

金融科技 专业本科人才培养方案

Undergraduate Program for specialty in Fintech

一、培养目标

I. Educational Objectives

本专业培养具有人文与科学素养、诚信品质、创新精神和社会责任感，具备经济学、金融学基础理论知识，系统掌握金融科技专业知识及技能，具有金融大数据分析与应用能力、金融产品设计与运营能力，具有英语、数学、计算机应用能力及持续性学习能力，具备一定国际视野、较强沟通交流能力和团队协作能力，能够在各类银行、证券公司、金融科技公司和金融管理部门从事金融科技相关工作的跨学科高素质应用型人才。

二、培养规格

II. Skills Profile

本专业毕业生应获得以下几方面的素质、知识和能力：

1. 具有良好的职业认知，拥有人文与科学素养、诚信品质、创新精神和社会责任感。
2. 系统掌握经济金融、大数据分析等方面的基础知识、理论和技能，熟悉相关的方针政策和法律法规。
3. 通晓金融机构核心业务，具备金融市场分析能力、金融大数据分析与应用能力、金融产品创新能力。
4. 具有以英语为工具处理金融科技事务的基本能力；计算机应用能力强，能够利用现代信息技术、财务和计量软件处理专业领域的实际问题；掌握经济管理类文献检索的方法，具备基本的科学研究能力。
5. 具备一定国际视野；具备较强的思辨能力、沟通交流能力和团队协作精神；具有终身自我学习、获取知识的能力。

三、主干学科

III. Major Disciplines

应用经济学 Applied Economics

四、学制与学位

IV. Length of Schooling and Degrees

修业年限：四年 Duration: 4 years

授予学位：经济学 学士

Degrees Conferred: Bachelor of Economics

五、学时与学分

V. Hours/Credits

总学分：180 学分

Total Credits: 180

1. 课堂教学：学时/学分：2264 / 134 占总学分的比例：74.4%;

i. Classroom Teaching: Hours/Credits: 2264/134 The Proportion of Total Credits: 74.4%;

其中：理论学时/学分：1936/119.5 占总学分的比例：66.4%

It contains: Theo. hours / Credits: 1936/119.5 The Proportion of Total Credits: 66.4%

实验（上机、实践）学时/学分：328/14.5 占总学分的比例：8.0%;

Exp. (Oper., Prac.) hours / Credits: 328/14.5 The Proportion of Total Credits: 8.0%;

2. 集中性实践教学环节：周/学分：52 / 41 占总学分的比例：22.8%;

ii. Intensified Internship for Practical Training: Week/ Credits: 52 / 41 The Proportion of Total Credits: 22.8%;

3. 课外实践与创新活动：学分：5 占总学分的比例：2.8%。

iii. Extracurricular Activities and Innovation: Credits: 5 The Proportion of Total Credits: 2.8%

六、主要课程

VI. Main Courses

微观经济学 Microeconomics、宏观经济学 Macroeconomics、计量经济学 Econometrics、金融学 Finance、金融工程原理 Financial Engineering Principle、金融科技概论 Fintech Introduction、自动化数据处理技术 Automated Data Processing Technology、互联网金融风险管理 Internet Finance Risk Management、数据科学基础与 Python 语言 Basic Data Science and Python Language、金融大数据 Financial Big Data、机器学习基础 Fundamentals of Machine Learning、数据仓库与数据挖掘 Data Warehouse and Data Mining。

七、主要集中性实践教学环节

VII. Main Intensified Internship for Practical Training

互联网金融产品设计与规划实践 Internet Financial Product Design and Program Practice、
数字普惠金融产品设计分解实战 Digital Inclusive Financial Product Design & Decomposition
Practice、新消费金融模式与实践 New Consuming Financial Model and Practice、网络爬虫数
据采集实践 Data Collection Practice of Web Crawler、机器学习与金融应用实践 Machine Study
and Financial Practice、大数据金融计量策略分析综合实践 Big Data financial measurement and
strategy analysis: Comprehensive Practice、金融专业毕业实习 Graduation Exercitation of
Finance、金融专业毕业设计 Graduation Design of Finance。

