

AP (Advanced Placement)

As college admissions become increasingly competitive, any possible edge can be the difference between a coveted acceptance or a dreaded rejection. Advanced Placement (AP) is a program that offers college-level curriculum and examinations to high school students for them to prove their proficiency in certain subjects before starting college. Even though there is no specific rule of thumb to take any number of APs, statistics suggest that students applying for STEM courses on an average take 4-5 APs, which can also go up to 8 in number. Therefore, when you set a target for yourself, plan them well and spread them evenly throughout 10th, 11th and 12th standards, so that you don't stress yourself by taking all of them in one single go. Please remember, APs are conducted by College Board for international students only once a year in May. Here is how you could plan your timeline ahead.

AP Calculus AB and AP Calculus BC

What are AP Calculus AB and AP Calculus BC?

 Advanced Placement Calculus is a set of two distinct Advanced Placement Calculus courses and exams offered by College Board.

Who should ideally take Calculus AB and AP Calculus BC?

- Calculus BC is recommended to students aspiring for STEM courses for undergrad.
- Calculus AB is recommended to students aspiring for Business, Economics courses for undergrad or the ones who are aspiring for STEM courses but have a time constraint.
- Calculus BC is a prerequisite for applying for Stanford Pre-Collegiate University Level Online-Math and similar courses which students attend in 11th std.
- Calculus BC is more advanced than AB; therefore, one need not take Calculus AB if he/ she is already taking Calculus BC.

What are ideally the prerequisites for AP Calculus AP and AP Calculus BC?

 Students who have a thorough understanding of Functions, which is taught to students in 11th std. for both these AP papers.

When should one ideally take these papers?

- It should be taken when a student has covered the school-curriculum in 11th std.
- Calculus BC is a prerequisite for Stanford Pre-Collegiate University Level Online-Math and similar courses which students do in 11th std. In such cases a student shall start preparing for this AP Paper well before finishing 10th, so that he could take it before entering into 11th
- Having covered Calculus with programs like Kumon is an added advantage for a head start.

How much time does it ideally take to prepare for these two APs?

- Calculus AB takes approximately 40 hours of classroom engagement and 60 hours of self-practice.
- Calculus BC takes approximately 50 hours of classroom engagement and 80 hours of self-practice.

Do these AP exams have any advantages other than securing college placements?

- For students in IB curriculum, the Calculus AP exams covers calculus in Math HL subject (including "Options).
 Therefore, you get a head start.
- For ISC or CBSE students, the Calculus AP exams covers the entire calculus in Math in 11th and 12th standards. Again, you get a head start.



AP Physics C: Mechanics and AP Physics C: E&M

What are AP Physics C: Mechanics and AP Physics C: E&M?

- AP Physics C: Mechanics is an Advanced Placement science course that studies Newtonian mechanics offered by College Board.
- AP Physics C: Electricity and Magnetism is an Advanced Placement science course about electricity and magnetism
 offered by College Board.

Who should ideally take AP Physics C: Mechanics and AP Physics C: E&M?

- Both these Physics C exams are recommended to students who are aspiring to do STEM for undergrad.
- Both Physics C: Mechanics and Physics C: E&M can be taken at the same time.

What are ideally the prerequisites for AP Physics C: Mechanics and AP Physics C: E&M?

- Basic knowledge in Calculus
- An aggregate of 90 and above in Sciences in 10th std.

When should one ideally take these papers?

- Physics C: Mechanics- Students who have a good grip on Physics and are moving from either 10th to 11th std or from 11th to 12th std.
- Physics C: E&M Students who have a good grip Physics and are moving from 11th to 12th std.
- Physics C: E&M is a prerequisite for Stanford Pre-Collegiate University Level Online-Physics and similar courses
 which students cover in the 11th std. In such cases a student shall start preparing for this AP Paper well before
 finishing 10th, so that he could take it before entering into 11th

How much time does it ideally take to prepare for these two APs?

Both Physics C: Mechanics and Physics C: E&M takes approximately 30 hours of classroom engagement and 40 hours of self-practice

Do these AP exams have any other advantages other than getting college placement?

- The syllabus for Physics C: Mechanics is 60% of the syllabus in 11th std. enabling students to get a head start in 11th
- The syllabus for Physics C: E&M is 60% of the syllabus in 12th std. enabling students to get a head start in 12th std. and optimising the predicted scores.

AP Microeconomics and AP Macroeconomics

What is AP Microeconomics and Macroeconomics?

- AP Microeconomics is an introductory college-level microeconomics course.
- Advanced Placement Macroeconomics is course for high school students culminating in an exam offered by the College Board.

Who should ideally take AP Microeconomics and macroeconomics?

 AP Microeconomics/Macroeconomics is recommended to students aspiring for Business, Economics courses for undergrad.

What are ideally the prerequisites for AP Microeconomics and Macroeconomics?

