



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

## **English Taught Programs for Undergraduates**

- 1. Aerospace Engineering (Updated)**
- 2. Mechanical Engineering (Updated)**
- 3. Automation (Updated)**
- 4. Electronics Science and Technology (Updated)**
- 5. Computer Science and Technology (Updated)**
- 6. International Economics and Trade (Updated)**

## English-taught Program in Aeronautical and Astronautical Engineering (Updated)

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	100370022	工程热力学	An Introduction to Thermodynamics	2.5	5	Fall
2	100370023	结构力学	Structural Analysis	3.0	5	Fall
3	100370024	复合材料力学	Mechanics of Composite Materials	3.0	5	Fall
4	100370025	航天器轨道动力学	Spacecraft Orbital Dynamics	2.0	5	Fall
5	100370028	纳米科学与技术	Nano-science and Technology	2.0	6	Spring
6	100370027	优化设计原理	Optimization Design Methods	2.0	6	Spring
7		燃烧理论	Introduction to heat transfer and combustion	2.0	6	Spring
8	100370032	喷气推进	Jet Propulsion	2	7	Fall
9	100370031	飞行动力学与控制	Flight Dynamics & Control	2	7	Fall
10	102016001	飞行器制导与控制 (双语)	Flight Vehicle Guidance and Control	2.0	6	Spring

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## English-taught Program in Mechanical Engineering (Updated)

No.	Course Code	Course Title	Course Title	Credits	Semester	SemesterTime	Note
1	101037333	机械工程专业导论 (英文)	Introduction to Mechanical Engineering	0	1	September	
2	101037345	机械工程专业导论 (英文)	Introduction to Mechanical Engineering	1	1	September	张旭 Zhang Xu
3	101030110	计算机技术与编程 (全英文)	Computer Science and Programming	3	1	September	罗龙溪 Luo Longxi
4	101031102	工程制图基础 (全英文)	Engineering Graphics Fundamental	2	2	March	罗会甫 Luo Huifu
5	101037302	工程制图 (英文)	Engineering Graphics	4	2	March	罗会甫 Luo Huifu
6	101037344	工程概论与伦理 (英文)	Engineering Fundamentals and Ethics	1	3	September	伍岳 Wu Yue
7	101037324	工程设计实践 (英文)	Engineering Design Practice	2	3	September	罗会甫 Luo Huifu
8	101037334	工程创新实践 (双语)	Engineering Innovative Practice	1	3	September	李忠新 Li Zhongxin
9	101037327	复变函数与积分变换 (全英文)	Complex Variables and Integral Transform	2	3	September	梅冰昂 Mei Bing'ang

10	100033415	计算方法 (英文)	Computational Methods	2	4	March	白影春 Bai Yingchun
11	101037304	机械原理 (英文)	Theory of Machines and Mechanisms	3	4	March	王晓力 Wang Xiaoli
12	101037305	工程材料与应用 (英文)	Principle and Application of Engineering materials	3	4	March	孙娜 Sun Na
13	101037306	热力学 (英文)	Thermodynamics	3	4	March	郑宏飞, 马兴龙 Zheng Hongfei, Ma Xinglong
14	101037341	ROS系统开发与实践 (英文)	Development and Practice of ROS System	1	5	September	张旭东 Zhang Xudong
15	101037307	机械设计 (英文)	Machine Design	3	5	September	梁鹤 Liang He
16	101037309	传热学 (英文)	Hear Transfer	2	5	September	刘淑丽 Liu shuli
17	101037310	机械振动 (英文)	Mechanical Vibrations	3	5	September	冯慧华 Feng Huihua
18	101037311	系统建模与仿真 (英文)	Modelling and Simulation of Systems	3	5	September	邹渊 Zou Yuan
19	101037325	计算机辅助设计与工程 (英文)	Computer -Aided Design and Engineering	3	5	September	张旭 Zhang Xu
20	101037312	中国文化与跨文化交流 (英文)	Chinese Culture & Cross-Cultural Communications	1	6	March	李娜 Lena

21	101037315	控制原理与测试 (英文)	Principle of Control and Instrumentation	3	6	March	黄杰 Huang Jie
22	101037316	流体力学 (英文)	Fluid Mechanics	3	6	March	张敏弟, 章振宇 Zhang Mindi, Zhang Zhenyu
23	101037317	机械制造与装备 (英文)	Manufacturing and Machine Tools	4	6	March	解丽静, 张雨甜 Xie Lijing, Zhang Yutian
24	101037318	内燃机构造与原理 (英文)	Internal Combustion Engine Fundamentals	4	6	March	刘波澜, 王恩华 Liu Bolan, Wang Enhua
25	101037319	汽车结构与设计 (英文)	Automotive Structure and Design	4	6	March	刘海鸥, 王博洋 Liu Haiou, Wang boyang
26	101037328	产品设计与开发 (英文)	Product Design and Development	2	7	September	张旭 Zhang Xu
27	101037329	动力与储能电池技术 (英文)	Battery Technologies for Vehicle & Energy Storage Applications	2	7	September	杨晓光 Yang Xiaoguang
28	101037322	能源系统及设计 (英文)	Energy System and Design	3	7	September	贾博儒 Jia Boru
29	101037320	工程管理 (英文)	Engineering Management	3	7	September	宫琳 Gong Lin
30	101037321	专业课程设计 (英文)	Engineering Design Project	3	7	September	张旭 Zhang Xu
31	101037337	工程科学计算 (英文)	Scientific Computig Methods in the Realm of Engineering	2	7	September	吉鹏飞 Ji Pengfei

