

Virginia Board of Education Agenda Item



Agenda Item: E

Date: May 22, 2014

Title	First Review of Proposal to Establish the Hampton City Public Schools Architecture & Applied Arts Governor's STEM Academy		
Presenter	Ms. Lolita B. Hall, Director, Office of Career and Technical Education Services Mr. Jesse W. White, Curriculum Leader for Career and Technical Education		
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Purpose of Presentation:

Other initiative or requirement. Specify below:
Approval of Governor's STEM Academy

Previous Review or Action:

No previous review or action.

Action Requested:

Action will be requested at a future meeting. Specify anticipated date below:
Date: June 26, 2014
Action: Final review

Alignment with Board of Education Goals: Please indicate (X) all that apply:

X	Goal 1: Accountability for Student Learning
	Goal 2: Rigorous Standards to Promote College and Career Readiness
X	Goal 3: Expanded Opportunities to Learn
	Goal 4: Nurturing Young Learners
	Goal 5: Highly Qualified and Effective Educators
	Goal 6: Sound Policies for Student Success
	Goal 7: Safe and Secure Schools
	Other Priority or Initiative. Specify:

Background Information and Statutory Authority:

Goal 1: The Academy must meet rigorous criteria established by the Board of Education. Students progress in academic and technical knowledge and skills; and their employability knowledge and skills are monitored and measured annually to ensure successful transition to college and career.

Goal 3: The Governor's STEM Academy is designed to expand opportunities for the general student population to acquire STEM literacy and other critical skills, knowledge, and credentials that will prepare them for high-demand, high-wage and high-skill careers.

Partnerships establishing academies must include at least one public school division, business and industry, and postsecondary education. On November 29, 2007, the Board of Education approved the

criteria to establish a Governor’s STEM Academy. Subsequently, on March 19, 2008, the Board approved the standards for the Governor’s Career and Technical Education Exemplary Standards Awards Program, which all Career and Technical Academies must implement.

The State Council of Higher Education for Virginia (SCHEV) is currently reviewing the attached proposal. Their report and recommendation is expected by June 2 prior to the second review of the proposal by the Board of Education (Attachment B). Staff members of the Virginia Department of Education (VDOE) have also reviewed the proposal in the context of the established criteria. An executive summary of the proposal is in Attachment A. Attachment C is the report from the review by the VDOE. Attachment D is the complete proposal.

Currently, there are 22 Governor’s STEM Academies in Virginia. They are located in Arlington County, Carroll County, Chesapeake City, Chesterfield County, Fairfax County (two), Halifax County, Hampton City, Harrisonburg City, Loudoun County, Lynchburg City, Montgomery County, New Kent County, Newport News City, Pulaski County, Richmond City, Richmond County, Roanoke County, Russell County, Stafford County, Suffolk City, and Virginia Beach City.

Summary of Important Issues:

The Hampton City Public Schools Architecture and Applied Arts Governor’s Science, Technology, Engineering, and Mathematics Academy at Kecoughtan High School (AAA Governor’s STEM Academy) will provide rigorous academic and technical STEM coursework concentrating in the following three career clusters and pathways:

CAREER CLUSTER	CAREER PATHWAY
Architecture and Construction	Design/Pre-Construction
Science, Technology, Engineering, and Mathematics (STEM)	Engineering and Technology
Arts, A/V Technology and Communications	Visual Arts
Marketing	Merchandising

The AAA Governor’s STEM Academy will be part of regional efforts, receiving students from the four high schools in the City of Hampton, and include the New Horizons Regional Education Center, higher education, and business and industry to assure fidelity to local and regional work force needs. The Academy will have the capacity to enroll 400 students, grades 9-12. During the initial school year (2014-15)100 students will be admitted.

The four career pathways plan of study offered are closely aligned to specific work force needs on the Peninsula as well as regional economic development. A sampling of high growth occupations in the Hampton area is outlined in Table 1, page 4.

Students enrolled in the Design/Pre-Construction Pathway will learn how to turn a concept into a set of plans. Their plans guide other construction professionals as they continue the building process. After high school graduation, these students could continue to postsecondary education at Thomas Nelson Community College (TNCC) and earn an associate degree in Computer Aided Drafting and Design. Through articulation agreements, successful completion of the associate degree would allow the students

to attend Old Dominion University (ODU) and the potential to earn a bachelor's degree.

Students that follow the Engineering and Technology Pathway will develop knowledge and skills and the ability to (1) apply mathematics, sciences and technology concepts to solve problems quantitatively in engineering projects involving design, development or production in various technologies, and (2) recognize the core concepts of technology and their relationships with engineering, science and mathematics, and other content areas. Students can continue this pathway at TNCC to earn an AAS in Mechanical Engineering, and then continue in the same field at ODU to earn a bachelor's degree.

Students that pursue the Visual Arts Pathway will create various art forms to communicate ideas and develop knowledge and skills needed for a career especially in modeling and simulation, technical illustrator, and graphic designer. The need for graphic designers will grow 13 percent and modeling and simulation is growing in multiple career clusters such as Health Sciences, STEM, Transportation, Distribution and Logistics. Additionally, according to Virginia Labor Market Information, arts, design, entertainment, sports, and media careers are projected to grow more than 20 percent.

Students who enter the Merchandising Pathway will learn and apply knowledge and skills in forecasting, buying, displaying, selling and providing customer service. Students may earn an AAS in Management with a focus in Marketing and a Bachelor of Science in Marketing or Management with a specialization in Marketing.

The Academy students' learning experiences and achievement will be enhanced through strong partnerships that include local architects, local graphics and media firms, building contractors, Thomas Nelson Community College, Hampton University, ECPI University, the College of William and Mary, Peninsula Council for Workforce Development. The business partners advise, plan, and serve as subject matter experts that provide current career and industry information for each career pathway plan of study. Additionally, students will have opportunities to participate in job shadowing, mentorships, internships, and enrichment events such as the Professional Engineering Day and High Schools United with NASA Creating Hardware. These programs engage students at high academic levels while working with local and regional employers. Students will participate in problem-based learning activities and use modern design equipment and processes that will include computer-aided design and drafting (CADD), 3-D parametric modeling, rapid prototyping, team-based design, geospatial technologies, art design (both digital and non-digital), and practical business world applications. Each senior in the Academy will be required to complete a Capstone Project.

The AAA Governor's STEM Academy will provide awareness and opportunity for students and will increase the number of well-trained workers in areas that have been designated as high growth on the Peninsula. Offering parallel pathways with multiple post-graduation objectives will help students choose the best path before high school graduation.

Impact on Fiscal and Human Resources:

Funding for implementation must be provided at the local level.

Timetable for Further Review/Action:

The proposed beginning date for the Hampton City Public Schools Governor's Architecture & Applied Arts Governor's STEM Academy is school year 2014-15.

Superintendent's Recommendation:

The Superintendent of Public Instruction recommends that the Board of Education accept for first review the proposal to establish the Hampton City Public Schools Governor's Architecture & Applied Arts Governor's STEM Academy.

**Hampton City Public Schools
Architecture & Applied Arts Governor's STEM Academy**

**Executive Summary
May 5, 2014**

Partnership Members: Hampton City Public Schools, Distinctive Magazine, ECPI College of Technology, Hampton University, New Horizons Regional Education Center, Newport News Shipbuilding, Peninsula Council for Workforce Development, Q-Design, Thomas Nelson Community College, and Walsh Electric.

Lead Entity and Fiscal Agent: Hampton City Public Schools

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Academy Location: Kecoughtan High School

Number Students: The Governor's STEM Academy will have the capacity to enroll 400 students, grades 9 – 12. During the initial school year (2014–2015) 100 students will be admitted.

Career Pathways: Engineering and Technology
Design/Pre-Construction
Merchandising
Visual Arts

Academy Goals and Performance Measures: The goal of the Hampton City Public Schools Governor's STEM Academy is to promote student achievement and interest in STEM-related career fields that prepares students for global competitiveness in high-skill, high-wage, and high-demand STEM careers.

The following program objectives and performance measures have been established by the Planning/Advisory Committee:

- 100 percent of the AAA Governor's STEM Academy graduates will earn at least

nine transferable credits through dual enrollment and/or Advanced Placement courses.

- 100 percent of students completing the AAA Governor’s STEM Academy will enroll in postsecondary programs or obtain employment in Architecture, Art, Engineering, Engineering Technology, Graphic Arts, Marketing or STEM-related careers.
- 100 percent of the AAA Governor’s STEM Academy students will successfully pass advanced mathematics coursework beyond Algebra II.
- 100 percent of the AAA Governor’s STEM Academy students will enroll and successfully complete four years of science courses.
- 100 percent of the AAA Governor’s STEM Academy will earn two or more Virginia Board of Education approved industry credentials.
- Increase the percentage of Governor’s STEM Academy students taking Algebra II by four percent over the next four years.
- Increase the percentage of Governor’s STEM Academy students scoring pass/advanced on mathematics and science end-of-course Standards of Learning tests by four percent over the next four years.
- Increase the number of postsecondary credits earned through dual enrollment, and Advanced Placement courses.
- Provide annually, one hundred percent of the Governor’s STEM Academy students with work-based learning experiences, through strong partnerships with local businesses.
- Decrease the dropout rate and increase the graduation rates from 89.5 percent to 92.9 percent by the year 2018.
- Increase the number of students completing a college and career readiness curriculum in high school by increasing enrollment and completion rates in the AAA Governor’s STEM Academy courses by five percent annually.
- Increase the number of industry certifications awarded to Governor’s STEM Academy students by five percent over the next four years.
- Increase the number of Governor’s STEM Academy graduates employed in high-wage, high-demand, and high-skill careers as determined by the Virginia Employment Commission by five percent over the next four years. The attainment of the measure will be determined by data provided by the Career and Technical Education follow-up survey, Virginia Employment Commission, and Weldon Cooper Center, University of Virginia.

Highlights
of the
Program:

As a result of participating in the Governor’s STEM Academy in the pathways of Engineering and Technology, Design/Pre-Construction, Merchandising and Visual Arts, students will:

- Gain a deeper understanding of the skills and knowledge incorporated in their fields of study;
- Benefit from specialized, project-based courses which develop critical-thinking, problem-solving, and decision-making skills, preparing them for the 21st century world;
- Acquire greater communication skills;
- Develop workplace readiness skills;
- Receive opportunities to earn industry certifications preparing them to be more

competitive in the work force and when applying to postsecondary institutions, or specialized technical training schools;

- Obtain meaningful, real-life, hands-on experiences in their career pathway; and
- Profit from opportunities for internships, mentorships, job shadowing, and cooperative education, which provide students with advantages when entering postsecondary education and/or the workplace.

Attachment B

The State Council of Higher Education for Virginia (SCHEV)

Review of the Architecture & Applied Arts Governor's STEM Academy – Hampton City Public Schools

NOTE: The SCHEV staff is currently reviewing the proposal. Their report and recommendation is expected by June 2 prior to the second review of the proposal by the Board of Education.

**Virginia Department of Education
Governor's STEM Academy
Proposal Review Checklist**

Title of Proposal:

Architecture & Applied Arts Governor's STEM Academy

Lead Entity for Proposal:

Hampton City Public Schools

Date of Review:

April 30, 2014

Virginia Department of Education Governor's STEM Academy Proposal Review Checklist

I. Partnership Capacity

Partnerships desiring to implement a Governor's STEM Academy shall provide the Department of Education with evidence of the following:

Criteria	Documentation			Comments
	Full	Partial	None	
A. An active, ongoing planning committee, including a list of members and signed certifications from each that they are willing and able to serve in that capacity. At a minimum, members must represent K-12 education (superintendent or designee), higher education, and business and industry. All partners must be represented on the committee.	X			
B. An advisory committee, including a list of members and signed certifications from each that they are willing and able to serve in that capacity.		X		
C. A written memorandum of agreement among school divisions, local businesses, postsecondary institutions, and any other partners that outlines ways in which community resources will contribute to the Governor's STEM Academy to broaden the scope of students' educational experiences.	X			
D. A statement of assurances that the Governor's STEM Academy Planning Committee has reviewed provisions of <i>Administrative Procedures Guide for the Establishment of Governor's STEM Academies</i> and agrees to follow the guidelines set forth in the document (see appendix).	X			
E. A statement of assurances that, if applicable, an ongoing Governing			X	

Criteria	Documentation			Comments
	Full	Partial	None	
Board will be established to reflect current Board of Education regulations relative to jointly operated schools and programs (see appendix).				
Comments:				

II. Need/Rationale for the Academy

Partnerships desiring to implement a Governor’s STEM Academy shall provide the Department of Education with evidence of the following:

Criteria	Documentation			Comments
	Full	Partial	None	
A. Demonstration of the need/rationale for the Academy. This statement should be concise and state the major reasons to have a Governor’s STEM Academy, including need at the state, local and/or regional levels.	X			
B. A description of the enhanced or additional offerings in science, technology, engineering, and/or mathematics (STEM) that will meet the need described above.		X		
C. A fiscal agent that is a public entity, including a certification that the entity is willing and able to serve in that capacity.	X			
Comments:				

III. Program Description

Each Governor’s STEM Academy planning committee shall develop cooperatively with local school divisions, business, community, and higher education partners and have available for review and dissemination, a program description that includes:

A. A statement of program goals addressing the following criteria:

Criteria	Documentation			Comments
	Full	Partial	None	
1. Rigorous academic content in career and technical instruction;	X			
2. An emphasis on STEM career pathways;	X			
3. Individualized high school plans to ensure course selections that are aligned with students’ transition and career goals after high school;	X			
4. Evidence that graduates will complete a college and work readiness curriculum, minimally at the level specified for Commonwealth Scholars Course of Study (State Scholars Core) with the possibility of pre-approved substitution of equivalent courses where there may be more relevant course selections for a particular career pathway;	X			
5. Incorporation of Virginia’s Workplace Readiness Skills.	X			
Comments:				

B. A statement of program objectives and performance measures to:

Criteria	Documentation			Comments
	Full	Partial	None	
1. Improve academic achievement of Academy students;	X			
2. Increase completion of dual enrollment courses;	X			
3. Provide workplace readiness experiences for students through strong partnerships with businesses;	X			
4. Increase high school graduation rates;	X			
5. Reduce dropout rates;	X			
6. Increase enrollment and retention in postsecondary education;	X			
7. Increase the proportion of students completing a college and workplace ready curriculum in high school;	X			
8. Reduce the proportion of students requiring remediation in college;	X			
9. Increase the number of industry certifications awarded to high school students; and	X			
10. Increase the number of graduates employed in high-wage, high-demand and high-skill careers.	X			
Comments:				

C. A brief description of the proposed program, including:

Criteria	Documentation			Comments
	Full	Partial	None	
1. Site location;	X			
2. Number of students to be served;	X			
3. Grade levels;	X			
4. General curriculum design;	X			
5. List of courses to be delivered;	X			
6. Description of how/where the courses will be delivered. Courses may be delivered on a high school, technical center or community college campus, online, or in other innovative ways; and	X			
7. Designation of full-day or part-day, academic-year program.	X			
Comments:				

D. Evidence of participation in the Governor's Exemplary Standards Award Program for Career and Technical Education

	Documentation			Comments
	Full	Partial	None	
			X	
Comments:				

E. Program and course descriptions

E.1. At least two well-articulated career pathways must be included that meet the following criteria:

Criteria	Documentation			Comments
	Full	Partial	None	
Pathway #1				
a. Must include opportunities to earn industry credentials, postsecondary certificates, diplomas or associate degrees while in high school and pursue additional industry credentials and academic degrees at the associate, bachelor's and graduate levels. These pathways may be in the same or different career clusters.	X			
b. Must be in a field identified by a statewide authority or organization, such as the Virginia Economic Development Partnership or the Virginia Research and Technology Advisory Commission, as a strategic growth area for Virginia. Examples include biosciences, information technology, automotive technology and motor sports, as well as modeling and simulation and nanotechnology <u>or</u>	X			
c. Must address regional and local work force demand in a high-wage, high-skill field as identified by employers and work force officials.	X			
d. At least one pathway must be in a STEM-related field. This career pathway should drive the innovative capacity of the region and/or state.	X			

Criteria	Documentation			Comments
	Full	Partial	None	
Comments:				

Criteria	Documentation			Comments
	Full	Partial	None	
Pathway #2				
a. Each career pathway must include opportunities to earn industry credentials, postsecondary certificates, diplomas or associate degrees while in high school and pursue additional industry credentials and academic degrees at the associate, bachelor's and graduate levels. These pathways may be in the same or different career clusters.	X			
b. Must be in a field identified by a statewide authority or organization, such as the Virginia Economic Development Partnership or the Virginia Research and Technology Advisory Commission, as a strategic growth area for Virginia. Examples include biosciences, information technology, automotive technology and motor sports, as well as modeling and simulation and nanotechnology, <u>or</u>	X			
c. Must address regional and local work force demand in a high-wage, high-skill field as identified by employers and work force officials.	X			
d. Of the two pathways described, at least one must be in a STEM-related field. This career pathway should drive the innovative capacity of the region and/or the state.	X			

e. Additional career pathways may address one of the areas described above, or an area identified by the partnership as an area of interest, growth, or expansion for students in the service area of the Academy.	X			
Comments:				

E.2 List of all requirements for successful program completion.

	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

E.3 Academy graduates must achieve one or more of the following benchmarks:

Criteria	Documentation			Comments
	Full	Partial	None	
a. Earn one or more industry certifications or state occupational licenses, and/or demonstrate competencies on an assessment instrument recognized by postsecondary institutions such as CLEP examinations, collaboratively designed or mutually approved end-of-course tests, college placement tests, or student portfolios reviewed by a team of college and high school faculty; <u>or</u>	X			
b. Earn at least 9 transferable college credits as defined in the Early College Scholars program (includes dual enrollment, AP and other options); <u>or</u>	X			

Criteria	Documentation			Comments
	Full	Partial	None	
c. Earn an Associate Degree.			X	
Comments:				

E.4 Significant work-based experience must be included representing additional instruction or training beyond the classroom such as:

Criteria	Documentation			Comments
	Full	Partial	None	
a. Cooperative Education; or				
b. Internships; or	X			
c. Job Shadowing; or	X			
d. Mentorships; or				
e. Project-based learning; or				
f. Service learning; or		X		
g. A combination of the above.				
Comments:				

F. Length of program and daily schedule: Governor's STEM Academies are defined by program content, not by the location or delivery system of courses. Evidence of the following must be submitted:

Criteria	Documentation			Comments
	Full	Partial	None	
Designation of full-day or part-day, academic-year program.	X			
Comments:				

G. Assurance from the fiscal agent that operating funds and facilities are available to support the Governor's STEM Academy and are adequate to meet the needs of the program

	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				
.				

