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*Fairmont  
State  
University*

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*Program Review 2012*

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*A.S. Architectural Engineering  
Technology*

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# PROGRAM REVIEW

Fairmont State Board of Governors

Program with Special Accreditation  Program without Special Accreditation

Date Submitted: February 15, 2012

Program Associate of Science in Architectural Engineering Technology  
Degree and Title

## INSTITUTIONAL RECOMMENDATION

The institution is obligated to recommend continuance or discontinuance of a program and to provide a brief rationale for its recommendation:

- 1. Continuation of the program at the current level of activity;
- 2. Continuation of program with corrective action (for example, reducing the range of optional tracks or merging programs);
- 3. Identification of the program for further development (for example, providing additional institutional commitment);
- 4. Development of a cooperative program with another institution, or sharing courses, facilities, faculty, and the like;
- 5. Discontinuation of the Program

Rationale for Recommendation:

Signature of person preparing report:

Anthony J. Gilbert

Signature of Dean

Christina Lavorata

Signature of Provost and Vice President for Academic Affairs:

Marina Clark

Signature of President:

Ron L. Tucker

Signature of Chair, Board of Governors:

Date

1/25/12

Date

6-6-12

Date

6-6-12

Date

6-6-'12

Date

# A.S. Architectural Engineering Technology

## Five Year Program Review

### Spring 2012

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# Executive Summary for Program Review

(not to be more than 2-3 pages)

## **Name and degree level of program:**

Architectural Engineering Technology: Associate of Science

## External reviewer(s)

Mills Group Architects: Raymond Greg Eddy, AIA, NCARB; Michael Mills, AIA, NCARB

## **Synopses of significant findings, including findings of external reviewer(s)**

The AS Architectural Engineering Technology program mirrors the first two years of the BS Architecture program. Students, who complete the program, are employable as technicians in design offices. Because of the matching curriculum, the program is clearly oriented toward Architecture and consideration should be given to changing the program name to A.S. Architectural Technology. This presents a more accurate picture of the student's education to prospective employers and accreditation agencies.

## **Plans for program improvement, including timeline**

There are no plans for improving the program at this time.

## **Identification of weaknesses or deficiencies from the previous review and the status of improvements implemented or accomplished**

No previous program review is available for evaluation or comparison.

In the fall of 2006 the architecture program changed its degree name from *BSET in Architectural Engineering Technology* to *BS in Architecture*. This step improved the recognition of the architecture program as a pre-professional program by other institutions and the profession, leaving the A.S. Architectural Engineering Technology in name only. Because of the critical alignment with the BS in Architecture program, accreditation for this program as an engineering technology degree is impossible.

Beginning in the fall of 2010 the architecture program began the initial steps toward pursuing an accredited architecture degree program (National Architectural Accrediting Board – NAAB). The BS in Architecture is designed to meet the necessary pre-requisites for the professional program. While the necessary approvals are still pending, the following toward accreditation have been taken.

*Spring 2011: Application for Eligibility for Initial NAAB Candidacy (awaiting approval)*

*Fall 2011: Permission from the HEPC to plan a professional program (awaiting approval)*

*Fall 2011: Revised four-year pre-professional curriculum (awaiting approval)*

## **Five-year trend data on graduates and majors enrolled**

Five year data for enrollees is not available.

Of the 62 advisees assigned to the architecture faculty for the academic year 2011-2012, 5 are enrolled in the A.S. Program.

Over the past five years, from Spring 2007 – Spring 2011, the AS Architectural Engineering Technology program has graduated 10 students.

## **Summary of assessment model and how results are used for program improvement**

Student assessment begins in the classroom. In the design studio, student and faculty engage on a one-to-one level that is unique in education, as is the peer-to-peer learning opportunity. Critical thinking skills are challenged, knowledge of history and theory are tested and the ability to present ideas using the most relevant media of the profession is evaluated. Students are assessed through design project presentations, tests and quizzes, research papers and classroom activities. The design studio provides an almost constant state of review on some level by peers, faculty, adjunct faculty and professional juries. It is from the studio that the entire architectural learning environment is cultivated.