32	101037338	电池与电池管理系统基础 (英文)	Battery Management Systems for Electric Vehicle	2	7	September	林倪 Lin Ni
33	101037339	脑机接口(英文)	Brain Computer Interface	2	7	September	ABERHAM GENETU FELEKE
34	101037335	车辆排放: 原理、测试与控制 (英文)	Vehicle Emissions: Sources, Measurement, and Control	2	7	September	王欣 Wang Xin
35	101037336	自动驾驶深度学习 (英文)	Deep Learning for Autonomous Driving	2	8	March	蒋朝阳, 李颖 Jiang Chaoyang, Li Ying

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## English-taught Program in Automation

No.	Course Code	Course Title	Course Title	Credits	Semester
1	101062120	电磁场 (英文)	Engineering Electromagnetic Field	3	Spring
2	101063108	自动控制理论 I (英文)	Control Theory I	4	Spring
3	101063114	计算机控制系统 (英文)	Computer Controlled System	2.5	Spring
4	101063112	电机及控制 (英文)	Electrical Machine and Drive	5	Spring
5	101063113	传感器与检测技术 (英文)	Sensor and Measurement Technology	2.5	Spring
6	101063115	概率建模与离散事件系统仿真	Probabilistic Modeling and Discrete-Event System Simulation	2	Spring
7	101063116	卡尔曼滤波与惯性导航基础	Fundamentals of Kalman Filtering and Inertial Navigation	2	Spring
8	101062102	电路分析基础A(英文)	Fundamentals of Electric Circuit Analysis	3.5	Spring
9	101062219	电路分析基础实验A (英文)	Electric Circuit Lab	1	Spring

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## English-taught Program in Electronics Science and Technology (Updated)

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	101130006	集成电路与微纳芯片技术导论 (全英文)	Introduction to Integrated Circuits, Microsystems and Nanotechnology	2	1	September
2	101051220	电路与模拟电子学 (全英文)	Circuits and Analog Electronics	6	3	September
3	101051221	数字电路与系统 (全英文)	Digital Circuits and Systems	4	4	March
4	101052213	信号与系统 (全英文)	Signals and Systems	4	4	March
5	101054203	电磁场理论与微波工程 (全英文)	Electromagnetic Fields Theory and Microwave Engineering	4	4	March
6	101130002	半导体物理与器件 (全英文)	Semiconductor Physics and Devices	3	4	March
7	102130001	电子通信电路 (双语)	Electronic Communication Circuits	2	4	March
8	101130004	光电子学导论 (全英文)	Introduction to Optoelectronics	3	5	September
9	101130005	纳米电子器件 (全英文)	Nanoelectronics Devices	3	5	September
10	101056415	集成电路工程 (全英文)	Integrated Circuits Engineering(English)	4	5	September
11	101130001	MEMS与传感器 (全英文)	MEMS and Sensors	2	6	March
12	102130002	嵌入式系统原理与设计 (双语)	Principle and Design of Embedded System	4	6	March
13	102130003	微纳制造工艺 (双语)	Micro-Nano Fabrication Process	3	6	March
14	102130004	集成电路制造技术 (双语)	Micro-Nano Manufacturing Technology	2	6	March

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## English-taught Program in Computer Science and Technology (Updated)

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	100076213	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	100081004	数字逻辑基础	Fundamentals of Digital Circuits	2	4	March
9	100081052	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	100076226	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	3	6	March
16	101081062	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

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English-taught Program in International Economics and Trade (Updated)						
No.	Course Code	Course Title (in Chinese)	Course Title (in English)	Credits	Semester	Semester Time
1	101210026	会计学基础	Fundamentals of Accounting	2	2	March
2	101210005	管理学原理	Principles of Management	2	2	March
3	101210260	国际经济学(I)	International Economics	2	3	September
4	101210264	中级微观经济学	Intermediate Microeconomics	2	3	September
5	101210025	宏观经济学	Macroeconomics	2	3	September
6	101210027	财务管理概论	Introduction to Financial Management	2	3	September
7	101210263	国际商务沟通	International Business Communication	3	4	March
8	101210310	应用统计学	Applied Statistics	3	4	March
9	101210040	计量经济学	Econometrics	2	4	March
10	101210265	中级宏观经济学	Intermediate Macroeconomics	2	4	March
11	101210097	国际市场营销	International Marketing	3	4	March
12	101210261	国际经济学 (II)	International Economics (I)	2	4	March
13	101210218	创新与创业管理	Innovation and Entrepreneurial Management	2	6	March
14	101210035	货币银行学	Monetary Banking	2	6	March
15	101210266	中级计量经济学	Intermediate Econometrics	2	6	March
16	101210037	国际商法	International Business Law	2	6	March
17	101210384	数字贸易学	Digital Trade	2	6	March
18	101210083	世界经济	World Economy	2	6	March
19	101210084	证券投资学	Securities Investment	2	6	March
20	101210387	数字金融导论	Introduction of Digital Finance	2	6	March
21	101210270	中国经济	China Economy	2	6	March
22	100210266	时间序列分析	Time Series Analysis	2	6	March

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