食品科学与工程 Food Science and Engineering（0832）

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，创新性开展基础和应用研究，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. 培养对中华人民共和国友好，德、智、体全面发展的食品专业研究与管理高级专门人才。

2.掌握本学科坚实宽广的基础理论和系统深入的专门知识。

3.了解本专业领域学科发展前沿和动向；具有独立从事科学研究或独立担负专门技术工作的能力，具有科技创新的能力；具有团结协作精神，能在专门技术或科学研究方面做出创造性的成果，成为高级专业人才。

4.具备良好的写作能力和国际学术交流能力；具有较强从事与该专业有关的教学、科研、管理的能力。

5.具有健康的体魄和良好的心理素质。

1. Cultivate senior professionals in food research and management who are friendly to the People's Republic of China and develop comprehensively in moral, intellectual and physical

2. PhD students are expected to master broad basic theories and expertise.

3. PhD students are also expected to have a good understanding of cutting-edge progress in our discipline, and to have the strong ability to do independent scientific and technical research. Our students are encouraged to make creative achievements in specialized technologies or science by cooperation with others.

4. PhD students are encouraged to develop their abilities in scientific writing, international academic exchange, other major-related teaching, research and managements through studying.

5. PhD students should have good physical quality and high psychological diathesis.

四、培养方式

IV. Training Models

1.博士研究生培养实行导师负责制，成立以博士研究生导师为组长的指导小组，其成员由 3～5 名本专业和相关学科专业或跨学科专家组成。

2.采取科学研究为主、课程学习为辅、自主学习与创新贯穿全程的方式。

1. The tutor responsibility system is implemented in the training of doctoral students, and a steering group with the tutor as the leader is set up, and the members are composed of 3-5 experts from the major and related disciplines or interdisciplinary.

2. Adopt the way of scientific research as the main task, curriculum learning as the supplement, and independent learning and innovation throughout the whole process.

五、基本学制及学习年限

V. Basic educational system and study length

博士研究生（含硕博连读博士阶段）基本学制为 4 年，本直博研究生基本学制为 5 年，最长学习年限为 6 年（含休学）。全日制研究采取全脱产在校学习方式。

The basic educational system of doctoral students (including the doctoral stage of master's degree and doctoral degree) is 4 years, and that of direct doctoral students is 5 years, and the longest length of study is 6 years (including suspension). Full time research adopts full-time study in school.

六、学分要求及课程设置

VI. Credit requirements and course setting

普通博士研究生（含硕博连读博士阶段）应修满 14 学分，其中，学位课 8 学分，选修课 4 学分，必修环节 2 学分。本直博研究生学分要求参照国内生。

普通博士研究生课程学习一般在第 1 学期完成，部分课程可安排在第 2 学期完成。课程成绩学位课 70 分以上（含）为及格，非学位 60 分以上（含）为及格，成绩及格取得相应学分。课程设置见附表。

Credit system is adopted in this doctoral program and a total of course credits must be no less than 14, at least 8 credits for degree courses, at least 4 credits for optional courses and 2 credits for practice.

All the classroom teaching should be finished before third semester. Degree course’s score is at least 70 points while non-degree courses and

elective courses score 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

The PhD students 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. To study the "guide to academic norms of science

and technology in Colleges and universities" (Science, technology 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，阅读与本研究领域相关的文献不少于 60 篇，在进行论文开题论证前应撰写不少于 1 万字文献综述，并在学院内公开做开题报告。要求在第 2 学期内完成。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

The PhD students must complete the course study specified in the training plan and pass the assessment before they 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. The PhD students should read no less than 60 articles related to this research field. Before starting the thesis argumentation of the thesis, PhD students should write a literature review of no less than 10,000 words and make a thesis opening report publicly in the college. Opening report should be finished in the second 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 PhD students is carried out, which is mainly for comprehensive examination and evaluation of political thinking, curriculum learning, and scientific research capabilities.

5.学术活动（必修 2 学分）

博士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。在校学习期间参加学术活动不少于 8 次，且至少参加一次所在学科领域的全国或国际性学术会议，并在学术会议上宣读自己的研究成果，完成时间第 1-7 学期。

研究生参加学术活动应做好记录，毕业前一学期撰写总结报告，经导师（或指导小组）和学院审核，合格者记 2 学分。

5. Academic activities (2 credits)

PhD students should participate in certain academic activities, including academic lectures, academic reports, and academic seminars. Students should participate in academic activities no less than 8 times, as well as encourage students to make an academic report at least once within international or National Academic Conference, and the completion time is during 1 to 7 semester.

PhD students 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.