As the overwhelming majority of students matriculate to the B.S. Architecture program, and very few seek employment after completing only the AS degree, separate assessment of the AS program through graduate and employer feedback is not available.

## **Data on student placement (for example, number of students employed in positions related to the field of study or pursuing advanced degrees)**

Of the ten students completing the AS degree program, only one did not matriculate into the BS program to complete a Bachelor's degree, that student is currently working in a technical field.

## **Final recommendations approved by governing board**

# PROGRAM REVIEW

| FAIRMONT STATE UNIVERSITY OR PIERPONT COMMUNITY AND TECHNICAL COLLEGE |   |
|---|---|
| Program:  | A.S. Architectural Engineering Technology |
| School:   | Fairmont State University                 |
| Date:   | February 23, 2012                         |

## Program Catalog Description:

The associate degree in Architectural Engineering Technology provides students with a basic understanding of the history of architectural design and entry level drafting and communication skills required in order to work in a design/drafting office. Graduates with the associate of science degree are qualified for entry-level technical positions in architectural and engineering offices, firms related to architecture, or other businesses requiring in-house planning and drafting.

## VIABILITY (§ 4.1.3.1)

### Enrollments

| Applicants, graduates | <p><b>Report using common data base attached here.</b></p> <p>The AS Architectural Engineering Technology program currently has no special admissions requirements other than those of general admission to the university (see university catalog).</p> <p>The first semester freshman class (BS Architecture and AS Architectural Engineering Technology combined) has averaged 40.2 students over the past five years (as averaged from first semester freshman courses ARCH 1130, ARCH 1160 2006-2010).</p> <p>AS Architecture graduates for the corresponding period, Spring 2007-Fall 2011, average 2 students per year.</p> <p>Graduates of the architectural engineering technology program should be able to apply technical problem solving skills to a variety of design oriented problems. Graduates should be able to use the most current technical media of architectural practice to present and communicate ideas critical to the discipline. Graduates should be prepared to begin work in an architecture or related field at an entry level, or matriculate into the BS Architecture program.</p> |                    |           |           |           |                               |           |                               |             |    |    |    |    |   |    |                  |   |   |   |   |   |    |
|-----------------------|---|--------------------|-----------|-----------|-----------|-------------------------------|-----------|-------------------------------|-------------|----|----|----|----|---|----|------------------|---|---|---|---|---|----|
|                       | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">ARCH Course Number</th> <th style="text-align: center;">2006-2007</th> <th style="text-align: center;">2007-2008</th> <th style="text-align: center;">2008-2009</th> <th style="text-align: center;">2009-2010</th> <th style="text-align: center;">2010-2011</th> <th style="text-align: center;">Total Enrollment over 5 Years</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><b>1130</b></td> <td style="text-align: center;">NA</td> <td style="text-align: center;">NA</td> <td style="text-align: center;">NA</td> <td style="text-align: center;">NA</td> <td style="text-align: center;">5</td> <td style="text-align: center;">NA</td> </tr> <tr> <td style="text-align: center;"><b>Graduates</b></td> <td style="text-align: center;">0</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> <td style="text-align: center;">10</td> </tr> </tbody> </table> | ARCH Course Number | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010                     | 2010-2011 | Total Enrollment over 5 Years | <b>1130</b> | NA | NA | NA | NA | 5 | NA | <b>Graduates</b> | 0 | 2 | 2 | 3 | 3 | 10 |
| ARCH Course Number    | 2006-2007   | 2007-2008          | 2008-2009 | 2009-2010 | 2010-2011 | Total Enrollment over 5 Years |           |                               |             |    |    |    |    |   |    |                  |   |   |   |   |   |    |
| <b>1130</b>           | NA  | NA                 | NA        | NA        | 5         | NA                            |           |                               |             |    |    |    |    |   |    |                  |   |   |   |   |   |    |
| <b>Graduates</b>      | 0   | 2                  | 2         | 3         | 3         | 10                            |           |                               |             |    |    |    |    |   |    |                  |   |   |   |   |   |    |

