

能源与动力工程

一、培养目标

培养具有科学、工程 and 人文素养，具备热能工程、动力机械工程等能源与动力工程基础知识、研究应用能力、工程实践能力、组织协调能力、创新意识和国际视野，能在能源与动力领域从事设计制造、科技开发、应用研究、运行管理等方面工作的高级工程技术人才。

二、基本规格要求

本专业毕业生要求具备以下十二项核心能力：

1. 工程知识：能够将数学、自然科学、工程热物理、工程流体力学等工程基础和专业知识用于解决复杂能源与动力工程问题。
2. 问题分析：能够应用数学、自然科学、能源与动力转化等基本原理，并通过文献研究，识别、表达、分析能源与动力工程问题，以获得有效结论。
3. 设计/开发解决方案：能够设计针对复杂能源与动力工程问题的解决方案，设计满足特定需求的能源与动力系统、部件或工艺流程，并能够在设计环节中体现创新意识和节能减排意识，考虑法律、健康、安全、文化、社会以及环境等因素。
4. 研究：能够基于能源与动力转换科学原理并采用科学方法对能源与动力工程问题进行研究，包括设计实验、分析与解释数据、并通过信息综合得到合理有效的结论。
5. 使用现代工具：能够在能源与动力工程实践中开发、选择与使用恰当的技术、资源、现代工程工具和信息技术工具，并了解其局限性。
6. 工程与社会：能够基于能源与动力工程相关背景知识进行合理分析，评价能源与动力工程实践和能源与动力工程问题解决方案对社会、健康、安全、法律以及文化的影响，并理解应承担的责任。
7. 环境和可持续发展：能够理解和评价能源与动力工程实践对环境、社会可持续发展的影响。
8. 职业规范：具有人文社会科学素养、社会责任感和工程职业道德。
9. 个人和团队：具有在多学科团队中发挥作用的能力。
10. 沟通：能够就能源与动力工程问题与业界同行及社会公众进行有效沟通和交流，包括撰写报告和 design 文稿、陈述发言、清晰表达或回应指令。并具备一定的国际视野，能够在跨文化背景下进行沟通和交流。
11. 项目管理：理解并掌握工程管理原理与经济决策方法，并能在多学科环境中应用。
12. 终身学习：具有自主学习和终身学习的意识，有不断学习和适应发展的能力。

三、培养特色

把握能源与动力领域高速发展趋势，响应行业对能源与动力工程专业人才的需求；坚持学生的人文、科学、工程等综合素质培养，坚持学生的理论与实践相结合的能力培养；以工学能力培养为平台基础，强化传热传质等专业能力培养，突出能源与动力工程中心地位，注重与机械工程、车辆工程等学科的交叉培养；优化课程体系，完善教学内容，改革教学方法，加强实践基地建设，注重工程应用，探索创新人才培养模式。注重科研与工程能力培养，形成动力机械、热能设备、新能源利用与开发等专业教学特色。

四、学制、毕业基本要求及学位授予

1. 本科基本学制 4 年，弹性学习年限 3—6 年，按照学分制度管理。
2. 能源与动力工程专业学生毕业最低学分数为 165 学分，其中各类别课程及环节要求学分数如下表：

课程类别	通识必修	学门核心	学类核心	专业核心	专业选修	通识选修	集中实践	合计
学分数	27	26	33	16	21	8	34	165

3. 学生修满培养方案规定的必修课、选修课及有关环节，达到规定的最低毕业学分数，并修完规定必修但不记学分的所有课程和环节，德、智、体合格，即可毕业。满足学位授予相关文件要求的，授予工学学士学位。

五、课程设置及学分分布

（一）通识教育课程〔必修 27 +（6）学分+选修 8 学分〕

通识教育课程包括必修和选修两部分。通识选修课程按《湖南大学通识选修（文化素质教育）课程方案》实施，通识必修课程如下：

编码	课程名称	学分	备注
GE01101	毛泽东思想和中国特色社会主义理论体系概论	3+（3）	
GE01039	思想道德修养与法律基础	1.5+（1.5）	
GE01100	形势与政策	0.5+（1.5）	
GE01102	中国近现代史纲要	2	
GE01103	马克思主义基本原理（上）	2	
GE01104	马克思主义基本原理（下）	2	
GE01012（－15）	大学英语	8	
GE01088	计算机基本能力测试	0.5	
GE01095	计算机导论与程序设计	2.5	
GE01107（－13）	心理素质与生涯发展	1	
GE01089（－92）	体育	4	

