**八、专业经典阅读书目及期刊目录**

1. （1）专著

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[2]茆诗松, 吕晓玲. 数理统计学[M]. 北京：中国人民大学出版社, 2011.

[3]George A. F. Seber and Alan J. Lee. Linear regression analysis[M]. USA: A John wiley&sons publication, 2002.

[4]张润楚, 多元统计分析[M]. 北京：科学出版社，2017.

[5]薛毅, 陈立萍. 统计建模与R软件[M]. 北京：清华大学出版社，2007.

[6]茆诗松, 高等数理统计[M]. 北京：高等教育出版社，2006.

[7]Jiawei Han, MIchelineKamber, Jian Pei. 数据挖掘：概念与技术[M]. 北京：机械工业出版社，2012.

（2）期刊

[1] 数学类，Annals of Mathematics. 0003-486X.

[2] 数学类，Inventiones Mathematicae. 0020-9910.

[3] 数学类，Acta Mathematica. 0001-5962.

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[5] 统计类，Biometrika. 0006-3444.

[6] 统计类，Biometrics.0006-341X.

[7] 统计类，Journal of the American Statistical Association.0162-1459.

[8] 统计类，Journal of the Royal Statistical Society, Series A.

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[9] 统计类，Journal of the Royal Statistical Society, Series B.

1369-7412.

[10] 统计类，Annals of Statistics. 0090-5364.

[11] 统计类，Statistica Sinica. 1017-0405.

[12] 统计类，Scandinavian Journal of Statistics. 0303-6898.

[13] 统计类，Bernoulli. 1350-7265.

[14] 经济类，Econometrica. 0012-9682.

[15] 计算机类，Journal of Machine Learning Research. 1532-4435

1. **培养目标与毕业要求矩阵图**

| **培养目标**  **毕业要求** | | 目标1 | 目标2 | 目标3 | 目标4 | 目标5 |
| --- | --- | --- | --- | --- | --- | --- |
| 毕业要求1 | 1.1 | H | H | H | H | H |
| 1.2 | H | M | H | H | H |
| 1.3 | H | H | H | H | H |
| 毕业要求2 | 2.1 | H | H | H | H | H |
| 2.2 | H | M | M | M | H |
| 2.3 | H | H | H | H | H |
| 2.4 | H | M | H | M | H |
| 毕业要求3 | 3.1 | H | M | M | M | H |
| 3.2 | H | M | H | H | H |
| 3.3 | H | H | H | H | H |
| 3.4 | H | H | H | H | H |

※注：空格处填入H、M或L，其中H表示高相关性，M表示中相关性，L表示低相关性。

1. **毕业要求与课程体系矩阵图**

| **毕业**  **要求**  **课程**  **名称** | 毕业要求1 | | | 毕业要求2 | | | | 毕业要求3 | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1.1 | 1.2 | 1.3 | 2.1 | 2.2 | 2.3 | 2.4 | 3.1 | 3.2 | 3.3 | 3.4 |
| 毛泽东思想和中国特色社会主义理论体系概论 |  |  |  | √ |  |  |  | √ | √ | √ | √ |
| 习近平新时代中国特色社会主义思想概论 |  |  |  | √ |  |  |  | √ | √ | √ | √ |
| 思想道德与法治 |  |  |  | √ |  |  |  | √ | √ | √ | √ |
| 大学生心理健康 |  |  |  | √ |  |  |  | √ | √ | √ | √ |
| 中国近现代史纲要 |  |  |  | √ |  |  |  | √ | √ | √ | √ |
| 马克思主义基本原理概论 |  |  |  | √ |  |  |  | √ | √ | √ | √ |
| 形式与政策 |  |  |  | √ |  |  |  | √ | √ | √ | √ |
| 大学英语Ⅰ |  | √ |  | √ | √ | √ |  |  |  |  |  |
| 大学英语Ⅱ |  | √ |  | √ | √ | √ |  |  |  |  |  |
| 体育I |  |  |  |  |  |  |  | √ | √ | √ | √ |
| 体育II |  |  |  |  |  |  |  | √ | √ | √ | √ |
| 体育III |  |  |  |  |  |  |  | √ | √ | √ | √ |
| 体育IV |  |  |  |  |  |  |  | √ | √ | √ | √ |
| 数学分析Ⅰ | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 数学分析II | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 高等代数与几何I | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 高等代数与几何II | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 应用写作 |  |  |  | √ | √ | √ | √ |  |  |  |  |
| 人工智能导论 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 人工智能素养 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 军事理论 | √ |  |  | √ | √ |  |  |  |  |  | √ |
| 国家安全教育 | √ |  |  | √ |  |  |  | √ | √ | √ |  |
| “四史类” | √ |  |  | √ |  |  |  | √ | √ | √ |  |
| 审美体验与艺术鉴赏 |  |  |  | √ |  |  |  | √ | √ | √ |  |
| 创新创业与职业发展 |  |  |  | √ |  |  |  | √ | √ | √ |  |
| 自然认知与科技文明 |  |  |  | √ |  |  |  | √ | √ | √ | √ |
| 语言与跨文化交流 |  | √ |  | √ | √ |  |  | √ | √ | √ |  |
| 国学历史与哲学伦理 |  |  |  | √ |  |  |  | √ | √ | √ | √ |
| 法律基础与公民修养 |  |  |  | √ |  |  |  | √ | √ | √ |  |
| 概率论 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 数理统计 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 随机过程 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 多元统计分析（双语） | √ | √ |  | √ | √ | √ | √ |  |  |  |  |
| 回归分析 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 时间序列分析 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 贝叶斯统计（双语） | √ | √ |  | √ | √ | √ | √ |  |  |  |  |
| 非参数统计 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 机器学习 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 超高维数据分析 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 测度论 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 人工智能中的统计学 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 人工智能中的数学方法 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 统计编程基础 |  |  | √ | √ | √ | √ | √ |  |  |  |  |
| 数学分析III | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 常微分方程 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 应用泛函分析 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 抽样技术与应用 | √ |  | √ | √ | √ | √ | √ |  |  |  |  |
| 试验设计 | √ |  | √ | √ | √ | √ | √ |  |  |  |  |
| Python数据分析 |  |  | √ | √ | √ | √ | √ |  |  |  |  |
| 生存分析 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 统计学科前沿选讲（英语） | √ | √ |  | √ | √ | √ | √ |  |  |  |  |
| 金融统计与风险管理 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 论文写作 |  |  |  | √ | √ | √ | √ |  |  |  |  |
| 神经网络与深度学习 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 强化学习 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 生物统计 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 因果推断 | √ |  |  | √ | √ | √ | √ |  |  |  |  |
| 统计计算 | √ |  | √ | √ | √ | √ | √ |  |  |  |  |

**十一、课程修读及培养流程图**

