食品科学与工程 Food Science and Engineering (0832/0972) (适用于留学生)

一、学科简介

I. Introduction to the discipline

本学科始于 1950 年广东省立高级水产技术学校加工科,现具有"学士、硕士、博士"完整学位授权体系,是学校"3+1+N"大海洋学科体系的核心优势学科("3"即 3 个一级博士点学科)、高水平大学重点建设学科。在全国第四轮学科评估中被评为"B-"档,并列全国第 24,在广东省内排名第 3。二级学科"水产品加工及贮藏工程"是广东省攀峰重点学科。目前,本学科是华南地区唯一以海洋食品为主体的食品科学与工程学科。本学科依托科研平台和科研团队,紧扣华南地区农、海产品加工业发展的战略需求,开展创新性基础和应用研究,形成了"水产品贮藏与加工""南海生物活性物质研究与开发""水产食品质量与安全""农产品贮藏与加工"4 个特色鲜明的研究方向。本学位点设在食品科技学院,授予工学硕士学位。

The discipline of Food Science and Engineering, origined from Guangdong Provincial Advanced Aquatic Technology School created in 1950, has a complete degree authorization system for Bachelor's, Master's and Doctor's degrees. As core strength discipline and High-level university key construction discipline, the discipline named "B-" in the fourth round of national assessment, tied for the 24th in the country, ranked 3rd in Guangdong Province. The second-level discipline "Aquatic Products Processing and Storage Engineering" is the key discipline of climbing in Guangdong Province. At present, this subject is the only food science and engineering discipline in South China with marine food as the main body. Relying on the scientific research platform and scientific research team, the discipline closely follows the strategic needs of the development of agriculture and seafood processing industry in South China, and carries out innovative foundation and applied research, builds four distinctive research directions: "Storage and processing of aquatic products", "Research and development of biological active substances in the South China Sea", "The quality and safety of aquatic products" and "Storage and processing of agricultural products". This degree is located at the School of Food Science and Technology and is awarded Master's Degree in engineering.

二、主要研究方向

II. Main research directions

- 1. 海洋食品贮藏与加工 Storage and Processing of Seafood
- 2. 海洋生物活性物质研究与开发 Research and Development of Marine Bioactive Substances
- 3. 海洋食品质量与安全 Quality and Safety of Seafood
- 4. 农产品贮藏与加工 Storage and Processing of Agricultural Products

三、培养目标

III. Training Objectives

- 1、培养了解和热爱中国文化,对中华人民共和国友好,德、智、体、美、劳全面发展, 具有良好专业素养、学术素养和创新创业能力的高素质人才。具体要求如下:
- 1. Our goal is to train the professional complex high-level talents who desire for Chinese culture and should be given an all-round education including moral, intellectual and physical development. The specific requirements are as follows:
- 2、掌握本专业坚实的基础理论、系统的专业知识和熟练的实验操作技能;了解所从事研究的科学技术发展趋势及新的研究成果;熟练地运用一门外语阅读专业书刊和撰写专业论文摘要;具有从事与本专业有关教学、科研、生产的能力。
- 2. The student should master the theoretical foundation, systematical professional knowledge and experimental skills of food science and engineering, understand the latest scientific technology and research results in related field, be skilled in reading professional English literatures and writing English professional papers, have the ability to engage with the teaching, research and production after graduation.
 - 3、身心健康。
 - 3. The student should be in physical and mental health.

四、培养方式

IV. Training Mode

- 1. 采取导师负责制和集体指导相结合的方式。对研究生的培养,既发挥导师的主导作用,又发挥课题组及其他有关教师的集体指导作用。
- 1. The institution of graduate cultivation is composed of both the tutor-responsible system and collective liability system. Not only their tutors but also their teachers from the committee or collective play important roles in graduate cultivation.
 - 2、采取课程学习和学位论文课题研究并重的方式。既要使硕士生系统掌握基础理论和专

门知识,又要使研究生掌握科学研究的基本方法和技能,具有从事科学研究的能力。

2. Learning of courses and training of scientific research ability involved in their Academic Dissertation. Students would be equally taken into account in cultivation mode. The graduate students are requested to grasp systematically the basic theory, the professional knowledge, know well basic approaches and skills and get the ability to undertake independent scientific research.

