English Taught Programs for Undergraduates

1. Aerospace Engineering √
2. Mechanical Engineering √
3. Automation √
4. Electronics Science and Technology √
5. Computer Science and Technology √
6. Materials Science and Engineering √
7. International Economics and Trade √

English-taught Program in Aeronautical and Astronautical Engineering						
No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	100370022.0	工程热力学	An Introduction to Thermodynamics	2.5	5.0	Spring
2	100370033.0	飞行器结构力学基础	Fundamentals of aircraft structural mechanics	3.0	5.0	Fall
3	100370024.0	复合材料力学	Mechanics of Composite Materials	3.0	5.0	Fall
4	100370025.0	航天器轨道动力学	Spacecraft Orbital Dynamics	2.0	5.0	Fall
5	新开课	航天工程概论	Introduction to Aerospace Engineering	2.0	5.0	Spring
6	100370027	优化设计原理	Optimization Design Methods	2.0	6	Spring
7	100370026	传热与燃烧学导论	Introduction to heat transfer and combustion	2.0	6	Spring
8	100370032	喷气推进	Jet Propulsion	2	7	Fall
9	100017013	结构动力学基础	Fundamentals of Structural Dynamics	2	6	Spring
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							
No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time	Note
1	MHE11003	机械工程专业导论（英文）	Introduction to Mechanical Engineering	1	1	September	张旭 Zhang Xu
2	MHE11004	计算机技术与编程（全英文）	Computer Science and Programming	3	2	March	罗龙溪 Luo Longxi
3	MHE11001	工程制图基础（全英文）	Engineering Graphics Fundamental	2	2	March	罗会甫 Luo Huifu
4	MHE11002	工程制图（英文）	Engineering Graphics	4	2	March	罗会甫 Luo Huifu
5	MHE21720	工程概论与伦理（英文）	Engineering Fundamentals and Ethics	1	3	September	伍岳 Wu Yue
6	MHE21711	工程设计实践（英文）	Engineering Design Practice	2	3	September	罗会甫 Luo Huifu
7	MHE22721	工程创新实践（双语）	Engineering Innovative Practice	1	3	September	李忠新 Li Zhongxin
8	MHE21713	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
9	100033415	计算方法（英文）	Computational Methods	2	4	March	白影春 Bai Yingchun
10	101037304	机械原理（英文）	Theory of Machines and Mechanisms	3	4	March	王晓力 Wang Xiaoli
11	101037305	工程材料与应用（英文）	Principle and Application of Engineering materials	3	4	March	孙娜 Sun Na
12	101037306	热力学（英文）	Thermodynamics	3	4	March	郑宏飞，田冉 Zheng Hongfei, Tian Ran
13	101037307	机械设计（英文）	Machine Design	3	5	September	张更新 Zhang Gengxin
14	101037309	传热学（英文）	Hear Transfer	2	5	September	刘淑丽 Liu shuli
15	101037310	机械振动（英文）	Mechanical Vibrations	3	5	September	冯慧华 Feng Huihua
16	101037311	系统建模与仿真（英文）	Modelling and Simulation of Systems	3	5	September	邹渊 Zou Yuan
17	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

18	101037312	中国文化与 跨文化交流（英文）	Chinese Culture & Cross-Cultural Communications	1	6	March	李娜 Lena
19	101037315	控制原理与测试（英文）	Principle of Control and Instrumentation	3	6	March	黄杰 Huang Jie
20	101037316	流体力学（英文）	Fluid Mechanics	3	6	March	张敏弟，段占春 Zhang Mindi, Duan Zhanchun
21	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
22	101037318	内燃机构造与原理（英文）	Internal Combustion Engine Fundamentals	4	6	March	刘波澜，谭建伟，王恩华 Liu Bolan, Tan Jianwei, Wang Enhua
23	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
24	101037328	产品设计与开发（英文）	Product Design and Development	2	7	September	张旭 Zhang Xu
25	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
26	101037322	能源系统及设计（英文）	Energy System and Design	3	7	September	贾博儒 Jia Boru
27	101037320	工程管理（英文）	Engineering Management	3	7	September	满佳宁 Man Jianing
28	101037321	专业课程设计（英文）	Engineering Design Project	3	7	September	张旭 Zhang Xu
29	101037337	工程科学计算（英文）	Scientific Computig Methods in the Realm of Engineering	2	7	September	吉鹏飞，朱家宁 Ji Pengfei, Zhu Jianing
30	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
31	101037339	脑机接口(英文)	Brain Computer Interface	2	7	September	ABERHAM GENETU FELEKE
32	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
33	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	101063116	卡尔曼滤波与惯性导航基础	Fundamentals of Kalman Filtering and Inertial Navigation	2	Spring
7	101062102	电路分析基础A(英文)	Fundamentals of Electric Circuit Analysis	3.5	Spring
8	101062219	电路分析基础实验A（英文）	Electric Circuit Lab	1	Spring
9	101062103	数据结构与算法设计（英文）	Data Structures and Algorithm Design	2	Fall
10	101062104	模拟电子技术基础A （英文）	Fundamentals of Analog Electronic Technology A	3.5	Fall
11	101062106	信号分析与处理（英文）	Signal Analysis and Processing	3	Fall
12	101062121	复变函数与积分变换（英文）	Complex Functions and Integral Transforms	2	Fall

