Institute for Politics and Strategy

Mark S. Kamlet, Interim Director, University Professor of Economics and Public Policy, and Provost Emeritus

Location: Posner Hall 385A
www.cmu.edu/ips (http://www.cmu.edu/ips/)

Founded in 2015, the Institute for Politics and Strategy (https://www.cmu.edu/ips/) is a university-wide institute for research and undergraduate and graduate education in the fields of international relations, political science, and national security.

The academic programs included in the Institute for Politics and Strategy are:

- BS International Relations and Politics Major (primary and additional);
- BS Economics and Politics (primary and additional);
- International Relations and Politics Minor;
- Cybersecurity and International Conflict Minor;
- Military Strategy and International Relations Minor;
- Politics and Public Policy Minor;
- The Carnegie Mellon University Washington Semester Program;
- MS International Relations and Politics (traditional and accelerated); and
- Master of Information Technology Strategy.

The International Relations and Politics (IRP) major delves deeply into international relations, comparative politics, and domestic politics from the discipline of political science. The International Relations and Politics (IRP) major (https://www.cmu.edu/ips/undergraduate-degrees/bachelor-of-science-international-relations-and-politics.html) analyzes the role of politics at the national, regional, international, and transnational levels; examines political and institutional arrangements within and among these levels; and investigates current issues relevant to the field of international relations. IRP includes an innovative initiative to incorporate decision science in political science. Thus, students learn to apply the burgeoning science of judgment and decision making to understanding political actors’ strategies and foibles, the strengths and weaknesses of formal methods of policy analysis (i.e., cost, risk, benefit, analysis), and the factors shaping public responses to politics and policies. IRP provides a rich set of courses and programmatic offerings that have made it an attractive course of study for students from all of CMU’s colleges.

The Economics and Politics major (https://www.cmu.edu/ips/undergraduate-degrees/bachelor-of-science-economics-and-politics.html) is offered jointly between the Undergraduate Economics Program (UEP) and IPS. Students are equal members of both academic units and receive advising from both units. The major will develop the political context and underpinnings of economic policy making. It will explore how political institutions resolve the tradeoffs and disagreements associated with policymaking and how they can facilitate or impede desirable economic outcomes. The major will appeal to any student interested in the design, evaluation, and political implementation of policy.

The International Relations and Politics (IRP) minor (https://www.cmu.edu/ips/undergraduate-degrees/minors/minor-in-international-relations-and-politics.html) shares core courses with the IRP major. The minor in Politics and Public Policy (https://www.cmu.edu/ips/undergraduate-degrees/minors/minor-in-politics-and-public-policy.html) has a greater focus on domestic politics and public policy than either the IRP major or minor and requires students to participate in the Carnegie Mellon University Washington Semester Program (https://www.cmu.edu/ips/cmuwsp). The minor in Cybersecurity and International Conflict (https://www.cmu.edu/ips/undergraduate-degrees/minors/cybersecurity-and-international-conflict-1.html) analyzes the role of cyber warfare and cybersecurity in international politics—past, present, and future. The Military Strategy and International Relations minor (https://www.cmu.edu/ips/undergraduate-degrees/minors/military-strategy-and-international-relations.html) recognizes that there can be no successful national defense without making diplomacy and international development key elements in our overall national security strategy and seeks to shape future leaders who have a clear understanding of the intersectionality of diplomacy, development, and defense.

The Carnegie Mellon University Washington Semester Program (CMU/WSP) (http://www.cmu.edu/ips/cmuwsp) is a semester-long program in which students live, intern, and take CMU classes in Washington, DC. Undergraduates from any course of study at the university may participate in the program. Students earn 48 units for the Carnegie Mellon University Washington Semester Program, interning about twenty-four hours per week in any sector or field of interest within Washington, DC, while taking classes taught by Carnegie Mellon faculty.

The Master of Science in International Relations and Politics (MS IRP) (https://www.cmu.edu/ips/graduatedegrees/) allows students to specialize in one of four conventional areas of political science: international security, international relations, American politics, and comparative politics. Students are equipped with strong methodological skills and are required to write a significant thesis in the final semester of the program. To prepare students to enter the job market, students are also required to complete an internship. In addition to a traditional two-year program, IPS offers an accelerated version of the MS IRP (MS IRP-AMP) for current Carnegie Mellon University undergraduate students. Students in the MS IRP-AMP begin graduate coursework in the senior year and complete the master’s degree in their fifth year of study.

The Master of Information Technology Strategy (MITS) (http://www.cmu.edu/mits/) program provides graduate students with core interdisciplinary competencies in cybersecurity. The master’s program is a joint initiative of the College of Engineering, the Institute for Politics and Strategy, and the School of Computer Science. The MITS program provides a multidisciplinary education that prepares students to define and conceptualize: the emerging environment of threats caused by cyber operations; opportunities for enhanced information analysis and exploitation; and the management of innovative information technology systems; and decision-making challenges.

Bachelor of Science in International Relations and Politics

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https://www.cmu.edu/ips (https://www.cmu.edu/ips/)

Offered through the Institute for Politics and Strategy (IPS), the Bachelor of Science in International Relations and Politics (IRP) analyzes the role of politics at the national, regional, international, and transnational levels; examines political and institutional arrangements within and among these levels; and investigates current issues relevant to the field of international relations.

The IRP major studies the ways in which leaders construct foreign and national security policy; the impact of domestic and international forces on states’ security and economic policies; and the significance of alliances, coalitions, and international institutions for world politics. The major emphasizes the importance of political institutions (domestic and comparative), decision making by leaders in shaping policy, and contemporary challenges to the international system.

