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| **HIT Doctoral Degree Programs** |
| **School** | **Major** | **Research Field** |
| School of Instrumentation Science and Engineering | 0804Instrument Science and Technology | 1. Ultra Precision Measurement Technology and Instruments 2. Laser Measurement and Detection Technology3. Modern Microscopic Technology and Instruments4. Visual and Photoelectric Measurement Technology5. Precision Electromagnetic Measurement Technology and Instruments6. Advanced Acousto-optic Materials and Instruments7. Technology of Radiation Temperature Measurement and Thermo-physical Properties Measurement8. Navigation Instruments and System Technology9. Bioinformatics Detection and Medical Instruments10.Ultra-Precision Control Technology and Instruments |
| School of Electrical Engineering and Automation | 0808Electrical Engineering | 1. Motor and Electrical Appliances2. Power Electronics and Power Transmission3. Power System and Automation4. Electrician Theory and New Technique |
| School of Energy Science and Engineering  | 0807Power Engineering and Engineering Thermo-physics | 1. Engineering Thermo-physics2. Thermal Engineering3. Power Machinery and Engineering4. Fluid Machinery and Engineering5. Refrigeration and Cryogenic Engineering |
| Faculty of Computing | 0812Computer Science and Technology | 1. High Reliable High Performance Computer Architecture2. Mobile Computing and Embedded Computing3. Computer Network and Information Security4. Computing Theory5. Huge Amounts of Data Calculation6. Service Computing7. Biological Computing and Bioinformatics8. Intelligent Human-Computer Interaction and Digital Media Technology9. Artificial Intelligence and Pattern Recognition10. Multiple Languages and Chinese Information Processing11. Social Computing |
| 0835Software Engineering | 1. Software Service Engineering2. Software Engineering and Software Architecture3. Software Trustworthiness and Reliability4. Intelligent Software Theory and Machine Learning5. Business Intelligence and Data Mining6. Field of Software Engineering |
| School of Astronautics | 0811Control Science and Engineering | 1. Navigation, Guidance and Control2. Control Theory and Control Engineering3. Detection Technology and Automatic Equipment4. Robots and Intelligent Systems5. Systems Engineering and Simulation |
| 0801Mechanics | 1. Fatigue and Fracture Mechanics2. Structural Optimization Design3. Micromechanics4. Solid Dynamics5. Thermo/Mechanical/ Electrical/Chemical Multi-field Coupling Mechanics6. Material and Structural Mechanics in Extreme Environment7. Advanced Composites and its Structural Lightweight Theory8. Composite Materials and its Structural Mechanics9. Reliability Analysis and Design of Composite Structures10. Intelligent Materials and Structural Mechanics11. Aerospace Structural Mechanics12. Material/ Structure/ Function Integrated Design13. Structural Dynamics and Vibration Control14. Nonlinear Dynamics15. Hydrodynamics16. Dynamics Inverse Problem and Fault Diagnosis |
| 0825Aeronautical and Astronautical Science and Technology | 1. Aircraft System Design2. Flight Dynamics and Control3. Aircraft Intelligent Autonomous Navigation, Guidance and Control4. Deep Space Flight and Landing Return5. Integrated Design and Simulation of Aircraft6. Dynamics and Control of Complex Spacecraft7. Space Environmental Effects of Spacecraft and its Countermeasures8. Structure and Protection of Aerospace Vehicles |
| 0803Optical Engineering | 1. Space Optical Information Acquisition Technology and Processing2. Optical Guidance and Simulation3. Modern Photoelectric Testing Technology4. Target Detection and Recognition5. Optical Image Processing and Evaluation6. Space Laser Communication7. Laser Radar and Laser Remote Sensing8. High Power Laser and Tunable Laser9. Nonlinear Optical Technology10. Photoelectric Device and Technology |
| 0809Electronics Science and Technology | 1. Laser Spatial Information and Confrontation2. Tunable Laser Short Wavelength Laser3. Nonlinear Optics Quantum Optics Technology and Application4. Photoelectric Device and Technology5. Laser Spectrum and The Mechanism of Laser Medium6. Micro-Nano Devices and Systems7. Integrated Circuits Design and Application8. Integrated Sensor Technology9. Advanced SoC and Reliability Design of Integrated Circuits10. Microwave Transmission Theory and Antenna System |