（二）学门核心（26 学分）

编码	课程名称	学分	备注
GE03025	高等数学 A（1）	5	
GE03026	高等数学 A（2）	5	
GE03003	线性代数 A	3	
GE03004	概率论与数理统计 A	3	
GE03005	普通物理 A（1）	3	
GE03006	普通物理 A（2）	3	
GE03007（8）	普通物理实验 A	2	
ME03001	工程化学	2	

(三) 学类核心 (33 学分)

编码	课程名称	学分	备注
ME04017	机械工程图学 (1)	3	
ME04018	机械工程图学 (2)	3	
EP04010	机械原理 A	3	
EP04011	机械设计 A	3	
EP04012	理论力学 A	3	
EP04013	材料力学 A	3	
EP04014	流体力学	3	
EP04015	工程热力学	4	
EP04016	工程传热学 A	3	
ME04019	工程材料	2	
ME04026	电工电子学	3	

(四) 专业核心 (16 学分)

编码	课程名称	学分	备注
EP05008	能源与动力设备	3	
EP05009	动力机械制造工艺学	3	
EP05010	燃烧学	3	
EP05011	热工测试技术	3	
EP05012	内燃机学	4	

(五) 选修课 (21 学分)

编码	课程名称	学分	备注
EP06020	能源与动力专业导论	1	任选 21 学分，可在全校范围内跨专业选修 11 学分。 学生在校期间参加学科竞赛获奖、公开发表学术论文等经学院认定后可以替代专业选修学分，但最高不超过 4 个学分，具体实施办法参照学院相关文件
ME04027	控制工程基础	2	
ME06092	工程中的数值方法	2	
EP06021	热动力设备排放污染及控制	2	
EP06022	发动机实验学	2	
EP06003	发动机电子控制	2	
EP06023	发动机性能数值式开发技术	2	
EP06024	内燃机噪声振动与控制	2	
EP06025	动力总成匹配技术	2	
EP06026	汽车底盘构造	2	
EP06027	新能源科学与技术	2	
EP06001	泵与风机	2	
ME06077	太阳能利用技术	2	
EP06028	新能源动力技术	2	
EP06029	能源经济学	2	
EP06015	热工自动控制系统	2	
EP06030	制冷压缩机	2	
EP06018	制冷原理与设备	2	
EP06006	换热器原理与设备	2	

(六) 集中实践（34 学分）

编码	课程名称	学分	备注
GE01040	军训、军事与国防、入学教育	0	
GE09003	中文写作实训	1	
GE09011	英文写作实训	1	
GE09010	金工实习 A	4	
GE09021	电工电子实习 B	2	
ME10034	测绘工程软件应用实践	1	
ME10009	机械原理课程设计	1	
ME10033	机械设计课程设计	3	
ME10005	机电控制综合实验	1	
EP10017	拆装实习	1	
EP10003	动力机械制造工艺课程设计	1	
EP10001	专业综合课程设计	2	
EP10018	生产实习	2	
EP10019	毕业实习	1	
EP10020	毕业论文（设计）	13	

六、课程体系与毕业生核心能力的关联度矩阵

课程类别	课程名称	工程知识	问题分析	设计/开发解决方案	研究	使用现代工具	工程与社会	环境与可持续发展	职业规范	个人和团队	沟通与交流	项目管理	终身学习
通识必修课程	毛泽东思想和中国特色社会主义理论体系概论							H					
	思想道德修养与法律基础						L	H					
	形势与政策							H					
	中国近现代史纲要								H				
	马克思主义基本原理（上）								H			H	
	马克思主义基本原理（下）								H			H	
	大学英语					M					H		
	计算机基本能力测试	M				H							M
	计算机导论与程序设计（C 模块）	M				H							M
	心理素质与生涯发展						L				M		H
	体育								M				
通识选修课程	文化素质选修（公选课）								H			M	M
学科核心课程	高等数学 A	H											
	线性代数 A	H	M										
	概率论与数理统计 A	M	H										
	普通物理 A	H											
	普通物理实验 A				H								
	工程化学	H					L	M					