Thinking systematically about international and domestic politics is the core objective of the IRP major. To this end, the major has required courses in mathematics and statistics that help to sharpen students’ ability to undertake scientific analysis in the required substantive and historical courses. The major is rooted in the discipline of political science but also utilizes the interdisciplinary strengths of decision science, economics, and political history. Thus, students pursuing this major will use the analytic tools of game theory, economic and statistical analysis, qualitative analysis, rational choice theory, and theories of behavioral decision making as they study alliances, coalitions, institutions, and political strategy.

The name of the major signifies that those studying IRP learn about international relations and domestic politics from the standpoint of the discipline of political science. Also, the major taps into and contributes to CMU’s strengths in other social sciences that combine analytical and empirical methods. IRP includes an innovative initiative that incorporates decision science in political science. It enables students to apply the burgeoning science of judgment and decision making to understanding political actors’ strategies and foibles, the strengths and weaknesses of formal methods of policy analysis (e.g., cost, risk, benefit, analysis), and the factors shaping public responses to politics and policies.

A rich set of electives allows students to investigate issues of national security strategy, cybersecurity and international conflict, military strategy, economic policy, representation and voting rights, climate change, political psychology, grand strategy, and the effects of culture and society on the international and domestic systems.

Recognizing the influence of language and culture on politics and international relations, students are required to complete the intermediate
(200) level, or its equivalent, in a modern language other than English. Advanced-level study is strongly encouraged.

Open to all Carnegie Mellon undergraduates, the Carnegie Mellon University Washington Semester Program (CMU/WSP) (https://www.cmu.edu/ips/cmuwsp/) allows students to study politics and public policy and intern in Washington for one semester. Courses taken through CMU/WSP will count toward the policy seminar core requirement and the elective sequence in politics and public policy for IRP majors.

In addition to the primary major in International Relations and Politics, IPS offers an additional minor. Majors in International Relations and Politics, Cybersecurity and International Conflict, Military Strategy and International Relations, and Politics and Public Policy are also available. IPS also offers a Bachelor of Science in Economics and Politics jointly with the Undergraduate Economics Program.

Double Counting: Students may double count a maximum of four courses with another major or minor.

Curriculum

Core Courses

Students must complete all of the following core courses.

- 84-104 Decision Processes in American Political Institutions 9
- 84-250 Writing for Political Science and Policy 9
- 84-450 Policy Seminar 9
- 84-451 Internship Seminar 12
- 84-310 Foundations of Political Economy 9
- 84-312 Principles of Microeconomics 9
- 84-313 Principles of Macroeconomics 9

Mathematics Requirement

Excluded from all double counting rules. Students must complete one of the following courses.

- 21-120 Differential and Integral Calculus 10
- or 21-112 Calculus II

Language Requirement

Students are required to complete the intermediate (200) level or the equivalent in a modern language other than English. Advanced level study is strongly encouraged. Students who successfully pass a language placement exam on campus, at the intermediate level or higher, are required to take an advanced language course to satisfy the language requirement.

Electives

International Relations and Politics students will fulfill the elective requirement by pursuing either option 1 or option 2 listed below:

Option 1: take 45 units (five courses) from the elective lists below. At least three courses (27 units) must be from the Institute for Politics and Strategy (84-xxx). Most courses listed below are 9-unit courses, but some are fewer. When courses offered for fewer than 9 units are chosen, students should note that a minimum of 45 units is required, and should plan to take one or more additional courses as appropriate.

Option 2: complete the majority of their electives via the Carnegie Mellon University Washington Semester Program (CMU/WSP) politics and public policy elective sequence. Any elective units not fulfilled during CMU/WSP may be completed through coursework from the Institute for Politics and Strategy (84-xxx) elective list.

The Washington Semester Program (CMU/WSP) Politics and Public Policy elective sequence includes:

- Policy Seminar (12 units) - Policy Seminar (84-450) and Policy Seminar II (84-451) will count as the core course requirement for the major.
- Internship Seminar 84-360 CMU/WSP: Internship Seminar (12 units)
- CMU/WSP Elective Seminars (24 units total)

A list of CMU/WSP elective seminars may be found in the Politics and Public Policy elective list below.

Grand Strategy and Political Institutions

- 79-301 History of Surveillance: From the Plantation to Data Capitalism 6
- 80-135 Introduction to Political Philosophy 9
- 80-321 Causation, Law, and Social Policy 9
- 80-335 Social and Political Philosophy 9
- 84-200 Security War Game Simulation 6
- 84-304 In the News: Analysis of Current Events 6
- 84-312 Terrorism in Sub-Saharan Africa 6
- 84-319 Civil-Military Relations 9
- 84-322 Nonviolent Conflict and Revolution 9
- 84-323 War and Peace in the Contemporary Middle East 9
- 84-324 The Future of Democracy 9
- 84-325 Contemporary American Foreign Policy 9
- 84-327 Repression and Control in Dictatorships 9
- 84-328 Military Strategy and Doctrine 9
- 84-329 Military Strategic Theory 9
- 84-352 Representation and Voting Rights 9
- 84-362 Diplomacy and Statecraft 9
- 84-363 Comparative Legal Systems 9
- 84-364 Comparative Presidential Behavior: Leadership, Personality, and Decision Making 9
- 84-365 The Politics of Fake News and Misinformation 9
- 84-366 The American Presidency 9
- 84-370 Nuclear Security & Arms Control 9
- 84-372 Space and National Security 9
- 84-373 Emerging Technologies and the Law 9
- 84-380 US Grand Strategy 9
- 84-383 Cyber Policy as National Policy 9
- 84-386 The Privatization of Force 9
- 84-387 Technology and Policy of Cyber War 9
- 84-388 Concepts of War and Cyber War 9
- 84-389 Terrorism and Insurgency 9
- 84-390 Social Media, Technology, and Conflict 9
- 84-393 Legislative Decision Making: US Congress 9
- 84-402 Judicial Politics and Behavior 9
- 84-405 The Future of Warfare 9
- 84-421 Advanced Topics in American Politics 9
- 88-281 Topics in Law: 1st Amendment 9
- 88-284 Topics of Law: The Bill of Rights 9

