What is Pathways? Pathways is the general education curriculum at Virginia Tech. As a central component of the undergraduate experience, the Pathways curriculum will allow you to examine the world from multiple perspectives and integrate your knowledge across various disciplines. Along with the coursework required for your major, you will complete credits from nine Pathways concepts (seven core concepts and two integrative concepts).

Core Concepts
You will complete credits from each of the seven Pathways core concepts.

1. Discourse
   Foundational (1f) + Advanced (1a)

2. Critical Thinking in the Humanities

3. Reasoning in the Social Sciences

4. Reasoning in the Natural Sciences

5. Quantitative and Computational Thinking
   Foundational (5f) + Advanced (5a)

6. Critique and Practice in Design and the Arts
   Design (6d) + Arts (6a)

7. Critical Analysis of Identity and Equity in the United States

Integrative Concepts
Each Pathways course also meets at least one integrative concept, ensuring that you complete your general education with competency in both ethical reasoning and intercultural and global awareness.

Ethical Reasoning
Intercultural and Global Awareness

How do you fulfill your Pathways requirements?
There are a number of options for satisfying your Pathways requirements. You may have already fulfilled credits through high school AP/IB courses or transfer credits. Some of the required coursework for your major will likely also fulfill Pathways credits. For the remainder, you may choose individual courses or complete a compatible Pathways minor (see the following pages).

Visit the Pathways website to search for classes by concept or to view an alphabetical list of Pathways courses: https://www.pathways.prov.vt.edu/about/pathways-guides.html.
Which general education requirements are satisfied by your major?

- Discourse (1f & 1a*)
- Reasoning in the Natural Sciences (4)
- Quantitative and Computational Thinking (5f & 5a)
- Critique and Practice in Design (6d)

But what about your other requirements?

- Critical Thinking in the Humanities (2)
- Reasoning in the Social Sciences (3)
- Critique and Practice in the Arts (6a)
- Critical Analysis of Identity & Equity in the US (7)

* Not all engineering majors fulfill Advanced Discourse (1a). Consult your checksheet to determine if you need to fulfill 1a outside of your major.

A Pathways minor can help you fulfill the requirements that are not met within your major!

Use the table below to find which minors best complement your gen ed needs. On the following pages, you can find specific examples of how an engineering major and Pathways minor can work together to fulfill your requirements. Have specific questions about meeting your requirements? Reach out to your advisor!

You can explore each of these minors in more detail at https://www.pathways.prov.vt.edu/minors.html.
Pathways Requirements
Pathways requires you to complete credit hours across seven concepts. If you're an engineering major, you will fulfill concepts 1, 4, 5, and 6 (design) in your program. The courses that satisfy Pathways requirements are listed inside orange lines in the diagram below.

PPE Minor Requirements
The Philosophy, Politics, and Economics minor includes 9 hours of Core Area Electives, a required 3-hour Gateway Course, one 3-hour Applied Area Elective, and a 3-hour required Capstone Course, for a total of 18 credit hours. Together, these four categories offer numerous possible combinations for completing Pathways concepts 2, 3, and 7.

For more information on the PPE Pathways minor, please visit: https://www.pathways.prov.vt.edu/minors/showcase/ppe.html.
Pathways Requirements
Pathways requires you to complete credit hours across seven concepts. If you're an engineering major, you will fulfill concepts 1, 4, 5, and 6 (design) in your program. The courses that satisfy Pathways requirements are listed inside orange lines in the diagram below.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Discourse</th>
<th>Critical Thinking in the Humanities</th>
<th>Reasoning in the Social Sciences</th>
<th>Reasoning in the Natural Sciences</th>
<th>Quantitative &amp; Computational Thinking</th>
<th>Critique &amp; Practice in Design &amp; the Arts</th>
<th>Critical Analysis of Identity &amp; Equity in the US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundational</td>
<td>ENGL 1105</td>
<td>ART 1104</td>
<td>SOC 1004</td>
<td>CHEM 1035/1045</td>
<td>MATH 2214 (or CS 3114 for CS)</td>
<td>ART 1004</td>
<td>SOC 1004</td>
</tr>
<tr>
<td>Advanced</td>
<td>ENGL 1106</td>
<td>ART 2385</td>
<td>ART 3174</td>
<td>PHYS 2305</td>
<td>MATH 2225</td>
<td>ART 4104</td>
<td>ART 4104</td>
</tr>
</tbody>
</table>

VAS Minor Requirements
The Visual Arts and Society minor includes 9 hours of required introductory courses, 6 credits of electives, and a 3-hour required Capstone Course, for a total of 18 credit hours. Together, these required and elective courses offer numerous possible combinations for completing Pathways concepts 1a, 2, 3, 6a and 7. The diagram to the left illustrates just one possible path for completing the minor and fulfilling your Pathways requirements.

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Courses</td>
<td>9</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Capstone Course</td>
<td>3</td>
</tr>
</tbody>
</table>

For more information on the VAS Pathways minor, please visit: [https://www.pathways.prov.vt.edu/minors/showcase/vas.html](https://www.pathways.prov.vt.edu/minors/showcase/vas.html).
Pathways Requirements

Pathways requires you to complete credit hours across seven concepts. If you're an MINE major, you will fulfill concepts 1, 4, 5, and 6 (design) in your program. The courses that satisfy Pathways requirements are listed inside orange lines in the diagram below.

This diagram illustrates how the Appalachian Cultures and Environments Pathways minor can help fulfill the general education requirements that are not met within your engineering major.

APCE Minor Requirements

The Appalachian Cultures and Environments minor includes a required 3-credit introductory course, 12 credits of electives (four courses from five areas), and a 3-hour required Capstone Course, for a total of 18 credit hours. Together, these required and elective courses offer numerous possible combinations for completing Pathways concepts 2, 3, 6a and 7. The diagram to the left illustrates just one possible path for completing the minor and fulfilling your Pathways requirements.

For more information on the APCE Pathways minor, please visit: https://www.pathways.prov.vt.edu/minors/showcase/apce.html.