and feedback mechanisms to ensure the full utilization and continuous improvement of facilities.

1. Equipment maintenance and updates

A plan for equipment maintenance and renewal has been formulated to ensure the normal operation and timely update of experimental equipment and teaching facilities. Establish an equipment management department to be responsible for the procurement, maintenance and scrapping management of equipment.

2. Feedback mechanism

Regularly conduct satisfaction surveys among teachers and students to understand the evaluations and demands of staff and students regarding the existing infrastructure.

Based on the feedback, promptly adjust and improve the facility configuration to enhance the satisfaction of teachers and students.

3.International Perspective

Actively carry out international exchanges and cooperation, invite international experts to give lectures at the school, organize teachers and students to go overseas for exchange and study, and enhance students' international vision and competitiveness.

The School of Mechanical Engineering and the School of Business have reliable financial planning and adequate infrastructure in terms of funds and equipment, which can provide a solid foundation for the implementation of professional (degree programs). Meanwhile, through internal and external cooperation, the school continuously enhances the depth and breadth of its collaboration to ensure the continuous improvement of educational and teaching quality. The school will continue to strengthen the construction of resource management and feedback mechanisms to ensure the effective implementation of various measures and provide a better teaching and learning environment for teachers and students.

4 Transparency and Documentation

4.1 Module descriptions

The curriculum design of the two professional training programs is divided into four categories: general education foundation courses, professional foundation courses, specialized courses, and practical courses, corresponding to 9 course groups. All course descriptions are published on the website (HRM: <https://sxy.hnie.edu.cn/jxgz/xzzx.htm>), and registered students can access the website.

批注 [cz5]: 课程大纲网站

The 9 course groups of **Industrial Engineering major**: Mathematics and Natural Sciences, Information Science, Engineering Foundation, Engineering Application, Practice, Foreign Language, General Education, Quality Enhancement, Graduation Thesis. The 9 course groups of **Human Resources Management major**: Mathematics and Natural Sciences, Information Science, Foreign Language, General Education, Quality Enhancement, Management Foundation, Management Application, Practice, Graduation Design (Thesis).

4.2 Diploma and Diploma Supplement

To obtain the graduation certificate, students majoring in Industrial Engineering must complete at least 170 credits and successfully complete the bachelor's thesis/graduate design project. Similarly, students majoring in Human Resources Management must complete at least 155 credits and successfully complete the bachelor's thesis/graduate design project. In addition to these requirements, students in both majors must achieve an average grade point of 1.7 or above to obtain the degree certificate.

The samples of the graduation certificates and bachelor's degree certificates for students majoring in Industrial Engineering and Human Resource Management at Hunan Institute of Engineering can be found in **Appendix 21.1 Diploma_IE** and **Appendix 21.1 Diploma_HRM**. All certificates will only be valid after being stamped with the official seal of Hunan Institute of Engineering and signed by the president. Supplementary explanations for the diplomas can be found in **Appendix 21.2 Diploma supplement_IE** and **Appendix 21.2 Diploma supplement_HRM**. Samples of the graduation transcripts for students can be found in **Appendix 06.1 student's grades_IE** and **Appendix 06.1 student's grades_HRM**. The conditions for students to obtain the graduation certificates are described in **Appendix 01.2 Undergraduate Student Status Management**.

4.3 Relevant rules

4.3.1 Teaching evaluation system

The school strictly determines the responsibilities of teachers in accordance with the "Teaching Management Regulations of Hunan Institute of Technology (Revised)" (for details, see **Appendix 02.5: Compilation Catalog of Teaching Management Regulations**). Teachers are required to prepare courses based on the training plan (details in **Appendix 01.1**), course outline (details in **Appendix 09.1**), and lecture notes. The management and evaluation of the teaching process are carried out in accordance with the "Teaching Management Regulations", "Course Arrangement, Adjustment (Suspension), and Course Management Regulations", "Undergraduate Teaching Quality Assurance Measures", "Teaching Accident Identification and Handling Measures", "Teaching Supervision Regulations", "Undergraduate Lecture Management Regulation Measures", and "Quality Excellent Award Selection Criteria" (for details, see **Appendix 02.5**).

The school conducts annual teaching evaluations for all courses to assess the basic performance of teachers during the teaching process. In the seventeenth week of each semester, students use the education management information system of Hunan Institute of Technology to evaluate the courses they have taken. After the Academic Affairs Office consolidates and reviews the results, they will be distributed to each secondary college, and the colleges will then provide feedback to the teachers.