H. Materials and equipment to be provided to accomplish program goals and objectives.

	Documentation			Comments
	Full	Partial	None	
			X	
Comments:				
.				

I. Evidence of an internal evaluation process to effect program improvement, including:

Criteria	Documentation			Comments
	Full	Partial	None	
1. A review of the Academy's policies, procedures, and outcomes;	X			
2. A review of the program design and instructional delivery;			X	
3. Consideration of feedback from students, staff, parents, the community, and partnership members; and			X	
4. Annual collection and reporting of data to the Department of Education related to student achievement, goal achievement, and other indicators.			X	
Comments:				

IV. Administrative Procedures

Each Governor's STEM Academy must develop and maintain procedures developed cooperatively with participating partners. There should be evidence of procedures in the four areas that follow.

A. Partnerships - The role of business and industry, public school divisions, and postsecondary institutions in the partnership. The role of work force and economic development entities should also be included if they are among the partners.

	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

B. Student recruitment, selection criteria, and admissions.

	Documentation			Comments
	Full	Partial	None	
		X		
Comments:				

C. Code of student conduct and attendance.

	Documentation			Comments
	Full	Partial	None	
		X		
Comments:				

D. Transportation provided by the school division or consortium that is in compliance with all applicable federal and state regulations.

	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

E. Staff recruitment, selection, and assignment - The Governor's STEM Academy shall hire staff members who meet the Virginia teacher licensure requirements and/or postsecondary faculty qualifications. Where applicable, they must have industry-specific education with training and experience, including industry certification.

	Documentation			Comments
	Full	Partial	None	
			X	
Comments:				

F. Staff development - The program will provide appropriate staff training in addition to staff planning time.

	Documentation			Comments
	Full	Partial	None	
			X	
Comments:				

G. Staff evaluation – Staff will be evaluated according to the human resources policies of the agency or institution employing Academy personnel.

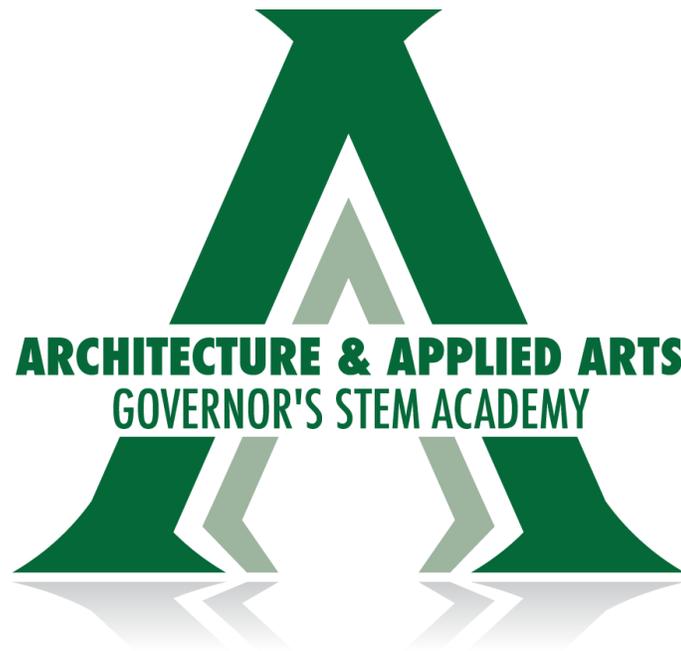
	Documentation			Comments
	Full	Partial	None	
	X			
Comments:				

H. Parent, student and community involvement

Criteria	Documentation			Comments
	Full	Partial	None	
1. Preparation for entering the Academies should begin by eighth grade.	X			
2. Students, parents, teachers, and counselors should work collaboratively to:	X			
a. Complete career interest inventories;				
b. Prepare academic and career plans outlining an intended course of study in high school;	X			
c. Review multiple postsecondary pathways and the steps required to pursue them;	X			
d. Participate in career assessments to identify areas students should strengthen to qualify for their selected pathways; and	X			
e. Discuss available diplomas, seals, and other recognitions including admission to specialized programs such as Governor's Academies.			X	

I. Documentation of insurance, budget, and other fiscal information

	Documentation			Comments
	Full	Partial	None	
Insurance	X			
Budget (from appendix)	X			
Budget Narrative	X			
Other				
Comments:				



AAA Governor's Science,
Technology, Engineering, and
Mathematics (STEM) Proposal



Hampton City Schools – 112
Kecoughtan High School 320
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757-850-5000

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I. Overview and Introduction

Hampton City Public Schools (HCPS) proposes the Architecture and Applied Arts Governor's Science, Technology, Engineering, and Mathematics Academy at Kecoughtan High School (AAA Governor's STEM Academy). The AAA Governor's STEM Academy will increase rigor in a small learning community of students, relate academic subjects to a career focus, and work to meet local and regional employer needs while engaging students in rigorous academic and technical STEM coursework.

Kecoughtan High School began accepting applications for its current Architecture and Applied Arts Academy in March 2013. The AAA Governor's STEM Academy will start in September 2014. The four career clusters and pathways offered are:

- Architecture and Construction: Design/Pre-Construction;
- Science, Technology, Engineering, and Mathematics (STEM): Engineering and Technology;
- Arts, Audio/Video Technology and Communications: Visual Arts; and
- Marketing: Merchandising.

The uniqueness of the AAA Governor's STEM Academy will be the combination of Fine Arts and Career and Technical Education careers options relating to STEM, design, aesthetics, and function. Each career pathway will include Advanced Placement (AP) courses and dual enrollment options.

The AAA Governor's STEM Academy students combine Science, Technology, Engineering and Mathematics with Art concepts and the Engineering design process. The British art critic John Ruskin quoted in *Lectures on Art*, "Life without industry is guilt; industry without art is brutality." It is with this notion the AAA Governor's STEM Academy has been envisioned. As a Governor's STEM Academy, students from all of Hampton's schools will be able to engage in deeper learning and contextual experiences while setting clear career goals in industries of high demand. Students will apply their learning by using hands-on application as well as high-level applications of science and mathematics knowledge in their technology, engineering, and arts curriculum.

II. Partnership Capacity

The AAA Governor's STEM Academy administrators have established formal and informal partnerships with local industries and higher education and their representatives serve on a planning team and advisory committee. The AAA Governor's STEM Academy will draw heavily on these groups, which includes local architects, local graphics and media firms, building contractors, Hampton University, Thomas Nelson Community College (TNCC), Peninsula Council for Workforce Development (PCfWD), and other partners (See Appendix A). Representatives advise, plan, and provide up-to-date career and industry information for each

plan of study. These partners assist in planning classroom experiences, and work based learning experiences for AAA Governor's STEM Academy students. Additionally, events such as Professional Engineering Day and High Schools United with NASA Creating Hardware (HUNCH) will engage students at high academic levels while working with local and regional employers. AAA Governor's STEM Academy students will engage in performance-based learning and use modern design equipment and processes that include computer-aided design and drafting (CADD), 3-D parametric modeling, rapid prototyping, team-based design, geospatial technologies, art design (both digital and non-digital), and practical business world applications. Students will take business and marketing courses to develop and understand how their work adds value to society and the economy (locally and statewide).

Specifically, the students will be able to:

- Work as a contributing and cooperating member and leader of a team;
- Develop entrepreneurial skills;
- Use appropriate verbal, written, and/or visual mediums to communicate project goals and results with a wide variety of audiences;
- Understand the potential impact their ideas and products may have on society;
- Think critically;
- Recognize and solve problems;
- Manage time, resources and projects;
- Research, collect, and analyze data;
- Apply aesthetics, the engineering design process, and the scientific method in collaborative projects;
- Complete a student-selected capstone project/portfolio in the senior year;
- Experience mathematics and science in application and innovation while integrating research, writing, and reporting skills, in an applied design, sciences, and mathematics career environments;
- Describe the career cluster, career pathway, and the secondary and postsecondary preparation required for entry to these careers;
- Create professional portfolios of accomplishments;
- Create a new idea or process in a capstone course; and
- Experience careers through internships, summer events, weekend and evening interactions with employers, and/or mentorships.

Partners will provide subject matter expertise, mentorship, internship, and job shadowing opportunities, and provide guidance and governance. An ongoing Governing Board will be established and selected from the current Planning Committee and Advisory Committee. The AAA Governor's STEM Academy will be part of regional efforts, drawing from the four high schools and eight middle schools in the City of Hampton, and include higher education, the

Regional Technical Center, and business and industry to assure fidelity to local and regional work force needs. The Governor’s STEM Academy Planning Committee will comply with all guidelines set forth in the “Administrative Procedures Guide for the Establishment of Governor’s STEM Academies” (See Appendix B).

III. Need/Rationale for the Academy

The four career pathways and plans of study are tied to specific work force needs on the Peninsula as well as regional economic development. The logic of how Hampton City Public Schools ties the AAA Governor’s STEM Academy pathways to these needs is described below and itemized within the four plans of study.

The Hampton Roads region utilizes architecture and engineering occupations 40 percent more than national norm. The mix of occupations will be changing rapidly over the next 10 years and will likely favor occupations that are education skill and intensive. A sampling of high growth careers in the U. S. related to the AAA Governor’s STEM is summarized below. The table shows the growth and need for applied arts and architectural careers in Hampton.

Table 1: 2012-2022 Occupational Outlook for Related Occupations

Occupation	2012 (thousands)	2022 (thousands)	Percentage Growth
Advertising, Promotions, and Marketing	216	241.4	11.70%
Architects	107.4	126.0	17.30%
Art Directors	74.8	77.0	2.9%
Civil Engineers	272.9	326.6	19.60%
Construction Managers	485.0	563.2	16.10%
Craft and Fine Arts	51.4	52.7	2.50%
Environmental Engineers	53.2	61.3	15.20%
Graphic Designers	279.2	316.5	13.00%
Multimedia Artists and Animators	68.9	73.2	6.00%
Retail Sales Workers	4,668.3	1,118.5	9.6%
Wholesale and Manufacturing Representatives	1,863.0	1,032.3	9.1%

Source: *Bureau of Labor Statistics* www.bls.gov/ooh © January 2014

The Virginia Employment Commission (for the third quarter of 2013 employment) reported that retail trade, construction, information, and arts accounted for almost 20 percent of Hampton’s employment, second only to government. Additionally, the US Census Bureau reported these industries showed the largest growth with the most new hires in 4th quarter 2012. In each of these categories, retail (merchandising) shows the largest projected growth and employment. Retail

also shows the oldest workers, after educational services, with 1,424 workers over age 55, also in 4th quarter 2012. These retiring workers will open space in these industries for entry-level positions that can lead to long-term employment.

The AAA Governor’s STEM Academy will meet the needs of the region by focusing on the four career clusters: Architecture and Construction, Arts, A/V Technology and Communications, Marketing, and Science, Technology, Engineering and Mathematics (STEM). These career clusters fit directly into the needs expressed in Table 1. The data supports the need for training, education, and clearly defined pathways to guide students into these upcoming jobs and careers.

In the fall of 2012, a survey was conducted by TNCC to gauge the interest of Peninsula eleventh and twelfth graders in selected career pathways. The results from the City of Hampton are found below in Table 2. The pathways identified in the AAA Governor’s STEM Academy are each highly sought after by the student body.

Table 2: Survey Data from the Greater Peninsula Employer Survey

Cluster Area	# of respondents	Percent %
Agriculture, Food and Natural Resources	28	6.40%
Architecture and Construction	26	6.00%
Arts, A/V Technology and Communications	63	14.40%
Business Management and Administration	77	17.70%
Education and Training	46	10.60%
Finance	16	3.70%
Government and Public Administration	27	6.20%
Health Science	108	24.80%
Hospitality and Tourism	19	4.40%
Human Services	39	8.90%
Information Technology	33	7.60%
Law, Public Safety, Corrections and Security	68	15.60%
Manufacturing	20	4.60%
Marketing	37	8.50%
Science, Technology, Engineering and Mathematics (STEM)	85	19.50%
Transportation, Distribution and Logistics	10	2.30%
Don't know/other	55	12.60%

Source: *Employer Survey Peninsula Council for Work Force Development* © Fall 2012

Census Bureau data also shows that the construction, retail, STEM, and arts industries predict

some of the greatest turnover. The combination of high turnover in high wages occupations supports the idea that the Academy graduates will continue to have the opportunity to earn good wages in these occupations.

In the 2012 Opportunity Inc. publication titled *Driving Hampton Roads Competitiveness: Meeting the Demand for a Skilled Workforce* (Chmura) stated that "...various industry managers offered that a career and technical high school that had a reputation for producing serious, career-oriented graduates could reduce hiring costs and search time by serving as a credible signal to employers that candidates from this school are work-ready. Across all major job categories, ample job growth prospects exist for positions that require less than a 4-year degree; occupations that could be well supplied by a career and technical high school with strong academic credentials. Careers in construction trades and industrial technicians can feed into many high-growth jobs."

IV. Fiscal Agent

Hampton City Public Schools will act as fiscal agent for the AAA Governor's STEM Academy. The school division will follow the policies and procedures of the School Board of the City of Hampton and all applicable state and federal laws with all assurances and agreements.

The AAA Governor's STEM Academy Planning Committee and Advisory Council (see Appendix A) has reviewed the provisions in the Administrative Procedures Guide for the Establishment of Governor's STEM Academies outlined in the Guidance Manual, and agree to comply.

These assurances have been addressed in planning meetings, division level meetings, and school board meetings and are signed by both the Superintendent of Hampton City Public Schools and the Chair of the School Board of Hampton City. A copy of the signature page is located in Appendix B. Additionally, the requirements of risk management and proper asset control is addressed in Appendix I and is presented as the policy of the School Board of Hampton City.

V. Program Description

Hampton City Public Schools' secondary education is on an A/B Block schedule. This schedule is set up on 90 minute class periods that meet every other day. This schedule allows greater depth of content study in the student schedule, and when combined with high school courses offered in the middle school that earn high school credit, students may graduate with more than 32 Carnegie credits, opportunity for interdisciplinary instruction, nine dual enrollment or Advanced Placement credits, and at least one industry credential, and a career focus based on a career and academic plan of study.

The goal of the AAA Governor’s STEM Academy is to engage a cohort of students in dynamic experiential learning through cross-curricular education to enable them to pursue post secondary education and careers in diverse, competitive, global and regional markets. To do so, and to seek career integration and application of learning, students select from four “pathways.” Once a pathway is established, students meet with a school counselor to review goals and determine the best classes to meet their post secondary and career goals. The plans of study are located in Appendix C.

Long-Term Goals

- 100 percent of AAA Governor’s STEM Academy graduates will earn at least nine transferable credits through dual enrollment and/or AP courses.
- 100 percent of students completing the AAA Governor’s STEM Academy will enroll in postsecondary programs or obtain employment in Architecture, Art, Engineering, Engineering Technology, Graphic Arts, Marketing, or STEM-related careers.

The Governor’s STEM Academy goals will be measured by the Virginia Department of Education Completer Demographic Report and Career and Technical Education student follow-up survey conducted by the University of Virginia, Weldon Cooper Center. The first cohort will graduate in 2017-2018.

Short-Term Goals

- 100 percent of AAA Governor’s STEM Academy graduates will be a CTE completer.
- 100 percent of enrolled AAA Governor’s STEM Academy students will successfully take advanced mathematics beyond Algebra II.
- 100 percent of enrolled AAA Governor’s STEM Academy students will enroll in four years of science coursework.
- 100 percent of the AAA Governor’s STEM Academy will possess two or more Virginia Board of Education approved industry credentials.

In addition to the above goals, program objectives and performance measures are as follows:

- Enhance academic achievement of students in the AAA Governor’s STEM Academy measured through improved GPA at graduation compared to the first graduating cohort in 2018. Minimum admission GPA (4.0 scale) will be 2.5 and expected to increase to 3.0 or higher during the four year program.
- Increase completion of dual enrollment classes in 2018 by increasing options and ways to take dual enrollment classes by working with community partners to offer more opportunities. These may be in AAA Governor’s STEM Academy classrooms, at local colleges, through online coursework or other opportunities for transfer credit as well as terminal Associates Degree courses.

- Provide each AAA Governor’s STEM Academy student with one or more workplace readiness experiences through strong partnerships with local businesses through camps, workshops, and internships in 2018. These will be measured as one or more industry experiences per student (60 students per year). Experiences will be outside typical school hours.
- Decrease dropout rate and increase high school graduation rates from 89.5 percent to 92.9 percent by the year 2018 through broadening support services and increasing education options.
- Increase enrollment and retention in postsecondary education by introducing more Advanced Placement (AP) and dual enrollment opportunities by 2018 to 60 students attempting AP and 42 dual enrollment credits in the cohort.
- Increase, by 120 students, the number of students completing a college and career readiness curriculum in high school by incorporating readiness curriculum into pathways by 2018.
- Reduce the need for remediation in college by increasing college readiness curriculum through 2018 as measured by the Virginia Placement Test or other standardized measure of college readiness.
- Increase the number of industry certifications awarded to high school students by building more opportunity through Governor’s Academies to incorporate certifications through 2018 from 100 students earning one or more credentials to 160 students and from 110 students who earned a credential to 170 students earning at least one credential.
- Increase the number of graduates employed in high-wage, high-demand, and high-skilled careers by working at a regional level to determine the needs as well as solutions to train students to prepare for future careers.

Location

The AAA Governor’s STEM Academy will be housed at Kecoughtan High School and provide students with progressive coursework in the architectural and visual design fields. The focus of the AAA Governor’s STEM Academy is to develop students through rigorous academic and professional experiences, and to incorporate *Virginia’s Workplace Readiness Skills for the Commonwealth*, helping students to succeed in the long term. Specific program goals can be found in Appendix C. Students of the AAA Governor’s STEM Academy will be immersed in visual arts and design curriculum that is contextually intertwined in an academic environment

designed to help them become visually fluent, experience the career field of their choice, and achieve college readiness. The program is a full-day, four-year program. Students may enter in the ninth or tenth grade, but must meet the AAA Governor’s STEM Academy regulations. The bell schedule can be found in Appendix D.

Applied Arts, in the AAA Governor’s STEM Academy, is defined as design processes, structure, and materials necessary in the application of aesthetic principles. An example of applied art found in structure or building is sculpting. Form and function are both necessary requirements. Additionally, the application of Applied Arts in graphics is found in many forms such as advertising, fashion, signage, and Web media. Both Architecture and Art teach aesthetics and form. In the AAA Governor’s STEM Academy, the student will focus on marketable products or processes.