| <p>Program courses</p> | <p><b>Report using common data base attached here.</b></p> <p>Five year course enrollment for all Architecture program courses is provided below:</p> <table border="1" data-bbox="537 310 1265 772"> <thead> <tr> <th>ARCH Course Number</th> <th>2006-2007</th> <th>2007-2008</th> <th>2008-2009</th> <th>2009-2010</th> <th>2010-2011</th> <th>Total Enrollment over 5 Years</th> </tr> </thead> <tbody> <tr> <td>1130</td> <td>33</td> <td>37</td> <td>40</td> <td>50</td> <td>41</td> <td>201</td> </tr> <tr> <td>1160</td> <td>38</td> <td>23</td> <td>27</td> <td>22</td> <td>32</td> <td>142</td> </tr> <tr> <td>2200</td> <td>13</td> <td>24</td> <td>19</td> <td>21</td> <td>22</td> <td>99</td> </tr> <tr> <td>2210</td> <td>14</td> <td>16</td> <td>16</td> <td>19</td> <td>17</td> <td>82</td> </tr> <tr> <td>2225</td> <td>16</td> <td>20</td> <td>21</td> <td>23</td> <td>22</td> <td>102</td> </tr> <tr> <td>2250</td> <td>19</td> <td>13</td> <td>11</td> <td>16</td> <td>12</td> <td>71</td> </tr> </tbody> </table> <p><i>Enrollment numbers combine both AS AET and BS in Architecture</i></p> <p>A list of course titles and descriptions are provided in Appendix B.</p> | ARCH Course Number | 2006-2007 | 2007-2008 | 2008-2009 | 2009-2010                     | 2010-2011 | Total Enrollment over 5 Years | 1130 | 33 | 37 | 40 | 50 | 41 | 201 | 1160 | 38 | 23 | 27 | 22 | 32 | 142 | 2200 | 13 | 24 | 19 | 21 | 22 | 99 | 2210 | 14 | 16 | 16 | 19 | 17 | 82 | 2225 | 16 | 20 | 21 | 23 | 22 | 102 | 2250 | 19 | 13 | 11 | 16 | 12 | 71 |
|------------------------|--|--------------------|-----------|-----------|-----------|-------------------------------|-----------|-------------------------------|------|----|----|----|----|----|-----|------|----|----|----|----|----|-----|------|----|----|----|----|----|----|------|----|----|----|----|----|----|------|----|----|----|----|----|-----|------|----|----|----|----|----|----|
| ARCH Course Number     | 2006-2007  | 2007-2008          | 2008-2009 | 2009-2010 | 2010-2011 | Total Enrollment over 5 Years |           |                               |      |    |    |    |    |    |     |      |    |    |    |    |    |     |      |    |    |    |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |    |     |      |    |    |    |    |    |    |
| 1130                   | 33   | 37                 | 40        | 50        | 41        | 201                           |           |                               |      |    |    |    |    |    |     |      |    |    |    |    |    |     |      |    |    |    |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |    |     |      |    |    |    |    |    |    |
| 1160                   | 38   | 23                 | 27        | 22        | 32        | 142                           |           |                               |      |    |    |    |    |    |     |      |    |    |    |    |    |     |      |    |    |    |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |    |     |      |    |    |    |    |    |    |
| 2200                   | 13   | 24                 | 19        | 21        | 22        | 99                            |           |                               |      |    |    |    |    |    |     |      |    |    |    |    |    |     |      |    |    |    |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |    |     |      |    |    |    |    |    |    |
| 2210                   | 14   | 16                 | 16        | 19        | 17        | 82                            |           |                               |      |    |    |    |    |    |     |      |    |    |    |    |    |     |      |    |    |    |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |    |     |      |    |    |    |    |    |    |
| 2225                   | 16   | 20                 | 21        | 23        | 22        | 102                           |           |                               |      |    |    |    |    |    |     |      |    |    |    |    |    |     |      |    |    |    |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |    |     |      |    |    |    |    |    |    |
| 2250                   | 19   | 13                 | 11        | 16        | 12        | 71                            |           |                               |      |    |    |    |    |    |     |      |    |    |    |    |    |     |      |    |    |    |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |    |     |      |    |    |    |    |    |    |
| <p>Service courses</p> | <p><b>Report using common data base attached here.</b></p> <p>Service Courses Liberal Studies:</p> <ul style="list-style-type: none"> <li>ARCH 1130 Architectural History I</li> <li>ARCH 1160 Architectural History II</li> </ul> <p>ARCH 1130 Architectural History I, ARCH 1160 Architectural History II are required courses for architecture majors.</p> <p>Service Courses BS Family and Consumer Science – Interior Design</p> <ul style="list-style-type: none"> <li>ARCH 1130 Architectural History I</li> <li>ARCH 1160 Architectural History II</li> <li>ARCH 2200 Graphics, ARCH 2210 Design 1</li> <li>ARCH 2250 Design II</li> </ul> <p>These courses serve as electives for the Interior Design Concentration of the B.S. degree in Family and Consumer Science.</p> <p>See <i>Five year course enrollment for all Architecture program courses</i> table above supporting enrollment data.</p>   |                    |           |           |           |                               |           |                               |      |    |    |    |    |    |     |      |    |    |    |    |    |     |      |    |    |    |    |    |    |      |    |    |    |    |    |    |      |    |    |    |    |    |     |      |    |    |    |    |    |    |



