# 经济学类 2021 版本科培养方案
# Undergraduate Education Plan for Specialty in Economics (2021)

专业名称　**经济学类**　　　　　　　计划学制　**一 年**
Major　**Economics**　　　　　　　　Duration　**1 Year**

## 最低毕业学分规定
## Graduation Credit Criteria

| 课程分类 Course Classification 课程性质 Course Nature | 公共基础课程 Public Basic Courses | 通识教育课程 Public Courses | 大类课程 Basic Courses in General Discipline | 专业教育课程 Specialized Courses | 个性课程 Personalized Course | 集中性实践教学环节 Specialized Practice Schedule | 课外学分 Study Credit after Class | 总学分 Total Credits |
|---|---|---|---|---|---|---|---|---|
| 必修课 Required Courses | 18 | \ | 26 | \ | \ | \ | \ | 44.0 |
| 选修课 Elective Courses | \ | \ | \ | \ | \ | \ | \ | |

## 一、 教学建议进程表
## Ⅰ Course Schedule

| (一)公共基础必修课程 1 Public Basic Compulsory Courses | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 开课单位 Course College | 课程编号 Course Number | 课程名称 Course Title | 学分 Crs | 总学时 Tot hrs. | 理论 Theory | 实验 Exp. | 上机 Ope-ratio. | 实践 Prac-tice. | 课外 Extra-cur. | 建议修读学期 Suggested Term | 先修课程 Prerequisite Course |
| 马克思主义学院 | 4220001210 | 思想道德与法治 Morality and the rule of law | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 1 | |
| 马克思主义学院 | 4220002180 | 中国近现代史纲要 Outline of Contemporary and Modern Chinese History | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 2 | |
| 外语学院 | 4030001210 | 大学英语1 College English Ⅰ | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 1 | |
| 外语学院 | 4030002210 | 大学英语2 | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 2 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | College English Ⅱ | | | | | | | | |
| 计算机智能学院 | 4120004210 | Python 程序设计基础 B<br>Foundation of Python Programming B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 |
| 计算机智能学院 | 4120008210 | 计算机基础与Python 程序设计综合实验 B<br>Comprehensive Experiments of Foundation of Computer and PYTHON Language Programming B | 1 | 32 | 0 | 32 | 0 | 0 | 0 | 2 |
| 学工部 | 1050001210 | 军事技能训练<br>Military Skills Training | 2 | 136 | 0 | 0 | 0 | 136 | 0 | 1 |
| 学工部 | 1050002210 | 军事理论<br>Military Theory | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 |
| 体育学院 | 4210001170 | 体育 1<br>Physical Education Ⅰ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 1 |
| 体育学院 | 4210002170 | 体育 2<br>Physical Education Ⅱ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 2 |
| 小 计 Subtotal | | | 18.0 | 476 | 276 | 32 | 0 | 136 | 32 | | |

(二)通识教育选修课程
2 General Education Elective Courses

| | | |
|---|---|---|
| 核心选修<br>Core elective courses | 文明与传统 Civilization and Tradition Courses<br>社会与发展类 Society and Development Courses<br>艺术与人文类 Art and Humanities Courses<br>自然与方法类 Nature and methods Courses | 通识课程应修满至少 9 学分。核心选修不少于 2 学分；自主选修课程中，至少在艺术与审美、创新与创业两个领域各选修 1 门课程。 Minimum subtotal credits: 9.Core elective courses ≥2 credits.Self-selected courses， at least 1 course in art and aesthetics and 1 course in innovation and entrepreneurship. |
| 自主选修<br>选修<br>Core elective courses | 数学与自然科学, 哲学与心理学, 法学与社会科学, 经济与管理, 历史与文化, 语言与文学, 艺术与审美, 创新与创业<br>Mathematics and Natural Sciences,Philosophy and Psychology,Science and Social Sciences,Economics and Management,History and | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Culture,Language and Literature,Art and Aesthetics,Innovation and Entrepreneurship | | | | | | | | | |

**(三)大类必修课程**
**3 Basic Discipline Required Courses**

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010001210 | 经济类专业导论 Introduction to Economics | 1.5 | 24 | 24 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010100110 | 政治经济学 Political Economics | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010003210 | 微观经济学 Microeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 1 | |
| 理学院 | 4050003210 | 高等数学 B 上 Advanced Mathematics Ⅰ | 4.5 | 72 | 72 | 0 | 0 | 0 | 0 | 1 | |
| 理学院 | 4050004210 | 高等数学 B 下 Advanced Mathematics Ⅱ | 5.5 | 88 | 88 | 0 | 0 | 0 | 0 | 2 | 高等数学 B 上, |
| 理学院 | 4050229110 | 线性代数 Linear Algebra | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | 高等数学 B 上, |
| 经济学院 | 4010007210 | 宏观经济学 Macroeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 2 | 微观经济学, |
| 管理学院 | 4170002210 | 管理学原理 A Principles of Management | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | |
| 材料学院 | 4070121210 | 神奇的材料世界 The World of Miraculous Materials | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 2 | |
| 小 计 Subtotal | | | 26.0 | 416 | 416 | 0 | 0 | 0 | 0 | | |

**(四)专业必修课程**
**4 Specialized Required Courses**

**(五)专业选修课程**
**5 Specialized Elective Courses**

**(六)个性课程**
**6 Personalized Electice Courses**

**(七)专业教育集中性实践教育环节**
**7 Specialized Practice Schedule**

# 经济学 2021 版本科培养方案
# Undergraduate Education Plan for Specialty in Economics (2021)

| | | | | | |
|---|---|---|---|---|---|
| 专业名称<br>Major | **经济学**<br>**Economics** | 主干学科<br>Major Disciplines | **经济学**<br>Economics | | |
| 计划学制<br>Duration | **四 年**<br>**4 Years** | 授予学位<br>Degree Granted | **经济学学士**<br>Bachelor of Economics | | |
| 所属大类<br>Disciplinary | **经济学类**<br>**Economics** | 大类培养年限<br>Duration | **1 年**<br>**1 year** | | |

## 最低毕业学分规定
## Graduation Credit Criteria

| 课程分类<br>*Course Classification*<br>课程性质<br>*Course Nature* | 公共基础课程<br>Public Basic Courses | 通识教育课程<br>Public Courses | 大类课程<br>Basic Courses in General Discipline | 专业教育课程<br>Specialized Courses | 个性课程<br>Personalized Course | 集中性实践教学环节<br>Specialized Practice Schedule | 课外学分<br>Study Credit after Class | 总学分<br>Total Credits |
|---|---|---|---|---|---|---|---|---|
| 必修课<br>Required Courses | 31 | \ | 26 | 46 | \ | 20.5 | 10 | 180.0 |
| 选修课<br>Elective Courses | \ | 9 | \ | 21.5 | 6 | \ | 10 | |

## 一、 培养目标与毕业要求

## Ⅰ Educational Objectives &Requirement

### （一） 培养目标

本专业面向国家新经济发展需求，适应新一代科技革命和产业变革需要，培养系统掌握经济学 理论、数字经济相关分析技术和研究方法，能够在国家各级管理部门、工商企业、金融机构、科研单位及数字产业部门从事经济大数据分析、产业数字化建设等工作，适应能力强、实干精神强、创新意识强，德智体美劳全面发展，具有卓越追求、卓越能力的社会主义建设者和接班人。

本专业期待毕业生五年后能达成下列目标：

（1）身心健康，具有崇高的家国情怀、坚定的社会主义核心价值观和中国特色社会主义理想信念；具备良好的敬业精神、职业道德和社会责任感。

（2）具有综合运用经济学理论知识，进行产业数字化规划与建设能力；

（3）具有运用各类数据分析工具，管理运营经济管理数据，服务产业数字化的分析与决策能力；

（4）具有良好的口头和书面表达和交流沟通能力、良好的团队意识和合作精神，具备可持续发 展理念和国际化视野，有意愿创新或创业，并有能力服务社会。

（5）具有自主学习和终身学习的意识，有不断学习和适应发展的能力。

**I  Education Objectives**

Facing the new economic development needs of our nation, this major meets the needs of the new generation of scientific and technological revolution and industrial change, cultivates students with a systematic grasp of economic theories, digital economy-related analytical technologies and research methods, which can engage in economic big data analysis and industrial digitalization construction in administrative departments, industrial and commercial enterprises, financial institutions, scientific research units and digital industry departments, with strong adaptability, hard work spirit, strong sense of innovation, all-round development of morality, intelligence, beauty and labor, and be the socialist builders and successors with excellent pursuit and ability.

Students of this program are expected to achieve the following objectives 5 years after graduation:

（1）Sound in body and mind, with lofty national feelings, firm socialist core values and belief of socialism with Chinese characteristics. Have good dedication, professional ethics and social responsibility. Have the ability to plan and build industry digitalization with the knowledge of economics theory;

（2）Have the ability to use all kinds of data analysis tools to manage and operation economic management data analysis and decision-making and serve the digitization of the industry;

（3）Have the ability to expand and enhance their knowledge and ability through lifelong learning;

（4）Have good oral and written expression skills, strong team consciousness and cooperation spirit, with the concept of sustainable development and international vision, willingness to innovation or start a business, and ability to serve the society;

（5）Have the awareness of autonomous learning and lifelong learning, and the ability to continuously learn and adapt to development.


二、 毕业要求

(1) **工程知识**：能够将数学、计算机、管理科学和经济学专业知识用于解决复杂的经济问题。

(2) **问题分析**：能够应用数学、计算机和管理科学和经济学的基本原理，识别、表达、并通过文献研究分 析复杂经济问题，以获得有效结论。

(3) **解决方案**：能够提出针对复杂经济问题的解决方案，提出满足特定需求的经济规划、政策建议，并能 够在规划中体现创新意识，考虑社会、健康、安全、法律、文化以及环境等因素。

(4) **研究**：能够基于经济学理论并采用科学量化方法对复杂经济问题进行研究，包括理论分析、实证 分析、并通过综合论证得到合理有效的结论。

(5) **工具使用**：能够针对复杂经济问题，开发、选择与使用恰当的技术、数据资源、现代计量工具和数据 分析技术工具，包括对复杂经济问题的预测与模拟，并能够理解其局限性。

(6) **工程与社会**：能够基于经济相关背景知识进行合理分析，评价经济实践和复杂经济问题解决方案对社会、 健康、安全、法律以及文化的影响，并理解应承担的责任。

(7) **环境和可持续发展**：能够理解和评价针对复杂经济问题的社会实践对环境、社会可持续发展的影响。

(8) **职业规范**：具有人文社会科学素养、社会责任感，能够在经济社会实践中理解并遵守职业道德和规范， 履行责任。

(9) **个人和团队**：能够在多学科背景下的团队中承担个体、团队成员以及负责人的角色。

(10) **沟通**：能够就复杂经济问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和规划文 稿、陈述发言、清晰表达或回应指令，并具备一定的国际视野，能够在跨文化背景下进行 沟通和交流。

(11) **项目管理**：理解并掌握管理学原理与经济决策方法，并能在多学科环境中应用。

(12) **终身学习**：具有自主学习和终身学习的意识，有不断学习和适应发展的能力。


II Graduation Requirement

(1) **Engineering knowledge:** Students are able to use the professional knowledge of mathematics, computer, management science and economics to solve complex economic problems.

(2) **Problem analysis:** Students can use the basic principles of mathematics, computer, management science and economics, to identify, express and analyze complex economic problems through literature research to obtain effective conclusions.

(3) **Design/development solution:** Students can put forward solutions for complex economic problems, propose economic planning and policy recommendations to meet specific needs, and can reflect the innovation consciousness in the planning, considering social, health, safety, law, culture and environmental factors.

(4) **Research:** Students can study complex economic problems based on economic theory and scientific quantitative methods, including theoretical analysis, empirical analysis, and get reasonable and effective conclusions through comprehensive demonstration;

(5) **Usage of modern tools:** Students are able to develop, select and use appropriate technologies, data resources, modern measurement tools and data analysis technology tools for complex economic problems, including forecasting and simulating complex economic problems, and to understand their limitations;

(6) **Engineering and society:** Students can make reasonable analysis based on economic-related background knowledge, evaluate the impact of economic practice and complex economic problem solutions on society, health, safety, law and culture, and understand the responsibilities they should bear;

(7) **Environment and sustainable development:** Students can understand and evaluate the impact of social practice on complex economic issues on environmental and social sustainable development;

(8) **Professional standards:** Students should have humanistic and social science literacy and social responsibility. They can understand and abide by professional ethics and norms in economic and social practice and fulfill their responsibilities.

(9) **Individual and team:** Students can undertake the role of individuals, team members and leaders in the team under the background of multidisciplinary.

(10) **Communication:** Students can effectively communicate with peers and the public on complex economic issues, including writing reports and planning documents, making statements, clearly expressing or responding to instructions, and has a certain international perspective, and can communicate in a cross-cultural context.

(11) **Project management:** Students can understand and master the principles of management and economic decision-making methods, and be able to apply them in a multi-disciplinary environment.

(12) **Life-long learning:** Students should have the awareness of autonomous learning and lifelong learning, and the ability to continuously learn and adapt to development.

## 表 2 培养目标的矩阵关系毕业要求支撑

| 毕业要求 | 培养目标 1 | 培养目标 2 | 培养目标 3 | 培养目标 4 | 培养目标 5 |
|---|---|---|---|---|---|
| 毕业要求 1 | √ | √ | √ |  | √ |
| 毕业要求 2 |  | √ | √ | √ | √ |
| 毕业要求 3 |  | √ | √ | √ | √ |
| 毕业要求 4 | √ | √ | √ | √ |  |
| 毕业要求 5 |  | √ | √ | √ | √ |
| 毕业要求 6 | √ | √ |  | √ | √ |
| 毕业要求 7 | √ |  | √ | √ | √ |
| 毕业要求 8 | √ | √ | √ | √ |  |
| 毕业要求 9 | √ |  |  | √ | √ |
| 毕业要求 10 | √ |  |  | √ | √ |
| 毕业要求 11 |  | √ | √ | √ | √ |
| 毕业要求 12 | √ |  | √ | √ | √ |

毕业要求的达成需以课程（教学环节）的教学活动为支撑。本专业为 合理设置课程体系、落实对毕业要求的支撑课程，对各项毕业要求进行了解。每项毕业要求（一级指标）被分解为若干层层递进的指标点（二级指标） ，前一指标点的达成是下一指标点达成的基

础，而下一指标点的达成是前一指标点的升华，所有指标点一起，支撑了该毕业要求的达成。根据上述分解方法， 本专业各项毕业要求的指标点分解如下表所示。

## 表 3 毕业要求指标点的分解

| 毕业要求 | 指标点 |
|---|---|
| 毕业要求 1.工程知识:能够将数学、计算机、管理科学和经济学专业知识用于解决复杂的经济问题。 | 1.1 问题表述 |
| | 1.2 建模求解 |
| | 1.3 推演分析 |
| | 1.4 比较综合 |
| 毕业要求 2.问题分析:能够应用数学、计算机和管理科学和经济学的基本原理，识别、表达、并通过文献研究分 析复杂经济问题，以获得有效结论。 | 2.1 识别问题 |
| | 2.2 表述问题 |
| | 2.3 文献研究 |
| | 2.4 获得结论 |
| 毕业要求 3.解决方案:能够提出针对复杂经济问题的解决方案，提出满足特定需求的经济规划、政策建议，并能 够在规划中体现创新意识，考虑社会、健康、安全、法律、文化以及环境等因素。 | 3.1 了解 |
| | 3.2 设计 |
| | 3.3 创新 |
| | 3.4 综合 |
| 毕业要求 4.研究:能够基于经济学理论并采用科学量化方法对复杂经济问题进行研究，包括理论分析、实证 分析、并通过综合论证得到合理有效的结论。 | 4.1 调研分析 |
| | 4.2 设计方案 |
| | 4.3 采集数据 |
| | 4.4 形成结论 |
| 毕业要求 5.工具使用:能够针对复杂经济问题，开发、选择与使用恰当的技术、数据资源、现代计量工具和数据 分析技术工具，包括对复杂经济问题的预测与模拟，并能够理解其局限性。 | 5.1 了解工具 |
| | 5.2 选择工具 |
| | 5.3 开发工具 |
| 毕业要求 6.工程与社会:能够基于经济相关背景知识进行合理分析，评价经济实践和复杂经济问题解决方案对社会、 健康、 | 6.1 了解影响 |
| | 6.2 理解责任 |

| | |
|---|---|
| 安全、法律以及文化的影响，并理解应承担的责任。 | |
| 毕业要求 7. 环境和可持续发展:能够理解和评价针对复杂经济问题的社会实践对环境、社会可持续发展的影响。 | 7.1 知晓理念 |
| | 7.2 评价隐患 |
| 毕业要求 8. 职业规范:具有人文社会科学素养、社会责任感，能够在经济社会实践中理解并遵守职业道德和规范， 履行责任。 | 8.1 了解国情 |
| | 8.2 遵守规范 |
| | 8.3 履行责任 |
| 毕业要求 9. 个人和团队:能够在多学科背景下的团队中承担个体、团队成员以及负责人的角色。 | 9.1 合作共事 |
| | 9.2 独立工作 |
| | 9.3 组织协调 |
| 毕业要求 10.沟通:能够就复杂经济问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和规划文 稿、陈述发言、清晰表达或回应指令，并具备一定的国际视野，能够在跨文化背景下进行 沟通和交流。 | 10.1 表达观点 |
| | 10.2 了解前沿 |
| | 10.3 跨文化交流 |
| 毕业要求 11.项目管理:理解并掌握管理学原理与经济决策方法，并能在多学科环境中应用。 | 11.1 掌握方法 |
| | 11.2 理解问题 |
| | 11.3 决策运用 |
| 毕业要求 12.终身学习:具有自主学习和终身学习的意识，有不断学习和适应发展的能力。 | 12.1 认识必要性 |
| | 12.2 具备能力 |

## 二、专业核心课程与专业特色课程
## II  Core Course and Characteristic Courses

### （一） 专业核心课程

政治经济学,微观经济学,宏观经济学,计量经济学,经济思想史,财政学 B,产业经济学 A

Political Economics,Microeconomics,Macroeconomics,Econometrics,History of Economic Thoughts,Public Finance,Industrial Economics

## （二） 专业特色课程

数字经济概论,人工智能导论,商务数据分析（Python）,网络经济学,电子商务数据库技术,区块链,平台经济学,文本挖掘与分析,数据化运营,数据可视化,数字金融

Introduction to digital economy, Introduction of Artificial,Business Data Analysis (Python),Economics of Network ,E-Business Database Technology,Block Chain,Platform Economics,Text analysis and mining,Digitalized Operation,Data Visualization,Digital Finance

**附：毕业要求实现矩阵**

| 专业核心课程 | 专业特色课程 | 课程名称 | 1 | | | | 2 | | | | 3 | | | | 4 | | | | 5 | | | 6 | | 7 | 8 | | | 9 | | | 10 | | | 11 | | | 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 1 | 2 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 |
| | | 思想道德与法治 | | | | | | | | | | | | | | | | | | | | √ | | | | √ | | | | | | | | | | | | √ |
| | | 中国近现代史纲要 | | | | | | | | | | | | | | | | | | | | √ | | | | √ | | | | | | | | | | | | √ |
| | | 马克思主义基本原理 | | | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | √ | | | | √ |
| | | 毛泽东思想和中国特色社会主义理论体系概论 | | | | | | | | | | | | | | | | | | | | √ | √ | | | | | | | | | | | √ | | | √ | √ |
| | | 大学英语1 | | | | | | | | | | | | | | | | | √ | | | | | | | | | √ | | √ | | | √ | | | | | |
| | | 大学英语2 | | | | | | | | | | | | | | | | | √ | | | | | | | | | √ | | √ | | | √ | | | | | |
| | | 大学英语3 | | | | | | | | | | | | | | | | | √ | | | | | | | | | √ | | √ | | | √ | | | | | |
| | | 大学英语4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Python程序设计基础B | | | | | | √ | | | | √ | | | | | | | | √ | √ | | | | | | | | | | | | | | | | | |
| | | 计算机基础与Python程序设计综合实验B | | | | | | √ | | | | | | | | | | | | √ | √ | | | | | | | | | | | | | | | | | |
| | | 军事技能训练 | | | | | | | | | | | | | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | |
| | | 军事理论 | | | | | | | | | | | | | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | |
| | | 体育1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| A | B | 课程 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | 体育 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 体育 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 体育 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 高等数学 B 上 | √ |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 高等数学 B 下 | √ |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 线性代数 | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 经济类专业导论 |  |  | √ |  |  |  |  |  | √ |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| √ |  | 政治经济学 |  | √ | √ |  | √ |  |  |  |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| √ |  | 微观经济学 |  | √ |  | √ | √ | √ |  |  | √ |  |  | √ |  |  | √ |  | √ |  |  |  |  |  |  |  |  |  |  | √ |  |  |
| √ |  | 宏观经济学 |  | √ | √ |  | √ |  |  |  |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 管理学原理 A | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |  |  |  |  |  |  |  |  |  |  | √ | √ | √ |  |  |  |  |  |  |
|  |  | 神奇的材料世界 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 概率论与数理统计 B | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 中级微观经济学 B |  |  | √ |  |  |  |  | √ |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |
|  |  | 中级宏观经济学 B |  | √ |  |  |  |  |  | √ |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |
|  |  | 货币金融学 | √ |  |  |  |  |  | √ |  | √ |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | √ | 数字经济概论 |  | √ | √ |  | √ |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 统计学 B | √ |  |  |  |  |  |  |  | √ | √ |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| √ |  | 计量经济学 | √ |  |  |  |  |  |  |  |  | √ | √ | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 国际贸易 B |  | √ | √ |  |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |
|  |  | 会计学原理 | √ |  |  | √ |  |  |  |  |  |  |  |  |  |  | √ |  |  | √ |  |  | √ | √ |  |  |  |  |  |  |  |  |
|  | √ | 人工智能导论 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | √ | 商务数据分析（Python） |  |  |  |  |  |  | √ |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 数字经济创业导论 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| √ |  | 经济思想史 |  |  |  | √ |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  |  |  |  | √ |
| √ |  | 财政学 B |  |  | √ | √ | √ | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 当代中国经济专题 |  | √ |  |  |  | √ |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |
|  |  | 经济史 |  |  | √ | √ | √ |  | √ |  | √ |  |  | √ |  | √ | √ | √ |  | √ |  | √ |  | √ |  | √ |  | √ |  |  | √ |
| √ |  | 产业经济学 A |  |  | √ |  |  |  | √ |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  |  | √ |
|  | √ | 网络经济学 |  | √ | √ | √ |  |  |  |  |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 政治经济学（II） |  | √ | √ |  | √ |  |  |  |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 《资本论》选读 |  | √ | √ |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |

| | 课程 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 经济计量软件与应用 | | | √ | | | | | | | | | √ | | √ | √ | | | | | | | | | | | | | | | | |
| | 制度经济学 | √ | √ | √ | | | | | | | | | | | | | √ | | | | | | | | | | | | | | | |
| | 信息经济学B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | 博弈论基础B | | | | | | | | | | | | √ | √ | √ | | | | | | | | | | | | | | | | |
| | 技术创新经济学C | √ | √ | √ | | | | | | | | | | | | | √ | | | | | | | | | | | | | | | |
| | 城市与区域经济学C | | | | | | √ | | | | √ | | | | | | | | √ | | | | | | | | | √ | | | | |
| | 经济优化理论B | | | | √ | | | | | | | √ | √ | √ | √ | | | | | | | | | | | | | | | | | |
| | 企业经济学B | | | | √ | | √ | | | | | √ | | | √ | | | | | | | | | | | | | | | | | |
| √ | 发展经济学B | | | | √ | | | | | | √ | | | | | | | | | | | | | | | | | | | | | √ |
| √ | 国际金融学 | | | | | | | | | | | | | | | | | | | | | | | | | | | | √ | √ | | |
| | 经济学方法论B | | | | √ | | | | √ | | | | √ | √ | | | | | | | | | | | | | | | | | | |
| √ | 电子商务数据库技术 | | | | √ | | | | | | | | | | | | | √ | | | | | | | | | | | | | | |
| √ | 区块链 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | 平台经济学 | √ | √ | | √ | | | | | | √ | | | | | | | | | | | | | | | | | | | | | |
| √ | 文本挖掘与分析 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 现代信息技术与商务应用 | | | | √ | | | | | | | √ | | | | √ | √ | | | | | | | | | | | | | | | |
| √ | 数据化运营 | | | | √ | | | | | | | √ | | | | √ | √ | | | | | | | | | | | | | | | |
| √ | 数据可视化 | | | | √ | | | | | | | √ | | | | √ | √ | | | | | | | | | | | | | | | |
| | 数字政府与数字治理 | | | | √ | | | | | √ | | | | | | | | √ | √ | | | | | | | | | | | | | |
| √ | 数字金融 | | | | √ | | | | | √ | | | | | | | | √ | √ | | | | | | | | | | | | | |
| | 智能计算与深度学习 | | | | √ | | √ | | | | | | | | | | | | | | | | | | | | | | | | √ | √ |
| | 电子商务原理B | | √ | | √ | | | | | | | | | | | | | | | | | | | | | | √ | | | | | |
| √ | 证券投资学B | | | | | | | | √ | | √ | | | | √ | | | | | | | | | | | | | | | | | |
| | 财务管理B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 商务礼仪与谈判 | | | | | | | | | | | | | | | | | | | | | √ | | √ | √ | | | √ | | | | |
| | 经济法B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 创业企业运营实训C | √ | √ | | | | | | | | | √ | | | | √ | | | | | √ | | | | | | | | √ | | | |
| | 经济实验与模拟 | | | | | | | | | √ | | | | | | √ | | | | | √ | | | | | √ | √ | | | | | |

| | | 社会调研与实践 | | | | | | | | √ | | | | | | √ | | | √ | | | √ | |
| | | 毕业实习 | | | √ | | | | √ | | | | | | | | | | | | | √ | | √ | |
| | | 毕业论文 | | | √ | | | √ | | | √ | | | | | | | | | | | | | | | |

## 三、 教学建议进程表
### III **Course Schedule**

(一)公共基础必修课程
1 Public Basic Compulsory Courses

| 开课单位<br>Course College | 课程编号<br>Course Number | 课程名称<br>Course Title | 学分<br>Crs | 学时分配<br>Including | | | | | | 建议修读学期<br>Suggested Term | 先修课程<br>Prerequisite Course |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | | | 总学时<br>Tot hrs. | 理论<br>Theory | 实验<br>Exp. | 上机<br>Ope-ratio. | 实践<br>Prac-tice. | 课外<br>Extra-cur. | | |
| 马克思主义学院 | 4220001210 | 思想道德与法治<br>Morality and the rule of law | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 1 | |
| 马克思主义学院 | 4220002180 | 中国近现代史纲要<br>Outline of Contemporary and Modern Chinese History | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 2 | |
| 马克思主义学院 | 4220005180 | 马克思主义基本原理<br>Marxism Philosophy | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 4 | |
| 马克思主义学院 | 4220003180 | 毛泽东思想和中国特色社会主义理论体系概论<br>Introduction to Mao Zedong Thought and Socialism with Chinese Characteristics | 4.5 | 66 | 66 | 0 | 0 | 0 | 0 | 3 | |
| 外语学院 | 4030001210 | 大学英语1<br>College English I | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 1 | |
| 外语学院 | 4030002210 | 大学英语2<br>College English II | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 2 | 大学英语1, |
| 外语学院 | 4030003210 | 大学英语3<br>College English III | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 3 | 大学英语2, |
| 外语学院 | 4030004210 | 大学英语4 | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 4 | 大学英语3, |

| 开课学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 开课学期 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | College English IV | | | | | | | | |
| 计算机智能学院 | 4120004210 | Python 程序设计基础 B<br>Foundation of Python Programming B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 |
| 计算机智能学院 | 4120008210 | 计算机基础与Python 程序设计综合实验 B<br>Comprehensive Experiments of Foundation of Computer and PYTHON Language Programming B | 1 | 32 | 0 | 32 | 0 | 0 | 0 | 2 |
| 学工部 | 1050001210 | 军事技能训练<br>Military Skills Training | 2 | 136 | 0 | 0 | 0 | 136 | 0 | 1 |
| 学工部 | 1050002210 | 军事理论<br>Military Theory | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 |
| 体育学院 | 4210001170 | 体育 1<br>Physical Education Ⅰ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 1 |
| 体育学院 | 4210002170 | 体育 2<br>Physical Education Ⅱ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 2 |
| 体育学院 | 4210003170 | 体育 3<br>Physical Education Ⅲ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 3 |
| 体育学院 | 4210004170 | 体育 4<br>Physical Education Ⅳ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 4 |
| 小 计 Subtotal | | | 31.0 | 744 | 512 | 32 | 0 | 136 | 64 | |

(二)通识教育选修课程
2 General Education Elective Courses

| 核心选修<br>Core elective courses | 文明与传统 Civilization and Tradition Courses | 通识课程应修满至少 9 学分。核心选修不少于 2 学分；自主选修课程中，至少在艺术与审美、创新与创业两个领域各选修 1 门课程。 Minimum subtotal credits: 9. Core elective courses ≥2 credits. Self-selected courses, at least 1 course in art and aesthetics and 1 course in innovation and entrepreneurship. |
|---|---|---|
| | 社会与发展类 Society and Development Courses | |
| | 艺术与人文类 Art and Humanities Courses | |
| | 自然与方法类 Nature and methods Courses | |
| 自主选修选修<br>Core elective courses | 数学与自然科学, 哲学与心理学, 法学与社会科学, 经济与管理, 历史与文化, 语言与文学, 艺术与审美, 创新与创业 Mathematics and Natural Sciences, Philosophy and | |

| | | Psychology,Science and Social Sciences,Economics and Management,History and Culture,Language and Literature,Art and Aesthetics,Innovation and Entrepreneurship | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|

(三)大类必修课程
3 Basic Discipline Required Courses

| 理学院 | 4050003210 | 高等数学 B 上 | 4.5 | 72 | 72 | 0 | 0 | 0 | 0 | 1 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Advanced Mathematics Ⅰ | | | | | | | | | |
| 理学院 | 4050004210 | 高等数学 B 下 | 5.5 | 88 | 88 | 0 | 0 | 0 | 0 | 2 | 高等数学 B 上, |
| | | Advanced Mathematics Ⅱ | | | | | | | | | |
| 理学院 | 4050229110 | 线性代数 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | 高等数学 B 上, |
| | | Linear Algebra | | | | | | | | | |
| 经济学院 | 4010001210 | 经济类专业导论 | 1.5 | 24 | 24 | 0 | 0 | 0 | 0 | 1 | |
| | | Introduction to Economics | | | | | | | | | |
| 经济学院 | 4010100110 | 政治经济学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 1 | |
| | | Political Economics | | | | | | | | | |
| 经济学院 | 4010003210 | 微观经济学 | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 1 | |
| | | Microeconomics | | | | | | | | | |
| 经济学院 | 4010007210 | 宏观经济学 | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 2 | 微观经济学, |
| | | Macroeconomics | | | | | | | | | |
| 管理学院 | 4170002210 | 管理学原理 A | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | |
| | | Principles of Management | | | | | | | | | |
| 材料学院 | 4070121210 | 神奇的材料世界 | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 2 | |
| | | The World of Miraculous Materials | | | | | | | | | |
| 小 计 Subtotal | | | 26.0 | 416 | 416 | 0 | 0 | 0 | 0 | | |

