

大连理工大学

管理与经济学部本科实验教学大纲

2017年9月

目 录

案例分析教学大纲.....	1
运营与物流综合实验教学大纲.....	5
跨境电商实训教学大纲.....	10
工商管理毕业设计教学大纲.....	14
物流管理毕业设计教学大纲.....	21
信息管理与信息系统毕业设计教学大纲.....	28
国际经济与贸易毕业设计教学大纲.....	36
金融学毕业设计教学大纲.....	44

大连理工大学管理与经济学部本科实验教学大纲

第四学年度第 2 学期 案例分析课程大纲

课程中文名称：案例分析

课程英文名称：Enterprise case analysis practice

授课教师：朱方伟

选修类别：必修 选修

学分：2 学分

时数：2 周

教师网址：无

先修科目：无

Prerequisites: None

课程目标：（对应毕业要求：4-①，4-②，4-③，5-①，5-④，5-⑥）

企业案例分析实践课程是工商管理专业在教学中实践环节的特别设置，旨在提升学生分析问题和解决问题的能力，团队协作精神以及综合表达能力，帮助学生掌握基本的案例分析技巧与方法，提高对管理理论和方法的实际运用能力，以适应教学培养过程的要求。

学生预计将具备以下能力和技能：

1. 了解并熟悉案例企业相关的业务和管理现状（对应毕业要求：4-①，4-②）

学生通过案例阅读与分析，增强对案例企业与专业相关的管理现状以及日常运行流程的认识，全面了解案例企业的组织机构设置、组织文化以及业务部门的管理与业务状况。

2. 提高实践能力（对应毕业要求：5-①，5-④）

培养学生理论联系实际的能力，提高团队合作能力以及创新能力，锻炼学生的语言表达能力以及人际沟通能力，增强在案例分析和行业资料搜集过程中发现问题、分析问题和解决问题的能力。

3. 检验并巩固专业理论教学的效果（对应毕业要求：4-③，5-⑥）

通过将所学的理论知识应用于处理案例问题，对学生所掌握的专业知识的广度与深度进行考核，在巩固理论知识的同时，增强专业知识运用的灵活性。

Course Objectives: (Required Graduate Abilities: 4-①, 4-②, 4-③,5-①, 5-④, 5-⑥)

Case analysis in practice course is special set of business management in the teaching practice, to enhance the ability of students to analyze and solve problems, team spirit and comprehensive skills, help students master the basic skills and methods of case analysis, improve the management theory and method of practical ability, in order to adapt to the process teaching culture.

Students are expected to have the following abilities and skills:

1. understanding and familiarity with case business related business and management status (corresponding to graduation requirements: 4-①, 4-②)

Students through reading and analysis of the case, to enhance the professional and related management and to recognize the status of case enterprise daily operation process, a comprehensive understanding of management and business organization enterprise case setting, organizational culture and business department.

2. improve practical ability (corresponding to graduation requirements: 5-①, 5-④)

To cultivate students' ability of theory and practice, improve the team cooperation ability and innovation ability, training students' language expression ability and interpersonal communication skills, enhanced in case analysis and industry data collection problems, the ability to analyze and solve problems in the process of discovery.

3. to examine and consolidate the effect of professional theory teaching (corresponding to graduation requirements: 4-③,5-⑥)

By applying the theoretical knowledge to dealing with the case problems, the breadth and depth of the professional knowledge that the students have mastered can be evaluated, and the flexibility of the professional knowledge can be enhanced while the theoretical knowledge is strengthened.

教学内容、基本要求和学时分配：

课次	教学内容	教学要求	学时	教学方式	对应课程目标
1	一、专题讲座模块	讲授案例分析所涉及的相关理论和方法。	6	讲授	1
2	二、教师指导模块	1. 任课教师以小组为单位开展理论传授和指导工作； 2. 围绕指定企业案例，有针对性的“过程与方法”的课堂讲授，不少于4课时，集中培训，启发并指导各小组学生，自主完成案例分析工作； 3. 案例分析注重创新性思想和解决方案的提出，理论与实际相结合，做到论据充分。	24	讲授 讨论	1、2
3	三、小组研讨模块	1. 由组长牵头以小组为单位进行，时间自行安排，任课教师参与； 2. 依据课程进度安排和本小组实际情况，组织学生阅读、思考、分析、讨论和交流等活动。	18	讨论	2、3

Course Outline:

Course Time	Course Contents	Teaching Requirements	Course Hours	Teaching Methods	Course Goals
1	Special lecture module	Teach cases and analyzing the related theories and methods of actual combat.	6	teach	1
2	Teacher guidance Modular	1. Teachers carry out theoretical teaching and guidance work in groups. 2. Around the specified business case, targeted "process and method" in the classroom teaching, not less than 4 hours; concentrated training, inspire and guide the students, case analysis work independently, not less than 20 hours. 3. The case analysis pays attention to the innovation thought and the solution proposal, the theory and the reality unifies, achieves the argument to be sufficient.	24	teach discuss	1,2

3	Panel discussion module	1.Led by the group leader, in groups as a unit, the timing of their own arrangements, the classroom teachers to participate as appropriate. 2.Organize students to read, think, analyze, discuss and communicate on the basis of the progress of the course and the actual situation of the group.	18	discuss	2,3
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学部认定本科项目学习目标（FME Learning Goals for Undergraduate Program）：

- 理解商业伦理道德和社会责任的重要性。
Graduates will understand the importance of business ethics and social responsibility.
- 具备商科基础知识以及所学专业的专门知识。
Graduates will understand the fundamentals of business and the professional knowledge relevant to their majors.
- 具有批判性思维和分析问题、解决问题的能力。
Graduates will be capable of critical thinking, analyzing and solving problems.
- 具有团队协作的意识和能力。
Graduates will demonstrate team spirit and be able to collaborate productively with others.
- 具备有效沟通能力和企业实践能力。
Graduates will be able to communicate effectively and work effectively in an enterprise
- 具有全球化意识。
Graduates will have an awareness of globalization.

教学方式（Teaching Methods）：

教师讲授与学生讨论相结合。

考核及成绩评定方式（Evaluation Methods）：

案例分析报告 80%，小组讨论表现 20%。

教科书目（Required Texts）：

由指导教师根据选题内容确定。

参考书目（Reference Texts）：

由指导教师根据选题内容确定。

其它参考资料（Other References）：

由指导教师根据选题内容确定。

大连理工大学管理与经济学部本科实验教学大纲

第三学年度第 2 学期 运营与物流综合实验课程大纲

课程中文名称：运营与物流综合实验

课程英文名称：**POM and Logistics Comprehensive Experiments**

授课教师：白朝阳

选修类别：必修 选修

学分：1.5 学分

时数：32 学时（其中授课 8 学时，实验 24 学时）

教师网址：无

先修科目：现代物流管理概论、运营管理、运输与配送管理、物流自动化与信息化

Prerequisites: Modern Logistics Management Introduction, Operations Management, Transportation and Distribution Management, Logistics Automation and Information

课程目标：（对应毕业要求：1-①，1-②，1-③，1-④，2-②，2-④，5-③，5-④）

本课程运用信息化工具，对运营和物流管理的基本理论与方法展开认知型、综合型、创新型实验教学。以精益生产、物流合理化为指导，从设计、评价与改善三方面研究企业生产运作与物流系统问题，它涵盖了生产准备管理、生产计划管理、生产作业管理、车间生产物流仿真、企业内物流仿真、企业供应链仿真等方面内容。

学生预计将具备以下能力和技能：

1. 具备一定数学计算和分析能力，构建企业生产运作、物流管理模型（对应毕业要求：1-①）；
2. 利用原理性知识自主分析实验中发现的相关问题（对应毕业要求：1-②）；
3. 针对实验问题，具备自主设计改进方案的能力（对应毕业要求：1-③）；
4. 利用仿真软件或自主设计系统，分析和解决实际专业问题能力（对应毕业要求：1-④）；
5. 通过团队合作完成个案报告（对应毕业要求：5-④）；
6. 根据道德问题和案例了解道德行为（对应毕业要求：2-②）；
7. 透过报告演讲进行有效沟通（对应毕业要求：5-③）。

Course Objectives: (Required Graduate Abilities: 1-①,1-②,1-③,1-④,2-②,5-③,5-④)

This course develops the experimental teaching about theories and methods of the production operations and logistics management to students on the strategies of the comprehensive mode, the inventive mode, and the cognitive model, by information tools. Guided by the lean production conception and logistics rationalization conception, this course studies on business production operation and logistics systems from three aspects, design evaluation and improvement, which involves production preparation management, production plan management, production operation management, workshop production logistics simulation, enterprise logistics simulation and enterprise supply chain simulation, etc.

Students are expected to have the following abilities and skills:

1. Training the mathematical analyses ability to build the model of enterprise production operations and logistics management (Required Graduate Abilities:1-①).
2. Training the ability to analyze questions found in the experiment (Required Graduate Abilities:1-②).
3. Training the ability to design improvement programs independently for the experiment (Required Graduate Abilities:1-③).
4. Explaining and analyzing practical problems by the available software and the independent development software (Required Graduate Abilities:1-④).
5. Completing the case report through the team work (Required Graduate Abilities:5-④).
6. Understanding the ethical behavior according to the moral problems and the cases (Required Graduate Abilities:2-②).
7. Making effective communication through the report speech (Required Graduate Abilities:5-③).

教学内容、基本要求和学时分配：

课次	教学内容	教学要求	学时	教学方式	对应课程目标
1	第一章 运营与物流综合实验概述	生产系统设计与企业物流设施规划	2	讲授	1、3
2	第二章 生产运作综合实验基本理论和方法	1. 生产运作的相关概念、理论 2. 生产计划与控制方法 3. 案例分析	2	讲授	1-4
3	第三章 生产运作综合实验	1. 生产准备管理实验 2. 生产计划管理实验 3. 生产作业管理实验	12	实验	1-5
4	第四章 企业物流综合实验基本理论和方法	1. 企业物流的相关概念、理论 2. 企业物流系统设计方法 3. 案例分析	2	讲授	1-4
5	第五章 企业物流综合实验	1. 车间生产物流仿真实验 2. 企业内物流仿真实验 3. 企业供应链仿真实验	12	实验	1-5
6	第六章 实验考评	1. 实验结果分析 2. 根据分析提出详细改进方案 3. 大作业评价	2	讲授 讨论	3-7

Course Outline:

Course Time	Course Contents	Teaching Requirements	Course Hours	Teaching Methods	Course Goals
1	Chapter1, Introduction on production operations and logistics comprehensive experiments	Production system designing and enterprise logistics facilities planning	2	Lecture	1,3
2	Chapter2, Basic theory and method of comprehensive production operations experiments	1. Concepts and theories of production operation. 2. Production planning and control method 3. Case analysis	2	Lecture	1-4
3	Chapter3, Comprehensive production operations experiments	1. Production preparation management experiment 2. Production planning management experiment 3. Production operation management experiment	12	Experiment	1-5

4	Chapter4 , Basic theory and method of comprehensive enterprise logistics experiments	1.Concepts and theories of enterprise logistics 2.Design method of enterprise 3.Logistics systems Case analysis	2	Lecture	1-4
5	Chapter5, Enterprise logistics experiments	1.Workshop production logistics simulation experiment 2.Logistics simulation experiment 3.Enterprise supply chain simulation	12	Experiment	1-5
6	Chapter6, Experimental evaluation	1.Analysis of experimental results 2.Improvement of method based on the analysis 3.Final report evaluation	2	Lecture Discussion	3-7

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理解商业伦理道德和社会责任的重要性。

Graduates will understand the importance of business ethics and social responsibility.

