计算机科学与技术学术学位全日制硕士研究生(留学生)培养方案

（代码： 081200 授 工学硕士 学位）

一、培养目标

致力于培养德、智、体、美、劳全面发展，品行端正，遵守学术规范，具有实事求是、科学严谨的治学态度，能够从事本专业理论和应用研究的学术创新型人才。

具体要求如下：

1.具有高度的社会责任感和创新精神，综合素质高。

2.掌握坚实的计算机科学与技术基础理论和系统的专门知识，了解本学科最新研究成果和发展动态。

3.能运用现代科学研究的方法和手段，开展本学科重要问题的研究，取得高质量的研究成果。

The program is dedicated to cultivating well-rounded talents who excel in moral, intellectual, physical, aesthetic, and labor education. Graduates are expected to exhibit strong character, adhere to academic integrity, and maintain a pragmatic and rigorous scientific attitude.

The specific requirements are as follows:

1.Graduates should possess a high sense of social responsibility, and an innovative spirit, with a comprehensive and high-level quality.

2.Graduates should master the fundamental theories and systematic specialized knowledge in computer science and technology, and be familiar with the latest research achievements and trends in the field.

3.Graduates should possess the capability to conduct academic research, employing modern scientific methods and tools to address significant issues within their discipline and produce high-quality research outcomes

二、主要研究方向

1.计算机系统结构 Computer Architecture

2.信息存储系统与技术 Information Storage Systems and Technologies

3.计算机软件 Computer Software

4.大数据管理与服务 Big Data Management and Services

5.人工智能 Artificial Intelligence

6.计算机应用技术 Computer Application Technology

三、学习年限及培养方式

本学科（专业）学术学位硕士研究生的基本学习年限为 2 年，最长学习年限（含休学）不超过 4 年。

培养方式为全日制。

四、课程设置及学分分配

总学分要求≥27 学分，其中学位课程学分要求≥24 学分，研究环节学分要求=3 学分。

具体课程设置及学分分配如下：

课程 \ 类别		学分要求	课程类别备注	分组情况	课程代码	课程名称	是否核心课程	学时	学分	季节	开课单位	备注
学位课程总学分≥24 学分	校级公共必修课	7			922130001	中国概况	否	32	2	春秋学期	国际教育学院	
					922130003	国际学生新生导入课	否	16	1	春秋学期	国际教育学院	
					922130006	汉语	否	160	4	春秋学期	国际教育学院	
	硕士专业课	17			181131009	现代数字信号处理	否	48	3	秋学期	电子信息与通信学院	
					181131015	计算机网络安全	否	32	2	秋学期	电子信息与通信学院	
					181131022	大数据分析	否	32	2	秋学期	电子信息与通信学院	
					184211016	人工智能导论	否	48	3	春秋学期	人工智能与自动化学院	
					184211018	机器学习 II	否	32	2	春秋学期	人工智能与自动化学院	
					184211020	凸优化与数据科学	否	48	3	春秋学期	人工智能与自动化学院	
					184211022	机器学习 I	否	32	2	春秋学期	人工智能与自动化学院	
					210111014	Computer Graphics 计算机图形学	否	32	2	春学期	计算机科学与技术学院	
					210111022	Database System Design and Implementation 数据库系统设计与实现	否	32	2	春学期	计算机科学与技术学院	
					210111023	高级软件工程 Adavanced Software Engineering	否	32	2	春秋学期	计算机科学与技术学院	
					210111024	媒体技术基础	否	32	2	春学期	计算机科学与技术学院	
					210111025	模式识别 Pattern Recognition	否	48	3	春秋学期	计算机科学与技术学院	
					210121012	深度学习及高级课题	否	32	2	春学期	计算机科学与技术学院	
研究环节=3 学分	研究环节	3			650139001	开题报告	否		1		研究生院	
					650139002	论文中期进展报告	否		1		研究生院	
					650139004	学术活动	否		1		研究生院	

五、科研训练和实践训练要求

1.培养指导和培养计划/Training Guidance and Study Plan

硕士生培养实行导师负责制，导师是硕士生培养的第一责任人。硕士生应当在导师指导下，按照培养方案，结合培养条件、研究方向和个人特点，制定个人培养计划。个人培养计

划应于入学后一个月内完成。The training of master’s students adopts the supervisor responsibility system, and the supervisor is the first person responsible for the training of master’s students. Master’s students should, under the guidance of their supervisors, formulate individual training plans in accordance with the training program, taking into account the training conditions, research directions and personal characteristics. The individual training plan should be completed within one month after enrollment.