Economics and Society

- 19-452 EPP Projects II 12
- 70-342 Managing Across Cultures 9
- 70-365 International Trade and International Law 9
- 70-430 International Management 9
- 73-328 Health Economics 12
- 73-332 Political Economy 9
- 80-136 Social Structure, Public Policy & Ethics 9
- 80-244 Environmental Ethics 9
- 80-249 AI, Society, and Humanity 9
- 80-348 Health, Human Rights, and International Development 9
- 80-447 Global Justice 9
- 84-307 Economic and Political History of Contemporary China 9
- 84-308 Political Economy of Latin America Var.
- 84-310 International Political Economy 9
- 84-313 International Organizations and Law 9
- 84-315 Political Economy of International Migration 9
- 84-316 Political Economy of Transatlantic Partnership 9
- 84-318 Politics of Developing Nations 9
- 88-411 Rise of the Asian Economies 9

International Cultures

- 76-318 Communicating in the Global Marketplace 9
In the Dietrich College, the International Relations and Politics major can be completed in as few as two years of undergraduate study, not that it must be. Students may declare the BS in International Relations and Politics as early as the second semester of the freshman year and should consult frequently with the deputy director when planning their curricular program.

**Students who participate in the CMU/WSP** will take the Policy Seminar while studying in Washington, DC. Students who do not participate in the CMU/WSP will take the Policy Seminar in the spring of the senior year in Pittsburgh.

### Additional Major
Students who elect International Relations and Politics as an additional major must fulfill all of the requirements of the International Relations and Politics major.

### B.S. in Economics and Politics
Politics and economics are deeply interconnected. Political institutions and decision-making impact economic growth, income distribution, and many other aspects of economic life. Both fiscal and monetary policies affect the economy, but these policies are often employed with political considerations in mind and can influence political activity. Conversely, economic outcomes shape political preferences and policy choices. The overlap between these two disciplines is endless. For example, while the United Nations is often thought of in purely political terms, the Security Council can and does make decisions that have significant economic implications. For instance, trade agreements, sanctions, and humanitarian aid are all topics that intersect with both political and economic considerations.

The Economics and Politics major is offered jointly between the Undergraduate Economics Program (https://www.cmu.edu/tepper/programs/undergraduate-economics/) (UEP) and the Institute for Politics and Strategy (https://www.cmu.edu/ips/) (IPS). Students are equal members of both...
Students must complete one course from the following list.

- Principles of Macroeconomics
- Principles of Microeconomics
- Decision Processes in American Political Institutions
- Comparative Politics
- Economics Colloquium I

*Students who place out of 73-102 based on the economics placement exam will receive a pre-req waiver for 73-102 and are waived from taking 73-102

Core (63 units)

Students must complete all of the following courses.

- Intermediate Microeconomics
- Intermediate Macroeconomics
- Economics and Data Science
- Econometrics I
- Political Science Research Methods
- Theories of International Relations
- International Political Economy

Communication (9 units)

Students must complete one course from the following list.

- Professional Communication for Economists
- Writing for Political Science and Policy

Electives (27 units)

Majors are required to take 27 units (three courses) from the elective lists below. At least one course (9 units) must be taken from Economics (73-xxx) and at least one course (9 units) must be taken from the Institute for Politics and Strategy (84-xxx). Students may complete electives through coursework in the Carnegie Mellon University Washington Semester Program (CMU/WSP) (https://www.cmu.edu/ips/cmuwsp/) Politics and Public Policy elective sequence.

**Economics Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>73-328</td>
<td>Health Economics</td>
<td>12</td>
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<tr>
<td>73-332</td>
<td>Political Economy</td>
<td>9</td>
</tr>
<tr>
<td>73-338</td>
<td>Financial Crises and Risk</td>
<td>9</td>
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<tr>
<td>73-352</td>
<td>Public Economics</td>
<td>9</td>
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<td>73-353</td>
<td>Financial Regulation in the Digital Age</td>
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<td>73-359</td>
<td>Benefit-Cost Analysis</td>
<td>9</td>
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<tr>
<td>73-365</td>
<td>Firms, Market Structures, and Strategy</td>
<td>9</td>
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<tr>
<td>73-421</td>
<td>Emerging Markets</td>
<td>9</td>
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<tr>
<td>73-427</td>
<td>Sustainability, Energy, and Environmental Economics</td>
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**Politics and Strategy Electives**

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<thead>
<tr>
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<tbody>
<tr>
<td>84-200</td>
<td>Security War Game Simulation</td>
<td>6</td>
</tr>
<tr>
<td>84-304</td>
<td>In the News: Analysis of Current Events</td>
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<td>84-307</td>
<td>Economic and Political History of Contemporary China</td>
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<td>Political Economy of Latin America</td>
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<td>International Organizations and Law</td>
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<td>84-315</td>
<td>Political Economy of International Migration</td>
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<td>84-316</td>
<td>Political Economy of Transatlantic Partnership</td>
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<td>84-318</td>
<td>Politics of Developing Nations</td>
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<td>84-319</td>
<td>Civil-Military Relations</td>
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<td>Nonviolent Conflict and Revolution</td>
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<td>84-362</td>
<td>Diplomacy and Statecraft</td>
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<td>84-366</td>
<td>The American Presidency</td>
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<tr>
<td>84-369</td>
<td>Decision Science for International Relations</td>
<td>9</td>
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<tr>
<td>84-370</td>
<td>Nuclear Security &amp; Arms Control</td>
<td>9</td>
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<tr>
<td>84-372</td>
<td>Space and National Security</td>
<td>9</td>
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<tr>
<td>84-373</td>
<td>Emerging Technologies and the Law</td>
<td>9</td>
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<td>84-380</td>
<td>US Grand Strategy</td>
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<td>84-383</td>
<td>Cyber Policy as National Policy</td>
<td>6</td>
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<td>84-386</td>
<td>The Privatization of Force</td>
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<td>84-390</td>
<td>Social Media, Technology, and Conflict</td>
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<tr>
<td>84-393</td>
<td>Legislative Decision Making: US Congress</td>
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<td>84-402</td>
<td>Judicial Politics and Behavior</td>
<td>9</td>
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<tr>
<td>84-405</td>
<td>The Future of Warfare</td>
<td>9</td>
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<tr>
<td>84-421</td>
<td>Advanced Topics in American Politics</td>
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CMU/WSP Politics and Public Policy Electives

