



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

## English Taught Programs for Graduates

1. **Aeronautics & Astronautics Science and Technology (Updated)**
2. **Mechanical Engineering (Updated)**
3. **Information and Communication Engineering (Updated)**
4. **Electronics Science and Technology (Updated)**
5. **Control Science and Engineering (Updated)**
6. **Computer Science and Technology (No updates yet, 2026 Spring Version)**
7. **Cyberspace Science and Technology (Updated)**
8. **Chemistry (Updated)**
9. **Chemical Engineering and Technology (Updated)**
10. **MBA (Updated)**
11. **Law (No updates yet, 2026 Spring Version)**
12. **Design (Updated)**

## English-taught Program in Aeronautics & Astronautics Science and Technology (Updated)

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	101005	控制理论	Control Theory	2	1	September
2	101006	轨道力学	Orbital Mechanics	3	1	September
3	101003	宇航推进原理	Fundamentals of Aerospace Propulsion	3	1	September
4	101004	飞行器制导与控制理论	Guidance and Control Theory for Flight Vehicle	2	1	September
5	101015	流体力学	Fluid Mechanics	3	2	March
6	101016	航天器姿态分析力学与非线性控制	Analytical Mechanics and Nonlinear Control for Spacecraft Attitude	2	2	March
7	101017	网络系统的协同控制及其应用	Cooperative Control over Networked Systems and its Applications	2	2	March
8	101018	现代飞行器布局设计	Modern Aircraft Configuration Design	2	2	March
9	101011	燃烧不稳定性概论	Introduction of Combustion Instability	2	2	March
10	101019	无人智群导论	Introduction to Unmanned Intelligent Swarm	2	2	March

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

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time	Level
1	0301003	(英) 高等机械振动	Advanced Mechanical Vibration	3	1	September	Master
2	0301008	(英) 弹性力学	Elasticity	2	1	September	Master
3	0301009	(英) 结构优化方法	Structural Optimization Method	2	1	September	Master
4	0301012	(英) CAD/CAM/CAE原理及工程应用	Principle and Application of CAD/CAM/CAE	2	1	September	Master
5	0301019	(英) 模型预测控制	Model Predictive Control and Applications	2	1	September	Master
6	0301006	(英) 先进控制工程	Advanced Control Engineering	2	1	September	Ph.D
7	0301007	(英) 机械结构疲劳与寿命设计	Fatigue Life Design of Mechanical Structure	2	1	September	Ph.D
8	0301014	(英) 切削理论与先进制造基础	Cutting Theory and Advanced Machining Processes	2	1	September	Ph.D
9	0301002	(英) 现代控制理论基础	Fundamentals of Modern Control Theory	3	2	March	Master
10	0301004	(英) 高等工程热力学和传热学	Advanced Engineering Thermodynamics and Heat Transfer	3	2	March	Master
11	0301010	(英) 现代测试技术	Modern Measurement Technology	2	2	March	Master

12	0301011	(英) 有限元原理	Principle of Finite Element Method	2	2	March	Master
13	0301015	(英) 现代车辆先进技术	Advanced Technology of Modern Vehicle	2	2	March	Master
14	0301016	(英) 节能和新能源车辆技术	Energy-saving and New Energy Vehicle Technology	2	2	March	Master
15	0301017	(英) 智能车辆机器学习技术	Learning-based Intelligent Vehicle Technology	3	2	March	Master
16	0301005	(英) 计算流体力学	Computational Fluid Dynamics	2	2	March	Ph.D
17	0301013	(英) 工程管理	Engineering Management	2	2	March	Ph.D
18	0301015	(英) 现代车辆先进技术	Advanced Technology of Modern Vehicle	2	2	March	Ph.D

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## English-taught Program in Information and Communication Engineering (Updated)

