

HOW TO APPLY

Students interested in the Engineering program must currently reside in Durham County and need to apply through the DPS Magnet Programs and CTE Pathways lottery. Applications are generally due in January for the school year beginning the following August.

Pathway applications may only be made online, and are accessible once the lottery registration period begins. For more information, or to apply, please go to www.dpsnc.net/magnet.



SELECTION PROCESS

Students who reside within the Riverside High School attendance zone and select the program as their first choice are given priority. Those living outside the Riverside attendance zone will be placed in the choice lottery. Selection is randomized, although priority is given to those listing this program as their first choice. Those selected in the first lottery will be notified generally in March. Selected applicants must then accept or decline the assignment. Additional lotteries may be held later in the process to fill any remaining spaces in the program.

Questions about the lottery process and selection should be directed to the office of Student Assignment at (919)560-2059 or to Dr. Julie Pack, Executive Director of CTE and Magnet Programs at (919)560-3660 or julie_pack@dpsnc.net.



PLTW

FOR MORE INFORMATION

RIVERSIDE HIGH SCHOOL
www.riverside.dpsnc.net

RIVERSIDE ENGINEERING
www.repac-riverside.org

NATIONAL PROJECT LEAD THE WAY
www.pltw.org

PLTW

PROJECT LEAD THE WAY

Your Pathway to Success



ENGINEERING

RIVERSIDE HIGH SCHOOL

919.560.3965 | FAX 919.560.2414

3218 Rose of Sharon Road | Durham, NC 27712

PROJECT LEAD THE WAY

(ENGINEERING PROGRAM)

Riverside's program is part of the national initiative Project Lead the Way. This program was created to address the country's need for more leaders in Science, Technology, Engineering and Mathematics (STEM). It began in upstate New York, and is now the nation's leading activities-, project-, and problem-based program for middle and high school students. The Riverside program became accredited by PLTW in 2008, and has been a PLTW School of Distinction since 2018. Through the Pathway to Engineering, Riverside students may be eligible for college credit for at least 5 of the 10 courses, based on earning a B and making above a cut score on the national final exam. (Computer Science Essentials is not eligible for college credit.)

COURSES

To be a part of the program, students are required to take four PLTW courses, generally taking one per year. Students are, however, allowed to take additional courses as schedules permit.

All courses, with the exception of Computer Science Essentials, are graded similarly to AP courses with one full quality point added for GPA computation.

AVAILABLE COURSES

Engineering

9th Grade: Introduction to Engineering Design (IED)

10th Grade: Principles of Engineering (POE)

11th Grade: Digital Electronics (DE)

11th/12th Grades: Students may choose from:

Aerospace Engineering (AE)

Civil Engineering & Architecture (CEA)

Computer Integrated Manufacturing (CIM)

Computer Science

9th Grade: Computer Science Essentials (CSE)

10th Grade: AP Computer Science Principles (CSP)

11th Grade: Cybersecurity (SEC)

12th Grade: AP Computer Science Applications (CSA)

PROGRAM FACULTY

TIM VELEGOL— ENGINEERING PROGRAM DIRECTOR

tim_velegol@dpsnc.net | 919-560-3965 x65170

Mr. Velegol earned a BS in Mechanical Engineering from Ohio State in 1983, a Masters in Nuclear Engineering while working for General Electric, and a Masters in International Business from the University of South Carolina in 1991. He is a certified Nuclear Plant Operations engineer, and has worked for Barnes and Noble and as a NASA subcontractor before entering teaching in 2006. He is certified to teach the following PLTW classes: DE, POE, and CSP, and he is the coordinator for Riverside Engineering. He was the faculty sponsor for Riverside's robotics team.

SHEENA BROOKS

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Ms. Brooks earned her BS in Business and Marketing Education from East Carolina University. She worked as a Business Technology teacher for twelve years before assuming the position as Career Development Coordinator with Riverside's Career and Technical Education Department in 2008. Ms. Brooks is passionate about empowering students to be successful citizens, workers and leaders.

JACQUELINE BROWN

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Ms. Brown earned her BSE in Mechanical Engineering from Duke University's Pratt School of Engineering and an MBA in Finance from Duke University's Fuqua School of Business. Ms. Brown is a 2020- 21 Kenan Fellow of the Kenan Fellows Program for Teacher Leadership and a 2021- 22 District Finalists for CTE Teacher of the Year for Durham Public School. Ms. Brown has previously organized and led FIRST LEGO League Teams and is excited about working with Riverside's Technology Student Association (TSA). She teaches Introduction to Engineering Design.

MIKE DIBBLE

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Mike Dibble received a BS in Computer Science from Shawnee State University. He started his teaching career at Riverside as a long-term sub in March 2023. He teaches Computer Science Applications, Computer Science Principles, and Computer Science Essentials. He looks forward to working with all students interested in learning computer science and hopes to pilot PLTW's Game Design course in the future!

WILLIAM OAKLEY

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Mr. Oakley received a Bachelor of Science in Mathematics from the University of Texas at Austin. He also earned his certification in Math, Science and Engineering at UT, and eventually brought those credentials here to North Carolina after teaching three years in Texas. He loves video games, D&D and his dog, Zeus. He teaches IED and POE.

RYAN PATRIDGE

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Mr. Patridge graduated from Cornell University's College of Engineering with a BS in Computer Science. He worked for Motorola and Computer Sciences Corporation for 15+ years as an IT Systems Engineer and System Administrator. He served as a staff engineer and manager of "The Pod" first year design makerspace at Duke University, and currently as an officer at SplatSpace (a non-profit makerspace in Durham). He participated in the Formula SAE student design competition at Cornell, mentored FIRST Team 111 at Motorola, and is an Eagle Scout. He teaches three PLTW courses: CIM, CSE, and SEC.

SETH STALLINGS

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Mr. Stallings holds a Bachelor of Applied Science from Campbell University and a Masters in Technical Education from North Carolina State University. As a Professional Land Surveyor in North Carolina, he owned a surveying and subdivision design company prior to joining Riverside's faculty in 2012. Mr. Stallings has also worked within the fields of forestry and natural resource conservation. He teaches three PLTW courses: DE, CEA, and CIM. He has also taught Technology Engineering and Design, Career Management, and Honors Pre-Calculus!

ADAM TOKONITZ

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Mr. Tokonitz is a graduate of North Carolina State University with a BS in Technology, Engineering, and Design Education. He loves working on his cars and is also an alumni of Richlands' PLTW Engineering program. He has experience with FIRST and Vex Robotics, TSA, and SkillsUSA. He teaches IED and DE.