



**北京理工大学**  
BEIJING INSTITUTE OF TECHNOLOGY

## **English-taught Programs for Graduates**

- ★ **Mechanical Engineering**
- ★ **Electronics Science and Technology**
- ★ **Information and Communication Engineering**
- ★ **Control Science and Engineering**
- ★ **Computer Science and Technology**
- ★ **Software Engineering**
- ★ **Chemistry**
- ★ **Chemical Engineering and Technology**
- ★ **Law**
- ★ **MBA**

## English-taught Program in Mechanical Engineering

| No. | Course Code      | Course Title  | Course Title  | Credits | Semester | Semester Time |
|-----|------------------|---------------|---|---------|----------|---------------|
| 1   | 21-080200-B21-03 | 机械振动          | Fundamentals of Mechanical System Dynamics            | 3       | 1        | September     |
| 2   | 21-080200-B19-03 | 弹塑性力学         | Elastic-Plastic Mechanics                             | 2       | 1        | September     |
| 3   | 21-080200-B23-03 | CAD/CAM/CAE技术 | Principles of CAD/CAM/CAE                             | 2       | 1        | September     |
| 4   | 21-080200-B24-03 | 机械优化设计        | Structural Design with Optimization Method            | 2       | 1        | September     |
| 5   | 21-080200-B18-03 | 现代测试技术        | Modern Measurement Technology                         | 2       | 2        | March         |
| 6   | 21-080200-B17-03 | 现代控制理论基础      | Fundamentals of Modern Control Theory                 | 3       | 2        | March         |
| 7   | 21-080200-B20-03 | 高等工程热力学与传热学   | Advanced Engineering Thermodynamics and Heat Transfer | 3       | 2        | March         |
| 8   | 21-080200-B22-03 | 有限元法原理        | Principle of Finite Element Method                    | 2       | 2        | March         |

## English-taught Program in Electronics Science and Technology

| No. | Course Code | Course Title  | Course Title                                    | Credits | Semester | SemesterTime |
|-----|-------------|---------------|---|---------|----------|--------------|
| 1   | 0500018     | 统计信号处理B       | Statistical Signal Processing B                 | 3       | 1        | September    |
| 2   | 0500020     | 医学图像处理与分析     | Medical Image Processing & Analysis             | 3       | 1        | September    |
| 3   | 0500054     | 语音信号数字处理      | Digital Speech Signal Processing                | 2       | 1        | September    |
| 4   | 0500004     | 现代天线理论与技术B    | Modern Antenna Theory and Technology B          | 2       | 2        | March        |
| 5   | 0500007     | 射频电路设计理论与应用   | RF Circuit Design Theory and Application        | 3       | 2        | March        |
| 6   | 0500014     | 超大规模集成电路设计导论  | Introduction to VLSI Design                     | 3       | 2        | March        |
| 7   | 0500016     | SOC的IP设计实现    | The IP of SOC Design Implementation             | 3       | 2        | March        |
| 8   | 0500026     | FPGA与SOPC设计基础 | Foundations of FPGA and SOPC Design             | 3       | 2        | March        |
| 9   | 0500051     | 移动通信原理与实践     | Mobile Communications Theory and Practice       | 3       | 2        | March        |
| 10  | 0500052     | 扩频通信          | Spread Spectrum Communication                   | 2       | 2        | March        |
| 11  | 0500053     | 多源数据融合理论与应用   | Multi-source Data Fusion Theory and Application | 2       | 2        | March        |

## English-taught Program in Information and Communication Engineering

| No. | Course Code | Course Title | Course Title                                       | Credits | Semester | SemesterTime |
|-----|-------------|--------------|--|---------|----------|--------------|
| 1   | 0500064     | 工程信息论        | Information Theory and Applications in Engineering | 3       | 1        | September    |
| 2   | 0500065     | 通信网络基础       | Fundamental Communication Networks                 | 3       | 1        | September    |
| 3   | 0500069     | 雷达系统导论       | Introduction to Radar Systems                      | 2       | 1        | September    |
| 4   | 0500071     | 高等数字通信       | Advanced Digital Communications                    | 2       | 1        | September    |
| 5   | 0500073     | 统计信号参数估计理论   | Statistical Signal Parameter Estimation Theory     | 2       | 1        | September    |
| 6   | 0500078     | 量子雷达原理       | Quantum Radar Principle                            | 2       | 1        | September    |
| 7   | 0500054     | 语音信号数字处理     | Digital Speech Signal Processing                   | 2       | 1        | September    |
| 8   | 0500051     | 移动通信原理与实践    | Mobile Communications Theory and Practice          | 3       | 2        | March        |
| 9   | 0500052     | 扩频通信         | Spread Spectrum Communication                      | 2       | 2        | March        |
| 10  | 0500053     | 多源数据融合理论与应用  | Multi-source Data Fusion Theory and Application    | 2       | 2        | March        |
| 11  | 0500079     | 高分辨雷达        | High Resolution Radar                              | 2       | 2        | March        |

