

College of Engineering Undergraduate Graduation Requirements (Checksheets)

Major Checksheets are approved two years prior to their effective graduation date. Until new checksheets are released, please use the below version for your intended major. You are also encouraged to utilize the "[Explore Engineering](#)" tool to aid in the major and career exploration process.

Aerospace Engineering	Students admitted to VT in Summer II or Fall 2018 as a First-Year General Engineering student will enroll in Pathways to General Education courses NOT CLE....see next pages for details !	2020
Biological Systems Engineering		2020
Chemical Engineering		2020
Civil Engineering		2020
Computer Engineering		2020
Computer Science		2020
Construction Engineering and Management		2019
Electrical Engineering		2020
Engineering Science and Mechanics (Biomechanics Option, Engineering Physics Option)		2020
Industrial and Systems Engineering		2020
Materials Science and Engineering (Nuclear Materials Option)		2020
Mechanical Engineering (Degree Path Sheet)		2020
Mining Engineering		2020
Ocean Engineering		2020

Attention: First-Year General Engineering Students admitted in Summer II or Fall 2018 !

Take Pathways to General Education (NOT) Curriculum for Liberal Education!

- First-Year General Engineering student will no longer take Curriculum for Liberal Education courses, rather they will enroll in the **Pathways to General Education Courses**.
- You can search for Pathways to General Education courses by completing the following: Go to Hokie Spa (www.hokiespa.vt.edu), click Hokie Spa, Registration (Add/Drop) and Schedule, Drop/Add Register for Classes, Select Term, Continue, Click Advanced Search, CLE Area / Pathway, Search for Pathways by number (i.e. Pathways 2, 3, 6a, or 7).
- If you are unsure if a course counts in the Pathways to General Education you can use the approved Pathways to General Education database at: <https://www.apps.provost.vt.edu/pathways/table.html>

Engineering Pathways to General Education

Pathway 1	<p>Discourse</p> <p><u>Foundational:</u> Fulfilled with ENGL 1105-1106</p> <p><u>Advanced:</u> Major Choice</p>	9 credits
Pathway 2	<p>Critical Thinking in the Humanities</p> <p><u>All Majors:</u> Student's Choice</p>	6 credits
Pathway 3	<p>Reasoning in the Social Sciences</p> <p><u>AE, MSE, OE:</u> require ECON 2005</p> <p><u>CEM:</u> requires ECON 2005-2006</p> <p><u>All other majors:</u> Student's Choice</p>	6 credits
Pathway 4	<p>Reasoning in the Natural Sciences</p> <p>Fulfilled with CHEM 1035/1045 and PHYS 2305</p>	8 credits
Pathway 5	<p>Quantitative and Computational Thinking</p> <p><u>Foundational:</u> Fulfilled with MATH 1225-1226</p> <p><u>Advanced:</u> Fulfilled with MATH 2214 (this is still pending for CS)</p>	9 credits
Pathway 6	<p>Critique and Practice in Design and the Arts</p> <p><u>Arts:</u> Student's Choice</p> <p><u>Design:</u> Fulfilled with ENGE 1215-1216</p>	6 credits
Pathway 7	<p>Critical Analysis of Identity and Equity in the United States</p> <p><u>All Majors:</u> Student's Choice</p>	3 credits