The AAA Governor’s STEM Academy will be open to all Hampton City Public Schools’ students by application, with a maximum cohort enrollment of 100 incoming ninth-grade students (See Appendix E). Accepted applicants attend the AAA Governor’s STEM Academy at Kecoughtan High School rather than their zoned high school. Any Hampton City Public Schools’ student entering the ninth grade may apply by March 1 of the previous school year. The AAA Governor’s STEM Academy application is multi-part (parent, student, school counselor and teacher recommendation) in an attempt to assure that students seriously consider the career pathways and make an informed choice. Application approval is required for participation in the Academy. All students must provide their own transportation unless they are in the Kecoughtan High School bus zone.

The four plans of study in this application are:

- Architecture and Construction (Design/Pre-Construction)
- Marketing (Merchandising)
- STEM (Engineering and Technology)
- Arts, Audio/Video Technology and Communications (Visual Arts)

The AAA Governor’s STEM Academy course sequences and sample plans of study are detailed in Appendix C. Each plan of study has unique completer sequences tied to locally relevant careers. These plans of study include work-based learning opportunities for students to interact with working professionals as well as engage in enrichment activities, experience realistic job previews, and develop a clear sense of the career fields.

Examples of career pathways include:

Pathway #1 Architecture and Construction (Design/Pre-Construction)

Students in design and pre-construction pathway create our future! They turn a concept into a set

of plans. Their plans guide other construction professionals as they continue the building process. If this pathway is followed through graduation students could continue to post-secondary education at TNCC and earn an associate degree in Computer Aided Drafting and Design. Through articulation agreements, successful completion of an AAS would allow the student to attend Old Dominion University and the potential to earn their bachelor's degree. According to the Virginia Labor Market Information (virginiaLMI.com) system for Workforce Investment Area XIV, Construction and Extraction Occupations are expected to grow some 15.2 percent by 2018. In addition, the combined Architecture and Engineering occupations for Virginia are expected to grow by 16.4 percent. This information may be found at <https://data.virginialmi.com/vosnet/analyzer/results.aspx?session=occproj>. Nationally, for Architects only, the growth to 2018 is 24.0 percent. Source: Bureau of Labor Statistics www.bls.gov, February 2012.

Pathway #2 Science, Technology, Engineering, and Mathematics (Engineering and Technology)

Students that pursue the engineering and technology pathway will develop knowledge and skills and the ability to (1) apply mathematics, sciences and technology concepts to solve problems quantitatively in engineering projects involving design, development or production in various technologies, and (2) recognize the core concepts of technology and their relationships with engineering, science and mathematics, and other subjects. This pathway can be continued at TNCC to earn an AAS Mechanical Engineering, and could then continue in the same field at ODU to earn a bachelor's degree. The combined Architecture and Engineering occupations for Virginia are expected to grow by 16.4 percent by 2018. This information may be found at <https://data.virginialmi.com/vosnet/analyzer/results.aspx?session=occproj>. However, when looking nationally at all engineering growth (from biomedical to computer engineering, to mechanical, etc.) 2018 growth rates range from 30.0 percent to 72.0 percent (Bureau of Labor Statistics www.bls.gov, February 2012). In Hampton, these jobs may be private sector, government, or military.

Pathway #3 Arts, Audio/Video Technology and Communications (Visual Arts)

Students that study the visual arts pathway will create various art forms to communicate ideas, thoughts and feelings. The primary focus of this pathway will enable students to develop knowledge and skill needed for a career in modeling and simulation, technical illustrator and graphic designer. Graphic designers will grow 13.0 percent (www.bls.gov) and Modeling and Simulation is growing in multiple clusters (Health and Medical, STEM, Transportation, Distribution, and Logistics to name a few). Additionally, Arts, Design, Entertainment, Sports, and Media careers are expected to grow 20.4 percent (Virginia Labor Market Information).

Pathway #4 Marketing (Merchandising)

Students that study the merchandising pathway will focus on forecasting, planning, buying,

displaying, selling and providing customer service. Students following this pathway will have the opportunity to complete the National Retail Federation (NRF) National Professional Certification in Customer Service Examination and NRF National Professional Certification in Sales. The related careers are in Sales and Related Occupations with 12.8 percent growth by 2018, Retail Sales growth of 9.6 percent, and Advertising, Promotions, and Marketing growth at 11.7 percent. Students following this pathway may earn an AAS in Management with a focus in Marketing and a Bachelor of Science in Marketing or Management with Specialization in Marketing.

Students in any of the pathways are expected to earn Advanced Placement credit and participate in dual enrollment to improve opportunities after graduation and career advancement. In addition, students may complete an associate degree while in school through an agreement.

Early College Scholars Program

The Early College Scholars Program allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma.

To qualify for the Early College Scholars Program, a student must:

- have a 3.0 average or better;
- pursue an Advanced Studies Diploma; and
- take and complete college-level coursework that will earn at least 15 transferable college credits. These credits can be earned by taking Advanced Placement, International Baccalaureate, and dual enrollment courses.

Participating students sign an Early College Scholars Agreement, which is also signed by the student's parents or guardians, principal and school counselor. Students who meet the terms of the agreement are recognized as Early College Scholars and receive a certificate of recognition from the Governor. Students who sign this agreement are allowed to take Virtual Virginia courses at no cost.

Dual Enrollment

The Secretary of Education, the Virginia Community College System, and the Superintendent of Public Instruction have established the "Virginia Plan for Dual Enrollment between Virginia Public Schools and Community Colleges." Under this plan HCPS and TNCC have developed an agreement to allow high school students to take college-level courses and receive both college credit and high school credit towards graduation.

HCPS and TNCC shall provide a pathway for participating students to complete an associate degree or one-year Uniform Certificate of General Studies (General Education Certificate) concurrent with their high school diploma. Credit awarded for applicable dual enrollment courses and Advanced Placement courses with qualifying exam scores of three or higher may be

applied toward attainment of the aforementioned credentials. This published plan is in Appendix H with the dual enrollment agreement. While AP courses will be delivered in Kecoughtan High School, dual enrollment courses may be in Kecoughtan, at TNCC, or through other delivery systems such as virtual courses. In partnership with TNCC and PCFWD, HCPS students participate in project-based learning in the form of camps and workshops that focus on work-based experiences. Additionally, Capstone projects designed to bring together education and experience gained in the Academy will help students apply their knowledge first-hand to real-world experiences. This project-based learning can be added to students' résumés to enhance employability.

Summer Programs

Summer programs will add to the Academy experience while encouraging not only new ways of learning but practical application. TNCC offers several camps that would complement Academy clusters. One such camp is the Peninsula K- Next Advanced Manufacturing Camp held in July at TNCC. Students work hands-on in teams to create actual robots, use 3-D printing, and engage in application of Engineering and Technology. PCFWD also offers a "That's my app" development camp. This camp is designed to help students create their own apps, which could add value to any of the AAA pathways and could also be used toward future Capstone projects.

Each senior in the AAA Governor's STEM Academy will be required to complete a senior Capstone project. The project will be determined by the focus area teacher and will use the sum of learning from AAA Governor's STEM Academy coursework to solve a problem, create a unique design, or similar content problem resolution. The pathways are designed around the Advanced Studies diploma. Students who earn a Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a Career and Technology Education (CTE) concentration or specialization and maintain a "B" or better average in those courses; or pass an board-approved industry credentialing exam or assessment will earn a Board of Education Career and Technical Education Seal. Additionally, the Board of Education's Seal of Advanced Mathematics and Technology will be awarded to students who earn either a Standard or Advanced Studies Diploma and satisfy all of the mathematics requirements for the Advanced Studies Diploma (four units of credit including Algebra II; two verified units of credit) with a "B" average or better: and either pass an examination in a CTE field that confers certification from a recognized industry, trade or professional association; acquire a professional license in a CTE field from the Commonwealth of Virginia: or pass an examination approved by the Board that confers college-level credit in a technology or computer science area.

Recruiting

Hampton's Career Academies have a section on the school division Web site with information, applications, and other material that can be viewed at:

<http://www.sbo.hampton.k12.va.us/schools/careeracademies/careeracademies.html>

To encourage interest and participation, a letter with brochures enclosed is sent to all current eighth-grade households in late fall (see Appendix E). A marketing video was created that shows students in the AAA Governor's STEM Academy describing why they entered the AAA Governor's STEM Academy and what they seek to do with a career. The video is on YouTube, shown as a commercial on PEG TV Channels 46 and 47 during events such as sports half-time and time-outs, and it is shown at career night and other marketing events to encourage participation. These will be rebranded as AAA Governor's STEM Academy marketing materials.

Students will be recruited for the Academy primarily through activities in their seventh-grade and eighth-grade years. Letters are sent to the parents of those students describing the program. Students are selected based on a variety of criteria. Of most importance is the question, "Why do you want to attend the Architecture and Applied Arts Academy?" This is submitted as an essay and student interest and previous knowledge of the careers are considered. In addition, student achievement, attendance, and discipline are considered. However, a student may make a persuasive case in the essay that leads to acceptance in the AAA Governor's STEM Academy. The requirements and student records are: attendance, tardies, and grade point average. The AAA Governor's STEM Academy selection committee will be made up of school counselors and teachers. Students must adhere to the current Student Rights and Responsibilities requirements for Hampton City Public Schools. This is found at: <http://www.hampton.k12.va.us/schoolinformation/rightsresponse/randr.html#.U0VX6vldXdA>.

All students are taught about the different Academies and career pathways beginning in kindergarten. Applications are due by March 1st of their eighth-grade year. By the time the student submits the application they have already met with counselors to complete career interest inventories, outline academic plans, review possible postsecondary options, and participated in career assessments to help them best determine their pathway. Each year the pathways are reviewed and a thorough evaluation is done with the student on success and next steps.

Additional marketing and recruiting is conducted through middle school activities directed at seventh-grade and eighth-grade students. Enrichment programs with local businesses, higher educators, and others, will provide realistic previews of the careers associated with the AAA Governor's STEM Academy. These enrichment programs include "Super Saturdays" during the school year, on-site experiential activities for students, and summer programs (See Appendix F for an example) to further explore options.

Hampton and its surrounding area have several colleges, universities, certification programs, and diploma programs through which students can enhance and extend the learning experience begun at the AAA Governor's STEM Academy. These include Hampton University, ECPI University, Old Dominion University, the College of William and Mary, and Thomas Nelson Community College. The Peninsula employers who need designers are many; however, the focus on this

AAA Governor’s STEM Academy will be the combination of form and function, technology and art, aesthetics and science in sectors that are needed. The employers, public schools, colleges, universities, and community partners are committed to combining their knowledge and, where possible, sharing resources to support the planning effort to develop a collaborative regional approach to meet the demands of the 21st century workplace.

Postsecondary dual enrollment coursework is available off-campus, at Kecoughtan High School, and virtually. It is part of the AAA Governor’s STEM Academy over the three-year implementation plan. Nineteen (19) Advanced Placement courses are currently available and others may be added as the AAA Governor’s STEM Academy develops. Other electives may be added in the future as need arises and staff seeks dual enrollment for college credit and AP coursework opportunities. Each plan of study has at least one industry credential students may earn that is either directly related to the coursework or related to other important measures of success.

Table 3: Advanced placement courses currently available to AAA Governor’s STEM Academy Students

Course Code	Name	Department
1195	AP ENGLISH/LIT 12	Language Arts
1196	AP ENGLISH/LANG 11	Language Arts
2212	AP HUMAN GEOGRAPHY	Social Studies
2319	AP US HISTORY	Social Studies
2380	AP WORLD HISTORY	Social Studies
2445	AP GOVERNMENT:US	Social Studies
2902	AP PSYCHOLOGY	Social Studies
3177	AP AB CALCULUS	Mathematics
3177	AP BC CALCULUS	Mathematics
3192	AP STATISTICS	Mathematics
4370	AP BIOLOGY	Science
4370	AP BIOLOGY (vir)	Science
4470	AP CHEMISTRY	Science
4570	AP PHYSICS	Science

Kecoughtan High School and Hampton City Public Schools will convene and coordinate a partnership team representing higher education, architects, graphic designers, engineers, builders and others who will plan and advise AAA Governor’s STEM Academy in implementation. Partnership members shall serve on a Planning/Advisory committee with members of the K-12 education community.

The AAA Governor’s STEM Academy will offer a program of study designed to expand options

for students to acquire skills through academic coursework, research experience, and experiential learning within a challenging and focused school environment to prepare students for 21st century STEM design careers. Students will be required to attend one or more extracurricular event at partner sites. Projects will include job shadowing, assisting Hampton's PEG TV and graphics department on projects, mentoring in elementary schools, regional art and design competitions, Distributive Education Clubs of America (DECA) and Technology Student Association (TSA), and assisting in local projects such as construction projects, graphics required for the city (variety of application and levels), and creating works that attract visitors.

Students will build their chosen career pathway on key skills received at the AAA Governor's STEM Academy and needed for success in postsecondary education and training as well as in structural and design fields. With an emphasis on partnerships and experiences, students will be able to take rigorous courses they may not otherwise attempt in science and mathematics. Teachers will work as a cohort and present problems, in the form of requests for proposals, for the students to contextually approach academic content and apply all areas to an industry relevant problem. Examples of interdisciplinary project-based learning opportunities and problem statements are:

Proposal problems:

- You have been assigned to help with the design of a separate area inside a city park to contain a petting zoo. There needs to be some kind of fencing around the area to keep the animals in and to prevent problems during off-hours (i.e., people sneaking in and freeing or harming the animals, etc.). Propose what type of fencing should be used, based on cost, effectiveness, and visual appeal.
- Your parents have just installed a 20'x 40'x 5' in-ground pool, and would like to heat the pool. Develop a proposal for a heating system, focusing on cost and efficiency.
- Due to global climate change, several historical sites are threatened by rising water levels, including the Statue of Liberty. You have been tasked with coming up with a plan to save this monument. You will need to consider cost, visual appeal, feasibility, and historical significance in your solution. You must use only existing technologies.
- A company would like to use automated drones to deliver packages to customers. However, there is public concern about the private use of such small aircraft like this. You have been asked to help design the drones in order to make them visually appealing, quiet, and non-threatening. Cost is a factor, but the primary factor is making them comfortable to the public.
- Your favorite band has asked you to design a new CD cover for them, one that holds to their core image. You will need to actually design the cover image; you cannot use existing pictures or photos, but you may draw/take pictures/digitally to create your own images.

- As a worker at a fashion agency, you have been assigned the task of designing a spring fashion shoot. You will need to come up with your concept, including colors, fabrics, accessories, and styles. You may use photographs from the Internet to illustrate your concept, but those do not count as research; the research must be used to explain choices.

Project-based learning also lends itself to service learning projects. For example, students in the courses associated with the AAA Governor's STEM Academy plans of study currently are working on NASA HUNCH projects, creating replica mariner items for The Waterman's Museum in Yorktown to assist with preserving the heritage of the watermen of the Chesapeake Bay. Additional events include job shadowing with local employers, project-based work with the community, and mentorships. Surveys and collected feedback and reviews of the overall program will be done annually including program design and instructional delivery and will be used to improve the program. This data will also be reported to the Department of Education.

VI. Administrative Procedures

Hampton City Public Schools has established partnerships with TNCC, PCFWD, and many other community organizations that enhance the overall experience for our students. Please see Appendix D for more information on procedures and the TNCC Dual Enrollment Contract.

Governing Policies

The AAA Governor's STEM Academy follows the policies and procedures of the Hampton School Board. These policies and procedures are stored electronically and may be found at the Hampton City Public Schools Web site: <http://www.sbo.hampton.k12.va.us/index.html>. Please see Appendices D & E for further information. All programs are evaluated in Hampton City Public Schools through formal and informal review processes in the building, by the curriculum specialists, and in the central office. Information and assistance for Specific, Measurable, Assignable, Realistic, and time-related (SMART) goals are provided as well. See: <http://www.hampton.k12.va.us/departments/instructionalacc/instructionalacc.html#U0VYgvldXdA>

Transportation

Transportation by yellow school bus will be provided for those living within the Kecoughtan High School transportation zone. Students residing outside of the transport zone must be able to provide their own transportation.

Staffing Evaluation and Professional Development

Staff for the AAA Governor's STEM Academy are highly qualified teachers in all core and elective areas. Teachers are chosen based on content expertise, ability to work in an interdisciplinary cohort, and the fit into the Academy structure. Teachers are evaluated using the Virginia Teacher Evaluation system Standards 1-7 and additional classroom walk-through observations. Teachers must have identified and intentional learning outcomes posted along with

the associated lessons each day. Current professional development work with Christopher Gareis teacher made assessment training and tables of specifications coupled with Thomas Guskey's five levels of professional development evaluation allow specific teacher review and improvement. Especially important are the improvements and efforts on Standard 7.

The AAA Governor's STEM Academy will create diverse educational experiences by involving and interacting with diverse groups. The AAA Governor's STEM Academy will create strategic alliances by interacting with students outside of the Academy, parents and community groups through onsite activities with providers, social media outreach, and enrichment activities. The AAA Governor's STEM Academy staff believes that parents are a critical support component for the Academy. Parents will receive regular updates and notices of upcoming opportunities about Academy activities via e-mail, letters, and flyers. Additionally, parents will be invited to summer companion programs where they can participate in parallel activities with their children by learning content in the four pathways offered by the Academy. Refer to Appendix F: Super Saturdays and Summer Experiences for more information on summer activities.

Parent Summer Workshop

Parent workshops will be a companion program to the students' summer experience. These workshops will be 90 minutes in duration each of the four evenings of the summer experience. Parents would be given opportunities to explore each of the pathways and learn about opportunities for their students as well as become more informed about the community employers' needs.

All outreach pathways will be supported by the HCPS Web site area designated for Academy updates as well as Facebook and Twitter accounts. These online resources can be used to disseminate breaking news and build camaraderie among Academy students, parents and community. Online presence of the Academy will be governed by the Hampton City Public Schools Acceptable Use Policy.

Review Process

The plans of study will be reviewed annually by the Planning and Advisory Committee, which includes the Academy Director and School Counseling Coordinator, to assure relevance to the local work force needs and changes approved by the Governing Board and the Virginia Governor's Career and Technical Education Exemplary Standards Award criteria. Annual surveys and collected feedback, reviews of the overall program will be done including design and instructional delivery, and will be used to improve the overall program.

