2025年北卡州立大学暑假网络科研项目常见问题

1. 项目的大体形式是什么样的？

美国北卡州立大学是公立、研究型大学。这个为期6周（2025年7月7日到8月15日）的网络的科研项目，由北卡州立大学全球培训学院主办，有来自北卡州立大学、北卡教堂山分校、杜克大学等北卡州著名高校的数十名教授提供科研项目，这个项目对学生来说是一个实习项目。我们会将参加项目的学生直接编入现有的科研团队，在6周中完成一项小的科研任务；在项目结束时提交基于科研成果的海报演讲。参加者会获得网络科研经验，学习如何有效地与虚拟团队沟通。项目结束时获得项目结业证书和教授评估信。对于有科研兴趣、或者今后有出国留学打算是一个难得的实习机会。

2. 哪些专业的学生可以申请这个项目？

招生对象：本科的学生，对科研项目感兴趣
目前开放网络科研项目的专业有：

- 生物医学工程
- 生物农业工程
- 计算机科学
- 信息系统
- 工业工程
- 土木工程/环境工程
- 电子工程
- 森林学
- 数学/统计
- 机械工程/航天工程
- 核工程
- 纺织科学/纺织工程
- 英语
- 国际研究
- 传播学
- 哲学

科研项目研究项目和专业也会逐步增加，除以上专业外，还有很多跨学科的科研项目，请随时登录我们的申请网站查询，具体步骤如下：https://gti.ncsu.edu/gears/

Program Application

Application open from March 15 – May 31; program admission on a rolling basis.

First round of admissions start on May 5.

Learn more →

Research Projects

This list of possible online research projects is updated regularly.

Students can select two topics when applying.

View projects →

样本图片；每个研讨会的项目日期和开放项目将有所不同。

3. 申请条件是什么？

- 北卡州立大学在中国合作伙伴的本科2年级及以上的学生
- 学习成绩优秀 (至少GPA 3.0)，能够用英文进行沟通和科研（申请时需要提供英文成绩和在校成绩单 ）我们需要至少一项英文成绩：
    - TOEFL – iBT: 85分以上
    - CET 6: 480（六级成绩请将主要信息翻译附在后面）
    - IELTS: 6.5
    - Duolingo: 100 (这是一个网络考试，随时可以注册，在线参加考试，详细信息请登录以下网站：https://englishtest.duolingo.com/)
    - TEM4: 80

- 申请时还需要提供简历，如果之前有科研经验请在简历中包括
- 暂时不能提供官方英文版成绩单的同学，可以先提供学校网站下载或者截屏的非官方成绩单，我们先按照这个成绩审核你的申请，之后条件允许的时候再提供官方成绩单
- 请在北卡州立大学全球培训学院网站申请
- 项目的申请最终截止日期为5月31日，第一轮录取的申请截止日期为4月16日。4月16日之后，很多非常受欢迎的、申请量过大的项目会关闭申请。我们会根据申请资料择优录取。4月28日后开始给合格的学生陆续发送录取通知。由于研究项目数量有限，还请有意向的同学尽快申请。

4. 我们将具体从事什么样的科研项目？

- 申请时需要提供简历和研究兴趣，你可以根据你的专业、研究方向选择两个最喜欢的研究项目，我们会帮你安排到北卡州立合适的教授和研究团队
- 科研项目期间你将加入该研究团队，从事实际科研项目。注意：这不是一个夏令营，是一个科研项目的实习工作
- 科研项目举例：