五、基本学制及学习年限

V. Basic educational system and study length

学制3年,最长学习年限5年(含休学)。学习方式为全脱产在校学习。

The basic length of schooling for Master's Degree should be three years and students are allowed to graduate according the actual situation, but usually no longer than 5 years (including suspension). Full-time education is required for master students in Guangdong Ocean University.

六、学分要求和课程设置

VI. Credit requirements and course setting

研究生毕业应修满 32 学分,其中:学位课 18 学分,选修课 10 学分,必修环节 4 学分。 学位课程学习一般在第 1~2 学期内完成,部分课程可安排在第 3 学期完成。课程成绩 60 分以上(含 60 分)为及格,成绩及格取得相应学分。**课程设置见附表。**

The graduate student should complete the required courses and get at least 32 credits including degree courses (18 credits), non-degree courses (10 credits) and practice education (4 credits). All the classroom teaching should be finished before third semester. course's score is at least 60 points is passable. The curriculum are as follows:

七、培养环节

VII. training process

研究生在学期间须完成课程学习及以下培养环节。

Graduate students should complete the course study and the following training links during the semester.

1. 制定个人培养计划

新生应在入学后3周内在导师指导下初步制定个人培养计划,并在随后三个月内逐步完善,确定后的培养计划经导师签字确认后报学院备案。

1. Develop a personal training plan

Freshmen should make a preliminary personal training plan under the guidance of the tutor within 3 weeks after enrollment, and adjust it in the next three months. The determined training plan will be signed by the tutor and reported to the college for recording.

2. 科学道德和学术规范教育

新生入学后应接受学术规范、学术道德和学术诚信教育,必须参加学校组织的专题教育报告会,报告会实行签到考勤,要求全勤。学习《高等学校科学技术学术规范指南》(理工 医科),要求通过学校组织的学术规范知识测试。

2. Scientific morality and academic standard education

The freshmen should receive the education of academic norms, academic ethics and academic integrity after entering the school. They must attend the special education meeting organized by the University. The report meeting should be signed in and checked in, and full attendance is required. In order to study the guidelines for academic norms of science and technology in Colleges and universities (Science, engineering and medicine) it is required to pass the knowledge test of academic norms organized by the University.

3. 开题报告

研究生须完成培养计划规定的课程学习并经考核合格后方可进行学位论文开题。

研究生入学后在导师的指导下确定研究方向,通过查阅文献、收集资料和调查研究确定研究课题,进入学位论文工作前进行开题和方案论证,说明选题的目的、意义、国内外目前研究现状、完成课题的条件和可行性、课题实施方案、研究的创新点、预期成果、进度安排等,在学院内公开报告,要求第3学期完成。具体要求参照《广东海洋大学研究生学位论文开题报告规定》。

3. Opening report

Postgraduates must complete the course study specified in the training plan and pass the assessment before they can start the dissertation opening report.

After enrolling, the research direction is determined under the guidance of tutor. The research topic is determined by consulting literature, collecting data and investigating and researching. Before entering the dissertation work, the opening report is demonstrated to explain the purpose and significance of the topic selection. The conditions and feasibility of completing the project, the project implementation plan, research innovations, expected results, schedule, etc., in the third

semester. For specific requirements, please refer to "Guangdong Ocean University Graduate Degree Thesis Opening Report Rules"

4. 中期考核

第4学期,开展研究生中期考核,主要是对政治思想、课程学习、科研能力等方面进行综合考查和评议,具体要求参照《广东海洋大学研究生中期考核办法》。

4. Mid-term assessment

At the beginning of the fourth semester, the mid-term assessment of graduate students is carried out, which is mainly for comprehensive examination and evaluation of political thinking, curriculum learning, and scientific research capabilities. Please refer to " Mid-term assessment Rules for Graduate of Guangdong Ocean University "

