



北京理工大学

BEIJING INSTITUTE OF TECHNOLOGY

English Taught Programs for Undergraduates

- ★ Mechanical Engineering
- ★ Electrical Engineering
- ★ Electronic Engineering
- ★ Computer Science and Technology
- ★ Industrial Design
- ★ Economics

English-taught Program in Mechanical Engineering

No.	Course Code	Course Name	Course Name	Credits	Semester	Semester Time
1	COM08075	计算机技术与编程 (英文)	Computer Science and Programming	3	1	September
2	MAC03227	工程制图I (英文)	Engineering Graphics I	3	1	September
3	PHY18005	大学物理 I (英文)	General Physics I	4	2	March
4	MAC03229	工程概论 (英文)	Introduction to Engineering	1	2	March
5	MAC03228	工程制图 II (英文)	Engineering Graphics II	2	2	March
6	PHY18004	大学物理 II (英文)	General Physics II	4	3	September
7	MEC03238	机械原理 (英文)	Theory of Machines and Mechanisms	3	4	March
8	MEC01300	材料力学 (英文)	Mechanics of Materials	3.5	4	March
9	MEC03249	机械设计 (英文)	Machine Design	3	5	September
10	MEC03250	热力学与传热学 (英文)	Thermodynamics and Heat Transfer	4	5	September
11	MEC03251	系统建模与仿真 (英文)	Modeling and Simulation of Systems	2.5	5	September
12	MAC03247	科学研究与写作 (英文)	Research Methods and Academic Writing	1	5	September
13	MEC03252	中国文化与跨文化交流 (英文)	Chinese Culture & Cross-Cultural Communications	1	5	September
14	MEC03255	嵌入式系统开发 (英文)	Embedded Control System Design	1.5	5	September
15	MEC03233	流体力学 (英文)	Fluid Mechanics	3	6	March
16	MEC03336	机械制造与装备 (英文)	Manufacturing and Machine Tools	4	6	March

17	MEC03335	汽车结构与设计（英文）	Automotive Structure and Design	4	6	March
18	MEC03333	机械工程中的计算机技术（英文）	Computer Technology in Mechanical Engineering	2.5	6	March
19	MEC03332	控制原理与测试（英文）	Principle of Control and Instrumentation	3	6	March
20	MEC03339	工程管理（英文）	Engineering Management	2.5	6	March
21	ME3037	内燃机结构与设计（英文）	Internal Combustion Engine Fundamentals	4	7	September
22	ME3034	能源系统及设计（英文）	Energy System and Design	3	7	September

English-taught Program in Electrical Engineering

No.	Course Code	Course Name	Course Name	Credits	Semester	Semester Time
1	MAC03230	工程制图基础 (英文)	Fundamentals of Engineering Drawing	2	1	September
2	COM08075	计算机技术与编程 (英文)	Computing Science and Programming	3	1	September
3	PHY18003	大学物理 I (英文)	General Physics I	4	2	March
4	MAC03229	工程概论 (英文)	Introduction to Engineering	1	2	March
5	AUT06079	电路分析基础A (英文)	Fundamentals of Electric Circuit Analysis	4.5	2	March
6	AUT06080	电路分析实验A (英文)	Experiment in Electric Circuit	1	2	March
7	PHY18004	大学物理 II (英文)	General Physics II	4	3	September
8	COM06091	数据结构与算法设计 (英文)	Data Structures and Algorithm Design	2.5	3	September
9	COM06092	C++ 语言程序设计 (英文)	C++ Programming	1	3	September
10	MEC01035	工程力学B (英文)	Engineering Mechanics B	4	4	March
11	AUT06081	信号与系统B (英文)	Signals and Systems	3	4	March
12	ELC06085	数字逻辑与CPU (英文)	Digital Logic Circuit and CPU	4	5	September
13	AUT06086	自动控制理论 I (英文)	Control Theory I	4	5	September
14	AUT06090	电力电子技术 (英文)	Power Electronics	3	5	September
15	AUT06091	研究与科技论文写作(英文)	Research and Academic Writing	1	5	September
16	AUT06092	电力系统分析 (英文)	Power Systems Analysis	3	5	March

17	AUT06087	自动控制理论 II (英文)	Control Theory II	3	6	March
18	AUT06095	传感器与检测技术(英文)	Sensor and Measurement Technology	2.5	6	March
19	AUT06094	电机及控制 (英文)	Electrical Machine and Drive	5	6	March
20	21-081100-B05-06	最优与鲁棒控制 (英文)	Optimal and Robust Control	2	6	March
21	21-081100-c09-06	滤波理论及应用(英文)	Kalman Filtering with Applications	2	6	March
22	AUT06011	决策支持系统 (英文)	Decision Support System	2	7	September
23	AUT06010	计算机控制系统 (英文)	Computer Controlled System	2.5	7	September
24	AUT06012	机器人控制技术 (英文)	Technology of Robotic Control	2	7	September
25	21-081100-B01-06	自动控制中的线性代数 (英文)	Linear Algebra in Automatic Control	2	7	September
26	21-081100-B02-06	线性系统理论 (英文)	Linear System Theory	2	7	September
27	21-081100-B03-06	随机过程理论及应用 (英文)	Stochastic Process with Applications	2	7	September

