

## Major Catalog in School of Earth and Space Sciences

| Major                                     | Research Field   | Mode      | Teaching Language |
|---|--|-----------|-------------------|
| 地图学与地理信息系统(Cartology and GIS)<br>(070503) | 01. 地理信息系统方法(Geographic Information System Methods)  | Full-time | English           |
|   | 02. 数字地球与智慧城市(Digital earth and smart city)  | Full-time | English           |
|   | 03. 空间信息智能处理与理解(Spatial information intelligent processing and understanding)              | Full-time | English           |
|   | 04. 空间分析方法和GIS建模(Spatial analysis methods and GIS modeling)                                | Full-time | English           |
|   | 05. 矿山空间信息应用工程(Spatial information applications and engineering in mines)                  | Full-time | English           |
|   | 06. 空间信息科学与信息工程(Spatial information science and engineering)                               | Full-time | English           |
|   | 07. 时空大数据计算与挖掘(Computation and mining for spatio-temporal Big Data)                        | Full-time | English           |
|   | 08. 水文地理空间大数据分析(Hydrologic geospatial big data analysis)                                   | Full-time | English           |
|   | 09. 三维地理信息与空间智能(Three Dimensional GIS & GeoAI)   | Full-time | English           |
| 固体地球物理学(Solid Geophysics)<br>(070801)     | 01. 理论地震学(Theoretical Seismology)  | Full-time | English           |
|   | 02. 地球动力学(Geodynamics)   | Full-time | English           |
|   | 03. 勘探地震学(Exploration Seismology)  | Full-time | English           |
|   | 04. 地球电磁学(Geoelectromagnetics)   | Full-time | English           |
|   | 05. 地壳形变与卫星大地测量学(Crustal Deformation and Satellite Geodesy)                                | Full-time | English           |
|   | 06. 地震力学与统计地震学(Earthquake Mechanics and Statistical Seismology)                            | Full-time | English           |
|   | 07. 计算地震学(Computational Seismology)  | Full-time | English           |
|   | 08. 震源运动学(Earthquake Kinematics)   | Full-time | English           |
|   | 09. 震源动力学(Earthquake Dynamics)   | Full-time | English           |
|   | 10. 震源水文学(Earthquake Hydrology)  | Full-time | English           |
|   | 11. 深部地球物理学(Deep-Earth Geophysics)   | Full-time | English           |
|   | 12. 实时地震学(Real-time Seismology)  | Full-time | English           |
|   | 13. 行星地震学(Planetary Seismology)  | Full-time | English           |
|   | 14. 地震大数据和深度学习(Seismic Big Data and Deep Learning)   | Full-time | English           |
|   | 15. 结构地震学(Structural Seismology)   | Full-time | English           |
|   | 16. 地震物理学(Earthquake Physics)  | Full-time | English           |
| 空间物理学(Space Physics)<br>(070802)          | 01. 磁层物理学、空间等离子体物理学、空间环境学(Magnetospheric physics, space plasma physics, space environment) | Full-time | English           |
|   | 02. 电离层物理学和电波传播(Ionospheric physics and radio wave propagations)                           | Full-time | English           |
|   | 03. 太阳与日球层粒子物理(Solar and heliospheric energetic particle physics)                          | Full-time | English           |
|   | 04. 太阳大气与太阳风物理(Physics of the solar atmosphere and solar wind)                             | Full-time | English           |
|   | 05. 行星与小天体物理(Physics of Planets and Solar System Small Bodies)                             | Full-time | English           |

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| 空间物理学(Space Physics)<br>(070802)                               | 06. 空间物理和空间环境探测技术(Exploration Technology for Space physics and Space Environment Engineering)     | Full-time | English |
| 矿物学、岩石学、矿床学(Mineralogy Petrology Economic Geology)<br>(070901) | 01. 变质地质学(Metamorphic Geology)  | Full-time | English |
|  | 02. 变质岩石学(Metamorphic Petrology)  | Full-time | English |
|  | 03. 岩石大地构造(Petrological Structure)  | Full-time | English |
|  | 04. 岩浆作用与成矿(Magmatism and Mineralization)   | Full-time | English |
|  | 05. 岩浆岩地球化学(Igneous Rock Geochemistry)  | Full-time | English |
|  | 06. 矿床学(Economic Geology)   | Full-time | English |
|  | 07. 流体与成矿作用(Fluid Mineralization)   | Full-time | English |
|  | 08. 沉积岩石学(Sedimentary petrology)  | Full-time | English |
| 地球化学(Geochemistry)<br>(070902)                                 | 01. 同位素地球化学(Isotope geochemistry)   | Full-time | English |
|  | 02. 矿床地球化学(geochemistry of mineral deposits)  | Full-time | English |
|  | 03. 化学地球动力学(chemical geodynamics)   | Full-time | English |
|  | 04. 实验地球化学(experimental geochemistry)   | Full-time | English |
|  | 05. 岩石地球化学(petrogeochemistry)   | Full-time | English |
| 古生物学与地层学(Paleontology and Stratigraphy)<br>(070903)            | 01. 古地理与古环境(Paleogeography and Paleoenvironment)  | Full-time | English |
|  | 02. 微体古生物学(Micropaleontology)   | Full-time | English |
|  | 03. 生物地层学(Biostratigraphy)  | Full-time | English |
|  | 04. 古植物学(Paleobotany)   | Full-time | English |
|  | 05. 古脊椎动物学(Vertebrate Paleontology)   | Full-time | English |
|  | 06. 古无脊椎动物学(Invertebrate Paleontology)  | Full-time | English |
|  | 07. 沉积地球化学(Sedimentary geochemistry)  | Full-time | English |
|  | 08. 天文年代学(Astrochronology)  | Full-time | English |
|  | 09. 全球变化(Global change)   | Full-time | English |
| 构造地质学(Structural Geology)<br>(070904)                          | 01. 构造地质学(Structural Geology)   | Full-time | English |
|  | 02. 地球与行星动力学(Dynamics of Earth and Planet)  | Full-time | English |
|  | 03. 区域大地构造学(Regional Tectonics)   | Full-time | English |
|  | 04. 盆地构造与油气构造(Basin Tectonics and Hydrocarbon Structural Geology)                                 | Full-time | English |
|  | 05. 活动构造与地震(Active Structures and Earthquake)   | Full-time | English |
|  | 06. 构造磁学(Magnetotectonics)  | Full-time | English |
|  | 07. 火山与地球系统(Volcanology and Earth System)   | Full-time | English |
|  | 08. 构造地貌与层圈作用(Tectonic Geomorphology and Sphere Interaction)                                      | Full-time | English |
|  | 09. 构造物理与模拟(Tectonophysics and Simulation)  | Full-time | English |
|  | 10. 应用地质学(工程、环境、能源等) (Applied Geology)  | Full-time | English |
|  | 11. 新能源与碳中和地质科学与工程(Geological Science and Engineering for Renewable Energy and Carbon Neutrality) | Full-time | English |
| 地质学(材料及环境矿物学)(Geomaterials and Environmental                   | 01. 环境矿物学及环境矿物材料学(environmental mineralogy and environmental mineral materials)                   | Full-time | English |

