

# Gaston County Schools Technology and Industrial Engineering Academy

### **Choice Program Pathways**

STEAM Academy at Stanley Middle



Technology & Industrial Engineering Academy at Bessemer City Middle School



Technology & Industrial Engineering Academy at Bessemer City High School





### **Program Information**

The Technology & Industrial Engineering Academy focuses on student exploration in the areas of industry, computer science and engineering.

The Technology & Industrial Engineering Academy empowers students to lead their own discovery. Students are engaged in activities that build knowledge and skills in the areas of computer science and engineering. Opportunities to explore web development, interactive games and animation, the design process, and computer programming allow students to develop an understanding of the influence of creativity and innovation in their lives. Their exploration opens a range of paths and possibilities they can look forward to in high school and beyond.

#### **Entrance Requirements**

- Students must be in good standing, including attendance, behavior, and academics
- Parent/Legal Guardian Resident of Gaston County
- Incoming 6th Grader

### **Available Seats**

60 Outside Attendance Area for Rising 6th Graders

### Middle School Courses for High School Credit\*

- Math I
- Spanish I
- World History
- Earth & Environmental Science



<sup>\*</sup>Additional criteria must be met to participate in these courses.

#### **Middle School Electives**

- Art
- Band
- Choir
- Spanish
- Business Technology
- Computer Science
- Engineering
- PE/Health



#### **Program Overview**

- Over 25 design and engineering clubs
- Broadcasting and Digital Communications
- Chess Team
- College and Career Summer Camp



### **Program Information**

The STEAM Academy at Stanley Middle provides a layered approach to the Core Curriculum incorporating the five strands of STEAM.

The core courses in each grade will be infused as follows:

- 6th grade will focus on Technology, creating a foundation of knowledge and skills
- 7th grade will continue to build on their technology foundation while adding the perspective of the Arts in their core classes
- 8th grade students will apply the concept of Engineering in all of their core courses.

All Core Plus (elective) courses are designed to support students' areas of interest as well as enhance the STEAM experience for them.

### **Entrance Requirements**

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- Incoming 6th Grader

### **Available Seats**

40 Outside Attendance Area for Rising 6th Graders

### Middle School Courses for High School Credit\*

- Math I
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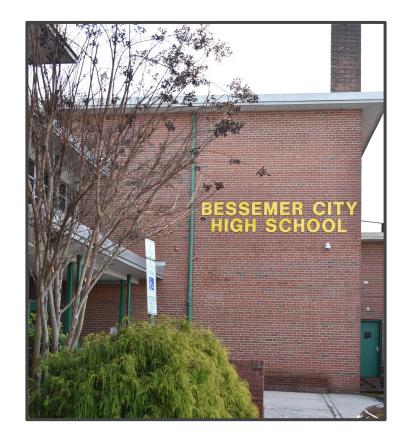
#### **Middle School Electives**

- Art
- Band
- Choir
- Spanish
- Business Technology
- Computer Science
- Medical Science
- Engineering
- PE/Health



### **Program Overview**

- Over 30 STEAM Clubs offered during the school day
- All students receive a Chromebook for use during the school day and at home



#### **Program Information**

The Technology & Industrial Engineering Academy focuses on offering educational opportunities and certifications that will prepare students for careers in engineering, trade & industry. Some of the CTE Engineering courses will be offered at the Advanced Placement (AP) level.

The Academy will be unique in regards to offering theory and real-world experiences. Students will participate in activities that are industry based and job specific such as masonry, carpentry, advanced manufacturing and engineering.

