**电气与计算机工程学院**

**2019级通信工程专业本科人才培养方案**

# 一、专业介绍

**（一）专业名称（中英文）： 通信工程（Communication Engineering）**

人才培养需求及定位：通信工程专业自建立以来，紧密结合国家建设对通信专业人才方面的需求，培养以数学、物理和信息论为基础，掌握信息处理技术和现代通信网设计方法，结合电子系统、信息网络和软件设计等技术解决通信行业相关问题，能在电子技术、通信软件、信息通信传输等相关企事业单位从事科学研究、项目研发、技术改造、设备运行与维护和工程管理等方面的工作，具有市场竞争力和一定创新能力的、德智体全面发展的高素质工程技术人才。

通信工程专业主要涵盖通信与信息系统、信号与信息处理，研究信息获取、处理、传输和应用的理论与技术，以及相关的通信设备、系统、网络的结构与应用，包括信号处理、信息编码与调制、信息网络与传输、多媒体信息处理、信息安全、无线移动通信等技术。

**（二）专业代码 ：080703**

**（三）学制：学分制3至7年**

# 二、培养目标和毕业要求

**（一）培养目标**

培养目标应是学生经过学校培养具有本专业基础，经过5年工作能达到的标准。本专业培养适应21世纪电子信息与通信产业科技与社会经济发展需求，培养具有道德文化与社会责任，掌握自然科学基础知识和信息与通信系统的基础理论与分析设计方法，具备良好学习能力、实践能力、协同合作能力和一定创新创业能力的应用型高素质专门人才，能在信息行业、通信领域、电子工程、计算机通信网络及其它相关领域和企事业单位从事信息与通信工程项目设计开发，技术改造，设备运行、维护和管理等方面的工作。

**（二）毕业要求**

毕业要求是学生经过大学3-7年的培养，在毕业是具有的能力，也就是核心能力。

1.基础素养：具有运用数学和自然科学基础知识从事通信工程领域相关研究与实践，并能解决实际问题的能力。

2.专业素养：掌握通信系统、电子信息系统等方面的基本理论、基本知识和基本技能与方法，系统掌握电路基础、电磁场与电波、信号处理、信号传输、现代通信网络、现代电信交换等专业基础理论；掌握各类通信网、通信系统及其主要设备的构成原理、技术性能、设计、调试、运行维护和管理的基本知识；了解信息与通信工程学科发展动态、应用前景，以及信息与通信工程产业发展状况。

3．工程实践：接受专业的电子通信工程和软件工程训练，能够使用常用电子仪器仪表，具有电子与通信信息系统软硬件工程实践能力；能运用先进的工程化分析与设计方法、技术和工具完成信息通信某一应用领域的技术研发、电子产品测试、系统维护和项目管理、系统分析与设计等工作。

4．问题解决：面对通信相关的产品、技术、工程、项目所出现的问题能够提出解决方案，初步具备独立实验、设计、分析和调试的能力，并能够在设计环节中体现一定的创新意识，考虑社会、健康、安全、法律、文化以及环境等因素。

5.研究方法与工具：掌握资料查询、文献检索及运用现代信息技术获取相关信息的基本方法；具有一定的技术文档资料归纳总结、分析整理,以及具备对实验结果的分析，撰写实验和研究报告的能力。

6.职业与社会：具有人文社会科学素养、社会责任感，能够在工程实践中理解并遵守工程职业道德和规范，履行责任，能够理解和评价通信工程中的实践问题对环境、社会可持续发展的影响。

7.团队协作：具备良好的团队协作能力，能够通过人际沟通、协调、计划和协作完成实际工作任务。

8.沟通交流：掌握一门外语，能进行听、说、查阅本专业有关的外文资料，学会查阅产品、系统或软件的应用手册等。

9.终身学习：具有自主学习和终身学习的意识，有不断学习和适应发展的能力。

# 主修专业毕业条件和学位授予

**毕业学分结构表**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **毕业总学分** | **公共必修课** | **通识及成长教育课** | | **专业课** | | |
| **通识选修课** | **成长教育必修课** | **专业必修课** | | **多元化选修课** |
| **数学与科学基础课** | **专业核心课** |
| 156 | 40 | 6 | 9 | 33 | 46 | 22 |

**备注：该学分结构表显示了本专业学生毕业的最低修读总学分要求和各类课程下的最低修读学分组成，专业必修课与专业选修课各模块按照附表3的说明设置，其中专业必修课79学分。专业选修课22学分。自然与学科基础包括数学、基础科学和学科基础模块，专业教育课包括国标中对学生能力培养的相关特色课程、重要课程，多元化选修课体现电气学院学科交叉人才培养。**

**（一）毕业条件**

学生申请以通信工程专业毕业，须符合以下全部条件后，才准予毕业，并发给毕业证书：

1.在学院允许的学习年限内，即3~7年。

2.取得通信工程专业规定的最低毕业总学分156学分，其中：

公共必修课40学分；通识及成长教育课15学分；专业必修课79学分；多元选修课22学分。

**（二）获得学位**

普通全日制本科生在取得毕业资格的前提下，按现行的绩点制，其必修课、专业选修课的平均学分绩点达到2.0及以上者，可授予工学学士学位。

# 四、专业核心课程

专业课分为专业必修课和多元化选修课，其中专业必修课分为数学与科学基础课和专业教育课，可覆盖通信网理论基础、无线通信、射频通信、移动通信、互联网通信、光通信、电磁场与电磁波、现代交换技术领域的专业知识。

**数学与科学课程**：高等数学，线性代数，复变函数与积分变换，大学物理，大学物理实验。

**专业核心课程**：电子信息技术导论，高级语言程序设计，电路基础，模拟电子技术，电路与模拟电子技术实验，数字电路与逻辑设计，数字电路与逻辑设计实验，信号与系统。

**多元选修课程**：通信网基础，通信原理，通信原理与系统实验，工程电磁场与电磁波，通信电子线路，移动通信技术，移动通信网络规划与优化，计算机网络及实训，嵌入式系统与应用、光纤通信等。

# 五、公共教育课程计划进程表

**请详见附表一。**

# 六、通识与成长教育课程计划进程表

**请详见附表二。**

# 七、专业教育课程计划进程表

**请详见附表三。**

# 八、专业各学期学分分配表

**请详见附表四。**

# 九、理论、实践教学学时占比一览表

**请详见附表五。**

# 十、三实课程教学环节一览表

**请详见附表六。**

# 十一、辅修课程、辅修专业、辅修专业学位课程计划进程表

**请详见附表七。**

**（一）辅修课程**

辅修课程是指修满通信工程专业辅修教学计划规定的30学分，其中必修课不低于20学分，选修课10学分，可以取得通信工程专业《辅修证明书》；

通信工程专业辅修课程人才培养方案详见分表一。

**（二）辅修专业**

辅修专业是指修满通信工程业辅修教学计划规定的50学分，其中必修课不低于36学分，选修课14学分，可以取得通信工程专业的辅修毕业资格。

通信工程专业辅修专业人才培养方案详见分表二。

**（三）辅修专业学位**

辅修专业学位规定，学生原主修专业与计划进行辅修专业学位的专业不能属于同一学科门类。在此前提下，非本学科门类专业学生修满本专业辅修专业学位教学计划中规定的60学分，其中必修课39学分，选修课21学分，且符合两个专业要求的学位授予条件，在取得主修专业学士学位的同时，可同时取得工学学士学位。

通信工程专业辅修专业学位人才培养方案详见分表三。

# 附表一

**公共教育课程计划进程表**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **课程性质** | | **课程中文名称** | **课程英文名称** | **课程学时、学分及分配** | | | | **各学年、学期每周课内学时** | | | | | | | |
| **学分** | **总学时** | **讲授学时** | **实践学时** | **1学年** | | **2学年** | | **3学年** | | **4学年** | |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| 公共必修课 |  | 大学体育 | Physical Education | 4 | 144 | 2 | 142 | 2 | 2 | 2 | 2 |  |  |  |  |
| 大学英语 | College English | 16 | 324 | 288 | 36 | 4 | 4 | 4 | 4 |  |  |  |  |
| 思想道德修养与法律基础 | Ideological and Moral Cultivation and Legal Basis | 3 | 54 | 54 | 0 |  | 3 |  |  |  |  |  |  |
| 中国近现代史纲要 | Outline of Modern History of China | 3 | 54 | 54 | 0 |  |  | 3 |  |  |  |  |  |
| 毛泽东思想和中国特色社会主义理论体系概论 | Mao Zedong Thought and Theoretical System of Socialism with Chinese Characteristics | 3 | 54 | 54 | 0 |  |  |  | 4 |  |  |  |  |
| 毛泽东思想和中国特色社会主义理论体系概论（实践） | Introduction to Mao zedong thought and Chinese characteristic socialism theory system (practice) | 2 | 48 | 0 | 48 |  |  |  | 3 |  |  |  |  |
| 马克思主义基本原理概论 | Introduction to the Basic Principle of Marxism | 3 | 54 | 54 | 0 |  |  |  |  | 3 |  |  |  |
| 形势与政策 | Situation and Policy | 2 | 36 | 36 | 0 |  |  |  |  |  | 4（10-18周） |  |  |
| 人文通识模块 | Humanities Module | 4 | 72 | 72 | 修读要求：学生在每个模块下都修有学分，通识必修课一共修读4个学分；建议在第1-2学期修读完。 | | | | | | | | |
| 自然科学模块 | Natural Module |
| 合计 | | 40 | 840 | 614 | 226 | 10 | 13 | 9 | 13 | 3 | 4 | 0 | 0 |