(四)专业必修课程
4 Specialized Required Courses

| 理学院 | 4050058110 | 概率论与数理统计 B | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | 高等数学 B 上,高等数学 B 下, |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Probability and Mathematical Statistics | | | | | | | | | |
| 经济学院 | 4010105110 | 中级微观经济学 B | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | 微观经济学, |
| | | Intermediate Microeconomics | | | | | | | | | |

| 经济学院 | 4010104110 | 中级宏观经济学 B<br>Intermediate Macroeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | 宏观经济学,中级微观经济学 B, |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 经济学院 | 4010008210 | 货币金融学<br>Money and Finance | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 3 | |
| 经济学院 | 4010009210 | 数字经济概论<br>Introduction to digital economy | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 3 | |
| 经济学院 | 4010335170 | 统计学 B<br>Statistics | 3 | 48 | 42 | 6 | 0 | 0 | 0 | 3 | 高等数学 B 上,高等数学 B 下, |
| 经济学院 | 4010056110 | 计量经济学<br>Econometrics | 3.5 | 56 | 48 | 8 | 0 | 0 | 0 | 4 | 概率论与数理统计 B, |
| 经济学院 | 4010382170 | 国际贸易 B<br>International Trade | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 4 | |
| 管理学院 | 4170006210 | 会计学原理<br>Accounting Principle | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 4 | |
| 计算机智能学院 | 4120440190 | 人工智能导论<br>Introduction of Artificial | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 4 | |
| 经济学院 | 4010011210 | 商务数据分析（Python）<br>Business Data Analysis (Python) | 3 | 48 | 32 | 16 | 0 | 0 | 0 | 5 | |
| 创业学院 | 4270004210 | 数字经济创业导论<br>Introduction to digital economy Entrepreneurship | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010012210 | 经济思想史<br>History of Economic Thoughts | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010005110 | 财政学 B<br>Public Finance | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010334170 | 当代中国经济专题<br>China Economy | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010014210 | 经济史<br>Economic History | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010006110 | 产业经济学 A | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 6 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Industrial Economics | | | | | | | | |
| 经济学院 | 4010015210 | 网络经济学<br>Economics of Network | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010032210 | 政治经济学（II）<br>Political Economics II | 1.5 | 24 | 24 | 0 | 0 | 0 | 0 | 7 | |
| 经济学院 | 4010333170 | 《资本论》选读<br>Selected Readings from Captialism | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 7 | |
| 小 计 Subtotal | | | 46.0 | 736 | 706 | 30 | 0 | 0 | 0 | | |
| (五)专业选修课程<br>5 Specialized Elective Courses | | | | | | | | | | | |
| 经济模块<br>Economics module | | | | | | | | | | | |
| 经济学院 | 4010041210 | 经济计量软件与应用<br>Application of Econometrics Software | 2 | 32 | 24 | 8 | 0 | 0 | 0 | 4 | |
| 经济学院 | 4010101110 | 制度经济学<br>Institutional Economics | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 管理学院 | 4170155110 | 信息经济学B<br>Information Economics | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010342170 | 博弈论基础B<br>Foundation of Game Theory | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010348170 | 技术创新经济学C<br>Economics of Technology Innovation | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010344170 | 城市与区域经济学C<br>Urban and Regional Economics | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010346170 | 经济优化理论B<br>Optimal Theory in Economics | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010175130 | 企业经济学B<br>Enterprise Economics | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010345170 | 发展经济学B<br>Development Economics | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |

| 经济学院 | 4010044210 | 国际金融学<br>International Finance | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 7 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010352170 | 经济学方法论B<br>Economic Methodology | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 7 | |
| 小 计 Subtotal | | | 21.5 | 344 | | 8 | 0 | 0 | 0 | | |
| 数字模块<br>Digital module | | | | | | | | | | | |
| 经济学院 | 4010017110 | 电子商务数据库技术<br>E-Business Database Technology | 3 | 48 | 40 | 8 | 0 | 0 | 0 | 4 | |
| 计算机智能学院 | 4120052190 | 区块链<br>Block Chain | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010046210 | 平台经济学<br>Platform Economics | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 安全应急学院 | 4290465190 | 文本挖掘与分析<br>Text analysis and mining | 2 | 32 | 24 | 0 | 8 | 0 | 0 | 6 | |
| 经济学院 | 4010048210 | 现代信息技术与商务应用<br>Modern Information Technologies and Applications in Business | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010049210 | 数据化运营<br>Digitalized Operation | 2.5 | 40 | 24 | 16 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010050210 | 数据可视化<br>Data Visualization | 2.5 | 40 | 32 | 8 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010051210 | 数字政府与数字治理<br>Digital Government and Digital Governance | 2.5 | 40 | 34 | 6 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010053210 | 数字金融<br>Digital Finance | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| 管理学院 | 4170056210 | 智能计算与深度学习 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |

| 开课学院 | 课程编号 | 课程名称 | 学分 | 学时 | | | | | | 学期 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Intelligent Computing and Deep Learning | | | | | | | | |
| 小 计 Subtotal | | | 23.0 | 368 | | 38 | 8 | 0 | 0 | |

要求至少选修 21.5 学分，其中经济模块至少选修 9 学分，数字模块至少选修 9 学分。
Minimum subtotal credits:21.5，with at least 9 credits in the economics module and 9 credits in the digital module

**(六)个性课程**
**6 Personalized Electice Courses**

| 开课学院 | 课程编号 | 课程名称 | 学分 | 学时 | | | | | | 学期 |
|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010090210 | 电子商务原理B<br>E-commerce Practice | 2 | 32 | 26 | 6 | 0 | 0 | 0 | 6 |
| 经济学院 | 4010358170 | 证券投资学B<br>Securities Investment | 2 | 32 | 26 | 6 | 0 | 0 | 0 | 6 |
| 管理学院 | 4170014110 | 财务管理B<br>Financial Management | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 |
| 经济学院 | 4010353170 | 商务礼仪与谈判<br>Business Etiquette and Negotiation | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 |
| 法学社会学院 | 4020074110 | 经济法B<br>Economic Law | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 |
| 小 计 Subtotal | | | 10.0 | 160 | 148 | 12 | 0 | 0 | 0 | |

学生从以上个性课程和学校发布的其它个性课程目录中选课，要求至少选修 6 学分。
Sudents can select courses from above and the other personalized courses in catalog, and are required to obtain at least 6 credits.

**(七)专业教育集中性实践教育环节**
**7 Specialized Practice Schedule**

| 开课学院 | 课程编号 | 课程名称 | 学分 | 学时 | | | | | | 学期 |
|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010302170 | 创业企业运营实训C<br>Training for Start-up Entreperneurship Operation | 1 | 16 | 0 | 0 | 0 | 16 | 0 | 4 |
| 经济学院 | 4010092210 | 经济实验与模拟<br>Economics Experiment and Simulation | 4 | 64 | 0 | 0 | 0 | 64 | 0 | 5 |
| 经济学院 | 4010361170 | 社会调研与实践<br>Social Research and Practice | 3 | 48 | 0 | 0 | 0 | 48 | 0 | 6 |
| 经济学院 | 4010112210 | 毕业实习<br>Graduation Practice | 4 | 64 | 0 | 0 | 0 | 64 | 0 | 8 |
| 经济学院 | 4010104210 | 毕业论文 | 8.5 | 272 | 0 | 0 | 0 | 272 | 0 | 8 |

| | | Graduation Thesis | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 小 计 Subtotal | 20.5 | 464 | 0 | 0 | 0 | 464 | 0 | | |

## 四、 修读指导
**IV Recommendations on Course Studies**

　　课外培养方案详见《武汉理工大学第二课堂课外学分实施办法》。《形势与政策》和《心理健康教育》课程为课外必修课程，分别计 2 个课外学分。

　　Please refer to the cultivation plan of the second class-Implementation Measures for Extracurricular Credits of the Second Class of Wuhan University of Technology. Situation & Policy (2 credits) and Mental Health Education (2 credits) are the required extracurricular courses.

<div align="right">

学院教学负责人：杜伟岸

专业培养方案负责人：余谦, 刘春晖

</div>

# 经济学（创业试点班）2021 版本科培养方案
# Undergraduate Education Plan for Specialty in Economics (Oriented in Entrepreneurship) (2021)

| | | | |
|---|---|---|---|
| 专业名称<br>Major | **经济学（创业试点班）**<br>**Economics (Oriented in Entrepreneurship)** | 主干学科<br>Major Disciplines | **经济学**<br>Economics |
| 计划学制<br>Duration | **四 年**<br>**4 Years** | 授予学位<br>Degree Granted | **经济学学士**<br>Bachelor of Economics |

**最低毕业学分规定**
**Graduation Credit Criteria**

| 课程分类<br>*Course Classification*<br>课程性质<br>*Course Nature* | 公共基础课程<br>Public Basic Courses | 通识教育课程<br>Public Courses | 大类课程<br>Basic Courses in General Discipline | 专业教育课程<br>Specialized Courses | 个性课程<br>Personalized Course | 集中性实践教学环节<br>Specialized Practice Schedule | 课外学分<br>Study Credit after Class | 总学分<br>Total Credits |
|---|---|---|---|---|---|---|---|---|
| 必修课<br>Required Courses | 31 | \ | 26 | 43 | \ | 24 | 10 | 180.0 |
| 选修课<br>Elective Courses | \ | 9 | \ | 21 | 6 | \ | 10 | |

## 一、 培养目标与毕业要求

## Ⅰ Educational Objectives &Requirement

### （一） 培养目标

本专业适应中国社会经济发展和创业教育的需要，培养怀有强烈创业梦想、具备企业家精神、熟练掌握经济管理知识和实践能力、具备市场洞察力和团队精神的创业人才。

本专业期待毕业生五年后能达成下列目标：

（1）身心健康，具有崇高的家国情怀、坚定的社会主义核心价值观和中国特色社会主义理想信念；具备良好的敬业精神、职业道德和社会责任感。

（2）具有从事经济学科的研究和实践所需的数学、管理学、信息技术以及法学知识，具备多维分析能力，能将以上知识运用于解决经济社会问题。

（3）掌握"新常态"与"双创"背景下创业所需的经济理论和企业管理知识，了解理工学科技术前沿和行业发展态势。

（4）具备市场调查、商务大数据分析、创业计划设计、项目评估与融资、人际沟通与合作、互联网营销推广、危机处理等企业初创与经营能力。

（5）具有创新意识和创业思维的企业家精神，拥有强健体魄、过硬心理素质、强大人格魅力和团队凝聚能力的卓越创业素养。

**I  Education Objectives**

This specialty meets the needs of China's social economic development and entrepreneurship education. The specialty aims at fostering innovative talents who have a strong entrepreneurial dream, have entrepreneurial spirit, have a good command of economic management and practices, have sharp market insight and team spirit.

Students of this program are expected to achieve the following objectives 5 years after graduation：

（1）Sound in body and mind, with lofty national feelings, firm socialist core values and belief of socialism with Chinese characteristics. Have good dedication, professional ethics and social responsibility.

（2）Have been equipped with practice of mathematics, management, information technology and knowledge of law, multidimensional analysis ability, and can apply the above knowledge to solve social and economic problems.

（3）Master the knowledge of economic theory and business management necessary for entrepreneurship under the background of new normal and mass entrepreneurship and innovation，know the frontier of science and technology and industrial development situation.

（4）Have the ability of entrepreneurship and business management with market research, business big data analysis, entrepreneurship project design, project evaluation and financing，interpersonal skills, internet marketing and crisis management.

（5） Have entrepreneurial spirit with innovative consciousness and entrepreneurial mindsets, have excellent entrepreneurial attainment with good health, good psychological quality, strong personality charm and team cohesion ability.

**二、 毕业要求**

（1）**工程知识：** 具有互联网思维，运用电子商务等互联网相关知识，进行互联网产品设计、开发和营销。

（2）**问题分析：** 熟知创新创业项目运营过程中可能出现的各类风险问题，能够理论与实践相结合，独立思考、妥善解决问题。

（3）**解决方案：** 树立品牌思维，熟悉产品概念、产品生命周期、产品设计等内容，熟悉运用互联网等方式推广和塑造产品品牌价值。

（4）**研究：** 具备创业方案设计能力，结合行业调研、评估进行创业方案设计和计划书编写，并熟练完成融资环节。

（5）**工具使用：** 掌握创业所需的数学和相关自然科学知识以及基本数量分析方法，运用计量方法对创业行业进行大数据分析。

（6）**工程与社会：** 掌握创业所需的经济学、管理学等方面知识，了解国内外经济态势和经济政策，发掘和把握创业商机和企业发展方向。

（7）**环境和可持续发展：** 能够理解和评价针对复杂经济问题的社会实践对环境、社会可持续发展的影响。

（8）**职业规范：** 具有过硬的身体素质和心理素质，较高的职业素养和人文情怀，较强的社会责任感与强烈的爱国情感。

（9）**个人和团队：** 了解法律、环境、安全和伦理等知识，综合考虑制约因素实现独立或团队创业。

（10）**沟通：** 能够就复杂经济问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和规划文 稿、陈述发言、清晰表达或回应指令，并具备一定的国际视野，能够在跨文化背景下进行 沟通和交流。

（11）**项目管理：** 了解在科技产业快速变革下经济社会发展现状和趋势，能够识别新的商业模式，评估创新创业项目。

（12）**终身学习：** 具有进行终身学习的愿望和能力，具有适应创业需求不断发展和完善自我的能力。


II Graduation Requirement

(1) **Engineering knowledge:** Students should have internet thinking, apply electronic commerce to design, develop and promote internet products.

(2) **Problem analysis:** Students can know all kinds of risk problems that may arise in the operation process of innovation and entrepreneurship projects , and

they can combine theory with practice, think independently and solve problems properly.

(3) **Design/development solution:** Students should establish brand awareness, be familiar with product concepts, product life cycle, product design, and the use of the Internet and other ways to promote and shape product brand value.

(4) **Research:** Students can design business plan and write project plan according to industrial investigation and investment evaluation, and complete financing link.

(5) **Usage of modern tools:** Students should master mathematics, scientific knowledge and basic quantitative analytic method necessary for entrepreneurship, analyze large entrepreneurial industry data by using econometric methods.

(6) **Engineering and society:** Students should master the knowledge of economic theory and business management necessary for entrepreneurship，know the economic situation and economic policy at home and abroad，explore entrepreneurial commercial opportunity and grasp the direction of industrial development.

(7) **Environment and sustainable development:** (7) Students can understand and evaluate the impact of social practice on complex economic issues on environmental and social sustainable development.

(8) **Professional standards:** Students should have good health and psychological quality, good professional capability and profound humanistic feelings, strong social responsibility and intense patriotic emotion.

(9) **Individual and team:** Students should know law, environment, safety, ethical, and so on, can comprehensively consider the constraint in team entrepreneurship.

(10) **Communication:** Students can effectively communicate with peers and the public on complex economic issues, including writing reports and planning documents, making statements, clearly expressing or responding to instructions, and has a certain international perspective, and can communicate in a cross-cultural context.

(11) **Project management:** Students can understand the current situation and trends of economic and social development under the rapid change of the science and

technology industry, identify new business models and evaluate innovative entrepreneurship projects.

(12) **Life-long learning**: Students should have the desire and ability to lifelong learning, and have the ability of self-improvement to meet the requirement of entrepreneurship.

## 表 2 培养目标的矩阵关系毕业要求支撑

| 毕业要求 | 培养目标1 | 培养目标2 | 培养目标3 | 培养目标4 | 培养目标5 |
|---|---|---|---|---|---|
| 毕业要求1 | √ | √ | √ | | √ |
| 毕业要求2 | | √ | √ | √ | √ |
| 毕业要求3 | | √ | √ | √ | √ |
| 毕业要求4 | √ | √ | √ | √ | |
| 毕业要求5 | | √ | √ | √ | √ |
| 毕业要求6 | √ | √ | | √ | √ |
| 毕业要求7 | √ | | √ | √ | √ |
| 毕业要求8 | √ | √ | √ | √ | |
| 毕业要求9 | √ | | | √ | √ |
| 毕业要求10 | √ | | | √ | √ |
| 毕业要求11 | | √ | √ | √ | √ |
| 毕业要求12 | √ | | √ | √ | √ |

　　毕业要求的达成需以课程（教学环节）的教学活动为支撑。本专业为 合理设置课程体系、落实对毕业要求的支撑课程，对各项毕业要求进行了解。每项毕业要求（一级指标）被分解为若干层层递进的指标点（二级指标） ，前一指标点的达成是下一指标点达成的基础，而下一指标点的达成是前一指标点的升华，所有指标点一起，支撑了该毕业要求的达成。根据上述分解方法， 本专业各项毕业要求的指标点分解如下表所示。

## 表 3 毕业要求指标点的分解

| 毕业要求 | 指标点 |
|---|---|
| 毕业要求1.工程知识:具有互联网思维，运用电子商务等互联网相关知识，进行互联网产品设计、开发和营销。 | 1.1 问题表述 |
| | 1.2 建模求解 |
| | 1.3 推演分析 |
| | 1.4 比较综合 |

| 毕业要求2. 问题分析：熟知创新创业项目运营过程中可能出现的各类风险问题，能够理论与实践相结合，独立思考、妥善解决问题。 | 2.1 识别问题 |
|---|---|
| | 2.2 表述问题 |
| | 2.3 文献研究 |
| | 2.4 获得结论 |
| 毕业要求3. 解决方案：树立品牌思维，熟悉产品概念、产品生命周期、产品设计等内容，熟悉运用互联网等方式推广和塑造产品品牌价值。 | 3.1 了解 |
| | 3.2 设计 |
| | 3.3 创新 |
| | 3.4 综合 |
| 毕业要求4. 研究：具备创业方案设计能力，结合行业调研、评估进行创业方案设计和计划书编写，并熟练完成融资环节。 | 4.1 调研分析 |
| | 4.2 设计方案 |
| | 4.3 采集数据 |
| | 4.4 形成结论 |
| 毕业要求5. 工具使用：掌握创业所需的数学和相关自然科学知识以及基本数量分析方法，运用计量方法对创业行业进行大数据分析。 | 5.1 了解工具 |
| | 5.2 选择工具 |
| | 5.3 开发工具 |
| 毕业要求6. 工程与社会：掌握创业所需的经济学、管理学等方面知识，了解国内外经济态势和经济政策，发掘和把握创业商机和企业发展方向。 | 6.1 了解影响 |
| | 6.2 理解责任 |
| 毕业要求7. 环境和可持续发展：能够理解和评价针对复杂经济问题的社会实践对环境、社会可持续发展的影响。 | 7.1 知晓理念 |
| | 7.2 评价隐患 |
| 毕业要求8. 职业规范：具有过硬的身体素质和心理素质，较高的职业素养和人文情怀，较强的社会责任感与强烈的爱国情感。 | 8.1 了解国情 |
| | 8.2 遵守规范 |
| | 8.3 履行责任 |
| 毕业要求9. 个人和团队：了解法律、环境、安全和伦理等知识，综合考虑制约因素实现独立或团队创业。 | 9.1 合作共事 |
| | 9.2 独立工作 |
| | 9.3 组织协调 |

| 毕业要求 10.沟通:能够就复杂经济问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和规划文 稿、陈述发言、清晰表达或回应指令，并具备一定的国际视野，能够在跨文化背景下进行 沟通和交流。 | 10.1 表达观点 |
| --- | --- |
| | 10.2 了解前沿 |
| | 10.3 跨文化交流 |
| 毕业要求 11.项目管理:了解在科技产业快速变革下经济社会发展现状和趋势，能够识别新的商业模式，评估创新创业项目。 | 11.1 掌握方法 |
| | 11.2 理解问题 |
| | 11.3 决策运用 |
| 毕业要求 12.终身学习:具有进行终身学习的愿望和能力，具有适应创业需求不断发展和完善自我的能力。 | 12.1 认识必要性 |
| | 12.2具备能力 |

## 二、专业核心课程与专业特色课程
## II  Core Course and Characteristic Courses
### （一） 专业核心课程

政治经济学, 微观经济学, 宏观经济学, 计量经济学, 财政学 B, 产业经济学 A, 经济思想史

Political Economics, Microeconomics, Macroeconomics, Econometrics, Public Finance, Industrial Economics, History of Economic Thoughts

### （二） 专业特色课程

创业导论, 创业企业法律与知识产权, 市场调研与创业分析, 人工智能导论, 股权投资基金, 商务数据分析（Python）, 创业项目评估, 互联网产品分析与设计, 数字政府与数字治理, 创业计划书编写, 创业项目推广与路演, 商业模式创新实训

Introduction to Entrepreneurship, Law of Startups and Intellectual Rights, Research on market and Analysis on Startup, Introduction of Artificial, PE and VC, Business Data Analysis (Python), Venture Project Evaluation, Internet Product Analysis and Designing, Digital Government and Digital Governance, Business Planning, Promotion and Road Show of Venture, Training in Business Model Innovation

**附：毕业要求实现矩阵**

经济学（创业试点班）专业毕业要求

| 专业核心课程 | 专业特色课程 | 课程名称 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 10 | 10 | 10 | 11 | 11 | 11 | 12 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 1 | 2 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 |
|  |  | 思想道德与法治 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  | √ |
|  |  | 中国近现代史纲要 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  | √ |
|  |  | 马克思主义基本原理 |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  | √ |
|  |  | 毛泽东思想和中国特色社会主义理论体系概论 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ | √ |  |  |  |  |  |  |  | √ |  |  | √ | √ |
|  |  | 大学英语1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  | √ |  | √ |  | √ |  |  |  |  |  |  |
|  |  | 大学英语2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  | √ |  | √ |  | √ |  |  |  |  |  |  |
|  |  | 大学英语3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  | √ |  | √ |  | √ |  |  |  |  |  |  |
|  |  | 大学英语4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Python程序设计基础B |  |  |  |  | √ |  |  |  | √ |  |  |  |  |  |  |  | √ | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 计算机基础与Python程序设计综合实验B |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  | √ | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 军事技能训练 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ | √ | √ |  |  |  |  |  |  |  |  |
|  |  | 军事理论 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ | √ | √ |  |  |  |  |  |  |  |  |
|  |  | 体育1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 体育2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 体育3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 体育4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 高等数学B上 | √ |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 高等数学B下 | √ |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 线性代数 | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 经济学专业导论 |  |  | √ | √ |  | √ |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| √ |  | 政治经济学 |  |  | √ | √ | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| √ |  | 微观经济学 |  |  | √ |  | √ | √ | √ |  |  |  |  |  | √ |  |  |  |  | √ |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  | √ |  |  |
| √ |  | 宏观经济学 |  |  | √ | √ | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  | √ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 管理学原理A | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |  |  |  |  |  |  |  |  |  |  |  |  | √ | √ | √ |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 神奇的材料世界 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | √ | 创业导论 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 会计学原理 | √ | | | | √ | | | | | | | | | √ | | | | √ | | | √ | √ | | | | |
| | | 财务分析 | | √ | √ | | | | | | | | | √ | | √ | | | | | | | | | | | | |
| | | 概率论与数理统计 B | √ | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 中级微观经济学 B | | | | √ | | | | | √ | | | √ | | | | | | | | | | | | | | | √ |
| | | 中级宏观经济学 B | | | √ | | | | | | √ | | | √ | | | | | | | | | | | | | | | √ |
| | | 统计学 B | | √ | | | | | | | √ | | √ | | √ | | | | | | | | | | | | | | |
| | | 货币金融学 | √ | | | | | | √ | | √ | | | | √ | | | | | | | | | | | | | | |
| √ | | 计量经济学 | | √ | | | | | | | | | √ | √ | √ | | | | | | | | | | | | | | |
| | | 企业经济学 B | | | | √ | | √ | | | √ | | | √ | | | | | | | | | | | | | | | |
| | | 国际贸易 B | | √ | √ | | | | | | | | | | | | | √ | | | | √ | | | | | | | |
| √ | | 财政学 B | | | | √ | √ | √ | √ | | | | | | | | | | | | | | | | | | | | |
| √ | | 产业经济学 A | | | | √ | | | √ | | √ | | | √ | | | | | | | | | | √ | | | | | √ |
| √ | | 经济思想史 | | | | | √ | | | | √ | | | | | | | | | | | | | √ | | | | | √ |
| | | 当代中国经济专题 | | √ | | | √ | | | | | √ | | | | | | | | | | | | | | | | | √ |
| | | 经济史 | | | | √ | √ | √ | | √ | | √ | | | √ | | √ | | √ | √ | √ | | | √ | | | √ | | √ |
| | √ | 创业企业法律与知识产权 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 政治经济学（II） | | √ | √ | | √ | | | | | | | √ | | | | | | | | | | | | | | | |
| | | 《资本论》选读 | | √ | √ | | | | | | | | | √ | | | | | | | | | | | | | | | √ |
| | | 经济计量软件与应用 | | | | √ | | | | | | √ | | √ | √ | | | | | | | | | | | | | | |
| | | 国际贸易实务 D | | | | | | | | | √ | | | √ | √ | | | | | | | | | | | | | √ | |
| | | 人力资源管理 B | √ | | | √ | √ | | √ | | | √ | | | | √ | | √ | | √ | √ | √ | | √ | | √ | | | |
| | | 保险学 C | √ | | | | | √ | | √ | | | | √ | | | | | | | | | | | | | | | |
| | | 制度经济学 | | √ | √ | √ | | | | | | | | √ | | | | | | | | | | | | | | | |
| | | 技术创新经济学 C | | √ | √ | √ | | | | | | | | √ | | | | | | | | | | | | | | | |
| | | 产业发展分析 | | √ | √ | | | | | | | | | | √ | | | | | | | | | | | | | √ | |
| | | 网络经济学 | | √ | √ | √ | | | | | | | | √ | | | | | | | | | | | | | | | |
| | | 城市与区域经济学 C | | | | | √ | | | √ | | | | | | | | | √ | | | | | | √ | | | | |
| | | 国际金融学 | √ | | | | | | | | | | | | | | | | | | | √ | √ | | | | | | |
| | √ | 市场调研与创业分析 | | | | | √ | | √ | √ | √ | | √ | | | | | | | | | √ | | √ | | | | | |
| | √ | 人工智能导论 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| √ | 股权投资基金 | | | | | √ | | | | √ | | | | | | | | | √ | | | | |
| √ | 商务数据分析（Python） | | | | | √ | | | | | | √ | | | | | | | | | | | |
| √ | 创业项目评估 | | | | | | | | | | | | | | | | | | | | | | |
| √ | 互联网产品分析与设计 | | | | √ | √ | √ | | | | | | | | | | | | | | | | |
| | 电子商务解决方案 | | | √ | √ | | | | | √ | √ | | | | | | | | | | | | |
| | 品牌塑造与推广 | | | | | | | | | | | | | | | | | | | | | | |
| | 跨境电商社交媒体营销 | | | | | | | | | | | | | | √ | | | √ | | √ | | | |
| √ | 数字政府与数字治理 | | | √ | | | √ | | | | √ | √ | | | | | | | | | | | |
| √ | 创业计划书编写 | | | | | | | | | | | | | | | | | | | | | | |
| √ | 创业项目推广与路演 | | | | | | | | | | | | | | | | | | | | | | |
| | 商务礼仪与谈判 | | | | | | | | | | | | | | | √ | | √ | √ | | | | √ |
| | 金融工程学B | | | √ | | | | √ | | | √ | | | | | | | | | | | | |
| | 电子商务原理B | | √ | | √ | | | | | | | | | | | | | | | √ | | | |
| √ | 证券投资学B | | | | | √ | | √ | | | √ | | | | | | | | | | | | |
| | 创业企业管理B | | | | | | | | | | | | | | | | | | | | | | |
| √ | 商业模式创新实训 | | √ | √ | | | | | | | | √ | | | | | | | | √ | | | |
| | 创业企业运营实训B | | √ | √ | | | | | | | √ | | | | √ | | | | | √ | | | √ |
| | 经济实验与模拟 | | | | | | | √ | | | | | | | √ | | | √ | √ | | | | |
| | 创业精神与行为规范实训 | | | | | | | | | | | | | | | | | | | | | | |
| | 创业实践 | | | | √ | √ | | | | | | | | √ | | | | | | | √ | | |
| | 创业设计 | | | | | | | | | √ | √ | | | | | | | √ | | | √ | | |

### 三、 教学建议进程表
Ⅲ **Course Schedule**

| (一)公共基础必修课程 |
|---|
| 1 Public Basic Compulsory Courses |

| 开课单位<br>Course<br>College | 课程编号<br>Course<br>Number | 课程名称<br>Course Title | 学分<br>Crs | 总学<br>时<br>Tot<br>hrs. | 学时分配<br>Including | | | | | 建议修读<br>学期<br>Suggested<br>Term | 先修课程<br>Prerequisite<br>Course |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | | | | 理论<br>Theory | 实验<br>Exp. | 上机<br>Ope-<br>ratio. | 实践<br>Prac-<br>tice. | 课外<br>Extra-<br>cur. | | |
| 马克思主义学院 | 4220001210 | 思想道德与法治<br>Morality and the rule of law | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 1 | |
| 马克思主义学院 | 4220002180 | 中国近现代史纲要<br>Outline of Contemporary and Modern Chinese History | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 2 | |
| 马克思主义学院 | 4220005180 | 马克思主义基本原理<br>Marxism Philosophy | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 4 | |
| 马克思主义学院 | 4220003180 | 毛泽东思想和中国特色社会主义理论体系概论<br>Introduction to Mao Zedong Thought and Socialism with Chinese Characteristics | 4.5 | 66 | 66 | 0 | 0 | 0 | 0 | 3 | |
| 外语学院 | 4030001210 | 大学英语 1<br>College English I | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 1 | |
| 外语学院 | 4030002210 | 大学英语 2<br>College English II | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 2 | 大学英语 1, |
| 外语学院 | 4030003210 | 大学英语 3<br>College English III | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 3 | 大学英语 2, |
| 外语学院 | 4030004210 | 大学英语 4<br>College English IV | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 4 | 大学英语 3, |
| 计算机智能学院 | 4120004210 | Python 程序设计基础 B<br>Foundation of Python Programming B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| 计算机智能学院 | 4120008210 | 计算机基础与 Python 程序设计综合实验 B | 1 | 32 | 0 | 32 | 0 | 0 | 0 | 2 | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Comprehensive Experiments of Foundation of Computer and PYTHON Language Programming B | | | | | | | | | |
| 学工部 | 1050001210 | 军事技能训练 | 2 | 136 | 0 | 0 | 0 | 136 | 0 | 1 | |
| | | Military Skills Training | | | | | | | | | |
| 学工部 | 1050002210 | 军事理论 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| | | Military Theory | | | | | | | | | |
| 体育学院 | 4210001170 | 体育1 | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 1 | |
| | | Physical Education Ⅰ | | | | | | | | | |
| 体育学院 | 4210002170 | 体育2 | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| | | Physical Education Ⅱ | | | | | | | | | |
| 体育学院 | 4210003170 | 体育3 | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 3 | |
| | | Physical Education Ⅲ | | | | | | | | | |
| 体育学院 | 4210004170 | 体育4 | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 4 | |
| | | Physical Education Ⅳ | | | | | | | | | |
| 小 计 Subtotal | | | 31.0 | 744 | 512 | 32 | 0 | 136 | 64 | | |

(二)通识教育选修课程
2 General Education Elective Courses

| | | |
|---|---|---|
| 核心选修 Core elective courses | 文明与传统 Civilization and Tradition Courses | |
| | 社会与发展类 Society and Development Courses | |
| | 艺术与人文类 Art and Humanities Courses | |
| | 自然与方法类 Nature and methods Courses | 通识课程应修满至少9学分。核心选修不少于2学分；自主选修课程中，至少在艺术与审美、创新与创业两个领域各选修1门课程。 Minimum subtotal credits: 9.Core elective courses ≥2 credits.Self-selected courses, at least 1 course in art and aesthetics and 1 course in innovation and entrepreneurship. |
| 自主选修 选修 Core elective courses | 数学与自然科学,哲学与心理学,法学与社会科学,经济与管理,历史与文化,语言与文学,艺术与审美,创新与创业 Mathematics and Natural Sciences,Philosophy and Psychology,Science and Social Sciences,Economics and Management,History and Culture,Language and Literature,Art and Aesthetics,Innovation and Entrepreneurship | |

(三)大类必修课程
3 Basic Discipline Required Courses

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 理学院 | 4050003210 | 高等数学B上 | 4.5 | 72 | 72 | 0 | 0 | 0 | 0 | 1 | |

| 理学院 | 4050004210 | Advanced Mathematics Ⅰ 高等数学B下 Advanced Mathematics Ⅱ | 5.5 | 88 | 88 | 0 | 0 | 0 | 0 | 2 | 高等数学B上, |
| 理学院 | 4050229110 | 线性代数 Linear Algebra | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | 高等数学B上, |
| 经济学院 | 4010006210 | 经济学专业导论 Introduction to Economics discipline | 1.5 | 24 | 24 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010100110 | 政治经济学 Political Economics | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010003210 | 微观经济学 Microeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010007210 | 宏观经济学 Macroeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 2 | 微观经济学, |
| 管理学院 | 4170002210 | 管理学原理A Principles of Management | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | |
| 材料学院 | 4070121210 | 神奇的材料世界 The World of Miraculous Materials | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 2 | |
| 小 计 Subtotal | | | 26.0 | 416 | 416 | 0 | 0 | 0 | 0 | | |