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	0501001	统计信号处理基础	Fundamentals of Statistical Signal Processing	2	1	September
2	0501003	雷达系统导论	Introduction to Radar Systems	2	1	September
3	0501024	微波光子学	Microwave Photonics	2	1	September
4	0501007	先进光纤通信系统	Advanced Optical Fiber Communication System	2	1	September
5	0501014	高等数字通信	Advanced Digital Communications	2	1	September
6	0501012	语音信号数字处理	Digital Speech Signal Processing	2	1	September
7	0501002	信息论	Information Theory	2	1	September
8	0501021	概率、随机过程和随机几何及其应用	Probability, Random Process and Stochastic Geometry in Engineering	2	1	September
9	0501027	新型太赫兹通信技术	Novel Terahertz Communication Technologies	2	1	September
10	0501028	计算成像与感知	Computational Imaging and Sensing	2	1	September
11	0501029	数值分析	Numerical Analysis	2	1	September
12	0501005	射频电路设计理论与应用	RF circuit design theory and Application	2	1	September

13	0501011	多源数据融合理论与应用	Multisensor Data Fusion : Principle &Practice	2	2	March
14	0501009	FPGA与SoPC设计基础	Foundations of FPGA and SoPC Design	2	2	March
15	0501020	移动通信	Mobile Communications	2	2	March
16	0501013	通信网络基础	Fundamental Communication Networks	2	2	March
17	0501004	现代天线理论与技术	Modern Antenna Theory and Technology	2	2	March
18	0501022	医学图像处理与人工智能	Image Processing and Artificial Intelligence	2	2	March
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## English-taught Program in Electronic Science and Technology (Updated)

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	0501005	(英) 射频电路设计理论与应用	RF circuit design theory and Application	2	1	September
2	1301004	(英) MEMS原理	Fundamentals of MEMS Transducers	2	1	September
3	1301006	(英) 纳米电子器件及应用	Nanoelectronics devices and applications	2	1	September
4	1301021	(英) 微波遥感与信道建模	Radar remote sensing and channel modeling	2	1	September
5	1301028	(英) 生物光子学	Introduction to Biophotonics	2	1	September
6	1301066	(英) 量子材料基础	Fundamentals of Quantum Materials	2	1	September
7	0501004	(英) 现代天线理论与技术	Modern Antenna Theory and Technology	2	2	March
8	1301026	(英) MEMS设计	MEMS Design	2	2	March
9	1301054	(英) 双偏振雷达气象学	Weather radar polarimetry	2	2	March
10	1301062	(英) 生物MEMS	BioMEMS	2	2	March

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## English-taught Program in Control Science and Engineering (Updated)

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	601001	自动控制中的线性代数	Linear Algebra with Applications in Automatic Control	3	1	September
2	601003	随机过程理论及应用	Stochastic Process Theory and Applications	2	1	September
3	601002	线性系统理论	Linear Systems Theory	3	1	September
4	601007	系统工程原理及应用	Systems Engineering Principles and Application	2	1	September
5	601004	最优与鲁棒控制	Optimal and Robust Control	2	2	March
6	601005	计算机与分布式控制系统	Computer and Distributed Control Systems	2	2	March
7	601006	多源信息滤波与融合	Kalman Filter and Multisensor Data Fusion	2	2	March
8	601008	现代电力电子学	Modern Power Electronics	2	2	March
9	601011	智能制造系统建模与仿真	Modeling and Simulation of Intelligent Manufacturing System	2	2	March
10	601009	博弈论与控制	Game Theory and Control	2	2	March

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## English-taught Program in Computer Science and Technology

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	0701006	Web挖掘	Web Mining	2	1	September
2	0701003	高级操作系统	Advanced Operating Systems	2	1	September
3	0701014	高级计算机网络	Advanced Computer Network	2	1	September
4	0701010	内容管理与数字图书馆技术	Content Management and Digital Library	2	1	September
5	0701007	算法与算法复杂性理论	Theory of Algorithms and Algorithmic Complexity	2	2	March
6	0701002	计算理论	Theory of Computation	2	2	March
7	0701008	社交网络分析	Social Network Analysis	2	2	March
8	0701011	无线网络与移动计算	Wireless Network and Mobile Computing	2	2	March

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

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	1201004	物联网安全	Internet of Things Security	2	1	September
2	1201005	网络空间安全导论	Introduction to Cybersecurity	2	1	September
3	1201008	移动互联网安全与隐私保护	Mobile Internet Security and Privacy Protection	2	1	September
4	1201009	后量子密码	Post-Quantum Cryptography	2	1	September
5	1201002	移动通信安全理论与技术	Mobile Communications: Threats and Countermeasures	2	2	March
6	1201010	(英) 人工智能安全与伦理	Artificial Intelligence Security and Ethics	2	1	September

