GOVERNMENT ANALYTICS MINOR (COS)

Banner Code: GVAN

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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 AP.5.3.4 Minors.

Requirements

Minor Requirements

Total credits: 19-20

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

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDS 101</td>
<td>Introduction to Computational and Data Sciences (Mason Core)</td>
<td>3</td>
</tr>
<tr>
<td>CDS 102</td>
<td>Introduction to Computational and Data Sciences Lab (Mason Core)</td>
<td>1</td>
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<tr>
<td>CDS 230</td>
<td>Modeling and Simulation I</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>CDS 301</td>
<td>Scientific Information and Data Visualization</td>
<td></td>
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<tr>
<td>CDS 302</td>
<td>Scientific Data and Databases</td>
<td></td>
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<tr>
<td>CDS 303</td>
<td>Scientific Data Mining</td>
<td></td>
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<tr>
<td>STAT 463</td>
<td>Introduction to Exploratory Data Analysis</td>
<td></td>
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<td>Select two of the following:</td>
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<td>6-7</td>
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GOVT 300 Research Methods and Analysis (Mason Core)
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)
GOVT 368 Tools for Economic Policy Analysis
GOVT 400 Issues in Political Analysis
GOVT 490 Synthesis Seminar (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.