| School of Mechatronics Engineering | 0802Mechanical Engineering | 1. Precision and Ultra-Precision Processing Technology2. Micro-Nano Manufacturing Techniques3. Special Processing and Special Material Processing Technology4. Modern Design Theory and Method5. Digital Design and Manufacturing Technology6. Mechanical and Electrical System Control and Automation7. Modern Sensor and Testing Technology8. Fluid Flow Control and Automation9. Robot Technology and System10. Special Transmission Intelligent Design and Control11. Tribology Basic Theory and Application Technology12. Engineering Structure Design and Analysis13. Vibration and Noise Control14. Biomechanical Engineering15. Production System Automation Technology16. Manufacturing System Engineering Management17. Vehicle Dynamics and Control18. Vehicles Advanced Manufacturing Technology19. Modern Design Theory and Method Of Vehicle20. Vehicle Electronics and Control |
| 0825Aeronautical and Astronautical Science and Technology | 1. Space Structure and Control2. Aerospace High Precision Manufacturing Technology3. Space Robot Technology4. Space of Special Processing Technology5. Aircraft Digital Manufacturing Technology6. Aircraft Ground Simulation and Testing Technology |
| School of Materials Science and Engineering | 0805Materials Science and Engineering | 1. Intelligent Materials and Devices2. Space Material and its Environmental Effects3. Photoelectric Information Science and Engineering4. Advanced Metals and Ceramic Materials5. Solidification Science and Engineering6. Plastic Processing Science and Engineering7. Material Connection Science and Engineering |
| School of Management | 1201Management Science and Engineering | 1. Management Information Systems and Operation Management 2. E System Engineering and Optimization3. Big Data and Business Analysis4. Electronic Health |
| 1202Business Administration | 1. Enterprise Strategic Management Theory and Method2. Organization and Human Resource Theory and Method3. Marketing Theory and Method4. Accounting Policies and Accounting Information Disclosure5. Innovation theory, method and policy6. Investment and Financing Theory and Financial Engineering7. Sustainable Development Theory, Method and Policy8. Management Corporate Governance and Corporate Value |
| 1204Public Management | 1. Public Policy Analysis and Behavior Simulation2. Urban and Government Governance Innovation3. Public Policy Impact Assessment4. Infrastructure Economy and Management |
| School of Humanities, Social Science and Law | 0303Sociology | 1. Industrial Sociology2. Virtual Social Anthropology3. Social Construction and The Underclass4. Quantitative Social Research Methods5. Research on Network Society6. Tourism Sociology |
| School of Physics | 0702Physics | 1. Nonlinear Optics and Laser Spectroscopy2. Military Information Photonics Technology and Devices3. Nano Photonics and Surface Plasmon Optics4. Quantum Information and Quantum Dynamics5. Cross The Extreme Conditions Of Condensed Matter Physics6. Physics and High Energy Heavy-lon Collisions HadronPhenomenological Study7.Physical Function of Modern Materials and Nano Device8. Particulate Matter and Soft Matter Physics9. Plasma Transport and Its Interaction with Light Field10. Bioluminescence and Optical Imaging Technology |
| School of Mathematics | 0701Mathematics | 1. Analysis and Partial Differential Equations2. Algebra and Topology3. Ordinary Differential Equation and Dynamical System4. Science and Engineering Computation5. Inverse Problem of Mathematical Physics6. Operational Control and Optimization |
| 0714Statistics | 1. Statistics and its Application in Engineering2. Financial Statistics and Big Data Analysis3. Biology and Quantum Statistics |
| School of Environment | 0814Civil Engineering | 1. Urban Drinking Water Security2. Theory and Technology of Pollution (Waste) Water Treatment and Resource Utilization3. Prevention and Control of Water Pollution and Sustainable Utilization of Water Resources4. Hydro-chemical Environment al Functional Materials5. Safe Disposal and Resource Utilization of Municipal Solid Waste6. Urban Water System Digitalization and Pipeline Network Optimization7. Urban Water Circulation System |