八、教学计划进度表

IX. Table of Teaching Schedule

课程 类别 Course Classified	课程 代码 Course Code	课程名称 Course Name	学分 Crs	学时 Hrs		教学时数 Teaching Hours				各学期学时 Hours Distribution in a Semester							
				课内 In-cla	课外 Ext	理论 Theo	上机 Oper	实验 Exp.	实践 Prac	一 1st	二 2nd	三 3rd	四 4th	五 5th	六 6th	七 7th	八 8th
公共 基础 课程 Basic Courses in General Education	15209001	思想道德修养与法律基础 Ideological and Moral Cultivation and Legal Basis	2	40		32			8	40							
	15209002	马克思主义基本原理概论 Introduction to the basic principles of Marxism	2.5	48		40			8	48							
	15209003	中国近现代史纲要 Survey of Modern Chinese History	2	40		32			8	40							
	15209004	毛泽东思想和中国特色社会 主义理论体系概论 Mao Zedong Thought and the theoretical system of socialism with Chinese characteristics	3.5	64		56			8		64						
	15209005	军事理论 Military Theory	1	16		16				16							
	15209006	大学生心理健康教育 Mental Health Education	1	16		16				16							
	15209007	形势与政策 Current Affairs and Policy	0.5	32		32				8		8		8			8
	18204901	大学英语 1 College English 1	3	48		48				48							
	18204902	大学英语 2 College English 2	3	48		48				48							
	18204903	大学英语 3 College English 3	3	48		48					48						
18204904	大学英语 4 College English 4	3	48		48						48						

	17208001	大学体育 1 Physical Education 1	1	32				32	32								
	17208002	大学体育 2 Physical Education 2	1	32				32		32							
	17208003	大学体育 3 Physical Education 3	1	32				32			32						
	17208004	大学体育 4 Physical Education 4	1	32				32				32					
		公共选修课 Public Electives	8	128		128											
		小计: Total:	365	704		544		160	176	152	144	88		8		8	
数理 基础 课程 Basic Courses in Mathem- atics/ Humanit- ies	13208001	微积分 A1 Calculus A1	5.5	88		88			88								
	13208002	微积分 A2 Calculus A2	5.5	88		88				88							
	13208005	线性代数 Linear Algebra	2.5	40		40				40							
	13208006	概率论与数理统计 Probability and Mathematical Statistics	2.5	40		40					40						
		小计: Total:	16	256		256			88	128	40						
学科 基础 (平台) 课程 Basic Courses in Discipline	12105001	政治经济学原理 Marxism Political Economics	3	48		48			48								
	12105002	统计学 Statistics	3	48		40	8				48						
	12105003	微观经济学 Microeconomics	3	48		48				48							
	12105004	宏观经济学 Macroeconomics	3	48		48					48						
	12105010	金融学 Finance	3.5	56		56					56						
	12105016	计量经济学 Econometrics	3	48		48						48					
	12105017	基础会计学 Foundations of Accounting	3	48		48				48							
	12105018	金融伦理与职业道德 Finance Ethics and Professional Morality	1	16		16				16							
	14201902	C 语言程序设计 C Language Programming	3.5	56		40	16				56						
14201908	数据结构与算法基础 Data Structure and Algorithm	2	32		24	8					32						
	小计: Total:	28	448		416	32		112	104	184	48						
专业 核心 课程 Core Courses in Specialty	12105251	金融科技概论 Fintech Introduction	2	32		32				32							
	12105252	自动化数据处理技术 Automated Data Processing Technology	2	32		24	8				32						
	12105253	金融数据库技术 Financial Database Technology	2	32		24	8					32					