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<tr>
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<tbody>
<tr>
<td>84-330</td>
<td>The Shading of Democracy: The Influence of Race on American Politics</td>
<td>6</td>
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<tr>
<td>84-331</td>
<td>Money, Media, and the Power of Data in Decisionmaking</td>
<td>6</td>
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<tr>
<td>84-332</td>
<td>Effects of US Policy on Businesses: Perspectives of Asian Americans</td>
<td>6</td>
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<tr>
<td>84-333</td>
<td>Power and Levers for Change in Washington, DC</td>
<td>12</td>
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<tr>
<td>84-334</td>
<td>The History and Practice of Economic Statecraft</td>
<td>6</td>
</tr>
<tr>
<td>84-335</td>
<td>Intelligence and Policy</td>
<td>6</td>
</tr>
<tr>
<td>84-336</td>
<td>Implementing Public Policy: From Good Idea To Reality</td>
<td>12</td>
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</tbody>
</table>
84-337 Biomedical Science Research, Policy, and Governance 6
84-338 Political News Coverage in the Era of Trump, Twitter, and “Fake News” 6
84-339 Seminar in Public Policy Research 12
84-343 Language and Power: How to Understand and Use Political Speech 6
84-346 Legal Issues in Public Administration 6
84-348 Advocacy, Policy and Practice 6

Additional Electives
19-411 Science and Innovation Leadership for the 21st Century: Firms, Nations, and Tech 9
19-425 Sustainable Energy for the Developing World 9
70-365 International Trade and International Law 9
70-430 International Management 9
79-280 Coffee and Capitalism 9
79-318 Sustainable Social Change: History and Practice 9
80-135 Introduction to Political Philosophy 9
80-136 Social Structure, Public Policy & Ethics 9
80-321 Causation, Law, and Social Policy 9
80-335 Social and Political Philosophy 9
80-348 Health, Human Rights, and International Development 9
80-447 Global Justice 9
88-366 Behavioral Economics of Poverty and Development 9
88-419 International Negotiation 9
88-444 Public Policy and Regulations 9

CAPSTONE (15-21 units)
Students must complete all of the following courses.
84-450 Policy Seminar 6
12 units if taken during CMU/WSP, 6 units if taken in Pittsburgh
73-497 Senior Project 9

Note: Students in the BS in Economics and Politics who complete a Dietrich or Tepper Honors Thesis in economics may use 73-497 (Senior Project) as an economics elective.

DOUBLE-COUNTING RESTRICTION
A maximum of four courses may double count with another major or minor.

SAMPLE Four Year Plan
These sample curricula represent a plan for completing the requirements for the B.S. in Economics and Politics. Economics and Politics students are encouraged to spend a semester studying and interning in Washington, DC, through the CMU/WSP (http://www.cmu.edu/ips/cmuwsp/), and/or study abroad. The plan below demonstrates that a semester off-campus fits well into the curriculum. Students may declare the BS in Economics and Politics as early as the second semester of the freshman year and should consult frequently with the Economics and Politics advisors about their course of study. Please note that this is only a sample plan of study and not the only possible plan of study. The Economics and Politics major and Dietrich College General Education curricula provide a high degree of flexibility in sequencing and coursework. Double counting between the major and

General Education requirements are unlimited. The plan below shows a very conservative view of double counting.

<table>
<thead>
<tr>
<th>First-Year</th>
<th>Second-Year</th>
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<tbody>
<tr>
<td>Fall</td>
<td>Spring</td>
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<tr>
<td>73-120 Differential and Integral Calculus</td>
<td>73-256 Multivariate Analysis</td>
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<tr>
<td>36-200 Reasoning with Data</td>
<td>73-103 Principles of Microeconomics</td>
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<tr>
<td>73-102 Principles of Microeconomics</td>
<td>84-315 Comparative Politics</td>
</tr>
<tr>
<td>84-104 Decision Processes in American Political Institutions</td>
<td>Foundations: Communications (First Year Writing)</td>
</tr>
<tr>
<td>Grand Challenge Seminar</td>
<td>Disciplinary Perspectives: Humanities</td>
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<tr>
<td>99-101 Computing @ Carnegie Mellon</td>
<td>Foundations: Computational Thinking</td>
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<tr>
<th>Third-Year</th>
<th>Fourth-Year</th>
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</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Spring</td>
</tr>
<tr>
<td>73-497 Senior Project</td>
<td>Explore Disciplinary Perspectives: The Arts</td>
</tr>
<tr>
<td>Discipline Perspectives: Logic &amp; Math</td>
<td>Explore Economics &amp; Politics Elective</td>
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<tr>
<td>Foundations: Contextual Thinking</td>
<td>Explore Economics &amp; Politics Elective</td>
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<td>Foundations: Scientific Thinking</td>
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Minor in Cybersecurity and International Conflict
Mark S. Kamlet, Interim Director, University Professor of Economics and Public Policy, and Provost Emeritus
kamlet@cmu.edu, Posner Hall 395A
Emily Half, Deputy Director
ehalf@andrew.cmu.edu, Posner Hall 391, 412-268-7082
www.cmu.edu/ips (http://www.cmu.edu/ips/)

The minor in cybersecurity and international conflict analyzes the role of cyber warfare and cybersecurity in international politics—past, present, and future. Cyber attacks by nation-states and their proxies have the potential to reshape how wars are fought in the twenty-first century. As such, the complexity and policy challenge of cyber-engagements is immense and altogether without precedent. The minor addresses the role of deterrence, dissuasion, and attribution in cyber conflict, while also studying the nuances of key components of modern warfare—from the security dilemma to escalation management.