| 0830Environmental Science and Engineering | 1. Prevention and Control of Water Pollution and Sustainable Utilization of Water Resources2. Hydro-chemical Environment al Functional Materials3. Safe Disposal and Resource Utilization of Municipal Solid Waste4. Formation Mechanism and Prevention and Control of Air Pollution5. Regional Environmental Pollution Prevention and Control and Ecological Engineering6. Environmental System Simulation Prediction and Planning Management |
| School of Life Science and Technology | 0831/0777Biomedical Engineering | Engineering:1. Biomedical Information Technology2. Nano Biotechnology and Biological Sensors3. Biomedical Detection Technology4. Biological Electromechanical Integration Technology5. Biomedical Image Processing6. Tissue Engineering and TechnologyScience:1. Neurobiology2. Microbial Biotechnology3. Developmental Biology4. Structural Molecular Biology5. Tumor Cell Biology6. Space Molecular Cell Biology7. Genetics and Bioinformatics |
| School of Transportation Science and Engineering | 0823Communication and Transportation Engineering | 1. Road Construction Materials2. Composite Sub-grade Stability Technology3. Pavement Dynamics and Design Method4. Road Nondestructive Testing Technology5. Road Transportation Safety6. Transportation Planning7. Traffic Economy8. Intelligent Transportation System9. Traffic Management and Control |
| 0814Civil Engineering | 1. Bridge Structure and Durability2. Bridge Monitoring. Monitoring and Safety Evaluation3. Bridge Seismic and Axle Vibration4. Both The Bridge Reinforcement5. Advanced Composite Applications |
| School of Civil Engineering | 0814Civil Engineering | 1. Steel, Wood and Composite Structures2. Concrete Structure, Masonry Structure and New Structure3. Bridges and Ocean Engineering Structures4. Civil Engineering Materials5. Disaster Prevention and Mitigation Works and Protection Works6. Geotechnical and Underground Engineering7. Civil Engineering Construction and Management |
| 0801Mechanics | 1. Structural Vibration, Impact, Explosion and Control2. Structural Damage, Reliability and Health Monitoring3. Computational Structural Mechanics and Computational Fluid Dynamics4. Civil Engineering Intelligent Materials and Structural System5. Civil Engineering Structure and System Design Theory |
| School of Architecture | 0813Architecture | 1. Architectural Design and Theory2. Public Architecture Design and its Theory3. Green Building and Energy Saving Technology4. City and Building Physical Environment5. Chinese and Foreign Architectural History and Heritage Protection6. Urban Design and Interior Design |
| 0833Urban and Rural Planning | 1. Urban and Rural Planning Theory and Methods2. Urban Historical &Cultural Protection and Planning Design3. Cold to Urban and Rural Living Environment Planning4. Urban Form and Landscape Planning5. Urban and Rural Security and Regional Planning |
| 0834Landscape Architecture | 1. History and Theory of Western Landscape2. Landscape Heritage Protection and Utilization3. Landscape Planning and Design and Theory4. Landscape Architecture Engineering and Technology5. Ecology Landscape6. Tourist Recreation and Planning and Design |
| 0814Civil Engineering | 1. Heating Calculation Theory and Application Technology2. Ventilation and Air Conditioning Theory and Application3. Building Energy Efficiency and Energy Utilization4. Gas Storage and Transportation and Urban Gas Application5. HVAC Systems and Control Theory and Technology6. Built Environment |
| School of Electronics and Information Engineering | 0810Information and Communication Engineering | 1. Wireless Communication and Network2. Theory and Technology of Space Communication3. New System Radar Theory and Technology4. Microwave Imaging and Target Recognition Technology5. Remote Sensing Information Processing Technology6. Electronic Countermeasure Theory and Technology7. Measurement and Control Theory and Technology |
| School of Chemistry and Chemical Engineering | 0817Chemical Engineering and Technology | 1. Surface and Interface Chemistry2. Polymer Composite and Modification3. Chemical Power Source and Electrochemical Power Engineering4. Preparation and Performance of Functional Materials5. Biological Synthesis and Separation Engineering6. Bimolecular Engineering7. New Energy Chemical Industry |