	12105254	数据科学基础与 Python 语言 Basic Data Science and Python Language	2.5	40		32	8						40			
	12105255	金融工程原理 Financial Engineering Principle	3	48		40	8						48			
	12105256	金融大数据 Financial Big Data	2	32		24	8							32		
	12105257	区块链技术及应用 Block Chaining Technology and Application	2	32		32								32		
	12105258	互联网金融风险管理 Internet Finance Risk Management	2	32		32								32		
	12105259	机器学习基础 Fundamentals of Machine Learning	2	32		24	8								32	
	12105260	数据仓库与数据挖掘 Data Warehouse and Data Mining	3	48		24	24								48	
	小计: Total:		22.5	360		288	72					32	32	120	96	80
专业 选修 课程 Specialty- Oriented Elective Courses (最低 需修满 31学分)	12305251	第三方支付与电子银行 Third Party Payment and Electronic Banking	2	32		16	16							32		
	12305252	智能风控与监管科技 Intelligent Risk Control and Supervision Technology	2	32		32								32		
	12305253	投资学 Investment	3	48		40	8							48		
	12305298	保险学 A Insurance A	2	32		32								32		
	12305254	量化投资策略与技术 Qualitative Investment Method	2	32		24	8								32	
	12305255	国际金融学 A International Finance A	3	48		48									48	
	12305256	运筹学 Operational Research	2	32		24	8								32	
	12305257	利息理论 Interest Theory	2	32		32									32	
	12305206	金融行为学 Financial Behavior	2	32		32									32	
	12305211	金融英语 Financial English	2	32		32										32
	12305102	中国对外贸易概论 Introduction to China's Foreign Trade	2	32		32									32	
	12305530	管理学原理 Principles of Management	2	32		32									32	
12305258	商业银行学 Commercial Banking	3	48		40	8									48	
12305259	投资银行概论 Investment Banking	2	32		32									32		

	12305260	程序化交易概论 Programming Trading Introduction	2	32	32									32		
	12305261	金融科技监管与法律法规 Fintech Supervision and Laws and Regulations	2	32	32									32		
	12305262	大数据与征信 Big Data and Credit	2	32	32									32		
	12305263	互联网金融运营管理 Internet Finance Operation Management	2	32	24	8								32		
	12305264	国际金融中心建设动态 International Financial Center Construction	1	16	16										16	
	12305210	中央银行学 Central Banking	2	32	32										32	
	12305200	国际投资学 International Investment	2.5	40	40										40	
	12305001	经济信息资源检索与应用 Economic Information Resources Retrieval and Applications	1.5	24	16	8									24	
	小计: Total:		46	736	672	64							144	272	208	112
集中性 实践环 节 Intensified Internship for Practical Training	19209001	军训 Military Training	2	2w				2w	2w							
	19209008	思想政治理论课社会实践 Social Practice in the Course of Ideological and Political Theory	2	2w				2w		2w						
	19105251	用户研究与需求分析实践 User Research and Requirements Analysis Practice	1	1w							1w					
	19105252	互联网金融产品设计与规划 实践 Internet Financial Product Design and Program Practice	2	2w								2w				
	19105253	数字普惠金融产品设计分解 实战 Digital Inclusive Financial Product Design & Decomposition Practice	2	2w								2w				
	19105254	新消费金融模式与实战 New Consuming Financial Model and Practice	2	2w									2w			
	19105255	互联网金融新媒体运营推广 实践 Internet Financial New Media Operation & Promotion Practice	2	2w									2w			
	19105259	网络爬虫数据采集实践 Data Collection Practice of Web Crawler	1	1w										1w		
	19105256	机器学习与金融应用实践 Machine Study and Financial Practice	2	2w										2w		