Data will also be reported to the Department of Education. Collected data will be in the form of Perkins IV and V Performance Measures (Virginia Agreed-Upon Performance Levels), Secondary Enrollment Demographic Form (SEDF), End-of-Year (EOY) Student Record Collection and Secondary Student Career Clusters Enrollment Report (SSCCER), End-of-Year

(EOY) Student Record Collection and Preliminary Completer Demographics Report, CTE Program Completer Student Follow-Up, CTE Credential Collection (CTECC), and other reports required of the school division.

VII. Documentation of insurance, budget, and other fiscal information

The following table outlines the anticipated budget for the remainder of 2013-14 and all of the 2014-15 school year. The budget includes summer activities, off-site activities, co-curricular activities, and events such as Career and Technical Education Student Organization, teacher professional development, AAA Governor's STEM Academy team building, and extracurricular enrichment events.

The AAA Governor's STEM Academy budget will use grant funds, Perkins funds, local funds, and community in-kind support for proposed summer, Super Saturdays, and 2014-15 school year budgets. See Appendix F for specific activities and plans. This narrative will start by generalized categories organized by line item. Additional descriptors will be provided in context of student workshops and parent workshops. The budget and narrative is found in Appendix J.

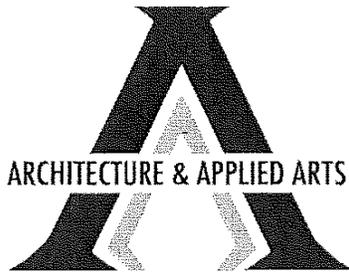
VIII. Appendices

Appendix A: AAA Governor's STEM Academy Planning Committee and Advisory Council

<i>Partner Name</i>	<i>Name and Title</i>	<i>Contact Information</i>
Q-Design, PLC	Mr. Ronald Albee Quinn, Architect	3 Ruckman Road, Suite 201 Fort Monroe, VA 23651 757-722-5577 q.design@att.net www.qdesignarchitecture.com
Distinctive Magazine	Ms. Jennifer Fenner, Creative Director	150 Brambleton Avenue Norfolk, VA 23510 757-446-2138
Huntington Ingalls, Newport News Shipbuilding	Ms. Sherri G. Thompson, Manager Career Pathways	4101 Washington Avenue Newport News, VA 23607 http://nns.huntingtoningalls.com/careerpathways
Huntington Ingalls, Newport News Shipbuilding	Mr. Dan Brookman, Manager Training	4101 Washington Avenue Bldg. 812 Dept. 022 Newport News, VA 23607 757-380-2683
Walsh Electric	Mr. Bill Walsh Treasurer	101 Sentry Circle Yorktown, VA 23692 757-890-0636 757-890-0702(fax) http://walshelec.com
Hampton University	Mr. Robert L. Easter, NOMA, AIA Chair, Department of Architecture	School of Engineering & Technology Hampton University Hampton, Virginia 23668 757-727-5440
ECPI College of Technology	Mr. John Olson, Campus President WIB Area XIV Chair	1001 Omni Boulevard, Suite 100 Newport News, VA 23606 Ecp.edu jolson@ecpi.edu
Hampton City Public Schools	Mr. Matt Houser, Graphics Coordinator	School Administration Center One Franklin Street Hampton, VA 23669-3570 757-727-2006 mhouser@hampton.k12.va.us
Peninsula Council for Workforce Development	Mr. Shawn Avery, Vice President, Private/Public Strategic Partnerships	11820 Fountain Way, Suite 301 Newport News, Virginia 23606 757- 826-3327 savery@pcfwd.org www.pcfwd.org

Thomas Nelson Community College	Mr. John Calver, Director Advanced Manufacturing	Peninsula Workforce Development Center 600 Butler Farm Road, Suite A Hampton, VA 23666 757-865-3122
Hampton City Public Schools, Kecoughtan High School	Mr. Raymond L. Haynes, Principal	Kecoughtan High School 522 Woodland Road Hampton, VA 23669 757-850-5000 rhaynes@hampton.k12.va.us http://khs.hampton.k12.va.us
Hampton PEG TV Ch. 46/47	Mr. Andrew Foley, Director	418 West Mercury Boulevard Hampton, VA 23666 757-727-2500
Chesapeake City Public Schools	Dr. John A. Bailey, Director of School Plants / Maintenance	1021 Great Bridge Boulevard Chesapeake, VA 23320 757-547-0139
Hampton City Public Schools, Kecoughtan High School	Mr. Paul Lawrence, Assistant Principal for AAA Governor's STEM Academy	Kecoughtan High School 522 Woodland Road Hampton, VA 23669 757-850-5438 plawrence@hampton.k12.va.us http://khs.hampton.k12.va.us/
Hampton City Public Schools, Kecoughtan High School	Mr. Robert Robbins, Teacher Social Studies	Kecoughtan High School 522 Woodland Road Hampton, VA 23669 757-850-5000
Hampton City Public Schools, Kecoughtan High School	Mr. Robert Globke, Teacher Technology and Engineering	Kecoughtan High School 522 Woodland Road Hampton, VA 23669 757-850-5000
Hampton City Public Schools, Kecoughtan High School	Ms. Emily Marshall, Teacher Art	Kecoughtan High School 522 Woodland Road Hampton, VA 23669 757-850-5000
Hampton City Public Schools, Kecoughtan High School	Mr. Christopher Companion, Teacher Language Arts	Kecoughtan High School 522 Woodland Road Hampton, VA 23669 757-850-5000

Hampton City Public Schools, Kecoughtan High School	Ms. Christina Kirby, Teacher Art	Kecoughtan High School 522 Woodland Road Hampton, VA 23669 757-850-5000
Hampton City Public Schools, Kecoughtan High School	Ms. Stacie Tyson, School Counselor	Kecoughtan High School 522 Woodland Road Hampton, VA 23669 757-850-5000
Hampton City Public Schools, Kecoughtan High School	Ms. Whitney Ketchledge, CTE Instructional Leader	Kecoughtan High School 522 Woodland Road Hampton, VA 23669 757-850-5000
Hampton City Public Schools	Dr. Patricia J. Johnson, Deputy Superintendent for Curriculum and Instruction	School Administration Center One Franklin Street Hampton, VA 23669-3570 757-727-2000 pjohnson@hampton.k12.va.us
Hampton City Public Schools	Dr. Donna Woods, Executive Director of School Leadership (Secondary)	School Administration Center One Franklin Street, Hampton, VA 23669-3570 757-727-2006 dwoods@hampton.k12.va.us
Hampton City Public Schools	Mr. Jesse W. White, Career and Technical Education Curriculum Leader	School Administration Center One Franklin Street Hampton, VA 23669-3570 757-727-2466 757-727-2468 (fax) jeswhite@hampton.k12.va.us http://www.sbo.hampton.k12.va.us/departments/cte/cte.html
Hampton City Public Schools	Ms. Vivian E. Griese Curriculum Leader, Fine Arts	School Administration Center One Franklin Street Hampton, VA 23669-3570 757-727-2474 757-727-2468(fax)
New Horizons Regional Education Centers	Mr. David Creamer, Principal	Butler Farm Campus 520 Butler Farm Road Hampton, VA 23666 757-766-1100 dave.creamer@nhrec.org

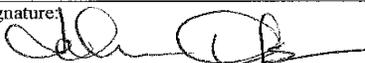


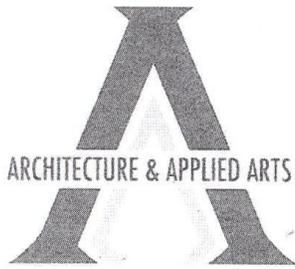
**Architecture and Applied Arts
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Agreement**

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Name of Representative Organization: ECPI University	
Address: 1001 Omni Boulevard, Newport News, VA 23606	
Phone: 757 838 9191	
Signature: 	
Printed Name: John Olson	
Title: Campus President	Date: 4/6/2014



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Name of Representative Organization: <i>Q-DESIGN, P.L.C.</i>	
Address: <i>3 KUCKMAN ROAD, SUITE 201, FORT MONROE, VA 23651</i>	
Phone: <i>722-5577</i>	
Signature: <i>Ronald Albee Quinn</i>	
Printed Name: <i>RONALD ALBEE QUINN</i>	
Title: <i>ARCHITECT</i>	Date: <i>12/7/13</i>

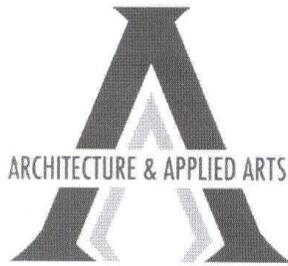
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Name of Representative Organization: <i>Walsh Electric Co, Inc</i>	
Signature: <i>William J. Walsh</i>	
Printed Name: <i>William J. Walsh</i>	
Title: <i>Treasurer</i>	Date: <i>3-3-14</i>

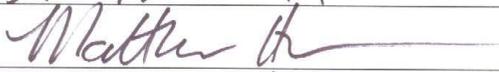


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Name of Representative Organization:	Matt Houser HCS Graphics	
Address:	1 Franklin Street Hpt. VA	
Phone	757-727-2114	
Signature:		
Printed Name:	Matthew Houser	
Title:	Graphics Coordinator	Date: 12-4-13



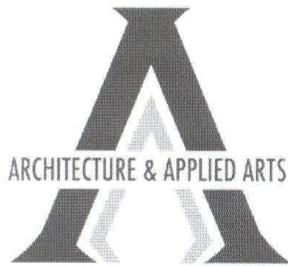
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Name of Representative Organization: Newport News Shipbuilding	
Address: 4101 Washington Avenue, Newport News, VA 23607	
Phone: 757-534-1990	
Signature: 	
Printed Name: Sherri Thompson	
Title: Career Pathways Manager	Date: Dec 4, 2013



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Name of Representative Organization: <i>John A. Bailey, Chesapeake Public Schools</i>	
Address: <i>1021 Great Bridge Blvd, Chesapeake, VA</i>	
Phone: <i>757-547-0139, c-592-3742</i>	
Signature: <i>[Handwritten Signature]</i>	
Printed Name: <i>John A. Bailey</i>	
Title: <i>Director of School Plants</i>	Date: <i>December 4, 2013</i>



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Name of Representative Organization: <i>TNCC</i>	
Address: <i>600 Butler Farm Rd, #A, Hampton 23666</i>	
Phone: <i>757-865-5846</i>	
Signature: <i>[Handwritten Signature]</i>	
Printed Name: <i>JOHN CALVER</i>	
Title: <i>Dir, Adv Mfg</i>	Date: <i>1/3/2014</i>



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Name of Representative Organization:	<i>New Horizons Regional Education Centers</i>	
Address:	<i>520 Butler Farm Road, Hampton, VA 23666</i>	
Phone:	<i>(757) 766-1100 Ext. 3305</i>	
Signature:	<i>[Handwritten Signature]</i>	
Printed Name:	<i>David A. Creamer</i>	
Title:	<i>Principal</i>	Date: <i>JAN 3 2014</i>



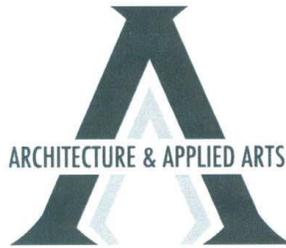
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Name of Representative Organization: Peninsula Council for Workforce Development	
Address: 11820 Fountain Way, Suite 301 NN, VA 23606	
Phone: 757-826-3327	
Signature: 	
Printed Name: Shawn Avery	
Title: Vice President	Date: 1/3/14



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Name of Representative Organization: HAMPTON CITY SCHOOLS	
Address: 1 FRANKLIN STREET, HAMPTON, VA 23669	
Phone: 757-727-2474	
Signature: 	
Printed Name: VIVIAN E. GRIESE	
Title: FINE ARTS CURRICULUM LEADER	Date: 6 Jan 2014



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Name of Representative Organization: <i>Hampton City Schools</i>	
Address: <i>7 Franklin St. Hampton, VA 23669</i>	
Phone: <i>(757) 727-2006</i>	
Signature: <i>Donna E. Woods</i>	
Printed Name: <i>Donna E. Woods</i>	
Title: <i>Executive Director - Secondary</i>	Date: <i>1/6/14</i>



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Name of Representative Organization: <i>Dan Brookman / Newport News Shipbuilding</i>	
Address: <i>4101 Washington Ave., Bldg 812, Dept 022</i>	
Phone: <i>757.380.2603</i>	
Signature: <i>[Handwritten Signature]</i>	
Printed Name: <i>Dan Brookman</i>	
Title: <i>Manager Training</i>	Date: <i>1/6/14</i>



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Name of Representative Organization: <i>Kecoughtan High School</i>	
Address: <i>522 Woodland Rd. Hampton, VA 23669</i>	
Phone: <i>850-6840</i>	
Signature: <i>Christopher Companion</i>	
Printed Name: <i>Christopher Companion</i>	
Title: <i>Teacher, Language Arts</i>	Date: <i>1/6/14</i>



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Name of Representative Organization:		Jennifer Fenner / Distinction Magazine	
Address:		150 W. Brambleton Ave. Norfolk, VA 23510	
Phone:		757. 446. 2138	
Signature:		<i>Jennifer Fenner</i>	
Printed Name:		Jennifer Fenner	
Title:		Creative Director	Date: 1/5/2014



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By signing below, I agree to actively participate in and provide guidance to the Architecture and Applied Arts Governor's Science, Technology, Engineering, and Mathematics Academy located at Kecoughtan High School in Hampton, VA.

Name of Representative Organization:	
KECOUGHTAN HIGH SCHOOL	
Address:	
522 WOODLAND RD. HAMPTON VA. 23669	
Phone:	
757-848-2193	
Signature:	
<i>Robert Globre</i>	
Printed Name:	
ROBERT GLOBRE	
Title:	Date:
INSTRUCTOR	1/6/2014



**Architecture and Applied Arts
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Name of Representative Organization:	Kecoughtan High School	
Address:	522 Woodland Rd Hpt VA 23669	
Phone:	757 550 5000	
Signature:		
Printed Name:	Christina Kerby	
Title:	teacher	Date: 1/6/14

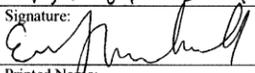


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By signing below, I agree to actively participate in and provide guidance to the Architecture and Applied Arts Governor's Science, Technology, Engineering, and Mathematics Academy located at Kecoughtan High School in Hampton, VA.

Name of Representative Organization: Emily Marshall - Kecoughtan High School	
Address: 522 Woodland Rd Hampton, VA 23669	
Phone: 757-848-2347	
Signature: 	
Printed Name: Emily Marshall	
Title: Teacher - Art	Date: 10/6/14



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By signing below, I agree to actively participate in and provide guidance to the Architecture and Applied Arts Governor's Science, Technology, Engineering, and Mathematics Academy located at Kecoughtan High School in Hampton, VA.

Name of Representative Organization: ROBERT ROBBINS - KECOUGHTAN HIGH SCHOOL	
Address: 522 WOODLAND RD HAMPTON VA 23669	
Phone: 757-850-6832	
Signature: 	
Printed Name: ROBERT ROBBINS	
Title: TEACHER- SOCIAL STUDIES.	Date: 1/6/14



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By signing below, I agree to actively participate in and provide guidance to the Architecture and Applied Arts Governor's Science, Technology, Engineering, and Mathematics Academy located at Kecoughtan High School in Hampton, VA.

Name of Representative Organization:	Stacie Tyson - KHS Guidance
Address:	533 Woodland Rd. Hampton VA 23669 850-5023
Phone:	
Signature:	<i>Stacie Tyson</i>
Printed Name:	Stacie Tyson
Title:	Professional School Counselor
Date:	1-6-14

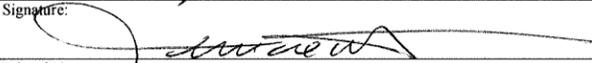


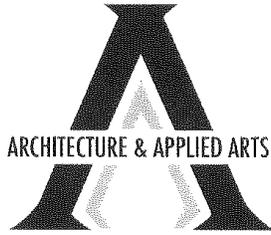
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Name of Representative Organization: <i>HAMPTON City Schools CTE</i>	
Address: <i>One Franklin St.</i>	
Phone: <i>(757) 727-2466</i>	
Signature: 	
Printed Name: <i>Jesse W. White</i>	
Title: <i>Career and Technical Educator Curriculum Leader</i>	Date: <i>1/4/2014</i>



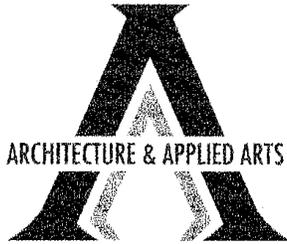
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Name of Representative Organization: <i>Kecoughtan High School</i>	
Address: <i>522 Woodland Rd, Hampton VA 23669</i>	
Phone: <i>757-850-5004</i>	
Signature: <i>Raymond L. Haynes</i>	
Printed Name: <i>Raymond L. Haynes</i>	
Title: <i>Principal</i>	Date: <i>4-18-14</i>



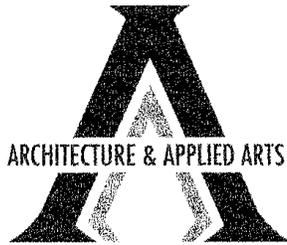
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Name of Representative Organization:	Kecoughtan High School	
Address:	522 Woodland Rd Hampton, VA 23069	
Phone	757-850-5000	
Signature:	<i>Whitney Ketchledge</i>	
Printed Name:	Whitney Ketchledge	
Title:	Teacher	Date: 4/18/14



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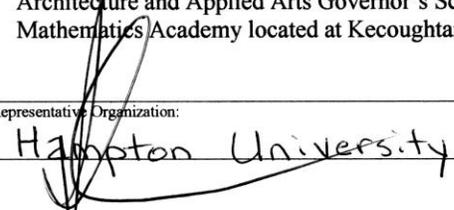
Name of Representative Organization: <i>Kecoughtan High School</i>	
Address: <i>522 Woodland Rd. Hampton, VA 23669</i>	
Phone: <i>850-5000</i>	
Signature: <i>Paul Lawrence</i>	
Printed Name: <i>Paul Lawrence</i>	
Title: <i>Assistant Principal</i>	Date: <i>4/18/2014</i>

**Architecture and Applied Arts
Governor's Science, Technology,
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Name of Representative Organization: Hampton University	
Signature: 	
Printed Name: Robert L. Easter	
Title: Chairperson	Date: 4-21-14



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Name of Representative Organization:	
PEG-TV	
Address:	
1819 Nickerson Blvd.	
Phone	
757-850-5369	
Signature: 	
Printed Name:	
Andrew Foley	
Title:	Date:
Director of PEG-TV	4/21/2014

Appendix B: Statement of Assurances

**ARCHITECTURE AND APPLIED
ARTS GOVERNOR'S STEM
ACADEMY STATEMENT OF
ASSURANCES**

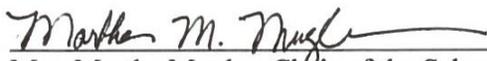


The authorized signature on this page certifies to the Virginia Department of Education that the authorized official assures that:

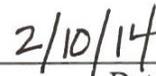
- The planning committee has reviewed the provisions of Administrative Procedures Guide for the Establishment of Governor's STEM Academies outlined in the Guidance Manual, and understands that an implementation proposal will need to address these criteria and/or others approved by the Virginia Board of Education.
- The planning committee agrees to follow the guidelines set forth in the Administrative Procedures Guide for the Establishment of Governor's STEM Academy's document.
- If the Governor's STEM Academy will be a jointly operated program, an ongoing governing board will be established or maintained to reflect current Board of Education regulations relative to jointly operated schools and programs.
- A public, government entity will serve as the grant fiscal agent.