**HIT Master’s Degree Programs**

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| **School** | **Major** | **Research Field** |
| School of Astronautics | 0811 Control Science and Engineering | 1. Navigation Guidance and Control
2. Detection Technology and Automation Device
3. Control Theory and Control Engineering
4. System Engineering and Stimulation

5．Robots and Intelligent System |
| 0801 Mechanics | 1. Damage and Fracture Mechanics
2. Solid Dynamics
3. Structural Mechanics and Software Engineering
4. Composite Materials and Structural Mechanics
5. Characterization and Failure Analysis of Advanced Composite Materials
6. Integration of Structural Design, Analysis and Evaluation of Composite Materials
7. Reliability and Optimization of Complex Structure Engineering
8. Intelligent Materials and Multi-field Coupling Mechanics
9. Thermal Protection System and Structure Design
10. Structural Dynamics and Vibration Control
11. Spacecraft Dynamics and Control
12. Hydrodynamics and Control of Underwater Vehicles
13. Nonlinear Dynamics

14. Health Monitoring and Fault Diagnosis Technology of Engineering System |
| 0825 Aeronautical and Astronautical Science and Technology | Aircraft System Design2. Flight Dynamics and Control3. Aircraft Intelligent Autonomous Navigation, Guidance and Control4. Deep Space Flight and Landing Return5. Integrated Design and Simulation of Aircraft6. Dynamics and Control of Complex Spacecraft7. Space Environmental Effects of Spacecraft and its Countermeasures8. Structure and Protection of Aerospace Vehicles |
| 0803 Optical Engineering | 1. Optical Image and Information Processing Technology
2. High Resolution Optical Remote Sensing Technology
3. Target Detection and Recognition Technology
4. Modern Photoelectric Detection Technology

5. Photoelectric Guidance and Simulation Technology |
| 0809 Electronics Science and Technology | 1. Laser Spatial Information and Confrontation
2. Tunable Lase and Short Wavelength Laser
3. Nonlinear Optics, Quantum Optics and its Application
4. Optoelectronic Devices and Technology
5. Study on Lase Medium Spectrum and Laser Mechanism
6. Micro-Nano Device and Micro-System
7. Design and Application of Integrated Circuits
8. Wireless Sensor Network Technology
9. Advanced SoC High Reliability IC Design Technology
10. Microwave and Millimeter Wave Circuit Theory and System
11. Wireless Theory and Technology

12.Microwave Intelligent Materials and Microwave Imaging Theory and Technology |
| School of Energy Science and Engineering | 0807 Power Engineering and Engineering Thermo-Physics | 1. Engineering Thermo-physics1. Thermal Engineering
2. Power Machinery and Engineering
3. Fluid Machinery and Engineering
4. Refrigeration and Cryogenic Engineering

6. Chemical Process Machinery |
| Faculty of Computing | 0812 Computer Science and Technology | 1. High Reliability Computing and Fault Tolerant Computing
2. Mobile Computing
3. Computer Network and Information Technology
4. Massive Data Computation
5. Digital Media and Human-Computer Interaction
6. Natural Language Computing Technology
7. Enterprise Computing and Service Computing
8. Biocomputing and Bioinformatics Technology
9. Multi-agent Robot Technology
10. Artificial Intelligence and Pattern Recognition
11. Information Fusion Technology and Application
12. Computational Theory
13. Social Computing

