

机械工程来华留学博士研究生培养方案

Doctoral Degree Program of Mechanical Engineering

一、适用学科 (Applicable Discipline)

学科名称: 机械工程

学科代码: 0802

Discipline: Mechanical Engineering

Discipline Code: 0802

二、主要研究方向 (Main Research Field)

- 先进制造技术/Advanced Manufacturing Technology
- 现代设计理论与方法/Modern Design Theory and Method
- 智能机械与机器人技术/Intelligent Machinery and Robot Technology
- 海洋工程装备技术/Marine Engineering Equipment Technology

三、培养方案 (Curriculum)

1. 课程设置和学分要求 (Courses and Credits)

课程类别 Category	课程编号 Code	课程名称 Course	学时 Hour	学分 Credit	开课学期 Semester	备注 Remark
公共必修课 General Compulsory Courses	202032020900	中国概况 Survey of China	48	3	2	必选 Compulsory
	202032020901	汉语 Chinese	64	3	1	必选 Compulsory
	202032023009	科学与工程计算 Scientific and Engineering Computing	48	2	1	必选 Compulsory
选修课 Optional Courses	202010721901	机械工程专题 Special Topics of Manufacturing and Automation	32	2	1	必选 Compulsory
	202010721902	现代机械设计理论 Theory of Modern Mechanical Design	32	2	1	选修 Optional
	202010721903	控制系统建模及仿真技术 Modeling and Simulation of Control System	32	2	1	
	202032020902	汉语交际 Chinese Communication	64	3	1	选修 Optional
	202032020903	HSK 辅导 HSK Tutoring	48	3	2	
	202010720001	论文写作指导 Thesis/Dissertation Writing	16	1	1	

学分要求 Credit Requirement	应修总学分≥16 学分，其中课程学分≥12 学分，必修环节≥4 学分。 Students should achieve no less than 16 credits totally, including course part 12 credits, compulsory part 4 credits.				
其他要求 Others	1.对于跨学科攻读本专业博士学位的研究生，应由导师根据研究方向需要指定若干门专业核心课程进行补修，只记成绩，不计学分。 2.硕士阶段没有修读“论文写作指导”课程的，一般应选其作为选修课。 3.毕业前中文能力应当达到《国际汉语能力标准》三级水平。能够顺利使用英语完成本学科、专业的学习和研究任务，并具备使用英语从事本专业相关工作的能力。 1. The interdisciplinary doctoral candidates are required to take several professional core courses designated by their supervisors, which record grades only without any credits. 2. Those who have not taken the course of "Thesis/Dissertation Writing" in the master's degree programs are required to study it as an optional course. 3. Before the graduation, all international students are required to pass HSK band III (level) at least. Be able to use English successfully to complete the learning and research tasks of the discipline and major, and have the ability to use English to engage in the relevant work of the major.				
2.必修环节及要求 (Compulsory Parts and Requirements)					
必修环节名称 Compulsory Part	学分 Credit	开课学期 Semester	考核内容或要求 Assessment Requirement	考核方式 Exam Method	备注 Remark
学术活动 Academic activities	1	5	<p>博士生参加相关学术讲座的次数不少于 5 次，且至少做 1 次学术报告；学术报告的内容要与所研究的课题相关。</p> <p>每次参加学术讲座要有 1500 字的总结报告，经导师签字后交院教务办公室，并给予相应学分。</p> <p>Doctoral students shall attend relevant academic lectures no less than 5 times and give academic presentation at least once; the topic of the academic presentation shall be related to the research topic.</p> <p>A 1500 word summary report shall be provided for each academic lecture, which shall be signed by the tutor and submitted to the Academic Affairs Office of the college, and corresponding credits shall be given.</p>	由院系负责考核 Assessed by the related college	至少选择 1 个环节 Select one part at least

<p>创新竞赛与创业活动 Innovation competition and entrepreneurial activities</p>	<p>1</p>	<p>5</p>	<p>参加“中国研究生创新实践系列大赛”或国家层面组织的创新创业活动等，符合学校有关规定条件的，可获得创新竞赛与创业活动成绩及学分。</p> <p>Those who participate in the "China Graduate Innovation Practice Series competition" or the innovation and entrepreneurship activities state organized and meet the relevant requirements of the school can obtain the scores and credits of the innovation competition and entrepreneurship activities.</p>	<p>由研究生院学术办公室考核 Assessed by the Academic Affairs Office of the Graduate School</p>	
<p>文献综述与开题报告 Literature review and thesis proposal</p>	<p>2</p>	<p>4</p>	<p>博士研究生入学后即开始阅读本学科国内外有关文献资料，总数不少于 60 篇，其中外文文献不少于 40 篇，并于第三学期完成不少于 8000 字的文献综述报告。文献综述报告应反映国内外本领域的研究历史、现状、前沿、发展动态、发展趋势、存在的问题及自己的见解等。</p> <p>博士生应在导师的指导下，根据自己所选定的研究方向和学位论文课题要求，就选题的科学根据、目的、意义、研究内容、预期目标、研究方法、课题可行性等做出论证并撰写开题报告，公开进行开题报告会。</p> <p>文献综述和开题报告由开题报告小组负责考核，开题报告小组考核通过后，文献综述和开题报告合计 2 学分。</p> <p>After enrolling, the PhD. students will start to read related domestic and foreign literature and materials, with a total of no less than 60 articles, including no less than 40 professional English file, and complete a literature review report of no less than 8,000 words in the third semester. The literature review report should reflect the research history, current situation, frontiers, development trends, development trends, existing problems and own opinions of the field at home and abroad. The literature review report must be reviewed by the tutor group before entering the thesis research work.</p> <p>Under the guidance of the tutor,</p>	<p>由开题报告小组负责考核 Assessed by the thesis/dissertation proposal group.</p>	<p>必选 Compulsory</p>

