

G.W. CARVER CENTER FOR ARTS AND TECHNOLOGY

938 York Road
Towson, MD 21204

Information Technology / Interactive Media Production

Information Technology / Interactive Media Production students demonstrate an interest in creating computer programs and interactive media. This dual-completer program provides students with experiences in computer programming, website development, computer graphics, and video game development. Students should have solid skills in mathematics and logic and be self-starters who are comfortable working independently and solving problems creatively.

BCPS Magnet Transportation Information: George Washington Carver Center for Arts and Technology (Central Area) Transportation is provided at community pick-up points for students from all areas of Baltimore County Public Schools.

Magnet Showcase Event: Tuesday, October 9, 2018 5-7 p.m.

2019-2020 Assessment Guidelines

Magnet Coordinator: Lori Turner lturner2@bcps.org
Ruth Arenas rarenas@bcps.org

Assessment Date: Saturday, December 8, 2018 8 a.m. – 6 p.m.

Assessments by appointment only

Individual assessment appointments must be scheduled no later than Wednesday, November 21, 2018.

Schedule your appointment online at the BCPS Magnet Programs' Web site

(www.tinyurl.com/BCPSMagnet) or call BCPS Magnet Programs at 443-809-4127 (NOT BOTH).

Unforeseen Illness or Emergency: Parent(s) must inform the school immediately if the applicant cannot attend or complete the scheduled assessment due to an unforeseen illness or emergency. Please be aware that assessments will not be rescheduled without documentation verifying the illness or emergency.

Inclement Weather Date: Saturday, December 15, 2018, at the previously scheduled appointment time

Inclement Weather: In the event that school activities are cancelled due to inclement weather, magnet assessments will be postponed. Postponed assessments will occur on the designated inclement weather date. All emergency closing and cancellation information will be posted on the BCPS automated information line, 443-809-5555. Closings and cancellation announcements may also be made through local media.

Directions to Carver Center:

From West:

- Take I-695 N to Towson exit 26A toward Towson/York Rd
- Turn left at West Rd (signs for Towson/York Rd)
- Take the 1st right onto York Rd
- Make a right at the next light, Fairmount Ave.

From East:

- Take I-695 W to Towson exit 26 toward Towson
- Turn left at MD-45/York Rd
- Make a right at the next light, Fairmount Ave.



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Prior to the Assessment

Demonstration of Interest

This **MUST** be completed prior to coming to the assessment.

Prior to coming to the assessment, applicants should conduct research about the video game industry and create a tri-fold brochure that shows the results of the research. The brochure should be constructed from an 8 ½" by 11" sheet of plain white paper and address the following:

1. Three positions within a video game company include (1) game designer, (2) programmer, and (3) artist. What are the primary responsibilities of these positions?
2. Of the three positions, which position interests you the most and why?
3. List three video game companies and three games each company produces.
4. Of the three companies, which would you want to work for and why?
5. What is your favorite video game and why is it your favorite? Does the game have 2D or 3D graphics?
6. In a 3 inch by 3 inch space, draw **your own** video game character OR write a description of the character. Be sure to include the name of your character.
7. Include your name, a title, and the source(s) of information.

On the Day of the Assessment

The assessment takes approximately 2 hours.
Assessments by Appointment ONLY

It is the responsibility of the parent(s) to:

- Ensure that the applicant attends the assessment on the scheduled date and time.
- Contact the schools if scheduled magnet assessment appointments conflict.

Failure to attend an assessment WILL result in disqualification.

Registration Information

Individual assessment appointments must be scheduled no later than November 21, 2018.
Schedule your appointment online at the BCPS Magnet Programs' Web site
(www.tinyurl.com/BCPSMagnet) or call BCPS Magnet Programs at 443-809-4127 (NOT BOTH).

Please arrive 15 minutes prior to the scheduled time. Students will register for the assessment in the Dining Hall with the required materials. Students who are more than 10 minutes late may not be admitted into the assessment. On average, the entire assessment takes approximately 2 hours. Due to personnel and time constraints, assessments may not be rescheduled. Due to the high volume of applicants, there will be no seating available in the school for parents/guardians. Parents are asked to drop off their students and return at the conclusion of the assessment.

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If the applicant cannot attend or complete the scheduled assessment due to an unforeseen illness or emergency, please contact George Washington Carver Center for Arts and Technology at 443- 809-2793.

Please be aware that assessments will not be rescheduled without documentation verifying the illness or emergency.

Required Materials:

- Brochure - Applicants must bring the brochure in a sealed envelope with the applicant's name on the front to the assessment at Carver Center. The brochures will be collected before the applicant completes the questionnaire.