14. Machine Learning |
| 0835 Software Enginee**ri**ng | 1. Software Service Engineering and Service Computing
2. Service Science and Engineering
3. Software Engineering Technology and Software Architecture
4. Software Reliability and Software Testing
5. Intelligent Software Theory and Machine Learning
6. Data Mining and Business Intelligence

7. Application of Software Engineering  |
| School of Instrumentation Science and Engineering | 0804 Instrument Science and Technology | 1. Ultra Precision Measurement Technology and Instruments 2. Laser Measurement and Detection Technology3. Modern Microscopic Technology and Instruments4. Visual and Photoelectric Measurement Technology5. Precision Electromagnetic Measurement Technology and Instruments6. Advanced Acousto-optic Materials and Instruments7. Technology of Radiation Temperature Measurement and Thermo-physical Properties Measurement8. Navigation Instruments and System Technology9. Bioinformatics Detection and Medical Instruments |
| School of Electrical Engineering and Automation | 0808 Electrical Engineering | 1. Motor and Electrical Appliances2. Power Electronics and Power Transmission3. Power System and Automation4. Electrician Theory and New Technique |
| School of Mathematics | 0701 Mathematics | 1. Analysis and Partial Differential Equations2. Algebra and Topology3. Ordinary Differential Equation and Dynamical System4. Science and Engineering Computation5. Inverse Problem of Mathematical Physics6. Operational Control and Optimization |
| School of Physics | 0702 Physics | 1. Nonlinear Optics and Photonic Devices
2. Military Photonics
3. Nano-photonics and Physics of Nano-materials
4. Optical Information Processing
5. Functional Materials Physics and Application
6. Cross-extreme Conditional Physics
7. Condensate Theory
8. Medium and High Energy Nuclear Physics
9. Hadron Physics
10. Atomic and Molecular Physics

11. Plasma Physics |
| School of Mechatronics Engineering | 0802 Mechanical Engineering | 1. Precision and Special Processing Technology
2. Modern Design Method and Intelligent Manufacturing Technology
3. Electromechanical System Control and Automation
4. Fluid Transmission and Control
5. Robot Technology and System
6. Basic Theory and Application of Mechanical Transmission
7. Engineering Machinery
8. Micro-nanotechnology and its Application

9.Industrial Engineering10. Industrial Design |
| 0825 Aeronautical and Astronautical Science and Technology (Discipline Direction: Manufacturing Engineering of Aerospace Vehicle) | 1. Space Structure and Control2. Aerospace High Precision Manufacturing Technology3. Space Robot Technology4. Space of Special Processing Technology5. Aircraft Digital Manufacturing Technology6. Aircraft Ground Simulation and Testing Technology |
| School of Materials Science and Engineering | 0805 Materials Science and Engineering | 1. Functional Materials and Devices2. Space Material and its Environmental Effects3. Photoelectric Information Science and Engineering4. Advanced Metals and Ceramic Materials5. Solidification Science and Engineering6. Plastic Processing Science and Engineering7. Material Connection Science and Engineering |
| School of Management | 1201 Management Science and Engineering | 1. Management Information System and Decision Support System
2. Electronic Commerce and Business Intelligence
3. System Engineering and Operational Management
4. Electronic Health and Management

5. Knowledge Management and Knowledge Engineering |
| 1202 Business Administration | 1. Technological Innovation and Technology Management
2. Theory of Industry and Regional Development
3. Risk Analysis and Management
4. Modern Manufacturing System management Theory
5. Strategic Management and Modern Enterprise Operation
6. Marketing Theory
7. Accounting and Management Accounting Theory
8. Financial and Cost Management

