**机械工程类英文授课体系硕士培养方案**

**International Master Programme of Mechanical Engineering**

**1. 研究方向Research Fields**

（1）机械设计及理论 Mechanical Design and Theory

（2）机械制造及其自动化 Mechanical Manufacture Automation

（3）机械电子工程 MechatronicEngineering

（4）生产过程管理 Production Process Management

（5）燃烧及污染控制 Combustion and Pollution Control

（6）动力、流体与化工机械 Dynamic Fluid and Chemical Machinery

（7）传热、传质及多相流 Heat, Mass Transfer and Multiphase flow

（8）能源的有效利用 The Utilization of Energy

**2. 课程设置 Course**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **类别****Type** | **课程编号****Course No.** | **课程名称****Course Name** | **课程英文名称****English Course name** | **学时****hours** | **学分****Credits** | **学期****Semester** | **备注****Notes** |
| **学位课****Degree Courses** | SYW00001Q | 初级汉语口语Ⅰ | The Course of Primary Chinese Oral I | 64 | 2 | 秋Autumn | 必修compulsory |
| SYW00001C | 初级汉语口语Ⅱ | The Course of Primary Chinese Oral II | 64 | 2 | 春Spring |
| SYW15001Q | 中国文化与跨文化沟通 | Chinese culture and cross-cultural communication | 32 | 2 | 春Spring |
| S1000006Q | 管理学原理 | Principle of management | 32 | 2 | 秋Autumn |  |
| S0612067Q | 数值分析 | Numerical Analysis | 32 | 2 | 秋Autumn |  |
| SYW02001Q | 机器人技术 | Robot Technology | 32 | 2 | 秋Autumn |  |
| SYW02002C | 机械动力学 | Dynamics of Machine | 32 | 2 | 春Spring |  |
| SYW02008C | 有限元分析导论 | Introduction to Finite Element Analysis | 32/0 | 2 | 春Spring |  |
| SYW04001Q | 热力学 | Thermodynamics | 32 | 2 | 秋Autumn |  |
| SYW04002C | 流体力学 | Hydrodynamics | 32 | 2 | 春Spring |  |
| **选修课****Optional****Courses** | SYW02003Q | 纳米摩擦学与纳米测量技术 | Nano-tribology and nano-measurement | 32 | 2 | 秋Autumn |  |
| SYW02004Q | 微纳制造技术基础 | The fundamentals of Micro and NanoManufacturing | 32 | 2 | 秋Autumn |  |
| SLX02011C | 液压伺服系统 | Hydraulic servo system | 32 | 2 | 春Spring |  |
| SYW02005C | 可靠性与智能维护 | Reliability and Intelligent Maintenance | 32 | 2 | 秋/春Autumn/ Spring |  |
| SYW04003Q | 热质传递 | Heat and mass transfer | 32 | 2 | 秋Autumn |  |
| SYW04004C | 多相流 | Multiphase Flow | 32 | 2 | 春Spring |  |
| **实践环节****Practice Part** | SYW02007C | 机械工程实践课程 | Experiment CourseOf Mechanical Engineering | 32 | 2 | 春Spring |  |
| **必修环节Required****Parts** | S1700XSJL | 学术交流 | Academic Communication | 18 | 1 | 春Spring |  |
| S1700KTBG | 开题报告 | Thesis Proposal | 18 | 1 | 秋Autumn |  |
| S1700ZQJC | 中期检查 | Interim Inspection | 18 | 1 | 春Spring |  |

**3. 培养规定 Regulations**

机械工程类：专业学位课不少于12学分，专业选修课不少于12学分，实践课2学分。

For master candidates specialized in M**echanical Engineering**：

Degree courses for more than 12 credits, specialized optional courses for more than 12 credits, practice part for 2 credits