Major List of 2027 Doctoral Program for International Students

2027 年国际学生博士研究生招生专业列表

Nature Science and Engineering 理工类			
School 学院	**Major 专业**	**研究方向**	**Research Field**
School of Materials Science and Engineering 材料科学与工程学院 http://www.mse.buaa.edu.cn/	Materials Science and Engineering ●▲ 材料科学与工程	(1) 高温结构材料与涂层技术 (2) 增材制造材料技术 (3) 结构功能一体化材料 (4) 信息功能与智能材料 (5) 新能源材料 (6) 材料智能设计	(1) High-temperature structural materials and coating technology (2) Additive manufacturing materials technology (3) Structure-function integration materials (4) Information functional and intelligent materials (5) New energy materials (6) Material intelligent design
School of Electronic Information Engineering 电子信息工程学院 http://www.ee.buaa.edu.cn/	Information and Communications Engineering ▲ 信息与通信工程	(1) 空天导航与时空服务 (2) 空天信息感知、处理与传输 (3) 空地一体新航行系统 (4) 天临空地海一体化信息网络 (5) 深空探测通信	(1) Space navigation and space and time services (2) Space information perception, processing and transmission (3) New air-ground integrated navigation system (4) Integrated information network of sky, land and sea (5) Deep-space detection and communication
	Electronic Science and Technology ▲ 电子科学与技术	(1) 隐身测试与微波感知 (2) 电磁安全 (3) 抗干扰全频谱快速感知 (4) 空天安全智能片上系统 (5) 超快光电子学与太赫兹	(1) Stealth testing and microwave sensing (2) Electromagnetic safety (3) Anti-interference full-spectrum fast perception (4) Space security intelligent chip system (5) Ultrafast optoelectronics and terahertz
	Transportation Engineering▲ 交通运输工程	航空交通信息工程及控制	Air traffic information engineering and control
School of Automation Science and Electrical Engineering 自动化科学与电气工程学院 https://dept3.buaa.edu.cn/	Mechanical Engineering ▲ 机械工程	机载系统与机电控制	Avionics systems and mechatronic control
	Control Science and Engineering ▲ 控制科学与工程	(1) 控制理论与智能系统 (2) 智能检测与健康管理 (3) 特种电机系统与电气自动化 (4) 导航、制导与控制 (5) 工业互联网与知识驱动自动化	(1) Control theory and intelligent systems (2) Intelligent detection and health management (3) Special electric machine systems and electrical automation (4) Guidance, navigation and control (5) Industrial internet and knowledge-driven automation

