

# 

### 1. UNIVERSITY SUMMARY 学校简介

The University is one of the world's oldest universities and leading academic centres, and a self-governed community of scholars. Its reputation for outstanding academic achievement is known worldwide and reflects the intellectual achievement of its students, as well as the world-class original research carried out by the staff of the University and the Colleges.

There are 31 Colleges, six Schools and over 150 Faculties and Departments that make up the University of Cambridge, covering a vast array of subjects and specialised areas of research. The University's mission is to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

剑桥大学为一所坐落于英国剑桥的研究型书院联邦制大学,是世界著名研究型大学之一 。 剑桥大学为 英语世界中历史第二悠久的大学,是英语世界里成立的第二所大学,也是世界上现存第四古老的大学。

剑桥大学由31所独立自治书院及6所学术学院组成。虽大学本身为公立性质,但享有高度自治权的书院则属私立机构。剑桥大学在学术方面始终是世界领先的大学之一,已诞生了121位诺贝尔奖获得者。而根据2024年QS排名,剑桥大学全球排名第2。





### 2. PROGRAM SUMMARY 项目简介

University of Cambridge offers customised academic summer programmes in a range of subject areas, carefully designed to meet the needs of our partner universities around the world, as well as summer programmes in Business, Economics and Engineering that are open to undergraduate students at any university.

项目为剑桥大学官方定制项目,集合剑桥大学顶级师资力量,为在校大学生开拓理想未来,助力他们进入梦想的学术领域。旨在帮助学生探索领域前沿学术方向,培养解决现实问题及创造实际价值的能力。同时学生可以体验原汁原味的剑桥大学校园生活,入住剑桥大学学生宿舍,参加由校方组织的丰富多彩校园活动和讲座,同时在课余时间和国际学生一起前往伦敦进行英国城市探索。学生还会在项目结束收获高含金量剑桥大学官方证书和项目成绩单,为未来海外升学,考保研助力。

### 3. PROGRAM HIGHLIGHTS 项目亮点

【顶级名校微留学体验】参加世界名校剑桥大学官方暑期项目,与顶尖教授面对面学习交流,体验剑桥在读学生的学习、校园生活,享受相同的教学资源、校园设施,激发内心名校梦想。

【高含金量项目收获】顺利完成项目的学生可收获剑桥大学官方证书和成绩单,助力未来海外升学考保研。 【英文能力综合提升】剑桥大学全英文课堂,课余时间与剑桥大学学生一起参加校内社交活动、文化探索, 沉浸式提升语言能力和跨文化交流能力。

【英国文化城市探索】前往剑桥大学、伦敦寻访英国传统文化,扩展国际视野,充实假期生活。

### 4. COURSE OBJECTIVES 课程介绍

University students can apply to attend 2-week summer programmes in the following subject areas:

- Economics
- Engineering

学生可申请参加以下学科领域的为期两周的暑期项目:

- 经济学
- 工程学
- · Economics 经济学: 【经济学综合研究:全球经济增长与发展】
- This course provides students with some fundamental insights into microeconomic analysis by studying a selection of Nobel Prize winners in economics. Each lecture outlines one or two theoretical insights that have been developed by the selected Nobel Prize winners. The course also provides



some background into the Nobel Prize winners themselves, including their life story, motivations, and their times.

- 本课程通过研究一系列诺贝尔经济学奖获得者的研究成果,为学生提供一些微观经济分析的基本见解。每堂课都将阐述一到两个由诺贝尔奖获得者提出的理论见解。本课程还提供了诺贝尔奖获得者自身的背景,包括他们的生活故事、动机和他们当时的时代发展。
- Engineering 工程: 【喷气发动机推进系统中冷金属集成的演变、原理和未来前沿】
- In this course, we will explore together how different pieces of 'cold metal' can be integrated together to achieve the amazing thing jet propulsion. It is going to introduce the past, the current and the future path of this revolutionary technology. We will learn the basic ideas and the fundamental principles which keep the engine running. This will also lead us to explore the state of art technologies of making the current engines more safe, efficient, and environmentally friendly. Consequently, we will discuss the directions and challenges of developing the future generations of jet engines. Finally, a number of high impact academic research carried out in Cambridge to the revolution of the jet engines will be introduced. This will give an example of what is good academic research in this filed looks like.
- 在本课程中,我们将共同探索如何将不同的 "冷金属 "整合在一起喷气推进器的神奇之处。它将介绍这一革命性技术的过去、现在和未来。我们将学习发动机运转的基本原理。引导我们探索使当前发动机更加安全、高效和环保的最新技术。因此,我们将讨论未来喷气发动机的发展方向和挑战。最后,我们还将介绍剑桥大学为喷气发动机革命所开展的一些具有重大影响的学术研究。