5. 学术活动(必修 2 学分)

研究生在学期间应参加一定的学术活动,学术活动内容包括参加学术讲座、学术报告、学术研讨会等。硕士生在校学习期间参加学术活动不少于 5 次,鼓励硕士生至少在学科或学院范围内公开做一次学术报告,完成时间为第 1-5 学期。

研究生参加学术活动应做好记录,第5学期撰写总结报告,经导师(或指导小组)和学院审核,合格者取得2学分。

5. Academic activities (2 credits)

Graduate students should participate in certain academic activities, including academic lectures, academic reports, and academic seminars. Master students should participate in academic activities no less than 5 times, as well as encourage master students to make an academic report at least once within the scope of the discipline or college, and the completion time is during 1 to 5 semester.

Postgraduates should keep records of their participation in academic activities. Write a summary report, which will review by the tutor (or guidance group) and the college at the semester before graduation, the qualified students will get 2 credits.

6. 实践活动(必修2学分)

实践活动包括结合研究开展的社会实践、教学实践、专业实践、企业实训实践、创新实践等活动。研究生在学期间参加实践活动累计时间一般要求不少于2周,第1~5学期完成,第5学期由导师和学院进行考核,合格者取得2学分。

6. Practical activities (2 credits)

Practical activities, including social practice, teaching practice, professional practice, enterprise training practice, innovation practice and other activities related to research. The cumulative time for graduate students to participate in practical activities not less than 2 weeks, completed during 1 to 5 semester, which is evaluated by the tutor and the college at the semester before graduation, and the qualified students get 2 credits.

八、论文工作要求

VII. Requirements of thesis

学位(毕业)论文研究的实际工作时间(从开题报告到申请论文答辩)一般不少于 1.5年。论文撰写必须在导师指导下由研究生独立完成。论文应当结构完整,逻辑严密,条理清晰,语言规范,数据准确,亮点突出,引用得当,保证原创性。留学生学位论文经导师和学科同意,可使用英文撰写,但必须附中文摘要。具体要求参照《广东海洋大学研究生学位论文写作规范》。

学位论文实行原创性检测、专家评阅、公开答辩制度。学位论文评阅和答辩时间一般安排在第6学期,具体要求按《广东海洋大学博士、硕士学位授予工作细则》相关规定执行。

The actual working time of the degree (graduation) thesis research (from the opening report to the application thesis defense) is generally not less than 1.5 years. Thesis writing must be completed independently by graduate students under the guidance of tutor. The paper should be complete in structure, rigorous in logic, clear in organization, standardized in language, accurate in data, prominent in highlights, properly cited, and ensure originality. International students' degree thesis can be written in English with the consent of the tutor and subject, But must attach Chinese abstract. For specific requirements, please refer to "Guangdong Ocean University Graduate Dissertation Writing Standards".

The system of original examination, expert evaluation and public defense is implemented in dissertation. The time for dissertation review and defense is generally arranged in the sixth semester, and the specific requirements are implemented in accordance with the relevant provisions of the working rules for conferring doctoral and master's degrees of Guangdong Ocean University.

九、毕业及授位

IX. Graduation and granting

研究生在规定的修业年限内修满规定学分,完成培养环节,考核合格,通过汉语水平考试三级(SHK3),方能申请学位(毕业)论文答辩,通过论文答辩者,则准予毕业,发给毕业证书。在读期间硕士研究生作为第1作者(或导师为第1作者、研究生为第2作者)至少发表1篇与学位论文内容相关的学术论文,或者获得授权专利1项,单位署名符合食品科技学院的要求(见学院相关规定),方能申请学位。符合学位授予条件者,根据《广东海洋大学博士、硕士学位授予工作细则》授予硕士学位。

The graduate student is permitted for dissertation defense after finished the required courses, passed interim reviews, and passed the Chinese Proficiency Test Level 3 (HSK 3). The graduate student passed the thesis defense will be allowed to graduate and issue a graduation certificate. The graduate student applying for the master degree should published at least 1 research paper as the first author or second author when the supervisor is the first author during the school period. Those who meet the conditions for awarding a master degree will be awarded in accordance with the "Working Rules for the Award of Doctoral and Master Degrees of Guangdong Ocean University".