说明：

1、本专业第四学期增设《专业英语（信息技术）》，学生按相关规定和结合自身情况选择修读《综合英语（四级）》、《高级综合英语（六级）》、《跨文化沟通与交流》或者《专业英语（信息技术）》。

2、《思想道德修养与法律基础》授课内容原为思想道德修养基本理论、马克思主义法学基本理论、中国特色社会主义法律基本理论等内容，现增加职业道德修养、礼仪素养、行业相关法律法规知识相关内容。

# 附表二

**通识及成长教育课程计划进程表**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **课程性质** | **开课院系** | **课程中文名称** | | | **课程英文名称** | **课程学时、学分及分配** | | | | | | | | **各学年、学期每周课内学时** | | | | | | | | | | | | | |
| **学分** | | **总学时** | | | **讲授学时** | | **实践学时** | **1学年** | | | | **2学年** | | | **3学年** | | | | **4学年** | | |
| **1** | | **2** | | **3** | | **4** | **5** | | | **6** | **7** | | **8** |
| **公 共 选 修 课** | 外国语学院（18门） | 法语语言与文化 | | | French language and culture | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 西方艺术史 | | | Western Art History | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 韩语语言与文化 | | | Korean Language and Culture | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | | 2 |  | |  |
| 中国古典诗歌欣赏与写作 | | | Appreciation and Writing of Classical Chinese Poetry | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | |  | 2 | |  |
| 日本语言与文化 | | | Japanese Language and Culture | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 思维导图设计与制作 | | | Mind-map Design and Drawing | 1 | | 18 | | | 9 | | 9 |  | |  | | 1 | |  |  | | |  |  | |  |
| 世界主要旅游国文化 | | | Culture of the Major Tourist Countries | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 日本文学与电影赏析 | | | Appreciation of Japanese Literature and Movies | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | | 2 |  | |  |
| 旅游法语 | | | tourism french | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 法国文学作品选读 | | | french literature | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 法语电影鉴赏 | | | french film | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | | 2 |  | |  |
| 即兴演讲 | | | Improvisational Speech | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  |  | | |  | 2 | |  |
| 东南亚文化研究 | | | National Social Culture of South-East Asia | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  |  | | |  | 2 | |  |
| 中华文化与传播 | | | Chinese Cultural and Its Promotion | 2 | | 36 | | | 18 | | 18 | 3 | |  | |  | |  |  | | |  |  | |  |
| 儿童文学—从《伊索寓言》到《哈利波特》 | | | Children's Literature ：FromAesop's Fables to Harry Potter | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 博雅人文阅读 | | | Boya Humanities Reading | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 中外影视文化 | | | Chinese and foreign film and television culture | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | |  | 2 | |  |
| 东亚（中日韩）文化比较 | | | Comparison of East Asian culture | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | | 2 |  | |  |
| 艺术设计与创意产业系（13门） | 创意思维训练 | | | Creative thinking training | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 图形语言与平面设计赏析 | | | Appreciation of Graphic Language and Graphic Design | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 现代礼仪 | | | Modern Etiquette | 2 | | 36 | | | 36 | | 0 | 3 | |  | |  | |  |  | | |  |  | |  |
| 设计美学 | | | Design aesthetics | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 军用品设计与赏析 | | | Design and Appreciation of Military Supplies | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 奥斯卡百年经典电影赏析 | | | Appreciation of Academy Awards Centennial Classic Films | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 纪录片评析 | | | Comments on Documentary Films | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 漫画赏析 | | | Cartoons appreciation | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 经典动画赏析 | | | Appreciation of Classical Animation | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 经典名画赏析 | | | Appreciation of Classical Paintings | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 摄影经典作品赏析 | | | Appreciation of Classical Photographic Works | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 网红短视频发展赏析 | | | Appreciation of the Development of Netred Short Video | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 非物质文化遗产赏析 | | | Appreciation of intangible cultural heritage | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 音乐系（8门） | 音乐欣赏 | | | Music appreciation | 2 | | 36 | | | 18 | | 18 |  | | 2 | |  | |  |  | | |  |  | |  |
| 艺术概论 | | | Art introduction | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 聆听音乐 | | | Listening To Music | 2 | | 36 | | | 6 | | 30 |  | |  | |  | | 2 |  | | |  |  | |  |
| 基本乐理 | | | Music Theory | 2 | | 36 | | | 14 | | 22 |  | |  | |  | |  | 2 | | |  |  | |  |
| 即兴乐舞 | | | Improvisational Dance and Music | 1 | | 18 | | | 2 | | 16 |  | |  | |  | |  |  | | | 1 |  | |  |
| 安格隆（Angklung） | | | Angklung | 1 | | 18 | | | 2 | | 16 |  | |  | |  | |  |  | | |  | 2 | |  |
| 舞蹈鉴赏 | | | Dance appreciation | 2 | | 36 | | | 20 | | 16 |  | | 2 | |  | |  |  | | |  |  | |  |
| 演出经纪人 | | | Performing Arts Broker | 2 | | 36 | | | 20 | | 16 |  | |  | |  | |  |  | | |  | 2 | |  |
| 大英中心（9门） | 跨文化沟通与交流 | | | Intercultural communication and communication | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 英语国家社会与文化 | | | Society and culture in English speaking countries | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | | 2 |  | |  |
| 英美文学赏析 | | | English and American Literature Appreciation | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | |  | 2 | |  |
| 商务英语 | | | Business English | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 英语演讲 | | | English speech | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | | 2 |  | |  |
| 高级综合英语（考研英语） | | | Advanced English （NETEM） | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | |  | 2 | |  |
| 雅思与英国语言教育 | | | IELTS and English Language Education of the U.K | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | |  | 2 | |  |
| 托福与美国语言教育 | | | TOEFL and American Language Education | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 求职英语 | | | Cambridge English for Job-hunting | 1 | | 18 | | | 18 | | 0 |  | |  | |  | |  |  | | |  | 2 | |  |
| 综合素养学部（6门） | 中国外交与世界 | | | Chinese Diplomacy and the World | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 文化传承与文明视野 | | | Culture Heritage and the View of Civilization | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 国史与国情 | | | History and National Conditions of China | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 经典著作阅读与赏析 | | | The Appreciation of Classical Works | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 哲学思辨与科学方法 | | | Philosophical Thoughts and Research Methods | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 中国当代社会与文化探究 | | | The Study of Contemporary Chinese Society and Culture | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | | 2 |  | |  |
| 文学与传媒学院（12门） | 中国文化 | | | Chinese culture | 2 | | 36 | | | 36 | | 0 | 2 | |  | |  | |  |  | | |  |  | |  |
| 欧洲文化艺术 | | | Culture & Arts in Europe | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 现代名作导读 | | | Introduction to modern masterpieces | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 中外文艺电影欣赏 | | | Appreciation of Chinese and foreign literary films | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 经典摄影作品分析 | | | Analysing classical photography | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  | 2 | | |  |  | |  |
| 大学生创意思维与创意素养 | | | College students' creative thinking and creative quality | 2 | | 36 | | | 18 | | 18 |  | |  | | 2 | |  |  | | |  |  | |  |
| 当代表演艺术赏析 | | | Performing Arts in Modern Times | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  | 2 | | |  |  | |  |
| 中国画 | | | Chinese Painting | 2 | | 36 | | | 18 | | 18 |  | | 2 | |  | |  |  | | |  |  | |  |
| 言语交际艺术 | | | Arts of Verbal Communication | 2 | | 36 | | | 18 | | 18 |  | | 2 | |  | |  |  | | |  |  | |  |
| 平台经济与数字驱动创新 | | | Platform Economy and Data-Driven Innovations | 3 | | 54 | | | 36 | | 18 | 3 | |  | |  | |  |  | | |  |  | |  |
| 科技、娱乐与设计 | | | Technology, Entertainment, and Design | 2 | | 36 | | | 30 | | 6 |  | | 2 | |  | |  |  | | |  |  | |  |
| 机器学习与人工智能之API经济 | | | API Econom of Machine Learning and Artificial Intelligence | 3 | | 54 | | | 36 | | 18 |  | |  | | 3 | |  |  | | |  |  | |  |
| 公共管理学系（8门） | 人力资源管理导论 | | | Introduction to Human Resource Management | 3 | | 54 | | | 36 | | 18 | 3 | |  | |  | |  |  | | |  |  | |  |
| 组织行为学 | | | Organizational Behavior | 3 | | 54 | | | 36 | | 18 |  | | 3 | |  | |  |  | | |  |  | |  |
| 文化产业概论 | | | Introduction of Cultural Industry | 3 | | 54 | | | 36 | | 18 |  | |  | | 3 | |  |  | | |  |  | |  |
| 中国传统文化概论 | | | Introduction of Chinese Traditional Culture | 3 | | 54 | | | 36 | | 18 |  | | 3 | |  | |  |  | | |  |  | |  |
| 公共关系学 | | | Public Relations | 3 | | 54 | | | 36 | | 18 |  | |  | | 3 | |  |  | | |  |  | |  |
| 媒介素养 | | | Media Literacy | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 当代中国政治与外交 | | | Politics and Diplomacy of Contemporary China | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 道德情操论 | | | The Theory of Moral Sentiments | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 会计学院（33门） | 趣味会计学：基础与案例 | | | Interesting Accounting： Principles and Cases | 3 | | 54 | | | 36 | | 18 | 3 | |  | |  | |  |  | | |  |  | |  |
| 生活中的会计 | | | Accounting in life | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 读懂财务语言 | | | Understand financial language | 2 | | 36 | | | 18 | | 18 |  | | 2 | |  | |  |  | | |  |  | |  |
| 读懂财务报表 | | | Understand financial statements | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 会计与经济 | | | Accounting and Economics | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 企业经营与财务 | | | Business operations and finance | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 互联网与会计 | | | Internet and Accounting | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 预算管理基础与艺术 | | | Budget Management Foundation and Art | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 企业绩效评价与职工激励 | | | Enterprise Performance Evaluation and Staff Incentives | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 内部控制与风险管理 | | | Internal Control and Risk Management | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 管理会计实务 | | | Management accounting practices | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 成本控制方法与案例 | | | Cost control methods and cases | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 资本市场与企业融资 | | | Capital market and corporate finance | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 投资决策技术与案例 | | | Investment decision technology and cases | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 企业理财攻略 | | | Corporate financial strategy | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 内部审计案例解剖 | | | Internal audit case anatomy | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 经济责任审计案例剖析 | | | Analysis of Economic Responsibility Audit Cases | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 企业绩效管理与案例 | | | Enterprise performance management and cases | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | |  | 2 | |  |
