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| **School** | **Major** | **Research Field** |
| School of Instrumentation Science and Engineering | Instrument Science and Technology | 1. Ultra Precision MeasurementTechnology and Instruments  2. Laser Measurement andDetection Technology  3. Modern MicroscopicTechnology and Instruments  4. Visual andPhotoelectric Measurement Technology  5. PrecisionElectromagnetic Measurement Technology and Instruments  6. Advanced Acousto-opticMaterials and Instruments  7. Technology of RadiationTemperature Measurement and Thermo-physical Properties Measurement  8. Navigation Instrumentsand System Technology  9. BioinformaticsDetection and Medical Instruments  10.Ultra-Precision ControlTechnology and Instruments |
| School of Electrical Engineering and Automation | Electrical Engineering | 1. Motor and ElectricalAppliances  2. Power Electronics andPower Transmission  3. Power System andAutomation  4. Electrician Theory andNew Technique |
| School of Energy Science and Engineering | Power Engineering and Engineering Thermo-physics | 1. EngineeringThermo-physics  2. Thermal Engineering  3. Power Machinery andEngineering  4. Fluid Machinery andEngineering  5. Refrigeration andCryogenic Engineering |
| Faculty of Computing | Computer Science and Technology | 1. High Reliable HighPerformance Computer Architecture  2. Mobile Computing andEmbedded Computing  3. Computer Network andInformation Security  4. Computing Theory  5. Huge Amounts of DataCalculation  6. Service Computing  7. Biological Computingand Bioinformatics  8. IntelligentHuman-Computer Interaction and Digital Media Technology  9. Artificial Intelligenceand Pattern Recognition  10. Multiple Languages andChinese Information Processing  11. Social Computing |
| Software Engineering | 1. Software ServiceEngineering  2. Software Engineeringand Software Architecture  3. SoftwareTrustworthiness and Reliability  4. Intelligent SoftwareTheory and Machine Learning  5. Business Intelligenceand Data Mining  6. Field of SoftwareEngineering |
| School of Astronautics | Control Science and Engineering | 1. Navigation, Guidanceand Control  2. Control Theory andControl Engineering  3. Detection Technologyand Automatic Equipment  4. Robots and IntelligentSystems  5. Systems Engineering andSimulation |
| Mechanics | 1. Fatigue and FractureMechanics  2. Structural OptimizationDesign  3. Micromechanics  4. Solid Dynamics  5. Thermo/Mechanical/Electrical/Chemical Multi-field Coupling Mechanics  6. Material and StructuralMechanics in Extreme Environment  7. Advanced Composites andits Structural Lightweight Theory  8. Composite Materials andits Structural Mechanics  9. Reliability Analysisand Design of Composite Structures  10. Intelligent Materialsand Structural Mechanics  11. Aerospace StructuralMechanics  12. Material/ Structure/Function Integrated Design  13. Structural Dynamicsand Vibration Control  14. Nonlinear Dynamics  15. Hydrodynamics  16. Dynamics InverseProblem and Fault Diagnosis |
| Aeronautical and Astronautical Science and Technology | 1. Aircraft System Design  2. Flight Dynamics andControl  3. Aircraft IntelligentAutonomous Navigation, Guidance and Control  4. Deep Space Flight andLanding Return  5. Integrated Design andSimulation of Aircraft  6. Dynamics and Control ofComplex Spacecraft  7. Space EnvironmentalEffects of Spacecraft and its Countermeasures  8. Structure andProtection of Aerospace Vehicles |
| Optical Engineering | 1. Space OpticalInformation Acquisition Technology and Processing  2. Optical Guidance andSimulation  3. Modern PhotoelectricTesting Technology  4. Target Detection andRecognition  5. Optical ImageProcessing and Evaluation  6. Space LaserCommunication  7. Laser Radar and LaserRemote Sensing  8. High Power Laser andTunable Laser  9. Nonlinear OpticalTechnology  10. Photoelectric Deviceand Technology |
| Electronics Science and Technology | 1. Laser SpatialInformation and Confrontation  2. Tunable Laser ShortWavelength Laser  3. Nonlinear OpticsQuantum Optics Technology and Application  4. Photoelectric Deviceand Technology  5. Laser Spectrum and TheMechanism of Laser Medium  6. Micro-Nano Devices andSystems  7. Integrated CircuitsDesign and Application  8. Integrated SensorTechnology  9. Advanced SoC andReliability Design of Integrated Circuits  10. Microwave TransmissionTheory and Antenna System |
