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| **School** | **Major** | **Research Field** |
| School of Instrumentation Science and Engineering | Instrument Science and Technology | 1. Ultra Precision Measurement Technology and Instruments  2. Laser Measurement and Detection Technology  3. Modern Microscopic Technology and Instruments  4. Visual and Photoelectric Measurement Technology  5. Precision Electromagnetic Measurement Technology and Instruments  6. Advanced Acousto-optic Materials and Instruments  7. Technology of Radiation Temperature Measurement and Thermo-physical Properties Measurement  8. Navigation Instruments and System Technology  9. Bioinformatics Detection and Medical Instruments  10.Ultra-Precision Control Technology and Instruments |
| School of Electrical Engineering and Automation | Electrical Engineering | 1. Motor and Electrical Appliances  2. Power Electronics and Power Transmission  3. Power System and Automation  4. Electrician Theory and New Technique |
| School of Energy Science and Engineering | Power Engineering and Engineering Thermo-physics | 1. Engineering Thermo-physics  2. Thermal Engineering  3. Power Machinery and Engineering  4. Fluid Machinery and Engineering  5. Refrigeration and Cryogenic Engineering |
| Faculty of Computing | Computer Science and Technology | 1. High Reliable High Performance Computer Architecture  2. Mobile Computing and Embedded Computing  3. Computer Network and Information Security  4. Computing Theory  5. Huge Amounts of Data Calculation  6. Service Computing  7. Biological Computing and Bioinformatics  8. Intelligent Human-Computer Interaction and Digital Media Technology  9. Artificial Intelligence and Pattern Recognition  10. Multiple Languages and Chinese Information Processing  11. Social Computing |
| Software Engineering | 1. Software Service Engineering  2. Software Engineering and Software Architecture  3. Software Trustworthiness and Reliability  4. Intelligent Software Theory and Machine Learning  5. Business Intelligence and Data Mining  6. Field of Software Engineering |
| School of Astronautics | Control Science and Engineering | 1. Navigation, Guidance and Control  2. Control Theory and Control Engineering  3. Detection Technology and Automatic Equipment  4. Robots and Intelligent Systems  5. Systems Engineering and Simulation |
| Mechanics | 1. Fatigue and Fracture Mechanics  2. Structural Optimization Design  3. Micromechanics  4. Solid Dynamics  5. Thermo/Mechanical/Electrical/Chemical Multi-field Coupling Mechanics  6. Material and Structural Mechanics in Extreme Environment  7. Advanced Composites and Its Structural Lightweight Theory  8. Composite Materials and Its Structural Mechanics  9. Reliability Analysis and Design of Composite Structures  10. Intelligent Materials and Structural Mechanics  11. Aerospace Structural Mechanics  12. Material/ Structure/Function Integrated Design  13. Structural Dynamics and Vibration Control  14. Nonlinear Dynamics  15. Hydrodynamics  16. Dynamics Inverse Problem and Fault Diagnosis |
| Aeronautical and Astronautical Science and Technology | 1. Aircraft System Design  2. Flight Dynamics and Control  3. Aircraft Intelligent Autonomous Navigation, Guidance and Control  4. Deep Space Flight and Landing Return  5. Integrated Design and Simulation of Aircraft  6. Dynamics and Control of Complex Spacecraft  7. Space Environmental Effects of Spacecraft and its Countermeasures  8. Structure and Protection of Aerospace Vehicles |
| Optical Engineering | 1. Space Optical Information Acquisition Technology and Processing  2. Optical Guidance and Simulation  3. Modern Photoelectric Testing Technology  4. Target Detection and Recognition  5. Optical Image Processing and Evaluation  6. Space Laser Communication  7. Laser Radar and Laser Remote Sensing  8. High Power Laser and Tunable Laser  9. Nonlinear Optical Technology  10. Photoelectric Device and Technology |
| Electronics Science and Technology | 1. Laser Spatial Information and Confrontation  2. Tunable Laser Short Wavelength Laser  3. Nonlinear Optics Quantum Optics Technology and Application  4. Photoelectric Device and Technology  5. Laser Spectrum and The Mechanism of Laser Medium  6. Micro-Nano Devices and Systems  7. Integrated Circuits Design and Application  8. Integrated Sensor Technology  9. Advanced SoC and Reliability Design of Integrated Circuits  10. Microwave Transmission Theory and Antenna System |