| 全面预算ABC | | | Comprehensive budget ABC | 1 | | 18 | | | 18 | | 0 |  | |  | |  | |  |  | | | 1 |  | |  |
| 生活中的税收 | | | Taxation in life | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 税务筹划方法与技巧 | | | Tax Planning methods and skills | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 税务筹划实务 | | | Tax Planning practices | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 妙趣横生经济法 | | | Interesting economic law | 3 | | 54 | | | 54 | | 0 | 3 | |  | |  | |  |  | | |  |  | |  |
| 案说经济与法 | | | Case study of Economics and Law | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 生活中的投资理财 | | | Investment and financial planning in life | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 公司理财实务 | | | Corporate finance practices | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 证券投资方法与技巧 | | | Securities investment methods and skills | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | | 2 |  | |  |
| 商务沟通技巧与实务 | | | Business communication skills and practices | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  |  | | |  | 2 | |  |
| 财务分析与估值 | | | Financial analysis and valuation | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 公司治理案例分析 | | | Case analysis of corporate governance | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 财务舞弊案例剖析 | | | Financial fraud case analysis | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | | 2 |  | |  |
| 透析风控看企业 | | | Knowing Enterprise through Internal control | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 企业IPO上市案例解读 | | | Interpretation of IPO cases of enterprises | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 商学院（54门） | 新媒体营销 | | | New Media Marketing | 3 | | 54 | | | 27 | | 27 |  | |  | | 3 | |  |  | | |  |  | |  |
| 互联网创业 | | | Internet Entrepreneurship | 3 | | 54 | | | 27 | | 27 |  | | 3 | |  | |  |  | | |  |  | |  |
| 质量管理学 | | | Quality Managament | 3 | | 54 | | | 48 | | 6 | 3 | |  | |  | |  |  | | |  |  | |  |
| 家族企业发展与传承 | | | The Development & Inheritance of the Family Business | 3 | | 54 | | | 48 | | 6 |  | |  | |  | |  |  | | | 3 |  | |  |
| 中国经济专题 | | | China's Economic Theme | 3 | | 54 | | | 54 | | 0 |  | |  | |  | |  | 3 | | |  |  | |  |
| 《论语》通解 | | | General interpretation of the Analects of Confucius | 3 | | 54 | | | 54 | | 0 |  | |  | |  | |  |  | | | 3 |  | |  |
| 战略管理 | | | Strategic Management | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  |  | | |  | 2 | |  |
| 微观经济学 | | | Microeconomics | 2 | | 36 | | | 36 | | 0 | 2 | |  | |  | |  |  | | |  |  | |  |
| 区域经济学 | | | Regional Economics | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 证券投资与理财 | | | Securities Investment and Financial Management | 2 | | 36 | | | 18 | | 18 |  | |  | | 2 | |  |  | | |  |  | |  |
| EXCEL进阶教程 | | | Advanced EXCEL COURSE | 2 | | 36 | | | 18 | | 18 |  | |  | |  | | 2 |  | | |  |  | |  |
| 细读张爱玲 | | | A Close Reading of Zhang Ailing | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  | 2 | | |  |  | |  |
| 人际关系沟通 | | | Interpersonal Communication | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  |  | | | 2 |  | |  |
| 英美电影赏析 | | | British and American Films Appreciation | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  |  | | |  | 2 | |  |
| 演讲与口才 | | | Speech and Eloquence | 2 | | 36 | | | 18 | | 18 |  | | 2 | |  | |  |  | | |  |  | |  |
| 时尚买手 | | | Psychology and Life | 2 | | 36 | | | 18 | | 18 |  | |  | | 2 | |  |  | | |  |  | |  |
| 在线旅游运作与创业 | | | Online Tourism Operations and Entrepreneurship | 2 | | 36 | | | 30 | | 6 |  | |  | |  | |  |  | | | 2 |  | |  |
| 园林艺术 | | | Art of Landscape | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 创业计划书写作 | | | Preparing Effective Business Plans | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 旅游线路设计与营销 | | | Tour Design and Marketing | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 健康与养生旅游 | | | Health and Wellness Tourism | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 主题活动策划与实施 | | | Theme Activities Planning | 2 | | 36 | | | 24 | | 12 |  | |  | |  | |  |  | | | 2 |  | |  |
| 多元思维训练 | | | Multiple Thinking Training | 2 | | 36 | | | 24 | | 12 |  | |  | |  | | 2 |  | | |  |  | |  |
| 公司法与公司股权结构设计 | | | Law of Corporation | 3 | | 54 | | | 54 | | 0 |  | |  | | 3 | |  |  | | |  |  | |  |
| 民事诉讼法 | | | Law of Civil Procedure | 3 | | 54 | | | 54 | | 0 |  | |  | |  | | 3 |  | | |  |  | |  |
| 跨国公司跨文化管理 | | | Interculture Management | 3 | | 54 | | | 36 | | 18 |  | |  | |  | |  |  | | |  | 3 | |  |
| 个人与家庭理财 | | | Personal and Family Financial Management | 3 | | 54 | | | 54 | | 0 |  | |  | |  | |  |  | | |  | 3 | |  |
| Photoshop | | | Photoshop | 2 | | 36 | | | 18 | | 18 |  | | 2 | |  | |  |  | | |  |  | |  |
| Python程序设计 | | | Python Programming | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  | 2 | | |  |  | |  |
| 《道德经》导读 | | | Introduction to the Tao Te Jing | 1 | | 18 | | | 18 | | 0 |  | |  | |  | | 1 |  | | |  |  | |  |
| 日语入门 | | | Introduction to Japanese | 2 | | 36 | | | 18 | | 18 |  | |  | | 2 | |  |  | | |  |  | |  |
| 国际贸易案例精选——以欺诈与风险防范为主线 | | | Selection of International Trade Cases | 3 | | 54 | | | 36 | | 18 |  | | 3 | |  | |  |  | | |  |  | |  |
| 国际奢侈品管理 | | | International Luxury Management | 3 | | 54 | | | 36 | | 18 |  | |  | |  | |  | 3 | | |  |  | |  |
| 品牌策划 | | | Brand Planning | 3 | | 54 | | | 36 | | 18 |  | |  | | 3 | |  |  | | |  |  | |  |
| 爱情经济学 | | | Economics of Love | 3 | | 54 | | | 36 | | 18 |  | |  | | 3 | |  |  | | |  |  | |  |
| 婚姻家庭法 | | | A Law of Marriage and Family | 2 | | 36 | | | 18 | | 18 |  | |  | |  | | 2 |  | | |  |  | |  |
| 商品包装与广告设计 | | | Commodity Packaging and Advertising Design | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  | 2 | | |  |  | |  |
| 时尚与奢侈品企业管理 | | | Managing Fashion and Luxury Companies | 2 | | 36 | | | 18 | | 18 |  | | 2 | |  | |  |  | | |  |  | |  |
| 股市淘金——散户策略与操作 | | | Gold Rush in Stock Market-Individual Investor Strategy and Operation | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  |  | | | 2 |  | |  |
| 简单投资 | | | Easy Financial Planning | 3 | | 54 | | | 36 | | 18 |  | |  | | 3 | |  |  | | |  |  | |  |
| 广告策划与欣赏 | | | Advertising Planning | 2 | | 36 | | | 30 | | 6 |  | |  | |  | | 2 |  | | |  |  | |  |
| 酒水概论与酒文化 | | | Wine Technology and Culture | 2 | | 36 | | | 24 | | 12 |  | |  | |  | |  |  | | | 2 |  | |  |
| 市场环境分析 | | | Market Circumstances Analysis | 3 | | 54 | | | 54 | | 0 |  | |  | |  | |  | 3 | | |  |  | |  |
| 消费心理与行为 | | | Consumer Psychology and Bebavior | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 新事业战略管理 | | | New Business Strategy Management | 2 | | 36 | | | 36 | | 0 |  | |  | |  | | 2 |  | | |  |  | |  |
| 心理学与生活 | | | Sociology and Life | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 大学数学 | | | College Mathematics | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 沟通管理 | | | Communication Management | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  |  | | | 2 |  | |  |
| 劳动合同管理 | | | Labor Contract Management | 2 | | 36 | | | 18 | | 18 |  | |  | |  | |  | 2 | | |  |  | |  |
| 管理案例分析 | | | Management Case Analysis | 2 | | 36 | | | 6 | | 30 |  | |  | |  | | 2 |  | | |  |  | |  |
| 旅游目的地与文化 | | | Tourism Destination and Culture | 2 | | 36 | | | 27 | | 9 |  | |  | | 2 | |  |  | | |  |  | |  |
| 初级会计职称考试之实务 | | | Accounting of Accounting Junior Professional Examination | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 初级会计职称考试之经济法 | | | Economic Law of Accounting Junior Professional Examination | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 区域与空间贸易 | | | Regional and Space Trade | 3 | | 54 | | | 54 | | 0 |  | |  | |  | | 3 |  | | |  |  | |  |
| 健康与护理系（5门） | 女性生理与保健 | | | Female physiology and health care | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
| 常用急救技术-心肺复苏 | | | Common first aid technique - cardiopulmonary resuscitation (CPR) | 1 | | 18 | | | 9 | | 9 |  | |  | |  | |  |  | | | 1 |  | |  |
| 常用药物知识 | | | Common drug knowledge | 1 | | 18 | | | 18 | | 0 |  | |  | |  | |  |  | | |  | 1 | |  |
| 营养与健康 | | | Nutrition and health | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 大学生卫生保健 | | | Health care for College Students | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 云康医学与健康管理学院（4门） | 药妆与药品 | | | Cosmeceuticals and Drugs | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 化学与生活 | | | Chemistry and Life | 2 | | 36 | | | 36 | | 0 |  | |  | | 2 | |  |  | | |  |  | |  |
| 营养学 | | | nutriology | 2 | | 36 | | | 36 | | 0 |  | | 2 | |  | |  |  | | |  |  | |  |
| 人体健康与疾病 | | | The Human Body in Health and Disease | 2 | | 36 | | | 36 | | 0 |  | |  | |  | |  | 2 | | |  |  | |  |
|  | 合计 | | | | | | 358 | | 6444 | 5413 | | 1031 | | | 25 | | 64 | | 91 | 47 | | 61 | | 39 | 35 | | 0 |
| 成长必修课 | 综合素养部 | | 大学生心理健康教育 | Mental Health Education | | | 2 | | 36 | 36 | | 0 | | | 2 | |  | |  |  | |  |  | |  |  | |
| 学工部 | | 军事理论 | Military Theory | | | 2 | | 36 | 36 | | 0 | | | 2 | |  | |  |  | |  |  | |  |  | |
| 政商研究院 | | 创业基础（理论） | Foundation of Establishing a business（Theory） | | | 1 | | 18 | 18 | | 0 | | |  | |  | |  |  | | 2(1-9周) |  | |  |  | |
| 电气与计算机工程学院 | | 创业基础（实践） | Foundation of Establishing a business | | | 2 | | 48 | 0 | | 48 | | |  | |  | |  |  | |  | 12(1-4周) | |  |  | |
| 就业指导（理论+实践） | Employment Guidance（Theory） | | | 2 | | 36 | 18 | | 18 | | |  | |  | |  |  | |  | 2 | | 6(1-3周) |  | |
|  | | 合计 | | | | 9 | | 174 | 108 | | 66 | | | 4 | | 0 | | 0 | 0 | | 2 | 14 | | 6 | 0 | |