(四)专业必修课程
4 Specialized Required Courses

| 创业学院 | 4270001210 | 创业导论 Introduction to Entrepreneurship | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 1 | |
| 管理学院 | 4170006210 | 会计学原理 Accounting Principle | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | |
| 管理学院 | 4170011210 | 财务分析 Financial Analysis | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 3 | 会计学原理, |
| 理学院 | 4050058110 | 概率论与数理统计B Probability and Mathematical Statistics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | 高等数学B上,高等数学B下, |
| 经济学院 | 4010105110 | 中级微观经济学B Intermediate Microeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | 微观经济学, |

| 开课学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 开课学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010104110 | 中级宏观经济学 B | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | 中级微观经济学 B, 宏观经济学, |
| | | Intermediate Macroeconomics | | | | | | | | | |
| 经济学院 | 4010335170 | 统计学 B | 3 | 48 | 42 | 6 | 0 | 0 | 0 | 3 | |
| | | Statistics | | | | | | | | | |
| 经济学院 | 4010008210 | 货币金融学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 3 | |
| | | Money and Finance | | | | | | | | | |
| 经济学院 | 4010056110 | 计量经济学 | 3.5 | 56 | 48 | 8 | 0 | 0 | 0 | 4 | 概率论与数理统计 B, |
| | | Econometrics | | | | | | | | | |
| 经济学院 | 4010175130 | 企业经济学 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 4 | |
| | | Enterprise Economics | | | | | | | | | |
| 经济学院 | 4010382170 | 国际贸易 B | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 4 | |
| | | International Trade | | | | | | | | | |
| 经济学院 | 4010005110 | 财政学 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| | | Public Finance | | | | | | | | | |
| 经济学院 | 4010006110 | 产业经济学 A | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | |
| | | Industrial Economics | | | | | | | | | |
| 经济学院 | 4010012210 | 经济思想史 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | |
| | | History of Economic Thoughts | | | | | | | | | |
| 经济学院 | 4010334170 | 当代中国经济专题 | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 6 | |
| | | China Economy | | | | | | | | | |
| 经济学院 | 4010014210 | 经济史 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Economic History | | | | | | | | | |
| 法学社会学院 | 4020474190 | 创业企业法律与知识产权 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Law of Startups and Intellectual Rights | | | | | | | | | |
| 经济学院 | 4010032210 | 政治经济学（II） | 1.5 | 24 | 24 | 0 | 0 | 0 | 0 | 7 | |
| | | Political Economics II | | | | | | | | | |
| 经济学院 | 4010333170 | 《资本论》选读 | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 7 | |
| | | Selected Readings from Captialism | | | | | | | | | |
| 小 计 Subtotal | | | 43.0 | 688 | 674 | 14 | 0 | 0 | 0 | | |

(五)专业选修课程
5 Specialized Elective Courses

| 经济模块 |
|---|
| Economics module |

| 学院 | 课程号 | 课程名 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010041210 | 经济计量软件与应用<br>Application of Econometrics Software | 2 | 32 | 24 | 8 | 0 | 0 | 0 | 4 | |
| 经济学院 | 4010339170 | 国际贸易实务D<br>International Trade Practice | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 管理学院 | 4170112110 | 人力资源管理B<br>Human Resource Management | 2.0 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010332170 | 保险学C<br>Insurance | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010101110 | 制度经济学<br>Institutional Economics | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010348170 | 技术创新经济学C<br>Economics of Technology Innovation | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010076210 | 产业发展分析<br>Industry Development Analysis | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010015210 | 网络经济学<br>Economics of Network | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010344170 | 城市与区域经济学C<br>Urban and Regional Economics | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010044210 | 国际金融学<br>International Finance | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 7 | |
| 小 计 Subtotal | | | 21.0 | 336 | | | 8 | 0 | 0 | 0 | |
| 创业模块<br>Entrepreneurship module | | | | | | | | | | | |
| 创业学院 | 4270051190 | 市场调研与创业分析<br>Research on market and Analysis on Startup | 2 | 32 | 16 | 0 | 0 | 16 | 0 | 4 | |
| 计算机智能学院 | 4120440190 | 人工智能导论<br>Introduction of Artificial | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 4 | |
| 经济学院 | 4010069210 | 股权投资基金 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |

| 学院 | 课程代码 | 课程名称 | 学分 | 学时 | | | | | | 学期 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | PE and VC | | | | | | | | |
| 经济学院 | 4010011210 | 商务数据分析（Python）<br>Business Data Analysis (Python) | 3 | 48 | 32 | 16 | 0 | 0 | 0 | 5 |
| 创业学院 | 4270050190 | 创业项目评估<br>Venture Project Evaluation | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 5 |
| 经济学院 | 4010072210 | 互联网产品分析与设计<br>Internet Product Analysis and Designing | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 |
| 经济学院 | 4010015110 | 电子商务解决方案<br>E-Business Solutions | 2.0 | 32 | 26 | 6 | 0 | 0 | 0 | 6 |
| 创业学院 | 4270001220 | 品牌塑造与推广<br>Branding and Promotion | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 |
| 经济学院 | 4010080210 | 跨境电商社交媒体营销<br>Social Media Marketing of Cross-Border e-Commerce | 2 | 32 | 26 | 0 | 6 | 0 | 0 | 6 |
| 经济学院 | 4010051210 | 数字政府与数字治理<br>Digital Government and Digital Governance | 2.5 | 40 | 34 | 6 | 0 | 0 | 0 | 6 |
| 创业学院 | 4270045190 | 创业计划书编写<br>Business Planning | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 6 |
| 创业学院 | 4270049190 | 创业项目推广与路演<br>Promotion and Road Show of Venture | 2 | 32 | 16 | 0 | 0 | 16 | 0 | 7 |
| 经济学院 | 4010353170 | 商务礼仪与谈判<br>Business Etiquette and Negotiation | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 |
| 小 计 Subtotal | | | 26.0 | 416 | | | 28 | 6 | 32 | 0 | |

修读说明：要求至少选修 21 学分，其中经济模块至少选修 6 学分，创业模块至少选修 10 学分。

NOTE：Minimum subtotal credits:21，with at least 6 credits in the economics module and 10 credits in the Entrepreneurship module.

| | | (六)个性课程<br>6 Personalized Electice Courses | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010201990 | 金融工程学 B<br>Financial Engineering | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010090210 | 电子商务原理 B<br>E-commerce Practice | 2 | 32 | 26 | 6 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010358170 | 证券投资学 B<br>Securities Investment | 2 | 32 | 26 | 6 | 0 | 0 | 0 | 7 | |
| 管理学院 | 4170779170 | 创业企业管理 B<br>Start-up Enterprises Management | 2 | 32 | 26 | 0 | 6 | 0 | 0 | 7 | |
| | 小 计 Subtotal | | 8.0 | 128 | 110 | 12 | 6 | 0 | 0 | | |

修读说明：学生从以上个性课程和学校发布的其它个性课程目录中选课，要求至少选修 6 学分。
NOTE: Sudents can select courses from above and the other personalized courses in catalog, and are required to obtain at least 6 credits.

| | | (七)专业教育集中性实践教育环节<br>7 Specialized Practice Schedule | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010270160 | 商业模式创新实训<br>Training in Business Model Innovation | 2 | 32 | 0 | 0 | 0 | 32 | 0 | 3 | |
| 经济学院 | 4010306170 | 创业企业运营实训 B<br>Training for Start-up Entreperneurship Operation | 2 | 32 | 0 | 0 | 0 | 32 | 0 | 4 | |
| 经济学院 | 4010092210 | 经济实验与模拟<br>Economics Experiment and Simulation | 4 | 64 | 0 | 0 | 0 | 64 | 0 | 5 | |
| 创业学院 | 4270002210 | 创业精神与行为规范实训<br>Training in Entrepreneurial Spirit and Code of Conduct | 2 | 32 | 0 | 0 | 0 | 32 | 0 | 6 | |
| 经济学院 | 4010100210 | 创业实践<br>Entrepreneurship Practice | 5.5 | 88 | 0 | 0 | 0 | 88 | 0 | 7 | |
| 经济学院 | 4010101210 | 创业设计<br>Entrepreneurship Design | 8.5 | 272 | 0 | 0 | 0 | 272 | 0 | 8 | |
| | 小 计 Subtotal | | 24.0 | 520 | 0 | 0 | 0 | 520 | 0 | | |

## 四、 修读指导
## Ⅳ Recommendations on Course Studies

课外培养方案详见《武汉理工大学第二课堂课外学分实施办法》。《形势与政策》和《心理健康教育》课程为课外必修课程，分别计 2 个课外学分。

Please refer to the cultivation plan of the second class-Implementation Measures for Extracurricular Credits of the Second Class of Wuhan University of Technology. Situation & Policy (2 credits) and Mental Health Education (2 credits) are the required extracurricular courses.

学院教学负责人：杜伟岸

专业培养方案负责人：余谦, 刘春晖

# 金融学 2021 版本科培养方案
# Undergraduate Education Plan for Specialty in Finance (2021)

| | | | | | | |
|---|---|---|---|---|---|---|
| 专业名称 | **金融学** | | | 主干学科 | **经济学** | |
| Major | **Finance** | | | Major Disciplines | Economics | |
| 计划学制 | **四 年** | | | 授予学位 | **经济学学士** | |
| Duration | **4 Years** | | | Degree Granted | Bachelor of Economics | |
| 所属大类 | **经济学类** | | | 大类培养年限 | **1 年** | |
| Disciplinary | **Economics** | | | Duration | **1 year** | |

## 最低毕业学分规定
**Graduation Credit Criteria**

| *课程分类*<br>*Course Classification*<br>*课程性质*<br>*Course Nature* | 公共基础课程<br>Public Basic Courses | 通识教育课程<br>Public Courses | 大类课程<br>Basic Courses in General Discipline | 专业教育课程<br>Specialized Courses | 个性课程<br>Personalized Course | 集中性实践教学环节<br>Specialized Practice Schedule | 课外学分<br>Study Credit after Class | 总学分<br>Total Credits |
|---|---|---|---|---|---|---|---|---|
| 必修课<br>Required Courses | 31 | \ | 26 | 46 | \ | 17.5 | 10 | 180.0 |
| 选修课<br>Elective Courses | \ | 9 | \ | 24.5 | 6 | \ | 10 | |

## 一、 培养目标与毕业要求

## Ⅰ Educational Objectives &Requirement

### （一） 培养目标

　　本专业面向新时代数字经济发展需要，培养具有扎实的经济、金融理论知识，能够胜任金融机构、政府部门及企事业单位相关金融经济管理、实务及研究工作，适应能力强、实干精神强、创新意识强、德智体美劳全面发展，具有卓越追求、卓越能力的社会主义建设者和接班人。

　　本专业期待毕业生五年后能达成下列目标：

（1）身心健康，具有崇高的家国情怀、坚定的社会主义核心价值观和中国特色社会主义理想信念；具备良好的敬业精神、职业道德和社会责任感；

（2）具有从事金融领域科学研究和实践所需的经济学、金融学知识，具备多种分析能力，能将以上知识运用于解决实际金融问题；

（3）具有运用数理、计算机和金融工具进行金融市场分析和金融风险管理的能力；

（4）具有良好的口头和书面表达与沟通能力、良好的团队意识和合作精神，拥有国际化视野，具备较强的社会适应能力与创新能力；

（5）具有终身学习能力，适应职业发展，在金融及相关领域具有职场竞争力。

## Ⅰ Education Objectives

Facing the needs of digital economic development in the new era, this specialty cultivates socialist builders and successors with solid knowledge of economic and financial theory, competent financial and economic management, practice and research related to financial institutions, government departments and enterprises and institutions, strong adaptability, strong spirit of hard work, strong sense of innovation, all-round development of moral, intellectual and physical beauty, and excellent pursuit and ability of excellence.

Students of this program are expected to achieve the following objectives 5 years after graduation:

（1）Physical and mental health, with lofty patriotism, firm socialist core values and socialist ideals and beliefs with Chinese characteristics, with good professionalism, professional ethics and social responsibility.

（2）Be familiar with the knowledge of economics and finance needed to engage in scientific research and practice in the field of finance, and has a variety of analytical abilities, can apply the above knowledge to solve practical financial problems.

（3）Possessing ability to use mathematical, computer and financial instruments for financial market analysis and financial risk management;

（4）Have good oral and written expression and communication skills, good team awareness and spirit of cooperation, with an international perspective, with strong social adaptability and innovation ability.

（5）With lifelong learning ability, learning to adapt to career development, in finance and related fields with professional competitiveness.


## 二、 毕业要求

(1) **工程知识**：能够将现代经济学、金融学基本理论和专业知识用于解决金融实践问题；

(2) **问题分析**：能够运用相关理论和方法，识别、表达、分析复杂金融问题，以获得有效结论；

(3) **解决方案**： 能够针对社会经济金融发展需求，运用金融理论和分析方法，综合考虑社会、健康、安全、法律、文化以及环境等因素，提出金融解决方案；

(4) **研究**： 能够基于经济金融学原理，并采用科学方法对宏观经济金融形势进行研究，并通过信息综合得到合理有效的结论；

(5) **工具使用**： 能够针对现实中的金融问题，运用现代金融工具和方法进行分析和判断，并能够理解其局限性；

(6) **工程与社会**： 能够基于金融学相关背景知识进行合理分析，评价金融实践和复杂金融问题解决方案对社会、健康、安全、法律以及文化的影响，并理解应承担的责任；

(7) **环境和可持续发展**： 能够理解和评价各类金融市场活动对环境、社会可持续发展的影响；

(8) **职业规范**： 具有人文社会科学素养、社会责任感，能够在金融实践中理解并遵守职业道德和规范，履行责任；

(9) **个人和团队**： 具有良好的团队协作精神，能够在多学科背景下的团队中承担个体、团队成员以及负责人的角色；

(10) **沟通**：能够就金融问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和设计文稿、陈述发言、清晰表达或回应指令，并具备一定的国际视野，能够在跨文化背景下进行沟通和交流；

(11) **项目管理**：理解并掌握项目管理原理与经济决策方法，能在多学科环境中应用；

(12) **终身学习**：具有自主学习和终身学习的意识，有不断学习和适应发展的能力。

## II Graduation Requirement

(1) **Engineering knowledge:** Be able to apply the basic theory and professional knowledge of modern economics and finance to solve financial practice problems.

(2) **Problem analysis:** Be able to use the relevant financial theory and analysis methods and basic principles to identify, express and analyze complex financial problems through literature research, in order to obtain effective conclusions.

(3) **Design/development solution:** Be able to propose financial solutions in response to the needs of socio-economic and financial development by using financial theory and analytical methods, taking into account social, health, safety, legal, cultural and environmental factors.

(4) **Research:** Be able to study the macroeconomic and financial situation based on the principles of economic and financial science and adopt scientific methods, and to obtain reasonable and effective conclusions through information synthesis;

(5) **Usage of modern tools:** To be able to analyze and judge the financial problems in reality by using modern financial instruments and methods, and to understand their limitations;

(6) **Engineering and society:** Be able to conduct a rational analysis based on relevant background in finance, evaluate the social, health, safety, legal and cultural impacts of financial practices and solutions to complex financial problems, and understand the responsibilities;

(7) **Environment and sustainable development:** To be able to understand and evaluate the impact of various financial market activities on the sustainable development of the environment and society;

(8) **Professional standards:** With human and social science literacy, social responsibility, can understand and abide by professional ethics and norms in financial practice and fulfill responsibilities;

(9) **Individual and team:** Have a good team spirit, can assume the role of individual, team member and person in charge in the multidisciplinary background of the team;

(10) **Communication:** Be able to communicate effectively with industry peers and the public on financial issues, including writing reports and designs, making presentations, expressing clearly or responding to directives. And have a certain international perspective, can communicate and exchange in a cross-cultural context;

(11) **Project management:** Understand and master the principles of project management and economic decision-making methods, and can be applied in a multidisciplinary environment;

(12) **Life-long learning:** Have the awareness of independent learning and lifelong learning, have the ability to continuously learn and adapt to development.

表 2 培养目标的矩阵关系毕业要求支撑

| 毕业要求 | 培养目标 1 | 培养目标 2 | 培养目标 3 | 培养目标 4 | 培养目标 5 |
|---|---|---|---|---|---|
| 毕业要求 1 | √ | √ | √ | | |
| 毕业要求 2 | | √ | √ | √ | √ |
| 毕业要求 3 | | √ | √ | √ | √ |
| 毕业要求 4 | √ | √ | √ | √ | |
| 毕业要求 5 | | √ | √ | √ | √ |
| 毕业要求 6 | √ | √ | | √ | √ |
| 毕业要求 7 | √ | √ | √ | √ | √ |
| 毕业要求 8 | √ | √ | √ | √ | |
| 毕业要求 9 | √ | | | √ | √ |
| 毕业要求 10 | √ | | | √ | √ |
| 毕业要求 11 | | √ | √ | √ | √ |
| 毕业要求 12 | √ | √ | √ | √ | √ |

毕业要求的达成需以课程（教学环节）的教学活动为支撑。本专业为 合理设置课程体系、落实对毕业要求的支撑课程，对各项毕业要求进行了解。每项毕业要求（一级指标）被分解为若干层层递进的指标点（二级指标） ，前一指标点的达成是下一指标点达成的基础，而下一指标点的达成是前一指标点的升华，所有指标点一起，支撑了该毕业要求的达成。根据上述分解方法， 本专业各项毕业要求的指标点分解如下表所示。

表 3 毕业要求指标点的分解

| 毕业要求 | 指标点 |
|---|---|
| 毕业要求 1. 工程知识:能够将现代经济学、金融学基本理论和专业知识用于解决金融实践问题； | 1.1 问题表述 |
| | 1.2 建模求解 |
| | 1.3 推演分析 |
| | 1.4 比较综合 |
| 毕业要求 2. 问题分析:能够运用相关理论和方法，识别、表达、分析复杂金融问题，以获得有效结论； | 2.1 识别问题 |
| | 2.2 表述问题 |
| | 2.3 文献研究 |
| | 2.4 获得结论 |
| | 3.1 了解 |

| 毕业要求 3. 解决方案:能够针对社会经济 | 3.2 设计 |
|---|---|
| 金融发展需求，运用金融理论和分析方 | 3.3 创新 |
| 法，综合考虑社会、健康、安全、法律、 | |
| 文化以及环境等因素，提出金融解决方 | 3.4 综合 |
| 案; | |
| 毕业要求 4. 研究:能够基于经济金融学原 | 4.1 调研分析 |
| 理，并采用科学方法对宏观经济金融形势 | 4.2 设计方案 |
| 进行研究，并通过信息综合得到合理有效 | 4.3 采集数据 |
| 的结论; | 4.4 形成结论 |
| 毕业要求 5. 工具使用:能够针对现实中的 | 5.1 了解工具 |
| 金融问题，运用现代金融工具和方法进行 | 5.2 选择工具 |
| 分析和判断，并能够理解其局限性; | 5.3 开发工具 |
| 毕业要求 6. 工程与社会:能够基于金融学 | 6.1 了解影响 |
| 相关背景知识进行合理分析，评价金融实 | |
| 践和复杂金融问题解决方案对社会、健 | |
| 康、安全、法律以及文化的影响，并理解 | 6.2 理解责任 |
| 应承担的责任; | |
| 毕业要求 7. 环境和可持续发展:能够理解 | 7.1 知晓理念 |
| 和评价各类金融市场活动对环境、社会可 | |
| 持续发展的影响; | 7.2 评价隐患 |
| 毕业要求 8. 职业规范:具有人文社会科学 | 8.1 了解国情 |
| 素养、社会责任感，能够在金融实践中理 | 8.2 遵守规范 |
| 解并遵守职业道德和规范，履行责任; | 8.3 履行责任 |
| 毕业要求 9. 个人和团队:具有良好的团队 | 9.1 合作共事 |
| 协作精神，能够在多学科背景下的团队中 | 9.2 独立工作 |
| 承担个体、团队成员以及负责人的角色; | 9.3 组织协调 |
| 毕业要求 10. 沟通:能够就金融问题与业界 | 10.1 表达观点 |
| 同行及社会公众进行有效沟通和交流，包 | 10.2 了解前沿 |
| 括撰写报告和设计文稿、陈述发言、清晰 | |
| 表达或回应指令，并具备一定的国际视 | 10.3 跨文化交流 |

| 毕业要求 | | 观测点 |
|---|---|---|
| 野，能够在跨文化背景下进行沟通和交流； | | |
| 毕业要求 11.项目管理:理解并掌握项目管理原理与经济决策方法，能在多学科环境中应用； | | 11.1 掌握方法 |
| | | 11.2 理解问题 |
| | | 11.3 决策运用 |
| 毕业要求 12.终身学习:具有自主学习和终身学习的意识，有不断学习和适应发展的能力。 | | 12.1 认识必要性 |
| | | 12.2 具备能力 |

## 二、专业核心课程与专业特色课程
**II Core Course and Characteristic Courses**

### （一） 专业核心课程

货币金融学,国际金融学,证券投资学,金融工程学 A,商业银行经营与管理,公司金融学,金融风险管理

Money and Finance,International Finance,Securities Investment,Financial Engineering,Commercial Bank Management ,Corporate Finance,Financial Risk Management

### （二） 专业特色课程

保险精算学,人工智能导论,房地产金融学 A,金融数据挖掘与分析,量化交易系统设计与运用

Insurance Actuarial Theory,Introduction of Artificial,Real Estate Finance,Financial Data Mining and Analysis,Quantitative Trading System Design

附：毕业要求实现矩阵

| 专业核心课程 | 专业特色课程 | 课程名称 | 金融学专业毕业要求 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | | 2 | | | | 3 | | | | 4 | | | | 5 | | | 6 | | 7 | 8 | | | 9 | | | 10 | | | 11 | | | 12 | |
| | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 1 | 2 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 |
| | 思想道德与法治 | | | | | | | | | | | | | | | | | | | | | | √ | | | √ | | | | | | | | | | | | √ |
| | 中国近现代史纲要 | | | | | | | | | | | | | | | | | | | | | | √ | | | √ | | | | | | | | | | | | √ |

| 课程 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 马克思主义基本原理 | | | | √ | | | | | | | | | | | | | | | | | | √ | | | | √ |
| 毛泽东思想和中国特色社会主义理论体系概论 | | | | | | | | | | | | √ | √ | | | | | | | | | √ | | √ | √ | |
| 大学英语 1 | | | | | | | | | √ | | | | | √ | | √ | | √ | | | | | | | | |
| 大学英语 2 | | | | | | | | | √ | | | | | √ | | √ | | √ | | | | | | | | |
| 大学英语 3 | | | | | | | | | √ | | | | | √ | | √ | | √ | | | | | | | | |
| 大学英语 4 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Python 程序设计基础 B | | | | √ | | √ | | | | | √ | √ | | | | | | | | | | | | | | |
| 计算机基础与 Python 程序设计综合实验 B | | | | √ | | | | | | | √ | √ | | | | | | | | | | | | | | |
| 军事技能训练 | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | | | |
| 军事理论 | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | | | |
| 体育 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 体育 2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 体育 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 高等数学 B 上 | √ | | | | √ | | | | | | | | | | | | | | | | | | | | | |
| 高等数学 B 下 | √ | | | | √ | | | | | | | | | | | | | | | | | | | | | |
| 线性代数 | √ | | | | | | | | | | | | | | | | | | | | | | | | | |
| 经济类专业导论 | | | | √ | | | | √ | | √ | | | | | | | | | | | | | | | | |
| 政治经济学 | | √ | √ | √ | | | | | | | | | √ | | | | | | | | | | | | | |
| 微观经济学 | | √ | | √ | √ | √ | | | √ | | √ | | | √ | √ | | | | | | | | | | √ | |
| 宏观经济学 | | √ | √ | √ | | | | | | | | | √ | | | | | | | | | | | | | |

| | 课程 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 管理学原理A | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | | | | | | | | | √ | √ | √ | | | | | | | | | |
| | 神奇的材料世界 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 概率论与数理统计B | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 中级微观经济学B | | | | √ | | | | | √ | | | √ | | | | | | | | | | | | | | | | | | √ |
| | 中级宏观经济学B | | | √ | | | | | | √ | | | √ | | | | | | | | | | | | | | | | | | √ |
| | 计量经济学 | | √ | | | | | | | | | | √ | √ | √ | | | | | | | | | | | | | | | | |
| | 国际贸易 | | | √ | | √ | | | | | | | | | | | | | √ | √ | | | | | | | | | | | |
| √ | 货币金融学 | √ | | | | | | √ | | √ | | | | | √ | | | | | | | | | | | | | | | | |
| √ | 国际金融学 | √ | | | | | | | | | | | | | | | | | | | | | | | √ | √ | | | | | |
| | 统计学B | | √ | | | | | | | | | √ | √ | | √ | | | | | | | | | | | | | | | | |
| | 会计学 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | 证券投资学 | √ | | | | | | √ | | √ | | | | | √ | | | | | | | | | | | | | | | | |
| √ | 金融工程学A | | | | √ | | | | | √ | | | | | √ | | | | | | | | | | | | | | | | |
| √ | 商业银行经营与管理 | | | | √ | | | | | | | | | | | | | | | | √ | | √ | | | √ | | | | | |
| | 保险学B | √ | | | | | | √ | | √ | | | | | √ | | | | | | | | | | | | | | | | |
| | 国际结算 | √ | | | | | | √ | | √ | | | | | √ | | | | | | | | | | | | | | | | |
| √ | 公司金融学 | | | | | | | | √ | √ | | | | √ | | | | √ | | | | | | | | | | | | | |
| √ | 金融风险管理 | √ | | | | | | √ | | √ | | | | | √ | | | | | | | | | | | | | | | | |
| | 数字经济创业导论 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 财政学B | | | | √ | √ | √ | √ | | | | | | | | | | | | | | | | | | | | | | | |
| | 投资银行理论与实务 | | | √ | | | | | | √ | | | | | √ | | | | | | | | | | | | | | | | |

| | 课程 | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 跨国公司金融管理 | | | | √ | | √ | | | | | | | | | √ | | | | | | | | | | | |
| √ | 保险精算学 | | | | | | √ | | | | | | √ | | | √ | | | | | | | | | | | |
| √ | 人工智能导论 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | 房地产金融学A | | | | | √ | | | | | | | | | | √ | | | √ | | | | | | | | |
| | 商业银行营销学 | | | | | | | √ | | | | | | | | | | | | | √ | √ | | | | | |
| | 金融专业英语 | √ | | | | | | | | | | | | | | | | | | | √ | | √ | | | | |
| | 国际贸易实务D | | | | | | | | | | | √ | | | | √ | √ | | | | | | | | | √ | |
| | 经济计量软件与应用 | | | | √ | | | | | | | | √ | | √ | √ | | | | | | | | | | | |
| √ | 金融数据挖掘与分析 | | | | √ | | | | | | | √ | | | | √ | | | | | | | | | | | |
| | 世界经济B | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 国际投资学C | | | | √ | | | √ | | | | | | | | | | | | | | | | | √ | | |
| √ | 量化交易系统设计与运用 | | | | | | | | √ | | | | | | | √ | √ | | | | | | | | | | |
| | 税收学A | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 股权投资基金 | | | | | | √ | | | | | | | | √ | | | | | | | | | √ | | | |
| | 金融科技概论 | | √ | | | | | | | | | | | | | | | | √ | | | | | | | | √ |
| | 计算机网络原理 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 技术经济学C | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 财务报表分析A | | √ | √ | | | | | | | | | | | √ | | √ | | | | | | | | | | |
| √ | 金融企业会计A | √ | | | | | | | | √ | √ | | | | | | | | | | | | | | | | |

| 课程名称 | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 金融法B | | | | | | | | | | | | | | | | | | | | | | | |
| 电子商务原理B | | √ | | √ | | | | | | | | | | | | | | | | | √ | | |
| 经济法B | | | | | | | | | | | | | | | | | | | | | | | |
| 金融专业综合实践 | | | | | | | | | | | √ | | | | √ | √ | | | | | | | |
| 毕业实习 | | | | | | | | | | | √ | | | | √ | √ | | | | | | | |
| 毕业论文 | | | | √ | | | | | √ | √ | | | | | | | | | | | | | |
| 创业企业运营实训C | | √ | √ | | | | | | | √ | | | | √ | | | | | | | | √ | |
| 体育4 | | | | | | | | | | | | | | | | | | | | | | | |

三、 教学建议进程表

III **Course Schedule**

(一)公共基础必修课程
1 Public Basic Compulsory Courses

| 开课单位 Course College | 课程编号 Course Number | 课程名称 Course Title | 学分 Crs | 学时分配 Including | | | | | | 建议修读学期 Suggested Term | 先修课程 Prerequisite Course |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 总学时 Tot hrs. | 理论 Theory | 实验 Exp. | 上机 Ope-ratio. | 实践 Prac-tice. | 课外 Extra-cur. | | |
| 马克思主义学院 | 4220001210 | 思想道德与法治 | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 1 | |
| | | Morality and the rule of law | | | | | | | | | |
| 马克思主义学院 | 4220002180 | 中国近现代史纲要 | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 2 | |
| | | Outline of Contemporary and Modern Chinese History | | | | | | | | | |
| 马克思主义学院 | 4220005180 | 马克思主义基本原理 | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 4 | |
| | | Marxism Philosophy | | | | | | | | | |
| 马克思主义学院 | 4220003180 | 毛泽东思想和中国特色社会主义理论体系概论 | 4.5 | 66 | 66 | 0 | 0 | 0 | 0 | 3 | |
| | | Introduction to Mao Zedong Thought and | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Socialism with Chinese Characteristics | | | | | | | | |
| 外语学院 | 4030001210 | 大学英语 1<br>College English I | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 1 |
| 外语学院 | 4030002210 | 大学英语 2<br>College English II | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 2 |
| 外语学院 | 4030003210 | 大学英语 3<br>College English III | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 3 |
| 外语学院 | 4030004210 | 大学英语 4<br>College English IV | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 4 |
| 计算机智能学院 | 4120004210 | Python 程序设计基础 B<br>Foundation of Python Programming B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 |
| 计算机智能学院 | 4120008210 | 计算机基础与Python 程序设计综合实验 B<br>Comprehensive Experiments of Foundation of Computer and PYTHON Language Programming B | 1 | 32 | 0 | 32 | 0 | 0 | 0 | 2 |
| 学工部 | 1050001210 | 军事技能训练<br>Military Skills Training | 2 | 136 | 0 | 0 | 0 | 136 | 0 | 1 |
| 学工部 | 1050002210 | 军事理论<br>Military Theory | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 |
| 体育学院 | 4210001170 | 体育 1<br>Physical Education Ⅰ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 1 |
| 体育学院 | 4210002170 | 体育 2<br>Physical Education Ⅱ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 2 |
| 体育学院 | 4210003170 | 体育 3<br>Physical Education Ⅲ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 3 |
| 体育学院 | 4210004170 | 体育 4<br>Physical Education Ⅳ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 4 |
| 小 计 Subtotal | | | 31.0 | 744 | 512 | 32 | 0 | 136 | 64 | | |

(二)通识教育选修课程
2 General Education Elective Courses

| 核心选修 Core elective courses | 文明与传统 Civilization and Tradition Courses | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 社会与发展类 Society and Development Courses | | | | | | | | | |
| | 艺术与人文类 Art and Humanities Courses | | | | | | | | | |
| | 自然与方法类 Nature and methods Courses | 通识课程应修满至少9学分。核心选修不少于2学分；自主选修课程中，至少在艺术与审美、创新与创业两个领域各选修1门课程。 Minimum subtotal credits: 9. Core elective courses ≥2 credits. Self-selected courses, at least 1 course in art and aesthetics and 1 course in innovation and entrepreneurship. | | | | | | | | |
| 自主选修 选修 Core elective courses | 数学与自然科学, 哲学与心理学, 法学与社会科学, 经济与管理, 历史与文化, 语言与文学, 艺术与审美, 创新与创业 Mathematics and Natural Sciences, Philosophy and Psychology, Science and Social Sciences, Economics and Management, History and Culture, Language and Literature, Art and Aesthetics, Innovation and Entrepreneurship | | | | | | | | | |