| School of Mechatronics Engineering | Mechanical Engineering | 1. Precision and Ultra-Precision Processing Technology  2. Micro-Nano Manufacturing Techniques  3. Special Processing and Special Material Processing Technology  4. Modern Design Theory and Method  5. Digital Design and Manufacturing Technology  6. Mechanical and Electrical System Control and Automation  7. Modern Sensor and Testing Technology  8. Fluid Flow Control and Automation  9. Robot Technology and System  10. Special Transmission Intelligent Design and Control  11. Tribology Basic Theory and Application Technology  12. Engineering Structure Design and Analysis  13. Vibration and Noise Control  14. Biomechanical Engineering  15. Production System Automation Technology  16. Manufacturing System Engineering Management  17. Vehicle Dynamics and Control  18. Vehicles Advanced Manufacturing Technology  19. Modern Design Theory and Method Of Vehicle  20. Vehicle Electronics and Control |
| Aeronautical and Astronautical Science and Technology | 1. Space Structure and Control  2. Aerospace High Precision Manufacturing Technology  3. Space Robot Technology  4. Space of Special Processing Technology  5. Aircraft Digital Manufacturing Technology  6. Aircraft Ground Simulation and Testing Technology |
| School of  Materials Science and Engineering | Materials Science and Engineering | 1. Intelligent Materials and Devices  2. Advanced Space Materials and Environmental Effects  3. Optoelectronic Information Science and Engineering  4. Advanced Metal and Ceramic Materials  5. Solidification Science and Engineering  6. Plastic Processing  7. Material Joining Science and Engineering |
| School of Management | Management Science and Engineering | 1. Management Information Systems and Operation Management  2. E System Engineering and Optimization  3. Big Data and Business Analysis  4. Electronic Health |
| Business Administration | 1. Enterprise Strategic Management Theory and Method  2. Organization and Human Resource Theory and Method  3. Marketing Theory and Method  4. Accounting Policies and Accounting Information Disclosure  5. Innovation Theory,Method and Policy  6. Investment and Financing Theory and Financial Engineering  7. Sustainable Development Theory, Method and Policy  8. Management Corporate Governance and Corporate Value |
| Public Management | 1. Public Policy Analysis and Behavior Simulation  2. Urban and Government Governance Innovation  3. Public Policy Impact Assessment  4. Infrastructure Economy and Management |
| School of Humanities, Social Science and Law | Sociology | 1. Industrial Sociology  2. Virtual Social Anthropology  3. Social Construction and The Underclass  4. Quantitative Social Research Methods  5. Research on Network Society  6. Tourism Sociology |
| School of Physics | Physics | 1. Nonlinear Optics and Laser Spectroscopy  2. Military Information Photonics Technology and Devices  3. Nano Photonics and Surface Plasmon Optics  4. Quantum Information and Quantum Dynamics  5. Cross The Extreme Conditions Of Condensed Matter Physics  6. Physics and High Energy Heavy-lon Collisions Hadron  Phenomenological Study  7.Physical Function of Modern Materials and Nano Device  8. Particulate Matter and Soft Matter Physics  9. Plasma Transport and Its Interaction with Light Field  10. Bioluminescence and Optical Imaging Technology |
| School of Mathematics | Mathematics | 1. Analysis and Partial Differential Equations  2. Algebra and Topology  3. Ordinary Differential Equation and Dynamical System  4. Science and Engineering Computation  5. Inverse Problem of Mathematical Physics  6. Operational Control and Optimization |
| Statistics | 1. Statistics and Its Application in Engineering  2. Financial Statistics and Big Data Analysis  3. Biology and Quantum Statistics |
| School of Environment | Civil Engineering | 1. Urban Drinking Water Security  2. Theory and Technology of Pollution (Waste) Water Treatment and Resource Utilization  3. Prevention and Control of Water Pollution and Sustainable Utilization of Water Resources  4. Hydro-chemical Environment and Functional Materials  5. Safe Disposal and Resource Utilization of Municipal Solid Waste  6. Urban Water System Digitalization and Pipeline Network Optimization  7. Urban Water Circulation System |
