

武汉大学 2023 中国政府来华留学卓越奖学金 测绘科学与技术专业

一、测绘遥感信息工程国家重点实验室

武汉大学测绘遥感信息工程国家重点实验室于 1989 年成立，是我国测绘学科第一个国家级重点实验室。2004 年，在国家科技部等部委召开的国家重点实验室建设 20 周年总结表彰大会上，实验室被授予先进集体称号，获“金牛奖”；在国家科技部组织的每五年一次评估中，2000 年、2005 年、2010 年、2015 年连续四次被评为“优秀”国家重点实验室。

2012 年，由于在测绘遥感领域的卓越贡献，武汉大学获得由国际地球空间信息科学大会颁发的地球空间信息基础研究与能力提升 World Leadership 奖。实验室成果有力支撑了武汉大学遥感学科 2017 至 2021 年连续 5 年“软科世界一流学科排名”（Shanghai Rankings Global Ranking of Academic Subjects）全球第一，以及武汉大学地球科学、社会学、计算机科学等 10 个学科排名进入基本科学指标数据库（ESI）全球前 1%。

本项目教授包括：吴华意，教授、博导、国际摄影测量与遥感学会 IV/2 工作组主席，联合国全球地理空间信息管理委员会学术网络顾问委员会委员，研究领域为地理信息系统的理论与应用；Timo Balz，武汉大学全职德籍教授，地球空间信息科学国际学院副院长，主要从事雷达数据处理、模式识别和高性能计算等方面的研究；邵振峰，教授、博导，获得美国摄影测量与遥感领域 Talbert Abrams Award，美国摄影测量与遥感学会会刊 PE&RS 这一遥感领域 SCI 期刊副主编，主要研究城市遥感。

二、培养方案

此硕士项目课程包括中文学习、必修课程、选修课程、实习实践，分别由国际教育学院、实验室专职及外聘教师、兄弟院系专职教师 and 行业头部企业完成不同模块的教学或指导任务。除课程之外，学生还须通过论文开题、论文中期考核、预答辩等培养环节。攻读硕士学位期间，学生须获得总学分不少于 37 学分。

课程类型	课程名称（中文）	学时	学分	任课教师/执行单位	学期
公共必修 (5 学分)	汉语综合	48	3	国际教育学院	1
	中国概况	32	2	国际教育学院	1
专业必修	研究方法及英文写作 (全英文授课)	32	2	Steve McClure	1
专业必修 (五选二, 4 学分)	大地测量原理 (全英文授课)	32	2	郭际明	1
	摄影测量原理 (全英文授课)	32	2	Levin Evgueny	1
	卫星导航与定位技术 (全英文授课)	32	2	耿江辉	1
	地理信息系统原理 (全英文授课)	32	2	杨必胜、陈碧宇	2
	遥感原理 (全英文授课)	32	2	Tsehaie Woldai	2

专业必修 (五选二, 4 学分)	空间大地测量学 (全英文授课)	32	2	桑吉章	2
	摄影测量前沿技术 (全英文授课)	32	2	高智、胡翔云	2
	全球导航卫星系统前沿技术 (全英文授课)	32	2	楼益栋	2
	当代地理信息技术 (全英文授课)	32	2	Wolfgang Kainz	2
	遥感前沿技术 (全英文授课)	32	2	陆灯盛	2
专业必修	科研项目实践 I		6	学生导师	
专业 选修(不少于 4 学分)	信号处理与分析 (全英文授课)	32	2	罗斌	1
	空间数据库管理 (全英文授课)	32	2	杜清运	1
	地球动力学 (全英文授课)	32	2	申文斌	1
	地图制图学前沿技术 (全英文授课)	32	2	艾廷华	1
	城市遥感(全英文授课)	32	2	邵振峰	2
	机器学习(全英文授课)	32	2	Marcello Pelillo	2
	微波遥感(全英文授课)	32	2	Timo Balz	2
必修 环节	实习实践		2	中海达、上海华测	2
	毕业论文及答辩		10		3-4

三、联系方式

武汉大学测绘遥感信息工程国家重点实验室

联系人: 石老师

电子邮件: igeo@whu.edu.cn

电话: 027-68778229 or 027-68778525

Chinese Government Youth of Excellence Scheme Scholarship Programs

Wuhan University

Geospatial Information Science Master's Program

The State Key Laboratory of Surveying, Mapping, and Remote Sensing Information Engineering

Established in 1989, the State Key Laboratory of Surveying, Mapping and Remote Sensing Information Engineering of Wuhan University is the first National Key Laboratory of Surveying and Mapping in China. In 2004, at the 20th Anniversary Summary and Commendation Conference of the National Key Laboratory Construction held by the Ministry of Science and Technology and other ministries and commissions, the laboratory was awarded the title of advanced collective and won the "Golden Bull Award"; in the evaluation every five years organized by the Ministry of Science and Technology. In 2000, 2005, 2010, and 2015, it was rated as "Excellent" State Key Laboratory for four consecutive years.