Nature Science and Engineering 理工类			
School 学院	**Major 专业**	**研究方向**	**Research Field**
School of Energy and Power Engineering 能源与动力工程学院 http://sepe.buaa.edu.cn/	Power Engineering and Engineering Thermophysics ▲ 动力工程及工程热物理	(1) 发动机结构安全与整机动力学 (2) 多场耦合非定常流动 (3) 推进系统智慧热管理 (4) 推进系统燃烧学 (5) 航空电推进与智能控制 (6) 航空绿色能源	(1) Structural Safety and Integrated Dynamics of Engines (2) Multi-field Coupling Unsteady Flow (3) Intelligent Thermal Management of Propulsion Systems (4) Combustion Science of Propulsion System (5) Aviation Electric Propulsion and Intelligent Control (6) Green Energy for Aviation
School of Aeronautic Science and Engineering 航空科学与工程学院 http://www.ase.buaa.edu.cn/	Aerospace Science and Technology ●▲ 航空宇航科学与技术	(1) 飞行器总体设计与系统工程 (2) 飞行器结构-控制一体化设计与验证 (3) 人机环境工程与能量管理 (4) 宽域飞行智能控制与信息处理	(1) Flight vehicle overall design and system engineering (2) Flight vehicle structure-control integrated design and verification (3) Man-machine- environment engineering and energy management (4) Wide range flight vehicle intelligent control and information processing
	Mechanics ●▲ 力学	(1) 飞行器强度与结构完整性 (2) 跨速域飞行物理与飞行试验 (3) 神经动力学与多体协同控制	(1) Aircraft strength and structural integrity (2) Flight physics across speed regimes (3) Neural dynamics and multi-body coordinated control
School of Computer Science and Engineering 计算机学院 https://scse.buaa.edu.cn/	Computer Science and Technology ▲ 计算机科学与技术	(1) 先进计算系统与环境 (2) 新型系统结构与芯片 (3) 可视计算与通用智能 (4) 未来网络与安全 (5) 虚拟现实与增强现实	(1) Advanced computing systems & environments (2) Advanced system architecture and chip (3) Visual computing and artificial intelligence (4) Future internet & security (5) Virtual reality and augmented reality
	Software Engineering ▲ 软件工程	(1) 大数据科学与计算系统 (2) 复杂关键系统软件与理论 (3) 群体智能与群体软件工程	(1) Big data science and computing systems (2) Complex critical system software and theory (3) Crowd intelligence & crowd software engineering
School of Mechanical Engineering and Automation 机械工程及自动化学院 http://www.me.buaa.edu.cn/	Mechanical Engineering ▲ 机械工程	(1) 空间机构学与仿生机械 (2) 智能加工与数控系统 (3) 微纳仿生制造与微机电系统 (4) 先进制造工业软件与智能制造 (5) 智能机器人系统与人机交互	(1) Spatial mechanism and bionic machinery (2) Intelligent machining and CNC systems (3) Micro/Nano bionic manufacturing and MEMS (micro-electro-mechanical systems) (4) Advanced manufacturing industrial software and intelligent manufacturing (5) Intelligent robotic systems and human-machine interaction

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School 学院	**Major 专业**	**研究方向**	**Research Field**
	Materials Science and Engineering ▲ 材料科学与工程	增材制造材料技术	Additive manufacturing materials technology
	Aerospace Science and Technology ▲ 航空宇航科学与技术	航空宇航高性能制造	High-performance manufacturing for aeronautics and astronautics
	Design ● 设计学	产品创新设计及人机工程	Product innovation design and ergonomics
School of Mathematical Sciences 数学科学学院 http://math.buaa.edu.cn/	Mathematics ▲ 数学	(1) 代数与几何 (2) 方程、分析与动力系统 (3) .科学计算 (4) 运筹与优化 (5) 信息安全与计算机数学 (6) 信息数学与智能基础	(1) Algebra and geometry (2) Equations, analysis and dynamical systems (3) Scientific computing (4) Operation research and optimization (5) Information security and computer mathematics (6) Information mathematics and intelligent basic theory
School of Biological Science and Medical Engineering 生物与医学工程学院 https://bme.buaa.edu.cn/	Biomedical Engineering ●▲ 生物医学工程	(1) 生物力学与力学生物学 (2) 生物材料与人工器官 (3) 新一代成像与诊断技术 (4) 新一代治疗与智能医学装备 (5) 空天医学工程与特殊环境生命保障	(1) Biomechanics and mechanobiology (2) Biomaterials and artificial organs (3) New generation imaging and diagnostic technology (4) New generation treatment and intelligent medical equipment (5) Aerospace medical engineering and special environmental life support
School of Medical Sciences and Engineering 医学科学与工程学院 https://ygy.buaa.edu.cn/	Biomedical Engineering ●▲ 生物医学工程	(1) 生物力学与力学生物学 (2) 生物材料与人工器官 (3) 新一代成像与诊断技术 (4) 新一代治疗与智能医学装备 (5) 空天医学工程与特殊环境生命保障	(1) Biomechanics and mechanobiology (2) Biomaterials and artificial organs (3) New generation imaging and diagnostic technology (4) New generation treatment and intelligent medical equipment (5) Aerospace medical engineering and special environmental life support
School of Transportation Science and Engineering 交通科学与工程学院 http://transportation.buaa.edu.cn/	Transportation Engineering●▲ 交通运输工程	(1) 交通基础设施智能化 (2) 智能网联载运工具及运用 (3) 交通数据智能与系统控制 (4) 智能交通技术 (5) 立体交通安全与适航	(1) Intelligent Transportation Infrastructure (2) Intelligent Connected Vehicles and Applications (3) Traffic Data Intelligence and System Control (4) Intelligent Transportation Technologies (5) 3D Traffic Safety and Airworthiness
	Transportation●▲ 交通运输		

