

Governor's STEM and Technology Academy at Landstown High School



Rachel White, Coordinator

The Landstown Governor's STEM and Technology Academy features a curriculum designed for students with a keen interest in and talent for technology. Students attending these programs take rigorous programs of study in the core academic areas and technology elective courses from two major career strands: STEM engineering technology and information technology. Students select one strand which to focus their academic studies completing a comprehensive pathway that will prepare them for the appropriate associated industry certification(s). Students may select to dual strand, maximizing their academic experience and skills learned. Analytical problem-solving approaches to real-world situations are emphasized in classroom instruction, as well as hands-on applications in a 21st century learning environment.

Technology Academy Sample Program of Study

Core Courses

Grade 9	Grade 10	Grade 11	Grade 12
Academy Honors English 9	Academy Honors English 10	Academy Honors English 11 or	Academy Honors English 12 or
Math	Math	*AP English 11	*AP English 12
Earth Science or Biology	Biology or Oceanography or Chemistry	Math	Math
World History I or	World History II or World Geography or	Oceanography or Chemistry or Physics	Physics or Chemistry or *AP Science
*AP Human Geography	*AP European History	VA and U.S. History or *AP level	VA and U.S. Government or *AP level
Health/Physical Education 9	Health/Physical Education 10	**Economics and Personal Finance	

Grade 9

Required Academy Elective Course Academic Support Block

Grade 10

Required Academy Elective Course

Grade 11

Required Academy Elective Course

Grade 12

Required Academy Elective Course

Governor's Stem Academy Program of Study

Core Courses

Grade 9	Grade 10	Grade 11	Grade 12
Academy Honors English 9	Academy Honors English 10	*AP English 11	*AP English 12 or Dual Enrollment English
		Strand Dependent Discrete Math/ Trig/ Prob. Stats	Strand Dependent Math Analysis/ Pre-Calculus
Geometry Honors	Strand Dependent Algebra II or Algebra II/Trigonometry	Math Analysis/ Pre-Calculus or *AP Statistics or	*AP Calculus A/B or *AP Calculus B/C or
Biology	Chemistry Social Studies:	AP Computer Science Physics	*AP Statistics *AP Science
World History I *AP Human Geography	World Geography or *AP Human Geography or World History II or *AP European History	VA and U.S. History or *AP U.S. History	VA and U.S. Government or AP U.S. Government and Politics
Health/Physical Education 9	Health/Physical Education 10	**Economics and Personal Finance	
World Language Required Academy Elective Course Academic Support Block	World Language Required Academy Elective Course	World Language Required Academy Elective Course	World Language Required Academy Elective Course

*Weighted Credit in addition to the requirements for either the Standard or Advanced Studies Diploma outlined above, students select an academy elective course depending on the concentration strand the student wishes to pursue. **May be taken in 10-12 grade but must be completed prior to graduation.

Students are exposed to a STEM-enriched curricula and afforded multiple opportunities to apply their knowledge and skills through the many projects they complete and competitions in which they participate. Each strand is complemented with a student organization that reinforces leadership skills, collaborative learning, and community service. Additionally, if eligibility requirements are met, students may partake of the National Technical Honor Society.

The Landstown Governor's STEM and Technology Academy combines academic and technical training that prepares students for a variety of post-graduation choices: college/ university studies, advanced technology training, or entry-level jobs. They will be eligible for an Advanced Studies Diploma or a Standard Diploma. Students may also qualify for the Board of Education's Seal of Advanced Mathematics and Technology depending on their course selections. Admission to the program is through application only. Being the program requires 4 years of sequential study, application is only available to current 8th grade middle school students who will be entering their freshman year of high school.

Sample Course of Study

With A/B block scheduling, a student may take as many as eight courses during their sophomore thru senior years. The sequence of courses in areas such as math, science, and world languages is dependent upon the student's coursework prior to entering high school and his or her achievement in courses each year. All students participating in the Governor's STEM Academy must successfully complete the prerequisite courses of Algebra I Honors and Earth Science prior to their freshman year. Keyboarding is a required prerequisite for students pursuing the Information Technology strand, in either Academy program.