## English-taught Program in Control Science and Engineering

| No. | Course Code | Course Title | Course Title  | Credits | Semester | SemesterTime |
|-----|-------------|--------------|---|---------|----------|--------------|
| 1   | 0600003     | 自动控制中的线性代数   | Linear Algebra with Applications in Automatic Control | 3       | 1        | September    |
| 2   | 0600006     | 随机过程理论及应用    | Stochastic Process Theory and Applications            | 3       | 1        | September    |
| 3   | 0600004     | 线性控制系统       | Linear Systems Theory                                 | 3       | 1        | September    |
| 4   | 0600010     | 系统工程原理及应用    | Systems Engineering Principles and Application        | 2       | 1        | September    |
| 5   | 0600007     | 最优与鲁棒控制      | Optimal and Robust Control                            | 3       | 2        | March        |
| 6   | 0600017     | 计算机与分布式控制系统  | Computer and Distributed Control Systems              | 2       | 2        | March        |
| 7   | 0600019     | 多源信息滤波与融合    | Multi-source Information Filtering and Fusion         | 2       | 2        | March        |

## English-taught Program in Computer Science and Technology

| No. | Course Code | Course Title | Course Title                                    | Credits | Semester | SemesterTime |
|-----|-------------|--------------|---|---------|----------|--------------|
| 1   | 0700020     | Web挖掘        | Web Mining                                      | 2       | 1        | September    |
| 2   | 0700012     | 高级操作系统       | Advanced Operating Systems                      | 3       | 1        | September    |
| 3   | 0700023     | 计算机科学与技术前沿   | Computer Science and Technology Frontier        | 3       | 1        | September    |
| 4   | 0700032     | 图像与视频处理      | Image and Video Processing                      | 2       | 1        | September    |
| 5   | 0700033     | 内容管理与数字图书馆技术 | Content Management and Digital Library          | 2       | 1        | September    |
| 6   | 0700008     | 计算理论         | Theory of Computation                           | 3       | 2        | March        |
| 7   | 0700022     | 算法与算法复杂性理论   | Theory of Algorithms and Algorithmic Complexity | 3       | 2        | March        |
| 8   | 0700030     | 社交网络分析       | Social Network Analysis                         | 2       | 2        | March        |
| 9   | 0700035     | 无线网络与移动计算    | Wireless Network and Mobile Computing           | 2       | 2        | March        |
| 10  | 0700016     | 机器学习与知识发现    | Machine Learning and Knowledge Discovery        | 2       | 2        | March        |
| 11  | 0700019     | 计算机图形与图像处理   | Computer Graphics and Image Processing          | 3       | 2        | March        |
| 12  | 0700040     | 最优化方法        | Optimization Methods                            | 2       | 2        | March        |

## English-taught Program in Software Engineering

| No. | Course Code | Course Title | Course Title                             | Credits | Semester | SemesterTime |
|-----|-------------|--------------|--|---------|----------|--------------|
| 1   | 0800019     | 云计算          | Cloud Computing                          | 2       | 1        | September    |
| 2   | 0800006     | 软件理论与工程      | Software Theory and Engineering          | 3       | 1        | September    |
| 3   | 0800005     | 软件工程前沿       | Frontiers of Software Engineering        | 1       | 1        | September    |
| 4   | 0800004     | 数理逻辑与方法      | Mathematical Logic                       | 3       | 1        | March        |
| 5   | 0800020     | 软件工程实训       | Software Engineering Training            | 2       | 2        | March        |
| 6   | 0800008     | 软件质量保障       | Software Quality Assurance               | 2       | 2        | March        |
| 7   | 0800009     | 数据科学与工程      | Data Science and Engineering             | 2       | 2        | March        |
| 8   | 0800010     | 智能科学技术       | Intelligent Science and Technology       | 2       | 2        | March        |
| 9   | 0800011     | 数字媒体技术       | Digital Media Technology and Application | 2       | 2        | March        |

## English-taught Program in Chemistry

| No. | Course Code | Course Title  | Course Title                                       | Credits | Semester | Semester Time |
|-----|-------------|---------------|--|---------|----------|---------------|
| 1   | 1900006     | X射线晶体学        | X-Ray Crystallography                              | 3       | 1        | September     |
| 2   | 1900010     | 有机波谱分析        | Spectrometric Identification of Organic Compounds  | 2       | 1        | September     |
| 3   | 1900016     | 配位化学          | Coordination Chemistry                             | 3       | 1        | September     |
| 4   | 1900017     | 固体化学与物理       | Solid State Chemistry and Physics                  | 2       | 1        | September     |
| 5   | 1900020     | 高等有机化学专题      | Advanced Topics in Organic Chemistry               | 3       | 1        | September     |
| 6   | 1900025     | 新能源技术         | New Energy Technology                              | 2       | 1        | September     |
| 7   | 1900033     | 现代色谱质谱分析方法及实验 | Modern Analytical Techniques for Mass Spectrometry | 3       | 1        | September     |
| 8   | 1900007     | 纳米科学与技术       | Nano-science and Technology                        | 2       | 2        | March         |
| 9   | 1900009     | 高等有机合成实验      | Advanced Experiment of Organic Chemistry           | 3       | 2        | March         |
| 10  | 1900013     | 电子显微分析        | Electron Microscopy                                | 2       | 2        | March         |
| 11  | 1900026     | 超分子化学         | Supramolecular Chemistry                           | 2       | 2        | March         |



