

GOVERNMENT ANALYTICS MINOR (SCHAR)

Banner Code: GVAN

Dr. Robert McGrath

344 Research Hall

Fairfax Campus

Phone: 703-993-4567

Email: rmcgrat2@gmu.edu

Government analytics involves the use of cutting-edge tools of data science and analysis to address political, policy, and governance problems at federal, state, local, and organizational levels. This minor introduces students to the tools and context that are now commonly employed by government entities and agencies, as well as by the non-profit and private sectors. In particular, students will work with canonical programming languages (R and Python) and apply these tools to substantive issues in political science, public administration, and international relations. The minor integrates a technical curriculum with real-world applicability and gives students the flexibility and independence to develop unique expertise and hone research skills. The curriculum also introduces students to issues of copyright and privacy that are integral to ethical government analytics.

Admissions & Policies

Admissions

This minor is available to all Mason undergraduate students.

Policies

Eight credits of coursework must be unique to the minor and students must complete all coursework with a minimum GPA of 2.00. For policies governing all minors, see AP5.3.4 Minors (<http://catalog.gmu.edu/policies/academic/undergraduate-policies/#text>).

Requirements

Minor Requirements

Total credits: 19-20

Of the total of 19 credits, 9 credits must be unique to minor

Required Courses

Code	Title	Credits
CDS 101	Introduction to Computational and Data Sciences (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
CDS 102	Introduction to Computational and Data Sciences Lab (Mason Core) (http://catalog.gmu.edu/mason-core/)	1
CDS 230	Modeling and Simulation I	3
Select one of the following:		3
CDS 301	Scientific Information and Data Visualization	
CDS 302	Scientific Data and Databases	

CDS 303	Scientific Data Mining	
STAT 463	Introduction to Exploratory Data Analysis	
Select two of the following: ¹		6-7
GOVT 300	Research Methods and Analysis	
GOVT 307	Legislative Behavior	
GOVT 308	The American Presidency	
GOVT 311	Public Opinion and Electoral Behavior	
GOVT 312	Political Parties and Campaigns	
GOVT 313	Political Psychology	
GOVT 318	Interest Groups, Lobbying, and the Political Process	
GOVT 343	International Political Economy	
GOVT 351	Administration in the Political System	
GOVT 354	Nonprofit Sector in Society	
GOVT 355	Public Personnel Administration	
GOVT 356	Public Budgeting and Finance	
GOVT 357	Urban Planning	
GOVT 358	Nonprofit Financial Planning	
GOVT 361	Introduction to Environmental Policy	
GOVT 362	Intermediate Environmental Policy	
GOVT 364	Public Policy Making	
GOVT 365	State and Regional Public Policy	
GOVT 366	Public Policy Analysis	
GOVT 367	Money, Markets and Economic Policy (Mason Core) (http://catalog.gmu.edu/mason-core/)	
GOVT 368	Tools for Economic Policy Analysis	
GOVT 400	Issues in Political Analysis	
Seminar Requirement		
GOVT 490	Synthesis Seminar (Mason Core) (http://catalog.gmu.edu/mason-core/) ²	3
Total Credits		19-20

¹ An alternative 300-level GOVT course, especially including GOVT 319, or any 400-level GOVT course, may be substituted for any other GOVT course with the permission of the minor director, depending on the topic.

² This Government Analytics capstone seminar will be offered annually and covers:

- i) Open Government Data, in theory and practice
- ii) Supervision of individual capstone projects

Enrollment in the capstone section is limited to Government Analytics minors and requires permission of the instructor.