附表 Attached Table:

食品科学与工程学科课程设置及必修环节 Course Coding Sheet

食品科字与上程字科课程设直及必修外节 Course Coding Sheet											
课程类别 Course Category	课程编号 Course code	课程名称 Course	学时 Credit hours		开课学期 Semester	考核方式 Evaluation Mode	备注 Note				
公共学位课 (4 学分)	217024	中国概况 Introduction to China	48	2	1	考试 Test					
Public Degree	213002	基础汉语(一) The Basic Chinese	48	1	1	考试 Test					
Course (4-credit)	213003	基础汉语(二) The Basic Chinese	48	1	2	考试 Test					
专业学位课 (14 学分) Professional Degree Courses (14credit)	203032	学术道德与论文写作 Academic ethics and essay writing	16	1	1	考査 Check	必修				
	203001	高级生物化学 Advanced Biochemistry	32	2	1	考试 Exam					
	203002	高级微生物学 Advanced Microbiology	32	2	1	考试 Exam					
	203033	现代仪器分析与波谱解析 Modern Instrumental Analysis and Spectrum analysis	32	2	1	考试 Exam					
	203031	海洋食品化学 Seafood Chemistry	16	1	1	考查 Check					
	203005	现代食品科学技术 Modern Food Science and Technology	32	2	2	考查 Check					
	203013	试验设计与数据处理 Experimental Design and Data Processing	32	2	2	考查 Check					
	203034	食品质量与安全控制 Food Quality and Safety Control	32	2	1	考查 Check					
专业选修课 (≥10 学分) Selective Courses (≥10 credit)	203006	高级生物化学实验技术 Advanced Biochemical Experimental Technology	32	2	1	考查 Check					
	203007	现代仪器分析实验技术 Modern Instrumental Analysis Experimental Technology	32	2	1	考查 Check					
	203008	食品物性学 Physical Properties of Foods	32	2	1	考査 Check					
	203009	食品毒理学 Food Toxicology	32	2	2	考查 Check					
	203011	食品酶学 Food Enzymology	32	2	2	考查 Check					
	203044	食品绿色加工新技术 Novel Food Processing Technology	32	2	1	考查 Check					
	203014	蛋白质化学研究进展 Progress in Protein Chemistry	16	1	2	考查 Check					
	203015	碳水化合物化学研究进展 Progress in Carbohydrate Chemistry	16	1	2	考査 Check					
	203036	功能食品研发专题	16	1	1	考查					

广东海洋大学硕士研究生培养方案

		Progress in Function Food				Check	
	203017	海洋食品加工研究进展	16	1	1	考查	
		Progress in Seafood Processing				Check	
		食品分子生物学	32	2	2	考查	
		Molecular Biology of Food				Check	
	203019	食品营养学研究进展	16	1	1	考查	
		Progress in Food Nutriology				Check	
	203038	海洋天然产物化学	32	2	2	+v -k-	
		Marine natural product				考查	
		chemistry;				Check	
	203039	食品营养与功能评价	32	2	1	**	
		Food Nutrition and Function				考查	
		Evaluation				Check	
		油脂化学研究进展	16	1	1		
						-	
		Progress of oleochemistry				Check	
必修环节(4	203J15	学术活动		2	1-5	考查	
学分)		Seminars				Check	
Compulsory	203j16						
part		实践活动		2.	1-5	考查	
(4-credit)	203,10	Practice		2	1-3	Check	
补修课 Remedial courses	203027	食品化学					
		Food Science				Test	
	203028	食品工艺学				考试	
		Food processing technology				Test	