## English-taught Program in Chemical Engineering and Technology

| No. | Course Code | Course Title | Course Title   | Credits | Semester | Semester Time |
|-----|-------------|--------------|--|---------|----------|---------------|
| 1   | 1000009     | 波谱分析         | Spectroscopic Analysis                                   | 2       | 1        | September     |
| 2   | 1000018     | 杂环化学及应用      | Heterocyclic Chemistry and Application                   | 2       | 1        | September     |
| 3   | 1000019     | 药物制剂与工艺      | Pharmaceutical Dosage Forms and Technology               | 2       | 1        | September     |
| 4   | 1000023     | 手性合成与药物技术    | Asymmetric Synthesis and the Pharmaceutical Applications | 2       | 1        | September     |
| 5   | 1000025     | 高等有机化学进展     | Progress in Advanced Organic Chemistry                   | 2       | 2        | March         |
| 6   | 1000028     | 金属有机化学       | Organometallic Chemistry                                 | 2       | 2        | March         |

## English-taught Program in Law

| No. | Course Code | Course Title | Course Title                                | Credits | Semester | Semester Time |
|-----|-------------|--------------|---|---------|----------|---------------|
| 1   | 2300115     | 国际法原论        | Public International Law                    | 3       | 1        | September     |
| 2   | 2300133     | 国际空间法专题      | International Space Law                     | 2       | 1        | September     |
| 3   | 2300157     | 法律文献与写作      | Legal Research and Writing                  | 1       | 1        | September     |
| 4   | 2300129     | 国际移民法        | International Immigration Law               | 2       | 1        | September     |
| 5   | 2300130     | 比较诉讼制度       | Comparative Procedural Law                  | 2       | 1        | September     |
| 6   | 2300164     | 国际经济法专题      | International Economical Law                | 3       | 2        | March         |
| 7   | 2300122     | 工业产权法前沿问题研究  | Industrial Property Rights Frontier Problem | 2       | 2        | March         |
| 8   | 2300127     | 比较合同法        | Comparative Contract Law                    | 2       | 2        | March         |
| 9   | 2300132     | 国际人权法专题      | International Human Rights Law              | 2       | 2        | March         |
| 10  | 2300121     | 著作权法前沿问题研究   | Copyright Law Frontier Problem              | 2       | 2        | March         |

## English-taught Program in MBA

| No. | Course Code | Course Title | Course Title                     | Credits | Semester | Semester Time |
|-----|-------------|--------------|----------------------------------|---------|----------|---------------|
| 1   | 2100115     | 跨文化管理        | Intercultural Management         | 2       | 1        | September     |
| 2   | 2100003     | 商务英语         | Business English                 | 3       | 1        | September     |
| 3   | 2100008     | 会计学          | Accounting                       | 2       | 1        | September     |
| 4   | 2100011     | 人力资源管理       | Human Resource Management        | 2       | 1        | September     |
| 5   | 2100005     | 管理经济学        | Managerial Economics             | 2       | 1        | September     |
| 6   | 2100012     | 战略管理         | Strategic Management             | 2       | 1        | September     |
| 7   | 2100009     | 财务管理         | Financial Management             | 2       | 1        | September     |
| 8   | 2100035     | 员工关系管理       | Employee Relationship Management | 2       | 1        | September     |
| 9   | 2100044     | 创业管理         | Entrepreneurial Management       | 2       | 1        | September     |
| 10  | 2100115     | 跨文化管理        | Intercultural Management         | 2       | 2        | March         |
| 11  | 2100010     | 市场营销管理       | Marketing Management             | 2       | 2        | March         |
| 12  | 2100013     | 管理信息系统       | Management Information System    | 2       | 2        | March         |
| 13  | 2100006     | 运作管理         | Operation Management             | 2       | 2        | March         |
| 14  | 2100007     | 管理统计学        | Managerial Statistics            | 2       | 2        | March         |
| 15  | 2100002     | 商业伦理与企业社会责任  | Business Ethics                  | 2       | 2        | March         |
| 16  | 2100015     | 管理者的领导艺术     | The Art of Managerial Leadership | 1       | 2        | March         |

|    |         |           |                                       |   |   |       |
|----|---------|-----------|---------------------------------------|---|---|-------|
| 17 | 2100014 | 创新与变革管理   | Innovation and Reformation Management | 2 | 2 | March |
| 18 | 2100025 | 能源与环境政策专题 | Clean Energy and Environment Policy   | 2 | 2 | March |
| 19 | 2100016 | 国际商务管理    | International Business Management     | 2 | 2 | March |