

# Master's Program in Power Electronics and Power Transmission

**Title/degree:** Master of Engineering (M.E.)

**Duration:** 2-3 years, full-time

**Start month:** September

**Language of instruction:** English

## I. Program Description

*The English-taught Master of Engineering (M.E.) in Power Electronics and Power Transmission program extensively enrolls and cultivates worldwide master's degree students under the primary discipline Power Electronics and Automation. It also relates to the disciplines of Electrical Engineering, Communication Technology, and Computer Technology. The research fields cover power electronics, electric drive, intelligent control and intelligent automation, pattern recognition, intelligent information sensing and communication engineering, intelligent decision support system, modelling and control of productive process, industrial network, and system integration with database and data warehouse.*

## II. Why study Power Electronics and Power at Donghua University?

- 1. Our approach is pragmatic as well as theoretical. As an academic, we not only expect you to understand and make use of the appropriate tools, but also to program and develop your own.*
- 2. There are plenty of high profile companies in the vicinity such as Siemens, KUKA, CHNT, etc. where you could do an internship or the research for your Master's project.*
- 3. Currently, we have more than 1000 students enrolled in the College of Information Science and Technology in Donghua University. They can enjoy the advantages of our faculty as there are:*
  - Excellent support of the students from 17 professors and numerous scientific faculty members and tutors*
  - Various courses of study, focused on different topics*
  - Excellent scientific reputation (national and international).*

### III. Participating Professors and Junior Scientists



*Prof. Dr. 王直杰 Wang Zhijie*

*Ph.D. Supervisor*

*Research Area: Neural networks, Machine learning, Software design for control systems, Data mining*

*[wangzj@dhu.edu.cn](mailto:wangzj@dhu.edu.cn)*



*Prof. Dr. 郝矿荣 Hao Kuangrong*

*Ph.D. Supervisor*

*Research Area: Pattern recognition, robots*

*[krhao@dhu.edu.cn](mailto:krhao@dhu.edu.cn)*



*Prof. Dr. 周武能 Zhou Wuneng*

*Ph.D. Supervisor*

*Research Area: Machine learning, Intelligent optimal algorithm*

*[wnzhou@dhu.edu.cn](mailto:wnzhou@dhu.edu.cn)*



*Prof. Dr. 卢文科 Lu Wenke*

*Ph.D. Supervisor*

*Research Area: Sensors*

*[luwenke3@163.com](mailto:luwenke3@163.com)*



*Prof. Dr. 赵曙光 Zhao Shuguang*

*Ph.D. Supervisor*

*Research Area: EHW, Intelligent information processing*

*[sgzhao@dhu.edu.cn](mailto:sgzhao@dhu.edu.cn)*



*Prof. Dr. 任正云 Ren Zhengyun*

*Ph.D. Supervisor*

*Research Area: Model predictive control, Adaptive control, Process computer control*

*[renzhengyun@dhu.edu.cn](mailto:renzhengyun@dhu.edu.cn)*



Prof. Dr. 李征 Li Zheng

Research Area: Complex system modeling and intelligent control, Distributed power generation system control and integration, Micro smart grid

[lizheng@dhu.edu.cn](mailto:lizheng@dhu.edu.cn)



Prof. Dr. 沈波 Shen Bo

Ph.D. Supervisor

Research Area: Stochastic nonlinear control

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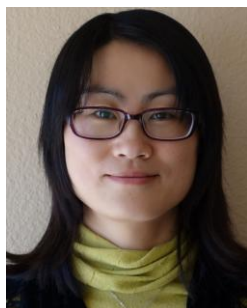


Prof. Dr. 孙韶媛 Sun Shaoyuan

Ph.D. Supervisor

Research Area: Night vision image processing, Pattern recognition and machine vision, Colorization of infrared image

[shysun@dhu.edu.cn](mailto:shysun@dhu.edu.cn)