Certification by Authorized or Institutional Official:

The applicant certifies that to the best of his/her knowledge the information in this application is correct, that the filing of this application is duly authorized by the partners participating in this process to establish the Architecture and Applied Arts Governor's STEM Academy, and that the applicant will comply with the statements of assurances.



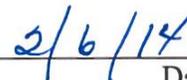
Mrs. Martha Mugler, Chair of the School Board of Hampton City, VA



Date



Dr. Linda M. Shifflette, Superintendent of Hampton City Schools



Date

Appendix C: Plans of Study

Cluster: Science, Technology, Engineering and Mathematics

Pathway: Engineering & Technology (Technology)

This Career Pathway Plan of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	GRADE	English/ Language Arts	Mathematics	Science	Social Studies/ Science	Other Required Courses	Recommended Career and Technical Courses	SAMPLE – Occupations Relating to This Pathway:	
						Recommended Electives	Source: Administrative Planning Guide http://www.cteresource.org/apg/		
NOTE: Indicate State Course Titles and Codes									
Graduation Requirements: http://www.doe.virginia.gov/instruction/graduation/index.shtml									
MIDDLE	7	English 7 (1110)	Math 7 (3111)	Life Science (4115)	U S History (2354)	Make It Your Business (8114)	Inventions and Innovations (8461)	<ul style="list-style-type: none"> - Application Engineer - Architectural Engineer - CAD Technician - Civil Engineer - Construction Engineer - Drafter - Industrial Engineer/Technician - Manufacturing Engineer/Technician - Mechanical Engineer - Product/Process Engineer - Survey Technician - Systems Engineer - Transportation Engineer 	
	8	English 8 (1120)	Algebra I (3130)	Physical Science (4125)	Civics & Economics (2357)	Principles of Business and Marketing (6115)	Technological Systems (8462)		
Career Assessment: Identify an appropriate career assessment instrument at the middle school level used to help students and their parents plan for high school: VA Wizard <input checked="" type="checkbox"/> or other assessment (please indicate): _____									
SECONDARY	9	English (1130) or Honors	Geometry (3143)	Earth Sciences (4210)/ Biology (4310)	World History/ Geography I (2215)	Required: Economics & Personal Finance (6120)	Technical Drawing (8435)		
	10	English (1140) or Honors	Algebra II (3135)	Biology (4310)/ Chemistry (4410)	World History/ Geography II (2216)	Health & PE (2 years)	Engineering Drawing and Design (8436)		

11	English (1150)/ Honors/ AP (1195)	Trigonometry (3150)	Chemistry (4410) or AP Biology (4370) DE Chemistry 111	US/VA History (2360) or AP US History (2319) DE History 121/122	Foreign Language (3 years) Other Electives to Complement Pathway (Core Academic and CTE): Materials and Processes Technology (8433); Production System (8447)	Engineering Explorations I (8450)
	English (1160) /Honors /AP (1196) DE English 111/112	Elem Functions (3163) DE Mathematics 151/163	AP Physics I (4573), AP Physics II (4574) DE Physics 201 DE Physics 202	US/VA Government(2440)/ AP Government (2445) DE Political Science 135	DE Finance 107	Engineering Analysis and Applications II (8451) DE Mechanical Engineering Courses 100
High school courses in the pathway offered locally for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit) Dual Enrollment opportunity at TNCC in bold.						

List related certifications/credentials approved by VDOE and offered locally: http://www.cteresource.org/apg (Go to Certification – License Section) W!SE Financial Literacy Autodesk Certified Associate Pre-Engineering/Engineering Technology Workplace Readiness Skills for the Commonwealth (CTECS) National Career Readiness Certificate	Additional Learning Opportunities: CTSO Organization(s): <input type="checkbox"/> DECA <input type="checkbox"/> FBLA <input type="checkbox"/> FCCLA <input type="checkbox"/> FFA <input type="checkbox"/> FEA <input type="checkbox"/> HOSA <input type="checkbox"/> SkillsUSA <input checked="" type="checkbox"/> TSA Work-Based Learning: <input checked="" type="checkbox"/> Career Research <input type="checkbox"/> Cooperative Education <input type="checkbox"/> Internship <input checked="" type="checkbox"/> Mentorship <input type="checkbox"/> Job Shadowing <input checked="" type="checkbox"/> Service Learning Project <input type="checkbox"/> Student Apprenticeship
--	---

Postsecondary: Placement Assessments such as Virginia Placement Test or COMPASS	College Entrance Exams such as ACT & SAT
--	--

SAMPLE POSTSECONDARY PROGRAMS RELATED TO THIS CAREER PATHWAY			
Individual plans must include locally agreed upon courses at the postsecondary level (See page 2)			
POSTSECONDARY	Pathway	Associate Degree, College Certificate, or Apprenticeship	Postgraduate Degree
	Engineering and Technology	AAS Mechanical Engineering	Bachelors Degree Engineering/ Engineering Technology (Determined locally – optional)



Postsecondary: Placement Assessments such as Virginia Placement Test or COMPASS

POSTSECONDARY - COMMUNITY COLLEGE or APPRENTICESHIP - Determined Locally	Semester	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives			
	POSTSECONDARY PLAN OF STUDIES MUST INCLUDE POSTSECONDARY ACADEMIC, CTE, AND OTHER ELECTIVE COURSES APPROPRIATE FOR AN ASSOCIATE DEGREE.								
	Year 1 1 st Semester	ENG 111	MTH 163	PHY 201		HLT/PED	CAD 151	MEC 100	SDV 100
	Year 1 2 nd Semester	ENG 112 or ENG 115	MTH 164	PHY 202			CAD 211 or CAD 241	MEC 131	
	Year 2 1 st Semester		MTH 173	CHM 111	ECO 201			MEC 132	MEC 113
Year 2 2 nd Semester				Social Science Elective	Humanities Elective	2 Electives from MEC, CAD, IND, SIM 201, SIM 202 or ETR 104	MEC 133	MEC 161 or MEC 220	
College courses offered locally in the high school for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit).									

Related Industry Certifications Available:

Additional Suggested Learning Opportunities:

Work-Based Learning:

- Cooperative Education Internship Mentorship
- Job Shadowing Service Learning Project Registered Apprenticeship

UNIVERSITY

University/College: ODU
 Degree or Major: Engineering
 Number of Articulated CC Credits: 66

Notes: Students who choose to continue with a Bachelor's Degree should check with the 4-year institute of their choice for course transferability.



Cluster: Marketing Pathway: Merchandising

This Career Pathway Plan of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	GRADE	English/ Language Arts	Mathematics	Science	Social Studies/ Science	Other Required Courses Recommended Electives Learner Activities	Recommended Career and Technical Courses Source: Administrative Planning Guide http://www.cteresource.org/apg/	SAMPLE – Occupations Relating to This Pathway: http://www.doe.virginia.gov/instruction/career_technical/career_clusters/sample_plans_study/index.shtml http://www.careerclusters.org http://www.cteresource.org/cpg/
		NOTE: Indicate State Course Titles and Codes						
Graduation Requirements: http://www.doe.virginia.gov/instruction/graduation/index.shtml								
MIDDLE	7	English 7 (1110)	Math 7 (3111)	Life Science (4115)	U S History (2354)		Make It Your Business (8114)	<ul style="list-style-type: none"> - Administrative Support Representative - Customer Service Representative - Department Manager - Merchandise Buyer - Merchandising Manager - Operations Manager - Retail Marketing Coordinator - Sales Associate - Sales Manager
	8	English 8 (1120)	Algebra I (3130)	Physical Science (4125)	Civics & Economics (2357)		Principles of Business and Marketing (6115/6116)	
<p>Career Assessment: Identify an appropriate career assessment instrument at the middle school level used to help students and their parents plan for high school: VA Wizard <input checked="" type="checkbox"/> or other assessment (please indicate): _____</p>								
SECONDARY	9	English (1130) or Honors	Geometry (3143)	Earth Sciences (4210)	World History/ Geography I (2215)	Required: Economics & Personal Finance (6120) Health & PE (2 years) Foreign Language (3 years) Craft Design I (9160)	Introduction to Marketing (8110)	<ul style="list-style-type: none"> - Retail Marketing Coordinator - Sales Associate - Sales Manager
	10	English (1140) or Honors	Algebra II (3135)	Biology (4310)	World History/ Geography II (2216)		Marketing (8120)	
	11	English (1150)/ Honors/ AP (1195)	Trigonometry (3150)	Chemistry (4410) or AP Biology (4370)	US/VA History (2360)		Other Electives to Complement Pathway (Core Academic and CTE): Computer Graphic Design	

12	English (1160) /Honors /AP (1196) DE English 111/112	Elem Functions (3163) DE Mathematics 151/163	AP Physics I (4573), AP Physics II (4574)	US/VA Government (2440) or AP US History (2319) DE Political Science 135	(9180), Fashion Careers I. (8280); Art 2D (9130 – 18 wk.), Art – 3D (9197 – 18 wk.); Portfolio Prep (9147) DE Finance 107	Marketing Management (8132) DE Marketing 110	- Stock Clerk - Store Manager - Visual Merchandise Manager
	High school courses in the pathway offered locally for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit) Dual Enrollment opportunity at TNCC in bold.						

List related certifications/credentials approved by VDOE and offered locally: http://www.cteresource.org/apg (Go to Certification - License Section.) Fundamental Marketing Concepts; National Professional Certification In Customer Service; National Professional Certification In Retail Management; WISE Financial Literacy; Workplace Readiness Skills for the Commonwealth (CTECS); National Career Readiness Certificate	Additional Learning Opportunities: CTSO Organization(s): <input checked="" type="checkbox"/> DECA <input checked="" type="checkbox"/> FBLA <input type="checkbox"/> FCCLA <input type="checkbox"/> FFA <input type="checkbox"/> FEA <input type="checkbox"/> HOSA <input type="checkbox"/> SkillsUSA <input type="checkbox"/> TSA Work-Based Learning: <input checked="" type="checkbox"/> Career Research <input checked="" type="checkbox"/> Cooperative Education <input checked="" type="checkbox"/> Internship <input checked="" type="checkbox"/> Mentorship <input checked="" type="checkbox"/> Job Shadowing <input checked="" type="checkbox"/> Service Learning Project <input type="checkbox"/> Student Apprenticeship
Postsecondary: Placement Assessments such as Virginia Placement Test or COMPASS	College Entrance Exams such as ACT & SAT

POSTSECONDARY	SAMPLE POSTSECONDARY PROGRAMS RELATED TO THIS CAREER PATHWAY			
	Individual plans must include locally agreed upon courses at the postsecondary level (See page 2)			
	Pathway	Associate Degree, College Certificate, or Apprenticeship	Bachelors Degree	Postgraduate Degree
	Merchandising	AAS Management with a focus in Marketing	BS Marketing	(Determined locally – optional)

College: Thomas Nelson Community College

School Division(s): Hampton City Schools

Postsecondary: Placement Assessments such as Virginia Placement Test or COMPASS						
POSTSECO NDARY - COMMUNIT Y COLLEGE or	Semester	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives
	POSTSECONDARY PLAN OF STUDIES MUST INCLUDE POSTSECONDARY ACADEMIC, CTE, AND OTHER ELECTIVE COURSES APPROPRIATE FOR AN ASSOCIATE DEGREE.					



UNIVERSITY	Year 1 1st Semester	ENG 111	MTH 120 or MTH 151 or MTH 158 or MTH 240			BUS 100	ITE 115	MKT 100	SDV 100
	Year 1 2nd Semester	ENG 112			PLS 135 ECO 120	BUS 200	BUS 121	MKT 110	
	Year 2 1st Semester					ACC 211	BUS 220 BUS 241	HLT/ PED	CST 227 MKT 271
	Year 2 2nd Semester					ACC 212	HUM/ FINART	MKT 220 BUS 201	ACC 215 or MKT 216 or MKT 210 or BUS 165 or BUS 230 or ITE 170 or AST 253

College courses offered locally in the high school for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit).

Related Industry Certifications Available:

Additional Suggested Learning Opportunities:

Work-Based Learning:

- Cooperative Education
 Internship
 Mentorship
 Job Shadowing
 Service Learning Project
 Registered Apprenticeship

University/College: Old Dominion University
Degree or Major: Marketing or Management with Specialization in Marketing:
Number of Articulated CC Credits: 66

Notes: Students who choose to continue with a Bachelor's Degree should check with the 4-year institute of their choice for course transferability.



Cluster: Arts, Audio/Video Technology & Communications

Pathway: Visual Arts

This Career Pathway Plan of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	GRADE	English/ Language Arts	Mathematics	Science	Social Studies/ Science	Other Required Courses Recommended Electives Learner Activities	Recommended Career and Technical Courses Source: Administrative Planning Guide http://www.cteresource.org/apg/	SAMPLE – Occupations Relating to This Pathway: http://www.doe.virginia.gov/instruction/career_technical/career_clusters/sample_plans_study/index.shtml http://www.careerclusters.org http://www.cteresource.org/cpg/
		NOTE: Indicate State Course Titles and Codes						
Graduation Requirements: http://www.doe.virginia.gov/instruction/graduation/index.shtml								
MIDDLE	7	English 7 (1110)	Math 7 (3111)	Life Science (4115)	U S History (2354)	Art Grade 7 (9105)	Make it Your Business (8114)	<ul style="list-style-type: none"> - Advertiser - Animator - Cartoonist - Designer - Educator - Fashion Illustrator - Interior Designer - Performance
	8	English 8 (1120)	Algebra I (3130)	Physical Science (4125)	Civics & Economics (2357)	Art I/ Art Foundations (9120)	Principles of Business and Marketing (6115)	
<p>Career Assessment: Identify an appropriate career assessment instrument at the middle school level used to help students and their parents plan for high school: VA Wizard <input checked="" type="checkbox"/> or other assessment (please indicate): _____</p>								
SECONDARY	9	English (1130) or Honors	Geometry (3143)	Earth Sciences (4210)	World History/ Geography I (2215)	Required: Economics & Personal Finance (6120) Health & PE (2 years) Foreign Language (3 years) Craft Design I (9160) Other Electives to	Communication Systems (8415)	<ul style="list-style-type: none"> - Interior Designer - Performance
	10	English (1140) or Honors	Algebra II (3135)	Biology (4310)	World History/ Geography II (2216)		Imaging Technology (8455)	
	11	English (1150)/ Honors/ AP (1195)	Trigonometry (3150)	Chemistry (4410) or AP Biology (4370)	US/VA History (2360)		Digital Visualization (8459)	

12	English (1160) /Honors /AP (1196) DE English 111	Elem Functions (3163) DE Mathematics 151/163	AP Physics I (4573), AP Physics II (4574)	US/VA Government (2440) Or AP US History (2319) DE Political Science 135	Complement Pathway (Core Academic and CTE): Art 2D (9130 – 18 wk.), Art – 3D (9197 – 18 wk.); Portfolio Prep (9147) DE Humanities 111 DE Finance 107 DE ART 101 DE ART 102	Modeling & Simulation (8460) DE (Games)	Artist - Photographe - Web Designer
	High school courses in the pathway offered locally for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)						

<p>List related certifications/credentials approved by VDOE and offered locally: http://www.cteresource.org/apg (Go to Certification – License Section) Workplace Readiness Skills for the Commonwealth (CTECS); WISE Financial Literacy National Professional Certification in Sales; National Professional Certification in Customer Service Adobe Certified Associate - Photoshop</p>	<p>Additional Learning Opportunities: CTSO Organization(s): <input type="checkbox"/> DECA <input type="checkbox"/> FBLA <input type="checkbox"/> FCCLA <input type="checkbox"/> FFA <input type="checkbox"/> FEA <input type="checkbox"/> HOSA <input type="checkbox"/> SkillsUSA <input checked="" type="checkbox"/> TSA</p> <p>Work-Based Learning: <input type="checkbox"/> Career Research <input checked="" type="checkbox"/> Cooperative Education <input checked="" type="checkbox"/> Internship <input checked="" type="checkbox"/> Mentorship <input checked="" type="checkbox"/> Job Shadowing <input checked="" type="checkbox"/> Service Learning Project <input type="checkbox"/> Student Apprenticeship</p>
<p>Postsecondary: Placement Assessments such as Virginia Placement Test or COMPASS</p>	<p>College Entrance Exams such as ACT & SAT</p>

POSTSECONDARY	SAMPLE POSTSECONDARY PROGRAMS RELATED TO THIS CAREER PATHWAY			
	Individual plans must include locally agreed upon courses at the postsecondary level (See page 2)			
	Pathway	Associate Degree, College Certificate, or Apprenticeship	Bachelors Degree	Postgraduate Degree
	Visual Arts	AAA - Fine Arts	BFA	

College: Thomas Nelson Community College

School Division(s): Hampton City Schools

Postsecondary: Placement Assessments such as Virginia Placement Test or COMPASS						
POST SECO NDAR Y- COMM	Semester	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives



POSTSECONDARY PLAN OF STUDIES MUST INCLUDE POSTSECONDARY ACADEMIC, CTE, AND OTHER ELECTIVE COURSES APPROPRIATE FOR AN ASSOCIATE DEGREE.