(三)大类必修课程
3 Basic Discipline Required Courses

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 理学院 | 4050003210 | 高等数学 B 上 Advanced Mathematics Ⅰ | 4.5 | 72 | 72 | 0 | 0 | 0 | 0 | 1 | |
| 理学院 | 4050004210 | 高等数学 B 下 Advanced Mathematics Ⅱ | 5.5 | 88 | 88 | 0 | 0 | 0 | 0 | 2 | |
| 理学院 | 4050229110 | 线性代数 Linear Algebra | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | |
| 经济学院 | 4010001210 | 经济类专业导论 Introduction to Economics | 1.5 | 24 | 24 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010100110 | 政治经济学 Political Economics | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010003210 | 微观经济学 Microeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010007210 | 宏观经济学 Macroeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 2 | |
| 管理学院 | 4170002210 | 管理学原理 A Principles of Management | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | |
| 材料学院 | 4070121210 | 神奇的材料世界 The World of Miraculous Materials | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 2 | |
| 小 计 Subtotal | | | 26.0 | 416 | 416 | 0 | 0 | 0 | 0 | | |

(四)专业必修课程
4 Specialized Required Courses

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 理学院 | 4050058110 | 概率论与数理统计B | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | |
| | | Probability and Mathematical Statistics | | | | | | | | | |
| 经济学院 | 4010105110 | 中级微观经济学B | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | |
| | | Intermediate Microeconomics | | | | | | | | | |
| 经济学院 | 4010104110 | 中级宏观经济学B | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | |
| | | Intermediate Macroeconomics | | | | | | | | | |
| 经济学院 | 4010056110 | 计量经济学 | 3.5 | 56 | 48 | 8 | 0 | 0 | 0 | 4 | |
| | | Econometrics | | | | | | | | | |
| 经济学院 | 4010037110 | 国际贸易 | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | |
| | | International Trade | | | | | | | | | |
| 经济学院 | 4010008210 | 货币金融学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 3 | |
| | | Money and Finance | | | | | | | | | |
| 经济学院 | 4010367170 | 国际金融学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 4 | |
| | | International Finance | | | | | | | | | |
| 经济学院 | 4010335170 | 统计学B | 3 | 48 | 42 | 6 | 0 | 0 | 0 | 3 | |
| | | Statistics | | | | | | | | | |
| 管理学院 | 4170010210 | 会计学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 4 | |
| | | Accounting | | | | | | | | | |
| 经济学院 | 4010099110 | 证券投资学 | 2.5 | 40 | 34 | 6 | 0 | 0 | 0 | 4 | |
| | | Securities Investment | | | | | | | | | |
| 经济学院 | 4010062110 | 金融工程学A | 2.5 | 40 | 34 | 6 | 0 | 0 | 0 | 5 | 高等数学B下, |
| | | Financial Engineering | | | | | | | | | |
| 经济学院 | 4010021210 | 商业银行经营与管理 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | |
| | | Commercial Bank Management | | | | | | | | | |
| 经济学院 | 4010003110 | 保险学B | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | |
| | | Insurance | | | | | | | | | |
| 经济学院 | 4010032110 | 国际结算 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | |
| | | International Settlement | | | | | | | | | |
| 经济学院 | 4010029110 | 公司金融学 | 2.5 | 40 | 36 | 4 | 0 | 0 | 0 | 6 | |
| | | Corporate Finance | | | | | | | | | |
| 经济学院 | 4010061110 | 金融风险管理 | 2.0 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |

| | | Financial Risk Management | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 创业学院 | 4270004210 | 数字经济创业导论 | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 5 | |
| | | Introduction to digital economy Entrepreneurship | | | | | | | | | |
| 经济学院 | 4010005110 | 财政学 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| | | Public Finance | | | | | | | | | |
| 小 计 Subtotal | | | 46.0 | 736 | 706 | 30 | 0 | 0 | 0 | | |

(五)专业选修课程
5 Specialized Elective Courses

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010090110 | 投资银行理论与实务 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | |
| | | Investment Bank Theory and Practice | | | | | | | | | |
| 经济学院 | 4010063210 | 跨国公司金融管理 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | |
| | | Multinational Financial Management | | | | | | | | | |
| 经济学院 | 4010140110 | 保险精算学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 6 | 概率论与数理统计 B, |
| | | Insurance Actuarial Theory | | | | | | | | | |
| 计算机智能学院 | 4120440190 | 人工智能导论 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Introduction of Artificial | | | | | | | | | |
| 经济学院 | 4010026110 | 房地产金融学 A | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 6 | |
| | | Real Estate Finance | | | | | | | | | |
| 经济学院 | 4010086110 | 商业银行营销学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 6 | |
| | | Commercial Bank Marketing | | | | | | | | | |
| 经济学院 | 4010065210 | 金融专业英语 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 6 | |
| | | Financial English | | | | | | | | | |
| 经济学院 | 4010339170 | 国际贸易实务 D | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | International Trade Practice | | | | | | | | | |
| 经济学院 | 4010041210 | 经济计量软件与应用 | 2 | 32 | 24 | 8 | 0 | 0 | 0 | 7 | 计量经济学, |
| | | Application of Econometrics Software | | | | | | | | | |
| 经济学院 | 4010336170 | 金融数据挖掘与分析 | 2 | 32 | 20 | 12 | 0 | 0 | 0 | 5 | |

| 开课学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 开课学期 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Financial Data Mining and Analysis | | | | | | | | | |
| 经济学院 | 4010204990 | 世界经济 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| | | World Economy | | | | | | | | | |
| 经济学院 | 4010313170 | 国际投资学 C | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | International Investment | | | | | | | | | |
| 经济学院 | 4010068210 | 量化交易系统设计与运用 | 2 | 32 | 16 | 16 | 0 | 0 | 0 | 7 | |
| | | Quantitative Trading System Design | | | | | | | | | |
| 经济学院 | 4010239160 | 税收学 A | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 5 | |
| | | Taxation | | | | | | | | | |
| 经济学院 | 4010069210 | 股权投资基金 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | PE and VC | | | | | | | | | |
| 经济学院 | 4010763190 | 金融科技概论 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | Introduction of FinTech | | | | | | | | | |
| 经济学院 | 4010001220 | 计算机网络原理 | 2.5 | 40 | 32 | 8 | 0 | 0 | 0 | 7 | |
| | | Computer Network Designing | | | | | | | | | |
| 管理学院 | 4170078110 | 技术经济学 C | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Economics of Technology | | | | | | | | | |
| 管理学院 | 4170530130 | 财务报表分析 A | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Analysis of Financial Report | | | | | | | | | |
| 管理学院 | 4170191110 | 金融企业会计 A | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | Financial Enterprises Accounting | | | | | | | | | |
| 法学社会学院 | 4020072110 | 金融法 B | 2.0 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Financial Law | | | | | | | | | |
| 经济学院 | 4010090210 | 电子商务原理 B | 2 | 32 | 26 | 6 | 0 | 0 | 0 | 4 | |
| | | E-commerce Practice | | | | | | | | | |
| 小 计 Subtotal | | | 48.5 | 776 | 726 | 50 | 0 | 0 | 0 | | |

修读说明：专业选修课程至少选修 24.5 学分。
NOTE：Minimum subtotal credits: 24.5 .

(六)个性课程
6 Personalized Electice Courses

| 开课学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 开课学期 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 法学社会学院 | 4020074110 | 经济法 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| | | Economic Law | | | | | | | | | |
| 小 计 Subtotal | | | 2.0 | 32 | 32 | 0 | 0 | 0 | 0 | | |

| 修读说明：学生从以上个性课程和学校发布的其它个性课程目录中选课，要求至少选修6学分。<br>NOTE:Students can select courses from above and the other personalized courses in catalog, and are required to obtain at least 6 credits. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (七)专业教育集中性实践教育环节<br>7 Specialized Practice Schedule | | | | | | | | | | | |
| 经济学院 | 4010094210 | 金融专业综合实践<br>Practice of Specialty | 3 | 48 | 0 | 0 | 0 | 48 | 0 | 6 | |
| 经济学院 | 4010137110 | 毕业实习<br>Graduation Practice | 5 | 80 | 0 | 0 | 0 | 80 | 0 | 8 | |
| 经济学院 | 4010106210 | 毕业论文<br>Graduation Thesis | 8.5 | 272 | 0 | 0 | 0 | 272 | 0 | 8 | |
| 经济学院 | 4010302170 | 创业企业运营实训C<br>Training for Start-up Entreperneurship Operation | 1 | 16 | 0 | 0 | 0 | 16 | 0 | 5 | |
| 小 计 Subtotal | | | 17.5 | 416 | 0 | 0 | 0 | 416 | 0 | | |

## 四、 修读指导
## Ⅳ Recommendations on Course Studies

课外培养方案详见《武汉理工大学第二课堂课外学分实施办法》。《形势与政策》和《心理健康教育》课程为课外必修课程，分别计 2 个课外学分。

Please refer to the cultivation plan of the second class-Implementation Measures for Extracurricular Credits of the Second Class of Wuhan University of Technology. Situation & Policy (2 credits) and Mental Health Education (2 credits) are the required extracurricular courses.

学院教学负责人：杜伟岸

专业培养方案负责人：沈蕾, 郭春风

# 金融学（数理金融班）2021 版本科培养方案
# Undergraduate Education Plan for Specialty in Finance (Oriented in Mathematical Finance) (2021)

| | | | | |
|---|---|---|---|---|
| 专业名称<br>Major | **金融学（数理金融班）**<br>**Finance (Oriented in Mathematical Finance)** | 主干学科<br>Major Disciplines | **经济学**<br>Economics | |
| 计划学制<br>Duration | **四 年**<br>**4 Years** | 授予学位<br>Degree Granted | **经济学学士**<br>Bachelor of Economics | |

**最低毕业学分规定**
**Graduation Credit Criteria**

| *课程分类*<br>*Course Classification*<br>*课程性质*<br>*Course Nature* | 公共基础课程<br>Public Basic Courses | 通识教育课程<br>Public Courses | 大类课程<br>Basic Courses in General Discipline | 专业教育课程<br>Specialized Courses | 个性课程<br>Personalized Course | 集中性实践教学环节<br>Specialized Practice Schedule | 课外学分<br>Study Credit after Class | 总学分<br>Total Credits |
|---|---|---|---|---|---|---|---|---|
| 必修课<br>Required Courses | 31 | \ | 28 | 51.5 | \ | 17.5 | 10 | 180.0 |
| 选修课<br>Elective Courses | \ | 9 | \ | 17 | 6 | \ | 10 | |

## 一、 培养目标与毕业要求

## Ⅰ Educational Objectives &Requirement

### （一） 培养目标

本专业面向新时代数字经济发展需要，培养具有扎实的数学、经济金融理论基础，精通计量分析、金融建模等研究方法，具备运用数理、计算机和金融工具解决实际金融问题的能力，能够在经济、金融相关领域从事金融产品开发、金融市场分析、金融风险管理等方面工作，适应能力强、实干精神强、创新意识强、德智体美劳全面发展，具有卓越追求、卓越能力的社会主义建设者和接班人。

本专业期待毕业生五年后能达成下列目标：

（1）身心健康，具有崇高的家国情怀、坚定的社会主义核心价值观和中国特色社会主义理想信念，具备良好的敬业精神、职业道德和社会责任感；

（2）具有从事金融领域科学研究和实践所需的数学、经济学、金融学知识，具备多维分析能力，能将以上知识运用于解决实际金融问题；

（3）具有运用数理、计算机和金融工具进行数量分析、金融建模，进行金融产品开发、金融市场分析和金融风险管理的能力；

（4）具有良好的口头和书面表达与沟通能力、良好的团队意识和合作精神，拥有国际化视野，具备较强的社会适应能力与创新能力；

（5）具有终身学习能力，适应职业发展，在金融及相关领域具有职场竞争力。

**I Education Objectives**

To meet the needs of digital economic development in the new era, this specialty cultivates a solid mathematical, economic and financial theoretical basis, proficient in measurement analysis, financial modeling and other research methods, has the ability to solve practical financial problems by mathematical, computer and financial instruments, can work in economic and financial related fields in financial product development, financial market analysis, financial risk management, etc., has strong adaptability, strong spirit of hard work, strong sense of innovation, moral and intellectual beauty and all-round development, with excellent pursuit, Socialist builders and successors of superior abilities.

Students of this program are expected to achieve the following objectives 5 years after graduation:

（1）Physical and mental health, with lofty national patriotism, firm socialist core values and socialist ideals and beliefs with Chinese characteristics;

（2）Have the mathematics, economics and finance knowledge needed to engage in scientific research and practice in the field of finance, have the ability of analysis, and can apply the above knowledge to solve practical financial problems;

（3）Have the ability to use mathematical, computer and financial instruments for quantitative analysis, financial modeling, financial product development, financial market analysis and financial risk management;

（4）Have good oral and written expression and communication skills, good team awareness and spirit of cooperation, with an international perspective, with strong social adaptability and innovation ability;

（5）With lifelong learning ability, learning to adapt to career development, in finance and related fields with professional competitiveness.

二、 毕业要求

(1) **工程知识：** 能够将现代金融学、数学和信息技术基础和专业知识用于解决复杂的金融问题；

(2) **问题分析：** 能够运用数学分析方法、计算机信息技术与金融学基本原理，识别、表达、分析复杂金融问题，以获得有效结论；

(3) **解决方案：** 能够针对社会经济金融发展需要，综合考虑社会、健康、安全、法律、文化以及环境等因素，运用金融理论和分析方法进行金融产品设计和产品定价；

(4) **研究：** 能够基于经济金融学原理，并采用科学方法对复杂金融问题进行研究，包括金融产品设计、金融问题分析与解释，并通过信息综合得到合理有效的结论；

(5) **工具使用：** 能够针对复杂金融问题，开发、选择与使用数理分析工具、信息技术工具以及金融分析方法对包括金融风险等复杂问题进行预测与模拟，能够理解其局限性；

(6) **工程与社会：** 能够基于金融学相关背景知识进行合理分析，评价金融实践和复杂金融问题解决方案对社会、健康、安全、法律以及文化的影响，并理解应承担的责任；

(7) **环境和可持续发展：** 能够理解和评价针对复杂金融问题的实践活动对环境、社会可持续发展的影响；

(8) **职业规范：** 具有人文社会科学素养、社会责任感，能够在金融实践中理解并遵守职业道德和规范、履行责任；

(9) **个人和团队：** 具有良好的团队协作精神，能够在多学科背景下的团队中承担个体、团队成员以及负责人的角色；

(10) **沟通：** 能够就复杂金融问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和设计文稿、陈述发言、清晰表达或回应指令，并具备一定的国际视野，能够在跨文化背景下进行沟通和交流；

(11) **项目管理：** 理解并掌握项目管理原理与经济决策方法，能在多学科环境中应用；

(12) **终身学习：** 具有自主学习和终身学习的意识，有不断学习和适应发展的能力。

## II Graduation Requirement

(1) **Engineering knowledge:** Be able to apply the basics and expertise of modern finance, mathematics and information technology to solve complex financial problems;

(2) **Problem analysis:** To be able to use mathematical analysis methods, computer information technology and the basic principles of finance to identify, express

and analyze complex financial problems through literature research in order to obtain effective conclusions;

(3) **Design/development solution:** To be able to use financial theory and analytical methods to design and price financial products in response to the needs of socio-economic and financial development, taking into account social, health, safety, legal, cultural and environmental factors;

(4) **Research:** Be able to study complex financial problems based on the principles of economic and financial science and scientific methods, including financial product design, analysis and interpretation of financial problems, and to obtain reasonable and effective conclusions through information synthesis;

(5) **Usage of modern tools:** To develop, select and use mathematical analysis tools, information technology tools and financial analysis methods to predict and simulate complex problems, including financial risks, and to understand their limitations;

(6) **Engineering and society:** Be able to conduct a rational analysis based on relevant background in finance, evaluate the social, health, safety, legal and cultural impacts of financial practices and solutions to complex financial problems, and understand the responsibilities to be assumed;

(7) **Environment and sustainable development:** To be able to understand and evaluate the impact of practical activities on the environmental and social sustainable development of complex financial issues;

(8) **Professional standards:** With human and social science literacy, social responsibility, can understand and abide by professional ethics and norms in financial practice, to fulfill responsibilities;

(9) **Individual and team:** Have a good team spirit, can assume the role of individual, team member and person in charge in the multidisciplinary background of the team;

(10) **Communication:** Ability to communicate and communicate effectively with industry peers and the public on complex financial issues, including writing reports and designing documents, making presentations, expressing clearly or

responding to directives. And have a certain international perspective, can communicate and exchange in a cross-cultural context;

(11) **Project management:** Understand and master the principles of project management and economic decision-making methods, and can be applied in a multidisciplinary environment;

(12) **Life-long learning:** Have the awareness of independent learning and lifelong learning, have the ability to continuously learn and adapt to development.

表 2 培养目标的矩阵关系毕业要求支撑

| 毕业要求 | 培养目标 1 | 培养目标 2 | 培养目标 3 | 培养目标 4 | 培养目标 5 |
|---|---|---|---|---|---|
| 毕业要求 1 | √ | √ | √ | | |
| 毕业要求 2 | | √ | √ | √ | √ |
| 毕业要求 3 | | √ | √ | √ | √ |
| 毕业要求 4 | √ | √ | √ | √ | |
| 毕业要求 5 | | √ | √ | √ | √ |
| 毕业要求 6 | √ | √ | | √ | √ |
| 毕业要求 7 | √ | √ | √ | √ | √ |
| 毕业要求 8 | √ | √ | √ | √ | |
| 毕业要求 9 | √ | | | √ | √ |
| 毕业要求 10 | √ | | | √ | √ |
| 毕业要求 11 | | √ | √ | √ | √ |
| 毕业要求 12 | √ | √ | √ | √ | √ |

　　毕业要求的达成需以课程（教学环节）的教学活动为支撑。本专业为 合理设置课程体系、落实对毕业要求的支撑课程，对各项毕业要求进行了解。每项毕业要求（一级指标）被分解为若干层层递进的指标点（二级指标） ，前一指标点的达成是下一指标点达成的基础，而下一指标点的达成是前一指标点的升华，所有指标点一起，支撑了该毕业要求的达成。根据上述分解方法， 本专业各项毕业要求的指标点分解如下表所示。

表 3 毕业要求指标点的分解

| 毕业要求 | 指标点 |
|---|---|
| | 1.1 问题表述 |
| | 1.2 建模求解 |

| 毕业要求 1. 工程知识:能够将现代金融学、数学和信息技术基础和专业知识用于解决复杂的金融问题; | 1.3 推演分析 |
|---|---|
| | 1.4 比较综合 |
| 毕业要求 2. 问题分析:能够运用数学分析方法、计算机信息技术与金融学基本原理,识别、表达、分析复杂金融问题,以获得有效结论; | 2.1 识别问题 |
| | 2.2 表述问题 |
| | 2.3 文献研究 |
| | 2.4 获得结论 |
| 毕业要求 3. 解决方案:能够针对社会经济金融发展需要,综合考虑社会、健康、安全、法律、文化以及环境等因素,运用金融理论和分析方法进行金融产品设计和产品定价; | 3.1 了解 |
| | 3.2 设计 |
| | 3.3 创新 |
| | 3.4 综合 |
| 毕业要求 4. 研究:能够基于经济金融学原理,并采用科学方法对复杂金融问题进行研究,包括金融产品设计、金融问题分析与解释,并通过信息综合得到合理有效的结论; | 4.1 调研分析 |
| | 4.2 设计方案 |
| | 4.3 采集数据 |
| | 4.4 形成结论 |
| 毕业要求 5. 工具使用:能够针对复杂金融问题,开发、选择与使用数理分析工具、信息技术工具以及金融分析方法对包括金融风险等复杂问题进行预测与模拟,能够理解其局限性; | 5.1 了解工具 |
| | 5.2 选择工具 |
| | 5.3 开发工具 |
| 毕业要求 6. 工程与社会:能够基于金融学相关背景知识进行合理分析,评价金融实践和复杂金融问题解决方案对社会、健康、安全、法律以及文化的影响,并理解应承担的责任; | 6.1 了解影响 |
| | 6.2 理解责任 |
| 毕业要求 7. 环境和可持续发展:能够理解和评价针对复杂金融问题的实践活动对环境、社会可持续发展的影响; | 7.1 知晓理念 |
| | 7.2 评价隐患 |

| 毕业要求 8.职业规范:具有人文社会科学素养、社会责任感，能够在金融实践中理解并遵守职业道德和规范、履行责任; | 8.1 了解国情 |
| | 8.2 遵守规范 |
| | 8.3 履行责任 |
| 毕业要求 9.个人和团队:具有良好的团队协作精神，能够在多学科背景下的团队中承担个体、团队成员以及负责人的角色; | 9.1 合作共事 |
| | 9.2 独立工作 |
| | 9.3 组织协调 |
| 毕业要求 10.沟通:能够就复杂金融问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和设计文稿、陈述发言、清晰表达或回应指令，并具备一定的国际视野，能够在跨文化背景下进行沟通和交流; | 10.1 表达观点 |
| | 10.2 了解前沿 |
| | 10.3 跨文化交流 |
| 毕业要求 11.项目管理:理解并掌握项目管理原理与经济决策方法，能在多学科环境中应用; | 11.1 掌握方法 |
| | 11.2 理解问题 |
| | 11.3 决策运用 |
| 毕业要求 12.终身学习:具有自主学习和终身学习的意识，有不断学习和适应发展的能力。 | 12.1 认识必要性 |
| | 12.2 具备能力 |

## 二、专业核心课程与专业特色课程
## II Core Course and Characteristic Courses

### （一） 专业核心课程

数学分析 1,国际金融学,证券投资学,金融工程学 A,商业银行经营与管理,多元统计分析 B,时间序列分析 B

Mathematical Analysis Ⅰ,International Finance,Securities Investment,Financial Engineering,Commercial Bank Management ,Multivariate Statistical Analysis,Time Series Analysis

### （二） 专业特色课程

数理统计 B,应用随机过程 A,多元统计分析 B,数学模型 B,保险精算学,量化交易系统设计与运用

Mathematical Statistics,Applied Stochastic Processes,Multivariate
Statistical Analysis,Mathematical Models,Insurance Actuarial
Theory,Quantitative Trading System Design

**附：毕业要求实现矩阵**

金融学（数理金融班）专业毕业要求

| 专业核心课程 | 专业特色课程 | 课程名称 | 1-1 | 1-2 | 1-3 | 1-4 | 2-1 | 2-2 | 2-3 | 2-4 | 3-1 | 3-2 | 3-3 | 3-4 | 4-1 | 4-2 | 4-3 | 4-4 | 5-1 | 5-2 | 5-3 | 6-1 | 6-2 | 7-1 | 7-2 | 8-1 | 8-2 | 8-3 | 9-1 | 9-2 | 9-3 | 10-1 | 10-2 | 10-3 | 11-1 | 11-2 | 11-3 | 12-1 | 12-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 思想道德与法治 | | | | | | | | | | | | | | | | | | | | | √ | | | | √ | | | | | | | | √ | | | | √ |
| | | 中国近现代史纲要 | | | | | | | | | | | | | | | | | | | | | √ | | | | √ | | | | | | | | √ | | | | √ |
| | | 马克思主义基本原理 | | | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | √ | | | √ |
| | | 毛泽东思想和中国特色社会主义理论体系概论 | | | | | | | | | | | | | | | | | | | | | | | √ | √ | | | | | | | | | √ | | √ | √ |
| | | 大学英语1 | | | | | | | | | | | | | | | | | | | √ | | | | | | √ | | | √ | | | √ | | | | | | |
| | | 大学英语2 | | | | | | | | | | | | | | | | | | | √ | | | | | | √ | | | √ | | | √ | | | | | | |
| | | 大学英语3 | | | | | | | | | | | | | | | | | | | √ | | | | | | √ | | | √ | | | √ | | | | | | |
| | | 大学英语4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Python程序设计基础A | | | | | | √ | | | | √ | | | | | | | | √ | √ | | | | | | | | | | | | | | | | | | |
| | | 计算机基础与Python程序设计综合实验A | | | | | | √ | | | | √ | | | | | | | | √ | √ | | | | | | | | | | | | | | | | | | |

| | 课程 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 军事技能训练 | | | | | | | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | |
| | 军事理论 | | | | | | | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | |
| | 体育1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 体育2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 体育3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 体育4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | 数学分析1 | | | √ | | √ | | | √ | | | | | | | | | | | | | | | | | | | | | | |
| | 数学分析2 | √ | | | | | | | | | | | | √ | | | | | | | | | | | | | | | √ | | √ |
| | 高等代数A1 | | √ | | | √ | | | | √ | | | | | | | | | | | | | | | | | | | √ | | |
| | 专业导论 | √ | | √ | | | | | | | | | | √ | | | | | | | | | | | | | | | √ | | |
| | 政治经济学 | | √ | √ | | √ | | | | | | | | | √ | | | | | | | | | | | | | | | | |
| | 微观经济学 | | √ | | √ | √ | √ | | | | | √ | | | √ | | | √ | | √ | | | | | | | | | √ | | |
| | 宏观经济学 | | √ | √ | | √ | | | | | | | | | √ | | | | | | | | | | | | | | | | |
| | 管理学原理A | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | | | | | | √ | √ | √ | | | | | | | | | | |
| | 神奇的材料世界 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 中级微观经济学B | | | | √ | | | | | | | √ | | | √ | | | | | | | | | | | | | | | | √ |
| | 中级宏观经济学B | | | √ | | | | | | | | √ | | | √ | | | | | | | | | | | | | | | | √ |
| | 货币金融学 | √ | | | | | | | √ | | | √ | | | | √ | | | | | | | | | | | | | | | |
| √ | 国际金融学 | √ | | | | | | | | | | | | | | | | | | | | | | | | | | √ | √ | | |
| √ | 证券投资学 | √ | | | | | | | √ | | | √ | | | | √ | | | | | | | | | | | | | | | |
| √ | 金融工程学A | | | | √ | | | | | | | √ | | | | √ | | | | | | | | | | | | | | | |
| √ | 商业银行经营与管理 | | | | √ | | | | | | | | | | | | | | | | √ | | √ | | | √ | | | | | |
| | 计量经济学 | | √ | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | | | | | |
| | 财政学B | | | √ | √ | √ | √ | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 | C17 | C18 | C19 | C20 | C21 | C22 | C23 | C24 | C25 | C26 | C27 | C28 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 数字经济创业导论 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 会计学 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 数学分析3 | √ | √ | √ | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 高等代数A2 | | √ | | √ | | | | √ | | √ | | | | | | | | | | | | | | | | | | |
| | | 常微分方程 | √ | √ | √ | √ | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 概率论B | | | | √ | √ | | | | | | | | | | | | | | | | | | | | | | | |
| | √ | 数理统计B | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | √ | 应用随机过程A | | | | √ | | | √ | | | √ | | | | | | | | | | | | | | | | | √ | √ |
| √ | √ | 多元统计分析B | | | | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | | | | | | | | | √ | √ | √ | √ |
| √ | | 时间序列分析B | | √ | | | | √ | | √ | | √ | | | | | | | | | | √ | | | | √ | | | | √ |
| | | 公司金融学 | | | | | | | √ | √ | | | | | √ | | | | √ | | | | | | | | | | | |
| | | 金融风险管理 | √ | | | | | √ | | | √ | | | | | √ | | | | | | | | | | | | | | |
| | | 保险学B | √ | | | | | √ | | | √ | | | | | √ | | | | | | | | | | | | | | |
| | √ | 数学模型B | √ | | √ | | | | | | √ | | | | | | | | | | | | | | | | | √ | | |
| | | 运筹学A | √ | | | | | | | | √ | | | | | | | | | | | | | | | | | | | √ |
| | | 国际贸易 | | | √ | | √ | | | | | | | | | | | | | | √ | | √ | | | | | | | |
| | | 跨国公司金融管理 | | | | √ | | | √ | | | | | | | | √ | | | | | | | | | | | | | |
| | √ | 保险精算学 | | | | | | | √ | | | | | | √ | | | | √ | | | | | | | | | | | |
| | | 经济计量软件与应用 | | | | √ | | | | | | | √ | | | √ | √ | | | | | | | | | | | | | |
| | | 博弈论基础 | | | | | √ | | | | | | | √ | √ | | | | | | | | | √ | | | | | | |
| | √ | 量化交易系统设计与运用 | | | | | | | | | √ | | | | | | √ | √ | | | | | | | | | | | | |

| 课程名称 | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 金融科技概论 | | √ | | | | | | | | | | √ | | | | | | | | | | √ |
| 经济法B | | | | | | | | | | | | | | | | | | | | | | |
| 风险理论A | | | | | | | | | | | | | | | | | | | | | | |
| 电子商务原理B | | | √ | | √ | | | | | | | | | | | | | | | √ | | |
| 金融专业综合实践 | | | | | | | | | | | | | √ | | | √ | √ | | | | | |
| 毕业实习 | | | | | | | | | | | | | √ | | | √ | √ | | | | | |
| 毕业论文 | | | | | √ | | | | | √ | √ | | | | | | | | | | | |
| 创业企业运营实训C | | | √ | √ | | | | | | | √ | | | | √ | | | | | | √ | |
| 实变函数A | √ | √ | √ | √ | | | | | √ | √ | √ | √ | | | | | | | √ | √ | √ | |

## 三、 教学建议进程表

### Ⅲ Course Schedule

(一)公共基础必修课程

1 Public Basic Compulsory Courses

| 开课单位 Course College | 课程编号 Course Number | 课程名称 Course Title | 学分 Crs | 学时分配 Including | | | | | | 建议修读学期 Suggested Term | 先修课程 Prerequisite Course |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 总学时 Tot hrs. | 理论 Theory | 实验 Exp. | 上机 Ope-ratio. | 实践 Prac-tice. | 课外 Extra-cur. | | |
| 马克思主义学院 | 4220001210 | 思想道德与法治 Morality and the rule of law | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 1 | |
| 马克思主义学院 | 4220002180 | 中国近现代史纲要 Outline of Contemporary and Modern Chinese History | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 2 | |
| 马克思主义学院 | 4220005180 | 马克思主义基本原理 Marxism Philosophy | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 4 | |
| 马克思主义学院 | 4220003180 | 毛泽东思想和中国特色社会主义理论体系概论 | 4.5 | 66 | 66 | 0 | 0 | 0 | 0 | 3 | |

| 学院 | 课程代码 | 课程名称 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Introduction to Mao Zedong Thought and Socialism with Chinese Characteristics | | | | | | | | | |
| 外语学院 | 4030001210 | 大学英语1 College English I | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 1 | |
| 外语学院 | 4030002210 | 大学英语2 College English II | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 2 | |
| 外语学院 | 4030003210 | 大学英语3 College English III | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 3 | |
| 外语学院 | 4030004210 | 大学英语4 College English IV | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 4 | |
| 计算机智能学院 | 4120003210 | Python 程序设计基础A Foundation of Python Programming A | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| 计算机智能学院 | 4120007210 | 计算机基础与Python 程序设计综合实验A Comprehensive Experiments of Foundation of Computer and PYTHON Language Programming A | 1 | 32 | 0 | 32 | 0 | 0 | 0 | 2 | |
| 学工部 | 1050001210 | 军事技能训练 Military Skills Training | 2 | 136 | 0 | 0 | 0 | 136 | 0 | 1 | |
| 学工部 | 1050002210 | 军事理论 Military Theory | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| 体育学院 | 4210001170 | 体育1 Physical Education Ⅰ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 1 | |
| 体育学院 | 4210002170 | 体育2 Physical Education Ⅱ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| 体育学院 | 4210003170 | 体育3 Physical Education Ⅲ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 3 | |
| 体育学院 | 4210004170 | 体育4 Physical Education Ⅳ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 4 | |

| | | 小 计 Subtotal | 31.0 | 744 | 512 | 32 | 0 | 136 | 64 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

**(二)通识教育选修课程**
**2 General Education Elective Courses**

| 核心选修 Core elective courses | 文明与传统 Civilization and Tradition Courses | | 通识课程应修满至少9学分。核心选修不少于2学分；自主选修课程中，至少在艺术与审美、创新与创业两个领域各选修1门课程。 Minimum subtotal credits: 9. Core elective courses ≥2 credits. Self-selected courses, at least 1 course in art and aesthetics and 1 course in innovation and entrepreneurship. |
|---|---|---|---|
| | 社会与发展类 Society and Development Courses | | |
| | 艺术与人文类 Art and Humanities Courses | | |
| | 自然与方法类 Nature and methods Courses | | |
| 自主选修选修 Core elective courses | 数学与自然科学, 哲学与心理学, 法学与社会科学, 经济与管理, 历史与文化, 语言与文学, 艺术与审美, 创新与创业 Mathematics and Natural Sciences, Philosophy and Psychology, Science and Social Sciences, Economics and Management, History and Culture, Language and Literature, Art and Aesthetics, Innovation and Entrepreneurship | | |