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School 学院	**Major 专业**	**研究方向**	**Research Field**
School of Reliability and System Engineering 可靠性与系统工程学院 https://rse.buaa.edu.cn/	Safety Science and Engineering▲ 安全科学与工程	(1) 安全科学与风险 (2) 可靠性系统工程 (3) 智能感知与安全控制 (4) 体系与智能系统安全	(1) Safety science and risk (2) Reliability systems engineering (3) Intelligent sensing and safety control (4) System-of-systems and intelligent system safety
School of Astronautics 宇航学院 http://www.sa.buaa.edu.cn/	Aerospace Science and Technology●▲ 航空宇航科学与技术	(1) 飞行器设计 (2) 航空宇航推进理论与工程	(1) Flight vehicle design (2) Aerospace propulsion theory and engineering
	Control Science and Engineering●▲ 控制科学与工程	(1) 模式识别与智能系统 (2) 导航、制导与控制	(1) Pattern recognition and intelligent systems (2) Navigation, guidance and control
	Aerospace Engineering●▲ 航天工程		
	Control Engineering●▲ 控制工程	(1) 模式识别与人工智能 (2) 导航、制导与控制技术	(1) Pattern recognition and artificial intelligence (2) Navigation, guidance and control technology
School of Instrumentation and Optoelectronic Engineering 仪器科学与光电工程学院 http://yqgdxy.buaa.edu.cn/	Instrumentation Science and Technology●▲ 仪器科学与技术	(1) 量子精密测量与传感技术及仪器 (2) 新型医疗装备与成像 (3) 惯性技术与组合导航 (4) 光电动态精密测量技术及仪器 (5) 先进探测与成像技术及仪器 (6) 先进传感技术及仪器	(1) Quantum precision measurement and sensing technology and instruments (2) New medical equipment and imaging (3) Inertial technology and integrated navigation (4) Optoelectronic dynamic precision measurement technology and instruments (5) Advanced detection and imaging technology and instruments (6) Advanced sensing technology and instruments
	Optical Engineering●▲ 光学工程	(1) 光学惯性定位导航 (2) 探测成像与显示 (3) 光电传感测量与智能系统 (4) 光量子器件与微纳系统	(1) Optical inertial positioning and navigation (2) Detection imaging and display (3) Optoelectronic sensing measurement and intelligent systems (4) Optical quantum devices and Micro-Nano systems
School of Physics 物理学院 http://physics.buaa.edu.cn/	Physics●▲ 物理学	(1) 极端条件物理 (2) 半导体物理 (3) 奇特强子态与粒子物理 (4) 稀有同位素物理 (5) 表面与低维物理 (6) 量子磁性与拓扑物理	(1) Extreme condition physics (2) Semiconductor physics (3) Peculiar hadron states and particle physics (4) Radioactive nuclear beam physics (5) Surface and low dimensional physics (6) Quantum magnetism and topological physics
School of Software 软件学院 https://soft.buaa.edu.cn/	Software Engineering●▲ 软件工程	(1) 智能软件工程 (2) 安全关键软件与工程 (3) 先进工业软件方法与环境	(1) Intelligence software engineering (2) Safety-critical software and engineering (3) Advanced industrial software method and environment