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| 地质学 (材料及环境矿物学) (Geomaterials and Environmental Mineralogy) (070920) | 02. 矿物与微生物(minerals and microorganisms)  | Full-time | English |
|   | 03. 材料矿物学(materials mineralogy)  | Full-time | English |
|   | 04. 晶体结构和晶体化学(crystal structure and crystal chemistry)                             | Full-time | English |
|   | 05. 新型碳石墨材料(novel materials of carbon and graphite)                                | Full-time | English |
|   | 06. 矿物资源综合利用(comprehensive utilization of mineral resources)                       | Full-time | English |
| 地质学 (石油地质学) (Petroleum Geology) (070921)                            | 01. 含油气盆地构造(Tectonics in Petroliferous basin)                                      | Full-time | English |
|   | 02. 沉积盆地分析与古地理学(Sedimentary basin analysis and Paleogeography)                     | Full-time | English |
|   | 03. 油气地球物理与地震沉积学(Oil and Gas geophysics and Seismic Sedimentology)                 | Full-time | English |
|   | 04. 储层地质学(Reservoir Geology)   | Full-time | English |
|   | 05. 非常规油气勘探开发(Exploration and Development of Unconventional Oil and Gas)           | Full-time | English |
|   | 06. 油气资源评价与勘探开发(Oil and Gas resource assessment and Exploration & Development)     | Full-time | English |
|   | 07. 沉积地球化学(Sedimentary Geochemistry)   | Full-time | English |
|   | 08. 天然气水合物勘探开发(Exploration and Development of Natural Gas Hydrate)                 | Full-time | English |
|   | 09. 油气地球化学(Petroleum geochemistry)   | Full-time | English |
|   | 10. 油气藏储层岩石力学(Rock mechanics of petroleum reservoir)                               | Full-time | English |
|   | 11. CO2地质利用与封存(Geological CO2 Utilization and Storage)                             | Full-time | English |
|   | 12. 油气资源利用与碳中和(Oil/Gas Utilization and Carbon Neutrality)                          | Full-time | English |
|   | 13. 孔隙介质中物质的物理和化学性质(Chemical and physical properties of materials in porous media) | Full-time | English |
|   | 14. 天然气地质(Natural Gas Geology)   | Full-time | English |
| 摄影测量与遥感(Photogrammetry and Remote Sensing) (081602)                 | 01. 全球变化水循环遥感(Remote Sensing for global change of water circulation)               | Full-time | English |
|   | 02. 遥感大数据(Remote sensing big data)   | Full-time | English |
|   | 03. 定量遥感成像学与定标方法(Imaging of quantitative remote sensing and calibration methods)   | Full-time | English |
|   | 04. 遥感信息工程(Remote sensing information engineering)                                 | Full-time | English |
|   | 05. 卫星导航技术与应用(Satellite navigation technology and application)                     | Full-time | English |
|   | 06. 微波遥感与应用(Microwave remote sensing and application)                              | Full-time | English |
|   | 07. 高光谱遥感数据获取与应用(Acquisition and application of hyperspectral remote sensing data) | Full-time | English |
|   | 08. 定量遥感及智能处理(Quantitative remote sensing and intelligent processing)              | Full-time | English |
|   | 09. 遥感信息处理与应用(Remote sensing information processing and application)               | Full-time | English |
|   | 10. 高分辨率遥感(High resolution remote sensing)   | Full-time | English |
|   | 11. 生态与环境遥感(Remote sensing for ecology and environment)                            | Full-time | English |
|   | 12. 智能交通与物联网(Intelligent transportation and internet of things)                    | Full-time | English |

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| 摄影测量与遥感(Photogrammetry and Remote Sensing)<br>(081602) | 13. 行星遥感(Planetary remote sensing)                   | Full-time | English |
|  | 14. 激光雷达遥感(LiDAR remote sensing)                     | Full-time | English |
|  | 15. 无人机遥感(UAV remote sensing)                        | Full-time | English |
|  | 16. 大气环境遥感(Remote Sensing of Atmosphere Environment) | Full-time | English |