**(三)大类必修课程**
**3 Basic Discipline Required Courses**

| 理学院 | 4050175110 | 数学分析1 Mathematical Analysis Ⅰ | 5 | 80 | 80 | 0 | 0 | 0 | 0 | 1 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 理学院 | 4050176110 | 数学分析2 Mathematical Analysis Ⅱ | 6 | 96 | 96 | 0 | 0 | 0 | 0 | 2 | 数学分析1, |
| 理学院 | 4050647170 | 高等代数A1 Advanced Algebra Ⅰ | 4 | 64 | 64 | 0 | 0 | 0 | 0 | 2 | |
| 经济学院 | 4010127110 | 专业导论 Introduction to Specialty | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010100110 | 政治经济学 Political Economics | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010003210 | 微观经济学 Microeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010007210 | 宏观经济学 Macroeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 2 | |
| 管理学院 | 4170002210 | 管理学原理A Principles of Management | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | |
| 材料学院 | 4070121210 | 神奇的材料世界 | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 2 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | The World of Miraculous Materials | | | | | | | | |
| 小 计 Subtotal | | | 28.0 | 448 | 448 | 0 | 0 | 0 | 0 | |

(四)专业必修课程
4 Specialized Required Courses

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010105110 | 中级微观经济学 B | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 5 | 微观经济学, |
| | | Intermediate Microeconomics | | | | | | | | | |
| 经济学院 | 4010104110 | 中级宏观经济学 B | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 5 | 宏观经济学, |
| | | Intermediate Macroeconomics | | | | | | | | | |
| 经济学院 | 4010008210 | 货币金融学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 3 | |
| | | Money and Finance | | | | | | | | | |
| 经济学院 | 4010367170 | 国际金融学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 4 | |
| | | International Finance | | | | | | | | | |
| 经济学院 | 4010099110 | 证券投资学 | 2.5 | 40 | 34 | 6 | 0 | 0 | 0 | 5 | |
| | | Securities Investment | | | | | | | | | |
| 经济学院 | 4010062110 | 金融工程学 A | 2.5 | 40 | 34 | 6 | 0 | 0 | 0 | 6 | |
| | | Financial Engineering | | | | | | | | | |
| 经济学院 | 4010021210 | 商业银行经营与管理 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 6 | |
| | | Commercial Bank Management | | | | | | | | | |
| 经济学院 | 4010056110 | 计量经济学 | 3.5 | 56 | 48 | 8 | 0 | 0 | 0 | 4 | |
| | | Econometrics | | | | | | | | | |
| 经济学院 | 4010005110 | 财政学 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| | | Public Finance | | | | | | | | | |
| 创业学院 | 4270004210 | 数字经济创业导论 | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 5 | |
| | | Introduction to digital economy Entrepreneurship | | | | | | | | | |
| 管理学院 | 4170010210 | 会计学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 4 | |
| | | Accounting | | | | | | | | | |
| 理学院 | 4050177110 | 数学分析 3 | 5 | 80 | 80 | 0 | 0 | 0 | 0 | 3 | 数学分析 2, |
| | | Mathematical Analysis Ⅲ | | | | | | | | | |
| 理学院 | 4050680170 | 高等代数 A2 | 4 | 64 | 64 | 0 | 0 | 0 | 0 | 3 | 高等代数 A1, |
| | | Advanced Algebra Ⅱ | | | | | | | | | |
| 理学院 | 4050019110 | 常微分方程 | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | |
| | | Ordinary Differential Equations | | | | | | | | | |
| 理学院 | 4050473130 | 概率论 B | 4 | 64 | 64 | 0 | 0 | 0 | 0 | 3 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Probability | | | | | | | |
| 理学院 | 4050482130 | 数理统计 B | 4 | 64 | 64 | 0 | 0 | 0 | 0 | 4 | 概率论 B, |
| | | Mathematical Statistics | | | | | | | | |
| 理学院 | 4050500130 | 应用随机过程 A | 4 | 64 | 64 | 0 | 0 | 0 | 0 | 5 | 概率论 B, |
| | | Applied Stochastic Processes | | | | | | | | |
| 小 计 Subtotal | | | 51.5 | 824 | 804 | 20 | 0 | 0 | 0 | | |

(五)专业选修课程
5 Specialized Elective Courses

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 理学院 | 4050372120 | 多元统计分析 B ∗ | 3.5 | 56 | 48 | 0 | 8 | 0 | 0 | 6 | 数理统计 B, |
| | | Multivariate Statistical Analysis | | | | | | | | |
| 理学院 | 4050405120 | 时间序列分析 B ∗ | 3.5 | 56 | 48 | 0 | 8 | 0 | 0 | 6 | 数理统计 B, |
| | | Time Series Analysis | | | | | | | | |
| 经济学院 | 4010029110 | 公司金融学 ∗ | 2.5 | 40 | 36 | 4 | 0 | 0 | 0 | 6 | |
| | | Corporate Finance | | | | | | | | |
| 经济学院 | 4010061110 | 金融风险管理 ∗ | 2.0 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | Financial Risk Management | | | | | | | | |
| 经济学院 | 4010003110 | 保险学 B ∗ | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | |
| | | Insurance | | | | | | | | |
| 理学院 | 4050655170 | 数学模型 B | 3 | 48 | 40 | 0 | 8 | 0 | 0 | 4 | |
| | | Mathematical Models | | | | | | | | |
| 理学院 | 4050254110 | 运筹学 A | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 7 | |
| | | Operations Research | | | | | | | | |
| 经济学院 | 4010037110 | 国际贸易 | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 5 | |
| | | International Trade | | | | | | | | |
| 经济学院 | 4010063210 | 跨国公司金融管理 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | |
| | | Multinational Financial Management | | | | | | | | |
| 经济学院 | 4010140110 | 保险精算学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 7 | |
| | | Insurance Actuarial Theory | | | | | | | | |
| 经济学院 | 4010041210 | 经济计量软件与应用 | 2 | 32 | 24 | 8 | 0 | 0 | 0 | 7 | 计量经济学, |
| | | Application of Econometrics Software | | | | | | | | |
| 经济学院 | 4010004110 | 博弈论基础 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 7 | |

| 学院 | 课程编号 | 课程名称 | 学分 | 学时 | | | | | | 学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Foundation of Game Theory | | | | | | | | | |
| 经济学院 | 4010068210 | 量化交易系统设计与运用<br>Quantitative Trading System Design | 2 | 32 | 16 | 16 | 0 | 0 | 0 | 7 | |
| 经济学院 | 4010763190 | 金融科技概论<br>Introduction of FinTech | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| 理学院 | 4050465130 | 实变函数 A<br>Functions of Real Variable | 3.5 | 56 | 56 | 0 | 0 | 0 | 0 | 6 | 数学分析 3, |
| 小 计 Subtotal | | | 40.0 | 640 | 588 | 28 | 24 | 0 | 0 | | |

修读说明："专业选修课程"至少选修 17 学分。其中，多元统计分析 B、时间序列分析 B、公司金融学、金融风险管理、保险学 B 为限定选修课，数理金融方向学生应选择这些课程（合计 14 学分）。数理金融方向学生还应从其他"专业选修课程"中至少选修 3 个学分。
NOTE：Minimum subtotal credits: 17.

## (六)个性课程
## 6 Personalized Electice Courses

| 学院 | 课程编号 | 课程名称 | 学分 | 学时 | | | | | | 学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 法学社会学院 | 4020074110 | 经济法 B<br>Economic Law | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 理学院 | 4050377120 | 风险理论 A<br>Risk Theory | 3.0 | 48 | 48 | 0 | 0 | 0 | 0 | 6 | 应用随机过程 A, |
| 经济学院 | 4010090210 | 电子商务原理 B<br>E-commerce Practice | 2 | 32 | 26 | 6 | 0 | 0 | 0 | 7 | |
| 小 计 Subtotal | | | 7.0 | 112 | 106 | 6 | 0 | 0 | 0 | | |

修读说明：学生从以上个性课程和学校发布的其它个性课程目录中选课，要求至少选修 6 学分。
NOTE: Students can select courses from above and the other personalized courses in catalog, and are required to obtain at least 6 credits.

## (七)专业教育集中性实践教育环节
## 7 Specialized Practice Schedule

| 学院 | 课程编号 | 课程名称 | 学分 | 学时 | | | | | | 学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010094210 | 金融专业综合实践<br>Practice of Specialty | 3 | 48 | 0 | 0 | 0 | 48 | 0 | 6 | |
| 经济学院 | 4010137110 | 毕业实习<br>Graduation Practice | 5 | 80 | 0 | 0 | 0 | 80 | 0 | 8 | |
| 经济学院 | 4010106210 | 毕业论文<br>Graduation Thesis | 8.5 | 272 | 0 | 0 | 0 | 272 | 0 | 8 | |
| 经济学院 | 4010302170 | 创业企业运营实训 C<br>Training for Start-up | 1 | 16 | 0 | 0 | 0 | 16 | 0 | 5 | |

| | | Entreperneurship Operation | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 小 计 Subtotal | | 17.5 | 416 | 0 | 0 | 0 | 416 | 0 | |

## 四、 修读指导
**Ⅳ Recommendations on Course Studies**

　　课外培养方案详见《武汉理工大学第二课堂课外学分实施办法》。《形势与政策》和《心理健康教育》课程为课外必修课程，分别计 2 个课外学分。

　　Please refer to the cultivation plan of the second class-Implementation Measures for Extracurricular Credits of the Second Class of Wuhan University of Technology. Situation & Policy (2 credits) and Mental Health Education (2 credits) are the required extracurricular courses.

<div align="right">

学院教学负责人：杜伟岸

专业培养方案负责人：沈蕾, 郭春风

</div>

# 金融学（金融科技班）2021 版本科培养方案
# Undergraduate Education Plan for Specialty in Finance (Oriented in Financial Technology) (2021)

| | | | | |
|---|---|---|---|---|
| 专业名称 | **金融学（金融科技班）** | 主干学科 | **经济学** | |
| Major | **Finance (Oriented in Financial Technology)** | Major Disciplines | Economics | |
| 计划学制 | **四 年** | 授予学位 | **经济学学士** | |
| Duration | **4 Years** | Degree Granted | Bachelor of Economics | |

**最低毕业学分规定**
**Graduation Credit Criteria**

| 课程分类 *Course Classification* 课程性质 *Course Nature* | 公共基础课程 Public Basic Courses | 通识教育课程 Public Courses | 大类课程 Basic Courses in General Discipline | 专业教育课程 Specialized Courses | 个性课程 Personalized Course | 集中性实践教学环节 Specialized Practice Schedule | 课外学分 Study Credit after Class | 总学分 Total Credits |
|---|---|---|---|---|---|---|---|---|
| 必修课 Required Courses | 31 | \ | 28 | 48.5 | \ | 17.5 | 10 | 180.0 |
| 选修课 Elective Courses | \ | 9 | \ | 20 | 6 | \ | 10 | |

## 一、 培养目标与毕业要求

## Ⅰ Educational Objectives &Requirement

### （一） 培养目标

本专业面向新时代数字经济发展需要，顺应大数据、人工智能等先进科技手段与传统金融深度融合的发展趋势，培养同时掌握全面的金融理论知识和大数据、人工智能等现代科技手段，能够在银行证券保险等金融机构、科技公司和政府部门从事金融科技相关工作，适应能力强、实干精神强、创新意识强、德智体美劳全面发展，具有卓越追求、卓越能力的社会主义建设者和接班人。

本专业期待毕业生五年后能达成下列目标：

（1）身心健康，具有崇高的家国情怀、坚定的社会主义核心价值观和中国特色社会主义理想信念，具备良好的敬业精神、职业道德和社会责任感；

（2）具有从事金融科技所需的数学、经济学、金融学、计算机、信息技术和法律知识，将以上知识运用于解决经济金融问题；

（3）具有结合金融业务需求、综合运用计算机和信息技术，构建模型、设计金融产品、编写和开发相关程序的能力；

（4）具有良好的口头和书面表达与沟通能力、良好的团队意识和合作精神，拥有国际化视野，具备较强的社会适应能力与创新能力；

（5）具有终身学习能力，适应职业发展，在金融及相关领域具有职场竞争力。

## I Education Objectives

To meet the development needs of digital economy in the new era, follow the development trend of the deep integration of advanced scientific and technological means such as big data and artificial intelligence with traditional finance, this major cultivates the socialist builder and successor who can not only comprehensively grasp financial theory knowledge and modern scientific and technological means such as big data and artificial intelligence but also can engage in financial technology-related work in financial institutions, technology companies and government departments such as bank securities insurance, and has strong adaptability, strong spirit of hard work, strong sense of innovation, all-round development of moral and intellectual beauty, with excellent pursuit.

Students of this program are expected to achieve the following objectives 5 years after graduation：

（1）Physical and mental health, with lofty patriotism, firm socialist core values and socialist ideals and beliefs with Chinese characteristics, with good professionalism, professional ethics and social responsibility；

（2）Have the mathematics, economics, finance, computer, information technology and legal knowledge and apply that knowledge to solve economic and financial problems；

（3）Be able to design financial products, write and develop related programs through computer and information technology construction models combined with financial business needs；

（4）Have good oral and written expression and communication skills, good team awareness and spirit of cooperation, with an international perspective, with strong social adaptability and innovation ability；

（5）With lifelong learning ability, learning to adapt to career development, in finance and related fields with professional competitiveness.

## 二、 毕业要求

（1）**工程知识**：能够将计算机、现代金融学基础与专业知识用于解决复杂金融问题；

（2）**问题分析**：能够运用现代信息技术、金融学基本原理，识别、表达、分析复杂金融问题，以获得有效结论；

（3）**解决方案**：能够针对社会经济金融发展需要，综合考虑社会、健康、安全、法律、文化以及环境等因素，将信息可视化思维、数据敏感性思维、数据挖掘及量化分析技术与金融理论知识相融合开展金融产品设计、金融风险防范等工作；

（4）**研究**：能够基于现代经济金融学原理，并采用现代信息技术手段和方法对复杂金融问题进行研究，包括金融产品设计、金融问题分析与解释、金融风险监管问题，并通过信息综合得到合理有效的结论；

（5）**工具使用**：能够针对复杂金融问题，开发、选择与使用大数据、区块链等现代科技手段及金融分析方法，运用信息可视化思维、数据敏感性等互联网思维对金融风险等复杂问题进行预测与模拟，并能够理解其局限性；

（6）**工程与社会**：能够基于现代信息技术和金融学相关背景知识进行合理分析，评价金融实践和复杂金融问题解决方案对社会、健康、安全、法律以及文化的影响，并理解应承担的责任；

（7）**环境和可持续发展**：能够理解和评价金融科技活动及创新对环境、社会可持续发展的影响；

（8）**职业规范**：具有人文社会科学素养、社会责任感，能够在金融实践中理解并遵守职业道德和规范、履行责任；

（9）**个人和团队**：具有良好的团队协作精神，能够在多学科背景下的团队中承担个体、团队成员以及负责人的角色；

（10）**沟通**：能够就复杂金融问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和设计文稿、陈述发言、清晰表达或回应指令，并具备一定的国际视野，能够在跨文化背景下进行沟通和交流；

（11）**项目管理**：理解并掌握项目管理原理与经济决策方法，能在多学科环境中应用；

（12）**终身学习**：具有自主学习和终身学习的意识，有不断学习和适应发展的能力。

II Graduation Requirement

(1) **Engineering knowledge:** Be able to use computer, modern finance foundation and expertise to solve complex financial problems;

(2) **Problem analysis:** Be able to use the modern information technology and fundamentals of finance to identify, express and analyze complex financial problems through literature research in order to obtain effective conclusions;

(3) **Design/development solution:** To meet the needs of socio-economic and financial development, the information visual thinking, data sensitivity thinking, data mining and quantitative analysis technology, methods and financial theory knowledge integration of financial product design, financial risk prevention and other activities, taking into account social, health, safety, legal, cultural and environmental factors;

(4) **Research:** Based on the principles of modern economic and financial science, using modern information technology means and methods to study complex financial problems, including financial product design, financial problem analysis and interpretation, financial risk supervision, and through information synthesis to obtain reasonable and effective conclusions;

(5) **Usage of modern tools:** To develop, select and use modern scientific and technological means such as big data and blockchain and financial analysis methods for complex financial problems, and to predict and simulate complex problems, including financial risks, using Internet thinking methods such as information visual thinking and data sensitivity, and to understand their limitations;

(6) **Engineering and society:** Be able to conduct reasonable analysis based on the relevant background knowledge of modern information technology and finance, evaluate the social, health, safety, legal and cultural implications of financial practices and solutions to complex financial problems, and understand the responsibilities;

(7) **Environment and sustainable development:** Be able to understand and evaluate the impact of fintech activities and innovations on the sustainable development of the environment and society;

(8) **Professional standards:** With human and social science literacy, social responsibility, can understand and abide by professional ethics and norms in financial practice, to fulfill responsibilities;

(9) **Individual and team:** Have a good team spirit, can assume the role of individual, team member and person in charge in the multidisciplinary background of the team;

(10) **Communication:** Possessing ability to communicate effectively with industry peers and the public on complex financial issues, including writing reports and designing documents, making presentations, expressing clearly or responding to instructions. And has a certain international perspective, can communicate and exchange in a cross-cultural context;

(11) **Project management:** Mastering project management principles and economic decision-making methods, and can use in a multidisciplinary environment;

(12) **Life-long learning:** Have the awareness of independent learning and lifelong learning, have the ability to continuously learn and adapt to development.

## 表 2 培养目标的矩阵关系毕业要求支撑

| 毕业要求 | 培养目标 1 | 培养目标 2 | 培养目标 3 | 培养目标 4 | 培养目标 5 |
|---|---|---|---|---|---|
| 毕业要求 1 | √ | √ | √ | | |
| 毕业要求 2 | | √ | √ | √ | √ |
| 毕业要求 3 | | √ | √ | √ | √ |
| 毕业要求 4 | √ | √ | √ | √ | |
| 毕业要求 5 | | √ | √ | √ | √ |
| 毕业要求 6 | √ | √ | | √ | √ |
| 毕业要求 7 | √ | √ | √ | √ | √ |
| 毕业要求 8 | √ | √ | √ | √ | |
| 毕业要求 9 | √ | | | √ | √ |
| 毕业要求 10 | √ | | | √ | √ |
| 毕业要求 11 | | √ | √ | √ | √ |
| 毕业要求 12 | √ | √ | √ | √ | √ |

毕业要求的达成需以课程（教学环节）的教学活动为支撑。本专业为 合理设置课程体系、落实对毕业要求的支撑课程，对各项毕业要求进行了解。每项毕业要求（一级指标）被分解为若干层层递进的指标点（二级指标） ，前一指标点的达成是下一指标点达成的基础，而下一指标点的达成是前一指标点的升华，所有指标点一起，支撑了该毕业要求的达成。根据上述分解方法， 本专业各项毕业要求的指标点分解如下表所示。

表 3 毕业要求指标点的分解

| 毕业要求 | 指标点 |
|---|---|
| 毕业要求 1.工程知识:能够将计算机、现代金融学基础与专业知识用于解决复杂金融问题； | 1.1 问题表述 |
| | 1.2 建模求解 |
| | 1.3 推演分析 |
| | 1.4 比较综合 |
| 毕业要求 2.问题分析:能够运用现代信息技术、金融学基本原理，识别、表达、分析复杂金融问题，以获得有效结论； | 2.1 识别问题 |
| | 2.2 表述问题 |
| | 2.3 文献研究 |
| | 2.4 获得结论 |
| 毕业要求 3.解决方案:能够针对社会经济金融发展需要，综合考虑社会、健康、安全、法律、文化以及环境等因素，将信息可视化思维、数据敏感性思维、数据挖掘及量化分析技术与金融理论知识相融合开展金融产品设计、金融风险防范等工作； | 3.1 了解 |
| | 3.2 设计 |
| | 3.3 创新 |
| | 3.4 综合 |
| 毕业要求 4.研究:能够基于现代经济金融学原理，并采用现代信息技术手段和方法对复杂金融问题进行研究，包括金融产品设计、金融问题分析与解释、金融风险监管问题，并通过信息综合得到合理有效的结论； | 4.1 调研分析 |
| | 4.2 设计方案 |
| | 4.3 采集数据 |
| | 4.4 形成结论 |
| 毕业要求 5.工具使用:能够针对复杂金融问题，开发、选择与使用大数据、区块链等现代科技手段及金融分析方法，运用信 | 5.1 了解工具 |
| | 5.2 选择工具 |
| | 5.3 开发工具 |

| | |
|---|---|
| 息可视化思维、数据敏感性等互联网思维对金融风险等复杂问题进行预测与模拟，并能够理解其局限性； | |
| 毕业要求 6. 工程与社会:能够基于现代信息技术和金融学相关背景知识进行合理分析，评价金融实践和复杂金融问题解决方案对社会、健康、安全、法律以及文化的影响，并理解应承担的责任； | 6.1 了解影响 |
| | 6.2 理解责任 |
| 毕业要求 7. 环境和可持续发展:能够理解和评价金融科技活动及创新对环境、社会可持续发展的影响； | 7.1 知晓理念 |
| | 7.2 评价隐患 |
| 毕业要求 8. 职业规范:具有人文社会科学素养、社会责任感，能够在金融实践中理解并遵守职业道德和规范、履行责任； | 8.1 了解国情 |
| | 8.2 遵守规范 |
| | 8.3 履行责任 |
| 毕业要求 9. 个人和团队:具有良好的团队协作精神，能够在多学科背景下的团队中承担个体、团队成员以及负责人的角色； | 9.1 合作共事 |
| | 9.2 独立工作 |
| | 9.3 组织协调 |
| 毕业要求 10.沟通:能够就复杂金融问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和设计文稿、陈述发言、清晰表达或回应指令，并具备一定的国际视野，能够在跨文化背景下进行沟通和交流； | 10.1 表达观点 |
| | 10.2 了解前沿 |
| | 10.3 跨文化交流 |
| 毕业要求 11. 项目管理:理解并掌握项目管理原理与经济决策方法，能在多学科环境中应用； | 11.1 掌握方法 |
| | 11.2 理解问题 |
| | 11.3 决策运用 |
| 毕业要求 12.终身学习:具有自主学习和终身学习的意识，有不断学习和适应发展的能力。 | 12.1 认识必要性 |
| | 12.2 具备能力 |

**二、专业核心课程与专业特色课程**

## Ⅱ Core Course and Characteristic Courses

### （一） 专业核心课程

货币金融学,金融工程学 A,商业银行经营与管理,数据库系统原理 E,数据挖掘 C

Money and Finance,Financial Engineering,Commercial Bank
Management ,Principles of Database System,Data Mining

### （二） 专业特色课程

云计算基础 B,量化交易系统设计与运用,人工智能概论 B,区块链,数据结构 C,大数据技术与应用

Cloud Computing Foundation,Quantitative Trading System Design,Artificial
Intelligence,Block Chain,Data Structure,Technology and Application of Big Data

**附：毕业要求实现矩阵**

| 专业核心课程 | 专业特色课程 | 课程名称 | 金融学（金融科技班）专业毕业要求 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | | 2 | | | | 3 | | | | 4 | | | | 5 | | | 6 | | 7 | | 8 | | | 9 | | | 10 | | | 11 | | | 12 | |
| | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 1 | 2 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 |
| | | 思想道德与法治 | | | | | | | | | | | | | | | | | | | | √ | | | | | | √ | | | | | | | | | | | √ |
| | | 中国近现代史纲要 | | | | | | | | | | | | | | | | | | | | √ | | | | | | √ | | | | | | | | | | | √ |
| | | 马克思主义基本原理 | | | | | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | √ | | | | √ |
| | | 毛泽东思想和中国特色社会主义理论体系概论 | | | | | | | | | | | | | | | | | | | | √ | √ | | | | | | | | | | | | √ | | | √ | √ |
| | | 大学英语 1 | | | | | | | | | | | | | | | | | √ | | | | | | | | | | √ | √ | | √ | | | | | | | |
| | | 大学英语 2 | | | | | | | | | | | | | | | | | √ | | | | | | | | | | √ | √ | | √ | | | | | | | |
| | | 大学英语 3 | | | | | | | | | | | | | | | | | √ | | | | | | | | | | √ | √ | | √ | | | | | | | |
| | | 大学英语 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 课程 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Python程序设计基础A | | | | | √ | | | √ | | | | | | √ | √ | | | | | | | | | | | | | |
| 计算机基础与Python程序设计综合实验A | | | | | √ | | | √ | | | | | | √ | √ | | | | | | | | | | | | | |
| 军事技能训练 | | | | | | | | | | | | | | | | | | | | | √ | √ | √ | | | | | |
| 军事理论 | | | | | | | | | | | | | | | | | | | | | √ | √ | √ | | | | | |
| 体育1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 体育2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 体育3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 体育4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 应用数学分析上 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 应用数学分析下 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 高等代数与解析几何 | | √ | | | | √ | | | | | | | | | | | | | | | | | | | | | | |
| 金融科技专业导论 | √ | | √ | | | | | | | | | | √ | | | | | | | | | | | | | | | √ |
| 政治经济学 | | √ | √ | | √ | | | | | | | | | | | √ | | | | | | | | | | | | |
| 微观经济学 | | √ | | √ | √ | √ | | | | | √ | | √ | | | | | √ | | | | | | | | | | √ |
| 宏观经济学 | | √ | √ | | √ | | | | | | | | | | | √ | | | | | | | | | | | | |
| 管理学原理A | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | | | | | | | √ | √ | √ | | | | | | | | |
| 神奇的材料世界 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 中级微观经济学B | | | | √ | | | | | | √ | | | √ | | | | | | | | | | | | | | | √ |
| 中级宏观经济学B | | | √ | | | | | | | √ | | | √ | | | | | | | | | | | | | | | √ |
| 金融科技概论 | | √ | | | | | | | | | | | | | | √ | | | | | | | | | | | | √ |

| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| √ | | 货币金融学 | √ | | | | √ | | √ | | | | √ | | | | | | | | | | | | | |
| | | 国际金融学 | √ | | | | | | | | | | | | | | | | | √ | √ | | | | | |
| | | 证券投资学 | √ | | | | √ | | √ | | | | √ | | | | | | | | | | | | | |
| | | 保险学B | √ | | | | √ | | √ | | | | √ | | | | | | | | | | | | | |
| √ | | 金融工程学A | | | √ | | | | √ | | | | √ | | | | | | | | | | | | | |
| √ | | 商业银行经营与管理 | | | √ | | | | | | | | | | | | √ | | √ | | | √ | | | | |
| | | 计量经济学 | | √ | | | | | | | √ | √ | √ | | | | | | | | | | | | | |
| | | 财政学B | | | √ | √ | √ | √ | | | | | | | | | | | | | | | | | | | |
| | | 概率论与数理统计B | √ | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 运筹学A | √ | | | | | | √ | | | | | | | | | | | | | | | | | | √ |
| | | 数字经济创业导论 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 会计学 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 离散结构 | | √ | | √ | | √ | | | | | | | | | √ | | | | | | | | | | |
| √ | | 数据库系统原理E | | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | | 数据挖掘C | | | | √ | | | √ | | | | | | | | | | | | | | | | | √ | |
| | √ | 云计算基础B | | | | √ | | | | | √ | | √ | | | | | | | | | | | | | | |
| | | 国际贸易 | | | √ | √ | | | | | | | | | | | √ | | √ | | | | | | | | |
| | | 互联网产品分析与设计B | | | | | | √ | √ | √ | | | | | | | | | | | | | | | | | |
| | | 跨国公司金融管理 | | | | √ | | | √ | | | | | | | √ | | | | | | | | | | | |
| | | 经济计量软件与应用 | | | | √ | | | | | √ | | | √ | √ | | | | | | | | | | | | |
| | √ | 量化交易系统 | | | | | | | √ | | | | | √ | √ | | | | | | | | | | | | |

| | 课程 | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 设计与运用 | | | | | | | | | | | | | | | | | | | | | | |
| | 金融风险管理 | √ | | | | | √ | | √ | | | | √ | | | | | | | | | | |
| | 世界经济B | | | | | | | | | | | | | | | | | | | | | | |
| | 国际投资学C | | | √ | | | | √ | | | | | | | | | | | | | | √ | |
| | 保险精算学 | | | | | √ | | | | √ | | | √ | | | | | | | | | | |
| | 博弈论基础 | | | √ | | | | | √ | √ | | | | | | | | | √ | | | | |
| | 财务报表分析A | | √ | √ | | | | | | √ | | √ | | | | | | | | | | | |
| | 数学模型B | √ | √ | | | | | | | √ | | | | | | | | | | | √ | | |
| | 应用随机过程B | √ | | | √ | | √ | | √ | | √ | √ | √ | | √ | | √ | | √ | | √ | | |
| | 数值计算 | | | | | | | | | | | | | | | | | | | | | | |
| | 金融法B | | | | | | | | | | | | | | | | | | | | | | |
| | 最优化理论与方法 | | | | | | | | | | | | | | | | | | | | | | |
| √ | 人工智能概论B | | | | √ | √ | | | √ | √ | | | | | | | | | | | √ | | |
| √ | 区块链 | | | | | | | | | | | | | | | | | | | | | | |
| √ | 数据结构C | | | | | | | | | | | | | | | | | | | | | | |
| | 应用文写作 | | | | | | | | | | | | | | | | | | | | | | |
| √ | 大数据技术与应用 | √ | | √ | | | | | √ | √ | √ | | | | | | | | | | | | |
| | 风险理论A | | | | | | | | | | | | | | | | | | | | | | |
| | 金融专业综合实践 | | | | | | | | | | | √ | | | √ | √ | | | | | | | |
| | 毕业实习 | | | | | | | | | | | √ | | | √ | √ | | | | | | | |
| | 毕业论文 | | | √ | | | | | √ | √ | | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 创业企业运营实训C | | √ | √ | | | | | √ | | | √ | | | √ |

## 三、 教学建议进程表
### III Course Schedule

(一)公共基础必修课程
1 Public Basic Compulsory Courses

| 开课单位<br>Course College | 课程编号<br>Course Number | 课程名称<br>Course Title | 学分<br>Crs | 学时分配<br>Including | | | | | | 建议修读学期<br>Suggested Term | 先修课程<br>Prerequisite Course |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 总学时<br>Tot hrs. | 理论<br>Theory | 实验<br>Exp. | 上机<br>Ope-ratio. | 实践<br>Prac-tice. | 课外<br>Extra-cur. | | |
| 马克思主义学院 | 4220001210 | 思想道德与法治<br>Morality and the rule of law | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 1 | |
| 马克思主义学院 | 4220002180 | 中国近现代史纲要<br>Outline of Contemporary and Modern Chinese History | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 2 | |
| 马克思主义学院 | 4220005180 | 马克思主义基本原理<br>Marxism Philosophy | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 4 | |
| 马克思主义学院 | 4220003180 | 毛泽东思想和中国特色社会主义理论体系概论<br>Introduction to Mao Zedong Thought and Socialism with Chinese Characteristics | 4.5 | 66 | 66 | 0 | 0 | 0 | 0 | 3 | |
| 外语学院 | 4030001210 | 大学英语1<br>College English I | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 1 | |
| 外语学院 | 4030002210 | 大学英语2<br>College English II | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 2 | |
| 外语学院 | 4030003210 | 大学英语3<br>College English III | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 3 | |
| 外语学院 | 4030004210 | 大学英语4<br>College English IV | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 4 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 计算机智能学院 | 4120003210 | Python 程序设计基础 A<br>Foundation of Python Programming A | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| 计算机智能学院 | 4120007210 | 计算机基础与 Python 程序设计综合实验 A<br>Comprehensive Experiments of Foundation of Computer and PYTHON Language Programming A | 1 | 32 | 0 | 32 | 0 | 0 | 0 | 2 | |
| 学工部 | 1050001210 | 军事技能训练<br>Military Skills Training | 2 | 136 | 0 | 0 | 0 | 136 | 0 | 1 | |
| 学工部 | 1050002210 | 军事理论<br>Military Theory | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| 体育学院 | 4210001170 | 体育 1<br>Physical Education Ⅰ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 1 | |
| 体育学院 | 4210002170 | 体育 2<br>Physical Education Ⅱ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| 体育学院 | 4210003170 | 体育 3<br>Physical Education Ⅲ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 3 | |
| 体育学院 | 4210004170 | 体育 4<br>Physical Education Ⅳ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 4 | |
| 小 计 Subtotal | | | 31.0 | 744 | 512 | 32 | 0 | 136 | 64 | | |

