

BCSA General Education

Carrie Hagan, BXA First-Year & Sophomore Advisor (HOA 211)

M. Stephanie Murray, BXA Junior & Senior Advisor (HOA 211)

BCSA General Education

(15 courses, 122 units minimum)

- Writing (1 course, 9 units, 76-101 required)
- Mathematics (2 courses, 20 units minimum, 21-122 and either 21-259, 21-266 or 21-241 required), Probability (1 course, 9 units minimum)
- Science & Engineering (2 courses, 18 units minimum)
- Economic, Political, & Social Institutions OR Cognition, Choice & Behavior (1 course, 9 units minimum)
- Two additional courses from Dietrich or CFA (2 course, 18 units minimum)
- University Requirement (1 course, 3 units, 99-101 required)
- BXA Required Courses (5 courses, 36 units, 52-190, 52-291, 52-392, 52-401, 52-402)

Writing (1 course, 9 units)

Broadly considered, language is a tool used to communicate, as well as a way to organize non-visual and non-mathematical thinking. This requirement focuses on the social nature of language and the ways in which writing constitutes thinking.

	Units
76-101 Interpretation and Argument -First-year	9
or 76-102 Advanced First Year Writing: Special Topics	
or 76-106 Writing about Literature, Art and Culture	
& 76-107 and Writing about Data	
& 76-108 and Writing about Public Problems	

All undergraduate students must complete the First-Year Writing requirement—the Department of English does not accept any Advanced Placement exemptions. This requirement can be completed in two different ways. Enroll in one of two full-semester courses 101 or 102 (by invitation only), 9 units, or enroll in two of three half-semester mini courses (back-to-back within a single semester) 106/107/108, 4.5 + 4.5 units.

Mathematics & Probability (3 courses, 29 units minimum)

Choose two mathematics courses (20 units minimum):

21-122 Integration and Approximation	10
21-259 Calculus in Three Dimensions	10
or 21-266 Vector Calculus using Matrix Algebra	
or 21-241 Matrices and Linear Transformations	

Choose one probability course(s) (9 units minimum):

15-259 Probability and Computing	12
21-325 Probability	9
36-218 Probability Theory for Computer Scientists	9
36-225 Introduction to Probability Theory	18
& 36-226 and Introduction to Statistical Inference	
36-235 Probability and Statistical Inference I	18
& 36-236 and Probability and Statistical Inference II	

Science & Engineering (2 courses, 18 units minimum)

Choose two science courses from differing departments or one science and one engineering course from the following CIT and MCS departments:

03-xxx Biology	
42-xxx Biomedical Engineering	
06-xxx Chemical Engineering	
09-xxx Chemistry	
12-xxx Civil and Environmental Engineering	
18-xxx Electrical and Computer Engineering	
27-xxx Materials Science and Engineering	
24-xxx Mechanical Engineering	
33-xxx Physics	

The School of Computer Science maintains a separate up-to-date list of approved science and engineering courses (<http://coursecatalog.web.cmu.edu/schools-colleges/schoolofcomputerscience/general-education/#text>), including deletions and additions.

Economic, Political & Social Institutions OR Cognition, Choice & Behavior (1 course from either category, 9 units minimum)

Economic, Political & Social Institutions

This requirement explores the processes by which institutions organize individual preferences and actions into collective outcomes.