2.开题答辩与开题报告/Proposal Defense &Proposal Report

硕士生应在导师指导下，查阅一定量的国内外相关文献（文献阅读量不少于40篇），及时确定学位论文选题、制定学位论文工作计划，完成开题报告。学位论文开题报告内容应当包括文献综述、选题意义、研究内容、研究方案、预期达到的目标、课题可行性等。开题答辩一般在第二学期末（最迟在第三学期结束前）完成。master’s students should under the guidance of their supervisors, consult a certain amount of relevant domestic and foreign literature (with a reading volume of no less than 40 articles), timely determine the topic of their thesis, develop a thesis work plan, and complete the thesis proposal. The content of the thesis proposal should include literature review, significance of the topic, research content, research plan, expected goals, feasibility of the topic, etc. The proposal thesis defense is usually completed by the end of the second semester (at the latest before the end of the third semester).

3.中期检查与论文中期进展报告/Mid-term Assessment& Mid-term Progress Report

硕士生应于第三学期参加中期考核。全面考核学生的专业基础知识和科研能力、学生个人培养计划完成情况、论文中期进展情况等。硕士生应向中期考核答辩专家组作学位论文阶段进展报告，汇报论文工作进展情况，撰写论文中期进展报告。master’s students are supposed to complete the mid-term assessment in the third semester. master’s students should make a progress report to the mid-term assessment defense expert group and write a mid-term progress report. The assessment will focus on the candidates’ professional basic knowledge and scientific research ability, the completion of the candidates’ personal study plan, and the mid-term progress.

4.学术活动/ Academic Activities

硕士生应在申请答辩前，至少参加1次国内或国际学术会议，撰写学术会议心得体会，导师签字，经认可后方可获得相应1学分。Before applying for degree defense, master candidates should attend at least one domestic or international academic conference/academic report, and complete the academic conference summary signed by supervisor. One credit can be obtained after evaluation.

六、学位论文与创新性成果要求

1.论文选题应属于本学科相关研究方向的基础研究或应用研究课题，对学科发展或国家需求有较大的理论意义或应用价值。The topic of the master dissertation should belong to the basic research or applied research related to the direction of discipline, and have great theoretical significance , as well as be of the application value for the development of the discipline or meet national needs.

2.论文内容应体现论文作者具有本学科较宽广的基础理论和系统深入专门知识，并对所研究领域的前沿动态和发展趋势有广泛了解。论文应有作者本人创造性思维，主要研究结果应具有创新性。The content of dissertation should reflect that the author of the dissertation has a broad basic theory and systematic in-depth expertise of the discipline, and has a broad understanding of the cutting-edge trends and development trends of the research field. The dissertation should be the author's creative thinking, and the main research results of dissertation should be innovative.

3.论文应具有系统性和完整性，表达清楚，论证严谨，引文准确、全面，行文规范。Dissertation should be systematic and completed with good expression, rigorous argumentation, accurate and comprehensive citation, and standard writing.

七、毕业结业及授予学位要求

毕业、结业、授予学位要求按照《华中科技大学研究生学籍管理规定》《华中科技大学研究生学籍管理实施细则》《华中科技大学学位授予管理规定》执行。The requirements for graduation, completion, and awarding of degrees for doctoral students shall be implemented in accordance with the "Regulations on the Administration of Graduate Student Status at Huazhong University of Science and Technology," the "Implementation Rules for the Administration of Graduate Student Status at Huazhong University of Science and Technology," and the "Regulations on Degree Awarding Management of Huazhong University of Science and Technology."

八、其他要求

鼓励学生养成体育锻炼习惯，保持身心健康。其他要求参照学校相关管理规定执行。Students are encouraged to develop the habit of physical exercise to maintain physical and mental health. Other requirements shall be implemented in accordance with the relevant regulations of the university.