Why Biodefense?
The Master of Science in Biodefense (BIOD) bridges the gap between science and policy by providing you with the knowledge and analytic skills to assess the risks posed by natural and man-made biological threats and to develop strategies for reducing these risks. Graduates of this program are employed in biodefense and biosecurity positions throughout academia, NGOs, government agencies, and the private sector. The program can be completed on campus (full- or part-time) or entirely online (part-time only).

Program Director – Dr. Gregory Koblentz
A complete list of Schar School faculty and their CVs can be found at http://schar.gmu.edu/faculty.

Curriculum Requirements
The Biodefense master’s program requires 36 credit hours of coursework.

Required Biodefense Core Courses (18 credits)
- **BIOD 604 Emerging Infectious Diseases I: Bacteria and Toxins**: Covers the microbiology, pathogenesis, clinical effects, and epidemiology of bacteria and toxins that pose threats to global health or can be utilized as biological weapons.
- **BIOD 605 Emerging Infectious Diseases II: Viral Agents**: Covers the microbiology, pathogenesis, clinical effects, and epidemiology of viruses that pose threats to global health or can be utilized as biological weapons.
- **BIOD 609 Biodefense Strategy**: Introduces students to the biodefense and biosecurity strategies and policies of the United States, other nations, and international organizations. Examines the interaction of biodefense and biosecurity with homeland, national, and international security.
- **GOVT 500 The Scientific Method and Research Design**: Grounds students in the principles of the scientific method as the framework for investigating all research questions in political science, whether qualitative or quantitative in character (or both). Focus is on sound and rigorous research design.
- **BIOD 620 Global Health Security Policy**: Explores issues emerging from the interaction of health and security that represent novel challenges to policy makers confronting a rapidly changing international landscape. Examines the origin and evolution of the concept of health security. Analyzes strategic impact of infectious disease outbreaks, global health security case studies, global health governance, and formulation and implementation of U.S. global health security policy.
- **BIOD 710 Health Security Preparedness**: Examines national and international public health and medical preparedness for and response to natural disasters, terrorist acts, and disease outbreaks. Explores organizational and policy architecture, implementation challenges, and strategies for preventing, detecting, and mitigating these threats.

Elective Courses (15 credits)
Students will complete five elective courses within the program. These courses come from the fields of Biodefense, Political Science, Emergency Management and Homeland Security, International Security, and Public Policy.

Capstone Course (3 credits)
Students must demonstrate the ability to conduct original, independent research by completing a research project in **BIOD 790 Global Health Security Capstone**.
Admissions Information
For admission consideration to the Biodefense master’s or certificate program, applicants must hold a bachelor’s degree or equivalent from an accredited university or college.

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<th>Application Deadlines</th>
<th>FALL TERM</th>
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<tr>
<td>Domestic Students</td>
<td>May 1</td>
<td>December 1</td>
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<tr>
<td>International Students*</td>
<td>May 1</td>
<td>November 1</td>
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<td>For Priority Scholarship Consideration</td>
<td>February 1</td>
<td>December 1</td>
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*For admission purposes, please adhere to the International Student Deadlines if you have completed your undergraduate and/or graduate degree outside of the United States.

Application Requirements
Please visit https://schar.gmu.edu/how-to-apply for more information.

- **Graduate Application and application fee.** The Graduate Application can be completed online at: https://www2.gmu.edu/admissions-aid/apply-now
- A 750-1000 word written statement of the applicant’s goals for and interest in the program
- A current resume
- Unofficial transcript(s) from all university work
  - Applicants presenting international credentials must provide transcripts, degree certificates or diplomas, and certified translations of the documents into English (if applicable)
- **Two letters of recommendation**
  - At least one letter of recommendation should be from an academic resource
- Valid GRE scores (only valid for five years from test date)

Additional criteria for International Applicants:
- TOEFL/IELTS scores (required for international applicants)
  - Minimum required TOEFL scores: 88 with a 20 in each of the four subsections OR
  - Minimum required IELTS score: 6.5 total

Financial Aid
To apply for federal assistance, applicants are required to fill out the Free Application for Federal Student Aid (FAFSA) form which can be accessed online at: http://www.fafsa.ed.gov/. For other questions regarding federal assistance, please visit the Office of Student Financial Aid at: http://financialaid.gmu.edu/.

Tuition and Fees for the 2019-2020 Academic Year
In-State Total: $852.00/credit hour
Out-of-State Total: $1,640.00/credit hour

Biodefense, MS Graduates:

- **Private Sector**
  - General 13%
  - Consulting 50%
- **Academia** 12%
- **NGO / Non-profit** 25%

*2017-18 Academic Year*