19-101 Introduction to Engineering and Public Policy	12
36-303 Sampling, Survey and Society	9
66-221 Topics of Law: Introduction to Intellectual Property Law	9
70-332 Business, Society and Ethics	9
70-364 Business Law	9
73-102 Principles of Microeconomics	9
or 73-104 Principles of Microeconomics Accelerated	
73-103 Principles of Macroeconomics	9
73-230 Intermediate Microeconomics	9
73-240 Intermediate Macroeconomics	9
73-369 Islamic Economics	9
76-425 Rhetoric, Science, and the Public Sphere *	9
79-101 Making History: How to Think About the Past (and Present)	9
79-155 Introduction to African American Studies	9
79-160 Introduction to the History of Science	9
79-189 Democracy and History: Thinking Beyond the Self	9
79-212 Jim Crow America	9
79-237 Comparative Slavery	9
79-246 War, Genocide, and Gender in Modern Europe	9
79-248 U.S. Constitution & the Presidency	9
79-253 Imperialism and Decolonization in South Asia	9
79-255 Modern Ireland: Politics and Culture from the Famine (1847) to Today	9
79-270 Anti-Semitism Then and Now: Perspectives from the Middle Ages to the Present	9
79-275 Introduction to Global Studies	9
79-300 History of U.S. Immigration Policy	9
79-304 History of Eugenics and Scientific Racism	9
79-315 The Politics of Water in Global Perspective	9
79-320 Women, Politics, and Protest	9
79-321 Documenting Human Rights	9
79-330 Medicine and Society: Health, Healers, and Hospitals	9
79-331 Body Politics: Women and Health in America	9
79-370 Technology in the United States	9
79-380 Hostile Environments: The Politics of Pollution in Global Perspective	9
79-383 The History of Capitalism	9
79-391 Nations and Nationalisms in South Asia	9
79-392 Europe and the Islamic World	9
80-135 Introduction to Political Philosophy	9
80-136 Social Structure, Public Policy & Ethics	9
80-244 Environmental Ethics	9
80-245 Medical Ethics	9
80-324 Philosophy of Economics	9
80-334/335 Social and Political Philosophy	9
80-348 Health, Human Rights, and International Development	9
84-104 Decision Processes in American Political Institutions	9
84-110 The Economics of Politics and Technology	9
84-226 International Relations	9
84-275 Comparative Politics	9

84-306	Latin American Politics	9
84-309	American Political Divides and Great Debates	9
84-322	Nonviolent Conflict and Revolution	9
84-324	The Future of Democracy	9
84-325	Contemporary American Foreign Policy	9
84-352	Representation and Voting Rights	9
84-362	Diplomacy and Statecraft	9
84-365	The Politics of Fake News and Misinformation	9
84-380	US Grand Strategy	9
84-386	The Privatization of Force	9
84-387	Remote Systems and the Cyber Domain in Conflict	9
84-389	Terrorism and Insurgency	9
84-390	Social Media, Technology, and Conflict	9
84-393	The US Congress: Legislative Progress or Paralysis?	9
84-402	Judicial Politics and Behavior	9
84-405	The Future of Warfare	9
88-234	Negotiation: International Focus	9
88-255	Strategic Decision Making	9
88-281	Topics in Law: 1st Amendment	9
88-284	Topics of Law: The Bill of Rights	9

Cognition, Choice, and Behavior

This requirement explores the process of thinking, decision making, and behavior in the context of the individual.

70-311	Organizational Behavior	9
70-318	Managing Effective Work Teams	9
70-385	Consumer Behavior	9
80-101	Dangerous Ideas in Science and Society	9
80-130	Introduction to Ethics	9
80-150	Nature of Reason	9
80-180	Introduction to Linguistics	9
80-221	Philosophy of Social Science	9
80-252	Kant	9
80-270	Problems of Mind and Body: Meaning and Doing	9
80-271	Mind and Body: The Objective and the Subjective	9
80-275	Metaphysics	9
80-330	Ethical Theory	9
85-100	Introduction to Psychology	9
85-106	Animal Minds	9
85-107	The Psychology of Video Games	9
85-110	Cognitive Psychology	9
85-130	Developmental Psychology	9
85-150	Social Psychology	9
85-190	Psychopathology	9
85-213	Human Information Processing and Artificial Intelligence	9
85-251	Personality	9
85-413	Perception	9
85-421	Language and Thought	9
88-120	Reason, Passion and Cognition	9
88-230	Human Intelligence and Human Stupidity	9
88-231	Thinking in Person vs. Thinking Online	9

Additional Dietrich College Courses (2 courses, 18 units minimum)

Complete two non-technical courses. Consult with your BXA advisor to determine the best courses to fulfill this requirement.

University Requirement (1 course, 3 units)

This foundational pass/no pass course is to be completed online in the first semester to develop core competency skills.

99-101	Core@CMU -Fall, First-year (section B; pass/no pass)	3
--------	--	---

BXA Required Courses (5 courses, 36 units)

BXA-specific courses give students the opportunity to integrate their areas of concentration by focusing on interdisciplinary approaches and arts-based research techniques.

52-190	BXA Seminar I: Building the Wunderkammer - Spring, First-year (mini-3)	4.5
52-291	BXA Seminar II: Transferring Knowledge -Spring, Sophomore year (mini-4)	4.5
52-392	BXA Seminar III: Deconstructing Disciplines - Spring, Junior year	9
52-401	BXA Seminar IV: Capstone Project Research -Fall, Senior year	9
52-402	BXA Seminar V: Capstone Project Production - Spring Senior year	9