In the shifting landscape of cyber capabilities, how will laws, authorities, and policies keep pace? What are the implications and consequences of actions that may be considered “short of war” by some countries but “above the threshold” of conflict by others? Will a more aggressive defensive posture with respect to cybersecurity inadvertently increase the risk of conflict with states that sponsor malicious hacking groups? What is the proper balance between offense and defense in cybersecurity and how are cyber operations best integrated into a country’s overall military strategy?
Unlike other kinds of conflicts, the attribution of attacks presents significant challenges. Indeed, in many cases, it can be difficult to determine whether the attacker is a nation-state, a nonstate actor, a criminal gang, or a lone hacktivist. Investigators must combine technical and traditional methods to identify potentially responsible parties and to understand their intent. If the aggressor’s identity cannot be confirmed, how can a counterattack be launched? Some attackers may seek to mount “false flag” attacks and deception, for example, that misdirect defenders to counter-attack in the wrong direction. Additionally, what are appropriate responses to attacks made on civil infrastructure and private business operations, such as in the areas of financial services, transportation, energy, entertainment, and health care? In other words, what are the appropriate rules of engagement for national systems, infrastructural systems, businesses, and individuals?

When, for example, is a counterattack or a “kinetic” response permissible? These questions have major implications for the study of war and peace. More than at any time in the past, those who seek to start war may be harder to find and their motives more difficult to discern. The cybersecurity and international conflict minor outlined herein tackles the social-scientific dimensions of cybersecurity with a focus on the implications of the cyber age for modern statecraft, warfare, elections (local, state, and national), and politics, more generally.

**CURRICULUM**

60 units

**Foundational Course**

Students must take one of the following two foundational courses (9 units):

- 84-275 Comparative Politics 9
- 84-326 Theories of International Relations 9

**Core Courses**

Students must take all of the following core courses (24 units):

- 84-387 Technology and Policy of Cyber War 9
- 84-388 Concepts of War and Cyber War 6
- 84-405 The Future of Warfare 9

**Elective Courses**

Students must take three courses from the following list of elective courses (27 units). At least one course (9 units) must be taken from the Institute for Politics and Strategy and have an 84-number.

- 84-200 Security War Game Simulation 6
- 84-312 Civil-Military Relations 6
- 84-323 War and Peace in the Contemporary Middle East 9
- 84-325 Contemporary American Foreign Policy 9
- 84-327 Repression and Control in Dictatorships 9
- 84-328 Military Strategy and Doctrine 9
- 84-370 Nuclear Security & Arms Control 9
- 84-372 Space and National Security 9
- 84-373 Emerging Technologies and the Law 9
- 84-380 US Grand Strategy 9
- 84-383 Cyber Policy as National Policy 6
- 84-386 The Privatization of Force 9
- 84-389 Terrorism and Insurgency 9
- 84-390 Social Media, Technology, and Conflict 9
- 16-735 Ethics and Robotics 12
- 17-200 Ethics and Policy Issues in Computing 9
- 17-303 Cryptocurrencies, Blockchains and Applications Var.
- 17-331 Information Security, Privacy, and Policy 12
- 17-333 Privacy Policy, Law, and Technology 9
- 17-334 Usable Privacy and Security 9
- 17-702 Current Topics in Privacy Seminar 3
- 79-301 History of Surveillance: From the Plantation to Data Capitalism 6
- 80-249 AI, Society, and Humanity 9
- 95-444 Cybersecurity Policy and Governance I 6

Students are permitted to double count a maximum of two courses between the minor in Cybersecurity and International Conflict and another major or minor.

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**Minor in International Relations and Politics**

Mark S. Kamlet, **Interim Director, University Professor of Economics and Public Policy, and Provost Emeritus**

kamlet@cmu.edu, Posner Hall 385A

Emily Half, **Deputy Director**
ehalf@andrew.cmu.edu, Posner Hall 391, 412-268-7082

cmu.edu/ips (http://www.cmu.edu/ips/)

The International Relations and Politics (IRP) minor examines international relations, comparative politics, and domestic politics from the discipline of political science. It analyzes the role of politics at the national, regional, international, and transnational levels; examines political and institutional arrangements within and among these levels; and investigates current issues relevant to the field of international relations.

The IRP minor studies the ways in which leaders construct foreign and national security policy; the impact of domestic and international forces on states’ security and economic policies; and the significance of alliances, coalitions, and international institutions for world politics. The minor emphasizes the importance of political institutions (domestic and comparative), decision making by leaders in shaping policy, and contemporary challenges to the international system.

A maximum of two courses may double count between the minor in International Relations and Politics and another major or minor.

**Curriculum**

54 units

**Core Courses**

Students must take all three core courses (27 units):

- 84-104 Decision Processes in American Political Institutions 9
- 84-275 Comparative Politics 9
- 84-326 Theories of International Relations 9

**Economics Requirement**

Students must complete one of the following courses. Excluded from all double counting rules.

- 84-110 Foundations of Political Economy 9
- 73-102 Principles of Microeconomics 9
- 73-103 Principles of Macroeconomics 9

**Electives**

Students select three courses (27 units) from any of the elective sequences below. Two courses (18 units) must be taken from the Institute for Politics and Strategy and have an 84-number.

