

The College Board and Project Lead The Way

Expanding College and Career Opportunities

The Challenge We Face

By the year 2020, almost two-thirds of jobs, and nearly all high-paying jobs, will require postsecondary education or training. And, by 2018, 92 percent of traditional science, technology, engineering, and math jobs will be for those with at least some postsecondary education and training. Increasingly, career readiness is dependent on college success. To ensure all students are ready to compete in the global market place, we need to expand access to challenging course work and ensure students are prepared for college and career success.

Our Solution: Partnering to Create More Opportunities for Students

The College Board is a mission-driven, not-for-profit membership organization committed to expanding access to opportunity for students through its programs and services. Project LeadTheWay (PLTW) is a not-for-profit committed to preparing students for the global economy and the nation's leading provider of K-12 science, technology, engineering, and math (STEM) programs.

The two organizations recognize the importance of preparing more students, earlier, to pursue STEM degrees and careers. They have partnered to offer new opportunities for schools and students. By bringing together the successes of both the AP[®] Program and PLTW's applied learning programs — both of which are shown to improve student outcomes — the organizations' partnership will:

- ▶ Increase the number and diversity of students who develop interest in and readiness for STEM degrees and careers;
- ▶ Provide these students with academic and applied learning courses that prepare them for college and career; and
- ▶ Increase opportunities and recognition for students who demonstrate college and career readiness.

The College Board and PLTW are forging a long-term partnership to develop college and career pathways in Engineering, Biomedical Science, and Computer Science by combining Advanced Placement Program[®] (AP) courses with PLTW programs. Each pathway will emphasize applied learning and consist of three components:

1. PLTW courses designed to introduce all students to the field;
2. AP courses that provide an opportunity for college credit; and
3. PLTW specialization courses that focus on knowledge and skills needed for high-growth careers.

Local flexibility will be a cornerstone of each pathway; schools will have the discretion to implement these pathways in ways that work best for their students and school. The chart below illustrates a variety of courses that may be combined to establish different pathways for students.

Combining AP and PLTW Courses

Level	Engineering	Biomedical Science	Computer Science
Readiness – PLTW courses	– Introduction to Engineering Design	– Principles of Biomedical Science	– Introduction to Computer Science
College – AP courses	<ul style="list-style-type: none"> – AP Physics 1 – AP Physics 2 – AP Physics C: Electricity and Magnetism – AP Physics C: Mechanics – AP Calculus AB – AP Calculus BC – AP Biology – AP Chemistry 	<ul style="list-style-type: none"> – AP Biology – AP Chemistry 	<ul style="list-style-type: none"> – AP Computer Science Principles – AP Computer Science A
Career – PLTW courses	<ul style="list-style-type: none"> – Principles of Engineering – Digital Electronics – Computer Integrated Manufacturing – Aerospace Engineering – Civil Engineering & Architecture – Environmental Sustainability – Engineering Design & Development 	<ul style="list-style-type: none"> – Human Body Systems – Medical Interventions – Biomedical Innovation 	<ul style="list-style-type: none"> – Artificial Intelligence – Simulation & Modeling – Cybersecurity – Computational Problem Solving

As part of the overall effort, and in time for the 2016-17 school year, the organizations are also working to develop:

- ▶ New recognition credentials for students and schools in Engineering, Biomedical Science, and Computer Science that combine AP courses and exams and PLTW’s applied learning programs; and
- ▶ A portfolio of career-focused opportunities that allow students to pursue work-based learning and mentorships with leading industry partners.

The College Board is also in the process of exploring the development of new AP courses to support the pathways.