八、论文工作要求

VIII. Requirements of thesis

学位论文应在导师的指导下，由研究生本人独立完成。博士生学

位论文研究的实际工作时间（从开题报告到申请论文答辩）原则上不少于 2.5 年。

学位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。英文授课留学生可使用英文撰写学位论文，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》。

博士学位论文实行原创性检测、预答辩、专家评阅、公开答辩制度。正式答辩前 3 个月内须进行预答辩，预答辩通过后方能提交论文申请正式公开答辩。学位论文评阅和答辩时间一般安排在第 8 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。

Thesis writing must be completed independently by graduate students under the guidance of tutor.The actual working time of the degree (graduation) thesis research (from the opening report to the application thesis defense) is generally not less than 2.5 years. 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, pre defense, expert evaluation and public defense is implemented in doctoral dissertations. Pre defense is required within 3 months before the formal defense, and the paper can be submitted for formal public defense only after the pre defense is passed. The time for dissertation review and defense is generally arranged

in the eighth 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、科研成果要求

IX. Requirements for scientific research achievement

博士研究生申请博士学位前应以第一作者（或导师第一、本人第二）、以广东海洋大学为第一单位署名，论文水平达到以下要求：在SCI源期刊发表（或正式接收）2篇以上与学位论文相关的学术论文，并且其中至少1篇为 JCR 3区以上论文。

汉语水平考试（HSK）。使用汉语接受学历教育者，中文能力应当达到《国际汉语能力标准》五级水平；使用英语接受学历教育者，应当达到《国际汉语能力标准》三级水平，并用汉语写作论文摘要。

Before applying for a doctoral degree, a doctoral student should published 2 papers which is related to degree thesis, and should be signed by the first author (or second author when the supervisor is the first author), and in which first unit is Guangdong Ocean University. The level of the paper must meet the following requirements: published in the SCI source journal (Or formally accepted), and at least one of them is a JCR 3 ranked or above paper.

Chinese Proficiency Test (HSK): Those who use Chinese to receive academic qualifications should have Chinese proficiency at Level 5 of the International Standards for Chinese Proficiency; Those who use English for academic qualifications should attain Level 3 of the International Standards for Chinese Proficiency and write abstracts in Chinese.

十、毕业及授位

X. Graduation and granting

留学研究生在规定的修业年限内修满培养方案规定学分，完成培养环节，通过汉语水平考试三级（HSK3），方可申请学位（毕业）论文答辩，通过论文答辩者，则准予毕业，发给毕业证书，达到科研成果要求等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》授予博士学位。

A doctoral student is permitted for dissertation defense after finished the required courses, passed interim reviews, and passed HSK3. The doctoral student passed the thesis defense will be allowed to graduate and issue a graduation certificate. The doctoral student applying for the doctor degree should meet the requirements of scientific research achievements. Those who meet the conditions for awarding a doctor 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：

食品科学与工程课程设置及必修环节

Course Coding Sheet

课程类别 Course Category	课程编号 Course code	课程名称 Course	学时 Credit hours	学分 Credit	开课学期 Semester	考核方式 Evaluation Mode	备注 Note
公共学位课（4 学分）Public degree courses（4 credits）	105002	中国概况 Introduction to China	48	2	1	考试 Test	
	113002	基础汉语（一） The Basic Chinese	48	1	1	考试 Test	
	113003	基础汉语（二） The Basic Chinese	48	1	2	考试 Test	
专业学位课（4 学分）Professional degree courses（4 credits）	103001	学术道德与论文写作 Academic ethics and essay writing	16	1	1	考查 Check	
	103002	食品科学技术发展前沿 Development of food science and technology	16	1	1	考查 Check	
	103003	食品科学与工程 Seminar Seminar for food science and technology	32	2	1	考查 Check	
选修课（≥4 学分）Professional elective courses（≥4 credits）	103004	水产利用化学研究前沿 Frontiers of aquatic product utilization chemistry	32	2	1	考查 Check	
	103005	海洋生物资源综合利用研究前沿 Frontiers of marine biological resources utilization	32	2	1	考查 Check	
	103006	活性物质与功能食品研究前沿 Frontiers of bioactive substances and function food	32	2	1	考查 Check	
	103007	食品安全研究前沿 Frontiers of food safety	32	2	1	考查 Check	
	103008	食品微生物研究前沿 Frontiers of food microbiology	32	2	1	考查 Check	
	103009	营养科学研究前沿 Frontiers of nutriology	32	2	1	考查 Check	
	103010	食品科技与产业发展战略 Food science and technology and industry development strategy	32	2	1	考查 Check	
必修环节 Compulsorylinks（2 学分）	103J01	学术活动 Seminar and academic report		2	1-7	考查 Check	

补修课程 Completing the courses：补修课程由导师决定 The supplementary courses are selected by supervisor