| School of Mechatronics Engineering | Mechanical Engineering | 1. Precision andUltra-Precision Processing Technology  2. Micro-NanoManufacturing Techniques  3. Special Processing andSpecial Material Processing Technology  4. Modern Design Theoryand Method  5. Digital Design andManufacturing Technology  6. Mechanical andElectrical System Control and Automation  7. Modern Sensor andTesting Technology  8. Fluid Flow Control andAutomation  9. Robot Technology andSystem  10. Special TransmissionIntelligent Design and Control  11. Tribology Basic Theoryand Application Technology  12. Engineering StructureDesign and Analysis  13. Vibration and NoiseControl  14. BiomechanicalEngineering  15. Production SystemAutomation Technology  16. Manufacturing SystemEngineering Management  17. Vehicle Dynamics andControl  18. Vehicles AdvancedManufacturing Technology  19. Modern Design Theoryand Method Of Vehicle  20. Vehicle Electronicsand Control |
| Aeronautical and Astronautical Science and Technology | 1. Space Structure andControl  2. Aerospace HighPrecision Manufacturing Technology  3. Space Robot Technology  4. Space of SpecialProcessing Technology  5. Aircraft DigitalManufacturing Technology  6. Aircraft GroundSimulation and Testing Technology |
| School of  Materials Science andEngineering | 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 InformationSystems and Operation Management  2. E System Engineeringand Optimization  3. Big Data and BusinessAnalysis  4. Electronic Health |
| Business Administration | 1. Enterprise StrategicManagement Theory and Method  2. Organization and HumanResource Theory and Method  3. Marketing Theory andMethod  4. Accounting Policies andAccounting Information Disclosure  5. Innovation theory,method and policy  6. Investment andFinancing Theory and Financial Engineering  7. Sustainable DevelopmentTheory, Method and Policy  8. Management CorporateGovernance and Corporate Value |
| Public Management | 1. Public Policy Analysisand Behavior Simulation  2. Urban and Government GovernanceInnovation  3. Public Policy ImpactAssessment  4. Infrastructure Economyand Management |
| School of Humanities, Social Science and Law | Sociology | 1. Industrial Sociology  2. Virtual SocialAnthropology  3. Social Construction andThe Underclass  4. Quantitative Social ResearchMethods  5. Research on NetworkSociety  6. Tourism Sociology |
| School of Physics | Physics | 1. Nonlinear Optics andLaser Spectroscopy  2. Military InformationPhotonics Technology and Devices  3. Nano Photonics andSurface Plasmon Optics  4. Quantum Information andQuantum Dynamics  5. Cross The ExtremeConditions Of Condensed Matter Physics  6. Physics and High EnergyHeavy-lon Collisions Hadron  Phenomenological Study  7.Physical Function ofModern Materials and Nano Device  8. Particulate Matter andSoft Matter Physics  9. Plasma Transport andIts Interaction with Light Field  10. Bioluminescence andOptical Imaging Technology |
| School of Mathematics | Mathematics | 1. Analysis and Partial DifferentialEquations  2. Algebra and Topology  3. Ordinary DifferentialEquation and Dynamical System  4. Science and EngineeringComputation  5. Inverse Problem ofMathematical Physics  6. Operational Control andOptimization |
| Statistics | 1. Statistics and itsApplication in Engineering  2. Financial Statisticsand Big Data Analysis  3. Biology and QuantumStatistics |
| School of Environment | Civil Engineering | 1. Urban Drinking WaterSecurity  2. Theory and Technology of Pollution (Waste) Water Treatment andResource Utilization  3. Prevention and Control of Water Pollution and SustainableUtilization of Water Resources  4. Hydro-chemicalEnvironment al Functional Materials  5. Safe Disposal andResource Utilization of Municipal Solid Waste  6. Urban Water SystemDigitalization and Pipeline Network Optimization  7. Urban Water CirculationSystem |
