

MATHEMATICS & STATISTICS



KEY SKILLS

- Analytical
- Application/Real World Connections
- Computational
- Data Analysis/ Interpretation
- Logic
- Organization
- Pattern Analysis
- Problem-Solving



CONCENTRATIONS/SPECIALIZATIONS

- Actuarial Science/ Mathematical Finance
- Applied
 - Computational
 - Dynamical Systems & Differential Equations
 - Game Theory
 - Information Theory & Signal Processing
 - Mathematical Physics
 - Operations Research
- Probability & Statistics
- Numerical Analysis
- Pure
 - Algebra
 - Calculus & Analysis
 - Combinatorics
 - Geometry & Topology
 - Logic
 - Number Theory



SAMPLE DEGREES

- Applied Mathematics (MS)
- Biostatistics (MPH, MS, PhD)
- Computer Science (Computational Mathematics & Sciences) (BA, BS)
- Mathematics (BA, BS, MA, PhD)
- Philosophy (BA, MA)
- Secondary Education (Mathematics) (MEd)
- Statistics (BS, MS, PhD)



SAMPLE OCCUPATIONS

- Accountant
- Actuary
- Applied Mathematician
- Computer Programmer
- Cryptographer
- Data Analyst
- Economist
- Financial Analyst
- Fraud Investigator
- Geodesist
- Investment Analyst
- Market Researcher
- Operations Researcher
- Professor/Math Teacher
- Statistical Modeling & Forecasting Scientist
- Statistician
- Systems Engineer



POSSIBLE WORK SETTINGS

- Actuarial Firm
- Consulting Firm
- Engineering Firm
- Financial Institution
- Federal Government/ Agency
- Insurance Company/Firm
- Investment Bank
- K-12 School
- Marketing Company
- R&D Company
- Research Organization/ Institute
- Technical Journal
- University/College



SAMPLE STUDENT ORGS

- Finance & Investments Club
- GW Association for Women in Mathematics
- GW Blockchain Club
- GW DATA Club
- GW Math & Stat Association
- Pi Mu Epsilon (Math Honors Society)



SAMPLE EMPLOYERS

- 2M Research Services
- American Chemical Society
- American Institutes for Research
- Applied Research Associates
- Capital One
- Columbia University
- DC Public Schools
- Deloitte
- Digital Management, LLC
- Equal Employment Opportunity Commission (EEOC)
- Federal Aviation Administration
- Fors Marsh Group
- GEICO
- Geisinger Health System
- Johns Hopkins University
- KDM Systems
- ManTech International Corp.
- Mathematica
- MITRE
- National Security Agency (NSA)
- NEC Labs America
- Nestlé USA
- Northrop Grumman
- Old Dominion University
- Prudential
- RAND Corporation
- Riverside Research
- RTI International
- The Lucas Group
- Tunnell Consulting
- US Census Bureau
- US Department of Energy
- US Department of Labor
- US International Trade Commission
- Wells Fargo
- Westat



PROFESSIONAL ORGS

- American Mathematical Society
- American Statistical Association
- Association for Women in Mathematics
- International Statistical Institute
- Mathematical Association of America
- The Society for Industrial & Applied Math (SIAM)