Year 1 1st Semester	ENG 111	MTH 120 or MTH 151 or MTH 163			CST 100	SDV 100	PHT 164	ART 121
Year 1 2nd Semester	ENG 112			Social Science Elective	ART 101	HLT/ PED	ART 283 or PHT 135	ART 122
Year 2 1st Semester				Social Science Elective	ART 102	ART 131	ART 241	Art 221
Year 2 2nd Semester				Art Elective	HUM/ FIN Elective	ART 132	ART 280	ART 222

College courses offered locally in the high school for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)

Related Industry Certifications Available:

Additional Suggested Learning Opportunities:

Work-Based Learning:

- Cooperative Education
 Internship
 Mentorship
 Job Shadowing
 Service Learning Project
 Registered Apprenticeship

UNIVERSITY

University/College: Old Dominion University
 Degree or Major: BFA
 Number of Articulated CC Credits: 66

Notes: Art students who choose to continue with a Bachelor's Degree should check with the 4-year institute of their choice for course transferability.



Cluster: Architecture & Construction

Pathway: Design/Pre-Construction

This Career Pathway Plan of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	GRADE	English/ Language Arts	Mathematics	Science	Social Studies/ Science	Other Required Courses Recommended Electives Learner Activities	Recommended Career and Technical Courses Source: Administrative Planning Guide http://www.cteresource.org/apg/	SAMPLE – Occupations Relating to This Pathway: http://www.doe.virginia.gov/instruction/career_technical/career_clusters/sample_plans_study/index.shtml http://www.careerclusters.org http://www.cteresource.org/cpg/	
		NOTE: Indicate State Course Titles and Codes							
Graduation Requirements: http://www.doe.virginia.gov/instruction/graduation/index.shtml									
MIDDLE	7	English 7 (1110)	Math 7 (3111)	Life Science (4115)	U S History (2354)		Inventions and Innovations (8461)	<ul style="list-style-type: none"> - Architect - Architectural Drafter - Building Code Inspector - Building Code Official - Building Designer - Civil Engineer - Code Official - Cost Estimator - Drafter - Environmental Designer - Environmental Engineer - Environmental 	
	8	English 8 (1120)	Algebra I (3130)	Physical Science (4125)	Civics & Economics (2357)		Technological Systems (8462)		
Career Assessment: Identify an appropriate career assessment instrument at the middle school level used to help students and their parents plan for high school: VA Wizard <input checked="" type="checkbox"/> or other assessment (please indicate): _____									
SECONDARY	9	English (1130) or Honors	Geometry (3143)	Earth Sciences (4210)/ Biology (4310)	World History/ Geography I (2215)	Required: Economics & Personal Finance (6120) Health & PE (2 years) Foreign Language (3 years)	Construction Technology (8431)		
	10	English (1140) or Honors	Algebra II (3135)	Biology (4310)/ Chemistry (4410)	World History/ Geography II (2216)		Architectural Drawing and Design (8437)		
	11	English (1150), AP (1195), or Honors	Trigonometry (3150)	Chemistry (4410) or AP Biology (4370) DE Chemistry 111	US/VA History (2360) or AP US History (2319) DE History 121/122	Other Electives to Complement Pathway (Core Academic and CTE): Materials and Processes	Advanced Drawing and Design - Architectural (8438) DE CAD 151		

12	English (1160), AP (1196) or Honors DE English 111 DE English 112	Elem Functions (3163) DE Mathematics 163 DE Mathematics 164	AP Physics I (4573), AP Physics II (4574) DE Physics 201 DE Physics 202	US/VA Government(2440)/ AP Government (2445) DE Political Science 135	Technology (8433); Production System (8447) Craft Design I (9160) or AP Art History (9149) DE Finance 107	Geospatial Technologies (8423)	Engineering Technician - Fire Prevention/Protection Engineer - Interior Designer - Landscape Architect - Materials Engineer - Regional and Urban Planner/Designer - Safety Director - Specification Writer - Structural Engineer - Surveying/Mapping Technician - Surveyor
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High school courses in the pathway offered locally for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)

<p>List related certifications/credentials approved by VDOE and offered locally: http://www.cteresource.org/apq (Go to Certification – License Section) ADDA Architectural Drafting Autodesk Certified Associate (AutoCAD or Revit) WISE Financial Literacy Workplace Readiness Skills for the Commonwealth (CTECS)</p>	<p>Additional Learning Opportunities: CTSO Organization(s): <input type="checkbox"/> DECA <input type="checkbox"/> FBLA <input type="checkbox"/> FCCLA <input type="checkbox"/> FFA <input type="checkbox"/> FEA <input type="checkbox"/> HOSA <input type="checkbox"/> SkillsUSA <input checked="" type="checkbox"/> TSA</p> <p>Work-Based Learning: <input checked="" type="checkbox"/> Career Research <input type="checkbox"/> Cooperative Education <input type="checkbox"/> Internship <input checked="" type="checkbox"/> Mentorship <input type="checkbox"/> Job Shadowing <input type="checkbox"/> Service Learning Project <input checked="" type="checkbox"/> Student Apprenticeship</p>
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<p>Postsecondary: Placement Assessments such as Virginia Placement Test or COMPASS</p>	<p>College Entrance Exams such as ACT & SAT</p>
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POSTSECONDARY	SAMPLE POSTSECONDARY PROGRAMS RELATED TO THIS CAREER PATHWAY			
	Individual plans must include locally agreed upon courses at the postsecondary level (See page 2)			
	Pathway	Associate Degree, College Certificate, or Apprenticeship	Bachelors Degree	Postgraduate Degree
Design/Pre-Construction	Computer Aided Drafting and Design AAS	Civil Engineering – Construction Management	(Determined locally – optional)	



College: Thomas Nelson Community College

School Division(s): Hampton City Schools

Postsecondary: Placement Assessments such as Virginia Placement Test or COMPASS

POSTSECONDARY - COMMUNITY COLLEGE or APPRENTICESHIP - Determined Locally	Semester	English	Mathematics	Science	Social Studies	Required Courses or Recommended Electives			
	POSTSECONDARY PLAN OF STUDIES MUST INCLUDE POSTSECONDARY ACADEMIC, CTE, AND OTHER ELECTIVE COURSES APPROPRIATE FOR AN ASSOCIATE DEGREE.								
	Year 1 1 st Semester	ENG 111	MTH 115 or 163	PHY 201			CAD 151	MEC 113	SDV 100
	Year 1 2 nd Semester	ENG 115	MTH116 or 164	PHY 202		HLT/PED	CAD 152	MEC 131	
	Year 2 1 st Semester			CHM 111	Social Science Elective	CAD 202	CAD 241	MEC 132	CAD 211
Year 2 2 nd Semester				Social Science Elective	Humanities Elective	CAD 280	MEC 133	2 Electives from DRF, MEC or EGR	
College courses offered locally in the high school for college credit should be coded: DE (Dual Enrollment) and/or VC (Validated Credit)									

Related Industry Certifications Available:

Additional Suggested Learning Opportunities:

Work-Based Learning:

- Cooperative Education
 Internship
 Mentorship
 Job Shadowing
 Service Learning Project
 Registered Apprenticeship

UNIVERSITY

University/College: ODU
 Degree or Major: Civil Engineering – Construction Management
 Number of Articulated CC Credits: 66

Notes: Students who choose to continue with a Bachelor’s Degree should check with the 4-year institute of their choice for course transferability.



Appendix D: Bell Schedule and Attendance

Bell Schedule

First Block	8:20 - 9:50	Lunch Schedule (During Third Block)	
Second Block	9:55 - 11:25	First Lunch	11:25 - 11:55
Third Block	11:30 - 1:35	Second Lunch	11:58 - 12:28
Fourth Block	1:40 - 3:09	Third Lunch	12:30 - 1:00
		Fourth Lunch	1:05 - 1:35

Attendance

Students are expected to maintain attendance in class in order to receive credit. Each student will be limited to five (5) absences (excused or unexcused) per semester in order to receive credit for the class.

Absences:

Parents are required to verify any absence within twenty-four (24) hours through written notice or the absence will be classified as unexcused.

Early Dismissals:

There will be no early dismissals by phone! All dismissals require a written request from parent and/or legal guardian. Each dismissal will be confirmed per phone call to said parent/guardian. Walk-in dismissals are permitted. For safety reasons, students may not be dismissed from school during the last twenty (20) minutes of the school day.

Tardies:

Students reporting to school 8:30 a.m. or later must report to the attendance office for a tardy note to class. Only three (3) notes from parent/guardian confirming a tardy will be accepted per semester. All tardies thereafter will be unexcused. Exceptions are: doctor's note, court note or other legal document.

Appendix E: Academy Recruiting and Student Application

Recruitment Letter Mailed to All Rising Ninth Grade Students



Hampton City Schools

Career & Technical Education

ONE FRANKLIN STREET

Hampton, Virginia 23669-3570

(757) 727-2466

Jesse W. White, Curriculum Leader

December 8, 2014

Dear Parents and Guardians of Hampton City Schools 8th grade students:

I am writing to inform you of an exciting opportunity for rising 9th grade Hampton City Schools' (HCS) students. Enclosed, please find brochures for our Governor's Academies and our two HCS Career Academies. These academies are one component of the Hampton City Schools COMPASS School Reform effort designed to ensure our students are career and college ready.

We are excited to announce the opening of Hampton City School's new Architecture and Applied Arts Governor's Science Technology Engineering, and Mathematics Academy next September at Kecoughtan High School (AAA Governor's STEM Academy).

Please take a few moments today to review the enclosed brochures and discuss these wonderful opportunities with your student. Ask your 8th grader to discuss the academies and let him or her know they can prepare for careers and college at the same time. Then, discuss the plan of study, or strand, with your child's School Counselor and choose an academy.

Career Academies are an academic plan of study with a career goal in mind. The term "Career Academy" is defined as a smaller learning community that provides an immersive academic experience with a career focus. More information about Career Academies may be found at www.ncacinc.org.

You may find applications, additional information about the Governor's Academies and Career Academies, as well as information about our high schools on the Hampton City Schools website under "Our Schools" (see: <http://www.sbo.hampton.k12.va.us/schools/schools.html>).



"The First Choice"
www.sbo.hampton.k12.va.us

HCS Web site Announcement

Eighth Annual Middle School College & Career Fair to be held December 10

The Eighth Annual Middle School College & Career Fair will be held on Tuesday, Dec. 10, 6-7:30 p.m. in the Kecoughtan High School cafeteria.

The fair is open to all middle school students and their parents and is sponsored by the school counseling department of Hampton City Schools. Representatives will be on hand to introduce students to the HCS career academies located at each of the four high schools, the International Baccalaureate program, New Horizons and local colleges. Students will have an opportunity to talk to representatives and obtain information to help them consider their course selections for high school and to reflect on available careers that may be of interest to them.

"The Middle School College & Career Fair is a great opportunity for middle school students to begin thinking about their future," said Penny Petersen, director of school counseling.

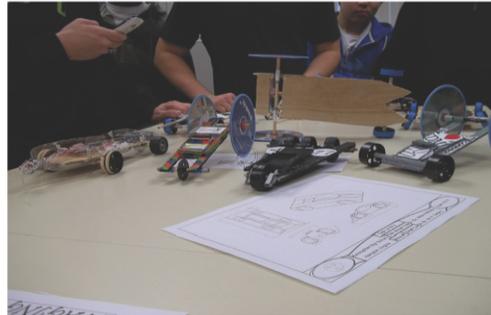
<http://www.sbo.hampton.k12.va.us/news/msfair.html#.UqjgWvRDt58>

Application

So, you want to become a...

Advertiser
Animator
Architect
Architectural Drafter
Architectural Engineer
Building Code Official
Building Designer
CAD Technician
Cartoonist
Civil Engineer
Construction Engineer
Cost Estimator
Designer
Drafter
Fashion Illustrator
Industrial Engineer/Technician
Interior Designer
Materials Engineer
Mechanical Engineer
Merchandise Buyer
Merchandising Manager
Operations Manager
Photographer
Product/Process Engineer
Regional and Urban Planner/Designer
Retail Marketing Coordinator
Safety Director
Sales Manager
Specification Writer
Store Manager
Structural Engineer
Surveyor
Visual Merchandise Manager
Web Designer

*You can make your
high school years
count in the
AAA Governor's
STEM Academy.*



For more information about Governor's & Career Academies and other High School offerings in Hampton City Schools, visit <http://www.sbo.hampton.k12.va.us/schools/schools.html>



Located at
**KECOUGHTAN
HIGH SCHOOL**
"Home of Every Day Greatness"

Hampton City Schools does not discriminate on the basis of race, color, national origin, sex, disability, age or other protected classes in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the non-discrimination policies:
Robbin G. Ruth, Executive Director of Human Resources • One Franklin Street, Hampton, VA 23669 • 757 727-2000



Design Your Future

Choose one of the AAA Governor's STEM Academy pathways to establish your career related to Architecture, Merchandising, STEM Engineering, and Visual Arts. Specific coursework will be combined with content in the core subject areas of Math, Science, English, and Social Studies. By participating in the AAA Governor's STEM Academy, a student will gain well-rounded, in-depth exposure to the competencies necessary for success in a chosen career. Each pathway is designed to be a four-year course of study.

PATHWAY #1 Architecture

... is about careers in designing, planning, managing, building and maintaining the built environment. Learn the details of designing, constructing, and equipping buildings. Architects design the look and flow of buildings, from abstract design to instructions for carpenters, masons, electricians, and heating and air conditioning installers. Architects with knowledge of sustainable, or green, design will be especially in demand.



PATHWAY #2 Science, Technology, Engineering and Mathematics (STEM) Engineering and Technology

... is about planning, managing, and providing professional and technical services including laboratory and testing services and research and development services. Focus will be on the engineering design process and materials.



PATHWAY #3 Visual Arts

... is about designing, producing, exhibiting, writing and publishing creative media. The jobs in this cluster appeal to people who prefer to work behind the scenes and who love to write, paint, or build. These careers, however, are very, very competitive. Graphic designers who have knowledge of Web site design or other interactive media will be most in demand.

PATHWAY #4 Merchandising

... is about about getting the merchandise into the hands of customers through buying, selling, and displaying the newest and most popular trends and products is the focus. This pathway also includes forecasting, planning, and providing customer service and is perfect for those who enjoy being creative, like working with people, enjoy a fast paced environment and like a diverse atmosphere.



The mission of the Architecture and Applied Arts Governor's Science, Technology, Engineering, and Mathematics Academy (AAA Governor's STEM Academy) is to engage students in dynamic experiential learning through cross-curricular education to enable them to pursue post-secondary education and careers in a diverse, competitive global market.

In addition to school and city policies, students are expected to adhere to the following student Architecture and Applied Arts contract requirements.

- **Attendance** – Only one unexcused absence is allowed per 9 week grading period. The parent's responsibility is to call the school or send a note for each absence. The student's responsibility is to turn the note into the Dean's office on the day they return to school as per Hampton City Schools Policy.
- **Tardies** – Consequences will follow school policy. Excessive tardies is considered defiance and for dismissal.
- **Grade Point Average** – A 3.0 GPA is expected to be maintained by all AAA Governor's STEM Academy students. Students with less than 2.5 GPA will be admitted. However, they will remain on probation during the next semester while the student has an opportunity to make improvement in GPA.
- **Referrals** – Before a referral is written for unacceptable behavior, a student will receive one warning. Parent contact by the teacher will be attempted, and then, the referral will be written. If a second referral is written, a parent conference will be scheduled with the AAA team teachers. A student who receives a second In School Suspension or one Out of School Suspension during one semester is subject to removal from the program. Any continued infractions of school and AAA Governor's Academy rules will result in probation and loss of career trip privileges.
- **Honor Code** – The Hampton City Schools honor code will be strictly followed and adhered to when dealing with academic violations. Students will receive a copy of the Honor Code along with the letter of acceptance. All students, teachers, and staff are expected to uphold the Honor Code.
- **Courses** – The Selection Committee, made up of school counselors and teachers in the AAA Governor's STEM Academy, will have final say in the placement of students.
- **Coursework** – Along with classroom assignments, (i.e; written assignments, tests, projects, etc.) there will be mandatory activities which are considered part of the coursework. Students are expected to honor their commitments by attending all activities.
- **Career Trips** – Students are responsible for any make-up work and should have a passing grade in the classes they are going to miss.
- **Senior Capstone Project** – Each senior in the AAA Governor's STEM Academy will be required to complete a senior capstone project. Project will be determined by the focus area teacher.

By signing below I am acknowledging that I have received and read the student contract of the AAA Governor's STEM Academy. Each applicant must to write a short essay as part of the application process.

Student Name

Student Signature

Date

Parent/Guardian Name

Parent/Guardian Signature

Date

Appendix F: Super Saturdays, Community Events, and Summer Program

AND THE SIX SCHOOL DISTRICTS OF THE GREATER PENINSULA ARE PROUD TO PRESENT

Youth Career Expo *2014*

SAVE THE DATE

Monday, February 10, 2014

8:00 a.m. — 2:00 p.m.

Hampton Roads Convention Center

Over 100 opportunities for students to interact and learn about the public, private and governmental sectors!

- Learn about Exciting New Careers and Receive College/University Info
- Participate in Success Workshops and Practice your Interview Skills
- Learn about Employment and Internship Opportunities

Some of the Employers Participating in the Youth Career Expo:

NEWPORT NEWS SHIPBUILDING

CANON VIRGINIA • FERGUSON ENTERPRISES • ECPI UNIVERSITY

W. M. JORDAN • COLONIAL WILLIAMSBURG • BAYPORT

RIVERSIDE SCHOOL OF HEALTH • ASSOCIATED GENERAL CONTRACTORS

MORE INFORMATION COMING SOON!!!

Visit www.youthcareerexpo.com for more information.

Daily Press Story: Peninsula students take on Career Day Challenge

Apprentice School hosts event for high school students

February 21, 2013: By Sarah J. Pawlowski, spawlowski@dailypress.com | 757-247-7478

NEWPORT NEWS — you can do a lot with a roll of duct tape.

If you are creative, you can use it to build a ship that floats and carries weight.

That was one of two tests for some 300 Peninsula high school students who participated in the Career Day Challenge at the Newport News Shipbuilding Apprentice School Thursday morning.

The annual event — sponsored by Newport News Shipbuilding, the Peninsula Engineers Council and the NASA Langley Research Center — aims to challenge students' problem-solving skills and educate them about careers in science, technology, engineering and math, known as STEM.

"It is all about the kids," said Roger Hathaway, director of education at NASA Langley.

Hathaway said it is important to make students aware of the opportunities available to them and make sure they are exposed to professionals in the field.

Before the challenge, students spent an hour rotating among career tables to learn from Newport News Shipbuilding and NASA engineers about augmented reality, exploration robotics, chemical engineering, designing ships and more.

Anna Montgomery, a Phoebus High School 11th-grader, said she was surprised to learn about the different STEM careers.