续表

课程类别	课程名称	工程知识	问题分析	设计/开发解决方案	研究	使用现代工具	工程与社会	环境与可持续发展	职业规范	个人和团队	沟通与交流	项目管理	终身学习
学类核心课程	机械工程制图	H				H	L						
	机械原理 A	H		M			L						
	机械设计 A	H		H		H	L		L				
	理论力学 A	H											
	材料力学 A	H											
	流体力学	H	H	H									
	工程热力学	H	H	H			M						
	工程传热学 A	H	H	H			M						
	工程材料	H		M									
	电工电子学	H		M									
专业核心课程	能源与动力设备	H		H			M						
	动力机械制造工艺学	H		H			L						
	燃烧学	H			H		M						
	热工测试技术	H		M			M						
	内燃机学	H		H			M						
选修课		M										M	M
集中实践环节	军事训练								H	M			
	中文写作实训										H		
	英文写作实训										H		
	金工实习 A	M					L		L				
	电工电子实习 B	M					L		L				
	测绘工程软件应用实践	H				H					L		
	机械原理课程设计			H							L		L
	机械设计课程设计			H		H			L		L		L
	机电控制综合实验			H		H			L		L		L
	拆装实习			H		H			L		L		
	动力机械制造工艺课程设计			H		H				M		M	L
	专业综合课程设计			H		H				M			L
	生产实习				H						M	L	
	毕业实习				H						M	L	
	毕业设计（论文）	H	H	H		H	M	M		L	H	H	H

注：1）表中教学活动包括：课程、实践环节、训练等；
2）课程与毕业生核心能力关联度的高度分别用“H（高）”“M（中）”“L（低）”表示。

七、课程责任教师一览表

序号	姓名	职称	学历学位	专业特长	课程 （专业核心、专业选修、通识选修）
1	龚金科	教授	博士	汽车排放	热动力设备排放污染及控制 动力机械综合课程设计
2	刘敬平	教授	博士	内燃机 CAE	发动机性能数值式开发技术 动力总成匹配技术
3	杨 靖	教授	硕士	内燃机设计	内燃机学 动力机械综合课程设计
4	任承钦	教授	博士	制冷空调 传热传质	制冷原理与设备传热学 换热器原理与设备
5	鄂加强	副教授	博士	智能控制 传热传质	热工测试技术 工程热力学 能源与动力专业导论
6	邓元望	副教授	博士	混合动力 传热传质	混合动力基础 能源经济学 工程传热学
7	朱 浩	副教授	博士	汽车电子 新能源	发动机电子控制 热能与动力机械制造工艺学
8	杨小龙	副教授	博士	汽车排放 CFD	流体力学
9	谭理刚	副教授	博士	汽车排放 传热传质	工程传热学 A 泵与风机
10	陈 征	副教授	博士	新能源 传热传质	燃烧学 工程热力学 内燃机噪声振动与控制
11	王曙辉	讲师	博士	内燃机设计 新能源	热能与动力设备 热能与动力机械制造工艺学 动力机械制造工艺课程设计 太阳能利用技术
12	蔡 皓	讲师	博士	汽车排放 内燃机设计	工程热力学 热工自动控制系统
13	黄魏迪	讲师	博士	内燃机设计	能源科学导论 热工自动控制系统
14	刘 云	高工	硕士	内燃机测试	拆装实习 发动机实验学
15	陈敬炜	讲师	博士	新能源利用	太阳能利用技术 传热学
16	付建勤	讲师	博士	内燃机 CAE	发动机性能数值式开发技术 动力机械构造

八、专业责任教授

序号	姓名	职称	学历学位	专业特长	承担授课课程
1	刘敬平	教授	博士	内燃机 CAE	发动机性能数值式开发技术 动力总成匹配技术

Energy and Power Engineering

I . Educational Objectives

This program aims at the cultivation of excellent professionals with accomplishment on science, engineering and humanities, fundamental knowledge energy and power engineering, abilities of research and application, engineering practice, organization and coordination, consciousness of innovation and open mind. The graduates will be qualified for design, manufacture, scientific development, application research and operations management related to the areas of energy and power.

