BCSA General Education (Gen Ed) Requirements

The BCSA General Education is a distinctive core curriculum that provides a foundation in humanities, social sciences, natural sciences, and mathematics. In addition, students are required to fulfill BXA-specific courses.

BCSA General Education Requirements (15 courses, 121 units minimum)

1. Writing (1 course, 9 units, 76-101 required)
2. Cultural Analysis (1 course, 9 units minimum)
3. Mathematics (2 courses, 19 units minimum, 21-120 and either 21-122 or 21-241 required), Probability (1 course, 9 units minimum required)
4. Science (2 courses, 18 units minimum)
5. Engineering (In consultation with your academic advisor, an engineering course could substitute for one of the two Science requirements)
6. Economic, Political, and Social Institutions or Cognition, Choice and Behavior (1 course, 9 units minimum)
7. One additional course from one of the following departments: English, History, Modern Languages, Philosophy, or Psychology (1 courses, 9 units minimum)
8. University Requirement (1 course, 3 units, 99-101 or 99-102 required)
9. BXA Required Courses (5 courses, 36 units minimum, 52-190 or 52-291, 52-391, 52-392, 52-401, 52-402)

1. 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.

   76-101 Interpretation and Argument (various topics by section) 9
   http://www.cmu.edu/dietrich/english/first_year/index.html

2. Cultural Analysis (1 course, complete 9 units minimum)
   This category explores definitions of culture and the role culture plays in producing different actions and institutions as well as the roles of institutions, systems and human actions in shaping cultural contexts. Listed below are examples of courses that meet the requirement for this category.

   57-173 Survey of Western Music History * 9
   70-342 Managing Across Cultures * 9
   76-227 Comedy 9
   76-232 Introduction to African American Literature * 9
   76-239 Introduction to Film Studies * 9
   76-241 Introduction to Gender Studies * 9
   79-104 Global Histories 9
   79-207 Development of European Culture 9
   79-222 Between Revolutions: The Development of Modern Latin America 9
   79-226 African History: Earliest Times to 1780 9
   79-230 Arab-Israeli Conflict and Peace Process since 1948 9
   79-240 The Development of American Culture 9
Continued required courses for Cultural Analysis

- 79-241 African American History: Africa to the Civil War 9
- 79-242 African American History: Reconstruction to the Present 9
- 79-255 Irish History 6
- 79-262 Modern China 9
- 79-282 Europe and the World since 1800 9
- 79-345 The Roots of Rock and Roll 9
- 79-350 Early Christianity 9
- 79-395 The Arts in Pittsburgh 9
- 79-396 Music and Society in 19th and 20th Century Europe and the U.S. 9
- 80-100 Introduction to Philosophy 9
- 80-250 Ancient Philosophy 9
- 80-251 Modern Philosophy 9
- 80-253 Continental Philosophy 9
- 80-254 Analytical Philosophy 9
- 80-255 Pragmatism 9
- 80-261 Empiricism and Rationalism 9
- 80-276 Philosophy of Religion 9
- 82-273 Introduction to Japanese Language and Culture 9
- 82-293 Introduction to Russian Culture 9
- 82-303 Introduction to French Culture * 9
- 82-304 The Francophone World * 9
- 82-333 Introduction to Chinese Language and Culture * Var.
- 82-342 Spain: Language and Culture * 9
- 82-343 Latin America: Language and Culture * 9
- 82-344 U.S. Latinos: Language and Culture * 9
- 82-345 Introduction to Hispanic Literary and Cultural Studies * 9

* Indicates co-requisites and/or prerequisites required.

3. Mathematics & Probability (3 courses, 29 units minimum)
Choose two mathematics courses (20 units minimum):

- 21-120 Differential and Integral Calculus 10
- 21-122 Integration and Approximation 10
- or 21-241 Matrices and Linear Transformations 10

Choose one probability course (9 units minimum):

- 15-359 Probability and Computing 12
- 21-325 Probability 9
- 36-217 Probability Theory and Random Processes 9
- 36-225 Introduction to Probability Theory 9
4. **Science (2 courses, 18 units minimum)**
Choose two courses from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>03-121</td>
<td>Modern Biology</td>
<td>9</td>
</tr>
<tr>
<td>09-105</td>
<td>Introduction to Modern Chemistry I</td>
<td>10</td>
</tr>
<tr>
<td>21-259</td>
<td>Calculus in Three Dimensions</td>
<td>9</td>
</tr>
<tr>
<td>33-111</td>
<td>Physics I for Science Students</td>
<td>12</td>
</tr>
</tbody>
</table>

5. **Engineering**
In consultation with your academic advisor, an engineering course could substitute for one of the two Science requirements.