具备商科基础知识以及所学专业的专门知识。

Graduates will understand the fundamentals of business and the professional knowledge relevant to their majors.

具有批判性思维和分析问题、解决问题的能力。

Graduates will be capable of critical thinking and analyzing and solving problems.

具有团队协作的意识和能力。

Graduates will demonstrate team spirit and be able to collaborate productively with others.

具备有效沟通能力和企业实践能力。

Graduates will be able to communicate effectively and work effectively in an enterprise

具有全球化意识。

Graduates will have an awareness of globalization.

教学方式 (Teaching Methods) :

授课 (Lectures) 30%

辅导 (Tutorials) 10%

实验 (Labs) 30%

讨论 (Discussions) 10%

案例教学 (Case Studies) 10%

报告 (Presentations) 10%

考核及成绩评定方式 (Evaluation Methods) :

平时成绩 (Pre-test) 100%

课堂随堂测验 (Quiz) 20%

个人报告 (Individual Presentation) 20%

团体报告 (Group Presentation) 40%

课后作业 (Assignment) 20%

教科书目 (Required Texts) :

冯根尧. 运营管理实验教程. 北京: 北京大学出版社, 2015

Geng-Rao Feng. Operation Management Tutorial Experiment. Peking University Press, 2015

参考书目 (Reference Texts) :

林光. 企业运营模拟实验. 北京: 科学出版社, 2012

Guang Lin. Business Operation Simulation Experiment. Beijing: Science Press, 2012

其它参考资料 (Other References) :

无

大连理工大学管理与经济学部本科实验教学大纲

第四学年度第 1 学期 跨境电商实训 课程大纲

<p>课程中文名称：跨境电商实训</p> <p>课程英文名称：Trans-national E-commerce training</p> <p>授课教师：丁永健</p> <p>选修类别： <input type="checkbox"/>必修 <input checked="" type="checkbox"/>选修</p> <p>学分：2 学分</p> <p>时数：48 学时</p>
<p>教师网址：http://faculty.dlut.edu.cn/yjding/zh_CN/index.htm</p>
<p>先修科目：国际贸易学、国际贸易实务</p>
<p>Prerequisites: International Trade, International Trade Practice</p>
<p>课程目标：（对应毕业要求：1-②，2-①，2-②，2-③，3-②）</p> <p>本课程是一门实训课，目的是使学生了解目前国内外几种常用的跨境电子商务平台及相关知识；熟悉外贸第三方电商平台的规则及平台基本操作、业务推广和客户服务；掌握国际物流和国际支付知识；掌握外贸市场网络调研、选品、采购；掌握对外产品网上报价、发布及推广；掌握处理网上询盘、报盘、谈判业务和客户关系维护；掌握在跨境交易的整个过程中相关问题的正确处理等专业知识和业务操作。是学生能够根据国际市场需求和不同的跨境电商平台，进行跨境网络调研、独立寻求货源并进行采购，能够在外贸第三方电商平台建立店铺、运营店铺、维护和管理店铺。</p> <ol style="list-style-type: none">1. 系统掌握跨境电商的相关知识（对应毕业要求：1-②）；2. 能够挖掘和识别跨境电商的商业机会（对应毕业要求：2-①）；3. 能够整合相关的知识从事跨境电商实践（对应毕业要求：2-②）；4. 能够运用相关数学工具分析跨境电商数据（对应毕业要求：2-③）；5. 独立解决跨境电商经营中出现的各类问题（对应毕业要求：3-②）。
<p>Course Objectives: (Required Graduate Abilities: 1-②, 2-①, 2-②, 2-③, 3-②)</p> <p>This course is to help students understand at home and abroad, several cross-border e-commerce platform and related knowledge; familiar with foreign trade business platform</p>

of the third party platform rules and basic operation, business promotion and customer service; Master of international logistics and international payment knowledge; to master foreign trade market network research, product selection, procurement; master foreign products online quotation, publishing and promotion; handling online inquiry, quotation, negotiate business and customer relationship maintenance; grasp the related problems in the whole process of cross-border transactions in the correct processing of professional knowledge and business operation. Students can according to international market demand and different cross-border electronic business platform, cross-border network research, and seek independent supply procurement, to build shops, shops operating, maintenance and management of the third party in the foreign trade business platform shop.

Students are expected to be equipped with the following abilities and skills upon completion:

1. Grasp the relevant knowledge of cross-border electricity supplier (Required Graduate Abilities: 1-②).
2. Be able to tap and identify business opportunities for cross-border electricity providers (Required Graduate Abilities: 2-①).
3. Be able to integrate relevant knowledge to engage in cross-border e-commerce practice (Required Graduate Abilities: 2-②).
4. Able to use mathematical tools to analyze cross-border e-commerce supplier data. (Required Graduate Abilities: 2-③).
5. Independently solve the various problems arising in the operation of cross-border e-commerce (Required Graduate Abilities: 3-②).

教学内容、基本要求和学时分配：

课次	教学内容	教学要求	学时	教学方式	对应课程目标
1	第一章 电商平台选择	1. 团队组建 2. 主要电商平台选择 3. 账号注册	6	讨论 实验	1-3
2	第二章 开店	1. 网店起名 2. 界面设计	6	讨论 实验	1-3
3	第三章 选品	1. 产品遴选 2. 目标市场 3. 目标顾客	6	讨论 实验	1-3
4	第四章 品牌	1. 品牌策略 2. 品牌管理 3. 品牌推广	6	讨论 实验	1-3

5	第五章 供应链策略	1. 供应商选择 2. 供应商库 3. 物流管理	6	讨论 实验	1-3
6	第六章 营销推广	1. 吸粉 2. 爆品 3. 客户关系维持	6	讨论 实验	1-3
7	第七章 数据分析	1. 数据获取 2. 数据分析	6	讨论 实验	1-4
8	第八章 创业准备	1. 实验总结 2. 创业准备 3. 公司注册	6	讨论 实验	5

Course Outline:

Course Time	Course Contents	Teaching Requirements	Course Hours	Teaching Methods	Course Goals
1	Chapter1, E- business platform selection	1.Team building 2.He main business platform choice 3.Account registration	6	discussion experiment	1-3
2	Chapter2, Shop opening	1.Shop name 2.Interface design	6	discussion experiment	1-3
3	Chapter3, Product selection	1.Product selection 2.Target market 3.Target customer	6	discussion experiment	1-3
4	Chapter4, Brand	1.Brand strategy 2.Brand management 3.Brand promotion	6	discussion experiment	1-3
5	Chapter5, Supply chain strategy	1.Supplier selection 2.Supplier management 3.Physical distribution management	6	discussion experiment	1-3
6	Chapter6, Marketing promotion	1.Fans management 2.Popular goods 3.Customer relationship maintenance	6	discussion experiment	1-3
7	Chapter7, Data analysis	1.Data acquisition 2.Data analysis	6	discussion experiment	1-4
8	Chapter8, Entrepreneurship preparation	1.Experimental summary 2.Entrepreneurship preparation 3.Company registration	6	discussion experiment	5

学部认定本科项目学习目标（FME Learning Goals for Undergraduate Program）：

理解商业伦理道德和社会责任的重要性。

Graduates will understand the importance of business ethics and social responsibility.

具备商科基础知识以及所学专业的专门知识。

Graduates will understand the fundamentals of business and the professional knowledge relevant to their majors.

具有批判性思维和分析问题、解决问题的能力。

Graduates will be capable of critical thinking and analyzing and solving problems.

具有团队协作的意识和能力。

Graduates will demonstrate team spirit and be able to collaborate productively with others.

具备有效沟通能力和企业实践能力。

Graduates will be able to communicate effectively and work effectively in an enterprise

具有全球化意识。

Graduates will have an awareness of globalization.

教学方式（Teaching Methods）：

授课（Lectures）10%，实验（Labs）70%，讨论（Discussions）20%。

考核及成绩评定方式（Evaluation Methods）：

1. 平时成绩（Pre-test）30%

- 课堂参与（Class Participation）10%
- 个人报告（Individual Presentation）15%
- 团体报告（Group Presentation）5%

2. 其它评量方式（Other Evaluation Methods）70%

教科书目（Required Texts）： None.

参考书目（Reference Texts）： None.

其它参考资料（Other References）： None.

