



北京理工大学
BEIJING INSTITUTE OF TECHNOLOGY

English Taught Programs for Undergraduates

- 1. Mechanical Engineering**
- 2. Automation**
- 3. Electronics Science and Technology**
- 4. Computer Science and Technology**
- 5. International Economics and Trade**

English-taught Program in Mechanical Engineering

No.	Course Code	Course Title	Course Title	Credits	Semester	Time	Note
1	101037333	机械工程专业导论（英文）	Introduction to Mechanical Engineering	0	1	September	
2	101031102	工程制图基础（全英文）	Engineering Graphics Fundamental	2	2	March	
3	101037302	工程制图（英文）	Engineering Graphics	4	2	March	
4	101037326	工程概论（英文）	Introduction to Engineering	1	3	September	
5	101037324	工程设计实践（英文）	Engineering Design Practice	2	3	September	
6	101037334	工程创新实践（双语）	Engineering Innovative Practice	1	3	September	
7	100033415	计算方法（英文）	Computational Methods	2	4	March	
8	101037304	机械原理（英文）	Theory of Machines and Mechanisms	3	4	March	
9	101037305	工程材料与应用（英文）	Principle and Application of Engineering materials	3	4	March	
10	101037306	热力学（英文）	Thermodynamics	3	4	March	

11	101037341	ROS系统开发与实践（英文）	Development and Practice of ROS System	1	5	September	
12	101037307	机械设计（英文）	Machine Design	3	5	September	
13	101037309	传热学（英文）	Heat Transfer	2	5	September	
14	101037310	机械振动（英文）	Mechanical Vibrations	3	5	September	
15	101037311	系统建模与仿真（英文）	Modelling and Simulation of Systems	3	5	September	
16	101037325	计算机辅助设计与工程（英文）	Computer -Aided Design and Engineering	3	5	September	
17	101037312	中国文化与跨文化交流（英文）	Chinese Culture & Cross-Cultural Communications	1	6	March	
18	101037315	控制原理与测试（英文）	Principle of Control and Instrumentation	3	6	March	
19	101037316	流体力学（英文）	Fluid Mechanics	3	6	March	
20	101037317	机械制造与装备（英文）	Manufacturing and Machine Tools	4	6	March	
21	101037318	内燃机构造与原理（英文）	Internal Combustion Engine Fundamentals	4	6	March	
22	101037319	汽车结构与设计（英文）	Automotive Structure and Design	4	6	March	

23	101037328	产品设计与开发（英文）	Product Design and Development	2	7	September	optional courses
24	101037329	动力与储能电池技术（英文）	Battery Technologies for Vehicle & Energy Storage Applications	2	7	September	optional courses
25	101037330	激光智能制造与检测（英文）	Laser-based Intelligent Manufacturing and On-line Analysis	2	7	September	optional courses
26	101037331	微纳制造前沿进展（英文）	Frontier of Micro/Nano Fabrication	2	7	September	optional courses
27	101037322	能源系统及设计（英文）	Energy System and Design	3	7	September	
28	101037320	工程管理（英文）	Engineering Management	3	7	September	
29	101037321	专业课程设计（英文）	Engineering Design Project	3	7	September	
30	101037337	工程科学计算（英文）	Scientific Computing Methods in the Realm of Engineering	2	7	September	
31	101037335	车辆排放：原理、测试与控制（英文）	Vehicle Emissions: Sources, Measurement, and Control	2	6,8	March	optional courses
32	101037336	自动驾驶深度学习（英文）	Deep Learning for Autonomous Driving	2	8	March	optional courses

English-taught Program in Automation

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time	备注
1	101062102	电路分析基础A (全英文)	Fundamentals of Electric Circuit Analysis	3.5	2	March	√
2	101062219	电路分析基础实验A (全英文)	Electric Circuit Lab	1	2	March	实验 Experiment
3	101062101	工程概论 (全英文)	Introduction to Engineering	1	3	September	停开
4	101062103	数据结构与算法设计 (全英文)	Data Structures and Algorithm Design	2	3	September	
5	101062104	模拟电子技术基础A (全英文)	Analog Electronics A	3.5	3	September	
6	100062203	模拟电子技术实验A	Analog Electronic Experiment A	0.75	3	September	实验 Experiment
7	101062106	信号分析与处理 (全英文)	Signals Analysis and Processing	3	4	March	
8	101062120	电磁场 (英文)	Engineering Electromagnetic Field	3	4	March	
9	101063108	自动控制理论 I (全英文)	Control Theory I	4	5	March	

10	101063107	数字逻辑与CPU（全英文）	Digital Logic Circuit and CPU	4	5	September	
11	100063211	自动控制理论综合实验	Control Theory Experiment	2	5	September	实验 Experiment
12	101063109	电力电子技术（全英文）	Power Electronics	3	5	September	
13	101063110	电力系统分析（全英文）	Power Systems Analysis	3	5	September	
14	101063111	自动控制理论II（全英文）	Control Theory II	3	6	March	
15	101063112	电机及控制（全英文）	Electrical Machine and Drive	5	6	March	
16	101063113	传感器与检测技术（全英文）	Sensor and Measurement Technology	2.5	6	March	
17	101063114	计算机控制系统（全英文）	Computer Controlled System	2.5	6	March	
18	101063115	概率建模与离散事件系统仿真	Probabilistic Modeling and Discrete-Event System Simulation	2	6	March	
19	101063116	卡尔曼滤波与惯性导航基础	Fundamentals of Kalman Filtering and Inertial Navigation	2	6	March	

