If you want to be a professional physicist, graduate school is a necessity (as opposed to using your physics as a springboard to another profession).

What can I expect in Graduate School?

• The typical physics Ph.D. program lasts from 5 to 7 years

• The first two years are primarily spent taking classes.

• After the first or second year, it is usually necessary to pass a fairly tough qualifying examination.

• By the third year, most students are making the transition to research.

• The Ph.D. thesis is based on a serious piece of original work that typically takes 2 to 7 years to complete
Almost all students are completely supported by a combination of teaching assistantships, research assistantships, and fellowships, while they complete the requirements for their degree.

Nobody gets rich as a graduate student, but you usually don't go deep into debt or have to work an outside job, either.
Preparation to Apply

- Start thinking & planning process in Junior Year
- Take General GREs (www.ets.org) in Spring or Summer before the Fall of your senior year – **STUDY**
- **STUDY** for your Physics GRE
  - Subject Test Dates: October 9, 2010, November 13, 2010 (reg: 10/8/10), and April 9, 2011 (reg: 3/4/11)
- Start thinking about:
  - "What do I really like about physics?"
  - And what kinds of physics do I really like?
  - Where do I want to go after graduate school -- Academe? Industry? Business?"
Choosing a Grad school

- First of all, try to make a realistic assessment of your own abilities and record.

- Second, decide which field or fields interest you. Most physics departments specialize in just two or three different areas, and it makes no sense to go to a very good university that has no faculty in the areas that excite you.

- Third, think about whether the geographical region and environment are important to you. This shouldn't be the most important criterion, but if you are going to spend up to 7 or 8 years in a place it would be nice to be reasonably happy during the times when you're not in the lab.

- Fourth – don’t get carried away by rankings
Rankings
A useful reference is *Graduate Programs in Physics, Astronomy, and Related Fields*, published annually by the American Institute of Physics.

PROFESSORS!
Most Grad Schools will look at the application package as a whole, so that a deficiency in one area could be balanced by superlative performance in another area.
How to be a competitive applicant

- You should know WHY you are applying to this particular program. Tailor your application to the school.
- Take all the physics courses that are offered – make your transcript as strong as it can be.
- DO undergraduate research.
- GO AWAY to a Summer program to do research.
- Email prospective “potential” advisors – make a connection.
- Visit (if feasible) the school and talk with professors.
If PHYSICS Grad School is not for you
Other Options for Graduate Study

- Applied Physics programs
- Masters programs in engineering
- PSM (Professional Masters)
- Industrial experience and then MBA
- Law School
- Med School (take another year to get pre-med requirements if you don’t have them)
- MST (Masters in Teaching – gets you certified)
- Post-bac Research semester or year