大连理工大学管理与经济学部本科实验教学大纲

第四学年度第 2 学期 工商管理毕业设计课程大纲

<p>课程中文名称：工商管理毕业设计</p> <p>课程英文名称：Business Management Graduation Design</p> <p>授课教师：朱方伟等</p> <p>选修类别：<input checked="" type="checkbox"/>必修 <input type="checkbox"/>选修</p> <p>学分：15 学分</p> <p>时数：15 周</p>
<p>教师网址：无</p>
<p>先修科目：无</p>
<p>Prerequisites: None</p>
<p>课程目标：（对应毕业要求：1-③，1-⑤，2-③，2-④，4-④，5-①，5-②，5-③）</p> <p>毕业设计是在教学过程的最后阶段采用的一种综合性的实践教学环节，是一门重要的必修课。在教师的指导下，以学生为主体进行科学研究工作的初步尝试，是一次较为系统的工程综合训练。通过该教学环节，学生将掌握选题、技术调研、文献检索、开题报告、设计论证、中期报告、论文撰写及毕业答辩这样一个完整的开展科学研究的一般程序和各部分的工作规范，从而培养学生综合运用所学的基础理论、专业知识和实践技能，分析和解决工程问题，提高学生从事开发生生产和科学研究综合能力，为择业工作和继续求学奠定坚实基础。</p> <p>学生预计将具备以下能力和技能：</p> <ol style="list-style-type: none">1. 培养学生巩固、深化和扩展所学的基础和专业知识的能力，在此基础上了解本学科前沿和发展趋势（毕业要求 1-⑤）；2. 具有设计、操作、执行、分析和撰写项目报告的能力（毕业要求 1-③）；3. 具有应对突发事件和危机的能力，采取恰当的应对措施（毕业要求 2-③）；4. 熟悉项目预研报告、可研报告、可行性分析报告、投标书、方案设计及方案评估等涉及的内容及深度（毕业要求 2-④）；5. 能够编制项目可行的项目计划书，并具有实施项目的基本能力（毕业要求 4-④）；

6. 掌握文献检索、资料查询及运用现代信息技术跟踪并获取信息的方法(毕业要求 5-①);
7. 至少熟练掌握一门外国语,并能进行有效的技术沟通和交流(毕业要求 5-②);
8. 能够使用专业技术语言,进行有效地沟通和交流(毕业要求 5-③)。

Course Objectives: (Required Graduate Abilities: 1-③, 1-⑤, 2-③, 2-④, 4-④, 5-①, 5-②, 5-③)

Graduation design is a comprehensive practice teaching parts adapted in the end of the teaching process. It's an important compulsory course. It's an initial attempt for students to get close to the main body of the scientific research work under the guidance of teachers, it's a systematic training of comprehensive engineering. Through this teaching session, students will master the general course of scientific research and the work norms of various parts, including a wide range of topics such as topic selection, technical research, literature search, question report, design demonstration, interim report, thesis writing and graduation reply. Students use the basic theory, professional knowledge and practical skills, analyze and solve engineering problems, improve students' ability to production and scientific research, and lay a solid foundation for job-hunting and further study.

Students are expected to be equipped with the following abilities and skills upon completion:

1. To cultivate students' ability to consolidate, deepen and expand the basic and professional knowledge they have learned, and to understand the forefront and development trend of the subject on this basis (Required Graduate Abilities:1-⑤).
2. Ability to design, operate, perform, analyze and write project reports (Required Graduate Abilities:1-③).
3. Have a good military theoretical basis, with the ability to deal with emergencies and crises, to take appropriate measures (Required Graduate Abilities:2-③).
4. Familiar with the contents and depth of the project pre-research report, feasibility study report, feasibility analysis report, tender, program design and program evaluation (Required Graduate Abilities:2-④).
5. Ability to develop a project plan that is viable and have the basic ability to implement the project(Required Graduate Abilities:4-④).
6. To master the literature search, data query and the use of modern information technology to track and obtain information (Required Graduate Abilities:5-①).
7. At least master a foreign language, and can carry out effective technical communication and exchange (Required Graduate Abilities:5-②).
8. Ability to communicate and communicate effectively using professional technical languages (Required Graduate Abilities:5-③).

教学内容、基本要求和学时分配：

课次	教学内容	教学要求	学时	教学方式	对应课程目标
1	一、毕业设计启动 1. 毕业设计总动员 2. 课题的分析与研究 3. 总体方案确定	1. 学生明确毕业设计任务、作用、相关的法律与法规、写作规范等，并树立终身学习的理念； 2. 完成中外文献检索、综合分析和调研工作，收集和汇总资料，做好进入设计工作的知识准备； 3. 经过科学论证后确定总体方案； 4. 外文翻译。	2-4周	讲授 辅导	1、3、5、6
2	二、毕业设计开题报告 1. 撰写开题报 2. 开题 PPT 制作及宣讲	1. 按照开题报告模板要求提交纸质开题报告； 2. 外文翻译完成二分之一工作量； 3. 采用 PPT 方式做开题汇报并答辩。	4周	讲授 辅导	7、8
3	三、毕业设计全面展开 1. 实验、测试、模拟仿真、数据处理、程序实现等具体方 2. 相关工具软件的学习及应 3. 开展设计、实验、计算等研究工	1. 确定实验、测试、模拟仿真、数据处理、程序实现等具体方案； 2. 掌握所需的仿真、设计、计算、编程等相关工具软件使用技巧； 3. 进行选题的具体设计与实验、计算程序编制等工作。	5-7周	讲授 辅导	2、4、5
4	四、毕业设计中期报告 1. 撰写中期报 2. 中期报告 PPT 制作及宣讲	1. 按照中期报告模板要求提交纸质中期报告； 2. 外文翻译全部完成； 3. 采用 PPT 方式做课题中期汇报并答辩。	8周	讲授 辅导	3、7、8
5	五、毕业设计具体工作的全面完善与提高 1. 所有预期研究目标的全面实 2. 数据分析与处 3. 获得结论性成 4. 完善系统方	1. 实现所有预期研究目标； 2. 对试验数据进行数据分析处理，绘制数据表格、曲线； 3. 进行结果分析，得出有关结论； 4. 根据上述成果，必要时对原方案进行修正，获得完善的实现方案。	9-13周	讲授 辅导	2、4、5

6	六、毕业论文撰写 1. 论文写作规 2. 科技论文写作技	1. 掌握《大连理工大学本科毕业设计（论文）模板》； 2. 学习科技论文的写作及写作技巧，按照《模板》要求撰写毕业设计论文。	12-13周	讲授 辅导	8
7	七、毕业论文评阅 1. 毕业论文审 2. 答辩 PPT 制作	1. 学生根据指导教师的意见修改论文； 2. 学生根据两位评阅教师的意见修改论文； 3. 做好正式答辩的 PPT。	14周	辅导	7、8
8	八、毕业设计答辩	1. 正式答辩； 2. 学生需根据答辩委员会的意见对论文做必要的修改。	15周	辅导	7、8

Course Outline:

Course Time	Course Contents	Teaching Requirements	Course Hours	Teaching Methods	Course Goals
1	Chapter 1, graduation design started 1.Graduation design 2.Analysis and research of the subject 3.Overall plan to determine	1.Students clear the task of graduation design, role, related laws and regulations, writing norms, and establish the concept of lifelong learning. 2.Complete the Chinese and foreign literature search, comprehensive analysis and research work, collection and summary of information, do a good job into the design work of knowledge preparation. 3.After the scientific argument to determine the overall program. 4.Foreign language translation.	Week 2-4	teaching counseling	1,3,5,6
2	Chapter 2, graduation design opening report 1. Write an open report 2. Open PPT production and preaching	1.Submit a paper issue report in accordance with the requirements report form. 2.Foreign language translation to complete one-half of the workload. 3.Present the report and reply with ppt.	Week 4	teaching counseling	7,8

3	<p>Chapter 3, graduate design in full swing</p> <p>1.Experiment, test, simulation, data processing, program implementation and other specific programs</p> <p>2.Learning and application of related tools</p> <p>3.To carry out research, experiment, calculation and other research work.</p>	<p>1.Identify specific programs such as experiment, test, simulation, data processing and program realization.</p> <p>2.Master the system required drawing, simulation, design, calculation, programming and other related tools and software skills.</p> <p>3.The specific design and experimentation, calculation, programming and other work.</p>	Week 5-7	teaching counseling	2,4,5
4	<p>Chapter 4, graduation design interim report</p> <p>1.Write an interim report</p> <p>2.Interim report PPT production and preaching</p>	<p>1.To submit a paper interim report in accordance with the requirements of the Interim Report Template.</p> <p>2.Full translation of foreign language.</p> <p>3.PPT way to do the interim report and reply.</p>	Week 8	teaching counseling	3,7,8
5	<p>Chapter 5, graduation design specific work to improve and improve the overall</p> <p>1.The full realization of all expected research objectives</p> <p>2.Data analysis and processing</p> <p>3.Achieve conclusive results</p> <p>4.Improve the system program.</p>	<p>1.Conduct system alliances to achieve all expected research objectives.</p> <p>2.Data analysis and processing of test data, drawing data tables, curves.</p> <p>3.To carry out the test results or the results of the implementation of the program analysis, draw the relevant conclusions.</p> <p>4.Based on the above results, if necessary, the original program to be amended to obtain a sound system to achieve the program.</p>	Week 9-13	teaching counseling	2,4,5
6	<p>Chapter 6, graduation thesis writing</p> <p>1. Writing specification</p> <p>2.Scientific and technical writing skills</p>	<p>1.Master "Dalian University of Technology undergraduate graduation design (thesis) template".</p> <p>2.Study the writing and writing skills of scientific papers, in accordance with the "template" requirements to write graduation design papers.</p>	Week 12-13	teaching counseling	8

7	Chapter 7, graduation thesis review 1. Graduation thesis review 2. Reply PPT production	1. Students modify the paper according to the advice of the instructor. 2. Students modify the paper according to the opinions of the two reviewers. 3. Make a formal reply to the PPT.	Week 14	counseling	7,8
8	Chapter 8, graduation design reply	1. Formal reply. 2. Students are required to make the necessary changes to the paper according to the opinion of the defense committee.	Week 15	counseling	7,8

学部认定本科项目学习目标（FME Learning Goals for Undergraduate Program）：

理解商业伦理道德和社会责任的重要性。

Graduates will understand the importance of business ethics and social responsibility.

具备商科基础知识以及所学专业的专门知识。

Graduates will understand the fundamentals of business and the professional knowledge relevant to their majors.

具有批判性思维和分析问题、解决问题的能力。

Graduates will be capable of critical thinking and analyzing and solving problems.

具有团队协作的意识和能力。

Graduates will demonstrate team spirit and be able to collaborate productively with others.

具备有效沟通能力和企业实践能力。

Graduates will be able to communicate effectively and work effectively in an enterprise

具有全球化意识。

Graduates will have an awareness of globalization.