Research Topic	**Research Projects Available**	**Prerequisites**	**NCSU Department**
Visualization in Engineering and Physics	In this project, you write a computer program in MATLAB that creates a movie of a system of moving bodies. The movie could be of a constellation of brilliant stars as you fly through the galaxy, a raindrop splashing onto a road in slow motion, or it could be atoms in a molecule as it undergoes a chemical reaction. Each project is different!	Background in STEM with knowledge of MATLAB or willingness to learn MATLAB during the program.	Mechanical & Aerospace Engineering
Machine Learning, Data Mining, Artificial Intelligence in real world applications	Machine Learning is concerned with computer programs that enable the behavior of a computer to be learned from examples or experience rather than dictated through rules written by hand. An important scientific phenomenon has been the advances made possible by mining the wealth of user data	Know Python and good at math	Computer Science

	available from various interactive systems. Machine learning and data mining methods can greatly improve the effectiveness and adaptiveness of interactive systems, and user-system interaction data in turn exposes new machine learning and data mining challenges. You will work on the practical side of machine learning for mining interactive data, such as mining user log files to make predictions, discovering interesting patterns from the sequential data, or building adaptive user interactive systems in the domain of healthcare, education, and food banks.		
Migration and International Development	Students will develop their remote fieldwork skills on a project looking into the impacts of migration and international development programs around the world. The selected students will help with collating key contacts and analyzing a development project in a global context of their own choosing. Students will enhance both their qualitative and quantitative research skills, as well as gaining an understanding of the migration and international development fields.	Interest in the topics. Open to all majors.	International Studies

- 网络科研和实地科研项目的不同？
    - 项目内容和领域不同：网络科研项目都是基于计算机、远程可以完成的项目，对于需要使用实验室设备、亲自动手的项目是不包括的
    - 沟通方式不同：教授和你的博士生主管、还有研究团队都是通过每周视频会议布置任务、解答疑问、跟进项目进度。日常工作中有问题也可通过邮件、短信、即时信息等方式沟通。对于你的沟通技巧、自觉自律要求也更高
    - 时差问题：北京时间和美国东部时间相差12个小时，所有的项目时间安排都是以美东时间为准，请大家注意调整
    - 体验远程工作：美国高科技领域很多工作人员都是远程办公，这是一个非常好的机会学习远程办公软件、实践与虚拟团队合作完成研究项目。这将是除了科研成果之外的另一个收获

5. 如何解决科研项目中的时差问题？

北卡州立大学使用美国东部时间，请大家注意所有的项目时间都以该时区的时间为准。项目组会议会尽量安排在美国东部时间的早上或者晚上，其他需要自己完成的科研任务可以自行安排时间

6. 如何与教授、项目组其他成员沟通？

项目会议是通过视频会议的方式，我们会在新生培训的时候给大家介绍相关的软件和平台，参加的学生需要有电脑和保证网络畅通。其他的沟通也可通过电子邮件、即时信息、电话等方式。

7. 一个项目组里会有几个实习的学生呢？

平均3-4个

8. 项目的具体时间安排是怎么样的？

第一周	新生培训 与研究团队见面 相关文档阅读 科研技术/技巧讲座 开始科研项目（科研时间15-20小时） 每周与教授的项目进度会
第二周	学术研讨会：海报演讲技巧 科研项目（科研时间20-30小时） 每周与教授的项目进度会
第三周	学术研讨会：美国博士生研究生申请 科研项目（科研时间20-30小时） 每周与教授的项目进度会
第四周	准备海报演讲 科研项目（科研时间20-30小时） 每周与教授的项目进度会
第五周	海报演讲初稿、一对一辅导 科研项目（科研时间20-30小时） 每周与教授的项目进度会
第六周	修改完成海报演讲稿、演讲演练 完成科研项目（科研时间15-20小时） 网络海报演讲 项目回顾总结和意见反馈 颁发结业证书、教授评估信

9. 项目的最终成果是什么？

- 项目结业证书
- 成绩单（科研时间、具体成绩等，用来申请所在学校学分）
- 北卡州立大学教授评估信
- 学术海报展示（最终研究成果）
- 拥有美国一流大学的科研经验
- 实践远程办公、远程科研
- 深入了解美国大学研究生和博士生申请流程

