**APSCO HIT PhD-Program-2022**

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| Schools | Disciplines | Research Fields |
| Astronautics | 0811  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 |
| 0801  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 |
| 0825  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 |
| Mechatronics Engineering | 0825 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 |
| 0802  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 |