(二)通识教育选修课程
2 General Education Elective Courses

| | | |
|---|---|---|
| 核心选修<br>Core elective courses | 文明与传统 Civilization and Tradition Courses<br>社会与发展类 Society and Development Courses<br>艺术与人文类 Art and Humanities Courses<br>自然与方法类 Nature and methods Courses | 通识课程应修满至少 9 学分。核心选修不少于 2 学分；自主选修课程中，至少在艺术与审美、创新与创业两个领域各选修 1 门课程。 Minimum subtotal credits: 9.Core elective courses ≥2 credits.Self-selected courses, at least 1 course in art and aesthetics and 1 course in innovation and entrepreneurship. |
| 自主选修选修<br>Core elective courses | 数学与自然科学, 哲学与心理学, 法学与社会科学, 经济与管理, 历史与文化, 语言与文学, 艺术与审美, 创新与创业 Mathematics and Natural Sciences,Philosophy and Psychology,Science and Social Sciences,Economics and | |

| | | Management,History and Culture,Language and Literature,Art and Aesthetics,Innovation and Entrepreneurship | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|

**(三)大类必修课程**
**3 Basic Discipline Required Courses**

| 学院 | 课程编号 | 课程名称 | 学分 | 学时 | | | | | | 学期 | 备注 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 理学院 | 4050005210 | 应用数学分析上 Mathematical Analysis I | 5 | 80 | 80 | 0 | 0 | 0 | 0 | 1 | |
| 理学院 | 4050069210 | 应用数学分析下 Mathematical Analysis II | 6 | 96 | 96 | 0 | 0 | 0 | 0 | 2 | |
| 理学院 | 4050006210 | 高等代数与解析几何 Higher Algebra and Analytic Geometry | 4 | 64 | 64 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010004210 | 金融科技专业导论 Introduction of FinTech | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010100110 | 政治经济学 Political Economics | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010003210 | 微观经济学 Microeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010007210 | 宏观经济学 Macroeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 2 | |
| 管理学院 | 4170002210 | 管理学原理 A Principles of Management | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | |
| 材料学院 | 4070121210 | 神奇的材料世界 The World of Miraculous Materials | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 2 | |
| 小 计 Subtotal | | | 28.0 | 448 | 448 | 0 | 0 | 0 | 0 | | |

**(四)专业必修课程**
**4 Specialized Required Courses**

| 学院 | 课程编号 | 课程名称 | 学分 | 学时 | | | | | | 学期 | 备注 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010105110 | 中级微观经济学 B Intermediate Microeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | |
| 经济学院 | 4010104110 | 中级宏观经济学 B Intermediate Macroeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | |
| 经济学院 | 4010763190 | 金融科技概论 Introduction of FinTech | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 3 | |
| 经济学院 | 4010008210 | 货币金融学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 3 | |

| 学院 | 课程代码 | 课程名称 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Money and Finance | | | | | | | | |
| 经济学院 | 4010367170 | 国际金融学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 4 |
| | | International Finance | | | | | | | | |
| 经济学院 | 4010099110 | 证券投资学 | 2.5 | 40 | 34 | 6 | 0 | 0 | 0 | 5 |
| | | Securities Investment | | | | | | | | |
| 经济学院 | 4010003110 | 保险学 B | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 |
| | | Insurance | | | | | | | | |
| 经济学院 | 4010062110 | 金融工程学 A | 2.5 | 40 | 34 | 6 | 0 | 0 | 0 | 6 |
| | | Financial Engineering | | | | | | | | |
| 经济学院 | 4010021210 | 商业银行经营与管理 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 6 |
| | | Commercial Bank Management | | | | | | | | |
| 经济学院 | 4010056110 | 计量经济学 | 3.5 | 56 | 48 | 8 | 0 | 0 | 0 | 4 |
| | | Econometrics | | | | | | | | |
| 经济学院 | 4010005110 | 财政学 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 |
| | | Public Finance | | | | | | | | |
| 理学院 | 4050058110 | 概率论与数理统计 B | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 4 |
| | | Probability and Mathematical Statistics | | | | | | | | |
| 理学院 | 4050254110 | 运筹学 A | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 7 |
| | | Operations Research | | | | | | | | |
| 创业学院 | 4270004210 | 数字经济创业导论 | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 5 |
| | | Introduction to digital economy Entrepreneurship | | | | | | | | |
| 管理学院 | 4170010210 | 会计学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 4 |
| | | Accounting | | | | | | | | |
| 计算机智能学院 | 4120349170 | 离散结构 | 3.5 | 56 | 56 | 0 | 0 | 0 | 0 | 2 |
| | | Discrete Structures | | | | | | | | |
| 计算机智能学院 | 4120273140 | 数据库系统原理 E | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 5 |
| | | Principles of Database System | | | | | | | | |
| 计算机智能学院 | 4120434170 | 数据挖掘 C | 2 | 32 | 24 | 8 | 0 | 0 | 0 | 6 |
| | | Data Mining | | | | | | | | |
| 计算机智能学院 | 4120317130 | 云计算基础 B | 2 | 32 | 20 | 12 | 0 | 0 | 0 | 7 |

| | | Cloud Computing Foundation | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 小 计 Subtotal | | | 48.5 | 776 | 736 | 40 | 0 | 0 | 0 | |

(五)专业选修课程
5 Specialized Elective Courses

| 学院 | 代码 | 课程名称 | | | | | | | | 学期 | 备注 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010037110 | 国际贸易 International Trade | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010074210 | 互联网产品分析与设计 B Internet Product Analysis and Designing B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010063210 | 跨国公司金融管理 Multinational Financial Management | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010041210 | 经济计量软件与应用 Application of Econometrics Software | 2 | 32 | 24 | 8 | 0 | 0 | 0 | 7 | 计量经济学, |
| 经济学院 | 4010068210 | 量化交易系统设计与运用 Quantitative Trading System Design | 2 | 32 | 16 | 16 | 0 | 0 | 0 | 7 | |
| 经济学院 | 4010061110 | 金融风险管理 Financial Risk Management | 2.0 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| 经济学院 | 4010204990 | 世界经济 B World Economy | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010313170 | 国际投资学 C International Investment | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| 经济学院 | 4010140110 | 保险精算学 Insurance Actuarial Theory | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 7 | |
| 经济学院 | 4010004110 | 博弈论基础 Foundation of Game Theory | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 7 | |
| 管理学院 | 4170530130 | 财务报表分析 A Analysis of Financial Report | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| 理学院 | 4050655170 | 数学模型 B Mathematical Models | 3 | 48 | 40 | 0 | 8 | 0 | 0 | 4 | |
| 理学院 | 4050244110 | 应用随机过程 B | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 7 | |

| 学院 | 课程代码 | 课程名称 | | | | | | | | | |
|------|----------|----------|---|---|---|---|---|---|---|---|---|
| | | Applied Stochastic Processes | | | | | | | | | |
| 理学院 | 4050669160 | 数值计算 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 3 | |
| | | Numerical Calculation | | | | | | | | | |
| 法学社会学院 | 4020072110 | 金融法B | 2.0 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Financial Law | | | | | | | | | |
| 计算机智能学院 | 4120004190 | 最优化理论与方法 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 4 | |
| | | Optimization Theory and Methods | | | | | | | | | |
| 计算机智能学院 | 4120055110 | 人工智能概论B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | 离散结构, |
| | | Artificial Intelligence | | | | | | | | | |
| 计算机智能学院 | 4120052190 | 区块链 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Block Chain | | | | | | | | | |
| 计算机智能学院 | 4120433170 | 数据结构C | 4 | 64 | 48 | 16 | 0 | 0 | 0 | 3 | |
| | | Data Structure | | | | | | | | | |
| 小 计 Subtotal | | | 44.5 | 712 | 664 | 40 | 8 | 0 | 0 | | |

修读说明：专业选修课程至少选修20学分。
NOTE：Minimum subtotal credits: 20.

(六)个性课程
6 Personalized Electice Courses

| 学院 | 课程代码 | 课程名称 | | | | | | | | | |
|------|----------|----------|---|---|---|---|---|---|---|---|---|
| 法学社会学院 | 4020342170 | 应用文写作 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | Practical Writing | | | | | | | | | |
| 计算机智能学院 | 4120247120 | 大数据技术与应用 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Technology and Application of Big Data | | | | | | | | | |
| 理学院 | 4050377120 | 风险理论A | 3.0 | 48 | 48 | 0 | 0 | 0 | 0 | 6 | |
| | | Risk Theory | | | | | | | | | |
| 小 计 Subtotal | | | 7.0 | 112 | 112 | 0 | 0 | 0 | 0 | | |

修读说明：学生从以上个性课程和学校发布的其它个性课程目录中选课，要求至少选修6学分。
NOTE: Students can select courses from above and the other personalized courses in catalog, and are required to obtain at least 6 credits.

(七)专业教育集中性实践教育环节
7 Specialized Practice Schedule

| 学院 | 课程代码 | 课程名称 | | | | | | | | | |
|------|----------|----------|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010094210 | 金融专业综合实践 | 3 | 48 | 0 | 0 | 0 | 48 | 0 | 6 | |
| | | Practice of Specialty | | | | | | | | | |

| 经济学院 | 4010137110 | 毕业实习<br>Graduation Practice | 5 | 80 | 0 | 0 | 0 | 80 | 0 | 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010106210 | 毕业论文<br>Graduation Thesis | 8.5 | 272 | 0 | 0 | 0 | 272 | 0 | 8 | |
| 经济学院 | 4010302170 | 创业企业运营实训C<br>Training for Start-up Entreperneurship Operation | 1 | 16 | 0 | 0 | 0 | 16 | 0 | 5 | |
| 小　计 Subtotal | | | 17.5 | 416 | 0 | 0 | 0 | 416 | 0 | | |

## 四、 修读指导
**Ⅳ Recommendations on Course Studies**

　　课外培养方案详见《武汉理工大学第二课堂课外学分实施办法》。《形势与政策》和《心理健康教育》课程为课外必修课程，分别计 2 个课外学分。

　　Please refer to the cultivation plan of the second class-Implementation Measures for Extracurricular Credits of the Second Class of Wuhan University of Technology. Situation & Policy (2 credits) and Mental Health Education (2 credits) are the required extracurricular courses.

<div align="right">

学院教学负责人：杜伟岸

专业培养方案负责人：沈蕾, 郭春风

</div>

# 国际经济与贸易 2021 版本科培养方案
# Undergraduate Education Plan for Specialty in International Economy and Trade (2021)

| | | | |
|---|---|---|---|
| 专业名称<br>Major | **国际经济与贸易**<br>**International Economy and Trade** | 主干学科<br>Major Disciplines | **经济学**<br>Economics |
| 计划学制<br>Duration | **四 年**<br>**4 Years** | 授予学位<br>Degree Granted | **经济学学士**<br>Bachelor of Economics |
| 所属大类<br>Disciplinary | **经济学类**<br>**Economics** | 大类培养年限<br>Duration | **1 年**<br>**1 year** |

## 最低毕业学分规定
## Graduation Credit Criteria

| *课程分类*<br>*Course Classification*<br>*课程性质*<br>*Course Nature* | 公共基础课程<br>Public Basic Courses | 通识教育课程<br>Public Courses | 大类课程<br>Basic Courses in General Discipline | 专业教育课程<br>Specialized Courses | 个性课程<br>Personalized Course | 集中性实践教学环节<br>Specialized Practice Schedule | 课外学分<br>Study Credit after Class | 总学分<br>Total Credits |
|---|---|---|---|---|---|---|---|---|
| 必修课<br>Required Courses | 31 | \ | 26 | 46 | \ | 20.5 | 10 | 180.0 |
| 选修课<br>Elective Courses | \ | 9 | \ | 21.5 | 6 | \ | 10 | |

## 一、 培养目标与毕业要求

## Ⅰ Educational Objectives &Requirement

### （一） 培养目标

本专业面向新时代数字经济发展的需要，培养具有扎实的国际经济学理论基础，熟练掌握国际经济与贸易的现代分析方法，具有向国际经济与贸易相关领域扩展渗透的复合型知识结构，适应能力强、实干精神强、创新意识强，德智体美劳全面发展，具有卓越追求、卓越能力的社会主义建设者和接班人。

本专业期待毕业生五年后能达成下列目标：

（1）身心健康，具有崇高的家国情怀、坚定的社会主义核心价值观和中国特色社会主义理想信念；具备良好的职业道德和社会责任感。

（2）具有从事国际经济与贸易领域的研究、政策咨询与分析及管理所需的数学、经济学、管理学和信息技术知识，具备宏观分析能力和微观管理能力，并能将以上知识运用于解决国际 经济与贸易问题。

（3）具有分析企业与行业的国际化需求、设计企业国际化经营的解决方案、开发企业国际化运营与管理的系统，及从事线上线下国际商务活动的认知、分析、决策、行动及组织协调能力。

（4）具有良好的语言表达与沟通、团队合作与适应社会的能力，具备创新创业精神及国际化视野。

（5）具有通过终身学习拓展自己的知识的能力，实现个人的持续发展。

## I  Education Objectives

The specialty in International Economy and Trade is facing the needs of the development of the new digital economy era, which aims to cultivate those who have strong theoretical foundation of international economics; who have grasped modern analysis methodologies with a comprehensive knowledge structure to extend and penetrate into the fields related to international economy and trade; who have strong adaption capability, strong practical spirit and strong innovation consciousness; who might be comprehensive development in moral, intellectual, aesthetics and labor education; who will be socialist builders and successors and excellent in pursuit and capability.

Students of this program are expected to achieve the following objectives 5 years after graduation:

（1）Be physical and mental health with dedication to home country, core socialist values, ideals and convictions of socialism with Chinese characteristics; have a strong sense of professional ethics, social responsibility

（2）Possess the theoretical foundation and professional knowledge in mathematics, economics, management and information technology to be applied in scientific research, policy consulting and analysis, and management in the field of international economics and trade; develop certain ability of macro analysis and micro management to solve those issues about international economy and trade.

（3）Possess the skills to analyze the needs of internationalization of enterprises and industries; to design the solutions to the internationalization management of enterprises; to explore the system for international management; have the operational and managerial ability to cognize, analyze, decision-making,

coordination and manage that is engaged in international business activities online or offline

（4）Possess good expression and communication ability, capability of team cooperation and social adaption, innovative entrepreneurial spirit, and global vision.

（5）Possess the ability to expand the individual's knowledge through lifelong learning to realize the sustainable development for individual.

二、毕业要求

(1) **工程知识**：能够将数学、经济学、管理学和法学的基础知识和国际经济与贸易的专业知识用于解决复杂的国际经贸问题。

(2) **问题分析**：能够应用数学、经济学、管理学及法学的基本原理，运用数学、计量经济、财务分析、大数据等方法分析复杂的国际经贸问题，以获得有效结论。

(3) **解决方案**：能够设计针对复杂的国际经贸问题的解决方案，设计企业国际化经营的系统及运营模式，熟悉数字经济的新特征与新规律，并能把握全球经贸环境的变化趋势，具备创新思维和探索能力。

(4) **研究**：能够基于国际经济与贸易的基本理论并采用科学方法对复杂的国际经贸问题进行深度研究，包括建模、实验、实践等，并通过综合信息分析得到合理有效的结论。

(5) **工具使用**：能够恰当应用现代信息技术跟踪并获取信息，进行文献检索和资料查询，借助计算机及软件工具进行国际经贸调研、趋势预测及商务数据分析。

(6) **工程与社会**：熟悉国内外经济的运行机制与环境，关注全球问题与社会问题，理解并评价中外经济活动对社会、健康、安全、法律以及文化的影响，理解应承担的责任。

(7) **环境和可持续发展**：具有环境和可持续发展的意识，能在国际.经贸活动中关注、理解和评价环境保护、社会和谐，以及人类社会可持续的问题。

(8) **职业规范**：具有人文素养、科学精神及与材料、汽车与航运等行业相关的专业知识，关注国情社情民情，能够在经贸活动实践中理解并遵守职业道德和规范，履行社会责任。

(9) **个人和团队**：能够与多学科背景的团队成员和谐相处、合作共事，并能作为成员或领导者在团队活动中发挥积极作用。

(10) **沟通**：能够就国际经济与贸易问题与同行及社会公众进行有效沟通和交流，具有全球化视野，掌握国际商务礼仪，能够在跨文化背景下进行商务沟通和交流。

(11) **项目管理：** 理解并掌握企业国际化运营与决策的方法，具备从事跨国经营活动的技能，并能在多学科与跨行业的环境中应用。

(12) **终身学习：** 具有自主学习和终身学习的意识，能适应全球经济与贸易的发展与变化，能与时俱进地掌握国际经济与贸易领域的新知识、新要求，实现个人的持续发展。

**II Graduation Requirement**

(1) **Engineering knowledge:** Grasp the fundamental knowledge of mathematics, economics, management, law and the specialty knowledge in international trade and economy and apply them to solve the complicated issues about international economy and trade.

(2) **Problem analysis:** Have the ability to apply the fundamental theories of mathematics, economics, management and law to analyze those complicated issues about international economy and trade through the methodology of mathematics, econometrics, finance analysis and big data and achieve effective conclusions.

(3) **Design/development solution:** Have the ability to design solutions aimed to complicated issues of international economy and trade, and design the system and mode of internalization management of enterprises; be familiar with the new nature and rules of digital economy and be capable to hold the trend of change in the environment of global economy with innovative spirits and exploration ability.

(4) **Research:** Have the ability to demonstrate deep research on the issues related to international economy and trade based on the fundamental theories with scientific methods, including model construction, experimental and practical ways, and achieve reasonable and effective conclusions after comprehensive information analysis.

(5) **Usage of modern tools:** (5) Have the ability to use the modern information technics to trace and gather information to do literature and data search, and be able to investigate and research, forecast and analyze commercial data in terms of computers and its software.

(6) **Engineering and society:** Be familiar with the mechanism and environment of domestic and foreign economy; be concerned with the global and social issues; be

capable to comprehend and evaluate the influence of domestic and foreign economy activities on the society, health, security, law and culture; be clear about the liability should undertake.

(7) **Environment and sustainable development:** Have the sense of environment and sustainable development; be concerned, understand and evaluate the environment protection, social harmony and issues about human sustainable development in the practice in of international economic activities.

(8) **Professional standards:** Have good humane accomplishments, scientific spirits and specialty knowledge related to industry of material, automobile and marine; be concerned about the national, social and civilian conditions; be able to follow the rules of professional ethics and take the social responsibility.

(9) **Individual and team:** Have the ability to get well along and cooperate with team members with different subject background and play an active role in the middle of the team work as either an individual or a leader.

(10) **Communication:** Have the ability to communicate with colleagues and the pubic effectively; have the globalization vision and grasp the international business etiquette; be able to communicate well in the cross-culture circumstance.

(11) **Project management:** Understand and grasp the mode of internationalization management and decision-making; possess the skills for the jobs related to cross-border management activities and implement them in the environment of multi-subject and cross-industry.

(12) **Life-long learning:** Have the sense of autonomous and lifelong learning; be adaptable to the development and change in the global economy and trade, and grasp its new knowledge and requirement to realize the sustainable development for individual.

表 2 培养目标的矩阵关系毕业要求支撑

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

| | | | | | |
|---|---|---|---|---|---|
| 毕业要求 4 | √ | √ | √ | √ | |
| 毕业要求 5 | | √ | √ | √ | √ |
| 毕业要求 6 | √ | √ | | √ | √ |
| 毕业要求 7 | √ | | √ | √ | √ |
| 毕业要求 8 | √ | √ | √ | √ | |
| 毕业要求 9 | √ | | | √ | √ |
| 毕业要求 10 | √ | | | √ | √ |
| 毕业要求 11 | | √ | √ | √ | √ |
| 毕业要求 12 | √ | | √ | √ | √ |

　　毕业要求的达成需以课程（教学环节）的教学活动为支撑。本专业为 合理设置课程体系、落实对毕业要求的支撑课程，对各项毕业要求进行了解。每项毕业要求（一级指标）被分解为若干层层递进的指标点（二级指标）， 前一指标点的达成是下一指标点达成的基础，而下一指标点的达成是前一指标点的升华，所有指标点一起，支撑了该毕业要求的达成。根据上述分解方法， 本专业各项毕业要求的指标点分解如下表所示。

## 表 3 毕业要求指标点的分解

| 毕业要求 | 指标点 |
|---|---|
| 毕业要求 1. 工程知识:能够将数学、经济学、管理学和法学的基础知识和国际经济与贸易的专业知识用于解决复杂的国际经贸问题。 | 1.1 问题表述 |
| | 1.2 建模求解 |
| | 1.3 推演分析 |
| | 1.4 比较综合 |
| 毕业要求 2. 问题分析:能够应用数学、经济学、管理学及法学的基本原理，运用数学、计量经济、财务分析、大数据等方法分析复杂的国际经贸问题，以获得有效结论。 | 2.1 识别问题 |
| | 2.2 表述问题 |
| | 2.3 文献研究 |
| | 2.4 获得结论 |
| 毕业要求 3. 解决方案:能够设计针对复杂的国际经贸问题的解决方案，设计企业国际化经营的系统及运营模式，熟悉数字经济的新特征与新规律，并能把握全球经贸 | 3.1 了解 |
| | 3.2 设计 |
| | 3.3 创新 |
| | 3.4 综合 |

| | |
|---|---|
| 环境的变化趋势，具备创新思维和探索能力。 | |
| 毕业要求 4. 研究:能够基于国际经济与贸易的基本理论并采用科学方法对复杂的国际经贸问题进行深度研究，包括建模、实验、实践等，并通过综合信息分析得到合理有效的结论。 | 4.1 调研分析 |
| | 4.2 设计方案 |
| | 4.3 采集数据 |
| | 4.4 形成结论 |
| 毕业要求 5. 工具使用:能够恰当应用现代信息技术跟踪并获取信息，进行文献检索和资料查询，借助计算机及软件工具进行国际经贸调研、趋势预测及商务数据分析。 | 5.1 了解工具 |
| | 5.2 选择工具 |
| | 5.3 开发工具 |
| 毕业要求 6. 工程与社会:熟悉国内外经济的运行机制与环境，关注全球问题与社会问题，理解并评价中外经济活动对社会、健康、安全、法律以及文化的影响，理解应承担的责任。 | 6.1 了解影响 |
| | 6.2 理解责任 |
| 毕业要求 7. 环境和可持续发展:具有环境和可持续发展的意识，能在国际.经贸活动中关注、理解和评价环境保护、社会和谐，以及人类社会可持续的问题。 | 7.1 知晓理念 |
| | 7.2 评价隐患 |
| 毕业要求 8. 职业规范:具有人文素养、科学精神及与材料、汽车与航运等行业相关的专业知识，关注国情社情民情，能够在经贸活动实践中理解并遵守职业道德和规范，履行社会责任。 | 8.1 了解国情 |
| | 8.2 遵守规范 |
| | 8.3 履行责任 |
| 毕业要求 9. 个人和团队:能够与多学科背景的团队成员和谐相处、合作共事，并能作为成员或领导者在团队活动中发挥积极作用。 | 9.1 合作共事 |
| | 9.2 独立工作 |
| | 9.3 组织协调 |

| 毕业要求 10.沟通:能够就国际经济与贸易问题与同行及社会公众进行有效沟通和交流，具有全球化视野，掌握国际商务礼仪，能够在跨文化背景下进行商务沟通和交流。 | 10.1 表达观点 |
| | 10.2 了解前沿 |
| | 10.3 跨文化交流 |
| 毕业要求 11.项目管理:理解并掌握企业国际化运营与决策的方法，具备从事跨国经营活动的技能，并能在多学科与跨行业的环境中应用。 | 11.1 掌握方法 |
| | 11.2 理解问题 |
| | 11.3 决策运用 |
| 毕业要求 12.终身学习:具有自主学习和终身学习的意识，能适应全球经济与贸易的发展与变化，能与时俱进地掌握国际经济与贸易领域的新知识、新要求，实现个人的持续发展。 | 12.1 认识必要性 |
| | 12.2 具备能力 |

## 二、专业核心课程与专业特色课程

**Ⅱ Core Course and Characteristic Courses**

### （一） 专业核心课程

国际贸易,世界经济 A,国际商务 A,国际贸易实务 A,国际市场营销 C,中国对外贸易专题 C

International Trade,World Economy,International Business,International Trade Practice,International Marketing,Special Topics on China s Foreign Trade

### （二） 专业特色课程

商务沟通与写作（全英文）,跨境电子商务理论与实务,国际商务法律和惯例,国际物流与采购学原理,跨文化管理 C

Business Communication and Writing,Theroty and Practice of Cross-Border e-Commerce,International Commercial Law and Practices,Principle of International Logistics and purchasing,Cross-cultural Management

附：毕业要求实现矩阵

| | 课程名称 | 国际经济与贸易专业毕业要求 |
|---|---|---|

| 专业核心课程 | 专业特色课程 | | 1 | | | | 2 | | | | 3 | | | | 4 | | | | 5 | | | 6 | | 7 | | 8 | | | 9 | | | 10 | | | 11 | | | 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 1 | 2 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 |
| | | 思想道德与法治 | | | | | | | | | | | | | | | | | | | √ | | | | √ | | | | | | | | | | | | | √ |
| | | 中国近现代史纲要 | | | | | | | | | | | | | | | | | | | √ | | | | √ | | | | | | | | | | | | | √ |
| | | 马克思主义基本原理 | | | | | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | √ | | | | | √ |
| | | 毛泽东思想和中国特色社会主义理论体系概论 | | | | | | | | | | | | | | | | | | | | | | √ | √ | | | | | | | | √ | | | √ | √ |
| | | 大学英语1 | | | | | | | | | | | | | | | | | | √ | | | | | | | | √ | | √ | | √ | | | | | | |
| | | 大学英语2 | | | | | | | | | | | | | | | | | | √ | | | | | | | | √ | | √ | | √ | | | | | | |
| | | 大学英语3 | | | | | | | | | | | | | | | | | | √ | | | | | | | | √ | | √ | | √ | | | | | | |
| | | 大学英语4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Python程序设计基础B | | | | | √ | | | | √ | | | | | | | | √ | √ | | | | | | | | | | | | | | | | | | | |
| | | 计算机基础与Python程序设计综合实验B | | | | | √ | | | | | | | | | | | | √ | √ | | | | | | | | | | | | | | | | | | | |
| | | 军事技能训练 | | | | | | | | | | | | | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | | |
| | | 军事理论 | | | | | | | | | | | | | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | | |
| | | 体育1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 体育2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 体育3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 体育4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 经济类专业导论 | | | | | √ | | | | | | | | √ | | | | √ | | | | | | | | | | | | | | | | | | | | |
| | | 政治经济学 | | | √ | √ | | √ | | | | | | | | | | | | | | √ | | | | | | | | | | | | | | | | | |
| | | 微观经济学 | | | | √ | √ | √ | √ | | | | | | √ | | | | √ | | | | | | | √ | | | √ | | | | | | | | | √ | |
| | | 高等数学B上 | √ | | | | | | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 高等数学B下 | √ | | | | | | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 线性代数 | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 宏观经济学 | | | √ | √ | | √ | | | | | | | | | | | | | | √ | | | | | | | | | | | | | | | | | |
| | | 管理学原理A | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | | | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | |
| | | 概率论与数理统计B | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 统计学B | | √ | | | | | | | | | | | √ | | √ | | √ | | | | | | | | | | | | | | | | | | | | |

| | 课程 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 货币金融学 | √ | | | | | | | √ | √ | | | | √ | | | | | | | | | | | | |
| √ | 国际贸易 | | | √ | | | √ | | | | | | | | | | | | √ | | √ | | | | | |
| | 中级微观经济学B | | | | √ | | | | | √ | | √ | | | | | | | | | | | | | | √ |
| | 中级宏观经济学B | | | √ | | | | | | √ | | √ | | | | | | | | | | | | | | √ |
| | 国际金融学 | √ | | | | | | | | | | | | | | | | | | √ | √ | | | | | |
| | 计量经济学 | | √ | | | | | | | | √ | √ | √ | | | | | | | | | | | | | |
| | 会计学 | | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | 世界经济A | | | | | | | | | | | | | | | √ | √ | √ | | | √ | | | | | |
| √ | 国际商务A | | | | | | | | | √ | | | | | | √ | √ | √ | | | | | | | | |
| √ | 国际贸易实务A | √ | | √ | | | | | √ | | | | | | | | | | | | | | √ | | | |
| | 财政学B | | | | √ | √ | √ | √ | | | | | | | | | | | | | | | | | | |
| √ | 国际市场营销C | | | √ | | | √ | | √ | | | | | | | | | | | | | | √ | | | |
| √ | 商务沟通与写作（全英文） | | | | | | | | | | | | | | | | | | √ | | | √ | | | √ | |
| | 数字经济创业导论 | | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | 跨境电子商务理论与实务 | | | | | | √ | | | √ | | | | | | | | | | | | | √ | | | |
| | 财务管理B | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 国际投资学C | | | | √ | | | | | √ | | | | | | | | | | | | | √ | | | |
| √ | 国际商务法律和惯例 | | | | √ | | | | | | | | | | | √ | | √ | | | | | | | | |
| √ | 国际物流与采购学原理 | | √ | | | | | | | √ | | | | | | | | | | | | | | √ | | |
| | 商务英语口语 | | | | | | | | | | | | | | | | | | √ | | | √ | | | √ | |
| | 数字经济与国际服务贸易 | | | | | | √ | | | | | | | | | √ | √ | | | | | | | | | |
| √ | 跨文化管理C | | | | | | | | | | | | | | √ | | | | | √ | | √ | | | | |
| | 国际航运市场 | | | | | | | | | √ | | | | | | | | √ | | | | | √ | | | |
| | 跨境电商社交媒体营销 | | | | | | | | | | | | | | | | | | √ | | | √ | | √ | | |
| | 经济文献阅读与写作 | | | | | | | | | | √ | | √ | | | | | | | | | | | | | √ |
| | 国际结算B | √ | | | | | | | √ | √ | | | | √ | | | | | | | | | | | | |
| | 国际商务谈判 | | | | | | | | | | | | | | | | | | √ | | | √ | | | √ | |
| | 国际经济技术合作B | | | | | | | | √ | | | | | | | √ | | | | | | | √ | | | |

| | | 课程名称 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 应用国际贸易学 | | | | ✓ | | | | ✓ | | | | | | | | | | ✓ | | |
| | | 海运经济地理 B | | | | | | | | | | | | | | | | | | | | |
| | | 商务数据分析（Python） | | | | | ✓ | | | ✓ | | | | | | | | | | | | |
| | | 跨境电商综合服务实务 | | | | | ✓ | | | | | | | | | | | | | ✓ | ✓ | |
| | | 中国跨国公司发展专题 | | | ✓ | | | | | ✓ | | | ✓ | | | | | | | | | |
| | | 新能源汽车产业数字化战略 | | | | | | ✓ | | ✓ | | | ✓ | ✓ | | | | | | | | |
| | | 经济计量软件与应用 | | | ✓ | | | | | ✓ | | ✓ | ✓ | | | | | | | | | |
| | | 海商法 | | | | | | | | | | ✓ | ✓ | | ✓ | | | | ✓ | | ✓ | |
| | | 幸福心理学 | | | | | | | | | | | | | | | | | | | | |
| | | 电子商务原理 B | | ✓ | | ✓ | | | | | | | | | | | | | ✓ | | | |
| | | 商品期货市场 C | ✓ | | | ✓ | | | | | | | | | | | | | | | ✓ | |
| | | 证券投资学 B | ✓ | | | | | ✓ | | ✓ | | | ✓ | | | | | | | | | |
| | | 商务礼仪 | | | | | | | | | | | | ✓ | | ✓ | | ✓ | | | | |
| | | 创业企业运营实训 C | | ✓ | ✓ | | | | | | | | ✓ | | | ✓ | | | | | ✓ | |
| | | 能力拓展训练 | | | ✓ | | | | ✓ | | | ✓ | ✓ | | | | | | | | | |
| | | 专业实习 B | | | | | | | | | | | | | ✓ | | ✓ | | | ✓ | ✓ | |
| | | 市场调查与分析 | | | | | ✓ | | ✓ | | | ✓ | | | | ✓ | | | ✓ | | | |
| | | 毕业实习 | | | | | | | | | | | | | ✓ | | ✓ | | | ✓ | | ✓ |
| | | 毕业论文 | | | | ✓ | | | | ✓ | | ✓ | | | | | | | | | ✓ | |
| ✓ | | 中国对外贸易专题 C | | | ✓ | | | | | ✓ | | | ✓ | ✓ | | | | | | | | |
| | | 神奇的材料世界 | | | | | | | | | | | | | | | | | | | | |