9. Organizational Management and New Leadership |
| 0202 Applied Economics | 1. Financial Markets and Financial Stability2. Financial Engineering and Financial Mathematics3. Internet + and Financial Innovation4. Urban Economy and Urban Governance5. International Trade Theory and Practice6. Behavioral Economics Theory and Experimental Methods |
| School of Humanities, Social Science and Law | 0201 Theoretical Economics | 1. Macroeconomic Theory and Policy2. Economic Globalization and World Economy3. Resource Environment and Economic Development4. Study on Regional Economic Problems5. International Trade Theory and Policy |
| 0202 Applied Economics | 1. International Trade Theory and Practice2. International Finance Theory and Empirical Research3. WTO and Economic Globalization |
| 0303 Sociology | 1. Research on Social Problems of Information and Network2. Social Research Methods3. Frontier of Psychodynamics4. Industrial Sociology5. Cultural Society and Social Theory6. Urban Politics and Community Studies |
| 0301 Law | 1. Jurisprudence2. Civil and Commercial Law3. Criminal law4. International Law |
| School of Civil Engineering | 0814 Civil Engineering | 1. Steel, Wood and Composite Structures2. Concrete Structure, Masonry Structure and New Structure3. Bridges and Ocean Engineering Structures4. Civil Engineering Materials5. Disaster Prevention and Mitigation Works and Protection Works6. Geotechnical and Underground Engineering7. Civil Engineering Construction and Management |
| 0801 Mechanics | 1. Structural Vibration, Impact, Explosion and Control2. Structural Damage, Reliability and Health Monitoring3. Computational Structural Mechanics and Computational Fluid Dynamics4. Civil Engineering Intelligent Materials and Structural System5. Civil Engineering Structure and System Design Theory |
| School of Environment | 0830 Environmental Science and Engineering | 1. Prevention and Control of Water Pollution and Sustainable Utilization of Water Resources2. Hydro-chemical and Environmental Functional Materials3. Safe Disposal and Resource Utilization of Municipal Solid Waste4. Formation Mechanism and Prevention and Control of air Pollution5. Regional Environmental Pollution Prevention and Control and Ecological Engineering6. Environmental System Simulation, Prediction and Planning Management |
| 0710 Biology (Discipline Direction: Microbiology) | 1. Physiological Ecology of Environmental Microorganisms2. Biotechnology and Molecular Biotechnology in Environmental Pollution Control3. Biological Resources and Energy Development and Utilization |
| 0814 Civil Engineering(Discipline Direction: Municipal Engineering) | 1. Safety Control of Drinking Water Quality in Cities and Towns2. Theory and Technology of Pollution (Waste) Water Treatment and Resource Utilization3. Prevention and Control of Water Pollution and Sustainable Utilization of Water Resources4. Hydro-chemical and Environmental Functional Materials5. Safe Disposal and Resource Utilization of Municipal Solid Waste6. Digitalization and Management Optimization of Urban Water System7. Urban Water Circulation System |
| School of Architecture | 0813 Architecture | 1. Regional Architectural Design and Theory2. Public Architectural Design and Its Theory3. Green Building Theory and Energy Saving Technology4. Urban and Architectural Physical Environment5. Chinese and Foreign Architectural History and Heritage Protection6. Urban Design Theory7. Interior Design Theory8. Architectural Planning and Its Theory |
| 0814 Civil Engineering (Discipline Direction: Heating, Gas Supply, Ventilating and Air Conditioning Engineering) | 1. Theory and Application Technology of Heating Calculation2. Theory and Application of Ventilation and Air Conditioning3. Building Energy Conservation and Energy Utilization4. Gas Storage and Transportation and Urban Gas Application |
| 0833 Urban and Rural Planning | 1. Urban and Rural Planning Theory and Methods2. Urban Historical &Cultural Protection and Planning Design3. Cold to Urban and Rural Living Environment Planning4. Urban Form and Landscape Planning5. Urban and Rural Security and Regional Planning |