10.项目说明会时间：

2月18日、3月5日、3月27日、5月8日北京时间晚上9点30分

Zoom Meeting ID: 851 388 1946; Passcode: 25SGEARS

联系信息:

Lynn.wang@ncsu.edu

微信：1470602259

2025 NC State Online Summer GEARS Seminar FAQ

1. Program Introduction

North Carolina State University is a public research university in the United States. This 6 weeks long online research program is hosted by NC State University Global Training Initiative. Professors from NC State University, University of North Carolina in Chapel-Hill, Duke University, University of North Carolina in Wilmington and North Carolina Central University offer a variety of research opportunities for participants. This is an internship type of program where students have the opportunity to gain online research experience and learn how to communicate with a virtual team. Participants are assigned to existing research teams or have a special project designed for them and are expected to accomplish a specific research task during the 6 weeks. Participants will have access to an online poster and presentation skills workshop and submit a poster presentation at the end of their program. GTI also provides an optional workshop on Tips and Procedures for Applying to Graduate School in the USA. Upon completion of the program, GTI will issue a graduation certificate and professors will submit a formal evaluation for each participant. This is a very valuable opportunity for the students who are interested in a career in professional or academic research, or who plan to study overseas in the future.

2. Who can apply for this program?

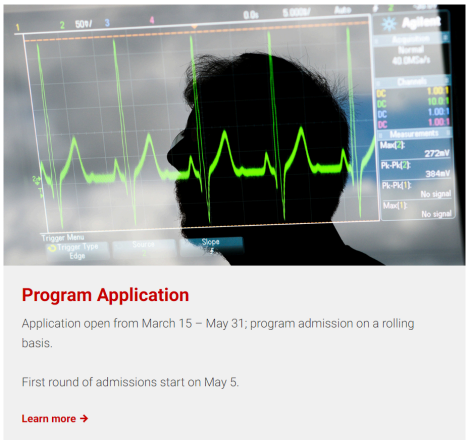
Undergraduate students who are interested in learning about the research process while working on a project/set of labs with a faculty member at NC State University, or one of our partner universities.

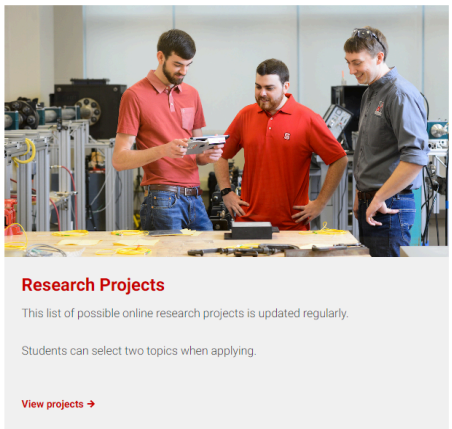
We have research projects in the following fields:

- ❏ Biomedical Engineering
- ❏ Environmental Engineering
- ❏ Computer Science
- ❏ Electronic Engineering
- ❏ Computer Engineering
- ❏ Environmental Science
- ❏ Materials Science
- ❏ Polymer Science
- ❏ Biological Science/Physical Science
- ❏ Nuclear Engineering
- ❏ Forestry
- ❏ Mechanical Engineering
- ❏ Aerospace Engineering
- ❏ Mathematics
- ❏ Statistics
- ❏ Chemistry
- ❏ Food Science
- ❏ Communication
- ❏ English
- ❏ International Studies
- ❏ Business & Management
- ❏ Accounting & more

We may add more research projects, please check the latest information on our website

https://gti.ncsu.edu/gears/





Sample images; program dates and projects available will vary for each seminar cycle

