# Career Spotlight

## **National Security Analyst**

National security analyst, also known as intelligence analysts, use the process of taking known information about situations and entities and with appropriate statements of probability, the future actions in those situations and by those entities. They reduce the ambiguity of highly uncertain situations.



#### **EDUCATION**

The minimum requirement includes an advanced degree and experience in fields involving mathematics, statistics, econometrics, operations research, computer or mathematical programming, and/or modeling.

#### WHEN MATH IS USED

National security analysts utilize mathematics, computer programming, engineering, and language skills as well as new technologies and creativity to solve tomorrow's problems.

#### POTENTIAL EMPLOYERS

The national security analyst practice is found in its purest form inside intelligence agencies, such as the Central Intelligence Agency (CIA) in the United States or the Secret Intelligence Service (SIS) in the UK. Its methods are also applicable in fields such as business intelligence or competitive intelligence.

#### MATH REQUIRED

- College Algebra
- Trigonometry
- Calculus I and II
- Linear Algebra
- Differential Equations
- Introduction to Real Analysis
- Analysis I and II
- Statistics

Low-end Salary: \$53,938/yr Median Salary: \$89,000/yr High-end Salary: \$105,581/yr

#### **FACTS**

Mathematicians and computer scientists have figured out a clever code for sending secrets that, for now at least, is very very difficult to break. The code relies on the simple numerical property that it takes computers a very very long time to factor large numbers into a product of prime numbers.

### **CITATIONS**

http://en.wikipedia.org/wiki/Intelligence analysis

http://www.cbsalary.com/national-salary-chart.

https://www.cia.gov/careers/opportunities/analytical/analytic-methodolog...

http://www.mathematics.jhu.edu/new/undergrad/courses.htm

http://math.tntech.edu/who-is-hiring.html

http://www.simplyhired.com/a/salary/search/q-national+security+analyst/l-mclean,+va

http://www.cs.dartmouth.edu/farid/Hany\_Farid/Math\_Kids/Entries/2011/6/3\_Prime\_numbers\_and\_the\_National\_

Security Agency.html