| Success rates Serv Crs   | <p><b>Report using common data base attached here.</b></p> <p>The success rates of service courses are based on the number of students completing the course with a letter grade of D or better.</p> <p>ARCH 1130 and ARCH 1160 represent the most widely taken service courses. ARCH 2200, 2210, 2250 represent a comparatively small number of students.</p> <p>Success rates from Fall 2006 through Spring 2011 are as follows:</p> <ul style="list-style-type: none"> <li>ARCH1130 approximately 80%;</li> <li>ARCH 1160 approximately 85%</li> <li>ARCH 2200 approximately 79%</li> <li>ARCH 2210 approximately 90%</li> <li>ARCH 2250 approximately 93%</li> </ul> <p><i>Enrollment numbers combine both AS AET and BS in Architecture</i></p> <p>See attached <i>Architecture Grade Counts by Course</i> – Appendix B for supporting data.</p>  |                                    |   |                                    |         |                  |                  |         |           |          |         |           |          |         |           |          |         |           |          |
|--------------------------|--|------------------------------------|---|------------------------------------|---------|------------------|------------------|---------|-----------|----------|---------|-----------|----------|---------|-----------|----------|---------|-----------|----------|
| ext ed/off campus crses  | <p><b>Report using common data base attached here.</b></p> <p>During this academic review period there have been no ext ed/off campus courses offered at this time.</p>  |                                    |   |                                    |         |                  |                  |         |           |          |         |           |          |         |           |          |         |           |          |
| cost/student credit hour | <p><b>Report using common data base attached here.</b></p> <p>The average cost per Instructional Credit Hour for students in the School of Science and Technology from 2007-08 through 2010-2011 is \$140.91.</p> <p>There is no break down for the AS Architectural Engineering Technology program specifically within the college.</p> <p><b>College of Science and Technology</b></p> <table border="1" data-bbox="529 1182 1412 1530"> <thead> <tr> <th>Academic Year</th> <th>Total Cost Per Student (FTE) Equivalent</th> <th>Total Cost per Student Credit Hour</th> </tr> </thead> <tbody> <tr> <td>2006-07</td> <td>Data Unavailable</td> <td>Data Unavailable</td> </tr> <tr> <td>2007-08</td> <td>\$5960.33</td> <td>\$139.13</td> </tr> <tr> <td>2008-09</td> <td>\$5334.50</td> <td>\$138.69</td> </tr> <tr> <td>2009-10</td> <td>\$5511.00</td> <td>\$142.18</td> </tr> <tr> <td>2010-11</td> <td>\$5176.94</td> <td>\$143.65</td> </tr> </tbody> </table> | Academic Year                      | Total Cost Per Student (FTE) Equivalent | Total Cost per Student Credit Hour | 2006-07 | Data Unavailable | Data Unavailable | 2007-08 | \$5960.33 | \$139.13 | 2008-09 | \$5334.50 | \$138.69 | 2009-10 | \$5511.00 | \$142.18 | 2010-11 | \$5176.94 | \$143.65 |
| Academic Year            | Total Cost Per Student (FTE) Equivalent  | Total Cost per Student Credit Hour |   |                                    |         |                  |                  |         |           |          |         |           |          |         |           |          |         |           |          |
| 2006-07                  | Data Unavailable   | Data Unavailable                   |   |                                    |         |                  |                  |         |           |          |         |           |          |         |           |          |         |           |          |
| 2007-08                  | \$5960.33  | \$139.13                           |   |                                    |         |                  |                  |         |           |          |         |           |          |         |           |          |         |           |          |
| 2008-09                  | \$5334.50  | \$138.69                           |   |                                    |         |                  |                  |         |           |          |         |           |          |         |           |          |         |           |          |
| 2009-10                  | \$5511.00  | \$142.18                           |   |                                    |         |                  |                  |         |           |          |         |           |          |         |           |          |         |           |          |
| 2010-11                  | \$5176.94  | \$143.65                           |   |                                    |         |                  |                  |         |           |          |         |           |          |         |           |          |         |           |          |