## 三、 教学建议进程表

### Ⅲ Course Schedule

| (一)公共基础必修课程<br>1 Public Basic Compulsory Courses | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 开课单位<br>Course College | 课程编号<br>Course Number | 课程名称<br>Course Title | 学分<br>Crs | 学时分配 Including | | | | | | 建议修读学期<br>Suggested Term | 先修课程<br>Prerequisite Course |
| | | | | 总学时 | 理论<br>Theory | 实验<br>Exp. | 上机<br>Ope-ratio. | 实践<br>Prac-tice. | 课外<br>Extra-cur. | | |

| | | | | Tot hrs. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 马克思主义学院 | 4220001210 | 思想道德与法治 | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 1 | |
| | | Morality and the rule of law | | | | | | | | | |
| 马克思主义学院 | 4220002180 | 中国近现代史纲要 | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 2 | |
| | | Outline of Contemporary and Modern Chinese History | | | | | | | | | |
| 马克思主义学院 | 4220005180 | 马克思主义基本原理 | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 4 | |
| | | Marxism Philosophy | | | | | | | | | |
| 马克思主义学院 | 4220003180 | 毛泽东思想和中国特色社会主义理论体系概论 | 4.5 | 66 | 66 | 0 | 0 | 0 | 0 | 3 | |
| | | Introduction to Mao Zedong Thought and Socialism with Chinese Characteristics | | | | | | | | | |
| 外语学院 | 4030001210 | 大学英语1 | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 1 | |
| | | College English I | | | | | | | | | |
| 外语学院 | 4030002210 | 大学英语2 | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 2 | |
| | | College English II | | | | | | | | | |
| 外语学院 | 4030003210 | 大学英语3 | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 3 | |
| | | College English III | | | | | | | | | |
| 外语学院 | 4030004210 | 大学英语4 | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 4 | |
| | | College English IV | | | | | | | | | |
| 计算机智能学院 | 4120004210 | Python 程序设计基础B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| | | Foundation of Python Programming B | | | | | | | | | |
| 计算机智能学院 | 4120008210 | 计算机基础与Python 程序设计综合实验B | 1 | 32 | 0 | 32 | 0 | 0 | 0 | 2 | |
| | | Comprehensive Experiments of Foundation of Computer and | | | | | | | | | |

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 学期 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PYTHON Language Programming B | | | | | | | | | |
| 学工部 | 1050001210 | 军事技能训练 Military Skills Training | 2 | 136 | 0 | 0 | 0 | 136 | 0 | 1 | |
| 学工部 | 1050002210 | 军事理论 Military Theory | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| 体育学院 | 4210001170 | 体育1 Physical Education Ⅰ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 1 | |
| 体育学院 | 4210002170 | 体育2 Physical Education Ⅱ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| 体育学院 | 4210003170 | 体育3 Physical Education Ⅲ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 3 | |
| 体育学院 | 4210004170 | 体育4 Physical Education Ⅳ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 4 | |
| 小 计 Subtotal | | | 31.0 | 744 | 512 | 32 | 0 | 136 | 64 | | |

(二)通识教育选修课程
2 General Education Elective Courses

| 核心选修 Core elective courses | 文明与传统 Civilization and Tradition Courses | 通识课程应修满至少9学分。核心选修不少于2学分；自主选修课程中，至少在艺术与审美、创新与创业两个领域各选修1门课程。 Minimum subtotal credits: 9.Core elective courses ≥2 credits.Self-selected courses, at least 1 course in art and aesthetics and 1 course in innovation and entrepreneurship. |
|---|---|---|
| | 社会与发展类 Society and Development Courses | |
| | 艺术与人文类 Art and Humanities Courses | |
| | 自然与方法类 Nature and methods Courses | |
| 自主选修选修 Core elective courses | 数学与自然科学, 哲学与心理学, 法学与社会科学, 经济与管理, 历史与文化, 语言与文学, 艺术与审美, 创新与创业 Mathematics and Natural Sciences,Philosophy and Psychology,Science and Social Sciences,Economics and Management,History and Culture,Language and Literature,Art and Aesthetics,Innovation and Entrepreneurship | |

(三)大类必修课程
3 Basic Discipline Required Courses

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 学期 |
|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010001210 | 经济类专业导论 Introduction to Economics | 1.5 | 24 | 24 | 0 | 0 | 0 | 0 | 1 |
| 经济学院 | 4010100110 | 政治经济学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 1 |

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Political Economics | | | | | | | | | |
| 经济学院 | 4010003210 | 微观经济学 Microeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 1 | |
| 理学院 | 4050003210 | 高等数学 B 上 Advanced Mathematics Ⅰ | 4.5 | 72 | 72 | 0 | 0 | 0 | 0 | 1 | |
| 理学院 | 4050004210 | 高等数学 B 下 Advanced Mathematics Ⅱ | 5.5 | 88 | 88 | 0 | 0 | 0 | 0 | 2 | 高等数学 B 上, |
| 理学院 | 4050229110 | 线性代数 Linear Algebra | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | 高等数学 B 上, |
| 经济学院 | 4010007210 | 宏观经济学 Macroeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 2 | |
| 管理学院 | 4170002210 | 管理学原理 A Principles of Management | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | |
| 材料学院 | 4070121210 | 神奇的材料世界 The World of Miraculous Materials | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 2 | |
| 小 计 Subtotal | | | 26.0 | 416 | 416 | 0 | 0 | 0 | 0 | | |

(四)专业必修课程
4 Specialized Required Courses

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 理学院 | 4050058110 | 概率论与数理统计 B Probability and Mathematical Statistics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | 高等数学 B 下, |
| 经济学院 | 4010335170 | 统计学 B Statistics | 3 | 48 | 42 | 6 | 0 | 0 | 0 | 3 | 高等数学 B 上, |
| 经济学院 | 4010008210 | 货币金融学 Money and Finance | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 3 | 宏观经济学, |
| 经济学院 | 4010037110 | 国际贸易 International Trade | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | 宏观经济学, |
| 经济学院 | 4010105110 | 中级微观经济学 B Intermediate Microeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | 微观经济学, |
| 经济学院 | 4010104110 | 中级宏观经济学 B Intermediate Macroeconomics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 3 | 宏观经济学, |
| 经济学院 | 4010367170 | 国际金融学 International Finance | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 4 | |

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | | 开课学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010056110 | 计量经济学 | 3.5 | 56 | 48 | 8 | 0 | 0 | 0 | | 4 | 概率论与数理统计 B, |
| | | Econometrics | | | | | | | | | | |
| 管理学院 | 4170010210 | 会计学 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | | 4 | |
| | | Accounting | | | | | | | | | | |
| 经济学院 | 4010087110 | 世界经济 A | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | | 4 | |
| | | World Economy | | | | | | | | | | |
| 经济学院 | 4010044110 | 国际商务 A | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | | 4 | 国际贸易, |
| | | International Business | | | | | | | | | | |
| 经济学院 | 4010041110 | 国际贸易实务 A | 3 | 48 | 40 | 8 | 0 | 0 | 0 | | 4 | 国际贸易, |
| | | International Trade Practice | | | | | | | | | | |
| 经济学院 | 4010005110 | 财政学 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | | 5 | |
| | | Public Finance | | | | | | | | | | |
| 经济学院 | 4010224130 | 国际市场营销 C | 2.5 | 40 | 32 | 8 | 0 | 0 | 0 | | 5 | |
| | | International Marketing | | | | | | | | | | |
| 经济学院 | 4010018210 | 商务沟通与写作（全英文） | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | | 5 | |
| | | Business Communication and Writing | | | | | | | | | | |
| 创业学院 | 4270004210 | 数字经济创业导论 | 1 | 16 | 16 | 0 | 0 | 0 | 0 | | 5 | |
| | | Introduction to digital economy Entrepreneurship | | | | | | | | | | |
| 经济学院 | 4010019210 | 跨境电子商务理论与实务 | 2 | 32 | 26 | 6 | 0 | 0 | 0 | | 5 | |
| | | Theroty and Practice of Cross-Border e-Commerce | | | | | | | | | | |
| 经济学院 | 4010308170 | 中国对外贸易专题 C | 2 | 32 | 32 | 0 | 0 | 0 | 0 | | 6 | 国际贸易, |
| | | Special Topics on China s Foreign Trade | | | | | | | | | | |
| 小 计 Subtotal | | | 46.0 | 736 | 700 | 36 | 0 | 0 | 0 | | | |

(五)专业选修课程
5 Specialized Elective Courses

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | | 开课学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 管理学院 | 4170014110 | 财务管理 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | | 5 | |
| | | Financial Management | | | | | | | | | | |
| 经济学院 | 4010313170 | 国际投资学 C | 2 | 32 | 32 | 0 | 0 | 0 | 0 | | 5 | |
| | | International Investment | | | | | | | | | | |
| 经济学院 | 4010054210 | 国际商务法律和惯例 | 2.5 | 40 | 32 | 8 | 0 | 0 | 0 | | 5 | |

| | | International Commercial Law and Practices | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010055210 | 国际物流与采购学原理 | 2.5 | 40 | 32 | 8 | 0 | 0 | 0 | 5 | |
| | | Principle of International Logistics and purchasing | | | | | | | | | |
| 经济学院 | 4010081110 | 商务英语口语 | 2.0 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| | | Oral English in Business | | | | | | | | | |
| 经济学院 | 4010056210 | 数字经济与国际服务贸易 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Economy of Service and International Trade in service | | | | | | | | | |
| 经济学院 | 4010307170 | 跨文化管理 C | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Cross-cultural Management | | | | | | | | | |
| 经济学院 | 4010309170 | 国际航运市场 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | International Shipping Market | | | | | | | | | |
| 经济学院 | 4010080210 | 跨境电商社交媒体营销 | 2 | 32 | 26 | 0 | 6 | 0 | 0 | 6 | |
| | | Social Media Marketing of Cross-Border e-Commerce | | | | | | | | | |
| 经济学院 | 4010057210 | 经济文献阅读与写作 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | Reading and Writing of Essays of Economics | | | | | | | | | |
| 经济学院 | 4010326170 | 国际结算 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | International Settlement | | | | | | | | | |
| 经济学院 | 4010058210 | 国际商务谈判 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 6 | |
| | | International Business Negotiation | | | | | | | | | |
| 经济学院 | 4010317170 | 国际经济技术合作 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | International Economic and Technical Cooperation | | | | | | | | | |

| 经济学院 | 4010059210 | 应用国际贸易学 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | Applied International Trade | | | | | | | | | |
| 航运学院 | 4160034111 | 海运经济地理B | 1.5 | 24 | 24 | 0 | 0 | 0 | 0 | 7 | |
| | | Marine Economic Geography | | | | | | | | | |
| 经济学院 | 4010011210 | 商务数据分析（Python） | 3 | 48 | 32 | 16 | 0 | 0 | 0 | 7 | |
| | | Business Data Analysis (Python) | | | | | | | | | |
| 经济学院 | 4010061210 | 跨境电商综合服务实务 | 2 | 32 | 24 | 8 | 0 | 0 | 0 | 7 | |
| | | Comprehensive Service Practice of Cross-Border e-Commerce | | | | | | | | | |
| 经济学院 | 4010152120 | 中国跨国公司发展专题 | 2.0 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | Topics on MNCs' Development in China | | | | | | | | | |
| 经济学院 | 4010062210 | 新能源汽车产业数字化战略 | 1.5 | 24 | 24 | 0 | 0 | 0 | 0 | 7 | |
| | | Strategy of New Energy Vehicle Industry Digitization | | | | | | | | | |
| 经济学院 | 4010041210 | 经济计量软件与应用 | 2 | 32 | 24 | 8 | 0 | 0 | 0 | 7 | |
| | | Application of Econometrics Software | | | | | | | | | |
| 航运学院 | 4160023210 | 海商法 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | Law of Maritime Commerce | | | | | | | | | |
| 小 计 Subtotal | | | 43.0 | 688 | 634 | 48 | 6 | 0 | 0 | | |

修读说明：要求至少选修21.5学分。
NOTE：Minimum subtotal credits:21.5.

(六)个性课程
6 Personalized Electice Courses

| 法学社会学院 | 4020155210 | 幸福心理学 | 1.5 | 24 | 24 | 0 | 0 | 0 | 0 | 4 | |
| | | The Psychology in Happiness | | | | | | | | | |
| 经济学院 | 4010090210 | 电子商务原理B | 2 | 32 | 26 | 6 | 0 | 0 | 0 | 5 | |
| | | E-commerce Practice | | | | | | | | | |

| 经济学院 | 4010327170 | 商品期货市场 C<br>The Market of Commodity Futures | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 5 | |
| 经济学院 | 4010358170 | 证券投资学 B<br>Securities Investment | 2 | 32 | 26 | 6 | 0 | 0 | 0 | 7 | |
| 经济学院 | 4010089210 | 商务礼仪<br>Business Etiquette | 1.5 | 24 | 24 | 0 | 0 | 0 | 0 | 7 | |
| 小 计 Subtotal | | | 9.0 | 144 | 132 | 12 | 0 | 0 | 0 | | |

修读说明：学生从以上个性课程和学校发布的其它个性课程目录中选课 ，要求至少选修 6 学分。
NOTE: Sudents can select courses from above and the other personalized courses in catalog, and are required to obtain at least 6 credits.

(七)专业教育集中性实践教育环节
7 Specialized Practice Schedule

| 经济学院 | 4010302170 | 创业企业运营实训 C<br>Training for Start-up Entreperneurship Operation | 1 | 16 | 0 | 0 | 0 | 16 | 0 | 3 | |
| 经济学院 | 4010134110 | 能力拓展训练<br>Ability Development Training | 1 | 16 | 0 | 0 | 0 | 16 | 0 | 5 | |
| 经济学院 | 4010192130 | 专业实习 B<br>Practical Training in Major | 3 | 48 | 0 | 0 | 0 | 48 | 0 | 6 | |
| 经济学院 | 4010093210 | 市场调查与分析<br>Market Investgation and Analysis | 2 | 32 | 0 | 0 | 0 | 32 | 0 | 7 | |
| 经济学院 | 4010136110 | 毕业实习<br>Graduation Practice | 5 | 80 | 0 | 0 | 0 | 80 | 0 | 8 | |
| 经济学院 | 4010105210 | 毕业论文<br>Graduation Thesis | 8.5 | 272 | 0 | 0 | 0 | 272 | 0 | 8 | |
| 小 计 Subtotal | | | 20.5 | 464 | 0 | 0 | 0 | 464 | 0 | | |

## 四、 修读指导
## Ⅳ Recommendations on Course Studies

课外培养方案详见《武汉理工大学第二课堂课外学分实施办法》。《形势与政策》和

《心理健康教育》课程为课外必修课程，分别计 2 个课外学分。

Please refer to the cultivation plan of the second class-Implementation

Measures for Extracurricular Credits of the Second Class of Wuhan University of Technology. Situation & Policy (2 credits) and Mental Health Education (2 credits) are the required extracurricular courses.

学院教学负责人：杜伟岸

专业培养方案负责人：肖德云, 叶海燕

# 电子商务 2021 版本科培养方案
# Undergraduate Education Plan for Specialty in E-Business (2021)

| | | | |
|---|---|---|---|
| 专业名称 | **电子商务** | 主干学科 | **计算机科学与技术，经济学，管理学** |
| Major | **E-Business** | Major Disciplines | Computer Science and Technology, Economics, Management |
| 计划学制 | **四 年** | 授予学位 | **管理学学士** |
| Duration | **4 Years** | Degree Granted | Bachelor of Management |

## 最低毕业学分规定
**Graduation Credit Criteria**

| 课程分类<br>*Course Classification*<br>课程性质<br>*Course Nature* | 公共基础课程<br>Public Basic Courses | 通识教育课程<br>Public Courses | 大类课程<br>Basic Courses in General Discipline | 专业教育课程<br>Specialized Courses | 个性课程<br>Personalized Course | 集中性实践教学环节<br>Specialized Practice Schedule | 课外学分<br>Study Credit after Class | 总学分<br>Total Credits |
|---|---|---|---|---|---|---|---|---|
| 必修课<br>Required Courses | 31 | \ | 32 | 35 | \ | 21.5 | 10 | 180.0 |
| 选修课<br>Elective Courses | \ | 9 | \ | 25.5 | 6 | \ | 10 | |

## 一、 培养目标与毕业要求

## Ⅰ Educational Objectives &Requirement

### （一） 培养目标

本专业是集互联网、物联网、云计算、大数据、人工智能、区块链等现代信息技术，理、工、经、管、法等多学科交叉融合形成的新文科专业，面向国家社会主义现代化强国建设的需要，以社会主义核心价值观为引领，将现代信息技术与商务深度融合，以信息技术赋能行业发展，以技术实现支撑商务创新，培养德智体美劳全面发展，具有良好人文素养、多学科融合知识、智能商务系统分析和实现能力、互联网产品创新和运营优化能力，服务于企业、政府或行业机构互联网产品分析策划、设计开发与运营管理的复合型电子商务行业引领人才和创新创业人才。 本专业学生毕业后，通过 5 年左右的实践，期望达到以下主要目标： （1）综合人文素养：身心健康，具有崇高的家国情怀、坚定的社会主义核心价值观和中国特色社会主义理想信念；具备良好的敬业精神、互联网思维、职业道德和社会责任感；具有良好的国际视野，关注全球当代经济和社会问题，以及互联网和电子商务的最新发展。 （2）专业基础能力：具有从事电子商务领域科学研究和实践所需的数

学、信息技术、经济学、管理学知识，具备多维分析能力，能将以上知识运用于解决电子商务问题。 （3）专业技术能力：具有分析企业和行业智能商务需求、设计智能商务解决方案、开发智能商务系统和进行技术实施的能力。 （4）专业商务能力：精通互联网产品策划、设计与运营，网络营销，电子商务服务管理。 （5）社会发展能力：具有良好的口头和书面表达和交流沟通能力、良好的团队意识和合作精神，具有创新能力和终身学习的能力。

本专业期待毕业生五年后能达成下列目标：

（1）综合人文素养：身心健康，具有崇高的家国情怀、坚定的社会主义核心价值观和中国特色社会主义理想信念；具备良好的敬业精神、互联网思维、职业道德和社会责任感；具有良好的国际视野，关注全球当代经济和社会问题，以及互联网和电子商务的最新发展。

（2）专业基础能力：具有从事电子商务领域科学研究和实践所需的数学、信息技术、经济学、管理学知识，具备多维分析能力，能将以上知识运用于解决电子商务问题。

（3）专业技术能力：具有分析企业和行业智能商务需求、设计智能商务解决方案、开发智能商务系统和进行技术实施的能力。

（4）专业商务能力：精通互联网产品策划、设计与运营，网络营销，电子商务服务管理。

（5）社会发展能力：具有良好的口头和书面表达和交流沟通能力、良好的团队意识和合作精神，具有创新能力和终身学习的能力。

## I  Education Objectives

Electronic business (e-business) is a new inter-discipline major involving Internet, IoT, cloud computing, big data, artificial intelligence and blockchain. It is a new business major involving science, technology, economics, management and laws. Oriented towards the requirements of building China into a great modern socialist country lead by the core socialist values, this major focuses on the deep integration of modern information technologies and business, empowering industrial development with IT and promoting business innovation with technological implementation. This major aims to educate leading and innovative interdisciplinary talents in the field of e-business with high humanity quality, multi-discipline knowledge, as well as good capability in intelligent business system analysis and implementation, Internet products innovation and operation optimization. The graduate students are expected to work for Internet product analysis and planning, designing and

development and operation management in enterprises, government or industry bodies. The main educational objectives as the students of this major has practiced for more than 5 years after graduation include: （1）Overall humanity: Be solid physically and sound mentally with dedication to home country, core socialist values, ideals and convictions of socialism with Chinese characteristics. Be dedicated to work and sensitive to Internet thinking. Be able to take social responsibilities and professional ethics. Care about modern economic and societal problems and the up-to-date developments in Internet and e-business as well with broadened international views. （2）Basic capabilities: Grasp the knowledge in mathematics, information technologies, economics, management and laws, which is necessitated by the e-business research and practices. Have the ability in multi-dimensional analysis. Be able to put the concerned knowledge into solving e-business issues. （3）Advanced technological capabilities: Have the ability in analyzing intelligent business requirements, designing intelligent business solutions, developing intelligent business systems and implementing solutions using the knowledge in e-business. （4）Advanced business capabilities: Be proficient in e-business products planning, products designing, operations, internet marketing and service management. （5）Social development capabilities: Be good at oral and written presentation. Possess good communication abilities, teamwork and cooperation spirit. Be able to innovate and pursue study for a life-long time.

Students of this program are expected to achieve the following objectives 5 years after graduation：

（1）Overall humanity: Be solid physically and sound mentally with dedication to home country, core socialist values, ideals and convictions of socialism with Chinese characteristics. Be dedicated to work and sensitive to Internet thinking. Be able to take social responsibilities and professional ethics. Care about modern economic and societal problems and the up-to-date developments in Internet and e-business as well with broadened international views.

（2）Basic capabilities: Grasp the knowledge in mathematics, information technologies, economics, management and laws, which is necessitated by the e-

business research and practices. Have the ability in multi-dimensional analysis. Be able to put the concerned knowledge into solving e-business issues.

（3）Advanced technological capabilities: Have the ability in analyzing intelligent business requirements, designing intelligent business solutions, developing intelligent business systems and implementing solutions using the knowledge in e-business.

（4）Advanced business capabilities: Be proficient in e-business products planning, products designing, operations, internet marketing and service management.

（5）Social development capabilities: Be good at oral and written presentation. Possess good communication abilities, teamwork and cooperation spirit. Be able to innovate and pursue study for a life-long time.


## 二、 毕业要求

(1) **工程知识**： 具有人文底蕴、科学精神、职业素养和社会责任感，了解国情社情民情，践行社会主义核心价值观。 1.1 具有良好的思想素质、身体素质、心理素质、文化修养、社会道德和责任担当等人文素养， 以及追求真理的科学精神。 1.2 具有崇高的家国情怀、坚定的社会主义核心价值观和中国特色社会主义理想信念，致力于将现代信息技术应用于促进社会经济高效公平发展。

(2) **问题分析**： 具有扎实的基础知识和专业知识，掌握必备的研究方法，了解本专业及相关领域最新动态和发展趋势。 2.1 掌握与电子商务相关的信息技术、数学、经济、管理和法律的基本理论和方法，并能够将所学知识运用于电子商务复杂问题的表述中。 2.2 掌握商务智能分析、互联网产品分析策划、设计开发和运营优化专业知识，具有将现代信息技术与商务深度融合、实现商务创新和优化的能力。 2.3 掌握大数据分析工具、经济管理决策优化等模型，具有解决电子商务复杂问题所需的经济、管理和信息技术等多维分析能力。 2.4 了解本专业的发展动态和前沿，洞悉电子商务领域的最新发展方向和商务模式。

(3) **解决方案**： 具有批判性思维和创新能力。能够发现、辨析、质疑、评价本专业及相关领域现象和问题，表达个人见解。 3.1 具有批判意识和求真务实的科学思维，具有逻辑思维和辩证思维能力，能够基于深入的事实调查分析，独立组织、构建、概述、整合电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等相关问题。 3.2 具有创新

意识，掌握基本的创新方法，能够针对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等相关问题，独立进行假设、评价、核实和批判。

(4) **研究**：具有解决复杂问题的能力。能对本专业领域复杂问题进行综合分析和研究，并提出相应对策或解决方案。 4.1 具有系统思维和抽象能力，能够理解电子商务应用需求，合理运用信息技术、数学、经济、管理和法律的语言或模型，对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等关键问题进行正确表达。 4.2 能够运用电子商务基本原理和商务智能分析方法，对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等关键问题的内外动因及内在规律进行识别。 4.3 针对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等关键技术或商务问题，能够分析、设计、对比和选择优化的解决方案。

(5) **工具使用**：具有信息技术应用能力。能够恰当应用现代信息技术手段和工具解决实际问题。 5.1 熟练使用办公软件，掌握运用现代信息技术跟踪并获取信息的方法，熟练进行文献检索和资料查询。 5.2 具备扎实的计算机编程基础，以及对主流开发技术和工具的熟练运用能力，能够分析、设计和实现电子商务系统。 5.3 能够针对复杂电子商务问题，运用相应的商务智能分析、互联网产品创新和运营优化的软件工具进行建模、分析、预测、模拟与可视化展示。

(6) **工程与社会**：

(7) **环境和可持续发展**：

(8) **职业规范**：具有国际视野和国际理解能力。了解国际动态，关注全球性问题，理解和尊重世界不同文化的差异性和多样性。 8.1 具有良好的国际视野，了解电子商务发展的国际背景和国际发展趋势。 8.2 理解全球文化的差异性和多样性，在电子商务设计中综合考虑全球经济、文化、环境、法律、安全和伦理等因素。

(9) **个人和团队**：具有良好的团队合作能力。能够与团队成员和谐相处、协作共事，并作为成员或领导者在团队活动中发挥积极作用。 9.1 团队合作意识强，人际交往、沟通能力强，具备在多学科背景下独立或合作开展工作的能力。 9.2 具有一定的多学科背景下的组织、协调和管理能力。

(10) **沟通**：具有较强的沟通表达能力。能够通过口头和书面表达方式与同行、社会公众进行有效沟通。 10.1 能够就复杂电子商务问题，恰当运用图表、文稿或口头等方式与业界同行交流，具备与社会公众进行有效沟通的能力，包括撰写报告和设计文稿、陈述发言、清晰表达或回应。 10.2 至少熟练掌握一门外语，具备跨文化背景下进行电子商务技术和商务方面的表达、沟通与交流的能力。

(11) **项目管理**:

(12) **终身学习**：具有终身学习意识和自我管理、自主学习能力，能够通过不断学习，适应社会和个人可持续发展。 12.1 具有终身学习的意识，能够胜任本专业相关的产品、运营和技术等职业岗位，具备在学术上继续深造所需的认知和基础能力。 12.2具有自我管理、自主学习能力，能与时俱进掌握电子商务领域的新知识，具有适应电子商务不断创新和社会不断进步的可持续发展能力。

## II Graduation Requirement

(1) **Engineering knowledge:** Have good humane accomplishments, scientific spirit, professional quality and social responsibility. Know the national, social and humanistic conditions. Practise the core socialist values. 1.1Have good ideological quality, physical quality, psychological quality, cultural accomplishment, social morality and responsibility and other humanistic qualities, as well as the pursuit of truth of the scientific spirit. 1.2Have solid physically and sound mentally with dedication to home country, core socialist values, ideals and convictions of socialism with Chinese characteristics. Be committed to the application of modern information technology to promote the efficient and equitable development of society and economy.

(2) **Problem analysis:** Have solid basic knowledge and professional knowledge. Master the necessary research methods. Know the development trends of the major and its related fields. 2.1 Master the basic theories and methods of information technology, mathematics, economics, management and laws related to e-business. Be able to apply the learned knowledge to the solution of complex problems in e-business. 2.2Master the professional knowledge of business intelligence analysis, Internet product analysis and planning, designing and development, and operation optimization as well. Have the ability to deeply integrate modern information technology into business innovation and optimization. 2.3Master big data analysis tools, economic management decision optimization models, etc. Have the ability required in the economics, management and information technology to solve complex problems of e-business multi-dimensional analysis. 2.4Know the development trends

and frontiers of this major, insights into the latest development direction and business model in the field of e-business.

(3) **Design/development solution:** Have the ability in logical and dialectical thinking. Be able to identify, discriminate, question and evaluate phenomena and problems in this major and its related fields. 3.1Have critical consciousness, pragmatic scientific thinking, logical thinking and dialectical thinking abilities. Be able to independently organize, construct, summarize and integrate issues related to e-business based on in-depth fact investigation and analysis. 3.2Have the sense of innovation and master the basic innovation methods. Be able to independently assume, evaluate, verify and criticize related issues in the field of e-business.

(4) **Research:** Have the ability to solve complex problems. Be able to conduct comprehensive analysis and researches and propose corresponding solutions. 4.1 Have systematic thinking and abstract abilities and understand the application requirements of e-business. Be able to rationally use the language or model of information technology, mathematics, economics, management and law, as well as correctly express the key issues of Internet product innovation and operation optimization in the field of e-business. 4.2 Be able to use the basic principles of e-business and business intelligence analysis methods to identify internal and external motivations and internal laws of key issues such as Internet product innovation and operation optimization in the field of e-business. 4.3 Be able to analyze, design, compare and select optimal solutions for key technical or business problems such as Internet product innovation and operation optimization in the field of e-business.

(5) **Usage of modern tools:** Be capable of information technology application. Be able to properly use modern information technology and tools to solve practical problems. 5.1 Be skilled in using office software. Master the methods of tracking and obtain information by using modern information technology. Proficient in literature retrieval and data inquiry. Have Strong computer programming skills and proficiency in the use of mainstream techniques and tools. 5.2 Be able to model, analyze, forecast, simulate and visualize complex e-business problems

using the corresponding software tools of business intelligence analysis, Internet product innovation and operation optimization.

(6) **Engineering and society:**

(7) **Environment and sustainable development:**

(8) **Professional standards:** Have international vision and understanding ability. Be aware of international trends, pay attention to global issues, understand and respect the differences and diversity of different cultures in the world. 8.1 Have a good international vision, understand the international background and development trends of e-business. 8.2 Understand the differences and diversity of global cultures and be able to comprehensively consider global economic, cultural, environmental, legal, safety and ethical factors in the design of e-business.

(9) **Individual and team:** Have good teamwork skills. Be able to get along and cooperate with team members, and play an active role in team activities as a member or leader. 9.1 Have a strong sense of teamwork, strong interpersonal and communication skills. Be able to work independently or cooperatively in a multidisciplinary context. 9.2 Be able to organize, coordinate and manage in a multidisciplinary environment.

(10) **Communication:** Have strong communication and expression skills. Be able to communicate effectively with peers and the public. 6.1 Be able to communicate with industry colleagues on complex e-business issues using diagrams, texts or verbal communication as appropriate. Be able to effectively communicate with the community including writing reports, designing documents, making presentations and clearly expressing or responding to instructions. 6.2 Be proficient in at least one foreign language. Be able to express and communicate in the technical and business aspects of e-business in a cross-cultural context.

(11) **Project management:**

(12) **Life-long learning:** Have the consciousness of lifelong learning and the abilities of self-management and self-learning. Be able to adapt to the sustainable development of society and individuals through continuous learning. 12.1 Have the consciousness of lifelong learning. Be qualified for professional

positions of this major such as product, operation and technology. Have the necessary cognitive and basic abilities for further academic study. 12.2 Have the self-management and independent learning ability. Be able to keep pace with times to master the new knowledge in the field of e-business. Be able to adapt to the continuous innovation of e-business and social progress of sustainable development.