4.3.2 Regulatory transparency

Faculty and students of this school can log in to the "Regulations and Rules" section of the School of Education's website of Hunan Institute of Engineering (<https://jwc.hnie.edu.cn/gzdzd/xxjxglwj.htm>) to view the teaching management documents. Teachers can also refer to the "Compilation of Teaching Management Regulations", and the content directory is detailed in **Appendix 02.5**. The School of Education of Hunan Institute of Engineering is responsible for the approval of all course-related documents.

Within one month after enrollment, new students will receive the "Student Handbook of Hunan Institute of Engineering", which details the rights and obligations of students. The contents list can be found in **Appendix 01.5 The Catalog of the Student Handbook**. Students are required to learn the "Student Handbook of Hunan Institute of Engineering" through self-study and class meetings.

5 Quality Management: Quality Assessment and Development

The quality assessment of the Industrial Engineering major and the Human Resources Management major is part of the overall educational quality assessment of the school. The related quality evaluation, development and management system, regulations and operation process are carried out under the unified leadership of the school's academic affairs office and the teaching supervision groups at the school and college levels. Among them, certain specific arrangements that are necessary to comply with the ASIIN certification, such as ECTS credit conversion and supplementary materials for diplomas, are specifically applicable to the relevant systems or arrangements for the Industrial Engineering certification major and the Human Resources Management certification major. These have been reported to the relevant departments for record or information.

5.1 Internal Quality Management

5.1.1 Quality management organizational structure

The teaching quality management institution is composed of the principal, the academic affairs office, the colleges, the departments (teaching teams), and the teaching administrators. The school is responsible for leading this organization, while the teaching management department and the teaching units are in charge of specific affairs, and other functional departments provide support. All teaching staff and students participate in the management. The two-level quality monitoring and management structure of "school and college" for the teaching process is shown in Figure 5-1.

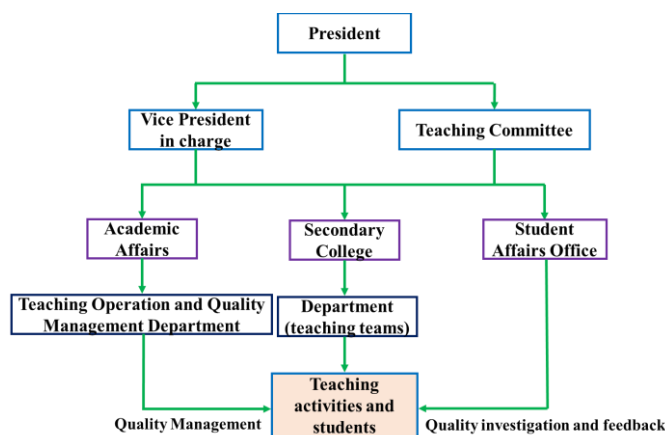


Figure 5-1: Organizational Structure of Teaching Quality Management

The Academic Affairs Office is a functional department responsible for organizing the school's teaching work and implementing teaching management (refer to **Appendix 02.3 Teaching Management Measures**). Under the leadership of the school's Party committee and administration, it fully implements the educational policies of the state and the Party, upholds the position of teaching as the core, updates educational concepts, deepens teaching reforms, comprehensively manages the school's teaching plans, teaching operation management, teaching quality management and evaluation, teaching infrastructure construction, teaching organization management, teaching research, etc., and strives to improve the educational and teaching level and the quality of talent cultivation. The secondary teaching colleges (departments, centers) are teaching units that implement talent cultivation. They are responsible for organizing and managing the teaching of their own departments. They should, in accordance with the policies and regulations of the higher education administrative department and the school, as well as relevant teaching regulations and rules, formulate the teaching management plan of their own units and organize teachers, students and staff to implement it. Teaching colleges (departments, centers) should strictly abide by the regulations and rules of the higher education administrative department and the school, and at the same time establish the teaching sub-committees (refer to **Appendix 02.2 Teaching Committee Charter**) and the teaching supervision group (refer to **Appendix 02.4 Teaching Supervision Work Procedures**), and carry out the work.