### Liberal Studies Requirements Met

All associated degree programs at FSU are required to complete the institutional general studies requirements. The architectural engineering technology program requires students to complete these liberal studies requirements based on the criteria listed below.

**THE FIRST YEAR EXPERIENCE..... 9-12 HOURS**

(Students are required to complete all Developmental Skills courses within their first 32 credit hours.)

- ENGL 1104 Written English I #.....3Hrs
- ENGL 1108 Written English II #.....3 Hrs
- INFO 1100 Computer Concepts & Applications 3 Hrs (or demonstrated competency)
- MATH 1101, 1106, 1112, 1115, 1185, 1190..... 3 - 4. Hours
- COMM 2200, 2201, 2202.....3 Hours

**CULTURAL/CIVILIZATION**

**EXPLORATION..... 3 HOURS**

**ARTISTIC / CREATIVE EXPRESSION & INTERDISCIPLINARY / ADVANCED STUDIES**

**OPTION..... 3 HOURS**

**GENERAL EDUCATION**

**ELECTIVES..... 8-9 HOURS**

**Total Liberal Studies Credit Hours: 30-31 Hours**

| <b>Form from Liberal Studies Attached here</b> |  |                         |                                |       |
|--|--|-------------------------|--------------------------------|-------|
| Year;<br>Semester or<br>Quarter                | Architectural Engineering Tech.<br>Course<br>(Department, Number, Title) | Category (Credit Hours) |                                |       |
|  |  | AET<br>Program Topics   | Liberal Studies<br>Requirement | Other |
| <b>1st Year<br/>First Semester</b>             | English, 1104, Written English I   |                         | X(3hrs)                        |       |
|  | Math, 1101, Applied Technical Math I                                     |                         | X(3hrs)                        |       |
|  | ART, 1111, Art Fundamentals  | X(3hrs)                 |                                |       |
|  | Architecture, 1130, Architectural Hist I                                 | X(3hrs)                 |                                |       |
|  | Architecture Elective  | X(3hrs)                 |                                |       |
| <b>1st Year<br/>Second Semester</b>            | English, 1108, Written English II  |                         | X(3hrs)                        |       |
|  | Math, 1102, Applied Technical Math II                                    |                         | X(3hrs)                        |       |
|  | Communication, 2200, 2201, 2202  |                         | X(3hrs)                        |       |
|  | General Elective   | X(3hrs)                 |                                |       |
|  | Architecture, 1160, Architectural Hist II                                | X(3hrs)                 |                                |       |
| <b>2nd Year<br/>First Semester</b>             | Architecture, 2225, ArchCADD   | X(3hrs)                 |                                |       |
|  | Physics, 1101, Intro to Physics I  |                         | X(4hrs)                        |       |
|  | Architecture, 2210, Design 1   | X(4hrs)                 |                                |       |
|  | Information Systems, 1100, Apps/Conc                                     |                         | X(3hrs)                        |       |
|  | Civil, 2210, Light Construction  | X(4hrs)                 |                                |       |
| <b>2nd Year<br/>Second Semester</b>            | Liberal Studies, Artistic/Creative/Inter.                                |                         | X(3hrs)                        |       |
|  | Architecture, 2250, Design 2   | X(4hrs)                 |                                |       |
|  | Architecture, 2200, Graphics   | X(3hrs)                 |                                |       |
|  | Physics, 1102, Intro to Physics II                                       |                         | X(4hrs)                        |       |
|  | Mechanical, 1100, Statics  | X(3hrs)                 |                                |       |
|  | Liberal Studies, Culture/Civilization                                    |                         | X(3hrs)                        |       |