| Environmental Science and Engineering | 1. Prevention and Control of Water Pollution and Sustainable Utilization of Water Resources  2. Hydro-chemical Environment and Functional Materials  3. Safe Disposal and Resource Utilization of Municipal Solid Waste  4. Formation Mechanism and Prevention and Control of Air Pollution  5. Regional Environmental Pollution Prevention and Control and Ecological Engineering  6. Environmental System Simulation Prediction and Planning Management |
| School of Life Science and Technology | Biomedical Engineering | Engineering:  1. Biomedical Information Technology  2. Nano Biotechnology and Biological Sensors  3. Biomedical Detection Technology  4. Biological Electromechanical Integration Technology  5. Biomedical Image Processing  6. Tissue Engineering and Technology  Science:  1. Neurobiology  2. Microbial Biotechnology  3. Developmental Biology  4. Structural Molecular Biology  5. Tumor Cell Biology  6. Space Molecular Cell Biology  7. Genetics and Bioinformatics |
| Biology | 1. Contains Protein Structure and Function 2. Tumor Cell Biology 3. Development and Epigenetic Regulation 4. Biomass Reuse and Microbial Control 5. Cognitive Neurobiology |
| School of Transportation Science and Engineering | Communication and Transportation Engineering | 1. Road Construction Materials  2. Composite Sub-grade Stability Technology  3. Pavement Dynamics and Design Method  4. Road Nondestructive Testing Technology  5. Road Transportation Safety  6. Transportation Planning  7. Traffic Economy  8. Intelligent Transportation System  9. Traffic Management and Control |
| Civil Engineering | 1. Bridge Structure and Durability  2. Bridge Monitoring.Monitoring and Safety Evaluation  3. Bridge Seismic and Axle Vibration  4. The Bridge Reinforcement  5. Advanced Composite Applications |
| School of Civil Engineering | Civil Engineering | 1. Steel, Wood and Composite Structures  2. Concrete Structure,Masonry Structure and New Structure  3. Bridges and Ocean Engineering Structures  4. Civil Engineering Materials  5. Disaster Prevention and Mitigation Works and Protection Works  6. Geotechnical and Underground Engineering  7. Civil Engineering Construction and Management |
| Mechanics | 1. Structural Vibration,Impact, Explosion and Control  2. Structural Damage, Reliability and Health Monitoring  3. Computational Structural Mechanics and Computational Fluid Dynamics  4. Civil Engineering Intelligent Materials and Structural System  5. Civil Engineering Structure and System Design Theory |
| School of Architecture | Architecture | 1. Architectural Design and Theory  2. Public Architecture Design and its Theory  3. Green Building and Energy Saving Technology  4. City and Building Physical Environment  5. Chinese and Foreign Architectural History and Heritage Protection  6. Urban Design and Interior Design |
| Urban and Rural Planning | 1. Urban and Rural Planning Theory and Methods  2. Urban Historical&Cultural Protection and Planning Design  3. Cold to Urban and Rural Living Environment Planning  4. Urban Form and Landscape Planning  5. Urban and Rural Security and Regional Planning |
| Landscape Architecture | 1. History and Theory of Western Landscape  2. Landscape Heritage Protection and Utilization  3. Landscape Planning and Design and Theory  4. Landscape Architecture Engineering and Technology  5. Ecology Landscape  6. Tourist Recreation and Planning and Design |
| Civil Engineering | 1. Heating Calculation Theory and Application Technology  2. Ventilation and Air Conditioning Theory and Application  3. Building Energy Efficiency and Energy Utilization  4. Gas Storage and Transportation and Urban Gas Application  5. HVAC Systems and Control Theory and Technology  6. Built Environment |
| School of Electronics and Information Engineering | Information and Communication Engineering | 1. Wireless Communication and Network  2. Theory and Technology of Space Communication  3. New System Radar Theory and Technology  4. Microwave Imaging and Target Recognition Technology  5. Remote Sensing Information Processing Technology  6. Electronic Countermeasure Theory and Technology  7. Measurement and Control Theory and Technology |
| School of Chemistry and Chemical Engineering | Chemical Engineering and Technology | 1. Surface and Interface Chemistry  2. Polymer Composite and Modification  3. Chemical Power Source and Electrochemical Power Engineering  4. Preparation and Performance of Functional Materials  5. Biological Synthesis and Separation Engineering  6. Bimolecular Engineering  7. New Energy Chemical Industry |