教学方式（Teaching Methods）：

授课（Lectures）10%

辅导（Tutorials）10%

讨论（Discussions）30%

报告（Presentations）20%

动手实践（Hands-on Involvement）30%

考核及成绩评定方式 (Evaluation Methods) :

毕业设计(论文)进行过程中,各学部(学院)按要求进行前、中、后三阶段检查。学校不定期组织抽查。

(1)前期:以开题答辩和提交开题报告形式,检查课题进行的必要条件是否具备,安排是否合理,任务书是否下达到每位学生。

(2)中期:组织毕业设计(论文)中期检查,以中期答辩和提交中期报告形式,着重检查学风、工作进度、教师指导情况及毕业设计(论文)工作中存在的困难和问题,并采取必要、有效的措施解决存在的问题。

(3)后期:检查答辩准备工作。答辩前各专业着重对学生进行答辩资格审查。根据任务书及毕业设计(论文)规范化要求,检查学生完成工作任务的情况。

每年6月份安排毕业设计(论文)答辩。答辩前10天,学生上交毕业设计(论文)全部材料,由指导教师进行答辩资格审查,同时写出评语,交评阅人评阅。评阅人将设计或论文中检查出的问题反馈给学生,学生在答辩前3天时间进行整理、修改,准备答辩。答辩小组组织学生答辩,答辩结束后,毕业设计(论文)成绩经答辩委员会审定后上报教务处。

成绩评定方式:答辩委员会评委根据工作情况、论文撰写、回答问题等情况给予打分。

教科书目 (Required Texts) :

由指导教师根据选题内容确定。

参考书目 (Reference Texts) :

由指导教师根据选题内容确定。

其它参考资料 (Other References) :

由指导教师根据选题内容确定。

大连理工大学管理与经济学部本科实验教学大纲

第四学年度第 2 学期 物流管理毕业设计课程大纲

课程中文名称：物流管理毕业设计

课程英文名称：Logistics Management Graduation Design

授课教师：张令荣等

选修类别：必修 选修

学分：15 学分

时数：15 周

教师网址：无

先修科目：无

Prerequisites: None

课程目标：（对应毕业要求：1-③，1-⑤，2-③，2-④，4-④，5-①，5-②，5-③）

毕业设计是在教学过程的最后阶段采用的一种综合性的实践教学环节，是一门重要的必修课。在教师的指导下，以学生为主体进行科学研究工作的初步尝试，是一次较为系统的工程综合训练。通过该教学环节，学生将掌握选题、技术调研、文献检索、开题报告、设计论证、中期报告、论文撰写及毕业答辩这样一个完整的开展科学研究的一般程序和各部分的工作规范，从而培养学生综合运用所学的基础理论、专业知识和实践技能，分析和解决工程问题，提高学生从事开发生生产和科学研究综合能力，为择业工作和继续求学奠定坚实基础。

学生预计将具备以下能力和技能：

1. 培养学生巩固、深化和扩展所学的基础和专业知识的能力，在此基础上了解本学科前沿和发展趋势（对应毕业要求 1-⑤）；
2. 具有设计、操作、执行、分析和撰写项目报告的能力（毕业要求 1-③）；
3. 具有应对突发事件和危机的能力，采取恰当的应对措施（毕业要求 2-③）；
4. 熟悉项目预研报告、可研报告、可行性分析报告、投标书、方案设计及方案评估等涉及的内容及深度（对应毕业要求 2-④）；
5. 能够编制项目可行的项目计划书，并具有实施项目的基本能力（对应毕业要求 4-④）；

6. 掌握文献检索、资料查询及运用现代信息技术跟踪并获取信息的方法（对应毕业要求 5-①）；
7. 至少熟练掌握一门外国语，并能进行有效的技术沟通和交流（对应毕业要求 5-②）；
8. 能够使用专业技术语言，进行有效地沟通和交流（对应毕业要求 5-③）。

Course Objectives: (Required Graduate Abilities: 1-③,1-⑤,2-③,2-④,4-④,5-①,5-②,5-③)

Graduation design is a comprehensive practice teaching parts adapted in the end of the teaching process. It's an important compulsory course. It's an initial attempt for students to get close to the main body of the scientific research work under the guidance of teachers, it's a systematic training of comprehensive engineering. Through this teaching session, students will master the general course of scientific research and the work norms of various parts, including a wide range of topics such as topic selection, technical research, literature search, question report, design demonstration, interim report, thesis writing and graduation reply. Students use the basic theory, professional knowledge and practical skills, analyze and solve engineering problems, improve students' ability to production and scientific research, and lay a solid foundation for job-hunting and further study.

Students are expected to be equipped with the following abilities and skills upon completion:

1. To cultivate students' ability to consolidate, deepen and expand the basic and professional knowledge they have learned, and to understand the forefront and development trend of the subject on this basis (Required Graduate Abilities:1-⑤).
2. Ability to design, operate, perform, analyze and write project reports (Required Graduate Abilities:1-③).
3. Have a good military theoretical basis, with the ability to deal with emergencies and crises, to take appropriate measures (Required Graduate Abilities:2-③).
4. Familiar with the contents and depth of the project pre-research report, feasibility study report, feasibility analysis report, tender, program design and program evaluation(Required Graduate Abilities:2-④).
5. Ability to develop a project plan that is viable and have the basic ability to implement the project (Required Graduate Abilities:4-④).
6. To master the literature search, data query and the use of modern information technology to track and obtain information (Required Graduate Abilities:5-①).
7. At least master a foreign language, and can carry out effective technical communication and exchange (Required Graduate Abilities:5-②).
8. Ability to communicate and communicate effectively using professional technical languages (Required Graduate Abilities:5-③).

教学内容、基本要求和学时分配：

课次	教学内容	教学要求	学时	教学方式	对应课程目标
1	一、毕业设计启动 1. 毕业设计总动员 2. 课题的分析与研究 3. 总体方案确定	1. 学生明确毕业设计任务、作用、相关的法律与法规、写作规范等，并树立终身学习的理念； 2. 完成中外文献检索、综合分析和调研工作，收集和汇总资料，做好进入设计工作的知识准备； 3. 经过科学论证后确定总体方案； 4. 外文翻译。	2-4 周	讲授 辅导	1、3、 5、6
2	二、毕业设计开题报告 1. 撰写开题报告 2. 开题 PPT 制作及宣讲	1. 按照开题报告模板要求提交纸质开题报告； 2. 外文翻译完成二分之一工作量； 3. 采用 PPT 方式做开题汇报并答辩。	4 周	讲授 辅导	7、8
3	三、毕业设计全面展开 1. 实验、测试、模拟仿真、数据处理、程序实现等具体方案 2. 相关工具软件的学习及应用 3. 开展设计、实验、计算等研究工作	1. 确定实验、测试、模拟仿真、数据处理、程序实现等具体方案； 2. 掌握所需的仿真、设计、计算、编程等相关工具软件使用技巧； 3. 进行选题的具体设计与实验、计算、程序编制等工作。	5-7 周	讲授 辅导	2、4、5
4	四、毕业设计中期报告 1. 撰写中期报告 2. 中期报告 PPT 制作及宣讲	1. 按照中期报告模板要求提交纸质中期报告； 2. 外文翻译全部完成； 3. 采用 PPT 方式做课题中期汇报并答辩。	8 周	讲授 辅导	3、7、8
5	五、毕业设计具体工作的全面完善与提高 1. 所有预期研究目标的全面实现 2. 数据分析与处理 3. 获得结论性成果 4. 完善系统方案	1. 实现所有预期研究目标； 2. 对试验数据进行数据分析处理，绘制数据表格、曲线； 3. 进行结果分析，得出有关结论； 4. 根据上述成果，必要时对原方案进行修正，获得完善的实现方案。	9-13 周	讲授 辅导	2、4、5

6	六、毕业论文撰写 1. 论文写作规范 2. 科技论文写作技巧	1. 掌握《大连理工大学本科毕业设计（论文）模板》； 2. 学习科技论文的写作及写作技巧，按照《模板》要求撰写毕业设计论文。	12-13周	讲授 辅导	8
7	七、毕业论文评阅 1. 毕业论文审阅 2. 答辩 PPT 制作	1. 学生根据指导教师的意见修改论文； 2. 学生根据两位评阅教师的意见修改论文； 3. 做好正式答辩的 PPT。	14周	辅导	7、8
8	八、毕业设计答辩	1. 正式答辩； 2. 学生需根据答辩委员会的意见对论文做必要的修改。	15周	辅导	7、8

Course Outline:

Course Time	Course Contents	Teaching Requirements	Course Hours	Teaching Methods	Course Goals
1	Chapter 1, graduation design started 1. Graduation design 2. Analysis and research of the subject 3. Overall plan to determine	1. Students clear the task of graduation design, role, related laws and regulations, writing norms, and establish the concept of lifelong learning. 2. Complete the Chinese and foreign literature search, comprehensive analysis and research work, collection and summary of information, do a good job into the design work of knowledge preparation. 3. After the scientific argument to determine the overall program. 4. Foreign language translation.	Week 2-4	teaching counseling	1、3、5、6
2	Chapter 2, graduation design opening report 1. Write an open report 2. Open PPT production and preaching	1. Submit a paper issue report in accordance with the requirements report form. 2. Foreign language translation to complete one-half of the workload. 3. Present the report and reply with ppt.	Week 4	teaching counseling	7、8

3	<p>Chapter 3, graduate design in full swing 1.Experiment, test, simulation, data processing, program implementation and other specific programs 2.Learning and application of related tools 3.To carry out research, experiment, calculation and other research work.</p>	1. Identify specific programs such as experiment, test, simulation, data processing and program realization. 2. Master the system required drawing, simulation, design, calculation, programming and other related tools and software skills. 3. The specific design and experimentation, calculation, programming and other work.	Week 5-7	teaching counseling	2、4、5
4	<p>Chapter4, graduation design interim report 1. Write an interim report 2. Interim report PPT production and preaching</p>	1. To submit a paper interim report in accordance with the requirements of the Interim Report Template. 2. Full translation of foreign language. 3. PPT way to do the interim report and reply.	Week 8	teaching counseling	3、7、8
5	<p>Chapter 5, graduation design specific work to improve and improve the overall 1. The full realization of all expected research objectives 2. Data analysis and processing 3. Achieve conclusive results 4. Improve the system program.</p>	1. Conduct system alliances to achieve all expected research objectives. 2. Data analysis and processing of test data, drawing data tables, curves. 3. To carry out the test results or the results of the implementation of the program analysis, draw the relevant conclusions. 4. Based on the above results, if necessary, the original program to be amended to obtain a sound system to achieve the program.	Week 9-13	teaching counseling	2、4、5
6	<p>Chapter 6, graduation thesis writing 1. Writing specification 2. Scientific and technical writing skills</p>	1. Master "Dalian University of Technology undergraduate graduation design (thesis) template". 2. Study the writing and writing skills of scientific papers, in accordance with the "template"	Week 12-13	teaching counseling	8

		requirements to write graduation design papers.			
7	Chapter 7, graduation thesis review 1. Graduation thesis review 2. Reply PPT production	1. Students modify the paper according to the advice of the instructor. 2. Students modify the paper according to the opinions of the two reviewers. 3. Make a formal reply to the PPT.	Week 14	counseling	7、8
8	Chapter 8, graduation design reply	1. Formal reply. 2. Students are required to make the necessary changes to the paper according to the opinion of the defense committee.	Week 15	counseling	7、8

学部认定本科项目学习目标（FME Learning Goals for Undergraduate Program）：

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具备有效沟通能力和企业实践能力。

Graduates will be able to communicate effectively and work effectively in an enterprise

具有全球化意识。

Graduates will have an awareness of globalization.

