

# CAREERS AT THE NATIONAL SECURITY AGENCY

## About the Summer Programs

The NSA has summer opportunities for undergraduate and graduate students majoring in mathematics or statistics. Applicants must be enrolled as full time students when the application is submitted. Due to the lengthy processing required, applications must be received by October 15th each year. To initiate your application, visit [www.intelligencecareers.gov/nsa](http://www.intelligencecareers.gov/nsa).

## Director's Summer Program (DSP)

The DSP is the NSA's premier summer outreach to the nation's most outstanding undergraduate mathematics majors. We invite 25 students who have demonstrated superior mathematical aptitude to collaborate with each other and NSA mathematicians on problems critical to the intelligence gathering and cybersecurity missions of the Agency. A full year of abstract algebra and analysis is strongly recommended. Some experience in computer programming, especially in C, Python, and in mathematical software packages is desirable.

DSP participants work on problems in mathematics, cryptology, and communications science that involve applications of abstract algebra, geometry, number theory, probability, statistics, combinatorics, graph theory, algorithms, computer science, and analysis. Each student chooses one of these problems as the focus of their research and documents the work in technical papers which are internally published at NSA.

## Cryptanalysis and Signals Analysis Summer Program (CASASP)

The CASASP gives undergraduate mathematicians and computer scientists a chance to contribute to mission-essential technical operations. We invite 12 students to learn, use, and further our tradecraft while working on operational problems of national importance. The problems involve applications of math, statistics, computer science, reverse engineering, and software development with results integrated into production systems for new capabilities.

The CASASP is seeking students majoring in mathematics, computer science, or related engineering fields that have a year of mathematics beyond calculus and some programming experience. Experience in C, C++, Java, Python, or some mathematical software package is desirable.

## Graduate Mathematics Program (GMP)

The GMP provides an opportunity for exceptional mathematics and statistics graduate students to work directly with NSA Mathematicians on mission-critical problems and experience the excitement of the NSA mathematics community.

Applicants should have demonstrated superior mathematical aptitude and problem-solving skills. Evidence of successful work on an independent project in pure or applied mathematics, statistics, data science, or computer science is desirable. Applicants may be at any stage in their graduate careers or intending to work in any area of mathematics or statistics. Computer programming experience, especially Python, C or C++, is desirable.

GMP participants work on problems involving math, stats, data analysis, cryptology, and communications technology and document their work in technical papers which are internally published at NSA.

## Summer Hiring Process

The Summer Internships are 12-week programs held at NSA headquarters in Fort Meade, MD from late May through mid-August. Students will receive annual, sick, and federal holiday leave and are paid a competitive salary based on education level. Subsidized housing is available.

In addition to applying online at [www.intelligencecareers.gov/nsa](http://www.intelligencecareers.gov/nsa), the below items must be emailed to [mathsummer@nsa.gov](mailto:mathsummer@nsa.gov) or sent via postal mail by October 15th to complete the application submission process:

- **Resume or CV**
- **Transcripts of college and university coursework, including community college (official or unofficial accepted)**
- **Two letters of recommendation from faculty members familiar with your technical work**
- **List of courses that will be completed by the end of the academic year**

National Security Agency  
9800 Savage Road, Suite 6844  
Fort George G. Meade, MD 20755-6844  
ATTN: R1 (Name of Internship)