### PROGRAM DATES 项目日期

Economics 经济学: 【经济学综合研究:全球经济增长与发展】 2024年7月21日至8月3日(2周), 20小时剑桥导师面授课程

Engineering 工程: 【喷气发动机推进系统中冷金属集成的演变、原理和未来前沿】 2024年7月21日-8月3日(2周), 20小时剑桥导师面授课程

- 5. PROPOSED FACULTY INFORMATION 参考师资团队介绍(部分)
- · Economics 经济学





Prof. Shaun Larcom
Professor of Law, Economics and Institutions, University of Cambridge 剑桥大学 教授(终身)

Prof. Larcom' s research is focused on how informal and formal institutions interact with one another and the consequences of such interactions, both on development and the environment. Prior to joining Cambridge, Prof. Larcom was a lecturer in environmental economics at the School of Oriental and African Studies, University of London. He

began his career as an economist at the Australian Treasury and worked on a range of policy areas; including climate change, taxation policy, health policy and water and natural resource management. He also worked for the Papua New Guinean Treasury where he managed an import tariff review and the Cape York Institute where he helped develop indigenous welfare reform pilots for remote communities. He completed his PhD at the Centre of Law and Economics at University College London in 2012 where his thesis examined the law and economics of legal pluralism in Papua New Guinea.

Shaun教授的研究领域主要在非正式和正式机构之间如何相互作用以及这种相互作用对发展和环境的影响。在进入剑桥之前,Shaun教授曾在伦敦大学东方与非洲研究学院教授环境经济学。他最初曾在澳大利亚财政部担任经济学家,并在多个政策领域工作,包括气候变化,税收政策,卫生政策以及水和自然资源管理。他还曾在巴布亚新几内亚财政部负责进口关税审查,也曾为约克角研究所工作,为偏远社区发展了土著福利改革试点。 他于2012年在伦敦大学学院法律与经济中心完成了博士学位,主要研究课题为巴布亚新几内亚的法律多元化的法律和经济学。

## • Engineering 工程



Dr. Teng Cao Lecturer & Senior Research Fellow, Girton College, University of Cambridge 剑桥大学 格顿学院 讲师 & 高级研究员

Teng obtained his Ph.D. in 2015 at Whittle Laboratory, University of Cambridge. He continued as Research Associate at the Whittle Lab. In 2016, he became MHI Senior Research Fellow and College lecturer at

Girton College.

His research has been in the field of turbomachinery which is a crucial component for the current and foreseeable future energy systems in the world. He is passionate about improving



the energy system's performance through understanding its aerothermal mechanics using both numerical and experimental methods. Over the years, his work has been devoted to various research areas: (1) Developing high-performance centrifugal compressors, (2) Low-order modeling of Turbomachinery, (3) Fan-intake interactions, and (4) Pulsating flow effects on turbocharger turbine performance.

导师于 2015 年在剑桥大学惠特尔实验室获得博士学位并继续在惠特尔实验室担任副研究员。2016 年,成为 MHI 高级研究员和格顿学院的学院讲师。

导师热衷于利用数值和实验方法,通过了解空气热力学来提高能源系统的性能。多年来,导师致力于多个研究领域: (1) 开发高性能离心压缩机, (2) 涡轮机械的低阶建模, (3) 风扇与进气口的相互作用, 以及(4) 脉动流对涡轮增压器涡轮性能的影响。

### 6. PROGRAM DETAILS 项目具体内容

- Economics 经济学
  - Introduction 对诺贝尔经济学奖的介绍
  - > Coase and Externalities 科斯和外部性
  - > Akerlof and Asymmetric Information 阿克洛夫和不对称信息
  - > Spence and Signalling 斯宾塞和信号
  - > Arrow and collective choice 阿罗和集体选择
  - ➤ The Behaviouralists: Simon, Kahneman, and Thaler 行为主义者 (西蒙、卡尼曼和泰勒) 的介绍

### • Engineering 工程

- ▶ Principles of jet propulsion and key components 喷气推进原理及关键部件
- > Applications of gas turbine technology 燃气涡轮的技术应用
- > Gas turbine cycle and layout of jet engine 燃气涡轮循环与喷气发动机布局
- ▶ Turbomachinery: Compressors and Turbines 透平机械:压缩机与涡轮机
- > Academic research in Turbomachinery 透平机械的前沿研究

\* The courses are offered by the designated Girton College of University of Cambridge and the syllabus will be based on the final version of the school.