Nature Science and Engineering 理工类			
School 学院	**Major 专业**	**研究方向**	**Research Field**
School of Chemistry 化学学院 http://sce.buaa.edu.cn/	Chemistry▲ 化学	(1) 仿生界面化学 (2) 轻质高强材料化学 (3) 能源化学 (4) 精准智能合成化学	(1) Bioinspired interfacial chemistry (2) Chemistry of lightweight and high-strength materials (3) Energy chemistry (4) Precise Intelligent Synthetic Chemistry
School of Space and Earth Sciences 空间与地球科学学院 http://sse.buaa.edu.cn/	Geophysics● 地球物理学	(1) 空间物理与空间探测技术 (2) 月球与行星科学 (3) 空间天文与基础物理 (4) 导航与时空科学	(1) Space physics and space exploration technology (2) Lunar and planetary science (3) Space astronomy and fundamental physics (4) Navigation and spatiotemporal information science
School of Cyberspace Security 网络空间安全学院 http://cst.buaa.edu.cn/	Cyberspace Security▲ 网络空间安全	(1) 密码前沿理论及应用 (2) 空天地信息网络安全 (3) 网络与计算系统安全 (4) 人工智能与工控安全	(1) Frontier cryptography theory and applications (4) Space-air-ground information network security (3) Network and computing system security (4) Artificial intelligence and industrial control security
School of Integrated Circuit Science and Engineering 集成电路科学与工程学院 http://www.sme.buaa.edu.cn/	Integrated Circuit Science and Engineering●▲ 集成电路科学与工程	(1) 新一代自旋材料与器件 (2) 空天芯片与设计自动化 (3) 后摩尔关键工艺与装备 (4) 射频芯片与太赫兹系统	(1) Next generation spintronic materials and devices (2) Aerospace chip design and automation (3) Post-Moore key processes and equipment (4) The RF chip and terahertz system
School of Artificial Intelligence 人工智能学院 https://iai.buaa.edu.cn/	Mathematics● 数学	信息数学与智能基础	Information mathematics and intelligence basic theory
	Artificial Intelligence● 人工智能	(1) 智能感知 (2) 认知智能 (3) 博弈智能与群体协同 (4) 泛在可信智能	(1) Intelligent perception (2) Cognitive intelligence (3) Game intelligence and swarm cooperation (4) Ubiquitous trusted intelligence
	Electronic Information● 电子信息		
Research Institute of Aero-Engine 航空发动机研究院 https://riae.buaa.edu.cn/	Aerospace Power Science and Technology ● 空天动力科学与技术		

Economics and Management 经管类			
School 学院	**Major 专业**	**研究方向**	**Research Field**
School of Economics and Management 经济管理学院 https://sem.buaa.edu.cn/	Management Science and Engineering ▲ 管理科学与工程	(1) 复杂系统的建模、优化与可持续运营管理 (2) 人机协同智慧管理与决策 (3) 综合交通与智慧物流管理 (4) 韧性城市智慧运营与应急管理 (5) 先进装备制造业数智化及技术创新	(1) Complex system modeling, optimization and sustainable operational management (2) Human-machine collaboration for smart management and decision-making (3) Integrated transportation and smart logistics management (4) Smart operation for resilient cities and emergency management (5) Digital transformation and technological innovation in industry
	Applied Economics ▲ 应用经济学	(1) 低碳经济 (2) 金融工程与金融安全 (3) 复杂数据建模和经济统计	(1) Low-carbon economics (2) Financial engineering and financial security (3) Complex data modeling and economic statistics
	Business Administration▲ 工商管理学	(1) 智能会计与数字化财务管理 (2) “国之重器”创新战略与数智组织管理 (3) 数字营销与可持续消费行为	(1) Intelligent accounting and digitalization of financial management (2) Megaprojects innovation and digital organization management (3) Digital marketing and sustainable consumer behavior

Humanities Literature and Law 文法类	
School 学院	**Major 专业**
School of Foreign Languages 外国语学院 http://fld.buaa.edu.cn/	English Language and Literature ●▲ 英语语言文学
	German Language and Literature 德语语言文学●□
	Russian Language and Literature ●△ 俄语语言文学
	Linguistics and Applied Linguistics in Foreign Languages ●▲ 外国语言学及应用语言学
School of Law 法学院 http://fxy.buaa.edu.cn/	Legal Theory ● 法学理论
	Legal History ● 法律史
	Constitutional Law and Administrative Law ● 宪法学与行政法学
	Criminal Law ● 刑法学
	Civil and Commercial Law ●