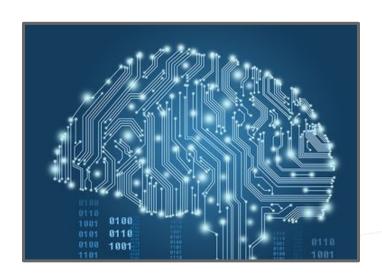


#### **Entrance Requirements**

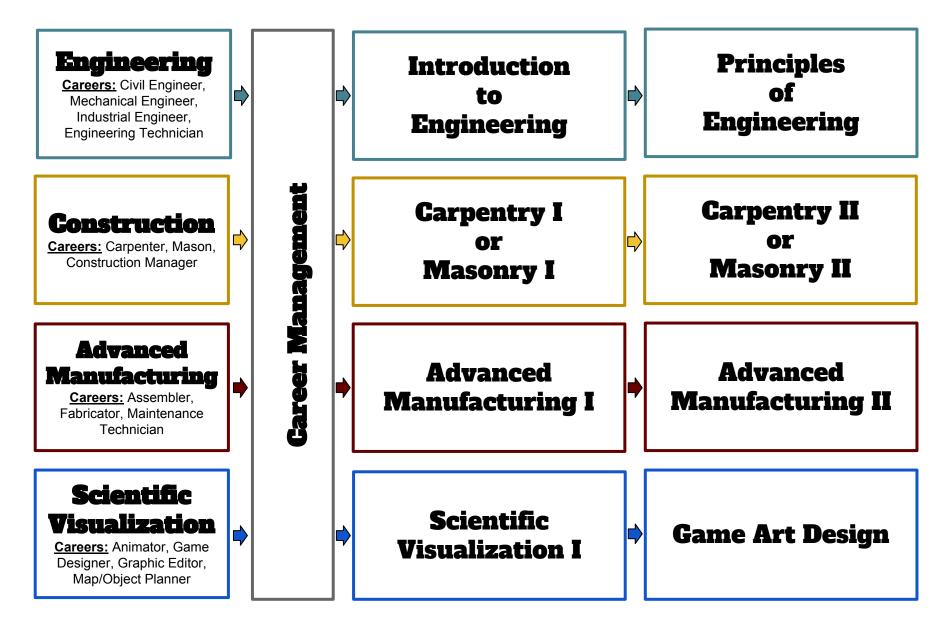
- Students must be in good standing, including attendance, behavior, and academics
- Parent/Legal Guardian Resident of Gaston County
- Incoming 9th Grader

### **Program Offerings**

- AP Level Career Technical Education (CTE) Course
  - Project Lead The Way Engineering
- Theory Courses
- Hands-On Trade Courses



# Technology & Industrial Engineering Academy at Bessemer City High School Course Overview



Sample Pathway Courses				
Freshman	Sophomore	Junior	Senior	
English 1	English 2	English 3	English 4	
Math 1	Math 2	Math 3	Math 4	
Science 1	Science 2	Science 3	Social Studies 4	
Social Studies 1	Social Studies 2	Social Studies 3	Foreign Language / Elective	
Health/PE	Pathway Course	Foreign Language / Elective	Pathway Course	
Career Management	Elective	Pathway Course	Elective	
Elective	Elective	Elective	Elective	
Elective	Elective	Elective	Elective	

#### **Possible Certifications**

- Certified Production Technician (CPT)
- Conover Soft Skills
- Microsoft Office Specialist Certifications
- National Center for Construction Education and Research (NCCER)
- Occupational Safety and Health Administration (OSHA)
  - Construction
  - Industry



### **Potential Careers**

Career	Starting Salary	
Civil Engineer	\$55,000	
Computer Numerically Controlled Programmer	\$32,000	
Carpenter	\$26,000	
Brick/Block Mason	\$28,000	
Certified Nurse Assistant	\$25,000	
Graphic Designer	\$29,000	
Child Care Worker	\$22,000	
Office Assistant	\$22,000	



### **Experiences**

- **Apprenticeships**
- **Internships**



































### **Available Seats**

30 Outside Attendance Area

### **Participation**

 Students in attendance zone are eligible to participate (must apply for academy and will participate in lottery)

Choice Program	Event	Date		
Gaston Early College (GEC)	Application Window	January 28 - February 28, 2019		
Highland School of Technology (HST)	Application Window	January 28 - February 28, 2019		
ALL Other Choice Programs	Application Window	January 28 - February 28, 2019		
Highland School of Technology (HST)	Lottery Selection	March 14, 2019		
ALL Choice Programs (except: GEC, HST, Hawks Nest, and G&T at Pleasant Ridge)	Lottery Selection	March 15, 2019		
Gaston Early College (GEC)	Lottery Selection	April 1, 2019		
ALL Choice Programs (except: GEC, HST, Hawks Nest, and G&T at Pleasant Ridge)	Seat Acceptance Deadline	March 29, 2019		
Hawks Nest and G&T at Pleasant Ridge	Lottery Selection	May 17, 2019		
Hawks Nest and G&T at Pleasant Ridge	Seat Acceptance Deadline	May 31, 2019		
ALL Choice Programs (except: GEC and HST)	Waitlist Seat Acceptance Deadline	July 27, 2019		

# **Questions?**