One of the important functions of the Academic Affairs Office is to be responsible for the overall operation of teaching, which includes the collection of data and information related to quality assessment. The Academic Affairs Office has various departments such as the Comprehensive Department, the Teaching Operation and Quality Management Department, the Practical Teaching Management Department, the Student Registration and Academic Record Management Department, the Examination Center, and the New Engineering and New Liberal Arts Construction Department. Adhering to the educational philosophy of "quality-oriented education, strengthening talent cultivation, and promoting distinctive development", it maintains the stability of teaching order, improves teaching conditions, ensures teaching quality, and focuses on students' needs. It deepens educational and teaching reforms, strengthens internal construction, and strives to cultivate high-quality applied talents with strong engineering practice and innovation capabilities and a spirit of contemporary craftsmanship.

In coordination with the academic affairs office, the school has specially established a school teaching supervision team and an academic department teaching supervision group, each responsible for the teaching supervision work within their respective areas of responsibility (see **Appendix 02.4 Teaching Supervision Work Procedures**). The school teaching supervision team operates under the leadership of the principal and with the assistance of

the Higher Education Research and Teaching Evaluation Center, and is responsible for supervising, inspecting, guiding and evaluating all aspects of the teaching process throughout the school. Each academic department teaching supervision group is responsible for supervising, inspecting, guiding and evaluating the various aspects of the teaching process within their own department. The academic department teaching supervision groups receive professional guidance from the school teaching supervision team. The Teaching Supervision Office is a permanent institution in our school that is responsible for standardizing teaching management, maintaining teaching order, deepening teaching reforms, and promoting the improvement of teaching quality. It is in charge of inspecting, supervising, evaluating, guiding, and providing feedback on all teaching activities across the school. It promptly grasps the teaching situation and is an important part of the school's quality monitoring system. The Teaching Supervision Office adheres to the educational philosophy of "quality-oriented education, strengthening talent cultivation, and promoting school development through distinctive features", and focuses on student-centeredness, output orientation, and continuous improvement. It is responsible for formulating quality monitoring and evaluation systems and standards, establishing quality assurance systems, conducting educational and teaching supervision, analyzing and evaluating teaching quality, and proposing measures and suggestions for quality improvement.

5.1.2 Teaching quality management mechanism

Hunan Institute of Engineering has formulated a series of quality assessment standards and process monitoring measures, including the Academic Committee Charter of Hunan Institute of Engineering (for details, see **Appendix 02.1**), the Revised Teaching Committee Charter of Hunan Institute of Engineering (for details, see **Appendix 02.2**), the Revised Teaching Management Measures of Hunan Institute of Engineering (for details, see **Appendix 02.3**), the Teaching Assessment Method for Teachers' Courses of Hunan Institute of Engineering (for details, see **Appendix 02.5**), the Revised Teaching Supervision Work Measures of Hunan Institute of Engineering (for details, see **Appendix 02.4 - Teaching Supervision Work Procedures**), the Selection Method for Excellent Teaching Quality Awards of Hunan Institute of Engineering (for details, see **Appendix 02.5**), and the Honorary Reward Measures for Teaching and Research of Hunan Institute of Engineering (for details, see **Appendix 02.5**). These regulations are used to manage and evaluate the teaching process.

Improving teaching quality and enhancing teaching effectiveness are the regular core tasks of the teaching departments (offices, centers) and their respective teaching research groups. To ensure the quality of teaching, the school has established a regular system for monitoring and inspecting the teaching process (including pre-term checks, mid-term checks and final-term checks), providing real-time feedback on teaching quality and