## 表 2 培养目标的矩阵关系毕业要求支撑

| 毕业要求 | 培养目标1 | 培养目标2 | 培养目标3 | 培养目标4 | 培养目标5 |
|---|---|---|---|---|---|
| 毕业要求1 | ✓ | | | | |
| 毕业要求2 | ✓ | ✓ | ✓ | ✓ | ✓ |
| 毕业要求3 | | ✓ | ✓ | ✓ | ✓ |
| 毕业要求4 | | ✓ | ✓ | ✓ | |
| 毕业要求5 | | ✓ | ✓ | ✓ | ✓ |
| 毕业要求6 | | | | | |
| 毕业要求7 | | | | | |
| 毕业要求8 | ✓ | | ✓ | ✓ | |
| 毕业要求9 | | | | | ✓ |
| 毕业要求10 | ✓ | | | | |
| 毕业要求11 | | | | | |
| 毕业要求12 | | | | | ✓ |

　　毕业要求的达成需以课程（教学环节）的教学活动为支撑。本专业为 合理设置课程体系、落实对毕业要求的支撑课程，对各项毕业要求进行了解。每项毕业要求（一级指标）被分解为若干层层递进的指标点（二级指标） ，前一指标点的达成是下一指标点达成的基础，而下一指标点的达成是前一指标点的升华，所有指标点一起，支撑了该毕业要求的达成。根据上述分解方法， 本专业各项毕业要求的指标点分解如下表所示。

## 表 3 毕业要求指标点的分解

| 毕业要求 | 指标点 |
|---|---|
| 毕业要求1.工程知识:具有人文底蕴、科学精神、职业素养和社会责任感，了解国情社情民情，践行社会主义核心价值观。 | 1.1具有良好的思想素质、身体素质、心理素质、文化修养、社会道德和责任担当等人文素养， 以及追求真理的科学精神。 |

| | |
|---|---|
| 1.1 具有良好的思想素质、身体素质、心理素质、文化修养、社会道德和责任担当等人文素养， 以及追求真理的科学精神。<br><br>1.2 具有崇高的家国情怀、坚定的社会主义核心价值观和中国特色社会主义理想信念，致力于将现代信息技术应用于促进社会经济高效公平发展。 | 1.2 具有崇高的家国情怀、坚定的社会主义核心价值观和中国特色社会主义理想信念，致力于将现代信息技术应用于促进社会经济高效公平发展。 |
| | 1.3 |
| | 1.4 |
| 毕业要求 2.问题分析:具有扎实的基础知识和专业知识，掌握必备的研究方法，了解本专业及相关领域最新动态和发展趋势。 2.1 掌握与电子商务相关的信息技术、数学、经济、管理和法律的基本理论和方法，并能够将所学知识运用于电子商务复杂问题的表述中。 2.2 掌握商务智能分析、互联网产品分析策划、设计开发和运营优化专业知识，具有将现代信息技术与商务深度融合、实现商务创新和优化的能力。 2.3 掌握大数据分析工具、经济管理决策优化等模型，具有解决电子商务复杂问题所需的经济、管理和信息技术等多维分析能力。 2.4 了解本专业的发展动态和前沿，洞悉电子商务领域的最新发展方向和商务模式。 | 2.1 掌握与电子商务相关的信息技术、数学、经济、管理和法律的基本理论和方法，并能够将所学知识运用于电子商务复杂问题的表述中。 |
| | 2.2 掌握商务智能分析、互联网产品分析策划、设计开发和运营优化专业知识，具有将现代信息技术与商务深度融合、实现商务创新和优化的能力。 |
| | 2.3 掌握大数据分析工具、经济管理决策优化等模型，具有解决电子商务复杂问题所需的经济、管理和信息技术等多维分析能力。 |
| | 2.4 了解本专业的发展动态和前沿，洞悉电子商务领域的最新发展方向和商务模式。 |
| 毕业要求 3.解决方案:具有批判性思维和创新能力。能够发现、辨析、质疑、评价本专业及相关领域现象和问题，表达个人见解。 3.1 具有批判意识和求真务实的科学思维，具有逻辑思维和辩证思维能力，能够基于深入的事实调查分析，独立组 | 3.1 具有批判意识和求真务实的科学思维，具有逻辑思维和辩证思维能力，能够基于深入的事实调查分析，独立组织、构建、概述、整合电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等相关问题。 |

| | |
|---|---|
| 织、构建、概述、整合电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等相关问题。 3.2 具有创新意识，掌握基本的创新方法，能够针对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等相关问题，独立进行假设、评价、核实和批判。 | 3.2 具有创新意识，掌握基本的创新方法，能够针对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等相关问题，独立进行假设、评价、核实和批判。 |
| | 3.3 |
| | 3.4 |
| 毕业要求 4. 研究:具有解决复杂问题的能力。能对本专业领域复杂问题进行综合分析和研究，并提出相应对策或解决方案。 4.1 具有系统思维和抽象能力，能够理解电子商务应用需求，合理运用信息技术、数学、经济、管理和法律的语言或模型，对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等关键问题进行正确表达。 4.2 能够运用电子商务基本原理和商务智能分析方法，对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等关键问题的内外动因及内在规律进行识别。 4.3 针对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等关键技术或商务问题，能够分析、设计、对比和选择优化的解决方案。 | 4.1 具有系统思维和抽象能力，能够理解电子商务应用需求，合理运用信息技术、数学、经济、管理和法律的语言或模型，对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等关键问题进行正确表达。 |
| | 4.2 能够运用电子商务基本原理和商务智能分析方法，对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等关键问题的内外动因及内在规律进行识别。 |
| | 4.3 针对电子商务领域智能商务系统分析与实现、互联网产品创新和运营优化等关键技术或商务问题，能够分析、设计、对比和选择优化的解决方案。 |
| | 4.4 |
| 毕业要求 5. 工具使用:具有信息技术应用能力。能够恰当应用现代信息技术手段和工具解决实际问题。 5.1 熟练使用办公软件，掌握运用现代信息技术跟踪并获取信息的方法，熟练进行文献检索和资料查询。 5.2 具备扎实的计算机编程基础，以 | 5.1 熟练使用办公软件，掌握运用现代信息技术跟踪并获取信息的方法，熟练进行文献检索和资料查询。 |
| | 5.2 具备扎实的计算机编程基础，以及对主流开发技术和工具的熟练运用能力，能够分析、设计和实现电子商务系统。 |

| | |
|---|---|
| 及对主流开发技术和工具的熟练运用能力，能够分析、设计和实现电子商务系统。 5.3 能够针对复杂电子商务问题，运用相应的商务智能分析、互联网产品创新和运营优化的软件工具进行建模、分析、预测、模拟与可视化展示。 | 5.3 能够针对复杂电子商务问题，运用相应的商务智能分析、互联网产品创新和运营优化的软件工具进行建模、分析、预测、模拟与可视化展示。 |
| 毕业要求 6. 工程与社会: | 6.1 |
| | 6.2 |
| 毕业要求 7. 环境和可持续发展: | 7.1 |
| | 7.2 |
| 毕业要求 8. 职业规范:具有国际视野和国际理解能力。了解国际动态，关注全球性问题，理解和尊重世界不同文化的差异性和多样性。 8.1 具有良好的国际视野，了解电子商务发展的国际背景和国际发展趋势。 8.2 理解全球文化的差异性和多样性，在电子商务设计中综合考虑全球经济、文化、环境、法律、安全和伦理等因素。 | 8.1 具有良好的国际视野，了解电子商务发展的国际背景和国际发展趋势。 |
| | 8.2 理解全球文化的差异性和多样性，在电子商务设计中综合考虑全球经济、文化、环境、法律、安全和伦理等因素。 |
| | 8.3 |
| 毕业要求 9. 个人和团队:具有良好的团队合作能力。能够与团队成员和谐相处、协作共事，并作为成员或领导者在团队活动中发挥积极作用。 9.1 团队合作意识强，人际交往、沟通能力强，具备在多学科背景下独立或合作开展工作的能力。 9.2 具有一定的多学科背景下的组织、协调和管理能力。 | 9.1 团队合作意识强，人际交往、沟通能力强，具备在多学科背景下独立或合作开展工作的能力。 |
| | 9.2 具有一定的多学科背景下的组织、协调和管理能力。 |
| | 9.3 |
| 毕业要求 10. 沟通:具有较强的沟通表达能力。能够通过口头和书面表达方式与同行、社会公众进行有效沟通。 10.1 能够 | 10.1 能够就复杂电子商务问题，恰当运用图表、文稿或口头等方式与业界同行交流，具备与社会公众进行有效沟通的能 |

| | |
|---|---|
| 就复杂电子商务问题，恰当运用图表、文稿或口头等方式与业界同行交流，具备与社会公众进行有效沟通的能力，包括撰写报告和设计文稿、陈述发言、清晰表达或回应。 10.2至少熟练掌握一门外语，具备跨文化背景下进行电子商务技术和商务方面的表达、沟通与交流的能力。 | 力，包括撰写报告和设计文稿、陈述发言、清晰表达或回应。 |
| | 10.2至少熟练掌握一门外语，具备跨文化背景下进行电子商务技术和商务方面的表达、沟通与交流的能力。 |
| | 10.3 |
| 毕业要求11.项目管理： | 11.1 |
| | 11.2 |
| | 11.3 |
| 毕业要求12.终身学习:具有终身学习意识和自我管理、自主学习能力，能够通过不断学习，适应社会和个人可持续发展。 12.1具有终身学习的意识，能够胜任本专业相关的产品、运营和技术等职业岗位，具备在学术上继续深造所需的认知和基础能力。 12.2具有自我管理、自主学习能力，能与时俱进掌握电子商务领域的新知识，具有适应电子商务不断创新和社会不断进步的可持续发展能力。 | 12.1具有终身学习的意识，能够胜任本专业相关的产品、运营和技术等职业岗位，具备在学术上继续深造所需的认知和基础能力。 |
| | 12.2具有自我管理、自主学习能力，能与时俱进掌握电子商务领域的新知识，具有适应电子商务不断创新和社会不断进步的可持续发展能力。 |

## 二、专业核心课程与专业特色课程
## II  Core Course and Characteristic Courses

### （一） 专业核心课程

电子商务数据库技术,电子商务程序设计,电子商务营销,电子支付与互联网金融,电子商务物流与供应链管理,商务数据分析（Python）,电子商务解决方案

E-Business Database Technology,E-Business Program Designing,E-Commerce Marketing,E-Payment and Network Finance,E-Business Logistics and SCM,Business Data Analysis (Python),E-Business Solutions

### （二） 专业特色课程

电子商务营销,电子支付与互联网金融,电子商务物流与供应链管理,商务数据分析（Python）,电子商务解决方案,电子商务软件设计模式 B,电子商务应用开发技术 B,数据仓库与大数据管理系统,互联网产品分析与设计

E-Commerce Marketing,E-Payment and Network Finance,E-Business Logistics and SCM,Business Data Analysis (Python),E-Business Solutions,E-Business Software Designing Patterns B,E-Business Applications Developing Technology,Data Warehouse and Big Data Management System,Internet Product Analysis and Designing

**附：毕业要求实现矩阵**

| 专业核心课程 | 专业特色课程 | 课程名称 | 1 | | | | 2 | | | | 3 | | | | 4 | | | | 5 | | | 6 | | 7 | | 8 | | | 9 | | | 10 | | | 11 | | | 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 1 | 2 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 |
| | | 思想道德与法治 | | | | | | | | | | | | | | | | | | | | √ | | | | | √ | | | | | | | | | | | | √ |
| | | 中国近现代史纲要 | | | | | | | | | | | | | | | | | | | | √ | | | | | √ | | | | | | | | | | | | √ |
| | | 毛泽东思想和中国特色社会主义理论体系概论 | | | | | | | | | | | | | | | | | | | | | | √ | √ | | | | | | | | | | | √ | | √ | √ |
| | | 马克思主义基本原理 | | | | | √ | | | | | | | | | | | | | | | | | | | | | | | | | | | | √ | | | | √ |
| | | 军事技能训练 | | | | | | | | | | | | | | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | |
| | | 军事理论 | | | | | | | | | | | | | | | | | | | | | | | | | | | √ | √ | √ | | | | | | | | |
| | | 体育1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 体育2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 体育3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 体育4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 大学英语1 | | | | | | | | | | | | | | | | | | √ | | | | | | | | | √ | | | √ | | | √ | | | | |
| | | 大学英语2 | | | | | | | | | | | | | | | | | | √ | | | | | | | | | √ | | | √ | | | √ | | | | |
| | | 大学英语3 | | | | | | | | | | | | | | | | | | √ | | | | | | | | | √ | | | √ | | | √ | | | | |
| | | 大学英语4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Python 程序设计基础 B | | | | | | √ | | | | √ | | | | | | | √ | √ | | | | | | | | | | | | | | | | | | | |
| | | 计算机基础与 Python | | | | | | √ | | | | | | | | | | | √ | √ | | | | | | | | | | | | | | | | | | | |

| | | 课程 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 程序设计综合实验B | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 高等数学B上 | √ | | | | | √ | | | | | | | | | | | | | | | | | | |
| | | 高等数学B下 | √ | | | | | √ | | | | | | | | | | | | | | | | | | |
| | | 线性代数 | √ | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 专业导论 | √ | √ | | √ | | | | | | | | | | | | | | | | | | | | | |
| | | 概率论与数理统计B | √ | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 经济学原理 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 管理学原理A | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | | | | | | √ | √ | √ | | | | | |
| | | 会计学原理 | √ | | | √ | | | | | | | | | √ | | | √ | | | | √ | √ | | | |
| | | 管理信息系统B | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 财务管理A | √ | √ | | √ | √ | | | √ | √ | √ | √ | √ | √ | √ | | | | | | | | | | |
| | | 管理运筹学 | | √ | √ | | | | | | | | | | | | | | | | | | | | √ | | √ |
| | | 电子商务原理（全英文） | | | | | | | | | | | | | | | √ | | | | √ | | | | | | |
| √ | | 电子商务数据库技术 | | | | √ | | | | | | | | | | √ | | | | | | | | | | | |
| √ | | 电子商务程序设计 | | √ | | √ | | | | √ | | | | | | √ | | | | √ | | | | | | | |
| | | XML与电子商务应用B | | | | | | √ | | | | | √ | | √ | | | | | | | | | | | | |
| | | 电子商务算法结构B | | | | | √ | | | | | √ | | | | | | | | | | | | | | | |
| | | 计算机网络原理 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 电子商务安全技术B | | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | √ | 电子商务营销 | √ | | | | | √ | | | | | | | | | | | √ | | | | | | | | |
| √ | √ | 电子支付与互联网金融 | | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | √ | 电子商务物流与供应链管理 | | √ | | √ | | | | √ | | | | | | | | | | | | | | | | | |
| √ | √ | 商务数据分析（Python） | | | | | | | | √ | | | | √ | | | | | | | | | | | | | |
| √ | √ | 电子商务解决方案 | | | | | √ | | √ | | | | | | √ | √ | | | | | | | | | | | |
| | | 研究方法B | | | √ | √ | | | | | | | | | √ | | | | | | | | | | | | √ |
| | | 创业导论 | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| √ | 电子商务软件设计模式B | | | √ | | | | | √ | √ | | √ | | | | | | | | | | | | | |
| √ | 电子商务应用开发技术B | | | | √ | | | | | √ | | √ | | √ | | | | | | | | | | | |
| | 服务学 | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | 数据仓库与大数据管理系统 | | | | | | | | | | | | | | | | | | | | | | | | |
| √ | 互联网产品分析与设计 | | | | | | √ | √ | √ | | | | | | | | | | | | | | | | |
| | 电子商务前沿与进展B | | √ | | | √ | | | | √ | | | | | | √ | | | | | | | | | √ |
| | 电子商务项目管理 | | | | | | | | | | | | | | | | √ | | √ | | | | | | |
| | 企业资源计划B | | √ | | √ | | | √ | | | | | | | | | | | | | | | | | |
| | 数字政府与数字治理 | | | | √ | | | √ | | | | | √ | √ | | | | | | | | | | | |
| | 数据分析与建模 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 数据可视化 | | | | √ | | | | √ | | √ | √ | | | | | | | | | | | | | |
| | 数据化运营 | | | | √ | | | | √ | | √ | √ | | | | | | | | | | | | | |
| | 现代信息技术与商务应用 | | | | √ | | | | √ | | √ | √ | | | | | | | | | | | | | |
| | 系统分析与设计C | | √ | | | √ | | | √ | | | | | | | | | | | | | | | | √ |
| | 企业决策支持系统 | | | √ | | | | | √ | | | | | | | | | | | | | | √ | | √ |
| | 文本挖掘与分析 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 社会网络分析 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 智能计算与深度学习 | | | | √ | | √ | | | | | | | | | | | | | | | | √ | | √ |
| | 信息经济学B | | | | | | | | | | | | | | | | | | | | | | | | |
| | 商业银行经营与管理 | | | | √ | | | | | | | | | | | √ | | √ | | | √ | | | | |
| | 人工智能与商务应用 | | √ | | | √ | | | √ | | | | | | | | | | | | | √ | | | |
| | 国际贸易实务A | √ | | √ | | | | √ | | | | | | | | | | | | | | | | √ | |
| | 经济法B | | | | | | | | | | | | | | | | | | | | | | | | |
| | 证券投资学 | √ | | | | | √ | | | √ | | | √ | | | | | | | | | | | | |
| | 电子商务企业认知 | | | | √ | | | | | | | | | | | | √ | | | √ | | | | | |

| 课程 | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 电子商务设计与开发 | | | | | | | | | | | | | | | | | | | | | |
| 专业实习 | | | | | | | | | | | | | | | | | | | | | |
| 创业企业运营实训C | √ | √ | | | | | | | | √ | | | | √ | | | | | | √ | |
| 毕业实习 | | | | | | | | | | | | | | | | | | | | | |
| 毕业论文 | | | | | √ | √ | | √ | | | | | | | | | | | | | |

## 三、 教学建议进程表
### III Course Schedule

(一)公共基础必修课程
1 Public Basic Compulsory Courses

| 开课单位 Course College | 课程编号 Course Number | 课程名称 Course Title | 学分 Crs | 学时分配 Including | | | | | | 建议修读学期 Suggested Term | 先修课程 Prerequisite Course |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 总学时 Tot hrs. | 理论 Theory | 实验 Exp. | 上机 Ope-ratio. | 实践 Prac-tice. | 课外 Extra-cur. | | |
| 马克思主义学院 | 4220001210 | 思想道德与法治 Morality and the rule of law | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 1 | |
| 马克思主义学院 | 4220002180 | 中国近现代史纲要 Outline of Contemporary and Modern Chinese History | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 2 | |
| 马克思主义学院 | 4220003180 | 毛泽东思想和中国特色社会主义理论体系概论 Introduction to Mao Zedong Thought and Socialism with Chinese Characteristics | 4.5 | 66 | 66 | 0 | 0 | 0 | 0 | 3 | |
| 马克思主义学院 | 4220005180 | 马克思主义基本原理 Marxism Philosophy | 2.5 | 42 | 42 | 0 | 0 | 0 | 0 | 4 | |
| 学工部 | 1050001210 | 军事技能训练 Military Skills Training | 2 | 136 | 0 | 0 | 0 | 136 | 0 | 1 | |
| 学工部 | 1050002210 | 军事理论 Military Theory | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | |
| 体育学院 | 4210001170 | 体育1 | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 1 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Physical Education Ⅰ | | | | | | | | |
| 体育学院 | 4210002170 | 体育2 Physical Education Ⅱ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 2 | 体育1, |
| 体育学院 | 4210003170 | 体育3 Physical Education Ⅲ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 3 | 体育2, |
| 体育学院 | 4210004170 | 体育4 Physical Education Ⅳ | 1 | 32 | 32 | 0 | 0 | 0 | 0 | 4 | 体育3, |
| 外语学院 | 4030001210 | 大学英语1 College English Ⅰ | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 1 | |
| 外语学院 | 4030002210 | 大学英语2 College English Ⅱ | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 2 | 大学英语1, |
| 外语学院 | 4030003210 | 大学英语3 College English Ⅲ | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 3 | 大学英语2, |
| 外语学院 | 4030004210 | 大学英语4 College English Ⅳ | 2 | 48 | 32 | 0 | 0 | 0 | 16 | 4 | 大学英语3, |
| 计算机智能学院 | 4120004210 | Python 程序设计基础B Foundation of Python Programming B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 1 | |
| 计算机智能学院 | 4120008210 | 计算机基础与Python 程序设计综合实验B Comprehensive Experiments of Foundation of Computer and PYTHON Language Programming B | 1 | 32 | 0 | 32 | 0 | 0 | 0 | 1 | |
| 小 计 Subtotal | | | 31.0 | 744 | 512 | 32 | 0 | 136 | 64 | | |

(二)通识教育选修课程
2 General Education Elective Courses

| | | |
|---|---|---|
| 核心选修 Core elective courses | 文明与传统 Civilization and Tradition Courses | 通识课程应修满至少9学分。核心选修不少于2学分；自主选修课程中，至少在艺术与审美、创新与创业两个领域各选修1门课程。 Minimum subtotal credits: 9.Core elective courses ≥2 credits.Self-selected courses, at least 1 course in art and aesthetics and 1 course in innovation and entrepreneurship. |
| | 社会与发展类 Society and Development Courses | |
| | 艺术与人文类 Art and Humanities Courses | |
| | 自然与方法类 Nature and methods Courses | |

| 自主选修<br>选修<br>Core elective courses | 数学与自然科学,哲学与心理学,法学与社会科学,经济与管理,历史与文化,语言与文学,艺术与审美,创新与创业<br>Mathematics and Natural Sciences,Philosophy and Psychology,Science and Social Sciences,Economics and Management,History and Culture,Language and Literature,Art and Aesthetics,Innovation and Entrepreneurship | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|

(三)大类必修课程
3 Basic Discipline Required Courses

| 理学院 | 4050003210 | 高等数学B上<br>Advanced Mathematics Ⅰ | 4.5 | 72 | 72 | 0 | 0 | 0 | 0 | 1 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 理学院 | 4050004210 | 高等数学B下<br>Advanced Mathematics Ⅱ | 5.5 | 88 | 88 | 0 | 0 | 0 | 0 | 2 | 高等数学B上, |
| 理学院 | 4050229110 | 线性代数<br>Linear Algebra | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 3 | 高等数学B上,高等数学B下, |
| 理学院 | 4050058110 | 概率论与数理统计B<br>Probability and Mathematical Statistics | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 4 | |
| 经济学院 | 4010128110 | 专业导论<br>Introduction to Specialty | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 1 | |
| 经济学院 | 4010002210 | 经济学原理<br>Principles of Economics | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 1 | |
| 管理学院 | 4170002210 | 管理学原理A<br>Principles of Management | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 1 | |
| 管理学院 | 4170006210 | 会计学原理<br>Accounting Principle | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 2 | |
| 管理学院 | 4170004210 | 管理信息系统B<br>Management Information System | 2.5 | 40 | 32 | 8 | 0 | 0 | 0 | 3 | 电子商务数据库技术, |
| 管理学院 | 4170005210 | 财务管理A | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 3 | 会计学原理, |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Financial Management | | | | | | | | |
| 管理学院 | 4170008210 | 管理运筹学 | 3 | 48 | 48 | 0 | 0 | 0 | 0 | 4 | 线性代数, |
| | | Management Operations Research | | | | | | | | |
| 小 计 Subtotal | | | 32.0 | 512 | 504 | 8 | 0 | 0 | 0 | | |
| (四)专业必修课程<br>4 Specialized Required Courses | | | | | | | | | | | |
| 经济学院 | 4010091210 | 电子商务原理（全英文） | 3 | 48 | 40 | 8 | 0 | 0 | 0 | 2 | |
| | | Introduction to E-Business | | | | | | | | |
| 经济学院 | 4010017110 | 电子商务数据库技术 | 3 | 48 | 40 | 8 | 0 | 0 | 0 | 2 | |
| | | E-Business Database Technology | | | | | | | | |
| 经济学院 | 4010121210 | 电子商务程序设计 | 3 | 48 | 40 | 8 | 0 | 0 | 0 | 2 | |
| | | E-Business Program Designing | | | | | | | | |
| 经济学院 | 4010290170 | XML 与电子商务应用 B | 2.5 | 40 | 32 | 8 | 0 | 0 | 0 | 3 | |
| | | XML and Application in E-Business | | | | | | | | |
| 经济学院 | 4010291170 | 电子商务算法结构 B | 3 | 48 | 40 | 8 | 0 | 0 | 0 | 3 | 电子商务程序设计 B, |
| | | E-Business Algorithm Structure | | | | | | | | |
| 经济学院 | 4010001220 | 计算机网络原理 | 2.5 | 40 | 32 | 8 | 0 | 0 | 0 | 3 | |
| | | Computer Network Designing | | | | | | | | |
| 经济学院 | 4010293170 | 电子商务安全技术 B | 2.5 | 40 | 32 | 8 | 0 | 0 | 0 | 4 | |
| | | E-Business Security Technology | | | | | | | | |
| 经济学院 | 4010229140 | 电子商务营销 | 2.5 | 40 | 34 | 6 | 0 | 0 | 0 | 5 | 电子商务原理（全英文）, |
| | | E-Commerce Marketing | | | | | | | | |
| 经济学院 | 4010294170 | 电子支付与互联网金融 | 3 | 48 | 40 | 8 | 0 | 0 | 0 | 5 | 财务管理 A, |
| | | E-Payment and Network Finance | | | | | | | | |

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010020110 | 电子商务物流与供应链管理<br>E-Business Logistics and SCM | 3 | 48 | 40 | 8 | 0 | 0 | 0 | 5 | 电子商务原理（全英文）， |
| 经济学院 | 4010011210 | 商务数据分析（Python）<br>Business Data Analysis (Python) | 3 | 48 | 32 | 16 | 0 | 0 | 0 | 5 | 电子商务数据库技术,概率论与数理统计B, |
| 经济学院 | 4010015110 | 电子商务解决方案<br>E-Business Solutions | 2.0 | 32 | 26 | 6 | 0 | 0 | 0 | 6 | 计算机网络设计,电子商务安全技术, |
| 管理学院 | 4170158110 | 研究方法B<br>Research Methods | 1.0 | 16 | 16 | 0 | 0 | 0 | 0 | 7 | |
| 创业学院 | 4270001210 | 创业导论<br>Introduction to Entrepreneurship | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 7 | |
| 小 计 Subtotal | | | 35.0 | 560 | 460 | 100 | 0 | 0 | 0 | | |

(五)专业选修课程
5 Specialized Elective Courses

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010070210 | 电子商务软件设计模式B<br>E-Business Software Designing Patterns B | 2 | 32 | 24 | 8 | 0 | 0 | 0 | 4 | 电子商务程序设计B, |
| 经济学院 | 4010292170 | 电子商务应用开发技术B<br>E-Business Applications Developing Technology | 3 | 48 | 32 | 16 | 0 | 0 | 0 | 4 | 电子商务数据库技术,XML与电子商务应用B,电子商务程序设计, |
| 经济学院 | 4010300170 | 服务学<br>Serviceology | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 4 | |
| 经济学院 | 4010071210 | 数据仓库与大数据管理系统<br>Data Warehouse and Big Data Management System | 3 | 48 | 40 | 8 | 0 | 0 | 0 | 4 | 电子商务数据库技术, |
| 经济学院 | 4010072210 | 互联网产品分析与设计 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 5 | 电子商务应用开发技术B, |

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | 电子商务项目管理, |
| | | Internet Product Analysis and Designing | | | | | | | | | |
| 经济学院 | 4010299170 | 电子商务前沿与进展B | 1 | 16 | 16 | 0 | 0 | 0 | 0 | 5 | 电子商务原理（全英文）， |
| | | E-Business Forefronts and Developments | | | | | | | | | |
| 经济学院 | 4010021110 | 电子商务项目管理 | 2.0 | 32 | 28 | 4 | 0 | 0 | 0 | 5 | |
| | | E-Business Project Management | | | | | | | | | |
| 经济学院 | 4010076110 | 企业资源计划B | 2.5 | 40 | 32 | 8 | 0 | 0 | 0 | 5 | |
| | | Enterprise Resources Planning | | | | | | | | | |
| 经济学院 | 4010051210 | 数字政府与数字治理 | 2.5 | 40 | 34 | 6 | 0 | 0 | 0 | 5 | |
| | | Digital Government and Digital Governance | | | | | | | | | |
| 管理学院 | 4170398130 | 数据分析与建模 | 3 | 48 | 30 | 18 | 0 | 0 | 0 | 5 | |
| | | Data Analysis and Modeling | | | | | | | | | |
| 经济学院 | 4010050210 | 数据可视化 | 2.5 | 40 | 32 | 8 | 0 | 0 | 0 | 6 | 商务数据分析（Python）， |
| | | Data Visualization | | | | | | | | | |
| 经济学院 | 4010049210 | 数据化运营 | 2.5 | 40 | 24 | 16 | 0 | 0 | 0 | 6 | 商务数据分析（Python），数据可视化， |
| | | Digitalized Operation | | | | | | | | | |
| 经济学院 | 4010048210 | 现代信息技术与商务应用 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 6 | 电子商务原理（全英文）， |
| | | Modern Information Technologies and Applications in Business | | | | | | | | | |
| 管理学院 | 4170050210 | 系统分析与设计C | 3 | 48 | 40 | 0 | 8 | 0 | 0 | 6 | 计算机网络原理， |
| | | Information Systems Analysis and Design | | | | | | | | | |
| 管理学院 | 4170694170 | 企业决策支持系统 | 3 | 48 | 28 | 20 | 0 | 0 | 0 | 6 | 管理信息系统B, |

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Enterprise Decision Support Systems | | | | | | | | | |
| 安全应急学院 | 4290465190 | 文本挖掘与分析 | 2 | 32 | 24 | 0 | 8 | 0 | 0 | 6 | 商务数据分析（Python）， |
| | | Text analysis and mining | | | | | | | | | |
| 安全应急学院 | 4290453190 | 社会网络分析 | 2.5 | 40 | 28 | 0 | 12 | 0 | 0 | 6 | 商务数据分析（Python）， |
| | | Social Network Analysis | | | | | | | | | |
| 管理学院 | 4170056210 | 智能计算与深度学习 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | Intelligent Computing and Deep Learning | | | | | | | | | |
| 管理学院 | 4170155110 | 信息经济学 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | 经济学原理， |
| | | Information Economics | | | | | | | | | |
| 经济学院 | 4010021210 | 商业银行经营与管理 | 2.5 | 40 | 40 | 0 | 0 | 0 | 0 | 7 | |
| | | Commercial Bank Management | | | | | | | | | |
| 小 计 Subtotal | | | 48.0 | 768 | 628 | 112 | 28 | 0 | 0 | | |

要求至少选修 25.5 学分。
At least 25.5 credits are required for elective courses.

(六)个性课程
6 Personalized Electice Courses

| 学院 | 课程代码 | 课程名称 | 学分 | 总学时 | | | | | | 学期 | 先修课程 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 管理学院 | 4170699170 | 人工智能与商务应用 | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | Artificial Intelligence and Business Application | | | | | | | | | |
| 经济学院 | 4010041110 | 国际贸易实务 A | 3 | 48 | 40 | 8 | 0 | 0 | 0 | 6 | |
| | | International Trade Practice | | | | | | | | | |
| 法学社会学院 | 4020074110 | 经济法 B | 2 | 32 | 32 | 0 | 0 | 0 | 0 | 7 | |
| | | Economic Law | | | | | | | | | |
| 经济学院 | 4010099110 | 证券投资学 | 2.5 | 40 | 34 | 6 | 0 | 0 | 0 | 7 | |
| | | Securities Investment | | | | | | | | | |
| 小 计 Subtotal | | | 9.5 | 152 | 138 | 14 | 0 | 0 | 0 | | |

学生从以上个性课程和学校发布的其它个性课程目录中选课，要求至少选修 6 学分。
Students are required to take at least 6 credits from the above personalized courses and other personalized courses published by the school.

(七)专业教育集中性实践教育环节
7 Specialized Practice Schedule

| 经济学院 | 4010095210 | 电子商务企业认知<br>E-business enterprise cognition internship | 1 | 16 | 0 | 0 | 0 | 16 | 0 | 2 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 经济学院 | 4010096210 | 电子商务设计与开发<br>Training on E-business project designing and developing | 2 | 32 | 0 | 0 | 0 | 32 | 0 | 4 | |
| 经济学院 | 4010124110 | 专业实习<br>Practical Training in Major | 4 | 64 | 0 | 0 | 0 | 64 | 0 | 6 | |
| 经济学院 | 4010302170 | 创业企业运营实训C<br>Training for Start-up Entreperneurship Operation | 1 | 16 | 0 | 0 | 0 | 16 | 0 | 7 | |
| 经济学院 | 4010114110 | 毕业实习<br>Graduation Practice | 5 | 80 | 0 | 0 | 0 | 80 | 0 | 8 | |
| 经济学院 | 4010114210 | 毕业论文<br>Graduation Thesis | 8.5 | 272 | 0 | 0 | 0 | 272 | 0 | 8 | |
| 小 计 Subtotal | | | 21.5 | 480 | 0 | 0 | 0 | 480 | 0 | | |

## 四、 修读指导
**Ⅳ Recommendations on Course Studies**

课外培养方案详见《武汉理工大学第二课堂课外学分实施办法》。《形势与政策》和《心理健康教育》课程为课外必修课程，分别计 2 个课外学分。

Please refer to the cultivation plan of the second class-Implementation Measures for Extracurricular Credits of the Second Class of Wuhan University of Technology. Situation & Policy (2 credits) and Mental Health Education (2 credits) are the required extracurricular courses.

学院教学负责人：杜伟岸

专业培养方案负责人：刘平峰, 危小超