3. Application Information

- Preference for, but not exclusive to, students from NC State Partner Universities.
- Must have completed two semesters of university studies.
- GAP 3.0 out of 4 or 4.0 out of 5.
- Can communicate with English, please provide at least one of the following English proficiency test results:
    - TOEFL – iBT: >85
    - TOEFL iBT Home Edition: 85
    - Previous Paper Version (PBT): 563
    - IELTS: 6.5
    - CET 6: 480
    - TOEIC: 800
    - TEM4: 80
    - Duolingo: 100 (Please register the online test here, you will receive your score in 3 days: https://englishtest.duolingo.com/)
- Please provide your resume and indicate any research experience you may have.
- Final application deadline is May 31st, first round application deadline is April 16th. We will close applications to projects that are full after the 16th. This is a very selective program, please apply as soon as possible.
- Please apply on our website, we will review all the applications after the deadline, and start making first round acceptances in late April.

4. Research Project Details

- You may choose up to 2 research projects when you apply. We cannot guarantee you'll be placed with your first choice project but will try our best to match everyone according to his/her top choices. If you are accepted by a professor, we will inform you and then you can decide to accept or decline the offer. This is not a summer camp, it is an internship experience.

  Research project examples:

Research Topic	Research Projects Available	Prerequisites	NCSU Department
Visualization in Engineering and Physics	In this project, you write a computer program in MATLAB that creates a movie of a system of moving bodies. The movie could be of a constellation of brilliant stars as you fly through the galaxy, a raindrop splashing onto a road in slow motion, or it could be atoms in a molecule as it undergoes a chemical reaction. Each project is different!	Background in STEM with knowledge of MATLAB or willingness to learn MATLAB during the program.	Mechanical & Aerospace Engineering
Machine Learning and Its Applications	This is an introductory-level research skills experience in machine learning. Students will be learning fundamental concepts in machine learning and applying them to several real-world applications. In particular, students will learn about the theory and practical applications of machine learning algorithms to data types relevant to biomedicine and financial applications such as credit card approval and trading strategies. Students will learn how to program in Scikit learn, Tensorflow, or Keras.	Computer Science, Mathematics and Applied Mathematics majors	Computer Science
Forced Migration and Refugees	Students will develop their remote fieldwork skills on a project looking into the effects of US-funded refugee resettlement programs in Guatemala. The selected students will help with collating key contacts and conducting a review of national policies, legislative debates, and community-based campaigns and practices. Students will enhance both their qualitative and quantitative research skills, as well as gaining an understanding of the migration and refugee studies fields.	Interest in the topics. Open to all majors.	International Studies

- The difference between Online Research and In-person Research？
    - **Project domain**：The online research projects are all computer based projects. Due to COVID-19, we transitioned to be able to host students online, as well as on campus.
    - **Communication methods**：You will communicate with your professor, supervisor and your research team through weekly video meetings and through email. If you have questions about your daily work, please email or message your supervisor or professor.
    - **Time zone**：The program schedule is based on the U.S. Eastern time, please adjust to your local time accordingly.
    - **Work remotely**：It is very common to work remotely in the United States. This is a very valuable opportunity for you to learn various computer softwares, video call etiquette and to practice working, in English, with a virtual team.

5. What are the outcomes of this program?

- Program Completion Certificate
- Professor Evaluation
- Poster Presentation (research accomplishment)
- Gain research experience from a top U.S. university
- Practice working and researching remotely
- Understand the admission process to Master/PHD programs in the USA

6. Where can I learn more about this program?

- Be sure to check out our website for more information, and to see the upcoming information sessions for this program!

Info Session I: Tuesday 2/18 at 8:30 AM US EST/ 9:30 PM Beijing Time
Info Session II: Wednesday 3/5 at 8:30 AM US EST/ 9:30 PM Beijing Time
Info Session III: Thursday 3/27 at 9:30 AM US EST/ 9:30 PM Beijing Time
Info Session IV: Thursday 5/8 at 9:30 AM US EST/ 9:30 PM Beijing Time

Meeting Room: 851 388 1946 Passcode: 25SGEARS

Contact Information:
cmmcarth@ncsu.edu