教学方式 (Teaching Methods) :

授课 (Lectures) 10%

辅导 (Tutorials) 10%

实验 (Labs) 20%

讨论 (Discussions) 20%

报告 (Presentations) 20%

动手实践 (Hands-on Involvement) 20%

考核及成绩评定方式 (Evaluation Methods) :

毕业设计 (论文) 进行过程中, 各学部 (学院) 按要求进行前、中、后三阶段检查。学校不定期组织抽查。

(1) 前期: 以开题答辩和提交开题报告形式, 检查课题进行的必要条件是否具备, 安排是否合理, 任务书是否下达到每位学生。

(2) 中期: 组织毕业设计 (论文) 中期检查, 以中期答辩和提交中期报告形式, 着重检查学风、工作进度、教师指导情况及毕业设计 (论文) 工作中存在的困难和问题, 并采取必要、有效的措施解决存在的问题。

(3) 后期: 检查答辩准备工作。答辩前各专业着重对学生进行答辩资格审查。根据任务书及毕业设计 (论文) 规范化要求, 检查学生完成工作任务的情况。

每年6月份安排毕业设计 (论文) 答辩。答辩前10天, 学生上交毕业设计 (论文) 全部材料, 由指导教师进行答辩资格审查, 同时写出评语, 交评阅人评阅。评阅人将设计或论文中检查出的问题反馈给学生, 学生在答辩前3天时间进行整理、修改, 准备答辩。答辩小组组织学生答辩, 答辩结束后, 毕业设计 (论文) 成绩经答辩委员会审定后上报教务处。

成绩评定方式: 答辩委员会评委根据工作情况、论文撰写、回答问题等情况给予打分。

教科书目 (Required Texts) :

由指导教师根据选题内容确定。

参考书目 (Reference Texts) :

由指导教师根据选题内容确定。

其它参考资料 (Other References) :

由指导教师根据选题内容确定。

大连理工大学管理与经济学部本科实验教学大纲

第四学年度第 2 学期 信息管理与信息系统毕业设计课程大纲

<p>课程中文名称：信息管理与信息系统毕业设计</p> <p>课程英文名称：Information Management and Information Systems Graduation Design</p> <p>授课教师：曲刚等</p> <p>选修类别：<input checked="" type="checkbox"/>必修 <input type="checkbox"/>选修</p> <p>学分：15 学分</p> <p>时数：15 周</p>
<p>教师网址：无</p>
<p>先修科目：无</p>
<p>Prerequisites: None</p>
<p>课程目标：（对应毕业要求：1-①，1-②，1-③，1-④，1-⑤，1-⑥，2-①，2-②，2-③，2-④，2-⑤，2-⑥，2-⑦，2-⑧，3-③，3-④，3-⑤，4-③，4-④）</p> <p>1. 通过综合运用管理理论、行为科学、系统方法和信息技术等多方面的知识，培养学生研究与解决信息管理与信息系统开发及应用中的理论与实际问题的能力。</p> <p>2. 学习撰写规范的科技论文。</p> <p>学生须在指导教师指导下选题，共有三大类题目供信息管理与信息系统专业学生选择：</p> <p>（1）管理信息系统分析与设计</p> <p>内容：设计并实现一个实际信息系统；</p> <p>重点：系统分析——组织结构与业务流程合理化；</p> <p>数据库设计——逻辑与物理设计；</p> <p>典型模块的实现——系统较大时，可以只实现典型模块。</p> <p>（2）MIS 开发技术与工具的分析与应用</p> <p>内容：对某种开发环境、开发技术、开发工具进行深入的研究和分析，并以实例说明其应用；</p> <p>重点：文献综述；优缺点及适用场合分析；应用实例说明。</p> <p>（3）信息管理与信息系统相关的现代理论、方法研究</p> <p>内容：对某种现代理论、方法（包括企业信息化、数据挖掘、电子商务、电子政务、</p>

供应链管理、决策支持系统等) 进行研究或介绍, 并做有一定学术价值的探索性研究。

重点: 对上述某一理论或方法进行国内外现状分析, 并提出自己的见解或改进方法。

学生预计将具备以下能力和技能:

1. 具有现代管理理念和全球化意识, 具有系统性、创新性、批判性思维能力, 具有提出问题、分析问题、解决问题的能力, 具有较强的自学能力与终身学习能力 (对应毕业要求: 1-①②③④⑤⑥);
2. 掌握数学、系统学、管理学、信息科学、数据科学、经济学和社会科学等基础知识, 掌握信息管理与信息系统专业的相关理论、方法和技术, 了解信息管理与信息系统专业现状和发展趋势, 掌握解决信息管理与信息系统实际问题的方法论 (对应毕业要求 2-①②③④⑤⑥⑦⑧);
3. 具有良好的表达和协作能力 (对应毕业要求: 3-③④⑤);
4. 具备信息技术伦理知识, 能够认识信息技术发展可能带来的社会问题, 并加以判断和自我约束, 具有创新精神、创业意识和创新创业能力 (对应毕业要求: 4-③④)。

Course Objectives: (Required Graduate Abilities: (1-①, 1-②, 1-③, 1-④, 1-⑤, 1-⑥, 2-①, 2-②, 2-③, 2-④, 2-⑤, 2-⑥, 2-⑦, 2-⑧, 3-③, 3-④, 3-⑤, 4-③, 4-④)

1. Through the integrated use of management theory, behavioral science, system methods and information technology and other aspects of knowledge, cultivate students' ability to study and solve the information management and information system development and application of the theory and practical problems.

2. Learning to write standardized scientific papers

Students are required to choose the subject under the guidance of the instructor. There are three main types of topics for students majoring in information management and information systems:

(1) Management information system analysis and design.

Content: design and implement an information system.

Key point: system analysis - rationalization of organizational structure and business process.

Database design -- logical and physical design.

Typical module implementation - when the system is large, you can only implement typical modules.

(2) Analysis and application of MIS development technology and tools

Content: some development environment, development technology and development tools are deeply studied and analyzed, and their applications are illustrated by examples.

Key points: literature review.

Advantages and disadvantages and applicable situation analysis.

Application examples illustration.

(3)Research on modern theories and methods related to information management and information systems

The content of some modern theories and methods (including enterprise information, data mining, e-commerce, e-government, supply chain management and decision support system) for research or introduction, and exploratory research has certain academic value.

Emphasis: to analyze the literature, and put forward his own views or improvement methods.

Students are expected to have the following abilities and skills:

1. With modern management concept and awareness of Globalization. It is systematic, creative and critical thinking ability, has the ability to ask questions, analyze and solve problems, self-learning ability and lifelong learning ability (the corresponding graduation requirements: 1-①②③④⑤⑥).
2. To master mathematics, basic knowledge of science, system management, information science, data science, economics and Social Sciences, master the theory and specialty of information management and information system of methods and techniques, understanding the current situation and development trend of information management and information system, master the methods to solve the practical problems of information management and information system theory. (corresponding to the graduation requirements: 2-①②③④⑤⑥⑦⑧).
3. Presentation and coordination skills. (corresponding to graduation requirements: 3-③④⑤).
4. With the knowledge of information technology ethics, it is possible to recognize the social problems that may arise from the development of information technology, and to judge and restrict themselves. With innovative spirit, entrepreneurial awareness and innovative entrepreneurial ability. (4-③④).

教学内容、基本要求和学时分配：

课次	教学内容	教学要求	学时	教学方式	对应课程目标
1	一、毕业设计启动 1. 毕业设计总动员 2. 课题的分析与研究 3. 总体方案确定	1. 学生明确毕业设计任务、作用、相关的法律与法规、写作规范等，并树立终身学习的理念； 2. 完成中外文献检索、综合分析和调研工作，收集和汇总资料，做好进入设计工作的知识准备； 3. 经过科学论证后确定总体方案； 4. 外文翻译。	2-4周	讲授 辅导	1、2
2	二、毕业设计开题报告 撰写开题报告	1. 按照开题报告模板要求提交纸质开题报告； 2. 外文翻译完成二分之一工作量。	4周	讲授 辅导	1、2
3	三、毕业设计全面展开 1. 实验、测试、模拟仿真、数据处理、程序实现等具体方案 2. 相关工具软件的学习及应用 3. 开展设计、实验、计算等研究工作	1. 确定实验、测试、模拟仿真、数据处理、程序实现等具体方案； 2. 掌握所需的仿真、设计、计算、编程等相关工具软件使用技巧； 3. 进行选题的具体设计与实验、计算、程序编制等工作。	5-7周	讲授 辅导	1、2
4	四、毕业设计中期报告 撰写中期报告	1. 按照中期报告模板要求提交纸质中期报告； 2. 外文翻译全部完成。	8周	讲授 辅导	1、2
5	五、毕业设计具体工作的全面完善与提高 1. 所有预期研究目标的全面实现 2. 数据分析与处理 3. 获得结论性成果 4. 完善系统方案	1. 实现所有预期研究目标； 2. 对程序、试验数据进行数据分析处理； 3. 进行结果分析，得出有关结论； 4. 根据上述成果，必要时对原方案进行修正，获得完善的实现方案。	9-13周	讲授 辅导	1、2
6	六、毕业论文撰写 1. 论文写作规范 2. 科技论文写作技巧	1. 掌握《大连理工大学本科毕业设计（论文）模板》； 2. 学习科技论文的写作及写作技巧，按照《模板》要求撰写毕业设计论文。	12-13周	讲授 辅导	1、2

7	七、毕业论文评阅 1. 毕业论文审阅 2. 答辩 PPT 制作	1. 学生根据指导教师的意见修改论文； 2. 学生根据两位评阅教师的意见修改论文； 3. 做好正式答辩的 PPT。	14 周	辅导	1、2
8	八、毕业设计答辩	1. 正式答辩； 2. 学生需根据答辩委员会的意见对论文做必要的修改。	15 周	辅导	2

Course Outline:

Course Time	Course Contents	Teaching Requirements	Course Hours	Teaching Methods	Course Goals
1	Chapter 1, graduation design started 1. Graduation design 2. Analysis and research of the subject 3. Overall plan to determine	1. Students clear the task of graduation design, role, related laws and regulations, writing norms, and establish the concept of lifelong learning. 2. Complete the Chinese and foreign literature search, comprehensive analysis and research work, collection and summary of information, do a good job into the design work of knowledge preparation. 3. After the scientific argument to determine the overall program. 4. Foreign language translation.	Week 2-4	teaching counseling	1,2
2	Chapter 2, graduation design opening report 1. Write an open report	1. Submit a paper issue report in accordance with the requirements report form. 2. Foreign language translation to complete one-half of the workload.	Week 4	teaching counseling	1,2
3	Chapter 3, graduate design in full swing 1. Experiment, test, simulation, data processing, program implementation and other specific programs	1. Identify specific programs such as experiment, test, simulation, data processing and program realization. 2. Master the system required drawing, simulation, design, calculation, programming and other related tools and software skills.	Week 5-7	teaching counseling	1,2