• Students who have a thorough understanding of Microeconomics and Macroeconomics which are taught to students in 11th, and 12th std.

When should one ideally take these papers?

- Students who have studied Economics in 9th and 10th std. in IB MYP, IGCSE or ICSE can take both the tests while moving from 10th to 11th std.
- CBSE students can take it while moving from 11th to 12th std.
- Students who haven't studied Economics either in 9th-10th or 11th-12th can also take the tests while moving from 11th to 12th std. by preparing right from scratch.



How much time does it ideally take to prepare for these two APs?

- AP Microeconomics takes approximately 30 hours of classroom engagement and 40 hours of self-practice.
- AP Macroeconomics takes approximately 30 hours of classroom engagement and 40 hours of self-practice.

Do these AP exams have any advantages other than securing college placements?

- For students in IB curriculum, the AP microeconomics exams covers Economics HL and Economics SL subjects.
 Therefore, you get a head start.
- For ISC or CBSE students, the AP Microeconomics and Macroeconomics exams cover the Economics in 11thand 12thstandards. Again, you get a head start.

AP Chemistry

What is AP Chemistry?

 Advanced Placement Chemistry is the Chemistry equivalent to the first year Chemistry course in college, offered by the College Board.

Who should ideally take AP Chemistry?

 AP Chemistry is recommended to students aspiring to pursue STEM courses particularly in Chemistry, Chemical Engineering, Biomedical, Environmental Engineering for undergrad.

What are ideally the prerequisites for AP Chemistry?

- Students having a basic understanding of algebra, graphing and interpretation can take this AP exam. Having Chemistry as a subject in 11th and 12th std. is definitely a bonus.
- An aggregate of 90 and above in Sciences in 10th std.

When should one ideally take these papers?

• Students moving from 11th to 12th std.

How much time does it ideally take to prepare for these two APs?

• AP chemistry takes approximately 40 hours of classroom engagement and 40 hours of self-practise.

Do these AP exams have any advantages other than securing college placements?

The syllabus is a mix of Grade 11 and Grade 12 Chemistry for all curriculums (IB, ISC, CBSE). So students moving to
Grade 12 will find help in the physical chemistry portion of Grade 12.

AP Statistics

What is AP Statistics?

• AP Statistics is a college level statistics course offered by College Board.

Who should ideally take AP Stats?

 It is recommended to students who are aspiring to do majors in Economics, Business or Computers or Data Science related courses.

What are ideally the prerequisites for AP Statistics?

An analytical bent of mind, enthusiasm towards solving logical reasoning problems

When should one ideally take these papers?

• It should be taken in 10th std. when the student is aiming to take 4 or more AP exams, as it is one of the very few papers which can be taken in 10th std. due its moderate level of difficulty. Otherwise it should be taken when the student is moving from 10th to 11th std.



How much time does it ideally take to prepare for AP Stats?

• AP Statistics takes approximately 30 hours of class commitment and 40 hours of self-improvement.

Do these AP exams have any other advantages other than getting college placement?

 The Stats AP is neither parallel to CBSE nor to ISC syllabus. However, it is very close to the A Level S2 paper or IB Math HL with Statistics as an Option.

AP Biology

What is AP Biology?

• AP Biology is an Advanced Placement course offered by College Board.

Who should ideally take AP Biology?

 AP Biology is recommended to students who are aspiring to do STEM for undergrad, particularly in Biomedical, Medicines and Environmental Engineering courses, to name a few.

What are ideally the prerequisites for AP Biology?

• An aggregate of 90 and above in Sciences in 10th std.

When should one ideally take these papers?

• It should be taken when the student is moving from 11th to 12th student.

How much time does it ideally take to prepare for these two APs?

• It takes approximately 40 hours of class commitment and 40 hours of self-improvement

Does AP Biology have any other advantages other than getting college placement?

• The syllabus has content from both 11th and 12th std. (IB, ISC, CBSE). It is helpful for students moving from 11th to 12th std. as there are commonalities.

Summary

- 1. These conditions are from the eligibility point of view and not as per college recommendations.
- 2. Computer Science and Statistics APs can be taken as early as when a student is moving from 10th to 11th std. particularly when one is taking 4 or more APs. Students who have a long list of APs to take are recommended to take these 2 APs and leave the STEM centric ones for later.
- 3. Both Macroeconomics and Macroeconomics APs can be taken as early as when a student is moving from 10th to 11th if he/she has studied Economics in 9th and 10th std.
- 4. If a student is extremely bright, AP EVS can be taken as early as in the 9th std.
- 5. AP Chemistry is considered one of the toughest APs in which a student can score a 5/5.
- 6. 5/5 in 5 APs are strongly recommended to Indian students by Cambridge for application for undergrad in Math, Science or Economics.
- 7. 5/5 in 5 APs are strongly recommended to Indian students applying for Math, Science or Economics in Oxford.