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## English-taguht Program in Chemistry (Updated)

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	1001003	新能源技术	New Energy Technology	2	1	September
2	1001017	配位化学	Coordination Chemistry	2	1	September
3	1001018	X射线晶体学	X-Ray Crystallography	2	1	September
4	1001021	能源应用当中的多相催化	Heterogeneous Catalysis for Energy Applications	2	1	September
5	1001023	碳中和化工技术	Carbon Neutral Chemical Technology	2	1	September
6	1001006	有机波谱分析	Spectrometric Identification of Organic Compounds	2	2	March
7	1001007	超分子化学	Supramolecular Chemistry	2	2	March
8	1001026	材料科学与工程基础	Fundamentals of Materials Science and Engineering	2	2	March

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## English-taught Program in Chemical Engineering and Technology (Updated)

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	1001006	有机波谱分析	Spectrometric Identification of Organic Compound	2	2	September
2	1001012	药物制剂与工艺	Pharmaceutical Dosage Forms and Technology	2	1	September
3	1001014	药物分子设计	Drug Design	2	1	September
4	1001017	配位化学	Coordination Chemistry	2	1	September
5	1001018	X 射线晶体学	X-Ray Crystallography	2	1	September
6	1001021	能源应用当中的多相催化	Heterogeneous Catalysis For Energy Applications	2	1	September
7	1001023	碳中和化工技术	Carbon Neutral Chemical Technology	2	1	September
8	1001011	化学生物学	Chemical Biology	2	2	March
9	1001013	合成生物技术	Synthetic Biotechnology	2	2	March
10	1001026	材料科学与工程基础	Fundamentals of Materials Science and Engineering	2	2	March

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## English-taught Program in MBA (Updated)

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	3701007	商业伦理与企业社会责任	Business Ethics and Corporate Social Responsibility	2	1	September
2	2101019	管理经济学	Managerial Economics	2	1	September
3	2101023	战略管理（专硕）	Strategic Management(For Professional Degree)	2	1	September
4	2101021	会计学	Accounting	2	1	September
5	2101025	财务管理	Financial Management	2	1	September
6	2101020	运作管理	Operation Management	2	1	September
7	2101039	组织行为学	Organizational Behavior	2	1	September
8	2101054	消费者行为学	Consumer Behavior	2	1	September
9	2101024	管理统计学	Managerial Statistics	2	2	March
10	2101026	市场营销管理	Marketing Management	2	2	March
11	2101022	人力资源管理	Human Resource Management	2	2	March
12	2101027	管理信息系统	Management Information System	2	2	March
13	2101055	国际商务谈判	International Business Negotiation	2	2	March

14	2101056	能源与经济	Energy and Economy	2	2	March
15	2101030	国际商法	International Business Law	2	2	March
16	2101036	创新与变革管理	Innovation & Revolution Management	2	2	March
17	2101041	国际金融	International Finance	2	2	March

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## English-taught Program in Law

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	2301006	国际移民法	International Immigration Law	2	1	September
2	2301013	航空航天法专题研究	Specific Issues on Aerospace Law	2	1	September
3	2301012	刑事诉讼制度比较	Comparative Criminal Procedure Law	2	1	September
4	2301014	国际法与比较法前沿	Frontier of International and Comparative Law	2	2	March
5	2301001	国际法原论	Principles of Public International Law	2	2	March
6	2301004	国际经济法研究	International Economic Law	2	2	March
7	2301015	工业产权法前沿问题	Industrial Property Law Frontier Issues	2	2	March
8	2301007	比较合同法	Comparative Contract Law	2	2	March
9	2301010	国际组织法专题	Law of International Organizations	2	2	March

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## English-taught Program in Design (Updated)

No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	2500113	数字媒体与交互叙事研究	Digital Media and Interactive Narrative Studies	2	2	March
2	2500114	当代艺术的实践与应用	Contemporary Art: Practice and Application	2	2	March
3	2500115	健康空间设计	Health space design	2	2	March
4	2500124	中国古典园林	Chinese Classical Garden	2	2	March
5	2501001	(英) 色彩设计与研究	Colour Design and Research	2	2	March

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