	<p>2.Learning and application of related tools</p> <p>3.To carry out research, experiment, calculation and other research work.</p>	<p>3.The specific design and experimentation, calculation, programming and other work..</p>			
4	<p>Chapter4, graduation design interim report</p> <p>1.Write an interim report</p>	<p>1.To submit a paper interim report in accordance with the requirements of the Interim Report Template.</p> <p>2.Full translation of foreign language.</p>	Week 8	teaching counseling	1,2
5	<p>Chapter 5, graduation design specific work to improve and improve the overall</p> <p>1.The full realization of all expected research objectives</p> <p>2.Data analysis and processing</p> <p>3.Achieve conclusive results</p> <p>4. Improve the system program.</p>	<p>1.Conduct system alliances to achieve all expected research objectives.</p> <p>2.Data analysis and processing of test data, or programing</p> <p>3.To carry out the test results or the results of the implementation of the program analysis, draw the relevant conclusions.</p> <p>4.Based on the above results, if necessary, the original program to be amended to obtain a sound system to achieve the program.</p>	Week 9-13	teaching counseling	1,2
6	<p>Chapter 6, graduation thesis writing</p> <p>1.writing specification</p> <p>2.Scientific and technical writing skills</p>	<p>1.Master "Dalian University of Technology undergraduate graduation design (thesis) template".</p> <p>2.Study the writing and writing skills of scientific papers, in accordance with the "template" requirements to write graduation design papers.</p>	Week 12-13	teaching counseling	2
7	<p>Chapter 7, graduation thesis review</p> <p>1.Graduation thesis review</p> <p>2.Reply PPT production</p>	<p>1.Students modify the paper according to the advice of the instructor.</p> <p>2.Students modify the paper according to the opinions of the two reviewers.</p> <p>3.Make a formal reply to the PPT.</p>	Week 14	counseling	7,8

8	Chapter 8, graduation design reply	1. Formal reply. 2. Students are required to make the necessary changes to the paper according to the opinion of the defense committee.	Week 15	counseling	7,8
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辅导（Tutorials）10%

实验（Labs）30%

报告（Presentations）20%

动手实践（Hands-on Involvement）30%

考核及成绩评定方式 (Evaluation Methods) :

毕业设计(论文)进行过程中,各学部(学院)按要求进行前、中、后三阶段检查。学校不定期组织抽查。

(1) 前期:以开题答辩和提交开题报告形式,检查课题进行的必要条件是否具备,安排是否合理,任务书是否下达到每位学生。

(2) 中期:组织毕业设计(论文)中期检查,以中期答辩和提交中期报告形式,着重检查学风、工作进度、教师指导情况及毕业设计(论文)工作中存在的困难和问题,并采取必要、有效的措施解决存在的问题。

(3) 后期:检查答辩准备工作。答辩前各专业着重对学生进行答辩资格审查。根据任务书及毕业设计(论文)规范化要求,检查学生完成工作任务的情况。

每年6月份安排毕业设计(论文)答辩。答辩前10天,学生上交毕业设计(论文)全部材料,由指导教师进行答辩资格审查,同时写出评语,交评阅人评阅。评阅人将设计或论文中检查出的问题反馈给学生,学生在答辩前3天时间进行整理、修改,准备答辩。答辩小组组织学生答辩,答辩结束后,毕业设计(论文)成绩经答辩委员会审定后上报教务处。

成绩评定方式:答辩委员会评委根据工作情况、论文撰写、回答问题等情况给予打分。

教科书目 (Required Texts) :

由指导教师根据选题内容确定。

参考书目 (Reference Texts) :

由指导教师根据选题内容确定。

其它参考资料 (Other References) :

由指导教师根据选题内容确定。

大连理工大学管理与经济学部本科实验教学大纲

第四学年度第 2 学期 国际经济与贸易毕业设计课程大纲

课程中文名称：国际经济与贸易毕业设计

课程英文名称：**Graduation Design of International Economics and Trade**

授课教师：丁永健等

选修类别：必修 选修

学分：15 学分

时数：15 周

教师网址：无

先修科目：无

Prerequisites: None

课程目标：（对应毕业要求：1，2，3，4）

毕业设计是在教学过程的最后阶段采用的一种综合性的实践教学环节，是一门重要的必修课。在教师的指导下，以学生为主体进行科学研究工作的初步尝试，是一次较为系统的金融实践综合训练。通过该教学环节，学生将掌握选题、案例调研、文献检索、开题报告、设计论证、中期报告、论文撰写及毕业答辩这样一个完整的开展科学研究的一般程序和各部分的工作规范，从而培养学生综合运用所学的基础理论、专业知识和实践技能，分析和解决工程问题，提高学生从事开发生生产和科学研究的综合能力，为择业工作和继续求学奠定坚实基础。

学生预计将具备以下能力和技能：

1. 培养学生巩固、深化和扩展所学的基础和专业能力的的能力，掌握国际经济与贸易的基本理论、基本知识和基本方法，包括对国际贸易、国际投资、国际产能合作、跨境电商等相关基本理论与实践的进一步学习，在此基础上了解本学科前沿和发展趋势（对应毕业要求：1-②④，2-①）；
2. 进行初步科学研究和国际经济实务所必备的统计学、计量经济学和互联网等方法及应用软件的基本训练；能熟练地应用计算机及其相关的应用软件分析和解决国际经济与贸易领域的实际问题（对应毕业要求：1-①，2①②③④，3-④，4-④）；

3. 掌握文献检索、资料查询、数据搜集与处理、调查研究的设计等基本方法，了解本学科的理论前沿和发展动态，适应“一带一路”背景下对外经济合作的需要，具有终身的学习能力，拥有批判性思维和专业的分析问题和解决问题的能力（对应毕业要求：1-①②，2-④，3-①②）；
4. 通过英文文献的检索和翻译，培养学生具有国际视野和跨文化交流、竞争和协作能力，能够识别组织中跨文化的问题，了解国际商务环境，用全球视角看待、理解和解决跨文化的问题（对应毕业要求：2-①②③④，3-①②③④）；
5. 培养学生理解商业伦理道德和社会责任的重要性。通过论文设计，了解与国际经济与贸易相关的职业和行业的法律法规，熟悉国际和国内贸易与投资领域的政策、法规和惯例，了解贸易与投资领域内的伦理道德规范和社会责任要求；具有责任担当和社会服务意识，重视涉外风险防范和安全（对应毕业要求：3-③④，4-①②③④）。

Course Objectives: (Required Graduate Abilities: 1, 2, 3, 4)

Graduation design is a comprehensive practice teaching parts adapted in the end of the finance teaching process. It's an important compulsory course. It's an initial attempt for students to get close to the main body of the scientific research work under the guidance of teachers, it's a systematic training of comprehensive engineering. Through this teaching session, students will master the general course of scientific research and the work norms of various parts, including a wide range of topics such as topic selection, technical research, literature search, question report, design demonstration, interim report, thesis writing and graduation reply. Students use the basic theory, professional knowledge and practical skills, analyze and solve engineering problems, improve students' ability to production and scientific research, and lay a solid foundation for job-hunting and further study.

Students are expected to be equipped with the following abilities and skills upon completion:

1. To cultivate students' ability to consolidate, deepen and expand the basic and professional knowledge they have learned, master the basic theory, knowledge and methods of international economics and trade, including basic research on international trade, international investment, international producing capacity corporation and trans-national e-commerce, on this basis to understand the forefront of the discipline and development trends (corresponding to the graduation requirements: 1-②④, 2-①).
2. To carry out the basic training of necessary statistics, financial metrology and the Internet and

other methods and application software for preliminary scientific research and quantitative processing and analysis of financial information; can skillfully use computer and its related application software analysis and solve the practical problems in the international trade and investment sector (corresponding to the graduation requirements : 1-①, 2①②③④, 3-④, 4-④).

3. To master the basic research methods such as literature search, data inquiry, data collection and processing, research design, to understand the theoretical frontier and development of the discipline, to meet the needs of the financial industry development, have lifelong learning ability, have critical thinking and professional to analyze and solve problems (corresponding to the graduation requirements: 1-①②, 2-④, 3-①②).

4. Through the retrieval and translation of English literature, students can have the international vision and cross-cultural communication, competition and collaboration ability, to identify cross-cultural issues in the organization, to understand the international business environment, to approach, understand and solve cross-cultural issues with a global perspective (corresponding to the graduation requirements: 2-①②③④, 3-①②③④).

5. Cultivate students' understanding of the importance of business ethics and social responsibility. Through the design of the paper, to understand the laws and regulations related to international trade and investment, familiar with the policies, regulations and practices in international and domestic financial areas, to understand ethics and social responsibility requirements in the field of international trade and investment; with the sense of responsibility and social service, attach importance to international risk prevention and security(corresponding to the graduation requirements: 3-③④, 4-①②③④).

