

**Architectural Technology/  
Building Science and  
Sustainable Design  
(AT/BSD/BSC/BST)  
Program Review**

**Pennsylvania College of Technology**

**May 14, 2014**

## **Executive Summary**

Our current strengths include our students, faculty, and the strong reputation held by our program in the community. There is, however, room for improvement in certain areas. The most significant of these areas include Curriculum, department staffing, marketing, and accreditation. A SWOT Analysis is included at the end of this report.

## **Curriculum**

In recent years we have seen a diminishing enrollment in the BSC version of our four year program. The BSC numbers in the fall of 2014 and those projected for the fall of 2015 are so low (with numbers in the mid to low single digits) that we risk the possibility that the BSC version of the program may be terminated. To avoid that outcome, the AT department faculty have decided to consolidate the final two years of the BSD and BSC programs into one curriculum. In doing this we also recognize that the majority of our 3rd and 4th year students have an architectural background. Most of these students have opted for the “design track” version of the program (most recently this has been true for 100% of the students with architectural backgrounds). For this reason, the consolidated version of the program will include the additional design emphasis that the majority of our students have favored in recent years.

Most of the proposed changes to our curriculum stem from this consolidation effort. There are however, some additional modifications that were made based upon data from recent surveys. One such example is our decision to make our “Building Performance Modeling” course a requirement for all students (rather than a directed elective option). Recent survey data showed that energy modeling was an area in which students felt they were not strongly prepared at graduation. We hope to remedy this situation by making Building Performance Modeling a required course. We will review data from upcoming surveys to measure our success in this regard. *2016 update: Curriculum revised Spring of 2016 and reflects changes mentioned above. BRC remains intact as a Building Science and Sustainable Design track. Curriculum posted in 2016 College Catalog reflects these changes. BSD370 Building Performance Modeling is now a required course in the degree.*

## **Department Staffing**

Since the introduction of the four year program, most of the AT department faculty have been carrying significant overloads each semester. The current adjunct pool is relatively small and we would like to increase its size. In the fall of 2014 we will need to run two sections of the fifth semester design studio (BSD332 “Architectural Design Studio IV”). Assuming that the 26 students in BSD332 transition successfully to the sixth semester course BSD352 (“Architectural Design Studio V”) and to the two subsequent fourth year design studios, we would be adding 11 contact hours to the total accumulated faculty workload for each of the fall and spring semesters

(for the 2015/2016 school year). If this were to happen with both the third and fourth year courses concurrently, it would result in an additional 22 contact hours per semester. To cover this added workload, we would likely need an additional faculty member. With the consolidation of the two tracks into one, in which all students will now take the design studio courses, the need for two sections of a third or fourth year design studio may occur more frequently going forward.

### **Marketing**

Several of our faculty members believe that the recent drop in BSC program enrollment is partly due to a lack of marketing. We would like to improve our marketing efforts to alumni, high schools, and two year colleges, in order to maximize our enrollment potential.

### **Accreditation**

Aside from Penn College's Middle States accreditation, the AT and BSD programs are not currently accredited. Beginning in the fall of 2012, the department reviewed various accrediting options including ABET, ADDA, and ATMAE. We intend to pursue ATMAE accreditation for our AT associate degree program during the 2014/2015 school year. We will submit our self-study report in February or March and expect an on-site visit between March and May of 2015.

Note that programs focused on sustainability are generally very new and are typically not accredited due to a lack of appropriate accrediting bodies. In fact, some schools openly disclose this issue on their web sites. Although an accrediting agency with a sustainability focus does not currently exist, this may change at some future point. ATMAE accreditation at the bachelor degree level requires a significant focus on management related courses, which we feel is not right for our program. As of now, we have not been able to identify an appropriate accrediting agency for our four year degree. We therefore intend to pursue accreditation for the associate degree only.

*2016 Update: The program pursued ATMAE accreditation for the associate's degree in Architectural Technology. The program received accreditation in Fall of 2016 and is the only ATMAE accredited program in the state.*