			<p>doctoral students should write thesis proposal stating the scientific basis, purpose, significance, research content, expected goals, research methods, feasibility of the topic, etc. according to the research direction and the requirements of the thesis selected and write the opening report, open discussion meeting.</p> <p>Literature review and opening report are examined by the opening report group, After the examination report group passes the examination, the literature review and the examination report will be awarded 2 credits.</p>		
<p>中期检查 Process assessment</p>	1	6	<p>中期检查最迟于开题后 1 年内完成。中期检查须成立中期检查考核小组，检查小组对博士生论文工作计划完成情况等内容予以评价，中期检查通过后计 1 学分。</p> <p>The mid-term review shall be completed no later than one year after the opening of the dissertation proposal.</p> <p>A mid-term inspection and assessment team shall be set up for mid-term inspection. The team shall evaluate the completion of the doctoral dissertation work plan and other contents, and 1 credit shall be calculated after passing the mid-term inspection.</p>	<p>由中期检查小组负责考核 Assessed by process assessment group</p>	<p>必选 Compulsory</p>

3.学位论文要求 (Degree Thesis Requirements)

对学位论文的学术道德、学术水平、创新性成果、论文撰写、预答辩以及答辩等方面的具体要求:
The degree thesis requirements for academic ethics, academic level, creative outcome, thesis writing, pre-defense and final defense of graduation:

学术道德: 博士生在攻读学位期间,要注重培养和提高自身学术道德修养,遵守学术研究的基本规范,自觉抵制学术不端行为。应参加学校和学院组织的学术道德和学术规范讲座,同时撰写不少于 3000 字的学习报告或心得体会,由导师组审阅同意后交学院人才培养办公室存档。在发表学术论文和撰写学位论文等有关工作中,应严格按照《哈尔滨工程大学研究生学术道德规范管理办法》要求,恪守职业道德,维护科学诚信。博士生导师在博士生培养过程中需对博士生进行学术道德教育和学术规范训练,并对博士生做出明确要求。

学术水平: 在本门学科上掌握坚实宽广的基础理论和系统深入的专门知识;具有独立从事创造性科学研究工作、分析及解决本学科领域关键技术问题的能力;能够在本学科相关领域的科学或专门技术上做出创造性的成果,并符合学校和学院的相关要求。

创新性成果: 博士学位论文的课题研究,可以是基础研究、应用基础研究,也可以是工程应用研究,尤其要加强对学科前沿和学科交叉渗透领域的研究,学位论文应对所研究的课题有新的见解,对学术发展、经济建设和社会进步有一定的促进作用。创新成果具体要求按学校及学院相关文件执行。

论文撰写: 博士学位论文撰写的要求按学校及学院相关文件执行。

预答辩和答辩: 博士学位论文预答辩及答辩的要求按学校及学院相关文件执行。

Academic ethics: The subject research of doctoral dissertation can find the topic in basic research, applied basic research, or engineering application research. In particular, it is necessary to strengthen the research on the frontier and interdisciplinary penetration fields of disciplines. The dissertation should have new opinions on the research subject and play a certain role in promoting academic development, economic construction and social progress. The specific requirements for innovation achievements shall be implemented in accordance with the relevant regulations of the university and the college.

Academic level: Doctoral candidate should have solid and broad basic theory and systematic in-depth professional knowledge in this field; have the ability and quality to analyze independently and solve key technical problems in this field, and meet the relevant requirements of the university and this college.

Creative Outcome: The research of doctoral dissertation Can find the research topic in basic research, applied basic research, or engineering application research. In particular, it is necessary to strengthen the research on the frontier and interdisciplinary penetration fields of disciplines. The dissertation should have new ideas on the research topics and play a certain role in promoting academic development, economic construction and social progress. The specific requirements for innovation achievements shall be implemented in accordance with the relevant regulations of the university and the college.

Thesis writing: The requirements for writing a doctoral dissertation will be implemented in accordance with the relevant regulations of the university and the college.

Pre-defense and Defense: The requirements for pre-defense and defense of doctoral dissertations will be implemented according to the relevant regulations of the university and the college.