II . Skills Profile

Students of this degree will require:

1. **Engineering Knowledge:** An ability to apply knowledge of mathematics, natural science, engineering fundamentals and engineering specialization to solving complex energy and power engineering problems.
2. **Problem Analysis:** An ability to identify, formulate and analyze the energy and power engineering problems to reach substantiated conclusions using principles of mathematics and natural science.
3. **Design/Development of Solution:** An ability to design solutions for complex energy and power engineering problems and design energy and power system, components or processes that meet specified needs with appropriate considerations of laws, health, safety, culture and society issues.
4. **Investigation:** An ability to investigate energy and power using research-based knowledge and research methods to provide valid conclusions via the process of experimental design, data analysis and interpretation, and information synthesis.
5. **Modern Tool Usage:** An ability to create, select and apply appropriate techniques, resources, modern engineering tools and IT tools in energy and power engineering practice and understand the limitations.
6. **The Engineering and Society:** An ability to rationalize and assess societal, health, safety, legal and cultural issues and the consequent responsibilities involving energy and power engineering practice and solutions to energy and power engineering problems by contextual knowledge.
7. **Environment and Sustainability:** An ability to understand and evaluate the impact of professional engineering work on sustainability of society and environment.
8. **Qualities of humanistic and social science, sense of social responsibility and engineering professional ethics.**
9. **Individual and Team Work:** An ability to function effectively as an individual, and as a member or leader in diverse and multi-disciplinary teams.
10. **Communication:** An ability to communicate effectively with the engineering community and general public on complex engineering activities at home and abroad, such as being able to comprehend and write effective reports, design documentations, make effective presentations, and give and receive clear instructions.
11. **Project Management:** An ability to understand and apply engineering management principles

and economic decision-making to managing projects as a member or leader in a multi-disciplinary team.

12. Lifelong Learning: An ability to recognize the need and prepare for independent and life-long learning in the broadest context of technological change.

III. Program Features

Following the developing tendency of energy and power area and the requirements for professionals of energy and power engineering;Cultivating good qualities of humanities,science,engineering and capability of integrating theory with practice;Emphasizing the cultivation of professional abilities of heat transfer and mass transfer,highlighting the Energy and Power Engineering and its integration with both Mechanical Engineering and Vehicle Engineering;optimizing curriculum systems and courses,improving teaching methods,Strengthening the building of practice base and engineering application;Exploring the cultivating mode of innovative talents;Emphasizing the cultivation of research and engineering ability,forming the teaching features of power machinery,thermal energy equipment,exploring and using new energy and so on.

IV. Length of Schooling, Graduation Requirement, and Degree Awarded

1. The length of schooling usually lasts 4 years,but flexibly 3—6 years based on the credit system.
2. The required minimum credits for this program is 165,which are distributed as follows:

Category	Credits
General Education Courses	27
Core Courses in General Discipline	26
Core Courses in General Category	33
Core Courses in Specialty	16
Elective Courses in Specialty	21
Elective Courses in General Education	8
Intensive Practicum	34
Total	165

3. The students will be qualified for graduation when they finish all required courses, elective courses and practices specified in this program to get the required minimum credits,complete other required courses without credits,and qualified in virtue,wisdom and health. Those who satisfy the above requirements will be awarded Bachelor of Engineering.

V. Curriculum and Credit Distribution

1. General Education Courses [required 27+(6) + elective 8 credits]

The general education courses consist of required courses and elective courses. General education electives are designed according to the *Curriculum Design of General Education Electives of Hunan University*. Required general education courses are illustrated in the following table.

Code	Course Title	Credit(s)	Remarks
GE01101	Introduction to Maoism and Theoretical System of Socialism with Chinese Characteristics	3+(3)	
GE01039	Moral Cultivation and Law Basics	1.5+(1.5)	
GE01100	Current Situation and Policies	0.5+(1.5)	
GE01102	Outline of Modern Chinese History	2	
GE01103	Fundamentals of Marxism I	2	
GE01104	Fundamentals of Marxism II	2	
GE01012(—15)	College English	8	
GE01088	Computer Proficiency Test	0.5	
GE01095	Introduction to Computer Science and Programming	2.5	
GE01107(—13)	Psychological Health &. Career Planning	1	
GE01089(—92)	Physical Education	4	

2. Core Courses in General Discipline (26 credits)

Code	Course	Credit(s)	Remarks
GE03025	Advanced Mathematics A(I)	5	
GE03026	Advanced Mathematics A(II)	5	
GE03003	Linear Algebra A	3	
GE03004	Probability and Mathematical Statistics A	3	
GE03005	Physics A(I)	3	
GE03006	Physics A (II)	3	
GE03007(8)	Physics Experiments A	2	
ME03001	Engineering Chemistry	2	

3. Core Courses in General Category (33 credits)

Code	Course	Credit(s)	Remarks
ME04017	Mechanical Engineering Graphics I	3	
ME04018	Mechanical Engineering Graphics II	3	
EP04010	Mechanical Principles A	3	
EP04011	Mechanical Design A	3	
EP04012	Theoretical Mechanics A	3	
EP04013	Material Mechanics A	3	
EP04014	Fluid Mechanics	3	
EP04015	Engineering Thermodynamics	4	
EP04016	Engineering Heat Transmission A	3	
ME04019	Engineering Materials	2	
ME04026	Electrotechnics and Electronics	3	

