**Pre-requisites for Apping:-** (Will elaborate on these in detail)

GRE, TOEFL are mandatory if you are applying to universities in US.

Publications (in top tier conferences) are a very important factor and can sometimes be the only factor by which you'll get admitted.

Research Internships, particularly abroad are very helpful.

Good CPI is more or less a necessity. (How good is good? Let's see it later)

Three Recommendation letters is a must for PhD, and not more than one of them should be from non-academia. Ensure by working on projects (summer/btp/supervised learning) you have a very close (and positive) association with three researchers (professors).

Relevant Course work.

1. **GRE :-** For guidance on how to prepare, read this quora post (<http://qr.ae/InA2C>) by Gururaj, which I think is comprehensive enough.
   1. **When** **is the right time to give GRE:-** Pre-final year December (in the last week) or first week of January is the best time to complete GRE. Most of the students are free in the December month of their pre-final year and gre requires 20-30 days of preparation. One can also give it in their pre-final year spring semester, but it’s usually difficult to prepare during the semester and the final year autumn semester is pretty hectic with placements, btps/ddps, courses and apping. Completing it in December will also give you a buffer of giving the test again sometime in August if the first attempt goes bad.   
        
      **Warning:** *Many people go easy on GRE preparation and start preparing pretty late, that should be avoided, particularly when your vocabulary is not good. (which is true for most iitian’s)*
2. **TOEFL:-** Does not require much practice, unless you are uncomfortable conversing in english. Does not require much advice for TOEFL, just keep in mind that finding slots for TOEFL is a little tricky and you are advised to book those slots before May.
3. **What’s Apping all about, should you go for it or not? What’s all involved in apping?:-** If you are looking for answers to these questions, read these articles, one by a researcher in CMU (<https://docs.google.com/file/d/0B-QCq_VYc9DSRHFWWlhFVENjOWc/edit?usp=sharing>), another by a grad student at Stanford (<https://docs.google.com/file/d/0B-QCq_VYc9DSLWhPZGdhTmlaQjQ/edit?usp=sharing>). The first article is more relevant for Phd applicants, while the second is more relevant for Masters applicants. To summarizes those articles briefly, various factors are involved for a student to be selected by good universities. publications and/or research projects help a lot, great recommendation letters (not just good, but outstanding one’s), course recommendation letters usually carry no weight so as recommendations from outside academia. sop’s should be well written and resume/courses should be relevant.
   1. **Publications:** is the best way to present yourself in the application, having a publication in good conference/journal already proves your research ability and the researchers will be more comfortable taking you provided you have good grades. If you could not publish during the internships/various projects work on, don’t worry, researchers understand that some projects are difficult to make progress on and not every project can turn into a publication. But the lack of publication should be appropriately compensated by outstanding recommendations and/or outstanding grades.
   2. **Projects/Internships:-** As in the case of publications, internships/research projects help you understand if you are up for challenges in research. It is important to work with good researchers in good places (talk to seniors/faculty advisers to find out good places to work with). Generally good projects usually lead you to publications making a stronger case for you, but even in the unfortunate case of the project being not very successful, there are lot of stakes in a good project and/or Internship. It’ll help you understand the area of your interest better and make you relevant for many researchers working in similar areas, other than helping you writing very relevant statement of purposes. Projects/Internships are the best way to find a close association with researchers in academia, which is essential for good recommendation letters. It’s important to work on good projects and good people, first priority should be this and not the location/perks associated with the internship/project. if you/your project adviser thinks that working in iit bombay for the summer might lead into a publication at top tier conference, you should not hesitate to stay back and work in the campus instead of an internship outside. Always make sure to understand the outline of the project/internship work clearly to ensure that you are working on what interested you. If you still have time, it’s good to start working with a Professor from your third year.
   3. **Recommendation Letters:-** Avoid taking recommendation letters from Profs who you have scored good grades, they do not make any difference and are usually ignored. The importance of recommendation letters are in the following order:- btp adviser/ddp adviser > internship adviser > Summer Project/URA supervisor > recommendation from courses. Recommendations from researchers already working in US are considered more seriously, similarly famous professors recommendations are also taken as an important positive factor.
   4. **Statement of Purpose:-** Don’t write essays, write what is relevant, talk more about research. Read more about writing a good sop here:- <http://qr.ae/IpKLd> written by a Prof at UCSB
   5. **Grades:-** Grades are important, most of the times top universities do not select people with less than 9 CPI, unless he/she is compensating lack of cpi with outstanding recommendation letters and/or publications. Some universities only consider the core CPI or specialization related CPI scores or cpi of the last 60 credits. So strive to improve the cpi, because there are considerable number of universities, which are interested your latest performances rather than overall performance. It’s important to have good cpi, but only good cpi without much research experience/publications/projects/relevant course work/letters of recommendation is useless. So high cpi students, choose your thesis advisors, courses, internships carefully.
4. **Timeline of the apping:-** 
   1. Complete GRE & TOEFL by pre-final year ending, don’t delay this beyond september.
   2. Shortlist universities and professors you might be interested in. (for shortlisting univs/profs discuss with your btp advisors and probably sometimes can help you directly offering a position in good universities through their contacts, usually all the top tier univs like Stanford, MIT, UCB, Princeton, Caltech, Cornell, COlumbia, UIUC have good people working with them, check the publications of profs to find out if you are interested in a particular prof’s work). This will take a lot of time, start by the end of august and finalize by end of september or mid october. Talk to your profs, about what are compatible universities for you
   3. Prepare SOP’s, request reviews from seniors. Allow seniors a time of couple of weeks to send their reviews. so have the first draft ready by last week of november.
   4. Resumes are different from what you apply for placements/internships, the resume focus should be on relevant research rather than overall activities
   5. For Elec and CS related fields, it’s important to have a web-page describing your research activities (for ex:- <http://www.ee.iitb.ac.in/student/~vashist/>) and your research goals.
   6. Start working on your applications at least 20-30 days before the actual deadline, many recommendation requests can be sent only after the entire application is complete and profs require couple of weeks to fill up the recommendation letters. Also don’t apply to more than 8-10 univs and plan for the costs of the applications.