**土木类英文授课体系硕士培养方案**

**International Master Programme of Civil Engineering**

**1. 研究方向 Research Fields**

(1)结构工程方向 Program of Structural Engineering

(2)土木工程材料方向 Program of Civil Engineering Materials

**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** |
| **公共****学位课****Degree Courses** | GS62002 | 初级汉语口语Ⅰ | The Course of Primary Chinese Oral | 64 | 2 | 秋Autumn | 必修compulsory |
| GS62003 | 初级汉语口语Ⅱ | The Course of Primary Chinese Oral | 64 | 2 | 春Spring |
| FL62001E | 中国文化 | Chinese culture and cross-cultural communication | 32 | 2 | 春Spring |
| **学位课 Degree Courses** | **学科****基础课****Discipline Basic Courses** | SYW33001Q | 土木工程应用数学 | Applied Mathematics for Civil Engineering | 36/12 | 3 | 秋Autumn |  |
| SYW33002Q | 结构动力学 | Structural Dynamics | 48 | 3 | 秋Autumn |  |
| SYW33003Q | 材料分析测试技术 | Materials Characterization Techniques | 36/12 | 3 | 秋Autumn |  |
| SYW33006Q | 弹性力学 | Elasticity | 32 | 2 | 秋Autumn |  |
| SYW33020Q | 有限单元法 | Finite Element Methods | 32 | 2 | 秋Autumn |  |
| **学科****专业课****Discipline Specialized Courses** | SYW33004Q | 高等混凝土与砌体结构 | Advanced Concrete and Masonry Structures | 48 | 3 | 秋Autumn |  |
| SYW33005Q | 土木工程FRP符合材料 | FRPs in Civil Structures | 42/6 | 3 | 秋Autumn | 共建课 |
| SYW33007C | 高等钢结构设计 | Steel Structures- Advanced Design | 42/6 | 3 | 春Spring |  |
| SYW33008C | 高等组合结构 | Advanced Composite Structures | 44/4 | 3 | 春Spring |  |
| SYW33009C | 高等岩土工程 | Advanced Geotechnical Engineering | 48 | 3 | 春Spring |  |
| SYW33010C | 地震工程 | Earthquake Engineering | 48 | 3 | 秋Autumn |  |
| SYW33017C | 结构可靠度与风险分析 | Structural Reliability & Risk Analysis | 48 | 3 | 春Spring |  |
| **选修课****Optional****Courses** | SYW33015C | 数学建模 | Mathematical Modeling | 32 | 2 | 春Spring |  |
| SYW33016C | 结构概念与体系 | Structural Concepts and Systems | 30/2 | 2 | 秋Autumn |  |
| SYW33018C | 材料检测技术 | Materials Testing Methods | 24 | 1.5 | 春Spring |  |
| SYW33019C | 科学研究方法 | Scientific Research Methodology | 24 | 1.5 | 春Spring |  |
| **必修环节Required****Parts** | S0933XSJL | 学术交流 | Academic Communication | 16 | 1 | 春Spring |  |
| S0933KTBG | 开题报告 | Thesis Proposal | 16 | 1 | 秋Autumn |  |
| S0933ZQJC | 中期检查 | Interim Inspection | 16 | 1 | 春Spring |  |

**3. 培养规定 Regulations**

土木工程类：学位课不少于30学分，包括学科基础课9学分（3门），学科专业课15学分（5门）；专业选修课为3学分。

For master candidates specialized in **Civil Engineering：**

Degree courses for more than 30 credits, including three discipline basic courses with 9 credits and five discipline specialized courses with 15 credits, and specialized optional courses for 3 credits