A Message for Prospective Students in UC Berkeley's BSTS Program

We warmly invite you to consider applying to the MS or PhD program in Building Science, Technology and Sustainability (BSTS), in the Department of Architecture at UC Berkeley. We get many email inquiries and cannot answer them all personally or review people's materials in advance; so in lieu of a personal reply we provide the following information.

First, some basic information and links

We accept applications to our program only once a year. Due dates for fall are listed here. Links to program descriptions and how to apply are here, and details about application requirements and additional links to deadlines are here. Here are links for more information about the MS program and the PhD program. You can see a list of faculty here, examples of past MS theses here, PhD dissertations here, and a description of the Center for the Built Environment here (but not all students work in this group). You can read about our recent work on our Google Scholar pages (Gail and Stefano). For questions related to administrative issues please contact archgrad@berkeley.edu.

How should you decide if UC Berkeley is the right place for you?

Our curriculum requirements are flexible and students take classes across campus, so we encourage you to look beyond just the Dept of Architecture at the entire Course Catalog. For your research, if you are interested in working with Prof. Stefano Schiavon and/or Prof. Gail Brager, and with the Center for the Built Environment, we are looking for students who have:

- Strong English communication / presentation skills (both oral and written)
- A demonstrated record of successful research experience (for PhD applicants in particular, a publication record is highly desirable)
- Quantitative skillsets (i.e., measurement, data analysis, and/or simulation) combined with architectural sensibilities (i.e., interest in applied research that will impact building design and/or operation)
- Well-defined interests that can be articulated in detail, and are aligned with the following topics, so that we can offer you intellectual support and guidance:
    - Energy and carbon performance of buildings
    - Innovative facades and HVAC systems
    - Indoor environmental quality (i.e., thermal, lighting, acoustics, air quality)
    - Human response to the indoor environment

If you feel like this describes you, we very much look forward to receiving your application and hope that we can welcome you into our program! We are given a limited number of slots for the MS and PhD programs in BSTS, and as such it is a very competitive admissions process. If you don't feel like the above points describe you, then perhaps our program is not the best place for you and we encourage you to continue looking at other schools where you can find good support for your interests.

If you are planning to apply, it is especially important that you read the application requirements carefully to learn about what the committee looks for in your essays, as

these are a critical part of our review. Admission decisions are made by a committee, not by individuals. Here are some additional guidelines that might be helpful.

Details regarding applications

As part of your application, you will need to write both a Statement of Purpose (described below) and a Biographical Statement (Bio), and these need to be separate. Although you should submit your CV, the additional Bio should be a narrative description of your experiences, how they might be related and/or supportive of each other, and how they have prepared you for this next stage of your studies. Your Bio should try to draw a connection between what you've done, and how it's prepared you for this next step. Professional experience is valued for both MS and PhD applicants, but you should discuss how past experience relates to your future goals. Research experience is also valued for both programs, but is essential for PhD applicants. You should elaborate on any details of your research experience, exactly what you did, etc., since the committee will be looking for what kind of experience has prepared you for advanced MS or PhD level work. If you are an MS applicant and do not have direct research experience, then it would be helpful to describe the kind of related tasks you've done in other academic or professional work (measurement, simulation, analysis, etc.), to show how it's prepared you for a research degree. Specific skills are great, but even more important is having a sense of what it means to do research, and to show the kind of analytical thinking that is required of a researcher. It's common that many of our applicants don't have an architecture background. If this is the case for you, it would be good to identify what in your personal history has given you an appreciation of or sensibility about building design and performance. For PhD applicants, the expectations regarding previous research experience are higher than for MS applicants. Most of our successful PhD applicants will have a record of publications in peer-reviewed journals.

While your background is certainly important, the committee also looks very carefully at the two parts of your Statement of Purpose (SoP). The first part of the SoP is general (why you're interested in an MS or PhD, why BSTS, why UC Berkeley, etc.), and the second part should be a specific research proposal. You can present that proposal (or even a couple) as an example. Although you are not committed to stick with what you propose, the committee needs to assess the candidate's ability to understand the existing literature and gaps in our knowledge, formulate clearly defined research questions, and understand what type of research methods you might apply. Part of this is to provide evidence of the candidate's thinking abilities, and part is to assess the match between his or her interests, and whether we have the various faculty and facilities here to support them. So while your research does not have to exactly match an existing faculty research project, it should demonstrate sufficient overlap with the interests and general types of projects our faculty do. For PhD applicants, one's research proposal should be more specific and detailed than what we might expect from MS applicants, even allowing that it is certainly acceptable for either to change their proposals once they are here.

Funding for PhD students

When we accept PhD students, there is usually a package of four years of funding that includes one year of tuition and stipend, two years of support in the form of either teaching or research and a final year of tuition and stipend to complete the dissertation. (Note that at the time of this

writing, the University is considering ways to increase funding packages for PhD students, so these details might change)

Funding for MS students

The funding in the BSTS program is becoming increasingly limited. While we try to give students research appointments we would not be able to guarantee any financial support for your tuition or salary in advance. It very much depends on the match between students' interests and abilities, and research projects' needs and available funding, (and this is very fluid).

If you do not have a graduate degree, we would recommend that you apply for the MS rather than the PhD program. Please note that once you're in the MS program, if you decide that the longer and more intensive PhD track is something you really want to do, and if you demonstrate success with your MS-level research, then there are opportunities to apply internally for the PhD degree. The classes you take would still apply (with the PhD degree having additional classes required to fulfill the minor requirement).

We hope this information is helpful and regret that we cannot answer each of the many inquiries we get personally! If you apply and you are selected for a video interview, then we will set up a call in January (for the PhD) and January or February (for the MS).

Warmly,
Gail Brager & Stefano Schiavon
Faculty of BSTS and the Department of Architecture
Researchers at the Center for the Built Environment (CBE)