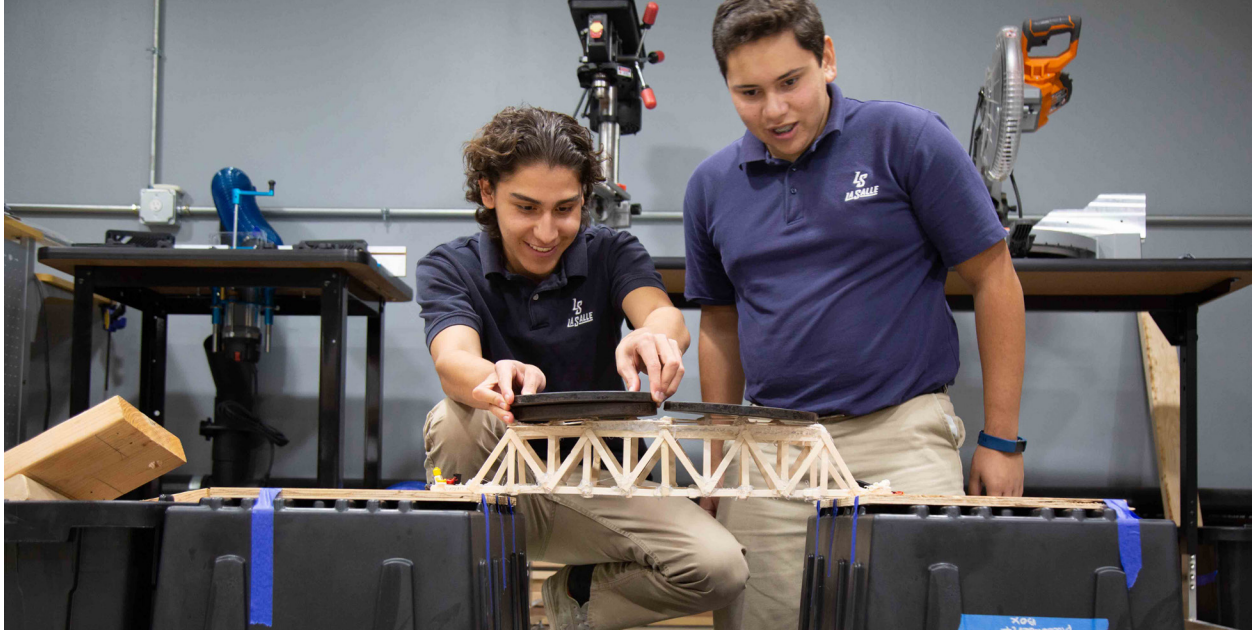




Technology & Engineering



La Salle College Preparatory understands that technology and computer science is integrated into almost every facet of contemporary life. Freshmen enter with knowledge of multiple digital platforms and have experience using them during their time in middle school. At La Salle, we provide ample opportunities for students to explore and expand their digital interests. Our course selection is designed to engage and challenge students at all digital literacy levels. The Department of Technology & Engineering has developed a 4-year curriculum which attracts and serves students interested in pursuing a higher education in Engineering and Technology.

TECHNOLOGY & ENGINEERING COURSES

Programming with Python

- Students learn to program in a high-level object-oriented language while studying the main constructs of the Python Language. The students will also learn to analyze mathematical problems and create algorithms that can be implemented in a program.

AP Computer Science Principles

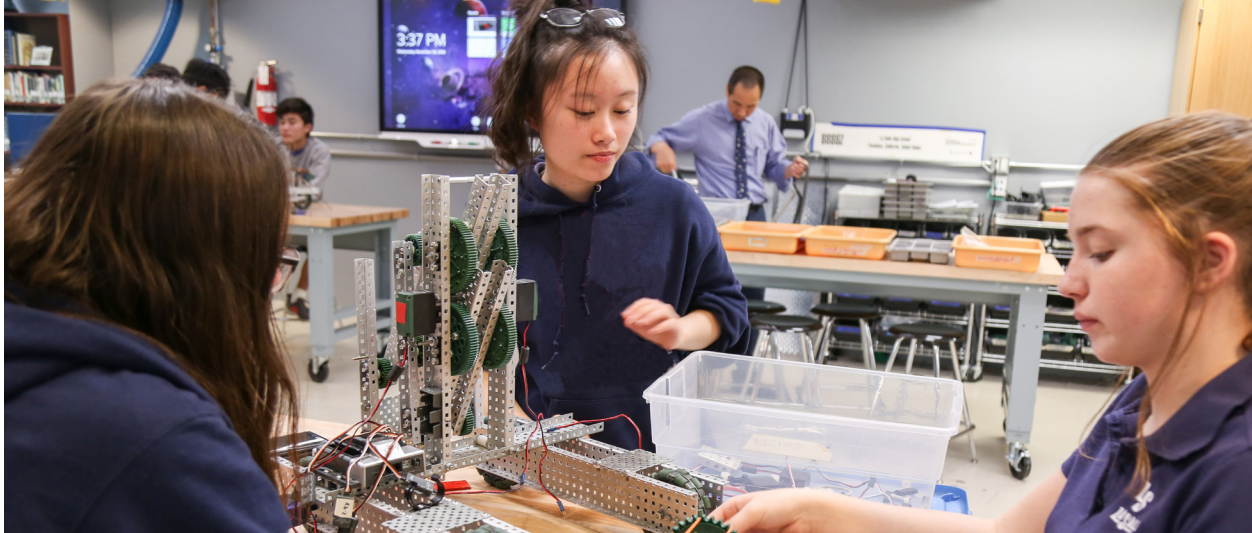
- A wonderful course for students of ALL technical aptitudes. Topics in this course include Internet infrastructure, digital information, introduction to programming, big data, and app building.

AP Computer Science A

- Students gain in-depth knowledge of coding in Java and how to apply that knowledge to real world problems.

Technical Drafting Using AutoCAD

- Students use current industry-based software and learn how to design and draw mechanical objects, floor plans design, and build models in both 2D and 3D. Software to be used will be AutoCAD and Fusion 360 from Autodesk.



The Technology and Engineering Department provides students with the unique opportunity to experience innovation and project-based curriculum through our S.T.E.A.M. courses. Our courses allow students to “learn through doing” while using state of the art equipment located in our Innovation and Design Lab (i.D. Lab). Students who participate in our exciting S.T.E.A.M. curriculum not only gain a working knowledge of design software and technology tools, but more importantly take away 21st-century skills necessary for the workplace in nearly all professional fields.

In each of our courses, students are challenged with creating and building tasks that integrate intuitive design, scientific research, and multiple iterations. Along with content acquisition, students develop their analytical thinking and methodology skills.

S.T.E.A.M. COURSES

Science of Innovation & Design

- A project-based, problem-solving course where students are guided towards planning and carrying out action items to methodically evaluate a problem and apply solutions. As students progress in this course they will design their own projects and are provided opportunities to design their own learning.

Science of Architecture & Engineering

- A fun and exciting course where students learn engineering principles and architectural design elements through intuitive and research-based projects. Students engage in engineering contests and create scaled models of various structures. These projects are built through the use of software and then various construction materials to be used in tangible experiments.

Engineering & Automated Systems Programming (Robotics)

- Open to all levels, students in this class engage in engineering activities encompassing both mechanical and computer programming concepts. Participation in Robotics Tournaments is also available through this course.

Digital Game Design

- Students gain insight into game design elements and a working knowledge game creation through the use of Game Maker Studio and Unity.