**Grand Strategy and Political Institutions**

66-221 Topics of Law: Introduction to Intellectual Property Law 9

- 79-301 History of Surveillance: From the Plantation to Data Capitalism 6
- 80-135 Introduction to Political Philosophy 9
- 80-321 Causation, Law, and Social Policy 9
- 80-335 Social and Political Philosophy 9
- 84-200 Security War Game Simulation 6
- 84-304 In the News: Analysis of Current Events 6
- 84-312 Terrorism in Sub-Saharan Africa 6
- 84-319 Civil-Military Relations 9
- 84-322 Nonviolent Conflict and Revolution 9
- 84-323 War and Peace in the Contemporary Middle East 9
- 84-324 The Future of Democracy 9
- 84-325 Contemporary American Foreign Policy 9
- 84-327 Repression and Control in Dictatorships 9
- 84-328 Military Strategy and Doctrine 9
- 84-329 Military Strategic Theory 6
- 84-362 Diplomacy and Statecraft 9
- 84-363 Comparative Legal Systems 9
### Minor in Military Strategy and International Relations

Mark S. Kamlet, Interim Director, University Professor of Economics and Public Policy, and Provost Emeritus

kamlet@cmu.edu, Posner Hall 385A

Emily Half, Deputy Director
ehalf@andrew.cmu.edu, Posner Hall 391, 412-268-7082

www.cmu.edu/ips (http://www.cmu.edu/ips/)

The minor in Military Strategy and International Relations offers undergraduates at Carnegie Mellon a course of study focusing on military strategy and doctrine, the current national security landscape, including how cybersecurity and artificial intelligence influence national security decision making, and the full range of strategic challenges facing future American leaders. While the minor is open to all CMU undergraduates, it is in part motivated by a desire to support CMU students embarking on the unique effort to serve and defend the country through the Reserve Officer Training Corps (ROTC) program and others interested in pursuing applied defense-related careers post-graduation. Indeed, CMU typically has several dozen ROTC students annually along with many others who go into related areas such as working in the Department of Defense, and these students are spread throughout the university. Many major in STEM fields, where they learn valuable technical skills but are exposed to little of the wider strategic context facing military leaders and decision-makers or the political and institutional frameworks in which they are embedded. The Military Strategy and International Relations minor aims to fill these needs, ultimately helping to foster future military and defense leaders who are fully cognizant of the national and international strategic context they will navigate.

Building squarely on the “3D” concept which has gained increasing currency in US foreign policy circles in recent years, the Military Strategy and International Relations minor recognizes that there can be no successful national defense without making diplomacy and international development key elements in our overall national security strategy. The Military Strategy and International Relations minor will engage students in the whys and hows of national strategy, military planning, and defense. The Military Strategy and International Relations minor will engage students in the whys and hows of national strategy, military planning, and defense.

**Curriculum**

**60 units**

**Core Courses**

Students must take the following core courses (33 units):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>84-307</td>
<td>Economic and Political History of Contemporary China</td>
</tr>
<tr>
<td>84-308</td>
<td>Political Economy of Latin America</td>
</tr>
<tr>
<td>84-310</td>
<td>International Political Economy</td>
</tr>
<tr>
<td>84-313</td>
<td>International Organizations and Law</td>
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<tr>
<td>84-314</td>
<td>Political Economy of International Migration</td>
</tr>
<tr>
<td>84-316</td>
<td>Political Economy of Transatlantic Partnership</td>
</tr>
<tr>
<td>84-318</td>
<td>Politics of Developing Nations</td>
</tr>
<tr>
<td>88-411</td>
<td>Rise of the Asian Economies</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>79-313</td>
<td>&quot;Unwanted&quot;: Refugees, Asylum Seekers, and Patterns of Global Migration</td>
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<tr>
<td>79-314</td>
<td>The Politics and Culture of Memory</td>
</tr>
<tr>
<td>79-318</td>
<td>Sustainable Social Change: History and Practice</td>
</tr>
<tr>
<td>79-320</td>
<td>Women, Politics, and Protest</td>
</tr>
<tr>
<td>79-338</td>
<td>History of Education in America</td>
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<tr>
<td>79-342</td>
<td>Introduction to Science and Technology Studies</td>
</tr>
<tr>
<td>79-343</td>
<td>Education, Democracy, and Civil Rights</td>
</tr>
<tr>
<td>79-377</td>
<td>Food, Culture, and Power: A History of Eating</td>
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<tr>
<td>79-381</td>
<td>Energy and Empire: How Fossil Fuels Changed the World</td>
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<tr>
<td>79-385</td>
<td>Out of Africa: The Making of the African Diaspora</td>
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<tr>
<td>79-398</td>
<td>Documenting the 1967 Arab-Israeli War</td>
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<tr>
<td>85-375</td>
<td>Crosscultural Psychology</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>300 or 400 level language class</td>
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</tbody>
</table>
Policy
84-450 Policy Seminar 6

Electives
Students must complete a total of 27 units (typically three courses) from the following list of courses. At least 9 units must be taken from the Institute for Politics and Strategy and have an 84-number.