| Environmental Science and Engineering | 1. Prevention and Control ofWater Pollution and Sustainable Utilization of Water Resources  2. Hydro-chemicalEnvironment al Functional Materials  3. Safe Disposal andResource Utilization of Municipal Solid Waste  4. Formation Mechanism andPrevention and Control of Air Pollution  5. Regional EnvironmentalPollution Prevention and Control and Ecological Engineering  6. Environmental SystemSimulation Prediction and Planning Management |
| School of Life Science and Technology | Biomedical Engineering | Engineering:  1. Biomedical InformationTechnology  2. Nano Biotechnology andBiological Sensors  3. Biomedical DetectionTechnology  4. BiologicalElectromechanical Integration Technology  5. Biomedical ImageProcessing  6. Tissue Engineering andTechnology  Science:  1. Neurobiology  2. Microbial Biotechnology  3. Developmental Biology  4. Structural MolecularBiology  5. Tumor Cell Biology  6. Space Molecular CellBiology  7. Genetics andBioinformatics |
| 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 ConstructionMaterials  2. Composite Sub-gradeStability Technology  3. Pavement Dynamics andDesign Method  4. Road NondestructiveTesting Technology  5. Road TransportationSafety  6. Transportation Planning  7. Traffic Economy  8. IntelligentTransportation System  9. Traffic Management and Control |
| Civil Engineering | 1. Bridge Structure andDurability  2. Bridge Monitoring.Monitoring and Safety Evaluation  3. Bridge Seismic and AxleVibration  4. Both The BridgeReinforcement  5. Advanced CompositeApplications |
| School of Civil Engineering | Civil Engineering | 1. Steel, Wood andComposite Structures  2. Concrete Structure,Masonry Structure and New Structure  3. Bridges and OceanEngineering Structures  4. Civil EngineeringMaterials  5. Disaster Prevention andMitigation Works and Protection Works  6. Geotechnical andUnderground Engineering  7. Civil EngineeringConstruction and Management |
| Mechanics | 1. Structural Vibration,Impact, Explosion and Control  2. Structural Damage, Reliabilityand Health Monitoring  3. ComputationalStructural Mechanics and Computational Fluid Dynamics  4. Civil EngineeringIntelligent Materials and Structural System  5. Civil EngineeringStructure and System Design Theory |
| School of Architecture | Architecture | 1. Architectural Designand Theory  2. Public ArchitectureDesign and its Theory  3. Green Building andEnergy Saving Technology  4. City and BuildingPhysical Environment  5. Chinese and ForeignArchitectural History and Heritage Protection  6. Urban Design andInterior Design |
| Urban and Rural Planning | 1. Urban and RuralPlanning Theory and Methods  2. Urban Historical&Cultural Protection and Planning Design  3. Cold to Urban and RuralLiving Environment Planning  4. Urban Form andLandscape Planning  5. Urban and RuralSecurity and Regional Planning |
| Landscape Architecture | 1. History and Theory ofWestern Landscape  2. Landscape HeritageProtection and Utilization  3. Landscape Planning andDesign and Theory  4. Landscape ArchitectureEngineering and Technology  5. Ecology Landscape  6. Tourist Recreation andPlanning and Design |
| Civil Engineering | 1. Heating CalculationTheory and Application Technology  2. Ventilation and AirConditioning Theory and Application  3. Building EnergyEfficiency and Energy Utilization  4. Gas Storage and Transportationand Urban Gas Application  5. HVAC Systems andControl Theory and Technology  6. Built Environment |
| School of Electronics and Information Engineering | Information and Communication Engineering | 1. Wireless Communicationand Network  2. Theory and Technologyof Space Communication  3. New System Radar Theoryand Technology  4. Microwave Imaging andTarget Recognition Technology  5. Remote SensingInformation Processing Technology  6. ElectronicCountermeasure Theory and Technology  7. Measurement and ControlTheory and Technology |
| School of Chemistry and Chemical Engineering | Chemical Engineering andTechnology | 1. Surface and InterfaceChemistry  2. Polymer Composite andModification  3. Chemical Power Sourceand Electrochemical Power Engineering  4. Preparation andPerformance of Functional Materials  5. Biological Synthesisand Separation Engineering  6.  Bimolecular Engineering  7. New Energy ChemicalIndustry |