

拔尖人才学术能力提升

Academic Ability Improvement for Top Talents

1. 课堂讲授学时 **Lecture Hours: 48 hours**
2. 课堂实验学时 **Laboratory Hours: N/A**
3. 课下研讨学时 **Colloquia Hours: N/A**
4. 学生课下投入学时 **Individual Study Hours: 8 hours**
5. 学分 **Credits: 3**
6. 开课学年学期 **Occurrence:** 1st year, 2nd year, 3rd year, 4th year; Summer, Winter
7. 先修课程 **Prerequisite(s):** Basic Calculus
***Recommended:** not required as prerequisite

8. 课程概要 **Course Description:**

This class aims to enhance the research capabilities of undergraduate students who intend to pursue postgraduate study. This course comprises 10 modules which systematically teach students how world-class universities improve their students' research capability and skills using AI tools for management science.

The class is suitable for students of all majors who want to improve their research capabilities.

9. 课程预期学习成果 **Course Outcomes:**

In this class, we will introduce classic literature, such as works by the Nobel Prize winners, and teach critical thinking skills. After taking this class, students will have learnt how to:

- (1) find classic literature;
- (2) identify interesting research topics;
- (3) select an appropriate research method;
- (4) find interesting results;
- (5) write effectively;

- (6) prepare papers for review and publications;
- (7) obtain a letter of recommendation from professors at elite universities.

10. 教学内容与学时分配 Course Content, Laboratories and Laboratory Hours, Colloquia Hours:

Eight hours are needed for each of the following topics:

- (1) How to identify interesting research topics. 8 hours
- (2) How to select and improve research methods. 8 hours
- (3) How to obtain interesting findings. 8 hours
- (4) How to improve writing and write effectively. 8 hours
- (5) How to write papers and submit them. 8 hours
- (6) how to use AI for management science tools to aid academic research. 8 hours

11. 考核与成绩评定 Grading:

Class Participation: 50%

Assignments: 50%

12. 教材，参考书 Text & Reference Book: 作者，书名，版本，年份，国际标准书号 ISBN
N/A

13. 编写教师 Course Lecturer: Xiang Zhang, Yunchuan Liu

编写教师 Course Lecturer (签字):