English-taught Program in Electronic Engineering

No.	Course Code	Course Name	Course Name	Credits	Semester	Semester Time
1	COM08075	计算机技术与编程 (英文)	Computing Technology and Programming	3	1	September
2	MAC03230	工程制图基础 (英文)	Fundamentals of Engineering Drawing	2	1	September
3	INF05199	电子工艺实践 (英文)	Practice in Electronic Technology	1.5	1	September
4	PHY18005	大学物理 I (英文)	College Physics I	4	2	March
5	PHY18004	大学物理 II (英文)	College Physics II	4	3	September
6	MAC03229	工程概论 (英文)	Introduction to Engineering	1	3	September
7	ELC05185	电路分析基础 (英文)	Fundamentals of Electric Circuit Analysis	3.5	3	September
8	ELC05186	电路分析实验 (英文)	Experiments in Electric Circuit Analysis	1	3	September
9	ELC05187/8	电子实习 (英文) (I ~ II)	Practice in Electronics (I~II)	2	3	September
10	INF05170	算法与数据结构 (英文)	Algorithm and Data Structure	2	4	March
11	INF05200	信号与系统 (英文)	Signals and Systems	3.5	4	March
12	ELC05175	模拟电路基础 (英文)	Fundamentals of Analog Circuits	3.5	4	March
13	ELC05174	模拟电路实验 (英文)	Experiments in Analog Circuits	1.5	4	March
14	INF05201	信号与系统实验 (全英文)	Lab of Signals and Systems	1	5	September
15	ELC05176	数字电路 (英文)	Digital Electronics	3.5	5	September
16	ELC05179	数字系统设计与实验 (英文)	Digital System Design and Experiment	2	5	September

17	ELC05177	电磁场理论与微波工程（英文）	Theory of Electromagnetic Fields and Microwave Engineering	4	5	September
18	ELC05180	数字信号处理（英文）	Digital Signal Processing	3	5	September
19	ELC05181	通信电路（英文）	Communication Circuit	3	5	September
20	ELC05182	通信电路实验（英文）	Experiments in Communication Circuit	1	5	September
21	ELC05184	研究与科技论文写作（英文）	Research and Academic Writing	1	5	September
22	ELC05183	课程设计（英文） I	Project I	3	5	September
23	INF05197	课程设计（英文） II	Project II	1	5	September
24	INF05198	课程设计（英文） III	Project III	1	5	September
25	ELC05178	控制理论基础（英文）	Fundamentals of Control Theory	3	6	March
26	INF05191	随机信号分析（英文）	Random Signal Analysis	3	6	March
27	INF05192	数字通信原理（英文）	Principles of Digital Communication	4	6	March
28	COM05115	计算机原理与应用（英文）	Computer Principle and Application	3.5	6	March
29	INF05193	数据通信与网络（英文）	Data Communication and Networking	2	6	March
30	INF05194	半导体物理与器件建模（英文）	Semiconductor Physics and Device Modeling	3	6	March
31	INF05196	超大规模集成电路设计（英文）	VLSI Design	4	7	September
32	INF05195	模拟集成电路分析与设计基础（全英文）	Analysis and Design Basics of Analog Integrated Circuit	4	7	September

English-taught Program in Computer Science and Technology

No.	Course Code	Course Name	Course Name	Credits	Semester	Semester Time
1		汉语	Chinese	3	5	September
2		中国概况	Overview of China	2	5	September
3	MTH07065	组合数学	Combinatorics	3	5	September
4	COM07019	操作系统实践	Practice of Operating System Principles	3	5	September
5	COM07062	无线网络技术及应用	Wireless Networks and Applications	3	5	September
6		汉语	Chinese	3	6	March
7	COM07058	网络技术实践	Experiment of Networking Technology	2	6	March
8	COM07017	编译原理	Compiler Principles and Design	5	6	March
9	COM07043	人工智能基础	Introduction to Artificial Intelligence	3	6	March
10	COM07057	图像处理技术	Digital Image Processing	3	6	March
11	COM07047	软件工程基础	Fundamentals of Software Engineering	4	7	September
12	COM07020	多媒体技术	Multimedia Technology	3	7	September
13	COM07027	计算机图形学	Computer Graphics	3	7	September
14	COM07041	模式识别与计算机视觉	Pattern Recognition & Computer Vision	3	7	September

English-taught Program in Industrial Design

No.	Course Name	Course Name	Credits	Semester	SemesterTime
1	交互设计实践	Interaction Design Practice	4	5	September
2	交互设计理念	Interaction Design Concept	1	5	September
3	开源硬件应用	Application of Open Source Hardware	3	5	September
4	设计心理分析	Design of Psychological Analysis	3	5	September
5	Solidworks+3D打印	Solidworks+3D Print	3	5	September
6	整合设计实践	Integrated Design Practice	4	6	March
7	整合设计理念	Integrated Design Concept	1	6	March
8	设计调研	Design Research	3	6	March
9	陶瓷工艺设计	Ceramic Process Design	3	6	March
10	广告招贴设计	Advertising Poster Design	3	6	March
11	企业实践设计	The Design of Enterprise Oriented	1	7	September
12	产品设计	Product Design Strategy	4	7	September
13	店面设计	Store Design	3	7	September
14	珠宝设计	Jewelry Design	3	7	September
15	考察实践	Study Trip	3	7	September

English-taught Program in Economics

No.	Course Name	Course Name	Credits	Semester	SemesterTime
1	社会学	Introduction to Sociology	4	1	September
2	现代科学技术概论	Introduction to Modern Sciene and Technology	2	1	September
3	经济学原理I和经济学原理II	Priciples of Economics I & II	4	2	March
4	微观经济学	Microeconomics	3	3	September
5	应用统计学	Applied Statistics	3	3	September
6	国际金融	International Finance	3	3	September
7	计量经济学	Econometrics	3	4	March