**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 [Mechatronic](app:ds:mechatronic)[Engineering](app:ds:engineering)

（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 Course  Of 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