THE GOVERNOR'S SCHOOL for SCIENCE AND TECHNOLOGY

Program Model 2024-2025 SY

ENGINEERING STRAND		Prerequisites: Biology, Chemistry, and Math minimum of Precalculus		
Grade	**Science**	**Research**	**Math**	**Credits**
11	**University Physics I: Calculus-based** 2 HS Science VPCC - PHY 241, 4 credits	**Research Methodology & Ethics** 1 HS Elective VPCC: MTH 245 3 credits	**Calculus** 1 HS Math VPCC - MTH 263 4 credits VPCC - MTH 264, 4 credits	4 HS credits VPCC 15 credits
			Multivariable & Linear Algebra 1 HS Math VPCC - MTH 265, 4 credits VPCC - MTH 266, 3 credits	4 HS credits VPCC 14 credits
12	**University Physics II: Calculus-based** 2 HS Science VPCC - PHY 242, 4 credits	**Honors Research & Mentorship** 2 HS Electives VPCC: NAS 206, 3 credits	**Calculus** 1 HS Math VPCC - MTH 263, 4 credits VPCC - MTH 264, 4 credits	5 HS credits VPCC 15 credits
			Differential Equations 1 HS Math VPCC - MTH 267, 3 credits	5 HS credits VPCC 10 credits
			Multivariable & Linear Algebra 1 HS Math VPCC - MTH 265, 4 credits VPCC - MTH 266, 3 credits	5 HS credits VPCC 14 credits

BIOLOGICAL SCIENCE STRAND		Prerequisites: Biology, Chemistry, and Math minimum of Algebra II / Trig		
Grade	**Science**	**Research**	**Math**	**Credits**
11	**University Physics 1: Calculus-based** 2 HS Science VPCC: PHY 241, 4 credits OR **General College Physics 1: Algebra-based** 2 HS Science VPCC: PHY 201, 4 credits VPCC: PHY 202, 4 credits	**Research Methodology & Ethics** 1 HS Elective VPCC: MTH 245 3 credits	**Precalculus** 1 HS Math VPCC - MTH 161, 3 credits VPCC - MTH 162, 3 credits	4 HS credits VPCC 13 credits
			Calculus 1 HS Math VPCC - MTH 263, 4 credits VPCC - MTH 264, 4 credits	4 HS credits VPCC 15 credits
			Multivariable & Linear Algebra 1 HS Math VPCC - MTH 265, 4 credits VPCC - MTH 266, 3 credits	4 HS credits VPCC 14 credits
12	**Advanced Biological Analysis** 2 HS Science VPCC: BIO 101, 4 credits VPCC: BIO 102, 4 credits	**Honors Research & Mentorship** 2 HS Electives VPCC: NAS 206, 3 credits	**Calculus** 1 HS Math VPCC - MTH 263, 4 credits VPCC - MTH 264, 4 credits	5 HS credits VPCC 19 credits
			Differential Equations 1 HS Math VPCC - MTH 267, 3 credits	5 HS credits VPCC 14 credits
			Multivariable & Linear Algebra 1 HS Math VPCC - MTH 265, 4 credits VPCC - MTH 266, 3 credits	5 HS credits VPCC 18 credits

COMPUTATIONAL SCIENCE STRAND		Prerequisites: Biology, Chemistry, and Math minimum of Algebra II / Trig		
Grade	**Science**	**Research**	**Math**	**Credits**
11	**Computational Physics:** Algebra-based physics 2 HS Science VPCC: PHY 201, 4 credits VPCC: PHY 202, 4 credits	**Research Methodology & Ethics** 1 HS Elective VPCC: MTH 245 3 credits	**Precalculus** 1 HS Math VPCC - MTH 161, 3 credits VPCC - MTH 162, 3 credits	4 HS credits VPCC 17 credits
			Calculus 1 HS Math VPCC - MTH 263, 4 credits VPCC - MTH 264, 4 credits	4 HS credits VPCC 19 credits
			Multivariable & Linear Algebra 1 HS Math VPCC - MTH 265, 4 credits VPCC - MTH 266, 3 credits	4 HS credits VPCC 18 credits
12	**Computational Computer Programming** 2 HS Science VPCC: CSC 221, 222, 223, 9 credits	**Honors Research & Mentorship** 2 HS Electives VPCC: NAS 206, 3 credits	**Calculus** 1 HS Math VPCC - MTH 263, 4 credits VPCC - MTH 264, 4 credits	5 HS credits VPCC 20 credits
			Differential Equations 1 HS Math VPCC - MTH 267, 3 credits	5 HS credits VPCC 15 credits
			Multivariable & Linear Algebra 1 HS Math VPCC - MTH 265, 4 credits VPCC - MTH 266, 3 credits	5 HS credits VPCC 19 credits

IMPORTANT INFORMATION:

It is imperative that all students meet with their high school counselor to ensure that the requirements for the Advanced Diploma are met.

Dual enrollment credits and fees, determined by VCCS and VPCC, are not guaranteed and may change throughout the school year.