13	101062205	C++程序设计（英文）	C++ Programming	2	Fall
14	101062222	模拟电子技术基础实验A （英文）	Experiments in Fundamentals of Analog Electronic Technology A	0.75	Fall
15	101063107	数字逻辑与CPU（英文）	Digital Logic and CPU Design	5	Fall
16	101063109	电力电子技术（英文）	Power Electronics	3	Fall
17	101063110	电力系统分析（英文）	Power System Analysis	3	Fall
18	101063111	自动控制理论 II （英文）	Automatic Control Theory II	3	Fall
19	101064125	机器人学导论（全英文）	Introduction to Robotics	2	Fall

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English-taught Program in Electronics Science and Technology						
No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	101051220	电路与模拟电子学（全英文）	Circuits and Analog Electronics	6	3	September
2	101051221	数字电路与系统（全英文）	Digital Circuits and Systems	4	4	March
3	101052213	信号与系统（全英文）	Signals and Systems	4	4	March
4	101054203	电磁场理论与微波工程（全英文）	Electromagnetic Fields Theory and Microwave Engineering	4	4	March
5	101130002	半导体物理与器件（全英文）	Semiconductor Physics and Devices	3	4	March
6	102130001	电子通信电路（双语）	Electronic Communication Circuits	2	4	March
7	101130004	光电子学导论（全英文）	Introduction to Optoelectronics	3	5	September
8	101130005	纳米电子器件（全英文）	Nanoelectronics Devices	3	5	September
9	101130007	MEMS与传感器（全英文）	MEMS and Sensors	3	6	March
10	102130002	嵌入式系统原理与设计（双语）	Principle and Design of Embedded System	4	6	March
11	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						
No.	Course Code	Course Title	Course Title	Credits	Semester	Semester Time
1	100081042	离散数学	Discrete Mathematics	4	3	September
2	100071004	数据结构	Data Structures	3.5	3	September
3	100076101	大数据技术导论	Introduction to Big Data Technology	2	3	September
4	100070022	Python语言程序设计	Introduction to Programming using Python	2	3	September
5	100081052	计算机组成与体系结构	Computer Organization and Architecture	3	5	September
6	100071007	操作系统	Operating System	3	5	September
7	100085042	数据仓库与数据挖掘	Data Warehouse and Data Mining	2	5	September
8	100076226	人工智能基础	Introduction of Artificial Intelligence	2	5	September
9	100071011	计算机网络	Computer Networks	3	5	September
10	100073009	计算机网络课程设计	Experiment of Computer Networks	1	7	September
11	100081064	大数据应用算法	Big Data Application Algorithm	2	7	September
12	100081004	数字逻辑基础	Fundamentals of Digital Circuits	2	4	March
13	100072107	面向对象技术与方法	Object-Oriented Programming	2.5	4	March
14	100072103	数据库原理与设计	Database Principle and Design	3	4	March

15	100076213	计算机图形学	Computer Graphics	2	4	March
16	100081065	大数据分析与处理	Big Data Analysis and Processing	4	6	March
17	100074320	编译原理与技术	Compiler Principles and Design	3	6	March
18	100076218	数据科学与算法	Data Science and Algorithms	2	6	March
19	100074302	机器学习初步	Machine Learning Fundamentals	2	6	March

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English-taught Program in Materials Science and Engineering						
No.	Course Code	Course Title (CH)	Course Title (EN)	Credits/Credit Hour	Semester	Semester Time
1	101090006	物理化学（全英文）	Physical Chemistry	4/64	3	Fall
2	101090007	材料力学（全英文）	Mechanics of Materials	2/32	4	Spring
3	101090008	半导体物理（全英文）	Semiconductor Physics	4/64	4	Spring
4	101090023	材料科学基础（全英文）	Fundamentals of Materials Science	4.5/72	3	Fall
5	101090024	物质结构现代分析方法（全英文）	Modern Methods For Structural Analysis of Materials	3/48	4	Spring
6	101097001	分子和细胞生物学导论（全英文）	Introduction to Molecular and Cellular Biology	2/32	5	Spring
7	101097203	软物质材料（全英文）	Soft Matters	3/64	5	Fall

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English-taught Program in International Economics and Trade						
No.	Course Code	Course Title (in Chinese)	Course Title (in English)	Credits	Semester	Semester Time
1	100440037	管理学原理	Principles of Management	2	2	March
2	100440042	创新创业管理	Innovation and Entrepreneurial Management	2	2	March
3	100440055	微观经济学	Microeconomics	3	3	September
4	100440071	国际贸易	International Trade	3	3	September
5	100440069	金融学	Finance	3	3	September
6	101210264	统计学	Statistics	3	3	September
7	100440062	宏观经济学	Macroeconomics	3	4	March
8	100440059	行为经济学	Behavior Economics	3	4	March
9	100440063	计量经济学	Econometrics	3	4	March
10	100440072	国际金融	International Finance	3	4	March
11	100440091	中级微观经济学	Intermediate Microeconomics	3	4	March
12	100440094	数字贸易学	Digital Trade	2	6	March
13	100440099	国际贸易实务	International Trade Practice	3	6	March
14	101210083	世界经济	World Economy	2	6	March
15	101210387	数字金融导论	Introduction of Digital Finance	2	6	March
16	101210035	货币银行学	Monetary Banking	2	6	March
17	101210270	中国经济	China Economy	2	6	March

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