说明：公共选修课从指定的模块中至少选修6学分，成长教育必修课共9学分。

# 附表三

**专业课程计划进程表**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **课程性质** | | **课程中文名称** | **课程英文名称** | **课程学时、学分及分配** | | | | **各学年、学期每周课内学时** | | | | | | | |
| **学分** | **总学时** | **讲授学时** | **实践学时** | **1学年** | | **2学年** | | **3学年** | | **4学年** | |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| 专业必修课 | 数学与科学基础 | 高等数学(1) | Advanced Mathematics (1) | 4 | 72 | 72 | 0 | 5 |  |  |  |  |  |  |  |
| 高等数学(2) | Advanced Mathematics (2) | 4 | 72 | 72 | 0 |  | 4 |  |  |  |  |  |  |
| 线性代数 | Linear Algebra | 3 | 54 | 54 | 0 | 4 |  |  |  |  |  |  |  |
| 高级语言程序设计(1) | Advance Language Programming (1) | 4 | 72 | 36 | 36 | 3+3 |  |  |  |  |  |  |  |
| 高级语言程序设计(2) | Advance Language Programming (2) | 3 | 54 | 27 | 27 |  | 3 |  |  |  |  |  |  |
| 计算机基础 | Computer Foundation | 2 | 36 | 18 | 18 |  | 3 |  |  |  |  |  |  |
| 大学物理(1) | College Physics (1) | 3 | 54 | 54 | 0 |  | 3 |  |  |  |  |  |  |
| 大学物理(2) | College Physics (2) | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 大学物理实验 | College Physics Experiments | 1 | 24 | 0 | 24 |  |  | 3 |  |  |  |  |  |
| 复变函数与积分变换 | Complex Function and Integral transformation | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 工程电磁场 | Engineering Electromagnetic Field | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 概率论与数理统计 | Probability Theory and Mathematical Statistics | 3 | 54 | 54 | 0 |  |  |  | 3 |  |  |  |  |
| 合计 | | 33 | 600 | 495 | 105 | 15 | 13 | 7 | 5 | 0 | 0 | 0 | 0 |
| 专业核心 | 电子信息技术导论 | Introduction of Electronic and Communication | 1 | 18 | 18 | 0 | 3 |  |  |  |  |  |  |  |
| 电路基础 | Fundamental of Circuit | 4 | 72 | 54 | 18 |  | 4 |  |  |  |  |  |  |
| 通信网基础 | Communication Network Foundation | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 模拟电子技术 | Analog Electronics Technology | 3 | 54 | 54 | 0 |  |  | 3 |  |  |  |  |  |
| 电路与模拟电子技术实践 | Circuit and Analog Electronic Technology Practice | 2 | 48 | 0 | 48 |  |  | 3 |  |  |  |  |  |
| 数字电路与逻辑设计 | Digital Circuit and Logic Design | 3 | 54 | 54 | 0 |  |  | 3 |  |  |  |  |  |
| 信号与系统 | Signals and Systems | 3 | 54 | 36 | 18 |  |  | 3 |  |  |  |  |  |
| 数字电路与逻辑设计实验 | Digital Circuit and Logic Design Experiments | 1 | 24 | 0 | 24 |  |  |  | 3 |  |  |  |  |
| 微机原理与接口技术 | Computer Principle and Interface Technology | 3 | 54 | 36 | 18 |  |  |  | 3 |  |  |  |  |
| 高频电子线路 | High Frequency Electronic Circuit | 3 | 54 | 54 | 0 |  |  |  | 3 |  |  |  |  |
| 通信原理 | Principle of Communication Systems | 3 | 54 | 54 | 0 |  |  |  |  | 3 |  |  |  |
| 移动通信技术 | Mobile Communication Technology | 2 | 36 | 36 | 0 |  |  |  |  | 2 |  |  |  |
| 通信原理与系统实验 | Communication Principle and System Experiments | 1 | 24 | 0 | 24 |  |  |  |  | 3 |  |  |  |
| 计算机网络及实训 | Computer network and Training | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 数字信号处理 | Digital Signal Processing | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 光纤通信 | Optical Fiber Communication | 2 | 36 | 36 | 0 |  |  |  |  |  | 2 |  |  |
| 毕业实习 | Practical Training | 3 |  |  |  |  |  |  |  |  |  |  |  |
| 毕业设计 | Graduation Project | 4 |  |  |  |  |  |  |  |  |  |  |  |
| 合计 | | 46 | 726 | 540 | 186 | 3 | 4 | 14 | 6 | 14 | 2 | 0 | 0 |
| 多元化选修课 | | MATLAB语言初步 | MATLAB Language Preliminary | 1 | 24 | 0 | 24 | 3 |  |  |  |  |  |  |  |
| 大学人文基础 | Foundation of university humanity | 2 | 36 | 36 | 0 |  | 2 |  |  |  |  |  |  |
| 电子工艺设计与实训 | Electronic Technology Design and Training | 1 | 24 | 0 | 24 |  |  | 3 |  |  |  |  |  |
| 多媒体信息处理 | Multimedia Signal Processing | 2 | 36 | 18 | 18 |  |  | 3 |  |  |  |  |  |
| 信息论基础 | Information Theory | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 现代交换技术 | Modern Exchange  Technology | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 程序设计实训 | Practices of Programming | 2 | 48 | 0 | 48 |  |  |  | 3 |  |  |  |  |
| 管理学基础 | Foundations of Management | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 电子线路设计 | Design of Electronic Circuit | 2 | 36 | 18 | 18 |  |  |  | 4（10-18周） |  |  |  |  |
| 数字图像处理 | Digital Image Processing | 2 | 36 | 18 | 18 |  |  |  | 3 |  |  |  |  |
| 计算机视觉 | Computer Vision | 2 | 36 | 12 | 24 |  |  |  | 2 |  |  |  |  |
| 单片机原理及应用 | Microchip Principles and Application | 3 | 54 | 18 | 36 |  |  |  |  | 3 |  |  |  |
| 嵌入式系统与应用 | Embedded System and Application | 3 | 54 | 30 | 24 |  |  |  |  | 3 |  |  |  |
| CMOS集成电路设计 | CMOS Integrated Circuit Design | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 信息安全 | Information Security | 2 | 36 | 36 | 0 |  |  |  |  | 2 |  |  |  |
| 创新创业项目及学科竞赛 | Innovative Entrepreneurship Programs and Disciplines Competition | 1 | 24 | 0 | 24 |  |  |  |  | 1 |  |  |  |
| 通信工程技术与项目管理 | Communication Engineering Technology and Project Management | 2 | 36 | 18 | 18 |  |  |  |  | 2 |  |  |  |
| 工程制图与CAD | Engineering Drawing and CAD | 2 | 36 | 12 | 24 |  |  |  |  |  | 3 |  |  |
| 移动互联网技术 | Mobile Internet technology | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 数据库系统与应用 | [Database](javascript:void(0);) System [and](javascript:void(0);) [Applications](javascript:void(0);) | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 网站设计 | Website Design | 2 | 36 | 12 | 24 |  |  |  |  |  | 4（1-9周） |  |  |
| 数据结构 | Data Structure | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 移动通信网络规划与优化 | Mobile Network Design and Optimization | 2 | 36 | 18 | 18 |  |  |  |  |  | 2 |  |  |
| 传感器原理及应用 | Sensors Principle and Application | 2 | 36 | 36 | 0 |  |  |  |  |  | 3 |  |  |
| 软件配置与质量管理 | The Software Configuration and Quality Management | 2 | 36 | 18 | 18 |  |  |  |  |  | 2 |  |  |
| 微波与天线技术 | Microwave and Antenna Technology | 2 | 36 | 36 | 0 |  |  |  |  |  | 2 |  |  |
| 企业家论坛 | Business Forum | 1 | 24 | 0 | 24 |  |  |  |  |  |  | 6(1-4周) |  |
| 企业项目实践 | Enterprise Project Practice | 1 | 24 | 0 | 24 |  |  |  |  |  |  | 6(1-4周) |  |
| 合计 | | 57 | 1072 | 570 | 522 | 3 | 2 | 6 | 18 | 14 | 25 | 12 | 0 |