Electives
84-104 Decision Processes in American Political Institutions 9
84-200 Security War Game Simulation 6
84-275 Comparative Politics 9
84-312 Terrorism in Sub-Saharan Africa 6
84-313 International Organizations and Law 9
84-318 Politics of Developing Nations 9
84-322 Nonviolent Conflict and Revolution 9
84-324 The Future of Democracy 9
84-325 Contemporary American Foreign Policy *(if not used as a core course, course may count as an elective)* 9
84-326 Theories of International Relations 9
84-327 Repression and Control in Dictatorships 9
84-329 Military Strategic Theory 6
84-362 Diplomacy and Statecraft *(if not used as a core course, course may count as an elective)* 6
84-365 The Politics of Fake News and Misinformation 9
84-370 Nuclear Security & Arms Control 9
84-372 Space and National Security 9
84-380 US Grand Strategy 9
84-383 Cyber Policy as National Policy 6
84-386 The Privatization of Force 9
84-387 Technology and Policy of Cyber War 9
84-388 Concepts of War and Cyber War 6
84-389 Terrorism and Insurgency 9
84-390 Social Media, Technology, and Conflict 9
84-393 Legislative Decision Making: US Congress 9
84-405 The Future of Warfare 9
17-200 Ethics and Policy Issues in Computing 9
32-201 Leadership & Management 9
32-310 Evolution Of Warfare 9
32-402 Leadership and Ethics 9
79-257 Germany and the Second World War 9
79-268 World War I: The Twentieth Century’s First Catastrophe 9
79-302 Killer Robots: The Ethics, Law, and Politics of Lethal Autonomous Weapons Systems 6
80-136 Social Structure, Public Policy & Ethics 9

Students may double count a maximum of two courses (18 units) with another major or minor. Unlimited double counting is permitted with general education requirements.

Minor in Politics and Public Policy

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Rooted in the discipline of political science, the minor in Politics and Public Policy investigates US public policy issues and other matters of domestic politics while providing students hands-on and practical learning experiences. Students pursuing the Politics and Public Policy minor must participate in the Carnegie Mellon University Washington Semester Program (CMU/WSP) (https://www.cmu.edu/ips/washington-dc-semester-program/) for one semester during their undergraduate experience.

The CMU/WSP, sponsored by the university’s Institute for Politics and Strategy (IPS), is a semester-long program in which students live, intern, and take CMU classes in Washington, DC. Undergraduates from any course of study at the university may participate in the program. Students earn 48 units for the Carnegie Mellon University Washington Semester Program, interning about twenty-four hours per week in any sector or field of interest within Washington, DC, while taking classes taught by Carnegie Mellon faculty.

From embassies to nongovernmental organizations, think tanks to advocacy organizations, government agencies to congressional offices, and consulting firms to media outlets, Washington, DC, is the center for many political, international relations, and public policy activities. Students in the program come into direct contact with political, business, and community leaders and learn about the most pressing policy issues of the day.

Through this experiential learning program, CMU/WSP participants develop professional and networking skills, explore how coursework connects to the real world, learn to give and receive constructive feedback in the workplace and classroom, and intentionally reflect on their learning and growth. Every CMU/WSP student is paired with a Washington, DC-based alumni mentor to share career advice and tips about life in DC. IPS also sponsors events and policy-oriented opportunities in Washington for students participating in the program to further enrich their experience and enhance their understanding of how Washington functions as a hub of international and policy decision making.

A maximum of two courses may double count between the minor in Politics and Public Policy and another major or minor.

Curriculum 57 units

Core Seminars
Students must take the following courses while participating in the CMU/WSP (24 units):

84-360 CMU/WSP: Internship Seminar 12
84-450 Policy Seminar 6
84-451 Policy Seminar II 6

Elective Seminars
Students must take 24 units from the below list of elective seminars offered in the CMU/WSP. Offerings vary by semester. (24 units):

84-330 The Shading of Democracy: The Influence of Race on American Politics 6
84-331 Money, Media, and the Power of Data in Decisionmaking 6
84-332 Effects of US Policy on Businesses: Perspectives of Asian Americans 6
84-333 Power and Levers for Change in Washington, DC 12
84-334 The History and Practice of Economic Statecraft 6
84-335 Intelligence and Policy 6
84-336 Implementing Public Policy: From Good Idea To Reality 12
84-337 Biomedical Science Research, Policy, and Governance 6
84-338 Political News Coverage in the Era of Trump, Twitter, and “Fake News” 6
84-339 Seminar in Public Policy Research 12
84-343 Language and Power: How to Understand and Use Political Speech 6
84-346 Legal Issues in Public Administration 6
84-348 Advocacy, Policy and Practice 6

Foundational Course
Students select one course from the following list of courses offered at Carnegie Mellon University’s Pittsburg or Qatar campus. Students may take this course before or after participating in the CMU/WSP. (9 units):

84-104 Decision Processes in American Political Institutions 9
84-275 Comparative Politics 9
84-326 Theories of International Relations 9

Economics Requirement
Students must complete one of the following courses. Students may take this course before or after participating in the CMU/WSP. Excluded from all double counting rules.

84-110 Foundations of Political Economy 9
73-102 Principles of Microeconomics 9
73-103 Principles of Macroeconomics 9
Students enroll in 24 units from the below list of elective seminars.

Curriculum

Applications (https://www.cmu.edu/ips/washington-dc-semester-program/application.html) are accepted on a rolling admission basis with a final deadline of October 1, for spring semester participation, and March 1, for fall semester participation.

Curriculum

All students enroll in the following core seminars (24 units).

Core Seminars
84-360 CMU/WSP: Internship Seminar 12
84-450 Policy Seminar 6
84-451 Policy Seminar II 6

Students enroll in 24 units from the below list of elective seminars. Offerings vary by semester.

Elective Seminars
84-330 The Shading of Democracy: The Influence of Race on American Politics 6
84-331 Money, Media, and the Power of Data in Decisionmaking 6
84-332 Effects of US Policy on Businesses: Perspectives of Asian Americans 6
84-333 Power and Levers for Change in Washington, DC 12
84-334 The History and Practice of Economic Statecraft 6
84-335 Intelligence and Policy 6
84-336 Implementing Public Policy: From Good Idea To Reality 12
84-337 Biomedical Science Research, Policy, and Governance 6
84-338 Political News Coverage in the Era of Trump, Twitter, and “Fake News” 6

84-339 Seminar in Public Policy Research 12
84-343 Language and Power: How to Understand and Use Political Speech 6
84-346 Legal Issues in Public Administration 6
84-348 Advocacy, Policy and Practice 6

Master of Science in International Relations and Politics (Accelerated-Track)

Current Carnegie Mellon undergraduate students may apply for the accelerated Master of Science in International Relations and Politics (MS IRP-AMP). Students should have an undergraduate major, additional major, or minor in the Institute for Politics and Strategy, they should have participated in the Carnegie Mellon University Washington Semester Program, or they should have special approval from the faculty admissions committee.