以上课程由剑桥大学格顿学院提供,课程大纲以最终版本为准。

### 7. APPLICATION REQUIREMENTS 申请要求

 Transcript: need to submit the university transcript, international transcripts must be translated and evaluated



#### 学生需提交英文在校成绩单

Language Proficiency: TOEFL 79+; IELTS 6.0+; CET-4 500+; CET-6 470+
 语言成绩达到托福79分/雅思6.0/大学英语四级500分/大学英语六级470分

## 8. SOCIAL EVENTS 项目课余活动、城市探索

- a) **官方讲座**——校方会组织不同主题的讲座,讲座主题包括不限于:
  - i. 剑桥大学研究生申请、校园生活
  - ii. 剑桥大学学子分享学习生活
  - iii. 国际贸易
  - iv. 英国脱欧
- b) **社交活动**——剑桥大学正式晚宴、英式下午茶、剑河游船、剑桥市内寻宝活动等
- c) **其他活动**——校方会组织学生在课余时间和周末前往剑桥大学其他学院参访,以及前往伦敦进行城市探索

#### 9. COLLEGE LIFE 校园生活

- Accommodation 住宿: Students will live in Cambridge student accommodation. All rooms are single occupancy study bedrooms with shared bathroom facilities.

  学生将住在剑桥大学的学生宿舍。所有房间均为单人学习卧室,配有共用浴室设施。
- Meals 餐食: Eating together is an important part of Cambridge College life. Students will therefore receive swipe cards to have meals in College, with sufficient credit for approximately two meals per day. This partial meal plan works well as we know that students appreciate the flexibility to explore the many wonderful cafes and restaurants around Cambridge. The swipe cards can be used in the College's excellent cafeteria and in the Social Hub. In the cafeteria there is a wide choice of food available, including hot and cold meals, a salad bar, sandwiches, and delicious puddings. The Social Hub offers a more relaxed space where students are able to enjoy hot or cold drinks, and lighter snacks. 学生可使用校园卡在剑桥大学格顿学院内的自助餐厅和社交中心享用一日两餐(不限制早、中、晚餐,可根据学生时间来自由安排)。自助餐厅提供包括冷热餐、沙拉吧、三明治和美味布丁等。社交中心提供了一个更放松的空间,学生可以在这里享用热冷饮以及零食等。同时也欢迎同学们探索学校周围的咖啡馆、餐厅。
- College Facilities 大学设施: Students will have access to all the usual College facilities, including the indoor swimming pool, gym, and chapel, and are also free to explore the woodland, orchard, gardens, lawns and sports fields.



学生可以使用所有普通的大学设施,包括室内游泳池、健身房和教堂,还可以自由探索林地、果园、 花园、草坪和运动场。







### 10. PROGRAM EVALUATION 项目评价

At the conclusion of the program, students will complete anonymous surveys on each aspect of the program.

在课程结束时,学校会让学生完成一个关于课程各个方面的匿名反馈调研。

### 11. PROGRAM FEES 项目费用

The fee for the program is 32,800RMB per student。 费用为每位学生32,800元人民币。

### This fee includes:

- The academic course, comprising a minimum of 20 hours of contact time
- Accommodation in a single occupancy study bedroom
- Approximately two meals per day in Cambridge
- Access to College facilities
- VISA invitation letter

### 此费用包含:

- 学术课程,包括至少20小时的授课时间
- 剑桥大学单人宿舍
- 在剑桥期间每天两餐(非三餐,剑桥大学希望学生有机会能够探索学校周边美食)
- 学院设施使用
- 签证邀请函

Residential students will need to cover the following additional costs:



- International travel and medical insurance
- VISA fee
- Travel to/from their home to Cambridge
- Travel within Cambridge
- Approximately one meal per day while in Cambridge
- · Meals and any activity fees while on the London and Oxford trips
- · Any social activities, personal expenditure, or independent travel

### 此费用不包含:

- 国际旅行交通费用和医疗保险
- 签证费
- 接送机服务 (大约40-60英镑/人,依据具体机场确认)
- 剑桥期间个人交通费用
- 在剑桥期间每天一餐
- 伦敦旅行期间的餐费和其他活动费
- 其他社交活动、个人支出或独立旅行

### 12. TRANSCRIPT AND CERTIFICATE SAMPLE 成绩单与证书样本

Summer Programme Transcript

This is to certify that «First\_name» «Last\_name» participated in the Economics Summer Programme organised by Girton College, Cambridge from 3 August to 21 August 2020.

During this summer programme «First\_name» «Last\_name» completed the following two modules:

The Nobel Prize Winners
Philosophical Reflections on Democratic Capitalism

«First\_name» «Last\_name» had a minimum of 30 hours of contact time over the three weeks of the Summer Programme.

Each module was assessed and «First\_name» «Last\_name» received the following grade for the work completed during the summer programme:

Programme

Grade

Economics Summer Programme

«Final\_Mark» (

«First\_name» «Last\_name» completed all requirements of the programme.

Dr Nick Godfrey Director of Summer Programmes



CERTIFICATE OF PARTICIPATION	Girton College Cambridge Summer Programmes
We certify that	
has participated in the	
Chemistry Summer Programme organised by Girton College, Cambridge	
Monday 24 August – Tuesday 1 September 2020	
Dr Nick Godfrey Director of Summer Programmes	

## 剑桥大学项目成绩单和证书样本(仅供参考)

# 13. PREVIOUS PHOTOS SHARING 往期照片分享