Assessment Description

1. **Brochure (20 points):** Applicants must bring the brochure in a sealed envelope with the applicant's name on the front to the assessment at Carver Center. Brochures will be evaluated on neatness, organization, clear labeling of sections, grammar, spelling and inclusion of required information.
2. **Math Assessment (40 points):** Applicants will take a timed assessment in mathematics. Skills evaluated will include basic knowledge of fractions and percent, equations, slope, and solution of logic and word problems. Calculators will be provided. Students are encouraged to review the sample questions to prepare.
3. **Practical Drawing Assessment (20 points):** Applicants will be asked to complete a drawing. You will spend 30 minutes drawing a video game character based on a description provided to you. You will be provided with all materials. The drawing will not be returned. The following criteria will be applied when scoring the drawing:
 - 12 points – Following the directions and inclusion of the features provided in the description
 - 4 points – Attention to detail
 - 4 points – Quality of coloring
4. **Questionnaire (20 points):** Applicants will complete a questionnaire about the brochure and to determine their interest in and knowledge of the Information Technology/Interactive Media Production program. The questionnaire will be evaluated based on the applicant's response, spelling, and grammar. Brochures will be collected prior to the student completing the questionnaire.

Documented testing accommodations, as appropriate to the assessment, will be provided.

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Magnet Application Deadline

Friday, November 16, 2018

Applications are available on the BCPS Magnet Programs' Web site (www.tinyurl.com/BCPSMagnet) beginning at 12:00 noon on Monday, September 17, 2018. Applications must be submitted on or before **Friday, November 16, 2018**. Late applications are not processed.

You are encouraged to **apply online** on the BCPS Magnet Programs' Web site (www.tinyurl.com/BCPSMagnet) or **submit a paper application**.

- **Online applications** may be submitted until 1:00 p.m. on Friday, November 16, 2018. To apply online, you will need an active email account.
- **Paper applications** must be postmarked on or before Friday, November 16, 2018.

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Course of Study

This dual-completer program provides students with experiences in computer programming, website development, computer graphics, and video game development. Students will take the classes in both the Information Technology (IT) and Interactive Media Production (IMP) completers.

The IT Programming completer provides students with opportunities to design, develop, and test software solutions using a variety of programming languages. This pathway includes the AP Computer Science class, which is the equivalent of an introductory college course emphasizing object oriented programming, problem solving, and algorithm development.

The IMP completer provides students with experiences in website development, computer graphics, digital media and entertainment production, and project management. Students develop skills in photo/video imagery, animation, web page design, and game development.

Expected Classes

Year	Classes
Grade 9	Foundations of Computer Science AND Interactive Media Production 1
Grade 10	Computer Science Principles AND Interactive Media Production 2
Grade 11	AP Computer Science AND Interactive Media Production 3
Grade 12	Microcomputer Operating Systems OR Dual Enrollment in CS/IT College Course AND Interactive Media Production 4

***Please be advised courses may be subject to change.**

Articulation Agreement

Students who earn a grade of B or better in select courses may be able to transfer those courses to the Community College of Baltimore County and receive credit for the courses.

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Sample Math Questions

Candidates will be able to use the calculators provided.

1. Change .07% to a decimal
2. Change $\frac{3}{4}$ to a percent
3. Solve $\frac{1}{4} + \frac{1}{2}$ and write as a fraction
4. Evaluate $\$300 * 106\%$
5. Evaluate $3 + 27/3^2 - (7 - 5)$
6. Evaluate $a^2 + 7b$ where $a = 2$ and $b = 4$
7. Solve for x : $2x + 3 = 23$
8. Find the slope for the line defined by the two points: $(-5,4)$ and $(0,-3)$
9. Identify the slope and the y-intercept for the following: $y = -2x + 10$
10. An advertisement indicated that a new computer priced at \$600.00 could be purchased by putting \$102.00 down. What percent of the price is the down payment?
11. Baxter Associates has a workers' compensation premium that is 73% of wages. Gene is paid \$16 per hour as a skilled worker. What is the cost of the worker's compensation insurance per hour for Gene?
12. A group of five people are all working on the same mathematics problem. On the night before it is due, they call each other to discuss their work. Each person talks to all the other people at least once. What is the fewest number of telephone calls that could be made?
13. Mario invited some people to a party. When the doorbell rang the first time, one of his guests arrived. When the doorbell rang the second time, three guests arrived. When the doorbell rang the third time, five guests arrived. If the guests continued to arrive in the same manner, how many guests would be at the party after ten rings?
14. Find the smallest single-digit positive integer that must be added to 2010 in order to obtain a number divisible by 9.
15. How many numbers between 77 and 177 are divisible by 8?
16. Harry's class took a field trip to the science museum. They left school at 7:00 A.M. It took them 45 minutes to drive to the museum. They stayed at the museum for 3 hours and 15 minutes and it took them 45 minutes to drive back to the school. What time was it when Harry's class got back to school?

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Solutions for IT/IMP Sample Questions

1. 0.0007
2. 75%
3. $\frac{3}{4}$
4. 318
5. 4
6. 32
7. 10
8. $-\frac{7}{5}$
9. Slope = -2; Y-intercept = 10
10. 17%
11. \$11.68
12. 10 calls
13. 100
14. 6
15. 13
16. 11:45 AM