3. English-taught Program in Electronics Science and Technology

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	101051247	电路分析基础	Fundamentals of Electric Circuit Analysis	4	2	March
2	101051220	电路与模拟电子学	Circuits and Analog Electronics	6	3	September
3	101051245	电工和电子技术I	Electrical and Electronic Technology I	3.5	3	September
4	101051221	数字电路与系统	Digital Circuits and Systems	4	4	March
5	101051246	电工和电子技术II	Electrical and Electronic Technology II	3.5	4	March
6	101052213	信号与系统	Signals and Systems	4	4	March
7	101054203	电磁场理论与微波工程	Electromagnetic Fields Theory and Microwave Engineering	4	4	March
8	101130002	半导体物理与器件	Semiconductor Physics and Devices	3	4	March
9	101058406	数据通信与网络	Data Communication and Network	2	5	September
10	101052314	数字信号处理	Digital Signal Processing	4	5	September
11	101057314	数字通信原理	Principles of Digital Communications	4	5	September
12	101056415	集成电路工程	Integrated Circuits Engineering	4	6	March

4. English-taught Program in Computer Science and Technology

No.	Course Code	Course Title	Course Title	Credits	Semester	SemesterTime
1	100076101	大数据技术导论	Introduction to Big Data Technology	2	3	September
2	100071015	数据结构与算法设计	Data Structures and Algorithms	5	3	September
3	100081042	离散数学	Discrete Mathematics	4	3	September
4	100070019	Python语言程序设计	Introduction to Programming using Python	1	3	September
5	100072103	数据库原理与设计	Database Principle and Design	3	4	March
6	100074601	计算机图形学	Computer Graphics	2	4	March
7	100072107	面向对象技术与方法	Object-Oriented Programming	2.5	4	March
8	100070103	数字逻辑基础	Fundamentals of Digital Circuits	2	4	March
9	100076204	计算机组成与体系结构	Computer Organization and Architecture	3	5	September
10	100071007	操作系统	Operating System	3	5	September
11	100085042	数据仓库与数据挖掘	Data Warehouse and Data Mining	3	5	September
12	100081063	大数据分析技术	Big Data Analytics	2	5	September
13	100086024	人工智能基础	Introduction of Artificial Intelligence	2	5	September
14	100071011	计算机网络	Computer Networks	3	6	March
15	100074320	编译原理与设计	Compiler Principles and Design	4	6	March
16	100081062	大数据处理技术	Big Data Processing Technology	2	6	March
17	100076218	数据科学与算法	Data Science and Algorithms	2	6	March
18	100074302	机器学习初步	Machine Learning Fundamentals	2	6	March
19	100081064	大数据应用算法	Big Data Application Algorithm	2	7	September

5. English-taught Program in International Economics and Trade

No.	Course Code	Course Title(in Chinese)	Course Title(in English)	Credits	Semester	Semester Time
1	101210006	中级微观经济学	Microeconomics	3	2	Spring
2	101210026	会计学基础	Fundamentals of Accounting	2	2	Spring
3	101210005	管理学原理	Principles of Management	2	2	Spring
4	101210040	商业伦理与企业社会责任	Business Ethics and Social Responsibility	2	2	Spring
5	101210311	数据库技术及应用	Database Techniques and Application	2	2	Spring
6	101210075	国际经济学I	International Economics I	2	3	Fall
7	101210025	宏观经济学	Macroeconomics	2	3	Fall
8	101210027	财务管理概论	Financial Management	2	3	Fall
9	101210038	经济法	Law for Economics	2	3	Fall
10	101210264	中级微观经济学	Intermediate Microeconomics	2	3	Fall
11	101210097	国际市场营销	International Marketing	3	4	Spring
12	101210028	应用统计学	Applied Statistics	2	4	Spring
13	101210035	货币银行学	Monetary and Banking	2	4	Spring

14	101210040	计量经济学	Econometrics	2	4	Spring
15	101210263	国际商务沟通	International Business Communication	3	4	Spring
16	101210265	中级宏观经济学	Intermediate Macroeconomics	2	4	Spring
17	101210073	跨文化管理	Intercultural Management	2	5	Spring
18	101210324	科学计量与数据分析	Scientometrics and data analytics	2	5	Fall
19	101210325	机器学习	Machine Learning	2	5	Fall
20	101210039	国际贸易实务	Practices of International Trade	2	6	Spring
21	101210082	国际商务环境	International Business Environment	2	6	Spring
22	101210083	世界经济	World Economy	2	6	Spring
23	101210270	中国经济	China Economy	2	6	Spring
24	101210078	世界贸易组织	World Trade Organization	2	6	Spring
25	101210037	国际商法	International Business Law	2	6	Spring
26	101210036	国际经济学 II	International Economics II	2	6	Spring
27	101210063	管理信息系统分析与设计	Design of Management Informa	3	6	Fall
28	101210266	中级计量经济学	Intermediate Econometrics	2	6	Spring
29	101210322	信息系统前沿	Information System Frontiers	2	6	Spring

30	101210312	大数据管理	Big Data Management	2	5	Spring
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