6. **Economic, Political and Social Institutions or Cognition, Choice, and Behavior (1 course from either category, complete 9 units minimum)**

**Economic, Political and Social Institutions**
This category examines the ways in which institutions organize individual preferences and actions into collective outcomes using model-based reasoning.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-101</td>
<td>Introduction to Engineering and Public Policy *</td>
<td>12</td>
</tr>
<tr>
<td>36-303</td>
<td>Sampling, Survey and Society *</td>
<td>9</td>
</tr>
<tr>
<td>70-332</td>
<td>Business, Society and Ethics *</td>
<td>9</td>
</tr>
<tr>
<td>73-100</td>
<td>Principles of Economics</td>
<td>9</td>
</tr>
<tr>
<td>73-230</td>
<td>Intermediate Microeconomics *</td>
<td>9</td>
</tr>
<tr>
<td>73-240</td>
<td>Intermediate Macroeconomics *</td>
<td>9</td>
</tr>
<tr>
<td>73-300</td>
<td>History of American Public Policy</td>
<td>9</td>
</tr>
<tr>
<td>79-320</td>
<td>Women, Politics, and Protest</td>
<td>9</td>
</tr>
<tr>
<td>79-331</td>
<td>Body Politics: Women and Health in America</td>
<td>9</td>
</tr>
<tr>
<td>80-135</td>
<td>Introduction to Political Philosophy</td>
<td>9</td>
</tr>
<tr>
<td>80-136</td>
<td>Social Structure, Public Policy &amp; Ethics</td>
<td>9</td>
</tr>
<tr>
<td>80-244</td>
<td>Environmental Ethics</td>
<td>9</td>
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<tr>
<td>80-245</td>
<td>Medical Ethics</td>
<td>9</td>
</tr>
<tr>
<td>80-341</td>
<td>Computers, Society and Ethics</td>
<td>9</td>
</tr>
<tr>
<td>88-104</td>
<td>Decision Processes in American Political Institutions</td>
<td>9</td>
</tr>
<tr>
<td>88-220</td>
<td>Policy Analysis I</td>
<td>9</td>
</tr>
</tbody>
</table>

* Indicates co-requisites and/or prerequisites required.
Cognition, Choice, and Behavior
This category uses model-based analysis to broaden an understanding of human thinking, choices, and behavior on an individual basis across a variety of settings.

70-311  Organizational Behavior *  9
80-130  Introduction to Ethics  9
80-150  Nature of Reason  9
80-180  Nature of Language  9
80-221  Philosophy of Social Science  9
80-230  Ethical Theory  9
80-241  Ethical Judgments in Professional Life  9
80-270  Philosophy of Mind  9
80-271  Philosophy and Psychology  9
80-275  Metaphysics  9
80-281  Language and Thought  9
85-102  Introduction to Psychology  9
85-211  Cognitive Psychology  9
85-221  Principles of Child Development  9
85-241  Social Psychology  9
85-251  Personality  9
85-261  Abnormal Psychology  9
88-120  Reason, Passion and Cognition  9
88-260  Organizations  9

* Indicates co-requisites and/or prerequisites required.

7. Complete ONE additional course from one of the following departments (1 course, complete 9 units minimum)
   - English
   - History
   - Modern Languages
   - Philosophy
   - Psychology

8. University Requirement (1 course, 3 units)
   This is a mini-course, pass/no pass, to be completed in the first semester.
   99-101/102  Computing @ Carnegie Mellon  3

9. BXA Required Courses (5 course, 36 units minimum)
   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  9
   52-291  BXA Seminar II: Transferring Knowledge  9
   52-391  BXA Junior Portfolio  0
   52-392  BXA Seminar III: Deconstructing Disciplines  9
   52-401  BXA Seminar IV: Capstone Fall  9
   52-402  BXA Seminar V: Capstone Spring  9