"(There are) a lot of interesting jobs I've never heard of before," she said.

Montgomery and her teammates chose to build a large ship — about the shape and size of a 9-by-13-inch cake pan — with a wide base and outer walls supported by balls of tape lined on the inside. This vessel, much like an aircraft carrier compared to others in the gymnasium, aimed to carry as much weight as possible. But theirs was just one way to answer the challenge. Judges would choose the winning ship by using a ratio of the ship's weight to the amount of weight it could carry. This means that a very light ship carrying just one weight could win if Montgomery's boat, which floated with 55 weights, was too heavy.

Montgomery and her teammates did not win, but she said she had fun.

And that was one purpose for the event, said Chris Giersch, education and public outreach manager for exploration and space operations at NASA Langley.

Giersch said the challenge was not so much about STEM as about teamwork and teaching

students to collaborate with others they do not know.

The challenge brought together students from Newport News, Hampton, Gloucester, Matthews, Poquoson and York, who were mixed up into teams.

Giersch was one of the leaders for the second challenge: building a lunar lander with a foam cup, a couple of straws, index cards, coffee filters, tape and a rubber band.

"By working together as a team, they can actually solve very complicated problems," he said.

Bill Ermatinger, one of the challenge's "founding fathers" and vice president of human resources at Huntington Ingalls Industries, said working with local students to provide context to what they learn in the classroom is an investment in his business' future.

"Workforce development is absolutely critical for the shipyard," he said. "The child is the product, we as a business receive that product."

John Shifflett, director of leadership of professional and technical development at Newport News Shipbuilding, said he is open to learning from students, too.

Summer Experience

- Rising eighth graders from across Hampton City Schools; maximum of 75 students
- August 2013
- Student Tuition - \$40
- Bus service or parent provided transportation
- Schedule

Student Schedule

Day	Time	Activity
Day One	9:00 a.m.–noon	Meet Workshop objectives Introduction to Architecture and Applied Arts Pathways Beginning of career portfolio
	Noon-1:00 p.m.	Bring a bag lunch, bottled water provided
	1:00-3:00 p.m.	Careers Group Project Architecture, Applied Arts, Civil Engineering, Materials Sciences Careers Group Project where students conduct simple career research and discuss their perspectives and what might be a good fit. Create a profile of that career. Students explore stations with professionals at businesses.
Day Two	9:00–noon	Scenario-based presentation and guest speaker (Informatics) and group work facilitated by in-residence expert
	Lunch	Bring a bag lunch, bottled water provided
	1:00-3:00 p.m.	Prep for trip to PEG TV, work on career project
Day Three	8:00 a.m. -12:30 p.m.	Trip to graphics company site to observe design processes, materials, and work flow.
	12:30-1:00 p.m.	Lunch (provided)
	1:00-3:00 p.m.	Debrief project related to site visit, work on career project
Day Four	8:00 a.m.-12:30 p.m.	Trip to architectural firm to observe design process, structural engineering, GIS, design software, fabric, and other components
	12:30-1:00 p.m.	Lunch/travel
	1:00 p.m. - 3:00 p.m.	Debrief and updates

- Field Trips
 - Graphics Company
 - Newport News Shipbuilding
 - Thomas Nelson Community College

- Component Parent Academy on Monday through Thursday evenings
 - Description of pathways and certificate/degree destinations
 - The AAA Governor’s STEM Academy Planning and Advisory Committee are working on plans for summer 2014.

Parent Schedule

Day	Time	Activity
Day One	7:00-8:30 p.m.	Career Planning at the Thursday evening reception.
Day Two	7:00-8:30 p.m.	Industry-directed Career Pathways
Day Three	7:00-8:30 p.m.	Industry-directed Career Pathways
Day Four	7:00-9:00 p.m.	Reception with students

Super Saturdays

The Super Saturday program will consist of four Saturday events from 9:00 a.m. – noon. The students will be given an opportunity to extend their classroom through contact with industry professionals and field trips to locations.

Events will be developed by the industry partners and will include topics related to the AAA Governor's STEM Academy pathways. These will be developed over the summer of 2014 to implement throughout the first school year.

Current plans are to visit Mellen Graphics, Hampton University Architectural Department, Q Architects, local contractors, and companies associated with the STEM Academy.

Students will experience the career field and engage with employers and higher education professionals in tours and project-based experiences. Tours will be designed to show the full cycle of work from a customer request to delivered product or service or to demonstrate the state of the technology in current use.

Appendix G: Internship Agreement Form

INTERNSHIP AGREEMENT TO PARTICIPATE FORM

I am aware and understand that there may be dangers and risks that may result in injury from participating in the Student Internship Program.

Because of the possible risks of participating in the above program, I recognize the importance of following the schools' and career sponsors' instructions regarding program techniques, training and other rules, etc., and agree to obey such instructions.

I, _____ have read the above warning and
Name of Participant (please print)

understand its terms. In consideration of this understanding, I hereby consent to participate and to engage in all activities related to the program. I understand that the above program may involve risks of injury. I understand that I must be covered by medical, accident, and automobile insurance for the duration of the internship. This also certifies that the student intern, parent or guardian is responsible for transportation to and from the internship site.

By signing this form, I agree to release the school and career sponsor from liability for the student intern while at their internship site.

I have read and kept a copy of the **Agreement to Participate and Emergency/Insurance Verification Forms** as well as the accompanying letter from the principal. Therefore, I understand the potential risks of injury and the responsibilities of participating in the Student Internship Program.

I also give permission to receive medical treatment, first aid, emergency medical care and all other medical or surgical care deemed reasonably necessary to my health and well-being in case of injury during my participation in the above-referenced program activities and understand that I, or my insurance, will be responsible for any medical bills.

Date

Signature of Participant

Date

Signature of Parent or Legal Guardian of Participant

Appendix H: Dual Enrollment Agreements



Thomas Nelson Community College
Office of the President

June 14, 2013

Linda Shifflette, Ed.D., Superintendent
Hampton City Schools
1 Franklin Street
Hampton, VA 23669

Dear Dr. Shifflette:

I am pleased to submit to you for signature the 2013-2014 Dual Enrollment Contract between Hampton City Public Schools and Thomas Nelson Community College. The contract outlines provisions and procedures for providing dual enrollment opportunities for eligible high school students.

As required by the passage in the General Assembly of HB 1184, we have added language to the contract (Section 10, Award of Credential) and appended matrices outlining pathways for high school students interested in completing a Certificate of General Education or an Associate of Science degree in Social Sciences concurrent with the high school diploma. These pathways were developed jointly this past spring by administrators from Hampton City Public Schools and TNCC and were then submitted to the Virginia Department of Education and the Virginia Community College System. The pathways include coursework that can be completed through high school dual enrollment, advanced placement, online distance learning, and on-campus courses beginning with the summer term following the student's sophomore year in high school.

You may be aware that the Virginia Community College System is reviewing dual enrollment programs at the 23 community colleges, and we expect recommendations will be made in the future that will align policies and procedures more closely across the Commonwealth. As we learn more definitively what these changes will be, we will be back in contact with you so that we can work together for implementation in 2014-2015. We are told that no changes will affect the 2013-2014 year, so the procedures outlined in the enclosed contract (excepting the above referenced items related to HB 1184) are the same as those in the previous academic year.

We look forward to continuing our partnership and providing opportunities for academically qualified and motivated students to pursue college coursework while still in high school. We also look forward to advancing discussions on college readiness and ways

Serving Hampton James City County Newport News Poquoson Williamsburg York County
99 Thomas Nelson Drive • Hampton, VA 23666 • Phone: 757.825.2700 • Fax: 757.825.3590

www.tncc.edu

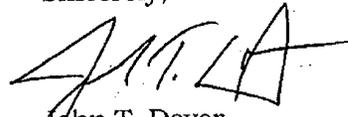
Linda Shifflette, Ed.D.
June 14, 2013
Page 2

in which we can partner to ensure that college-bound students are prepared to enter a college program immediately following high school graduation.

Please note that above your signature line, there is a request for you to identify your Career-Technical Dual Enrollment Contact and your Academic Dual Enrollment Contact. One signed copy of the contract should be sent to my office and one retained for your files.

If you have any questions or need further information, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "J. T. Dever". The signature is stylized with a large, sweeping initial "J" and a distinct "D".

John T. Dever
President

Enclosures



**Dual Enrollment Contract
Between
Thomas Nelson Community College
and
Hampton City Schools**

The purpose of this agreement is to set out the terms and conditions upon which courses will be offered under the "Virginia Plan for Dual Enrollment Between Virginia Public Schools and Community Colleges" established by the Secretary of Education, the VCCS Chancellor, and the Superintendent of Public Instruction in January 2005, and revised in March 2008. The purpose of this offering is to allow high school students to take college-level courses and receive both college credit and high school credit towards graduation.

Each party does hereby agree to the following:

1. Under this agreement, Thomas Nelson Community College, (herein after "the College"), will make available college-level courses to students of Hampton City Schools for the 2013 -2014 academic year.

The courses to be offered will be established by mutual agreement of both parties for the fall and spring semesters. A list of courses can be found as Attachment 1, and are hereby incorporated into this agreement.

The responsibilities of the parties pursuant to this agreement are conditional upon student registration for the course(s) being completed and subject to adequate student enrollment as determined by the college. The College and Hampton City Schools reserve the right to cancel any class sections or add sections, no later than the census date for the class as determined by the college.

2. Tuition & Fees

Pursuant to the Virginia Plan for Dual Enrollment, schools and colleges are encouraged to provide high school students the opportunity for dual enrollment at no cost to them or their families. If tuition will be charged, then the School will pay on behalf of the student or students, or the student will pay the College, the mandatory tuition and any fees established by the State Board for Community Colleges at the rate then in effect at the time the classes begin. Where the School agrees to pay the tuition and fees, the College will bill the School on a semester basis. If the parties agree the students are responsible for such payments, the College will bill the students directly for them.

3. Textbooks

The College reserves the right to determine the textbooks used in dual enrollment courses. The provision of all dual enrollment course textbooks is the responsibility of Hampton City Schools.

4. Payment for Other Services

Fees and reimbursement for other costs and services will be determined by mutual consent of Hampton City Schools and the College per Attachment 2, which is hereby incorporated herein and made a part of this Agreement.

5. Faculty

a. Selection

(1) Authority to Select/Hire

The selection and supervision of instructional faculty for all community college courses covered by this agreement will be the responsibility of the College. Hampton City Schools may recommend qualified teachers who are interested in teaching in the dual enrollment program to the College for consideration. Each faculty member teaching in the dual enrollment program shall be a member of the college's full-time or part-time faculty or an employee of Hampton City Schools.

(2) Dual enrollment course faculty must meet the minimum credential requirements set forth by Form VCCS-29 (Attachment 3) and the Southern Association of Colleges and Schools.

b. Payment

If the instructor for dual enrollment course(s) is employed full time by Hampton City Schools and the course(s) are part of the assigned teaching workload, the College may reimburse Hampton City Schools for the services of its employee in lieu of direct compensation to the faculty member. If, however, the College employs an instructor that is not affiliated with the Hampton City Schools, the College will compensate the faculty member directly. Reimbursement and/or payment of faculty salaries directly will be in accordance with the Virginia Community College System approved lecturer rates depending on qualifications of the instructor and will occur no later than the end of the semester of the course. Other reimbursement procedures, mutually agreeable to both the college and the school division, can also be implemented as an alternative if evidenced in writing.

c. Faculty Responsibilities

(1) Instructors will be expected to conform to college policies for the dual enrollment courses they teach, such as preparing course syllabi, verifying class rosters, reporting student progress to the college at mid-semester, taking attendance, and providing final grades at the end of the semester.

(2) Evaluation

- i. Instructor Evaluation-- The community college will conduct faculty evaluations for dual enrollment instructors using the college guidelines adopted for all adjunct faculty. A copy of the observation results will be submitted to the designated school division representative.
- ii. Student Evaluation - Student evaluations on all dual enrollment adjunct instructors will be conducted each semester for each course offered through the dual enrollment program. Results of the student evaluations will be compiled and shared with the Dean, Program Lead, faculty, and designated school division representative

6. Students

a. Selection and Eligibility to Participate in Dual Enrollment Program

- (1) In order to be eligible to participate in the Dual Enrollment Program, high school students must have permission of their parent or guardian to participate, be recommended by their high school principal to cross register, and meet course prerequisites.
- (2) Students must meet admission and course placement requirements of the college. Requirements for admission include the completion of an application for admission to the college, transcript request forms, and the completion and receipt of satisfactory scores on the college's placement tests when required.
- (3) Exceptions to the policies established in 6.a.(1) and 6.a.(2) regarding student eligibility may be made on a case-by-case basis with the approval of the public school superintendent and appropriate community college officials, so long as such exceptions are in accordance with the VCCS Policy Manual.

- b. All dual enrollment students must adhere to policies within the VCCS Policy Manual, unless specifically noted in this agreement.

7. College Administrative Responsibilities

- a. The College, through its instructor(s), will provide the appropriate Hampton City Schools officials with progress reports on each student as shall be agreed by the contracting School Division and College. At the conclusion of each college academic term, the student will receive a college grade for each course in which he/she was registered and such grades will become part of the student's permanent college record.
- b. A record will be maintained by the College for each student in the Dual Enrollment Program as a part of the permanent college record maintained by the College's

Admissions and Records office. The College will send transcripts to colleges/universities upon a student's request.

- c. The College will provide a minimum of 750 minutes of instruction (to include testing and evaluation) for each lecture credit or lab contact hour per semester to Hampton City Schools students enrolled in college courses under this agreement.

8. High School Administrative Responsibilities

Hampton City Schools will verify enrollments in each class section, and instructors will report grades to the College within a prescribed period of time, according to established college procedures.

9. Award of Credit

College and high school credit shall be awarded to the participating high school student upon successful completion of the course.

10. Award of Credential

Hampton City Schools and the College shall provide a pathway for participating students to complete an associate's degree or one-year Uniform Certificate of General Studies (General Education Certificate) concurrent with their high school diploma. Credit awarded for applicable dual enrollment courses and Advanced Placement courses with qualifying exam scores of three or higher may be applied toward attainment of the aforementioned credentials. The pathways are outlined in Attachment 4, which is hereby incorporated herein and made a part of this Agreement.

11. Course Standards

a. Course Equivalency, Evaluation, and Assessment

Assessment has long been recognized in Virginia as an important aspect of an effective instructional program. In this spirit, all dual enrollment courses developed and implemented under the auspices of the Virginia Plan for Dual Enrollment and this contract shall include a formal mechanism for evaluation. The College has the responsibility to ensure that all dual enrollment courses taught are equivalent to other instruction offered by the College, specifically in terms of course objectives, components of the syllabi, level and rigor of content, evaluation of students, textbooks, student outcomes and assessment and faculty evaluation.

b. Modifications of Policies

Modifications of on-campus policies, procedures, and rules appropriate to the high school setting may be agreed to by the parties in writing before each term begins.

c. Student Performance

The College reserves the right to advise the student, parents, and School System that the student does not have sufficient skills or abilities to continue in the courses selected after the first semester.

12. Agreement Contacts

Contact persons for this agreement are:

- the School System: Linda M. Shifflette, Ed.D., Superintendent
- the College: Vicki C. Richmond, Ph.D., Associate Vice President for Student Affairs

13. Transferability

Normally, academic courses intended for transfer with a grade of "C" or above will transfer to institutions of higher education. However, no guarantee can be made to students regarding transferability to all colleges and universities. Community college occupational/technical course credits earned are applicable to specific curricula and are intended to prepare students for employment in those areas. While some of these courses may be accepted for transfer, no unified policy on the transfer of VCCS courses exists. The School should advise students to consult with transfer institutions in order to determine if their courses will be accepted for transfer.

14. The College reserves the right to enroll other students in the courses subject to this contract when those courses are offered on the College's campus or sites not at the high school.

15. Each party will be responsible for liability coverage of its employees and agents in fulfilling its responsibilities under this agreement, to the extent authorized by law.

16. If either party wishes to terminate this agreement, a written notice must be provided to the other party within [30]* days of the requested termination date. Termination will not take place until dual enrollment courses in progress are completed.

*The number of days should be negotiated between Hampton City Schools and the Community College.

17. The College or Hampton City Schools shall not unlawfully discriminate on the basis of race, nationality, ethnicity, religion, gender, age, or disability in any undertaking pursuant to this contract. Disabled students will continue to receive accommodations through the School pursuant to the Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C § 1400.

18. Nothing herein shall be construed as a waiver of the sovereign immunity of the Commonwealth of Virginia or the assumption of any liability contrary to Virginia law.

Names of School Division Dual Enrollment Contracts for 2013-2014

Jesse White, Curriculum Leader for CTE Penny Petersen, Director of School Counseling
Career-Technical Dual Enrollment Contract Academic Dual Enrollment Contract

Signatures:



John W. Dever, Ph.D., President
Thomas Nelson Community College

6-14-2013
Date



Linda Shifflette, Ed.D., Superintendent
Hampton City Schools
Patricia J. Johnson, Ed.D. (Designee)

6-25-2013
Date

ATTACHMENT 1

Thomas Nelson Community College Hampton City Schools Approved Dual Enrollment Courses 2013-2014

Thomas Nelson Community College has approved the college-level courses listed below for dual enrollment to high school students in the Hampton City Schools for the 2013-2014 academic year.

If offered for dual enrollment, these courses will be taught in Hampton City Schools high schools by TNCC-approved Hampton City Schools instructors. *Note: Course selection may vary by high school.*

Approved Dual Enrollment Courses 2013-2014 Hampton City Schools		
<i>High School Course</i>	<i>TNCC Course</i>	<i>TNCC Credit</i>
3D Animation I	ART 278	4
3D Animation II	ART 279	4
Digital Input Technology (DIT)	AST 101	3
Word Processing	AST 102	3
Computer Keyboarding	AST 117	1
Computer Information Systems	AST 232	3
Office Administration	AST 243	3
Physiology	BIO 141	4
Business Management	BUS 100	3
Virtual Enterprise	BUS 230	4
Engineering Drawing	CAD 151	3
Virginia and US History I	HIS 121	3
Virginia and US History II	HIS 122	3
Web Design I	ITD 110	3
Computer Information Systems	ITE 115	3
IT Fundamentals	ITE 120	3
Advanced Web Design	ITE 130	3
Advanced Computer Information Systems	ITE 215	3
CISCO I/Computer Networking I	ITN 154	4
CISCO I/Computer Networking II	ITN 155	4
Introduction to Video Gaming	ITP 100	3
Introduction to Engineering	MEC 100	2
Advanced Marketing	MKT 216	3

ATTACHMENT 2

Tuition Information for School Divisions & Schools

Thomas Nelson Community College
In-School Dual Enrollment Tuition Rates / 2013-2014
Effective for Fall Semester 2013 / \$15.00 per credit hour

Hampton City Schools

TNCC requests that the Superintendent/School Executive Initial (in the third column below) the dual enrollment payment option selected for the school division for the 2013-2014 academic year.

