Resolution 2021-22F
Resolution to Modify the Pathways to General Education
Concept 5 – Quantitative and Computational Thinking Requirements

Recommended by the Commission on Undergraduate Studies and Policies
First Reading: January 24, 2022
Faculty Senate:
Staff Senate:
Graduate and Professional Student Senate:
Undergraduate Student Senate:
Second Reading: 
Approved by University Council:
Approved by the President:

Effective: 2022-2023 Undergraduate Course Catalog and Academic Policies

WHEREAS, creating the categories of “Foundational” and “Advanced/Applied” for Pathways to General Education Concept 5 – Quantitative and Computational Thinking allows for increased rigor in general education requirements and there is value in students having at least one unit of Advanced/Applied Concept 5; and

WHEREAS, currently students must fulfill Pathways to General Education Concept 5 – Quantitative and Computational Thinking requirements by completing two Foundational and one Advanced/Applied courses; and

WHEREAS, many degree programs require extensive coursework in the area of Quantitative and Computational Thinking, allowing students to fulfill Pathways to General Education Concept 5 with one Foundational and two Advanced/Applied courses that would facilitate progress toward degree for many students and create opportunities for expanding coursework accepted for this Pathways to General Education Concept; and

WHEREAS, modifying the Pathways to General Education Concept 5 – Quantitative and Computational Thinking requirement to add the option for one Foundational and two Advanced/Applied courses would increase the rigor of some students’ Pathways to General Education courses; and

WHEREAS, the university is expecting to increase transfer enrollment in the next 4 years, this modification would create increased flexibility for transfer students and students entering Virginia Tech with dual enrollment credits; and

WHEREAS, the proposed modification would increase opportunities for flexibility and rigor within degree programs;
THERFORE, BE IT RESOLVED, that completing:

Two courses for Concept 5 – Quantitative and Computational Thinking, Foundational, and
One course for Concept 5 – Quantitative and Computational Thinking, Advanced/Applied
(Current requirement)

is equivalent to completing

Two courses for Concept 5 – Quantitative and Computational Thinking, Advanced/Applied, and
One course for Concept 5 – Quantitative and Computational Thinking, Foundational
(Modified requirement); and

THerefore, Be It Further Resolved, that the following language will be added to the 2022-
2023 Undergraduate Course Catalog and Academic Policies, Pathways to General Education, Core
Concept 5 – Quantitative and Computational Thinking requirements:

“Credit Hours: 9 credits – 6 Foundational + 3 Advanced/Applied, or 3 Foundational + 6
Advanced/Applied”

And that the Office of the University Registrar in coordination with the Office of General Education will
develop a plan to communicate this modification to Pathways to General Education, Core Concept 5 –
Quantitative and Computational Thinking, requirement to the university community.