## Assessment Requirements

**Format developed by Assessment Committee attached here (program goals, assessment, goals being achieved, results for feedback)**

The AS Architectural Engineering Technology degree shares years one and two with the Bachelor of Science in Architecture degree, the methods of assessment are therefore similarly applied as they align with pre-professional architecture degree programs rather than assessing the associate's degree as a stand-alone degree program.

In the most general terms, assessment begins in the classroom. The studio is concerned primarily with the process and product of architecture. Because the studio is a place of dialog and contemplation, student and faculty engage on a one-to-one level that is unique in education, as is the peer-to-peer learning opportunity. The experience of wrestling with difficulties and conflicts on the way to producing a very real answer to a question is what architects actually do as they interact with colleagues, clients and the public domain.

Much of what is produced in the studio results in immediate feedback from faculty. Both the qualitative and quantitative aspects of the design process are evaluated. The design studio provides an almost constant state of review on some level by peers, faculty, adjunct faculty and professional juries. It is from the studio that the entire architectural learning environment is cultivated.

The FSU 2006-2011 Strategic Plan, Goal 1, directed each academic program to begin a programmatic assessment plan by developing program outcomes and identifying direct measures of those outcomes. The learning outcomes approach provides for review of individual courses and programs, and provides a means for determining direction or re-direction as necessary. As part of the effort to align the architecture program with the pre-requisite requirements for an accredited professional program, learning outcomes are tied directly to the NAAB perspectives.

**Program Learning Outcomes**

*Upon degree completion, students should be able to:*

1. *apply critical thinking skills to creatively solve a variety of design problems with respect to culture, context, systems, materials, sustainable principles, and contribute to the development of new knowledge. (NAAB Perspective A)*
2. *demonstrate how architectural history, theory, and practice may inform design decisions in a diverse, global society. (NAAB Perspective B)*
3. *transition to internship and licensure and gain employment in professional design offices and design and construction-related fields. (NAAB Perspective C)*
4. *assume the role of an architect as a collaborator, communicator, and leader while observing the diverse needs of clients, populations, and communities in a global society. (NAAB Perspective D)*
5. *make informed, ethical, and responsible contributions in a diverse and global society to serve the public good. (NAAB Perspective E)*

**Assessment Responsibilities**

In addition to the program faculty, program assessment involves the following parties:

*Professional Advisory Committee*

The professional advisory committee has been a key element in assessment of the pre-professional program. This group composed of practicing architects from the state of West Virginia, full-time program faculty, adjunct faculty, and one lay member meets annually or as needed to discuss the direction for the program. This committee and structure will be used to advise and assess the accredited degree program.

