

ADVANCED PLACEMENT PROGRAM (AP)

Parent Organization: The College Board

Web Address: <http://www.collegeboard.com/student/testing/ap/about.html>

Grade/Age Levels: High school students who wish to receive college credit

Overview: Advanced Placement Classes are classes that students can take at their high school that will prepare them to take the AP exam in a particular subject. Exams are scored on a 5-point scale with 5 being “extremely well-qualified” to receive college credit or advanced placement. Many colleges will grant varying levels of credit for scores ranging from 4-5. However, individual colleges and universities, not the College Board or the AP Program, grant course credit and placement. Therefore, it varies from school to school.

AP subject areas that relate to Applied Sciences and Engineering are:

- Calculus AB
- Calculus BC – covers all topics in AB plus additional material, designed to qualify the student for placement and credit in a course that is one course beyond that granted for Calculus AB.
- Computer Science A - emphasizes object-oriented programming methodology with an emphasis on problem solving and algorithm development.
- Computer Science AB - includes all the topics of Computer Science A, as well as a more formal and a more in-depth study of algorithms, data structures, and data abstraction.
- Chemistry
- Physics B - emphasizes the development of conceptual understanding and problem-solving ability using algebra and trigonometry, but rarely calculus.
- Physics C - forms the first part of the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering.
- Statistics

Subjects Covered: science, mathematics, social science, history, geography, foreign language, art, music theory

Size of Program: 34 courses and exams across 19 subject areas

Where Offered: Many high schools across the country

Time Spent by Students: Courses are usually taken as a part of regular high school schedule. Exams are taken during school hours.

Partners/Sponsors: The College Board

Format: High school courses followed by standardized exams – exams consist of a multiple choice section as well as a free response section.

Materials Available on Web and/or Purchase: Students and teachers can purchase CD-roms, publications, and videos from the College Board Store on the website. There are also free-response questions and study skills and test taking tips available for free.

Training – Avail/Required: Teachers of AP classes can find course descriptions and teacher guides on the AP website. More extensive trainings on implementing an AP program are available through various private institutions.

Results to Date: NA

Cost Structure: NA

Funding: Students pay \$82 for each exam.

Other Interest Point(s): The College Board provides access to home-schooled students and students who attend a school without an AP program through independent study.

The College Board also offers exams that can be used to obtain college credit through the College Level Examination Program (CLEP). The exams in this program are not associated with a specific course and are more limited in the range of available subjects.