	19105257	大数据金融计量策略分析综合实践 Big Data financial measurement and strategy analysis: Comprehensive Practice	4	4w													4w	
	19105203	投资基金项目模拟 Investment Fund Project Simulation	2	2w													2w	
	19105206	计量数据实训 Practical Training of Economic Statistics	2	2w								2w						
	19105207	金融专业学年论文 Term Thesis of Finance	2	2w									2w					
	19105208	金融机构调研 Researching Financial Survey	1	1w							1w*							
	19105209	金融专业毕业实习 Graduation Exercitation of Finance	3	6w													6w*	
	19105258	金融专业毕业设计 Graduation Design of Finance	8	16w													4w 12w	
创新创业训练	19105201	商业银行沙盘实训 Practical Training of Commercial Bank	2	2w													2w	
	19105001	现代企业与服务业虚拟仿真综合实训 Comprehensive Training of Modern Enterprises and Service Virtual Simulation	1	1w													1w	
小计: Total:			41	52w						4w	2w	2w	2w	6w	6w	7w	15w 12w	
课内学时合计 Total Class Hours			学分 Crs		学时 Hrs Teaching Hours				一 1st	二 2nd	三 3rd	四 4th	五 5th	六 6th	七 7th	八 8th		
			课内 In-cla	课外 Ext	理论 Theo	上机 Oper	实验 Exp.	实践 Prac										
			134	2264		1936	168		160	376	416	400	336	272	232	96	8	
各学期学分（不含公共选修课和集中性实践教学环节） Credits a Semester (Excluding public elective and Intensified Internship for Practical Training)									21.5	24.5	23.5	19.5	17	14	6			
各学期课内教学周数（不含考试2周〈第1学期1周〉和集中性实践教学周） In-class Teaching Weeks Each Semester (Excluding Two-week Exam (One-week Exam the 1 st semester) and Intensified Internship Weeks)									16	15	15	13	12	9	4			
各学期课内教学平均周学时数（不含考试2周〈第1学期1周〉和集中性实践教学周） Average In-class Teaching Hours per Week in a Semester (Excluding Two-week Exam (One-week Exam the 1 st semester) and Intensified Internship Weeks)									22.5	27.2	26.1	25.2	22.7	24.9	24			
每学期周数 Weeks a Semester									19	19	19	19	20	18	19	19		

备注：1. “课外学时”不计入总学分；2. “课内学时合计”不包含“集中性实践教学环节”和“课外实践与创新创业活动”。

Notes: 1. “Extracurricular Hours” are not included in the Total Credits; 2. In “Total Class Hours” exclude “Intensified Internship for Practical Training” and

“Extracurricular Activities and Innovation”。

说明：公共选修课可从第 2 学期开始选修，具体课程目录见教务处编发的《公共选修课程安排表》。

Direction: “Basic Courses in General Education” can be taken from the 2nd semester. The specific course catalog can be referred to *Public elective course guidelines* released by Teaching Affairs Office.

九、课外实践与创新创业活动

X. Extracurricular Activities and Innovation

实践创新学分可分为以下八大类：A、专业技能测试类；B、科技竞赛类；C、二课活动类；D、职业资格证书类；E、创新创业类；F、学术研究类；G、公益活动类；H、阅读学分类。学生须修满以上八类中的两类共计 5 学分。

Practice innovation credits can be divided into the following eight categories: A, professional skills test class; B. technology competition; C. Class 2 activities; D. Professional certificates; E. Innovation and entrepreneurship; F. Academic research; G. Public welfare activities; H. Classification of reading; Students are required to complete two of the eight categories in total 5 credits.

(一) 专业技能测试类

i Professional skills test class

参加学校组织的专业基础技能测试、专业技能测试，考核结果为“优秀”者，可获得 3 学分，考核结果为“合格”者，可获得 2 学分。

Participated in the professional basic skills test and professional skills test organized by the school, and the assessment result was "excellent". I could get 3 credits, and the assessment result was "qualified", and I could get 2 credits.

(二) 科技竞赛类

ii Scientific and technological competition

参加学校组织的省级及以上各类科技（人文社科类）竞赛的全过程者，可获得 1 学分，获得省级奖励的可获 3 学分，获得国家级奖励的可获 5 学分。

To participate in school organization of provincial level and above the whole process of all kinds of competition of science and technology (humanities and social sciences), 1 credit is available, and won awards at the provincial level to 3 credits, won national awards won 5 credits.