教学内容、基本要求和学时分配:

课次	教学内容	教学要求	学时	教学方式	对应课程目标
1	<p>一、毕业设计启动</p> <p>1. 毕业设计总动员</p> <p>2. 课题的分析与研究</p> <p>3. 总体方案确定</p>	<p>1. 学生明确毕业设计任务、作用、相关的法律与法规、写作规范等，并树立终身学习的理念；</p> <p>2. 完成中外文献检索、综合分析和调研工作，收集和汇总资料，做好进入设计工作的知识准备；</p> <p>3. 经过科学论证后确定总体方</p>	2-4周	讲授 辅导	1、3

		案； 4. 外文翻译。			
2	二、毕业设计开题报告 1. 撰写开题报告 2. 开题 PPT 制作及宣讲	1. 按照开题报告模板要求提交纸质开题报告； 2. 外文翻译完成二分之一工作量； 3. 采用 PPT 方式做开题汇报并答辩。	4 周	讲授 辅导	1、4
3	三、毕业设计全面展开 1. 实验、测试、模拟仿真、数据处理、程序实现等具体方案 2. 相关工具软件的学习及应用 3. 开展设计、实验、计算等研究工作	1. 确定建模、数据处理、实证检验、或模拟仿真等具体方案 2. 掌握所需的查找数据、建模和实证或编程等相关工具软件使用技巧，如 Eview、SPSS、SAT、Metlab 等.； 3. 进行选题所需要的具体建模、计算、检验等工作。	5-7 周	讲授 辅导	2、4
4	四、毕业设计中期报告 1. 撰写中期报告 2. 中期报告 PPT 制作及宣讲	1. 按照中期报告模板要求提交纸质中期报告； 2. 外文翻译全部完成； 3. 采用 PPT 方式做课题中期汇报并答辩。	8 周	讲授 辅导	2、3
5	五、毕业设计具体工作的全面完善与提高 1. 所有预期研究目标的全面实现 2. 数据分析与处理 3. 获得结论性成果 4. 完善系统方案	1. 对论文预期目标进行评估，实现所有预期研究目标； 2. 对数据进行数据分析处理，绘制数据表格、曲线； 3. 进行实证检验结果或程序执行结果分析，得出有关结论； 4. 根据上述成果，必要时对原方案进行修正，使得研究结论有说服力。	9-13 周	讲授 辅导	2、4
6	六、毕业论文撰写 1. 论文写作规范 2. 科技论文写作技巧	1. 掌握《大连理工大学本科毕业设计（论文）模板》； 2. 学习科技论文的写作及写作技巧，按照《模板》要求撰写毕业设计论文。	12-13 周	讲授 辅导	4、5
7	七、毕业论文评阅 1. 毕业论文审阅 2. 答辩 PPT 制作	1. 学生根据指导教师的意见修改论文； 2. 学生根据两位评阅教师的意见修改论文； 3. 做好正式答辩的 PPT。	14 周	辅导	3、5

8	八、毕业设计答辩	1. 正式答辩; 2. 学生需根据答辩委员会的意见对论文做必要的修改。	15周	辅导	1-5
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Course Outline:

Course Time	Course Contents	Teaching Requirements	Course Hours	Teaching Methods	Course Goals
1	Chapter 1, graduation design started 1. Graduation design 2. Analysis and research of the subject 3. Overall plan to determine.	1. Students clear the task of graduation design, role, related laws and regulations, writing norms, and establish the concept of lifelong learning. 2. Complete the Chinese and foreign literature search, comprehensive analysis and research work, collection and summary of information, do a good job into the design work of knowledge preparation. 3. After the scientific argument to determine the overall program. 4. Foreign language translation.	2-4 week	teaching counseling	1、3
2	Chapter 2, graduation design opening report 1. Write an open report 2. Open PPT production and preaching	1. Submit a paper issue report in accordance with the requirements report form. 2. Foreign language translation to complete one-half of the workload. 3. Present the report and reply with ppt.	4 week	teaching counseling	1、4
3	Chapter 3, graduate design in full swing 1. Experiment, test, simulation, data processing, program implementation and other specific programs 2. Learning and application of related tools 3. To carry out research, experiment, calculation and other research work	1. Identify specific solutions such as modeling, data processing, empirical testing, or simulation. 2. Master the necessary tools and skills to find data, modeling and demonstration or programming, such as Eview, SPSS, SAT, Metlab, etc. 3. The specific modeling, calculation, inspection and other work required for the topic selection.	5-7 week	teaching counseling	2、4

4	Chapter4, graduation design interim report 1. Write an interim report 2. Interim report PPT production and preaching	1. To submit a paper interim report in accordance with the requirements of the Interim Report Template. 2. Full translation of foreign language. 3. PPT way to do the interim report and reply.	8 week	teaching counseling	2、3
5	Chapter 5, graduation design specific work to improve and improve the overall 1. The full realization of all expected research objectives 2. Data analysis and processing 3. Achieve conclusive results 4. Improve the system program	1. Conduct system alliances to achieve all expected research objectives. 2. Data analysis and processing of test data, drawing data tables, curves. 3. To carry out the test results or the results of the implementation of the program analysis, draw the relevant conclusions. 4. Based on the above results, if necessary, the original program to be amended to obtain a sound system to achieve the program.	9-13 week	teaching counseling	2、4
6	Chapter 6, graduation thesis writing 1. Writing specification 2. Scientific and technical writing skills	1. Master "Dalian University of Technology undergraduate graduation design (thesis) template". 2. Study the writing and writing skills of scientific papers, in accordance with the "template" requirements to write graduation design papers.	12-13 week	teaching counseling	4、5
7	Chapter 7, graduation thesis review 1. Graduation thesis review 2. Reply PPT production.	1. Students modify the paper according to the advice of the instructor 2. Students modify the paper according to the opinions of the two reviewers. 3. Make a formal reply to the PPT.	14 week	counseling	3、5
8	Chapter 8, graduation design reply	1. Formal reply. 2. Students are required to make the necessary changes to the paper according to the opinion of the defense committee.	15 week	counseling	1-5

学部认定本科项目学习目标（FME Learning Goals for Undergraduate Program）：

理解商业伦理道德和社会责任的重要性。

Graduates will understand the importance of business ethics and social responsibility.

具备商科基础知识以及所学专业的专门知识。

Graduates will understand the fundamentals of business and the professional knowledge relevant to their majors.

具有批判性思维和分析问题、解决问题的能力。

Graduates will be capable of critical thinking and analyzing and solving problems.

具有团队协作的意识和能力。

Graduates will demonstrate team spirit and be able to collaborate productively with others.

具备有效沟通能力和企业实践能力。

Graduates will be able to communicate effectively and work effectively in an enterprise

具有全球化意识。

Graduates will have an awareness of globalization.

教学方式（Teaching Methods）：

授课（Lectures）10%

辅导（Tutorials）10%

实验（Labs）%

讨论（Discussions）30%

案例教学（Case Studies）%

报告（Presentations）20%

动手实践（Hands-on Involvement）30%

实地调研旅行（Field Trips）%

其他教学方式（Other Teaching Methods）%

考核及成绩评定方式（Evaluation Methods）：

毕业设计（论文）进行过程中，各学部（学院）按要求进行前、中、后三阶段检查。学校不定期组织抽查。

（1）前期：以开题答辩和提交开题报告形式，检查课题进行的必要条件是否具备，安排是否合理，任务书是否下达到每位学生。

(2) 中期：组织毕业设计（论文）中期检查，以中期答辩和提交中期报告形式，着重检查学风、工作进度、教师指导情况及毕业设计（论文）工作中存在的困难和问题，并采取必要、有效的措施解决存在的问题。

(3) 后期：检查答辩准备工作。答辩前各专业着重对学生进行答辩资格审查。根据任务书及毕业设计（论文）规范化要求，检查学生完成工作任务的情况。

每年6月份安排毕业设计（论文）答辩。答辩前10天，学生上交毕业设计（论文）全部材料，由指导教师进行答辩资格审查，同时写出评语，交评阅人评阅。评阅人将设计或论文中检查出的问题反馈给学生，学生在答辩前3天时间进行整理、修改，准备答辩。答辩小组组织学生答辩，答辩结束后，毕业设计（论文）成绩经答辩委员会审定后上报教务处。

成绩评定方式：答辩委员会评委根据工作情况、论文撰写、回答问题等情况给予打分。

教科书目（Required Texts）：

由指导教师根据选题内容确定。

参考书目（Reference Texts）：

由指导教师根据选题内容确定。

其它参考资料（Other References）：

由指导教师根据选题内容确定。

大连理工大学管理与经济学部本科实验教学大纲

第四学年度第 2 学期 金融学毕业设计课程大纲

<p>课程中文名称：金融学毕业设计</p> <p>课程英文名称：Finance Graduation Design</p> <p>授课教师：安辉</p> <p>选修类别：<input checked="" type="checkbox"/>必修 <input type="checkbox"/>选修</p> <p>学分：15 学分</p> <p>时数：15 周</p>
<p>教师网址：</p>
<p>先修科目：无</p>
<p>Prerequisites: None</p>
<p>课程目标：（对应毕业要求：1, 2, 3, 4）</p> <p>毕业设计是在教学过程的最后阶段采用的一种综合性的实践教学环节，是一门重要的必修课。在教师的指导下，以学生为主体进行科学研究工作的初步尝试，是一次较为系统的金融实践综合训练。通过该教学环节，学生将掌握选题、案例调研、文献检索、开题报告、设计论证、中期报告、论文撰写及毕业答辩这样一个完整的开展科学研究的一般程序和各部分的工作规范，从而培养学生综合运用所学的基础理论、专业知识和实践技能，分析和解决工程问题，提高学生从事开发生生产和科学研究的综合能力，为择业工作和继续求学奠定坚实基础。</p> <p>学生预计将具备以下能力和技能：</p> <ol style="list-style-type: none">1. 培养学生巩固、深化和扩展所学的基础和专业能力的的能力，掌握金融学的基本理论、基本知识和基本方法，包括对金融产品研发、定价、运营、风险控制和服务营销等相关基本理论与实践的进一步学习，在此基础上了解本学科前沿和发展趋势（对应毕业要求：1-②④，2-①）；2. 进行初步科学研究和金融信息定量处理与分析所必备的统计学、金融计量学和互联网等方法及应用软件的基本训练；能熟练地应用计算机及其相关的应用软件分析和解决金融领域的实际问题（对应毕业要求：1-①，2①②③④，3-④，4-④）；

3. 掌握文献检索、资料查询、数据搜集与处理、调查研究的设计等基本方法，了解本学科的理论前沿和发展动态，适应金融业发展的需要，具有终身的学习能力，拥有批判性思维和专业的分析问题和解决问题的能力（对应毕业要求：1-①②，2-④，3-①②）；
4. 通过英文文献的检索和翻译，培养学生具有国际视野和跨文化交流、竞争和协作能力，能够识别组织中跨文化的问题，了解国际商务环境，用全球视角看待、理解和解决跨文化的问题（对应毕业要求：2-①②③④，3-①②③④）；
5. 培养学生理解商业伦理道德和社会责任的重要性。通过论文设计，了解与金融业相关的职业和行业的法律法规，熟悉国际和国内金融领域的政策、法规和惯例，了解金融领域内的伦理道德规范和社会责任要求；具有责任担当和社会服务意识，重视金融风险防范和金融安全（对应毕业要求：3-③④，4-①②③④）。

Course Objectives: (Required Graduate Abilities: 1,2,3,4)

Graduation design is a comprehensive practice teaching parts adapted in the end of the finance teaching process. It's an important compulsory course. It's an initial attempt for students to get close to the main body of the scientific research work under the guidance of teachers, it's a systematic training of comprehensive engineering. Through this teaching session, students will master the general course of scientific research and the work norms of various parts, including a wide range of topics such as topic selection, technical research, literature search, question report, design demonstration, interim report, thesis writing and graduation reply. Students use the basic theory, professional knowledge and practical skills, analyze and solve engineering problems, improve students' ability to production and scientific research, and lay a solid foundation for job-hunting and further study.

