

Thinking About Pursuing a PhD?

Here are Some Considerations

Some Graduate Programs in Software students continue their studies beyond their MS degree in PhD or doctoral software degree programs at another university. Here are some things to consider in deciding if this path is right for you.

The purpose of a BS degree is to provide a broad education, and basic skills in your field of interest. The purpose of an MS degree is to focus on increasing your breadth and depth of knowledge in your field of interest by learning what others have created in the field. The purpose of a PhD degree is to increase your depth of knowledge, but focus on a sub-specialty in your field of interest, and making a contribution to the state of knowledge. The GPS MS degree is focused on applied knowledge; the PhD degree is focused on research.

The PhD degree usually has three phases. The details vary by university, but here is a sample program. The first phase consists of taking graduate courses to increase your depth of knowledge in your chosen area, and to shore-up any missing background. Sometimes, universities ask you to do additional preparation before officially joining their program. The second phase consists of taking qualifying exams, which typically consist of three rigorous exams, one in your chosen specialty and two in other specialties within the department. The third phase consists of working on a thesis dissertation, which includes proposing a research project and passing an oral preliminary examination with a committee, doing the research and writing it up, and defending it in an oral final defense. In addition, in order for you to successfully defend your thesis, you would typically publish one or two papers in the field of your specialty. This tells the defense committee that your peers and others outside your school have approved the novelty in your work.

You should have a general idea of the sub-specialty you would like to pursue before enrolling, but also be flexible and open to available opportunities and funding options.

Degree programs vary tremendously in length, from 2 to up to 6 or more years. In some part, the faculty advisor drives the length. However in larger part, how well the student plans, organizes, and how much time and effort they devote to their studies determines the length of the degree program.

Since the focus is on research, you should steer your GPS experience in that direction by enrolling in independent study or project courses with a GPS faculty member as part of your elective choices. Ideally, the outcome would be to publish a paper in an academic conference or journal with your faculty advisor. This will better prepare you for doing your research and publication during your PhD.

You will need faculty recommendation letters, but if your only contact with a faculty member is that you took their course, it typically isn't sufficient engagement to warrant a letter. However, if you completed a project or independent study outside of the classroom with a faculty member, a recommendation letter is essential and valuable. Also, GPS faculty will only fill out online recommendations, and it is best if you waive the right to see the recommendation to get the most candid review.

Thinking About Pursuing a PhD?

Here are Some Considerations

Most PhD programs pay their students a small salary out of research grants, and waive tuition for courses. These opportunities are very competitive, so you should plan on applying to approximately ten schools.

You might find this video helpful: <http://flowingdata.com/2014/10/07/why-to-pursue-a-phd/>