Master's Program in Material Procession and Engineering

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

Duration: 2-3 years, full-time

Start month: September

Language of instruction: English

I. Program Description

This project provides international students with frontier knowledge about high performance fiber, composites, low dimensional materials, bio-friendly materials, and training to handle new processing and scientific research techniques, achieving a solid, theoretical understanding of material science and engineering with plenty of attention for the wide range of its applications.

II. Why study Material Procession and Engineering at Donghua University?

- 1. Our approach is pragmatic as well as theoretical. We not only expect students to understand and make use of the appropriate tools, but also to develop their own research and products.
- 2. There are plenty of high profile collaborating companies, where students could do their research with extensive industrial background.
- 3. Currently, we have more than 1800 students enrolled in the faculty of Materials Science in Donghua University. They can enjoy the advantages of our faculty as there are:
 - Excellent team of professors and scientific faculties, including 40 professors and 30 associate professors, etc.
 - Various courses of study, focused on modern topics on polymer chemistry and physics
 - Excellent international scientific reputation and facilities, together with State Key Laboratory for Modification of Chemical Fiber and Polymer Materials.

III. Participating Professors and Junior Scientists



Prof. Dr. 朱美芳 Zhu Meifang

Research Area:

- 1. Nanocomposites and Smart Materials
- 2. Fiber Forming Theory
- 3. Functional fiber and polymer materials

zmf@dhu.edu.cn

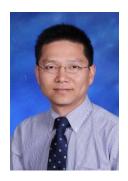


Prof. Dr. 余木火 Yu Muhuo

Research Area:

- 1. Fiber reinforced composites application of basic research and product development research.
- 2. Inorganic nano-powder and polymer composite spinning and application.
- 3. Fiber and fabric surface science and its application.

Yumuhuo @dhu.edu.cn



Prof. Dr. 张耀鹏 Zhang Yaopeng

Research Area:

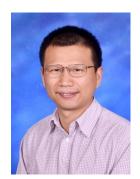
- 1. High performance artificial animal silk bionic preparation process of condensed state structure regulation
- 2. Complex microfluidic chip preparation technology and microfluidic biomimetic spinning
- 3. Biomedical materials based on silk fibroin

zyp@dhu.edu.cn



Prof. Dr. 丁彬 Ding Bin Research Area: Preparation and Application of Functional Nanofiber Materials

binding@dhu.edu.cn



Prof. Dr. 杨曙光 Yang Shuguang Research Area:

- 1. Macromolecular complexes fibers and films
- 2. Hydrogen bond dissociation and assembly of macromolecules
- 3. Macromolecular metal complexes

shgyang@dhu.edu.cn



Prof. Dr. 徐洪耀 Xu Hongyao

Research Area:

- 1. Preparation and Application of Novel Optical Sensing Probe Materials
- 2. Nanostructured super-capacitor electrode materials
- 3. Preparation of Optical sensing bio-targeting Polymer and Study on Detection and Diagnosis of Cancer Cells

hongyaoxu@dhu.edu.cn



Prof. Dr. 陈志刚 Chen Zhigang

Research Area:

- 1. New inorganic, polymer, organic / inorganic hybrid light and heat conversion materials and applications
- 2. Preparation of Photo-thermal Conversion Film and Its Application in Solar Energy Conversion and Storage
- 3. Design, construction and application of new bio nano-generator

zgchen@dhu.edu.cn



Prof. Dr. 张幼维 Zhang Youwei Research Area:

- 1. Green efficient preparation of polymer-based microspheres
- 2. Solution spun fiber formation, structure and properties

zhyw@dhu.edu.cn



Prof. Dr. 王朝生 Wang Chaosheng Research Area:

- 1. Fiber forming mechanism and processing
- 2. Polymerization Engineering

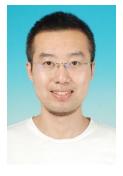
cswang@dhu.edu.cn



Prof. Dr. 杨建平 Yang Jianping Research Area:

- 1. Porous materials
- 2. Core-shell materials
- 3. Fiber materials

jianpingyang@dhu.edu.cn



Prof. Dr. 范宇驰 Fan Yuchi Research Area:

- 1. Ceramic matrix composites
- 2. Advanced two-dimensional materials

yuchifan@dhu.edu.cn



Prof. Dr. 葛郑腾 Ge Zhengteng Research Area:

- 1. Dynamic optical materials: nano-optical material, dynamic control assembly and, electrochromic devices;
- 2. The micro-bionic nanofabrication
- 3. Functional composites: a flexible energy storage material, high performance coating

dengteng@dhu.edu.cn



Prof. Dr. 巨安奇 Ju Anqi

Research Area:

- 1. High-performance / erosion-resistant carbon fiber and composite materials.
- 2. New energy carbon nano hybrid materials and devices.
- 3. Electrospun organic inorganic nano-functional fiber material

angiju@dhu.edu.cn



Prof. Dr. 何勇 He Yong Research Area:

- 1. Thermoplastic carbon fiber composite materials
- 2. High-performance polymer materials
- 3. Intelligent polymer materials

yhe@dhu.edu.cn



Prof. Dr. 石建军 Shi Jianjun Research Area: Low Temperature Plasma Physics and Technology

JShi@dhu.edu.cn

IV. Modules

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

	Consolidation Phase		
	1st Year		
C/E	Topic	CP	
С	Intergrated Chinese I	4	
С	Intergrated Chinese II	4	
С	China Survey	2	
С	Fiber Science	3	One needs to obtain 22CPs from
С	Textile Manufacturing Technology	3	compulsory courses and 12CPs from
С	Textile Chemistry	3	elective courses. These 34CPs should
С	Bio-medical Materials	3	in general be acquired in the 1st year.
E	Industrial Textiles	3	
E	Composite Materials	3	
E	Chinese Costume Culture	3	
E	Material Physics and Chemistry	3	
E	Polymer Chemistry And Physics	3	
E	Textile Physics	3	

Ε	Applied Linear Regression	3
E	Clothing Comfort	2

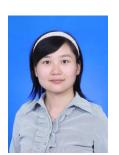
Scientific Phase			During the research phase
2 nd Year	Thesis Proposal	NOV.	First, the signature requirements
3 rd Year	Pre-defense	NOV.	To Dong hua University as the first unit,
	Concealed Evaluation	DEC.	with the first author or second author
	Final Defense	JAN.	(but the first author must be the
			student's mentor) published by the
			graduate students and mentors signed
			by the academic papers included in the
			the statistical range of academic
			papers. For graduate students
			co-cultivating at home and abroad, the
			published papers are based on the first
			or second units of Donghua University,
			students first or second signature (but
			the instructors signed the name of the
			school or co-cultivation unit) After the
			inclusion of graduate students in the
			academic period published academic
			statistics.
			Second, master graduate students
			Master's students must publish or take
			at least one non-summative academic
			dissertation related to the dissertation in
			a formally published academic journal
			before applying for a degree.

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.



CHEN Xiaoshuang chenxs @dhu.edu.cn

Yu Miaomiao mmyu@dhu.edu.cn



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 for international students

3. Application Details Step-by-Step

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

4. 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).