Students interested in applying for the MS IRP-AMP should consult with the Institute for Politics and Strategy (IPS) Deputy Director in the sophomore or junior year for details and advice on shaping undergraduate coursework to qualify for the program. Current undergraduates will apply for the accelerated master’s degree during the junior year. Detailed information on the MS IRP-AMP curriculum is available on the Institute for Politics and Strategy website (https://www.cmu.edu/ips/graduate-degrees/msirp/).

Intellectual Rationale

The Institute for Politics and Strategy (IPS) seeks to train the next generation of political scientists who can examine and understand domestic and international government institutions and processes in the twenty-first century’s continuously changing global political structure. War has been a constant in our students’ lives, and that unfortunately does not look like it will change soon. But what is changing is the political landscape of war – from wars between nations to non-state actors like ISIS and Boko Haram. Coupled with an increasingly global society, international relations and politics are extremely important for preparing students to analyze and manage uncertainty and transformation in many pursuits and places.

The Master of Science in International Relations and Politics (MS IRP) serves four academic goals.

1) To allow students to specialize in one of four conventional areas of political science.
2) To equip students with strong methodological skills.
3) To guide students in the production of a significant and publishable thesis.
4) To prepare students to enter the job market.

Faculty

MARK S. KAMLET, University Professor of Economics and Public Policy; Provost Emeritus; Interim Director of the Institute for Politics and Strategy – Ph.D., University of California, Berkeley; Carnegie Mellon, 1978–

IGNACIO ARANA ARAYA, Assistant Professor – Ph.D., University of Pittsburgh; Carnegie Mellon, 2016–

HALEIGH BARTOS, Associate Professor of the Practice – MSW, University of Pittsburgh; Carnegie Mellon, 2021–

JOHN J. CHIN, Assistant Teaching Professor – Ph.D., Princeton University; Carnegie Mellon, 2016–

BARUCH FISCHHOFF, Howard Heinz University Professor in the Institute for Politics and Strategy and Department of Engineering and Public Policy – Ph.D., The Hebrew University of Jerusalem; Carnegie Mellon, 1987–

DANIEL M. SILVERMAN, Assistant Professor – Ph.D., The Ohio State University; Carnegie Mellon, 2017–

Post-Doctoral Fellows

JONATHAN CERVAS, Postdoctoral Fellow – Ph.D., University of California, Irvine; Carnegie Mellon, 2020–

PEARCE EDWARDS, Postdoctoral Fellow – Ph.D., Emory University; Carnegie Mellon, 2021–
BENJAMIN HELMS, Postdoctoral Fellow – Ph.D., University of Virginia; Carnegie Mellon, 2022–
AYCAN KATITAS, Postdoctoral Fellow – Ph.D., University of Virginia; Carnegie Mellon, 2022–

Lecturers
RASHALL BRACKNEY, Lecturer – Ph.D., Robert Morris University; Carnegie Mellon, 2018–
MATTHEW BUTKOVIC, Lecturer – Master of Professional Studies, Pennsylvania State University; Carnegie Mellon, 2015–
FRED CRAWFORD, Lecturer – J.D., Georgetown University; Carnegie Mellon, 2017–
DALE CROWELL, Lecturer – M.A., Catholic University of America; Carnegie Mellon, 2018–
MARCIELA DEGRACE, Lecturer – Ph.D., Harvard University; Carnegie Mellon, 2018–
MOLLY DUNIGAN, Senior Lecturer – Ph.D., Cornell University; Carnegie Mellon, 2014–
MICHÉLLE GRISÉ, Lecturer – Ph.D., Yale University, J.D., University of Michigan; Carnegie Mellon, 2019–
DANIEL HANSEN, Lecturer – Ph.D., Michigan State University; Carnegie Mellon, 2018–
THOMAS KARAKO, Lecturer – Ph.D., Claremont Graduate University; Carnegie Mellon, 2015–
SOPHIE LE BLANC, Lecturer – Ph.D., University of Delaware; Carnegie Mellon, 2017–
MATTHEW LANE, Lecturer – Ph.D., The Pennsylvania State University; Carnegie Mellon, 2021–
WILLIAM M. MARCELLINO, Lecturer – Ph.D., Carnegie Mellon University; Carnegie Mellon, 2021–
GEOFFREY MCGOVERN, Senior Lecturer – Ph.D., Binghamton University, J.D., Harvard University; Carnegie Mellon, 2013–
FORREST E. MORGAN, Senior Lecturer – Ph.D., University of Maryland; Carnegie Mellon, 2017–
KIMBERLY SMACZNIAK, Lecturer – J.D., Harvard University; Carnegie Mellon, 2017–
ANDREW J. STRAVERS, Lecturer – Ph.D., University of Texas, Austin; Carnegie Mellon, 2021–
MARK A. TOUKAN, Lecturer – Ph.D., University of Wisconsin, Madison; Carnegie Mellon, 2021–
BEVERLEY WHEELER, Lecturer – D.Ed., Harvard University; Carnegie Mellon, 2012–
AUSTIN WHISNANT, Lecturer – M.S., University of Pittsburgh; Carnegie Mellon, 2021–
JULIE WILSON, Lecturer – J.D., American University; Carnegie Mellon, 2017–
SEAN ZEIGLER, Lecturer – Ph.D., Duke University; Carnegie Mellon, 2019–