(三) 二课活动类

iii Class two activities

利用课外时间参加由学校、学院组织的各类科技、学术、人文类二课竞赛活动并获奖者，可获得 1 学分，获得一等奖者，可获得 2 学分；参加学校统一组织的省级及以上体育竞赛活动并获奖者，可获得 1 学分，获得二等奖及以上者，可获得 2 学分。

Take advantage of extracurricular time to participate in all kinds of science and technology, academic and humanities competitions organized by the school and the college, and the winner can get 1 credit and get the first prize, and get 2 credits; To participate in the sports competition of the provincial level and above, and the winner can get 1 credit, get the second prize and the above, and get 2 credits.

(四) 职业资格证书类

iv Vocational certificate class

取得国家政府部门颁发的各类职业、职称资格证书、等级证书者，可获得 2 学分，所取得证书为本学科专业领域，且相当于本行业中级专业技术职务的可获得 3 学分、相当于本行业高级专业技术职务的可获得 5 学分。

Issued by state government departments of all kinds of occupation, title certificate, grade card, will be available 2 credits, obtained a certificate in this discipline specialized field, and is equivalent to the intermediate professional title 3 credits can be obtained in the industry, as senior professional technical position in the industry of 5 credits can be obtained.

(五) 创新创业类

v Innovation and entrepreneurship

在校期间获得由国家相关政府部门颁发的外观设计专利、商标注册授权、实用新型或发明专利授权的，每项计 3 学分。

在校期间自主创业，以个人名义注册实体公司，能提供工商、税务等相关部门证明实际营运的，计 3 学分，按中等规模以上公司纳税的，计 5 学分。

In the course of school, I shall obtain the patent of design, trademark registration authorization, utility model or invention patent granted by the relevant government departments of the state, each of which is 3 credits.

During school self-employment, registered in the name of the individual entity company, can provide the industry and commerce, tax and other relevant departments to

prove actual operation, 3 credits, according to the above medium size companies pay taxes, meter 5 credits.

(六) 学术研究类

vi Academic research

以课题组成员身份参加本学科领域校内、外教师的科技学术研究，且能提供立项任务书的，课题为学院级的，每项计 2 学分；课题为校级课题的，每项计 3 学分，课题为省级及以上的，每项计 5 学分。

在本学科领域专业期刊上以第二作者发表学术论文（第一作者限定为本校本学院教师），每篇计 1 学分，期刊为核心期刊及以上者，每篇计 2 学分；在本学科领域专业期刊上以第一作者发表学术论文，每篇计 3 学分，期刊为核心期刊及以上者，每篇计 5 学分，期刊名目参见学校科技处发布的核心期刊认定标准。

To participate in the academic research of science and technology of teachers in the field of the subject field, and to provide the project for the college level with 2 credits for each project; The subject is the university-level project, each of which is 3 credits, the project is provincial and above, each of 5 credits.

Professional journal in the field to the second author published academic papers (limited to the authors of the institute of school-based teacher), each 1 credit, as the core periodicals and above, each meter 2 credit; Professional journal in the field of academic papers as the first author of each meter 3 credits, as the core periodicals and above, each meter 5 credits, journal names refer to the school and technology core journals published standards.

(七) 公益活动类

vii Public welfare activities

利用节假日、寒暑假等课外时间参加各类社会组织举行的社会公益活动，如环保节能、教育助学、扶贫救灾、心理健康、社区服务等，每实际、完整参加一项并能提供相关证明者，计 2 学分。

Use holiday, summer and winter vacation outside of class time to participate in the social public welfare activities held in all kinds of social organizations, such as environmental protection, energy conservation, education assistance, poverty alleviation and disaster relief, mental health, community service, etc., each practice, take part in a complete and can provide the relevant certificates, 2 credit.

(八) 阅读学分类

viii Classification of reading

学生在校学习期间，结合自己的兴趣、特长和能力，组织、策划、参加校内外读书活动或发表文学作品等，根据《武昌首义学院阅读学分管理办法》，经学校相关部门认定获得完整的阅读学分者，计 2 学分。

Students in school during the study, combined with their own interests, special skills and abilities, organization, planning, participate in reading activities or face-to-face published literary works, etc., according to the institute of wuchang began reading credit management method ", the related departments of the school for the complete reading course credits, 2 credit.