In 2012, due to its outstanding contribution to Surveying, Mapping and Remote Sensing, Wuhan University won the World Leadership Award for Basic Geospatial Information Research and Capacity Improvement issued by the International Geospatial Information Science Conference. The results of the laboratory have strongly supported Wuhan University's Remote Sensing discipline for five consecutive years from 2017 to 2021, ranking first in the world in the "Shanghai Rankings Global Ranking of Academic Subjects," and Wuhan University's Earth Sciences, Sociology, Computer Science, etc. 10 disciplines are ranked in the top 1% of the world in the Essential Science Indicators Database (ESI).

Professors and experts in this program includes:

Dr. Huayi WU is a professor at LIESMARS Wuhan University, and serves as Deputy Director of LIESMARS. His main research interests include distributed and high-performance geographic information, spatial temporal data association analysis and knowledge mining. He is a member of the 2nd Advisory Board of the UN-GGIM Academic Network and Chairman of ISPRS IV/2 Working Group.

Dr. Timo Balz is a professor at LIESMARS, Wuhan University and serves as Vice-Director of the International Academy of GeoInformation, Wuhan University. His research interest focuses on surface motion estimation with SAR. He serves as Associate Editor for Remote Sensing and is a member of the editorial board of Geo-Spatial Information Science. He is Chair of ISPRS Commission I Working Group on SAR and Microwave Sensing.

Dr. Zhenfeng Shao is a professor in LIESMARS at Wuhan University. His research interest focuses on urban remote sensing applications. He has published more than 100 academic papers, and a book on "Urban Remote Sensing", which has been included in curriculum of over 30 universities. He was awarded Talbert Abrams Award by the American Society for Photogrammetry and Remote Sensing. He is the associate editor of PE&RS.

Curriculum Arrangement and Credit Requirements

Geospatial Information Science

The courses of this master's program include Chinese learning, compulsory courses, elective courses, and internship practice. The teaching or guidance tasks of different modules are completed by full-time and external teachers from the School of International Education, laboratories, full-time teachers from sister departments, and leading companies in the industry. In addition to the courses, students must pass the training links such as thesis proposal, mid-term thesis assessment, and pre-defense. During the master's degree, students must obtain a total of not less than 37 credits.

Type	Course	Hours	Credits	Faculty/Teacher	Semester
Public compulsory course (5 credits)	Comprehensive Chinese	48	3	School of International Education	1
	Outline of China	32	2	School of International Education	1
compulsory course	Research Methodology and Scientific Writing	32	2	Steve McClure	1
compulsory course (choose 2 items, 4 credits)	Principles of Geodesy	32	2	Guo Biaoming	1
	Principles of Geodesy	32	2	Levin Evgueny	1
	Principles of Photogrammetry	32	2	Geng Jianghui	1
	Satellite Navigation and Position Technology	32	2	Yang Bisheng, Chen Biyu	2
	Principles of GIS	32	2	Tsehaie Woldai	2
compulsory course (choose 2 items, 4 credits)	Principles of Remote Sensing	32	2	Sang Jizhang	2
	Space Geodesy	32	2	Gao Zhi, Hu Xiangyun	2
	Advanced Photogrammetry	32	2	Lou Yidong	2
	Advanced Topics of GNSS	32	2	Wolfgang Kainz	2
	Advanced Geographic Information Technology	32	2	Lu Dengsheng	2
compulsory course	Advanced Topics on Remote Sensing		6		
compulsory course (above 4 credits)	Practice in Research Project I	32	2	Luo Bin	1
	Signal Processing and Analysis	32	2	Du Qingyun	1
	Spatial Database Management	32	2	Shen Wenbin	1
	Geodynamics	32	2	Ai Yanhua	1
	Advanced Topics in Cartography	32	2	Shao Zhengfeng	2
	Urban Remote Sensing	32	2	Marcello Pelillo	2
	Machine Learning	32	2	Timo Balz	2

compulsory item	Microwave Remote Sensing		2	Relative Center	2
	Internship		10		3-4

Contact

The State Key Laboratory of Surveying, Mapping, and Remote Sensing Information Engineering,
WHU

Contact Person: Miss Shi

E-mail: igeo@whu.edu.cn

Tel: 027-68778229 or 027-68778525