说明：

1.专业必修课程总学分为79学分，其中，数学与科学基础课程包括：数学类、基础科学、学科基础课程，共33学分；专业核心课程共46学分。

2.专业选修课共需要修读22学分，其中《大学人文基础》、《管理学基础》为指定选修课，必须修读；《创新创业项目及学科竞赛》为学生参加学科竞赛、大学生创新创业训练项目、教师科研项目等认定学分；《企业项目实践》为企业在校内举办的课程实训。

3.毕业实习为期3周，在第7学期开展，其中1周集中，其余2周学生自主安排。毕业设计为期12周，在第7学期开展。

# 附表四

**专业各学期学分分配表**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **课程性质** | | **总学分** | **总学时** | **学分与学期分配** | | | | | | | |
| **一** | **二** | **三** | **四** | **五** | **六** | **七** | **八** |
| 公共教育课 | 必修课 | 40 | 840 | 7 | 10 | 8 | 10 | 3 | 2 | 0 | 0 |
| 通识与成长教育课 | 通识选修课 | 358 | 6444 | 18 | 61 | 86 | 47 | 59 | 37 | 34 | 0 |
| 成长教育必修 | 9 | 174 | 4 | 0 | 0 | 0 | 1 | 3 | 1 | 0 |
| 专业必修 | 数学与科学基础 | 33 | 600 | 11 | 12 | 5 | 5 | 0 | 0 | 0 | 0 |
| 专业核心课 | 46 | 726 | 1 | 4 | 13 | 6 | 12 | 2 | 0 | 0 |
| 多元化选修课 | 专业选修 | 57 | 1068 | 1 | 2 | 3 | 14 | 14 | 21 | 2 | 0 |
| 总计 | | 543 | 9852 | 42 | 89 | 115 | 82 | 89 | 65 | 37 | 0 |
| **特别说明** | | 通信工程专业实习学期为第（7）学期，除实习学期和第八学期外，第一学期修读的各类课程总学分不高于24学分，其他学期不高于28学分。 | | | | | | | | | |

# 附表五

**理论、实践教学学时占比一览表**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **课程性质** | | **学时数** | | **占总学时比例** |
| **理论学时** | **实践学时** |
| 公共教育课 | 公共必修课 | 614 | 226 | 8.18% |
| 合计 | 614 | 226 | 8.18% |
| 通识与成长教育课 | 通识选修课 | 5413 | 1031 | 66.4% |
| 成长教育必修 | 108 | 66 | 1.74% |
| 合计 | 5521 | 1097 | 68.17% |
| 专业必修课 | 数学与科学基础 | 495 | 105 | 5.99% |
| 专业核心课 | 540 | 186 | 7.00% |
| 合计 | 1035 | 291 | 12.99% |
| 多元化选修课 | 专业选修 | 570 | 498 | 10.65% |
| 合计 | 570 | 498 | 10.65% |
| 总计 | | 7740 | 2112 | 100.00% |

# 附表六

**三实课程教学环节一览表**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **实践项目名称** | **学期** | **学分** | **总学时** | **内容** | **备注** |
| 体育(一) | 1 | 1 | 34 | 学习所选体育项目专项技能 |  |
| 体育(二) | 2 | 1 | 36 | 学习所选体育项目专项技能 |  |
| 体育(三) | 3 | 1 | 36 | 学习所选体育项目专项技能 |  |
| 体育(四) | 4 | 1 | 36 | 学习所选体育项目专项技能 |  |
| 大学英语（自主学习） | 1、2 | 1 | 32 | 在教师指导下完成相应的学习和测试任务 |  |
| MATLAB语言初步实验 | 1 | 1 | 24 | MATLAB学习与使用 |  |
| 高级语言程序设计实验 | 1 | 1 | 24 | 高级语言程序设计、开发与应用 |  |
| 办公软件 | 2 | 1 | 24 | Office、Photoshop的使用 |  |
| 大学物理实验 | 2 | 1 | 24 | 电子测量基础实践 |  |
| 面向对象程序设计 | 2 | 2 | 48 | 面向对象的Java语言的设计与应用 |  |
| 电子工艺设计与实训 | 2 | 2 | 48 | 简单电路连接、PCB板焊接 |  |
| 毛泽东思想和中国特色社会理论体系概论（实践） | 3-4 | 2 | 48 | 认识国情，接触社会，提升综合素质，促进自我成长 |  |
| 信号与系统实验 | 3 | 1 | 18 | 信号与系统实验 |  |
| 程序设计实训 | 3 | 2 | 48 | 程序设计项目开发与实训 |  |
| 电路与模拟电子技术实践 | 3 | 2 | 48 | 电路基础知识与实践，模拟电子技术课程相关操作和实践 |  |
| 工程制图与CAD实验 | 3 | 1 | 18 | CAD软件实验 |  |
| 多媒体信息处理实验 | 3 | 1 | 18 | 多媒体信息处理上机操作实验 |  |
| 数字电路与逻辑设计实验 | 4 | 1 | 24 | 数字电路与逻辑设计实验 |  |
| 单片机原理及应用实验 | 4 | 1 | 24 | 单片机原理及应用 |  |
| 电子线路设计实验 | 4 | 1 | 18 | 电子线路设计仿真 |  |
| 数字图像处理实验 | 4 | 1 | 18 | 数字图像实验 |  |
| 通信原理与系统实验 | 4 | 1 | 24 | 通信原理与系统实验 |  |
| 微机原理与接口技术实验 | 4 | 1 | 18 | 微机原理与接口上机操作 |  |
| 创新创业项目及学科竞赛 | 5 | 1 | 24 | 创新创业项目及学科竞赛 |  |
| 数据库原理与应用实验 | 5 | 1 | 18 | 数据库上机实验 |  |
| 网站设计实验 | 5 | 1 | 18 | 网站设计上机实验 |  |
| 计算机网络及实训实验 | 5 | 1 | 24 | 计算机网络基本知识与通信原理 |  |
| 嵌入式系统与应用实验 | 5 | 1 | 24 | 嵌入式系统与应用 |  |
| 数字信号处理实验 | 5 | 1 | 18 | 数字信号处理实验 |  |
| CMOS集成电路设计实验 | 5 | 1 | 18 | 集成电路软件应用 |  |
| 移动互联网技术 | 5 | 2 | 48 | 移动互联网技术 |  |
| 创业基础（实践） | 6 | 1 | 24 | 进行创新实践训练 |  |
| 就业指导（理论+实践） | 6、7 | 1 | 18 | 进行就业实践训练 |  |
| Android应用开发 | 6 | 2 | 48 | Android应用开发 |  |
| 软件设计与实训 | 6 | 2 | 48 | 软件设计与实训 |  |
| 软件配置与质量管理实验 | 6 | 1 | 18 | 软件配置与质量管理操作 |  |
| 移动通信网络规划与优化实验 | 6 | 1 | 18 | 移动网络仿真模拟 |  |
| 通信工程技术与项目管理实验 | 6 | 1 | 18 | 通信网络设计 |  |
| 企业家论坛 | 7 | 1 | 24 | 企业专家论坛 |  |
| 企业项目实践 | 7 | 1 | 24 | 企业在校内举办的课程实训 |  |
| 毕业实习 | 7 | 3 | 3周 | 其中1周集中，其余2周学生自主安排 |  |
| 毕业论文 | 7 | 4 | 12周 | 专业知识综合应用训练 |  |
| 合计 |  | 57 | 1156 |  |  |