Payment Option	Example	Superintendent Initials
1 Student Pays	Dual Enrollment tuition is \$15 per credit hour. The student attaches a check to the <i>DE College Registration Form</i> . A 3-credit course (3 x \$15) is \$45.	
2 School Division Pays	<p>Dual Enrollment tuition is \$15 per credit hour. TNCC will invoice the school division for the credit hours taken by students in all DE courses. For example, the tuition for 30 students in a 3-credit course (30 x 3 x \$15) is \$1,350.</p> <hr style="width: 20%; margin: 10px auto;"/> <p>NOTE: There will be <i>no-cost</i> to the school division if 100% of the students in an approved DE course submit a <i>DE College Registration Form</i> according to <i>no-cost</i> criteria.</p> <p><u>Meets No-Cost Criteria</u> Of 30 students on a high school course roster, 25 submit a <i>DE College Registration Form</i> selecting dual enrollment, 3 submit a <i>DE College Registration Form</i> declining dual enrollment, and 2 submit a <i>DE College Registration Form</i> but do not meet registration requirements. This course <u>meets</u> <i>no-cost</i> registration criteria.</p> <p><u>Does Not Meet No-Cost Criteria</u> Of 30 students on a high school course roster, 25 submit a <i>DE College Registration Form</i> selecting dual enrollment, 2 submit a <i>DE College Registration Form</i> declining dual enrollment, and 3 do not return a <i>DE College Registration Form</i>. This course <u>does not meet</u> <i>no-cost</i> registration criteria. TNCC invoices the school division for DE tuition for the 25 students who registered for the approved DE course. For example, the tuition for 25 students in a 3-credit course (25 x 3 x \$15) is \$1,125.</p>	

ATTACHMENT 3: VCCS-29: Normal Minimum Criteria for Each Faculty Rank May 2013

	Faculty in Humanities, Social Sciences, Natural Sciences, Math, Developmental Studies, English, as a Second Language, Administrative and Professional Faculty, Counselors, Librarians		Faculty in Specialized Professional or Technical Associate in Applied Sciences or Art Degree Fields		Faculty in Non-Associate Degree Occupational Fields	
	Initial Appointment/ Promotions Column 1	Promotions Column 2	Initial Appointment/ Promotions Column 3	Promotions Column 4	Initial Appointment/ Promotions Column 5	Promotions Column 6
ASSISTANT INSTRUCTOR ASSOCIATE INSTRUCTOR INSTRUCTOR	Appointment as a Level I associate instructor requires the same credentials as an instructor or assistant professor. Appointment as a Level 2 associate instructor requires the same credentials as an associate or full professor.					
Teaching Effectiveness	Demonstrates Potential	Demonstrates Potential	Demonstrates Potential	Demonstrates Potential	Demonstrates Potential	Demonstrates Potential
Academic Preparation	Master's in field or Master's with 18 graduate semester hours in teaching field (The minimum requirement for faculty teaching ESL & developmental courses at the instructor level is a baccalaureate degree related to the teaching field).	Master's + 15 graduate semester hours obtained subsequent to the Master's for a total of 27 graduate semester hours in the teaching field	Bachelor's in teaching field or Associate's in the teaching field with demonstrated competency in teaching field.	Bachelor's in teaching field +15 graduate semester hours obtained subsequent to the Bachelor's	H.S. diploma or equivalent Associate's or equivalent in teaching field pretermic.	H.S. diploma or equivalent Associate's or equivalent in teaching field pretermic.
Experiences Related Occupational Experience Total Teaching Experience FIT Community College Experience	Meets Expectations on Most Recent Evaluation Master's + 24 graduate semester hours obtained subsequent to the Master's for a total of 27 graduate semester hours in the teaching field 0 years 0 years 0 years	Meets Expectations on Most Recent Evaluation Master's + 15 graduate semester hours obtained subsequent to the Master's for a total of 27 graduate semester hours in the teaching field 0 years 3 years 3 years	2 years 0 years 0 years	Meets Expectations on Most Recent Evaluation Bachelor's in teaching field +15 graduate semester hours obtained subsequent to the Bachelor's 2 years 0 years 0 years	5 years current experience 0 years 0 years	Meets Expectations on Most Recent Evaluation High school or equivalent + 30 semester hours toward an Associate Degree 5 years 3 years 3 years
ASSISTANT PROFESSOR Performance Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation
Academic Preparation	Meets Expectations on Most Recent Evaluation Master's + 24 graduate semester hours in the teaching field	Meets Expectations on Most Recent Evaluation Master's + 15 graduate semester hours obtained subsequent to the Master's for a total of 35 grad hours in teaching field	Bachelor's in teaching field + 24 graduate semester hours obtained subsequent to the Bachelor's	Bachelor's in teaching field +15 graduate semester hours obtained subsequent to the Bachelor's	Associate's or equivalent (Major in teaching field)	Associate's or equivalent (Major in teaching field)
Experiences Related Occupational Experience Total Teaching Experience FIT Community College Experience	Meets Expectations on Most Recent Evaluation Doctorate (36 graduate semester hours in teaching field) 0 years 6 years 0 years 0 years	Meets Expectations on Most Recent Evaluation Master's + 36 graduate semester hours obtained subsequent to the Master's for a total of 35 grad hours in teaching field 0 years 6 years 3 years 3 years	2 years 0 years 0 years	Meets Expectations on Most Recent Evaluation Master's related to teaching field +15 graduate semester hours obtained subsequent to the Master's 2 years 6 years 0 years 0 years	5 years 0 years 0 years	Meets Expectations on Most Recent Evaluation Assoc. related to the teaching field or equiv. + 30 semester hours obtained subsequent to the Associate's 5 years 6 years 3 years 3 years
ASSOCIATE PROFESSOR Performance Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation
Academic Preparation	Meets Expectations on Most Recent Evaluation Doctorate (36 graduate semester hours in teaching field)	Meets Expectations on Most Recent Evaluation Doctorate (35 graduate semester hours in teaching field)	Meets Expectations on Most Recent Evaluation Master's related to teaching field +15 graduate semester hours obtained subsequent to the Master's	Meets Expectations on Most Recent Evaluation Master's related to teaching field +15 graduate semester hours obtained subsequent to the Master's	Meets Expectations on Most Recent Evaluation Master's related to the teaching field	Meets Expectations on Most Recent Evaluation Master's related to the teaching field
Experiences Related Occupational Experience Total Teaching Experience FIT Community College Experience	Meets Expectations on Most Recent Evaluation Doctorate (36 graduate semester hours in teaching field) 0 years 9 years 0 years 0 years	Meets Expectations on Most Recent Evaluation Doctorate (35 graduate semester hours in teaching field) 0 years 9 years 3 years 3 years	2 years 0 years 0 years	Meets Expectations on Most Recent Evaluation Master's related to teaching field +15 graduate semester hours obtained subsequent to the Master's 2 years 6 years 3 years 3 years	5 years 9 years 0 years 0 years	Meets Expectations on Most Recent Evaluation Master's related to the teaching field 5 years 9 years 3 years 3 years
PROFESSOR Performance Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation	Meets Expectations on Most Recent Evaluation
Academic Preparation	Meets Expectations on Most Recent Evaluation Doctorate (36 graduate semester hours in teaching field)	Meets Expectations on Most Recent Evaluation Doctorate (35 graduate semester hours in teaching field)	Meets Expectations on Most Recent Evaluation Master's related to teaching field +15 graduate semester hours obtained subsequent to the Master's	Meets Expectations on Most Recent Evaluation Master's related to teaching field +15 graduate semester hours obtained subsequent to the Master's	Meets Expectations on Most Recent Evaluation Master's related to the teaching field	Meets Expectations on Most Recent Evaluation Master's related to the teaching field
Experiences Related Occupational Experience Total Teaching Experience FIT Community College Experience	Meets Expectations on Most Recent Evaluation Doctorate (36 graduate semester hours in teaching field) 0 years 9 years 0 years 0 years	Meets Expectations on Most Recent Evaluation Doctorate (35 graduate semester hours in teaching field) 0 years 9 years 3 years 3 years	2 years 0 years 0 years	Meets Expectations on Most Recent Evaluation Master's related to teaching field +15 graduate semester hours obtained subsequent to the Master's 2 years 6 years 3 years 3 years	5 years 9 years 0 years 0 years	Meets Expectations on Most Recent Evaluation Master's related to the teaching field 5 years 9 years 3 years 3 years

(1). Administrative and Professional faculty must receive at least a "good" summary evaluation rating on the most recent evaluation to be considered for promotion

HCS General Education Certificate

IMPLEMENTATION PLAN

Appendix 4

The following articulates a pathway¹ for a qualifying student² within Hampton City Schools to complete the TNCC General Education Certificate concurrent with high school graduation:

Course	Term Scheduled	Location	Delivery method	Credits	Faculty Provided by	Fulfill H.S. Requirement	H.S. Course Name
HIS 121/122	11 th Grade	High School	AP or DE	6	High School	Yes	AP US History
BIO 101/102	11 th Grade	High School	AP or DE	8	High School	Yes	BIO 101/102 (AP BIO) CHM 101/102 or 111/112 (AP CHM)
CHM 101/102							
CHM 111/112							
PHY 201/202							PHY 201/202 (AP Physics B)
BIO 101	Summer 2	TNCC	OC	4	TNCC	No	N/A
CHM 101							
ENG 111/112	Fall 2	High School	DE	6	TNCC or HS	Yes	Honors English 12
SDV 100	Spring 2	TNCC	OC	1	TNCC	No	N/A
CST 100/126	Spring 2	TNCC	OC	3	TNCC	Yes	N/A
BIO 102	Spring 2	TNCC	OC	4	TNCC	Yes	N/A
CHM 102							
Humanities Elective	Spring 2	TNCC	OC	3	TNCC	Yes	N/A
Social Science Elective	Spring 2	TNCC	OC	3	TNCC	Yes	N/A
MTH 158	Spring 2	TNCC	OC	3 or 4	TNCC	Yes	Pre-Calculus
MTH 163							
MTH 173							

¹Any modifications to the above pathway will be outlined in writing and agreed upon by the College and school division. Any modifications will not prevent students from obtaining the plan's intended credential.

²In order to participate in the above pathway, a student must meet all dual enrollment admission requirements and College program requirements and complete VCCS placement tests. In order to enroll in any of the courses noted in the pathway, all course pre-requisites must be met.

³Program information including purpose, occupational objectives, admission requirements, notes, computer competency requirements, and course requirements may be found in the College catalog found at: www.tncc.edu

Notes:

OC = On-campus V=Online

Summer 1 = Summer before 11th grade

Summer 2- Summer before 12th grade

Fall 2 = Fall of 12th grade

Spring 2 = Spring of 12th grade

¹Any modifications to the above pathway will be outlined in writing and agreed upon by the College and school division. Any modifications will not prevent students from obtaining the plan's intended credential.

²In order to participate in the above pathway, a student must meet all dual enrollment admission requirements and College program requirements and complete VCCS placement tests. In order to enroll in any of the courses noted in the pathway, all course pre-requisites must be met.

³Program information including purpose, occupational objectives, admission requirements, notes, computer competency requirements, and course requirements may be found in the College catalog found at: www.tncc.edu

HCS AS Social Science
 IMPLEMENTATION PLAN
 Appendix 4

The following articulates a pathway¹ for a qualifying student² within Hampton City Schools to complete the TNCC Associates of Science in Social Science³ concurrent with high school graduation:

Course	Term Scheduled	Location	Delivery method	Credits	Faculty Provided by	Fulfill H.S. Requirement	H.S. Course Name
SDV 100	Summer 1	TNCC	OC	1	TNCC	No	N/A
HLT	Summer 1	TNCC	OC/V	2	TNCC	Yes	N/A
HUM 201	Summer 1	TNCC	OC/V	3	TNCC	Yes	N/A
GEO 210	9 th Grade	High School	AP	3	High School	Yes	AP Human Geography (3 or better)
HIS 111/112	10 th Grade	High School	AP	6	High School	Yes	AP World History (3 or better)
HIS 121/112	11 th Grade	High School	DE or AP	6	High School	Yes	AP US History
BIO 101/102	11 th Grade	High School	AP or DE	8	High School	Yes	BIO 101/102 (AP BIO) CHM 101/102 or 111/112 (AP CHM)
CHM 101/102							
CHM 111/112							
PHY 201/202							PHY 201/202 (AP Physics B)
PSY 200	11 th Grade	High School	AP	3	High School	Yes	AP Psychology
MTH 163/164	11 th Grade	High School/TNCC	DE	6	High School	Yes	Math Analysis
MTH 173/174	11 th Grade	High School	DE or AP	8	High School	Yes	AP Calculus BC
ITE 115	Summer 2	TNCC	OC/V	3	TNCC	Yes	N/A
BIO 101	Summer 2	TNCC	OC	4	TNCC	Yes	N/A
CHM 101							
ENG 111/112	Fall 2	High School	DE	6	TNCC or HS	Yes	Honors English 12
PLS 135	Fall 2	High School	AP or DE	3	TNCC or HS	Yes	AP Government

¹Any modifications to the above pathway will be outlined in writing and agreed upon by the College and school division. Any modifications will not prevent students from obtaining the plan's intended credential.

²In order to participate in the above pathway, a student must meet all dual enrollment admission requirements and College program requirements and complete VCCS placement tests. In order to enroll in any of the courses noted in the pathway, all course pre-requisites must be met.

³Program information including purpose, occupational objectives, admission requirements, notes, computer competency requirements, and course requirements may be found in the College catalog found at: www.tncc.edu

Appendix I: Insurance

Hampton City Schools is Self-Insured as allowed by the following regulation and policy:

NOTE: The following are excerpts from the Hampton City Schools Policy Manual

Section: E - Support Services Title: INSURANCE MANAGEMENT

Number EI – Status Active

Legal [Code of Virginia, as amended, § 22.1-84](#) [Code of Virginia, as amended, § 22.1-88 through 22.1-198](#)
Regulations of the Virginia Board of Education Adopted April 26, 1967; Last Revised October 17, 2012

The Board will ensure that adequate insurance is maintained to cover all risks relating to the activities of Board members, employees of the Board and all real and personal property owned or leased by the Board. The terms of the coverage will be reviewed at least annually and the Superintendent will be authorized to change coverages when necessary.

Adopted: 4/26/67; Revised: 10/15/80, 2/5/03, 10/17/12

LEGAL REFS.: **Code of Virginia, as amended, §§ [22.1-84](#), [22.1-88](#) through 22.1-198** Regulations of the Virginia Board of Education

CROSS REF.: [ECA](#) – FIXED ASSET CONTROL AND REPORTING OF LOSS OR DAMAGE

Section E - Support Services Title: FIXED ASSET CONTROL AND REPORTING OF LOSS OR DAMAGE

Number: ECA – Status: Active

Legal: [Code of Virginia, as amended, § 22.1-78](#) Adopted: September 5, 2012

I. Inventories – The Superintendent shall devise an adequate system of inventory of school property. Such inventory shall be maintained to identify items for the purpose of insurance and to control the loss of property. The inventory shall include, but not be limited to the following: buildings, movable equipment, vehicles, and all other items of significant value. The Division shall keep a complete inventory of all equipment, listing make, source, date of purchase, model, serial number, location and other identifying data.

II. Reporting Losses

All loss of or damage to school property shall be promptly reported to the Superintendent or designee.

Adopted: 9/5/2012

LEGAL REF.: Code of Virginia, as amended, § [22.1-78](#)

CROSS REFS.: [ECAB](#) – REPORT OF VANDALISM

[EI](#) - INSURANCE MANAGEMENT

Hampton City Schools, Hampton, Virginia

Appendix J: Budget

Table 4: Projected AAA STEM Budget

2014-15 Budget				
	State Funds	Perkins Funds	Other Funds*	In-Kind
1. Personnel --- 1000	\$1,200.00	\$2,500.00		\$6,000.00
2. Employment Benefits --- 2000	\$100.00	\$195.00		
3. Purchased/Contractual Services ---- 3000 (include HOSA)	\$1,500.00	\$3,000.00		
4. Internal Services ---- 4000				
5. Staff Development ---- 5000		\$2,500.00		
6. Summer Component Activities ---- 5000		\$1,000.00		\$2,500.00
7. Travel ---- 5000	\$1,000.00	\$3,500.00	\$250.00	
8. Contractual Services ---- 5000	\$1,200.00			
9. Materials and Supplies ---- 6000			\$6,000.00	
10. Classroom Equipment ---- 8000		\$15,000.00	\$15,000.00	
11. Facilities ---- 8000				\$6,250.00
COLUMN TOTAL	\$5,000.00	\$27,685.00	\$21,250.00	\$14,750.00

Items 1 and 2: Personnel costs reflect payroll for teachers to work on off-contract projects and activities, and reflect both Saturday and summer activities. The in-kind portion is an estimate of business staff hours and volunteer labor through various groups (parents, PTA, and others).

Item 3: Purchased/Contractual Services refer to consultant fees in creating the plan. The 3000 budget code also refers to approved co-curricular DECA and TSA attendance, travel, etc. These items are over the two-year period and include the middle school DECA and TSA CTSO's.

Item 4: Not used

Item 5: Staff Development includes attendance at the Virginia Association of Marketing Educators (VAME), Virginia Technology and Engineering Education Association (VTEEA)

conference by AAA Governor's STEM Academy teachers. Additional opportunities arise in concert with local partners and advisers.

Item 6: Summer Component Activities are described in "Student Summer Workshops."

Item 7: Travel includes vehicle rental for field trips. Yellow bus transportation may be required for field trips or student transportation during off-contract hours and when buildings are closed.

Item 8: Contractual Services includes consultant fees to ensure the summer activities and coordinated events occur as outlined in Appendix E.

Item 9: Materials and Supplies include protective equipment, certificate paper, and items needed to conduct the Super Saturday and summer events. These are not the same as the AAA Governor's STEM Academy instructional supplies, which are not accounted for in this budget.

Item 10: Classroom Equipment includes purchases of models and simulators used in the laboratory, and computerized lab equipment and trainers (e.g., rapid prototyping equipment, production equipment, design equipment, and typical contemporary components required of the career).