# 2026 NC State Online Winter GEARS Seminar FAQ

#### 1. Program Introduction

North Carolina State University is a public research university in the United States. This 5 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 5 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 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 faculty partners in the following fields:

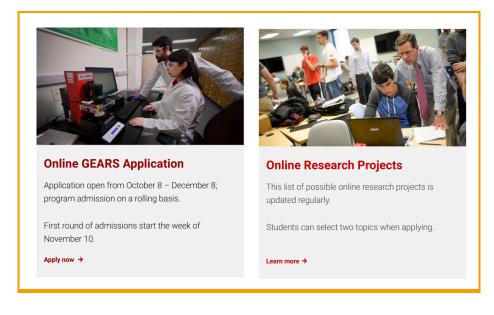
- Biomedical Engineering
- ☐ Environmental Engineering
- Computer Science
- ☐ Electronic Engineering
- Computer Engineering
- ☐ Environmental Science
- Materials Science
- ☐ Polymer Science

- ☐ Biological Science/Physical Science
- Nuclear Engineering
- □ Forestry
- Mechanical Engineering
- Aerospace Engineering
- Mathematics
- Statistics

- ☐ Chemistry
- ☐ Food Science
- Communication
- English
- International Studies
- ☐ Business & Management
- Accounting
- Nursing & more

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

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



#### 3. Application Information

- Preference for, but not exclusive to, students from NC State Partner Universities.
- Must have completed two semesters of university studies.
- GPA 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
  - Previous Paper Version (PBT): 563
  - CET 6: 480IELTS: 6.5TOEIC: 800
  - Duolingo: 100 (this is an online language test, please register at <a href="https://englishtest.duolingo.com/">https://englishtest.duolingo.com/</a> you will receive your score in 3 days: )
- Please provide your resume and indicate any research experience you may have.
- Please apply on our website, we will prioritize the first round applications, and start making first round acceptances in early November.
- The final application deadline is December 8th, with the first round admissions beginning the week of November 10th. This is a very selective program, be sure to apply as soon as possible.

### 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 winter/summer camp, it is an internship experience within a short-term program.

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?
  - o **Project domain**: Online research projects are all computer based projects.
  - 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.
  - o **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. How can I learn more?

We will hold 4 zoom info sessions at the dates and times listed below:

Info Session I: Friday 10/10 at 9:30a

Info Session II: Wednesday 10/22 at 9:30a

Info Session III: Thursday 11/6 at 8:30a (online program only) Info Session IV: Monday 11/24 at 8:30a (online program only)

Meeting Room: 851 388 1946 Passcode: 26WGEARS

Contact Information:

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