Humanities Literature and Law 文法类	
School 学院	**Major 专业**
	民商法学
	Procedural Law ● 诉讼法学
	Economic Law ● 经济法学
	Environment and Resources Protection Law ● 环境与资源保护法学

Art 艺术类			
School 学院	**Major 专业**	**研究方向**	**Research Field**
School of New Media Art and Design 新媒体艺术与设计学院 https://art.buaa.edu.cn/	Design● 设计学	(1) 艺术创新设计及理论 (2) 沉浸式体验与交互设计 (3) 信息艺术设计 (4) 产品创新设计及人机工程	(1) Artistic creative design and theory (4) Immersive experience and interaction design (3) Information art and design (4) Innovative product design and ergonomics

Hangzhou International Campus 杭州国际校园

Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (Affiliated to the United Nations) **联合国附属空间科技教育亚太区域中心（中国）** **https://rcssteap.buaa.edu.cn/**		
Major 专业	**研究方向**	**Research Field**
Space Technology Applications▲ 空间技术应用	(1) 遥感与地理信息系统 (2) 全球卫星导航系统 (3) 小卫星技术 (4) 空间科学与环境	(1) Remote Sensing & Geographic Information System (RS&GIS) (2) Global Navigation Satellite Systems (GNSS) (3) Micro-Satellite Technology (4) Space science and environment

Beihang Valencia Polytechnic Institute **中西智能学院** **https://bvpi.buaa.edu.cn**
Major 专业
Computer Technology▲ 计算机技术
Robotics Engineering▲ 机器人工程
Intelligent Manufacturing Technology▲ 智能制造技术
Communication Engineering (including Broadband Networks and Mobile Communications)▲ 通信工程（含宽带网络、移动通信等）

杭州国际创新研究院 Hangzhou International Innovation Institute **https://h3i.buaa.edu.cn/**	
Platform **平台**	**Major** **专业**
大飞机科创中心/大飞机研究院(杭州) COMAC-BUAA Aircraft Innovation Center (Hangzhou)	电子信息▲ Electronic Information 机械▲ Mechanics 材料与化工▲ Materials and Chemical Engineering 能源动力▲ Energy and Power 交通运输▲ Transportation
复杂科学国际研究中心 International Research Center of Complexity Sciences	
国际仿真技术科创中心 International Innovation Center for Simulation Technology	
国际太赫兹科创中心 International Terahertz Research Center	
空间环境与行星科学国际研究中心 International Research Center for Geological and Planetary Sciences	
绿色光子国际研究中心 Sustainable Photonics Research Center	
人工智能科创中心 Artificial Intelligence Innovation Center	
数据科学与智能计算科教平台 Data Science and Intelligent Computing Laboratory	
碳中和国际研究中心 International Research Center for Carbon Neutralization	
天目山实验室 Tianmushan Laboratory	
物理化学科教平台 Physics and Chemistry Laboratory	
医工交叉科创中心/高端医疗装备与器械国家医学攻关产教融合平台 Medical Engineering & Engineering Medicine Innovation Center	
智慧民航科创中心 Smart Aviation Center	
智能测试与健康管理产教协同创新中心 Smart Testing and System Health Management Center	
智能系统与人形机器人国际研究中心 International Research Center for Intelligent Systems and Robotics	
自旋芯片与技术全国重点实验室/微纳科学与分析测试协同创新中心 National Key Laboratory of Spintronics/Micro-nano Science and Analysis Innovation Center	

Note: ● 中文授课 Taught in Chinese ▲英文授课 Taught in English ◆法文授课 Taught in French
□ 德语授课 Taught in German △ 俄语授课 Taught in Russian