promptly identifying and resolving teaching issues. The inspection and continuous improvement of teaching quality can promote new teaching methods and teaching reform measures (refer to **Appendix 17.6 Evaluation of Talent Training Quality Attainment**), which is conducive to enhancing and strengthening teaching effectiveness. The school and college-level teaching supervision units cooperate to monitor all aspects of the daily teaching activities of the project. Through methods such as classroom observation, classroom listening, and classroom inspection, the teaching operation situation is promptly understood, and the identified problems are tracked and inspected. The inspection results will be informed to the teaching units, and corrective requirements, suggestions or opinions for teaching reform will be proposed. The school conducts regular teaching inspections and quality evaluations every semester. The inspection contents cover classroom teaching, homework guidance, practice (see **Appendix 17.3 Practice (Practical Training) Teaching Management Measures**), experiments (see **Appendix 17.2 Experimental Teaching Management Measures**), course design, graduation design (thesis) (see **Appendix 17.4 Graduation Design (Thesis) Work Management Measures**), examination papers (see **Appendix 17.9**), etc. Potential problems existing in teaching management are discovered and solved. At the same time, in order to strengthen the management of course teaching and improve the quality of course teaching, to promote teachers to continuously enhance their professional qualities and teaching levels, and to fully exert the main channel and main position of classroom teaching in talent cultivation, the school conducts an annual assessment of teachers' course teaching quality (details can be found in **Appendix 22.1 Teaching Evaluation**), that is, evaluating the situations of teachers' pre-class preparation, classroom teaching quality and after-class tutoring. The assessment adopts a combination of student evaluations, peer teacher evaluations and teaching supervision evaluations. The total score is 100 points, among which student evaluation accounts for 30%, peer teacher evaluation accounts for 30%, and teaching supervision evaluation accounts for 40%. The combination of supervision evaluation, student evaluation and peer teacher evaluation is adopted, fully leveraging the role of the school's teaching supervision team and each teaching college's supervision group in the teacher assessment, respecting the evaluations of students and peer teachers on teaching quality, and ensuring the objectivity, comprehensiveness and credibility of the assessment.

5.1.3 Quality management mechanism for degree programs

Every semester, under the unified arrangement of the school, each college and each major will conduct routine teaching inspections. These inspections will evaluate the quality of teachers' classroom teaching, practical sessions, graduation design processes, teaching

order, lesson plans, examination papers, and other teaching basic materials. They will identify and solve potential problems in the teaching management process. Taking the examination paper inspection as an example, the Academic Affairs Office will conduct random checks of the examination papers every semester and evaluate them from three aspects: examination paper scores, examination paper analysis, and improvement measures (see **Appendix 17.9 Sample Analysis of Exam Papers_IE** and **Appendix 17.9 Sample Analysis of Exam Papers_HRM** for details) to promote the standardization of examination papers. Every semester, each college will analyze the distribution of teachers' examination scores (see **Appendix 18.1 Statistics on Grade Distribution**) and students' grades (see **Appendix 06.1 student's grades_IE** and **Appendix 06.1 student's grades_HRM**) and provide suggestions and requirements for teachers to improve teaching quality.

The school's academic affairs office conducts a teaching evaluation for each course every semester to understand the basic performance of teachers in all aspects of the teaching process, including student evaluations, peer evaluations, and supervisor evaluations (i.e., three-party evaluations) for each course (details can be found in **Appendix 22.1 "Teaching Evaluation"**). The evaluation and feedback process is shown in **Figure 5-2**. The three-party evaluation forms will be collected and organized by the school's academic affairs office, submitted to the subordinate colleges, and notified to the relevant course teachers. Course teachers can also query the evaluation results in the teaching management system.

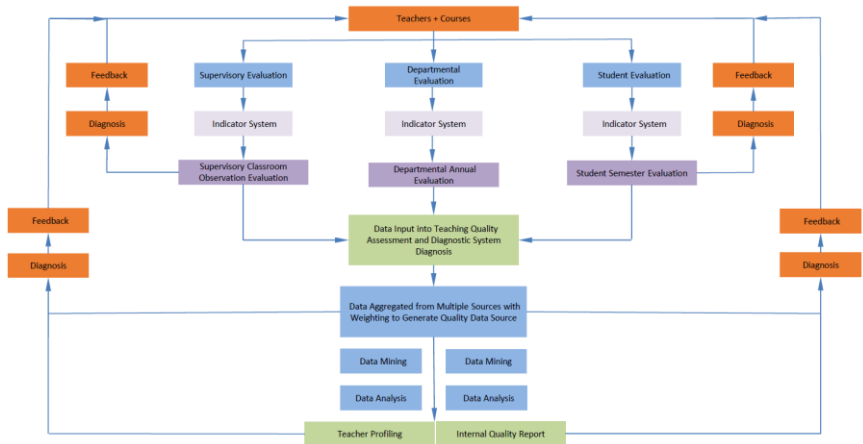


Figure 5-2 Quality Feedback System for Teaching Evaluation

Students' evaluations of teaching quality are an important part of the teaching evaluation system. The evaluation methods include: online teaching evaluation, questionnaire teaching evaluation, and student symposiums; the evaluation contents include: teaching

attitude, content, methods, course guidance and assessment; the evaluation results are applied to the continuous improvement of teachers' teaching and fed back to students, as shown in **Figure 5-3**. Each student submits the teacher's teaching quality evaluation form at the end of each semester. The teaching suggestions listed in the evaluation form will be analyzed and used to improve teaching methods. Student evaluation of teaching is also used to evaluate the teaching effect of teachers and is linked to the teachers' work performance.