说明：包括课内实验、单独开设的实验、集中实训与实践。

# 附表七

**辅修课程、辅修专业、辅修专业学位课程计划进程表**

分表一

**通信工程专业辅修课程人才培养方案**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **课程性质** | | **课程中文名称** | **课程英文名称** | **课程学时、学分及分配** | | | | **各学年、学期每周课内学时** | | | | | | | |
| **学分** | **总学时** | **讲授学时** | **实践学时** | **1学年** | | **2学年** | | **3学年** | | **4学年** | |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| 专业必修课 | 数学与科学基础 | 高等数学(1) | Advanced Mathematics (1) | 4 | 72 | 72 | 0 | 5 |  |  |  |  |  |  |  |
| 高等数学(2) | Advanced Mathematics (2) | 4 | 72 | 72 | 0 |  | 4 |  |  |  |  |  |  |
| 线性代数 | Linear Algebra | 3 | 54 | 54 | 0 | 4 |  |  |  |  |  |  |  |
| 高级语言程序设计(1) | Advance Language Programming (1) | 4 | 72 | 36 | 36 | 3+3 |  |  |  |  |  |  |  |
| 高级语言程序设计(2) | Advance Language Programming (2) | 3 | 54 | 27 | 27 |  | 3 |  |  |  |  |  |  |
| 计算机基础 | Computer Foundation | 2 | 36 | 18 | 18 |  | 3 |  |  |  |  |  |  |
| 大学物理(1) | College Physics (1) | 3 | 54 | 54 | 0 |  | 3 |  |  |  |  |  |  |
| 大学物理(2) | College Physics (2) | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 大学物理实验 | College Physics Experiments | 1 | 24 | 0 | 24 |  |  | 3 |  |  |  |  |  |
| 复变函数与积分变换 | Complex Function and Integral transformation | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 工程电磁场 | Engineering Electromagnetic Field | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 概率论与数理统计 | Probability Theory and Mathematical Statistics | 3 | 54 | 54 | 0 |  |  |  | 3 |  |  |  |  |
| 合计 | | 33 | 600 | 495 | 105 | 15 | 13 | 7 | 5 | 0 | 0 | 0 | 0 |
| 专业核心 | 电子信息技术导论 | Introduction of Electronic and Communication | 1 | 18 | 18 | 0 | 3 |  |  |  |  |  |  |  |
| 电路基础 | Fundamental of Circuit | 4 | 72 | 54 | 18 |  | 4 |  |  |  |  |  |  |
| 通信网基础 | Communication Network Foundation | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 模拟电子技术 | Analog Electronics Technology | 3 | 54 | 54 | 0 |  |  | 3 |  |  |  |  |  |
| 电路与模拟电子技术实践 | Circuit and Analog Electronic Technology Practice | 2 | 48 | 0 | 48 |  |  | 3 |  |  |  |  |  |
| 数字电路与逻辑设计 | Digital Circuit and Logic Design | 3 | 54 | 54 | 0 |  |  | 3 |  |  |  |  |  |
| 信号与系统 | Signals and Systems | 3 | 54 | 36 | 18 |  |  | 3 |  |  |  |  |  |
| 数字电路与逻辑设计实验 | Digital Circuit and Logic Design Experiments | 1 | 24 | 0 | 24 |  |  |  | 3 |  |  |  |  |
| 微机原理与接口技术 | Computer Principle and Interface Technology | 3 | 54 | 36 | 18 |  |  |  | 3 |  |  |  |  |
| 高频电子线路 | High Frequency Electronic Circuit | 3 | 54 | 54 | 0 |  |  |  | 3 |  |  |  |  |
| 通信原理 | Principle of Communication Systems | 3 | 54 | 54 | 0 |  |  |  |  | 3 |  |  |  |
| 移动通信技术 | Mobile Communication Technology | 2 | 36 | 36 | 0 |  |  |  |  | 2 |  |  |  |
| 通信原理与系统实验 | Communication Principle and System Experiments | 1 | 24 | 0 | 24 |  |  |  |  | 3 |  |  |  |
| 计算机网络及实训 | Computer network and Training | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 数字信号处理 | Digital Signal Processing | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 光纤通信 | Optical Fiber Communication | 2 | 36 | 36 | 0 |  |  |  |  |  | 2 |  |  |
| 毕业实习 | Practical Training | 3 |  |  |  |  |  |  |  |  |  |  |  |
| 毕业设计 | Graduation Project | 4 |  |  |  |  |  |  |  |  |  |  |  |
| 合计 | | 46 | 726 | 540 | 186 | 3 | 4 | 14 | 6 | 14 | 2 | 0 | 0 |
| 多元化选修课 | | MATLAB语言初步 | MATLAB Language Preliminary | 1 | 24 | 0 | 24 | 3 |  |  |  |  |  |  |  |
| 大学人文基础 | Foundation of university humanity | 2 | 36 | 36 | 0 |  | 2 |  |  |  |  |  |  |
| 电子工艺设计与实训 | Electronic Technology Design and Training | 1 | 24 | 0 | 24 |  |  | 3 |  |  |  |  |  |
| 多媒体信息处理 | Multimedia Signal Processing | 2 | 36 | 18 | 18 |  |  | 3 |  |  |  |  |  |
| 信息论基础 | Information Theory | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 现代交换技术 | Modern Exchange  Technology | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 程序设计实训 | Practices of Programming | 2 | 48 | 0 | 48 |  |  |  | 3 |  |  |  |  |
| 管理学基础 | Foundations of Management | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 电子线路设计 | Design of Electronic Circuit | 2 | 36 | 18 | 18 |  |  |  | 4（10-18周） |  |  |  |  |
| 数字图像处理 | Digital Image Processing | 2 | 36 | 18 | 18 |  |  |  | 3 |  |  |  |  |
| 计算机视觉 | Computer Vision | 2 | 36 | 12 | 24 |  |  |  | 2 |  |  |  |  |
| 单片机原理及应用 | Microchip Principles and Application | 3 | 54 | 18 | 36 |  |  |  |  | 3 |  |  |  |
| 嵌入式系统与应用 | Embedded System and Application | 3 | 54 | 30 | 24 |  |  |  |  | 3 |  |  |  |
| CMOS集成电路设计 | CMOS Integrated Circuit Design | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 信息安全 | Information Security | 2 | 36 | 36 | 0 |  |  |  |  | 2 |  |  |  |
| 创新创业项目及学科竞赛 | Innovative Entrepreneurship Programs and Disciplines Competition | 1 | 24 | 0 | 24 |  |  |  |  | 1 |  |  |  |
| 通信工程技术与项目管理 | Communication Engineering Technology and Project Management | 2 | 36 | 18 | 18 |  |  |  |  | 2 |  |  |  |
| 工程制图与CAD | Engineering Drawing and CAD | 2 | 36 | 12 | 24 |  |  |  |  |  | 3 |  |  |
| 移动互联网技术 | Mobile Internet technology | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 数据库系统与应用 | [Database](javascript:void(0);) System [and](javascript:void(0);) [Applications](javascript:void(0);) | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 网站设计 | Website Design | 2 | 36 | 12 | 24 |  |  |  |  |  | 4（1-9周） |  |  |
| 数据结构 | Data Structure | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 移动通信网络规划与优化 | Mobile Network Design and Optimization | 2 | 36 | 18 | 18 |  |  |  |  |  | 2 |  |  |
| 传感器原理及应用 | Sensors Principle and Application | 2 | 36 | 36 | 0 |  |  |  |  |  | 3 |  |  |
| 软件配置与质量管理 | The Software Configuration and Quality Management | 2 | 36 | 18 | 18 |  |  |  |  |  | 2 |  |  |
| 微波与天线技术 | Microwave and Antenna Technology | 2 | 36 | 36 | 0 |  |  |  |  |  | 2 |  |  |
| 企业家论坛 | Business Forum | 1 | 24 | 0 | 24 |  |  |  |  |  |  | 6(1-4周) |  |
| 企业项目实践 | Enterprise Project Practice | 1 | 24 | 0 | 24 |  |  |  |  |  |  | 6(1-4周) |  |
| 合计 | | 57 | 1068 | 570 | 498 | 3 | 2 | 6 | 18 | 14 | 25 | 12 | 0 |