4. Core Courses in specialty (16 credits)

Code	Course	Credit(s)	Remarks
EP05008	Energy and Power Equipment	3	
EP05009	Power Machinery Manufacturing Technology	3	
EP05010	Combustion Theory	3	
EP05011	Thermal Energy and Power Engineering Testing Technology	3	
EP05012	Principles of Internal Combustion Engine	4	

5. Elective Courses in specialty (21 credits)

Code	Course	Credit(s)	Remarks
EP06020	Introduction to Energy and Power Discipline	1	The students are required to select courses to 21 credits, or transdisciplinary studies with the same credits. The awards in academic competitions and academic paper publications which are recognized by the college, can be used to substitute the credits of elective courses in specialty. The maximum number of substituted credits is four. The measures for the implementations refer to relevant documents of the college.
ME04027	The Basis of Control Engineering	2	
ME06092	Engineering Numerical Method	2	
EP06021	Emission and Control of Thermal Energy and Power Equipment	2	
EP06022	Engine Laboratory Science	2	
EP06003	Electronic Control of Engine	2	
EP06023	Engine Numerical Developing Technology	2	
EP06024	Internal Combustion Engine Noise and Vibration Control	2	
EP06025	Matching Technology of Power System	2	
EP06026	Automobile Chassis Construction	2	
EP06027	New Energy Science and Technology	2	
EP06001	Pump and Air Machine	2	
ME06077	Solar Energy Utilization Technology	2	
EP06028	New Energy Power Technology	2	
EP06029	Energy Economics	2	
EP06015	Automatic Control System of Thermal Engineering	2	
EP06030	Refrigeration Compressor	2	
EP06018	Principles of Refrigeration and Equipment	2	
EP06006	Principles of Heat Exchanger and Equipment	2	

6. Intensive Practicum (34 credits)

Code	Courses	Credit(s)	Remarks
GE01040	Military Training, Military Affairs, National Defense and Entrance Education	0	
GE09003	Chinese Writing Training	1	
GE09011	English Writing Training	1	
GE09010	Metal Working Practice A	4	
GE09021	Electrical & Electronic Engineering Practice B	2	
ME10034	Application practice of Software of Surveying Mapping Engineering	1	
ME10009	Curriculum Design of Mechanical Principles	1	
ME10033	Curriculum Design of Mechanical Design	3	
ME10005	Comprehensive Experiment for Mechatronics Control	1	
EP10017	Disassembly and Assembly Practice	1	
EP10003	Curriculum Design of Manufacturing Technology of Power Machinery	1	
EP10001	Curriculum Design of Majors of Energy and Power Engineering	2	
EP10018	Production Practice	2	
EP10019	Graduate Internship	1	
EP10020	Graduate Thesis (Design)	13	

Cont

Category	Course	Engineering Knowledge	Problem Analysis	Design/development of Solution	Investigation	Modern Tool Usage	The Engineering and Society	Environment and Sustainability	Ethics	Individual and Team Work	Communication	Project Management	Lifelong Learning
Core Courses in General Discipline	Advanced Mathematics A	H											
	Linear Algebra A	H	M										
	Probability and Mathematical Statistics A	M	H										
	Physics A	H											
	Physics Experiments A				H								
	Engineering Chemistry	H					L	M					
	Mechanical Engineering Graphics	H				H	L						
	Mechanical Principles A	H		M			L						
	Mechanical Design A	H		H		H	L		L				
	Theoretical Mechanics A	H											
Core Courses in General Category	Material Mechanics A	H											
	Fluid Mechanics	H	H	H									
	Engineering Thermodynamics	H	H	H			M						
	Engineering Heat Transmission A	H	H	H			M						
	Engineering Materials	H		M									
	Electrotechnics and Electronics	H		M									
	Energy and Power Equipment	H		H			M						
	Power Machinery Manufacturing Technology	H		H			L						
	Combustion Theory	H			H		M						
	Thermal Energy and Power Engineering Testing Technology	H		M			M						
Specialized Core Courses	Principles of Internal Combustion Engine	H		H			M						