The website for students to evaluate teaching online is: <https://jwmis.hnie.edu.cn/jwwweb/home.aspx>. (Note: To view, a student or teacher account is required. The interface link can be found in the left function menu of Figure 3-2 in Chapter 3)

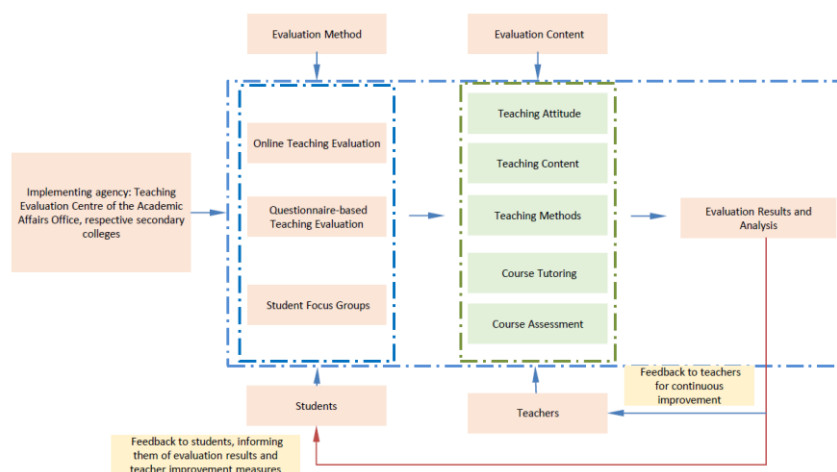


Figure 5-3 Course Evaluation and Feedback System

5.1.4 Professional construction quality management mechanism

The discipline is the basic unit for university operation and the carrier for talent cultivation. The level of discipline construction directly affects the school's educational level and the quality of talent cultivation. Based on the reference of China's engineering education discipline accreditation standards, Hunan Engineering University's professional evaluation indicators system, as well as the requirements of the new round of educational and teaching review and assessment, and the actual needs of our school's discipline construction, we regularly carry out undergraduate discipline evaluation work. The reference evaluation in-

indicator system of the discipline evaluation sets 6 first-level indicators, 16 second-level indicators, and 41 main observation points. Centered around the concept of "student-centered, output-oriented, and continuous improvement" (details can be found in **Appendix 17.6 Evaluation of Talent Training Quality Achievement**), adhering to the principles of "promoting construction through evaluation, promoting improvement through evaluation, promoting management through evaluation, combining evaluation and construction, and focusing on construction", through the method of "self-evaluation of the discipline - expert evaluation - continuous improvement", we establish and improve the quality guarantee mechanism for talent cultivation in the discipline.

The Industrial Engineering major is a first-class undergraduate program in Hunan Province, and the Human Resources Management major is a national first-class undergraduate program. The construction of first-class undergraduate programs should focus on talent cultivation. Based on the school's educational philosophy, development positioning and educational characteristics, combined with social needs, it is necessary to strengthen the construction of professional connotation, highlighting exemplary leadership; scientifically formulate the professional development plan (details can be found in **Appendix 04.1 University Construction and Development Plan**), mainly through inheritance and innovation, cross-disciplinary integration, collaboration and sharing as the main approaches, with improving the quality of talent cultivation as the main line, and professional certification as the handle, to enhance the overall level of professional construction and promote first-class undergraduate education.

5.2 External Quality Assessment

The school collected opinions and feedback from employers through visits and questionnaire surveys (see **Appendix 22.2 "Graduate and Employer Survey & Analysis"**, **Appendix 22.2 "Employer Survey & Analysis_HRM"**, and **Appendix 22.4 "Graduate Survey & Analysis_HRM"** for details). In addition, the school introduced external supervision and participated in the undergraduate teaching evaluation and review evaluation organized by the higher education institutions of the Ministry of Education, as well as the first-class undergraduate course evaluation organized by the Education Department of Hunan Province. This formed a teaching evaluation mechanism involving participation from superior departments, employers, teachers, and students, as well as a combination of internal and external evaluations (see **Appendix 22.1** for details).