说明：

辅修课程要求学生至少修满30学分。其中，必修课20学分，选修课要求学生从上表选修课程库中至少选择10学分修读。

分表二

**通信工程专业辅修专业人才培养方案**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **课程性质** | | **课程中文名称** | **课程英文名称** | **课程学时、学分及分配** | | | | **各学年、学期每周课内学时** | | | | | | | |
| **学分** | **总学时** | **讲授学时** | **实践学时** | **1学年** | | **2学年** | | **3学年** | | **4学年** | |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| 专业必修课 | 数学与科学基础 | 高等数学(1) | Advanced Mathematics (1) | 4 | 72 | 72 | 0 | 5 |  |  |  |  |  |  |  |
| 高等数学(2) | Advanced Mathematics (2) | 4 | 72 | 72 | 0 |  | 4 |  |  |  |  |  |  |
| 线性代数 | Linear Algebra | 3 | 54 | 54 | 0 | 4 |  |  |  |  |  |  |  |
| 高级语言程序设计(1) | Advance Language Programming (1) | 4 | 72 | 36 | 36 | 3+3 |  |  |  |  |  |  |  |
| 高级语言程序设计(2) | Advance Language Programming (2) | 3 | 54 | 27 | 27 |  | 3 |  |  |  |  |  |  |
| 计算机基础 | Computer Foundation | 2 | 36 | 18 | 18 |  | 3 |  |  |  |  |  |  |
| 大学物理(1) | College Physics (1) | 3 | 54 | 54 | 0 |  | 3 |  |  |  |  |  |  |
| 大学物理(2) | College Physics (2) | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 大学物理实验 | College Physics Experiments | 1 | 24 | 0 | 24 |  |  | 3 |  |  |  |  |  |
| 复变函数与积分变换 | Complex Function and Integral transformation | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 工程电磁场 | Engineering Electromagnetic Field | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 概率论与数理统计 | Probability Theory and Mathematical Statistics | 3 | 54 | 54 | 0 |  |  |  | 3 |  |  |  |  |
| 合计 | | 33 | 600 | 495 | 105 | 15 | 13 | 7 | 5 | 0 | 0 | 0 | 0 |
| 专业核心 | 电子信息技术导论 | Introduction of Electronic and Communication | 1 | 18 | 18 | 0 | 3 |  |  |  |  |  |  |  |
| 电路基础 | Fundamental of Circuit | 4 | 72 | 54 | 18 |  | 4 |  |  |  |  |  |  |
| 通信网基础 | Communication Network Foundation | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 模拟电子技术 | Analog Electronics Technology | 3 | 54 | 54 | 0 |  |  | 3 |  |  |  |  |  |
| 电路与模拟电子技术实践 | Circuit and Analog Electronic Technology Practice | 2 | 48 | 0 | 48 |  |  | 3 |  |  |  |  |  |
| 数字电路与逻辑设计 | Digital Circuit and Logic Design | 3 | 54 | 54 | 0 |  |  | 3 |  |  |  |  |  |
| 信号与系统 | Signals and Systems | 3 | 54 | 36 | 18 |  |  | 3 |  |  |  |  |  |
| 数字电路与逻辑设计实验 | Digital Circuit and Logic Design Experiments | 1 | 24 | 0 | 24 |  |  |  | 3 |  |  |  |  |
| 微机原理与接口技术 | Computer Principle and Interface Technology | 3 | 54 | 36 | 18 |  |  |  | 3 |  |  |  |  |
| 高频电子线路 | High Frequency Electronic Circuit | 3 | 54 | 54 | 0 |  |  |  | 3 |  |  |  |  |
| 通信原理 | Principle of Communication Systems | 3 | 54 | 54 | 0 |  |  |  |  | 3 |  |  |  |
| 移动通信技术 | Mobile Communication Technology | 2 | 36 | 36 | 0 |  |  |  |  | 2 |  |  |  |
| 通信原理与系统实验 | Communication Principle and System Experiments | 1 | 24 | 0 | 24 |  |  |  |  | 3 |  |  |  |
| 计算机网络及实训 | Computer network and Training | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 数字信号处理 | Digital Signal Processing | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 光纤通信 | Optical Fiber Communication | 2 | 36 | 36 | 0 |  |  |  |  |  | 2 |  |  |
| 毕业实习 | Practical Training | 3 |  |  |  |  |  |  |  |  |  |  |  |
| 毕业设计 | Graduation Project | 4 |  |  |  |  |  |  |  |  |  |  |  |
| 合计 | | 46 | 726 | 540 | 186 | 3 | 4 | 14 | 6 | 14 | 2 | 0 | 0 |
| 多元化选修课 | | MATLAB语言初步 | MATLAB Language Preliminary | 1 | 24 | 0 | 24 | 3 |  |  |  |  |  |  |  |
| 大学人文基础 | Foundation of university humanity | 2 | 36 | 36 | 0 |  | 2 |  |  |  |  |  |  |
| 电子工艺设计与实训 | Electronic Technology Design and Training | 1 | 24 | 0 | 24 |  |  | 3 |  |  |  |  |  |
| 多媒体信息处理 | Multimedia Signal Processing | 2 | 36 | 18 | 18 |  |  | 3 |  |  |  |  |  |
| 信息论基础 | Information Theory | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 现代交换技术 | Modern Exchange  Technology | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 程序设计实训 | Practices of Programming | 2 | 48 | 0 | 48 |  |  |  | 3 |  |  |  |  |
| 管理学基础 | Foundations of Management | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 电子线路设计 | Design of Electronic Circuit | 2 | 36 | 18 | 18 |  |  |  | 4（10-18周） |  |  |  |  |
| 数字图像处理 | Digital Image Processing | 2 | 36 | 18 | 18 |  |  |  | 3 |  |  |  |  |
| 计算机视觉 | Computer Vision | 2 | 36 | 12 | 24 |  |  |  | 2 |  |  |  |  |
| 单片机原理及应用 | Microchip Principles and Application | 3 | 54 | 18 | 36 |  |  |  |  | 3 |  |  |  |
| 嵌入式系统与应用 | Embedded System and Application | 3 | 54 | 30 | 24 |  |  |  |  | 3 |  |  |  |
| CMOS集成电路设计 | CMOS Integrated Circuit Design | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 信息安全 | Information Security | 2 | 36 | 36 | 0 |  |  |  |  | 2 |  |  |  |
| 创新创业项目及学科竞赛 | Innovative Entrepreneurship Programs and Disciplines Competition | 1 | 24 | 0 | 24 |  |  |  |  | 1 |  |  |  |
| 通信工程技术与项目管理 | Communication Engineering Technology and Project Management | 2 | 36 | 18 | 18 |  |  |  |  | 2 |  |  |  |
| 工程制图与CAD | Engineering Drawing and CAD | 2 | 36 | 12 | 24 |  |  |  |  |  | 3 |  |  |
| 移动互联网技术 | Mobile Internet technology | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 数据库系统与应用 | [Database](javascript:void(0);) System [and](javascript:void(0);) [Applications](javascript:void(0);) | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 网站设计 | Website Design | 2 | 36 | 12 | 24 |  |  |  |  |  | 4（1-9周） |  |  |
| 数据结构 | Data Structure | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 移动通信网络规划与优化 | Mobile Network Design and Optimization | 2 | 36 | 18 | 18 |  |  |  |  |  | 2 |  |  |
| 传感器原理及应用 | Sensors Principle and Application | 2 | 36 | 36 | 0 |  |  |  |  |  | 3 |  |  |
| 软件配置与质量管理 | The Software Configuration and Quality Management | 2 | 36 | 18 | 18 |  |  |  |  |  | 2 |  |  |
| 微波与天线技术 | Microwave and Antenna Technology | 2 | 36 | 36 | 0 |  |  |  |  |  | 2 |  |  |
| 企业家论坛 | Business Forum | 1 | 24 | 0 | 24 |  |  |  |  |  |  | 6(1-4周) |  |
| 企业项目实践 | Enterprise Project Practice | 1 | 24 | 0 | 24 |  |  |  |  |  |  | 6(1-4周) |  |
| 合计 | | 57 | 1068 | 570 | 498 | 3 | 2 | 6 | 18 | 14 | 25 | 12 | 0 |