Cont

Category	Course	Engineering Knowledge	Problem Analysis	Design/development of Solution	Investigation	Modern Tool Usage	The Engineering and Society	Environment and Sustainability	Ethics	Individual and Team Work	Communication	Project Management	Lifelong Learnin
Elective Courses		M										M	M
	Military Training								H	M			
	Chinese Writing Training										H		
	English Writing Training										H		
	Metal Working Practice A	M					L		L				
Intensive Practicum	Electrical &. Electronic Engineering Practice B	M					L		L				
	Application practice of Software of Surveying Mapping Engineering	H				H					L		
	Curriculum Design of Mechanical Principles			H							L		L
	Curriculum Design of Mechanical Design			H		H			L		L		L
	Comprehensive Experiment for Mechatronic Control			H		H			L		L		L
	Dsassembly and Assembly Practice			H		H			L		L		
	Curriculum Design of Manufacturing Technology of Power Machinery			H		H				M		M	L
	Curriculum Design of Majors of Energy and Power Engineering			H		H				M			L
	Production Practice				H						M	L	
	Graduate Internship				H						M	L	
	Graduate Design (The-sis)	H	H	H		H	M	M		L	H	H	H

Note: 1) The teaching activities in this table include: curriculum, practice and training, etc. ;
2) The correlation between curriculum and the core competence is ranged by “H (high)” “M (medium)” and “L (low)” .

VII. Curriculum-responsible Teachers

No.	Name	Position	Degree	Specialties	Courses(Core courses, elective courses and general elective courses)
1	Gong Jinke	Professor	Doctor	Automobile Emission	Emission and Control of Thermal Energy and Power Equipment Comprehensive Curriculum Design of Power Machinery
2	Liu Jingping	Professor	Doctor	Internal Combustion Engine CAE	Engine Numerical Developing Technology Matching Technology of Power System
3	Yang Jing	Professor	Master	Internal Combustion Engine Design	Principles of Internal Combustion Engine Power Machine Integrated Course Design
4	Ren Chengqin	Professor	Doctor	Refrigeration and Air-conditioning Heat and Mass Transfer	Principles of Refrigeration and Equipment Principles of Heat Exchanger and Equipment Heat Transmission
5	E Jiaqiang	Associate Professor	Doctor	Intelligent Control Heat and Mass Transfer	Thermal Energy and Power Engineering Testing Technology Engineering Thermodynamics Introduction to Energy and Power Discipline
6	Deng Yuanwang	Associate Professor	Doctor	Hybrid Power Heat and Mass Transfer	Hybrid Power Fundamentals Energy Economics Engineering Heat Transmission
7	Zhu Hao	Associate Professor	Doctor	Automotive Electronics New Energy	Electronic Control of Engine Energy and Power Machine Manufacture Technology
8	Yang Xiaolong	Associate Professor	Doctor	Automobile Emission CFD	Fluid Mechanics
9	Tan Ligang	Associate Professor	Doctor	Automobile Emission Heat and Mass Transfer	Engineering Heat Transmission A Pump and Air Machine
10	Chen Zheng	Associate Professor	Doctor	New Energy Heat and Mass Transfer	Combustion Engineering Thermodynamics Internal Combustion Engine Noise and Vibration Control
11	Wang Shuhui	Lecturer	Doctor	Internal Combustion Engine Design New Energy	Energy and Power Equipment Energy and Power Machine Manufacture Technology Curriculum Design of Manufacturing Technology of Power Machinery Solar Energy Utilization Technology
12	Cai Hao	Lecturer	Doctor	Automobile Emission Internal Combustion Engine Design	Engineering Thermodynamics Thermal Autocontrol System
13	Huang Weidi	Lecturer	Doctor	Internal Combustion Engine Design	An Introduction to Energy Science Thermal Autocontrol System

Cont

No.	Name	Position	Degree	Specialties	Courses(Core courses, elective courses and general elective courses)
14	Liu Yun	Senior Engineer	Master	Internal Combustion Engine Testing	Dismantlement Practice Engine Experiments
15	Chen Jingwei	Lecturer	Doctor	New Energy Utilization	Solar Energy Utilization Technology Heat Transmission
16	Fu Jianqin	Lecturer	Doctor	Internal Combustion Engine CAE	Engine Numerical Developing Technology Power Machine Structure

VIII. Program-responsible Professor

No.	Name	Position	Degree	Specialties	Courses
1	Liu Jingping	Professor	Doctor	Internal Combustion Engine CAE	Engine Numerical Developing Technology Matching Technology of Power System

(翻译人:杨钦文)