



Riverside High School

Engineering, Computer and Graphic Design Academy

yonkerspublicschools.org/riverside

GRADES 9-12

565 Warburton Avenue, Yonkers, NY 10701 • (914) 376-8425

School Theme: Engineering and Computer Design

Our Mission: Riverside High School empowers students through core academics as well as career and technical education to inspire a lifetime of professional creativity that carries forward into any career path. Students engage in career exploration through the integration of science, technology, engineering, art and mathematics in experiential classroom learning environments. Introductory courses in engineering, technology and design provide opportunities for students to engage in hands-on projects, design experiments and create innovative solutions for real-world engineering challenges. Riverside's career pathways offer in-depth study in engineering or computer and graphic design supported by industry and community advisory committees to align the instructional program with industry standards.

Academics

Riverside High School students engage in career exploration through the integration of science, technology, engineering, art and mathematics in experiential classroom learning environments. Introductory courses in engineering, computer and design, provide all students with opportunities to engage in hands-on projects, design experiments and create innovative ideas to solve proposed engineering problems. Riverside was recently recognized as an Microsoft Innovative Educator (MIE) Expert with high level of integrating technology into the classroom. The Spanish language pathways provides an opportunity to a high level of proficiency in a second language which culminates with students earning 3 college credits and potential to earn the Seal of Biliteracy on their diploma. Additional engagement with the Seal of Civic Readiness is integrated into the core academic pathways.

Seal of Civic Readiness: NY State is committed to the civic education of our students that empowers them to make informed decisions for the public good as members of a culturally diverse, democratic society in an interdependent world. Successful candidates will earn 6 points by demonstrating proficiency in civic knowledge and civic participation which include course credits, national or state exams, civic projects and actions, capstone project and civic experiences. The Seal of Civic Readiness may be used as a 4+1 graduation pathway.

Computer & Graphic Design Pathway

Students in the computer & design pathway learn about current industry trends in Graphic Design, Computer Information Systems, Program Logic, Web Design and 3-Dimensional Drawing. Creativity in design can be explored through Adobe Illustrator, Photoshop, Sketchup, and Flash. Students will gain 21st Century computer skills by mastering all programs in Microsoft Office Suite. Cybersecurity students can expect to participate in experiential learning of computer hardware, networking and operating systems, while learning to code and program in python and Java script. Students can pursue additional work-based national certifications in MS A+ and Cisco Networking. We encourage students to participate in Girls Who Can Code, Hour of Code, Cyber Hackathons to further their technology education.

Pathway Assessment in World Languages – Spanish

Students can take rigorous classes in Spanish that are designed to hone their language skills, while preparing them for college, careers, and life. They will deepen their understanding of the language, literature, history and culture while sharpening their critical thinking and communication skill in Spanish. The pathway culminates with dual enrolled college linked Spanish language course. Students can also complete the language proficiency portfolio to earn the Seal of Biliteracy on their high school diploma.

Seal of Biliteracy: NY State recognizes high school students who have attained high level of proficiency in English and one or more world languages. Successful candidates earn 3 points in English and 3 points in each world language through a point matrix that include course grades, national and state exams, transcripts and culminating projects. The seal is then affixed on the students' high school diploma and a medallion that is worn at graduation.

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Engineering Pathway

(Academic Admission Requirements)

Students in the engineering pathway will engage in fundamental concepts of electrical, mechanical, civil, and computer systems engineering. Programs such as Computer Aided Design and Drafting (CAD), PTC and SolidWorks are the foundations of creating innovative engineering solutions. Students will enhance their knowledge and skills in engineering through courses in electromechanical systems, robotics, green energy systems, computer programming, architecture and construction engineering. All students are expected to participate in hands-on projects and experiential learning in the engineering classes.

P-Tech Program – Electrical Engineering or Cyber Security Computer Technology

Riverside High School offers a 6-year course of study that culminates in an industry recognized Applied Associate Degree in either electrical engineering or cyber security computer technology from Westchester Community College. Students will be engaged in rigorous college level courses as early as 9th grade and participate in work-based learning experiences with Riverside's industry and community partnerships through mentoring programs and workshops, workplace tours, job shadowing programs and internship opportunities.

It is mandatory for all students participating in the P-Tech program to attend Summer Academy and Extended Day Programs which will prepare students for college and career readiness. These programs primarily focus on English Language Arts, Mathematics, workplace learning and technical courses that are specifically designed to support and reinforce one another to develop the professional skills and knowledge that students' will require for any career path, through curriculum aligned with the Next Generation Learning Standards and the pre- and co-requisite college course requirements.

The Partners

This school works closely with the following agencies, institutions and/or colleges:

- Groundwork Hudson Valley
- Habitat for Humanity
- Hudson River Museum of Westchester
- IAC Applications
- Microsoft Innovative Educator (MIE)
- Nepperhan Community Center - 21st Century Gateway Program
- P-Tech/NYSED
- P-Tech / IBM Global Network Partnership
- Qubit by Qubit - Quantum Computing
- Verde Electric Corporation
- Yonkers Chamber of Commerce
- Yonkers Contracting Company, Inc.
- Yonkers Partners in Education (YPIE)
- Yonkers Paddling & Rowing Club

Colleges and Universities:

- Columbia University - Lamont-Doherty Earth Observatory (LDEO)
- Concordia College
- Farmingdale University
- Manhattan College - School of Engineering
- Mercy College
- Monroe College
- Sarah Lawrence College Center for the Urban River at Beczak
- Westchester Community College



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