The review and evaluation of undergraduate education in ordinary higher education institutions by the Ministry of Education is conducted every five years. This major has passed the evaluation every time. The most recent one was in 2024. The Human Resources

Management major was approved as a first-class undergraduate program in Hunan Province in 2020, and was also approved as a first-class undergraduate program at the national level in 2021. In 2022, the Industrial Engineering major obtained the status of a first-class undergraduate program in Hunan Province. In the same year, only the Industrial Engineering major of our university was approved.

In addition, ASIIN certification is the most authoritative higher education degree certification institution in the field of natural engineering in Germany. It is also an authoritative international degree certification institution and has become an internationally recognized engineering certification body. To facilitate the alignment of talent cultivation with international standards, many universities in China have actively introduced ASIIN certification. The university engineering professional degrees that have undergone ASIIN certification are recognized in countries such as the European Union, the United States, Canada, Australia, New Zealand, and Japan. Graduates from these programs have the qualifications to work as engineers in these countries. If our university passes this ASIIN certification this time, it will serve as an important external quality evaluation mechanism for our teaching.

The ASIIN certification, evaluations from the Ministry of Education, employers, and external experts are defined as external evaluations; while evaluations by teachers, students, and the school itself are classified as internal evaluations. The combination of internal and external teaching quality evaluations has provided feedback and continuously improved the professional teaching quality.

5.3 Employment Data and Analysis

The employment prospects for graduates are promising and the employment rate is good. A tracking system for graduates has been established to conduct a comprehensive analysis of their situation. The analysis results show that graduates have jobs in all provinces of China, and they are confident and approving of the industries they are engaged in. Many employers are satisfied with the graduates (for details, see **Appendix 22.2 Graduate and Employer Survey & Analysis_IE**, **Appendix 22.2 Employer Survey & Analysis_HRM**). In the past five years, nearly 300 graduates have been hired by state-owned, private and foreign manufacturing and service enterprises as technicians (lean improvement, IE engineers, quality engineers, PIE engineers and planning specialists) and managers (workshop assistant managers, management trainees, project managers and customer managers, etc.). At the same time, in the past five years, graduates majoring in Human Resources Management have held human resources-related positions in enterprises and institutions in multiple in-

dustries such as manufacturing, finance, services, consulting, and internet, such as recruitment specialists, training assistants, salary and performance specialists, employee relations specialists and human resources managers, etc.

The employers include CRRC Zhuzhou Vehicles Co., Ltd., China Water Conservancy Eighth Engineering Bureau Co., Ltd., Blue Moon (China) Co., Ltd., Wanli Tire Co., Ltd., Lansheng Technology Co., Ltd., Foxconn Technology Group Co., Ltd., Guangdong Fenghua High-tech Co., Ltd., Shenzhen Changcheng Development Precision Technology Co., Ltd., Shenzhen Jinchang Import and Export Co., Ltd., Auyou Dairy (China) Co., Ltd., Hongli Da Precision Components (Zhongshan) Co., Ltd., Renben Co., Ltd., Zongli Heavy Machinery Co., Ltd., Sany Group Co., Ltd., Hunan Hualing Iron and Steel Group Co., Ltd., China Industrial Bank Hunan Branch, Changsha Bank Co., Ltd., Hunan Yifang Apollo Holdings Co., Ltd., Hunan Shunfeng Express Delivery Co., Ltd., Hunan Jinke Caizhi Management Consulting Co., Ltd. etc.

5.4 Further development and continuous improvement

In order to meet the demands of the job market and professional development, the Mechanical Engineering College and the Business School of Hunan Institute of Technology have been paying close attention to the continuous development of their majors. The college has been constantly exploring and has proposed relevant supporting management systems. It has also established a dedicated tracking information system for graduates, collecting and analyzing feedback information from employed graduates. Every year, it conducts an annual evaluation of the employment quality of graduates (for details, see **Appendix 22.2 Graduate and Employer Survey & Analysis_IE**, and **Appendix 22.4 Graduate Survey & Analysis_HRM**).

In addition, every year during the school anniversary, Hunan Institute of Engineering holds meetings related to graduates, establishing a platform for communication and interaction between the school and the graduates. This helps to continuously improve the teaching plan and enhance the teaching level and quality.

After analyzing and summarizing all the aforementioned evaluations, investigations, and feedback information, further efforts will be made to strengthen the construction of the teaching staff, assist teachers in their career development, revise the talent training plans, provide adequate support and services for students, and continuously enhance the overall educational strength of the school.