| 0834 Landscape Architecture | 1. Theory and Method of Landscape Architecture Planning and Design in Cold Regions2. Landscape Ecology Theory and Method3. Theory of Landscape Architecture and Landscape Heritage Protection4. Landscape Architecture History and Theory |
| 0872 、1305 Design  | 1. Environmental Art Design and Theoretical Research2. Product Design and Theoretical Research3. Visual Communication Design and Theoretical Research4. Public Art Design and Theoretical Research5. Research on Design Education and Management6. Digital Media Design7. Digital Media Art |
| School of Transportation Science and Engineering | 0823 Communication and Transportation Engineering | 1. Road Building Materials2. Subgrade and Pavement Engineering3. Road Alignment Design Theory4. Traffic Planning and Management5. Traffic Safety6. Traffic Information and Control7. Road Economy and Management8. Logistics Engineering9. Road Traffic Environment10. Intelligent Transportation System |
| 0814 Civil Engineering (Discipline Direction: Bridge and Tunnel Engineering) | 1. Design Theory and Construction Technology of Bridge Structure2. Coupled Vibration of Vehicle-Bridge System3. Seismic Resistance of Bridges4. State Assessment, Detection and Reinforcement of Existing Bridges5. Composite Bridge Structures6. Bridge Health Monitoring |
| School of Chemistry and Chemical Engineering | 0817 Chemical Engineering and Technology | 1. Chemical Power Supply2. Electrochemical Surface Modification3. Interfacial Chemistry and Engineering of Composite Polymers4. Polymerization and Engineering5. Green Chemical Technology6. Preparation and Application of Inorganic Functional Materials7. New Catalysts8. Catalytic Reaction Engineering9. Bioprocessing Technology10. Biosynthesis and Separation Engineering |
| 0832 Food Science and Engineering | 1. Food Processing Engineering2. Food Science3. Chemistry of Natural Products4. Extreme Environmental Nutrition |
| 0703 Chemistry | 1. Organic Synthesis and Structure Analysis2. Energy Conversion Materials3. Functional Nano-materials and Devices4. Spectral Analysis5. Polymer Synthesis and Modification6. Bio-molecular Science7. Computational Chemistry |
| 0703 Chemistry (Discipline Direction: Chemistry and Physics of Polymers) | 1. Interface modification and characterization of composite materials2. Polymer Modification3. Functional Polymers4. High Performance Reinforcing Fibers5. Molecular Simulation |
| School of Marxist | 0101 philosophy | 1. Marxist Philosophy2. Philosophy of Science and Technology |
| 0305 Marxist theory | 1. Study on the Sinicization of Marxism2. Ideological and Political Education3. Research on the Basic Problems of Modern Chinese History |
| School of Electronics and Information Engineering | 0810 Information and Communication Engineering | 1. Wireless Communication and Network2. Theory and Technology of Space Communication3. New System Radar Theory and Technology4. Microwave Imaging and Target Recognition Technology5. Remote Sensing Information Processing Technology6. Electronic Countermeasure Theory and Technology7. Measurement and Control Theory and Technology |
| School of Life Science and Technology | 0710 Biology | 1. Cancer Biology2. Microbial Genetic Engineering3. Developmental Biology4. Neurobiology5. Space Biology/Space Medicine6. Protein Structure and Function7. Structural Molecular Biology |
| 0831 Biomedical Engineering (Master of Engineering) | 1. Nano-biotechnology2. Medical Physics and Engineering3. Bioinformatics Technology4. Medical Image Processing5. Bio-electromechanical Signal Processing6. Tissue Engineering and Biomaterials |
| 0777 Biomedical Engineering (Master of Science) | 1. Nano-biotechnology2. Medical Physics and Engineering3. Bioinformatics Technology4. Medical Image Processing5. Bio-electromechanical Signal Processing6. Tissue Engineering and Biomaterials |