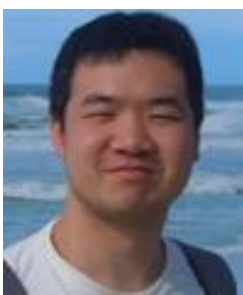


Prof. Dr. 齐洁 Qi Jie

Ph.D. Supervisor

Research Area: Multi-agent System, Multi-robot Control, Distributed Parameter System, Evolution Computation and Optimization

[jieqi@dhu.edu.cn](mailto:jieqi@dhu.edu.cn)



Prof. Dr. 赵鸣博 Zhao Mingbo

Research Area: Pattern recognition

[mzhao4@dhu.edu.cn](mailto:mzhao4@dhu.edu.cn)



Prof. Dr. 龚涛 Gong Tao

Ph.D. Supervisor

Research Area: Immune Computation, Artificial Intelligence, Security, Embedded systems

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Prof. Dr. 刘华山 Liu Huashan  
Research Area: Robotics, Motion Control, Mechatronics  
[hsliu@dhu.edu.cn](mailto:hsliu@dhu.edu.cn)



Prof. Dr. 石红瑞 Shi Hongrui  
Research Area: Modeling, Simulation and Control of Dynamic Systems; Control Theory and Application  
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Prof. Dr. 刘浩 Liu Hao  
Research Area: Image/Video Coding and Analysis  
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Prof. Dr. 李晓丽 Li Xiaoli  
Research Area: Distributed control and optimization of large-scale cooperative network system  
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Prof. Dr. 张义红 Zhang Yihong  
Research Area: PLC, Image processing, Sensor network, Automatic control method, The internet of the things method and application, Software engineering management  
[zhangyh@dhu.edu.cn](mailto:zhangyh@dhu.edu.cn)

## IV. Modules

*C: compulsory course      E: elective course      CP: credit points*

<b>Consolidation Phase</b>		
<b>1st Year</b>		
<i>C/E</i>	<i>Topic</i>	<i>CP</i>
<i>C</i>	<i>Modern Mathematical Methods</i>	<i>3</i>
<i>C</i>	<i>Modern Control Theory</i>	<i>3</i>
<i>C</i>	<i>Pattern Recognition: Theory and Technology</i>	<i>3</i>
<i>C</i>	<i>Intelligent Systems and Control</i>	<i>3</i>
<i>C</i>	<i>Introduction to China</i>	<i>2</i>
<i>C</i>	<i>Chinese Language</i>	<i>8</i>
<i>E</i>	<i>Embedded Systems: Theory and Application</i>	<i>3</i>
<i>E</i>	<i>Information Security of Networks</i>	<i>3</i>
<i>E</i>	<i>Data Mining</i>	<i>3</i>
<i>E</i>	<i>Internet of Things</i>	<i>3</i>
<i>E</i>	<i>Modern Signal Processing</i>	<i>3</i>
<i>E</i>	<i>Image Communication and Information Processing</i>	<i>3</i>

*One needs to obtain 22CPs from compulsory courses and 12CPs from elective courses. These 34CPs should in general be acquired in the 1st year.*

<b>Scientific Phase</b>		
<b>2<sup>nd</sup> Year</b>	<i>Thesis Proposal</i>	
<b>3<sup>rd</sup> Year</b>	<i>Final Defense</i>	
	<i>Concealed Evaluation</i>	

*In case you experience any problems throughout your studies, please contact student advisors. They are ready to help you personally for all situations you might encounter.*

*Ms. Ai Xin.*

## V. Application Information

### 1. **Important deadlines for Applications**

*Mar.31 (scholarship applicants)*

*Jun.30 (self-funding applicants)*

*Only the application materials and application fee received before the deadline (Beijing time) are valid.*

### 2. **Application Details Step-by-Step**

*Please refer to the postgraduate application guide Page 22-25 for details.*

### 3. **Important Notes**

*Once the documents are received, we will not send them back, so never supply any originals which you might need again. At the time of enrollment in our university, you will be required to present the original graduation or degree certificate (not the pending certificate but the final one).*