说明：

1.辅修专业要求学生至少修满50个学分，其中专业必修课36学分，选修课要求从上表选修课程库中至少选择14学分修读。

2.实习为期3周，在第7学期开展，其中1周集中，其余2周学生自主安排。毕业设计为期12周，在第7学期开展。

分表三

**通信工程专业辅修专业学位人才培养方案**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **课程性质** | | **课程中文名称** | **课程英文名称** | **课程学时、学分及分配** | | | | **各学年、学期每周课内学时** | | | | | | | |
| **学分** | **总学时** | **讲授学时** | **实践学时** | **1学年** | | **2学年** | | **3学年** | | **4学年** | |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
| 专业必修课 | 数学与科学基础 | 高等数学(1) | Advanced Mathematics (1) | 4 | 72 | 72 | 0 | 5 |  |  |  |  |  |  |  |
| 高等数学(2) | Advanced Mathematics (2) | 4 | 72 | 72 | 0 |  | 4 |  |  |  |  |  |  |
| 线性代数 | Linear Algebra | 3 | 54 | 54 | 0 | 4 |  |  |  |  |  |  |  |
| 高级语言程序设计(1) | Advance Language Programming (1) | 4 | 72 | 36 | 36 | 3+3 |  |  |  |  |  |  |  |
| 高级语言程序设计(2) | Advance Language Programming (2) | 3 | 54 | 27 | 27 |  | 3 |  |  |  |  |  |  |
| 计算机基础 | Computer Foundation | 2 | 36 | 18 | 18 |  | 3 |  |  |  |  |  |  |
| 大学物理(1) | College Physics (1) | 3 | 54 | 54 | 0 |  | 3 |  |  |  |  |  |  |
| 大学物理(2) | College Physics (2) | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 大学物理实验 | College Physics Experiments | 1 | 24 | 0 | 24 |  |  | 3 |  |  |  |  |  |
| 复变函数与积分变换 | Complex Function and Integral transformation | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 工程电磁场 | Engineering Electromagnetic Field | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 概率论与数理统计 | Probability Theory and Mathematical Statistics | 3 | 54 | 54 | 0 |  |  |  | 3 |  |  |  |  |
| 合计 | | 33 | 600 | 495 | 105 | 15 | 13 | 7 | 5 | 0 | 0 | 0 | 0 |
| 专业核心 | 电子信息技术导论 | Introduction of Electronic and Communication | 1 | 18 | 18 | 0 | 3 |  |  |  |  |  |  |  |
| 电路基础 | Fundamental of Circuit | 4 | 72 | 54 | 18 |  | 4 |  |  |  |  |  |  |
| 通信网基础 | Communication Network Foundation | 2 | 36 | 36 | 0 |  |  | 2 |  |  |  |  |  |
| 模拟电子技术 | Analog Electronics Technology | 3 | 54 | 54 | 0 |  |  | 3 |  |  |  |  |  |
| 电路与模拟电子技术实践 | Circuit and Analog Electronic Technology Practice | 2 | 48 | 0 | 48 |  |  | 3 |  |  |  |  |  |
| 数字电路与逻辑设计 | Digital Circuit and Logic Design | 3 | 54 | 54 | 0 |  |  | 3 |  |  |  |  |  |
| 信号与系统 | Signals and Systems | 3 | 54 | 36 | 18 |  |  | 3 |  |  |  |  |  |
| 数字电路与逻辑设计实验 | Digital Circuit and Logic Design Experiments | 1 | 24 | 0 | 24 |  |  |  | 3 |  |  |  |  |
| 微机原理与接口技术 | Computer Principle and Interface Technology | 3 | 54 | 36 | 18 |  |  |  | 3 |  |  |  |  |
| 高频电子线路 | High Frequency Electronic Circuit | 3 | 54 | 54 | 0 |  |  |  | 3 |  |  |  |  |
| 通信原理 | Principle of Communication Systems | 3 | 54 | 54 | 0 |  |  |  |  | 3 |  |  |  |
| 移动通信技术 | Mobile Communication Technology | 2 | 36 | 36 | 0 |  |  |  |  | 2 |  |  |  |
| 通信原理与系统实验 | Communication Principle and System Experiments | 1 | 24 | 0 | 24 |  |  |  |  | 3 |  |  |  |
| 计算机网络及实训 | Computer network and Training | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 数字信号处理 | Digital Signal Processing | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 光纤通信 | Optical Fiber Communication | 2 | 36 | 36 | 0 |  |  |  |  |  | 2 |  |  |
| 毕业实习 | Practical Training | 3 |  |  |  |  |  |  |  |  |  |  |  |
| 毕业设计 | Graduation Project | 4 |  |  |  |  |  |  |  |  |  |  |  |
| 合计 | | 46 | 726 | 540 | 186 | 3 | 4 | 14 | 6 | 14 | 2 | 0 | 0 |
| 多元化选修课 | | MATLAB语言初步 | MATLAB Language Preliminary | 1 | 24 | 0 | 24 | 3 |  |  |  |  |  |  |  |
| 大学人文基础 | Foundation of university humanity | 2 | 36 | 36 | 0 |  | 2 |  |  |  |  |  |  |
| 电子工艺设计与实训 | Electronic Technology Design and Training | 1 | 24 | 0 | 24 |  |  | 3 |  |  |  |  |  |
| 多媒体信息处理 | Multimedia Signal Processing | 2 | 36 | 18 | 18 |  |  | 3 |  |  |  |  |  |
| 信息论基础 | Information Theory | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 现代交换技术 | Modern Exchange  Technology | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 程序设计实训 | Practices of Programming | 2 | 48 | 0 | 48 |  |  |  | 3 |  |  |  |  |
| 管理学基础 | Foundations of Management | 2 | 36 | 36 | 0 |  |  |  | 2 |  |  |  |  |
| 电子线路设计 | Design of Electronic Circuit | 2 | 36 | 18 | 18 |  |  |  | 4（10-18周） |  |  |  |  |
| 数字图像处理 | Digital Image Processing | 2 | 36 | 18 | 18 |  |  |  | 3 |  |  |  |  |
| 计算机视觉 | Computer Vision | 2 | 36 | 12 | 24 |  |  |  | 2 |  |  |  |  |
| 单片机原理及应用 | Microchip Principles and Application | 3 | 54 | 18 | 36 |  |  |  |  | 3 |  |  |  |
| 嵌入式系统与应用 | Embedded System and Application | 3 | 54 | 30 | 24 |  |  |  |  | 3 |  |  |  |
| CMOS集成电路设计 | CMOS Integrated Circuit Design | 3 | 54 | 36 | 18 |  |  |  |  | 3 |  |  |  |
| 信息安全 | Information Security | 2 | 36 | 36 | 0 |  |  |  |  | 2 |  |  |  |
| 创新创业项目及学科竞赛 | Innovative Entrepreneurship Programs and Disciplines Competition | 1 | 24 | 0 | 24 |  |  |  |  | 1 |  |  |  |
| 通信工程技术与项目管理 | Communication Engineering Technology and Project Management | 2 | 36 | 18 | 18 |  |  |  |  | 2 |  |  |  |
| 工程制图与CAD | Engineering Drawing and CAD | 2 | 36 | 12 | 24 |  |  |  |  |  | 3 |  |  |
| 移动互联网技术 | Mobile Internet technology | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 数据库系统与应用 | [Database](javascript:void(0);) System [and](javascript:void(0);) [Applications](javascript:void(0);) | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 网站设计 | Website Design | 2 | 36 | 12 | 24 |  |  |  |  |  | 4（1-9周） |  |  |
| 数据结构 | Data Structure | 3 | 54 | 30 | 24 |  |  |  |  |  | 3 |  |  |
| 移动通信网络规划与优化 | Mobile Network Design and Optimization | 2 | 36 | 18 | 18 |  |  |  |  |  | 2 |  |  |
| 传感器原理及应用 | Sensors Principle and Application | 2 | 36 | 36 | 0 |  |  |  |  |  | 3 |  |  |
| 软件配置与质量管理 | The Software Configuration and Quality Management | 2 | 36 | 18 | 18 |  |  |  |  |  | 2 |  |  |
| 微波与天线技术 | Microwave and Antenna Technology | 2 | 36 | 36 | 0 |  |  |  |  |  | 2 |  |  |
| 企业家论坛 | Business Forum | 1 | 24 | 0 | 24 |  |  |  |  |  |  | 6(1-4周) |  |
| 企业项目实践 | Enterprise Project Practice | 1 | 24 | 0 | 24 |  |  |  |  |  |  | 6(1-4周) |  |
| 合计 | | 57 | 1068 | 570 | 498 | 3 | 2 | 6 | 18 | 14 | 25 | 12 | 0 |

说明：

1.辅修学位要求学生至少修满60个学分，其中专业必修课39学分，选修课要求从上表选修课程库中至少选择21学分修读。

2.实习为期3周，在第7学期开展，其中1周集中，其余2周学生自主安排。毕业设计为期12周，在第7学期开展。