**HIT Master’s Degree Programs Taught in English**

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| **Category** | **School** | **Major** | **Research Field** |
| Management | School of Management | 0202Applied Economics | 1. International Industry and Technology Transfer
2. International Trade Theory
3. Industry Economic Theory and Method
4. The Financial Policy and Regulation
5. Financial Economics
6. Financial Engineering
 |
| 1201Management Science and Engineering | 1. Management Information System, Decision Support System
2. E-commerce E-government Business Intelligence
3. Systems Engineering Theory and Application
4. Number Theory and the Statistical Analysis and Decision Optimization Model
5. Knowledge Management and Knowledge Engineering
6. Project Management
7. Construction Management Theory and Method
8. Real Estate Investment and Management
9. Housing and Housing System
 |
| 1202Business Administration | 1. Technology Innovation and Technology Management
2. Industry and Regional Development Theory
3. Risk Analysis and Management
4. Management Theory of Modern Manufacturing System
5. Strategic Management and Modern Organization Theory
6. Marketing Theory
7. Accounting Theory and Practice
8. Cost and Management Accounting Theory and Method
9. Financial Management Theory and Method
 |
| 1204Public Management | 1. The Theory and Practice of the Belt and Road Initiative
2. Application of Infrastructure Management
3. Research on Regional Economic Development
4. Research on Governance Theory and Practice
5. The Belt and Road Country Studies
 |
| Materials Science | School of Materials Science and Engineering | 0805Materials Science and Engineering | 1. Metal and Ceramics Materials
2. Surface Engineering
3. Behavior of Materials under Space Environment and Test Technologies
4. Polymer Matrix Composite Materials
5. Micromechanics of Composite Materials
6. Information Function Material and Device
7. Biomedical Materials and Device
8. Science and Solidification of Liquid Forming Technology
9. Plastic Forming Theory and Technology
10. Science and Technology of Materials Joining
 |
| Mechanical Engineering | School of Mechatronics Engineering | 0802Mechanical Engineering | 1. Mechanical Design and Theory
2. Mechanical Manufacture Automation
3. Mechatronic Engineering
4. Production Process Management
 |
| School of Energy Science and Engineering | 0807Power Engineering and Engineering Thermo-Physics | 1. Combustion and Pollution Control
2. Dynamic Fluid and Chemical Machinery
3. Heat, Mass Transfer and Multiphase flow
4. The Utilization of Energy
 |
| Civil Engineering | School of Civil Engineering | 0814Civil Engineering | 1. Steel, Wood and Composite Structures2. Concrete Structure, Masonry Structure and New Structure3. Bridges and Ocean Engineering Structures4. Civil Engineering Materials5. Disaster Prevention and Mitigation Works and Protection Works6. Geotechnical and Underground Engineering7. Civil Engineering Construction and Management |
| Electronics | Faculty of Computing | 0812Computer Science and Technology | Computer Science and Technology |
| 0835 Software Enginee**ri**ng | Software Enginee**ri**ng |
| School of Astronautics | 0811Control Science and Engineering | Control Science and Engineering |
| 0809Electronics Science and Technology | 1. Physical Electronics
2. Microelectronics and Solid-State Electronics
 |
| School of Electronics and Information Engineering | 0810Information and Communication Engineering | Information and Communication Engineering |
| School of Instrumentation Science and Engineering | 0804 Instrument Science and Technology | Instrument Science and Technology |
| Chemical Engineering &Life Science and Technology | School of Chemistry and Chemical Engineering | 0703Chemistry | 1. Surface and Interface Chemistry of Materials
2. Energy Conversion Material Chemistry
3. Solar Cells and Devices
4. Spectrum Detection and Analysis
5. Synthesis and Preparation of Functional Nano-Materials
 |
| 0817Chemical Engineering and Technology | 1. Polymer Composite and Modification
2. Chemical Power Source and Electrochemical Technology
3. Preparation and Performance of Functional Materials
4. Energy Chemical Engineering and Catalysis
5. Bimolecular Engineering
 |
| 0832Food Science and Engineering | 1. Space Biochemistry and Protection
2. Natural Product Chemistry and Human Health
3. Food Safety and Process Control
4. Food Fermentation and Microbiology
5. New Resource Food Research and Development
 |
| School of Life Science and Technology | 0831/0777Biomedical Engineering | 1. Nano Biotechnology
2. Tissue Engineering and Regenerative Medicine
3. Synthetic Biology
4. Cancer Biology
5. Neurobiology
 |