Students are expected to be equipped with the following abilities and skills upon completion:

1. To cultivate students' ability to consolidate, deepen and expand the basic and professional knowledge they have learned, master the basic theory , knowledge and methods of finance, including basic research on R&D, pricing, operation, risk control and service marketing of financial products theory and practice of further study, on this basis to understand the forefront of the discipline and development trends (corresponding to the graduation requirements: 1-②④, 2-①) .
2. To carry out the basic training of necessary statistics, financial metrology and the Internet and other methods and application software for preliminary scientific research and quantitative

processing and analysis of financial information; can skillfully use computer and its related application software analysis and solve the practical problems in the financial sector (corresponding to the graduation requirements : 1-①, 2①②③④, 3-④, 4-④).

3. To master the basic research methods such as literature search, data inquiry, data collection and processing, research design, to understand the theoretical frontier and development of the discipline, to meet the needs of the financial industry development, have lifelong learning ability, have critical thinking and professional to analyze and solve problems (corresponding to the graduation requirements: 1-①②, 2-④ , 3-①②).

4. Through the retrieval and translation of English literature, students can have the international vision and cross-cultural communication, competition and collaboration ability, to identify cross-cultural issues in the organization, to understand the international business environment, to approach, understand and solve cross-cultural issues with a global perspective (corresponding to the graduation requirements: 2-①②③④, 3-①②③④).

5. Cultivate students' understanding of the importance of business ethics and social responsibility. Through the design of the paper, to understand the laws and regulations related to the financial industry , familiar with the policies, regulations and practices in international and domestic financial areas, to understand the financial field of ethics and social responsibility requirements; with the sense of responsibility and social service, attach importance to financial risk prevention and financial security (corresponding to the graduation requirements: 3-③④、4-①②③④).

教学内容、基本要求和学时分配：

课次	教学内容	教学要求	学时	教学方式	对应课程目标
1	<p>一、毕业设计启动</p> <p>1. 毕业设计总动员</p> <p>2. 课题的分析与研究</p> <p>3. 总体方案确定</p>	<p>1. 学生明确毕业设计任务、作用、相关的法律与法规、写作规范等，并树立终身学习的理念；</p> <p>2. 完成中外文献检索、综合分析和调研工作，收集和汇总资料，做好进入设计工作的知识准备；</p> <p>3. 经过科学论证后确定总体方案；</p> <p>4. 外文翻译。</p>	2-4 周	讲授 辅导	1、3

2	二、毕业设计开题报告 1. 撰写开题报告 2. 开题 PPT 制作及宣讲	1. 按照开题报告模板要求提交纸质开题报告； 2. 外文翻译完成二分之一工作量； 3. 采用 PPT 方式做开题汇报并答辩。	4 周	讲授 辅导	1、4
3	三、毕业设计全面展开 1. 实验、测试、模拟仿真、数据处理、程序实现等具体方案 2. 相关工具软件的学习及应用 3. 开展设计、实验、计算等研究工作	1. 确定建模、数据处理、实证检验、或模拟仿真等具体方案； 2. 掌握所需的查找数据、建模和实证或编程等相关工具软件使用技巧，如 Eview、SPSS、SAT、Metlab 等； 3. 进行选题所需要的具体建模、计算、检验等工作。	5-7 周	讲授 辅导	2、4
4	四、毕业设计中期报告 1. 撰写中期报告 2. 中期报告 PPT 制作及宣讲	1. 按照中期报告模板要求提交纸质中期报告； 2. 外文翻译全部完成； 3. 采用 PPT 方式做课题中期汇报并答辩。	8 周	讲授 辅导	2、3
5	五、毕业设计具体工作的全面完善与提高 1. 所有预期研究目标的全面实现 2. 数据分析与处理 3. 获得结论性成果 4. 完善系统方案	1. 对论文预期目标进行评估，实现所有预期研究目标； 2. 对数据进行数据分析处理，绘制数据表格、曲线； 3. 进行实证检验结果或程序执行结果分析，得出有关结论； 4. 根据上述成果，必要时对原方案进行修正，使得研究结论有说服力。	9-13 周	讲授 辅导	2、4
6	六、毕业论文撰写 1. 论文写作规范 2. 科技论文写作技巧	1. 掌握《大连理工大学本科毕业设计（论文）模板》； 2. 学习科技论文的写作及写作技巧，按照《模板》要求撰写毕业设计论文。	12-13 周	讲授 辅导	4、5
7	七、毕业论文评阅 1. 毕业论文审阅 2. 答辩 PPT 制作	1. 学生根据指导教师的意见修改论文； 2. 学生根据两位评阅教师的意见修改论文； 3. 做好正式答辩的 PPT。	14 周	辅导	3、5
8	八、毕业设计答辩	1. 正式答辩； 2. 学生需根据答辩委员会的意见对论文做必要的修改。	15 周	辅导	1-5

Course Outline:

Course Time	Course Contents	Teaching Requirements	Course Hours	Teaching Methods	Course Goals
1	<p>Chapter 1, graduation design started</p> <p>1.Graduation design 2.Analysis and research of the subject 3.Overall plan to determine</p>	<p>1.Students clear the task of graduation design, role, related laws and regulations, writing norms, and establish the concept of lifelong learning; 2.Complete the Chinese and foreign literature search, comprehensive analysis and research work, collection and summary of information, do a good job into the design work of knowledge preparation; 3.After the scientific argument to determine the overall program; 4.Foreign language translation.</p>	Week 2-4	teaching counseling	1、 3
2	<p>Chapter 2, graduation design opening report</p> <p>1.Write an open report 2.Open PPT production and preaching</p>	<p>1.Submit a paper issue report in accordance with the requirements report form; 2.Foreign language translation to complete one-half of the workload; 3.Present the report and reply with ppt.</p>	Week 4	teaching counseling	1、 4
3	<p>Chapter 3, graduate design in full swing</p> <p>1.Experiment, test, simulation, data processing, program implementation and other specific programs 2.Learning and application of related tools 3.To carry out research, experiment, calculation and other research work</p>	<p>1.Identify specific solutions such as modeling, data processing, empirical testing, or simulation. 2.Master the necessary tools and skills to find data, modeling and demonstration or programming, such as Eview, SPSS, SAT, Metlab, etc.. 3.The specific modeling, calculation, inspection and other work required for the topic selection.</p>	Week 5-7	teaching counseling	2、 4

4	<p>Chapter4, graduation design interim report</p> <p>1. Write an interim report 2. Interim report PPT production and preaching</p>	<p>1. To submit a paper interim report in accordance with the requirements of the Interim Report Template. 2. Full translation of foreign language. 3. PPT way to do the interim report and reply.</p>	Week 8	teaching counseling	2、3
5	<p>Chapter5, graduation design specific work to improve and improve the overall</p> <p>1. The full realization of all expected research objectives 2. Data analysis and processing 3. Achieve conclusive results 4. Improve the system program</p>	<p>1. Conduct system alliances to achieve all expected research objectives. 2. Data analysis and processing of test data, drawing data tables, curves. 3. To carry out the test results or the results of the implementation of the program analysis, draw the relevant conclusions. 4. Based on the above results, if necessary, the original program to be amended to obtain a sound system to achieve the program.</p>	Week 9-13	teaching counseling	2、4
6	<p>Chapter 6, graduation thesis writing</p> <p>1. Writing specification; 2. Scientific and technical writing skills.</p>	<p>1. Master "Dalian University of Technology undergraduate graduation design (thesis) template". 2. Study the writing and writing skills of scientific papers, in accordance with the "template" requirements to write graduation design papers.</p>	Week 12-13	teaching, counseling	4、5
7	<p>Chapter 7, graduation thesis review</p> <p>1. Graduation thesis review 2. Reply PPT production.</p>	<p>1. Students modify the paper according to the advice of the instructor. 2. Students modify the paper according to the opinions of the two reviewers. 3. Make a formal reply to the PPT.</p>	Week 14	counseling	3、5
8	<p>Chapter8, graduation design reply</p>	<p>1. Formal reply. 2. Students are required to make the necessary changes to the paper according to the opinion of the defense committee.</p>	Week 15	counseling	1-5

学部认定本科项目学习目标（FME Learning Goals for Undergraduate Program）：

理解商业伦理道德和社会责任的重要性。

Graduates will understand the importance of business ethics and social responsibility.

具备商科基础知识以及所学专业的专门知识。

Graduates will understand the fundamentals of business and the professional knowledge relevant to their majors.

具有批判性思维和分析问题、解决问题的能力。

Graduates will be capable of critical thinking and analyzing and solving problems.

具有团队协作的意识和能力。

Graduates will demonstrate team spirit and be able to collaborate productively with others.

具备有效沟通能力和企业实践能力。

Graduates will be able to communicate effectively and work effectively in an enterprise

具有全球化意识。

Graduates will have an awareness of globalization.

教学方式(Teaching Methods):

授课（Lectures）10%

辅导（Tutorials）10%

实验（Labs）%

讨论（Discussions）30%

案例教学（Case Studies）%

报告（Presentations）20%

动手实践（Hands-on Involvement）30%

实地调研旅行（Field Trips）%

其他教学方式（Other Teaching Methods）%

考核及成绩评定方式（Evaluation Methods）：

毕业设计（论文）进行过程中，各学部（学院）按要求进行前、中、后三阶段检查。学校不定期组织抽查。

（1）前期：以开题答辩和提交开题报告形式，检查课题进行的必须条件是否具备，安排是否合理，任务书是否下达到每位学生。

(2) 中期：组织毕业设计（论文）中期检查，以中期答辩和提交中期报告形式，着重检查学风、工作进度、教师指导情况及毕业设计（论文）工作中存在的困难和问题，并采取必要、有效的措施解决存在的问题。

(3) 后期：检查答辩准备工作。答辩前各专业着重对学生进行答辩资格审查。根据任务书及毕业设计（论文）规范化要求，检查学生完成工作任务的情况。

每年6月份安排毕业设计（论文）答辩。答辩前10天，学生上交毕业设计（论文）全部材料，由指导教师进行答辩资格审查，同时写出评语，交评阅人评阅。评阅人将设计或论文中检查出的问题反馈给学生，学生在答辩前3天时间进行整理、修改，准备答辩。答辩小组组织学生答辩，答辩结束后，毕业设计（论文）成绩经答辩委员会审定后上报教务处。

成绩评定方式：答辩委员会评委根据工作情况、论文撰写、回答问题等情况给予打分。

教科书目（Required Texts）：

由指导教师根据选题内容确定。

参考书目（Reference Texts）：

由指导教师根据选题内容确定。

其它参考资料（Other References）：

由指导教师根据选题内容确定。