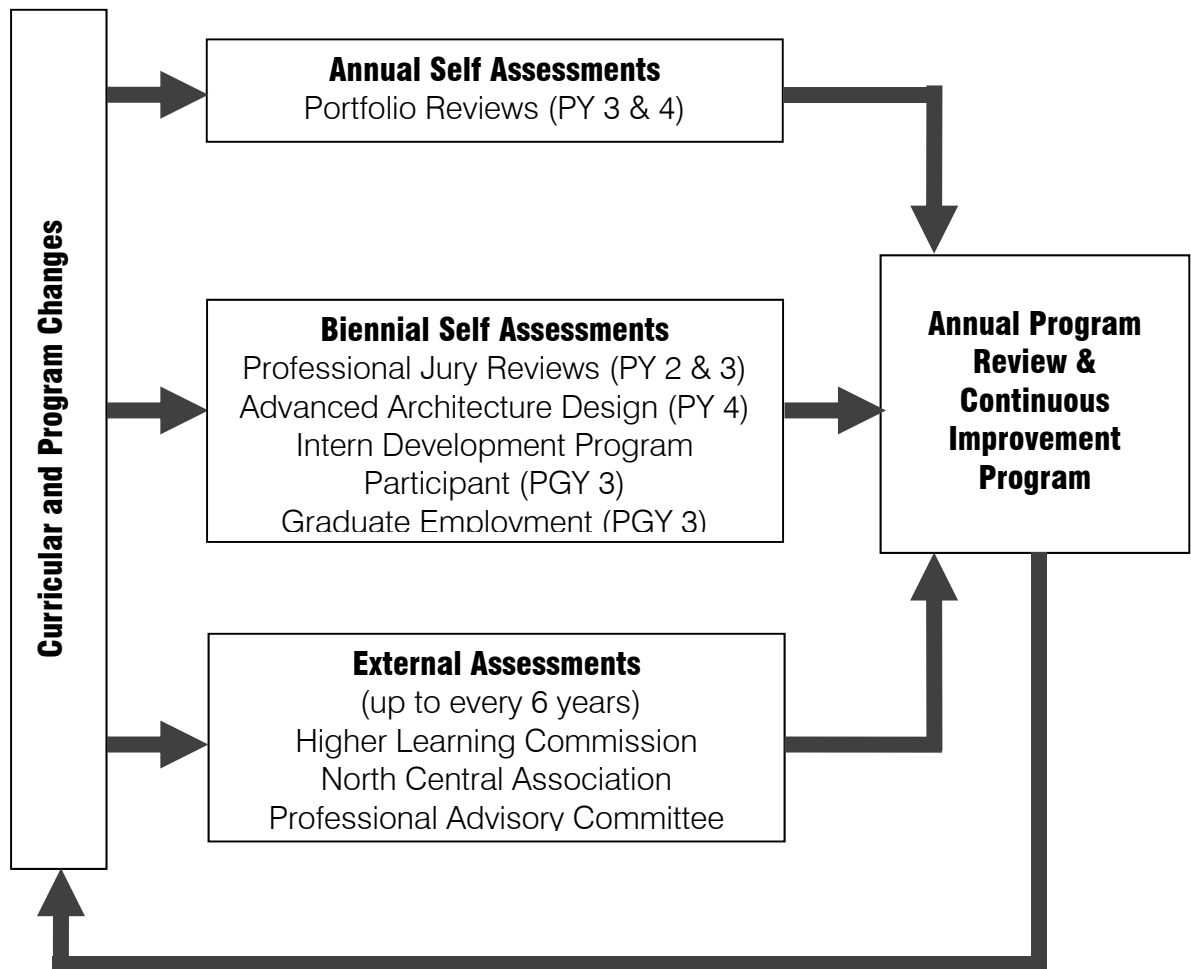
*Academic Advisors*

Faculty advisors will guide students with respect to courses and external study opportunities, and monitor student progress toward completing the degree.

*Professional Juries*

Professional juries are conducted by practicing architects who donate their time to critique student work and provide insight based on their experience of the practice of architecture. This is a traditional practice in architecture education.

## Assessment Events and Tool



Adjunct use

**Report using common data base attached here.**

Adjunct faculty have been used almost exclusively for instruction of ARCH 1130 and ARCH 1160. Adjunct faculty have also taught ARCH 2200, 2225 occasionally.

Graduation/Retention Rates

**Report using common data base attached here.**

Adequate data is not accessible to adequately illustrate graduation and retention rates.

Previous Program Review Results

**Summaries attached here**

No previous program reviews for the Associate of Science in Architectural Engineering Technology were available for examination or comparison.

**ADEQUACY (§ 4.2.4.2)**

Program Requirements:

|                 |          |          |  |
|-----------------|----------|----------|--|
| Liberal Studies | 30-31    | _32__hrs | ENGL 1104 – 3 hrs<br>ENGL 1108 – 3 hrs<br>COMM 2200,01,02 – 3 hrs<br>INFO 1100 – 3 hrs<br>MATH 1101 – 3 hrs<br>MATH 1102 – 3 hrs<br>PHYS 1101 – 4 hrs (Scientific/Discovery)<br>PHYS 1102 – 4 hrs. (Scientific/Discovery)<br>Artistic/Creative – 3 hrs.<br>Cultural Civilization - 3 hrs |
| Major           | 30       | _30__hrs | ART 1111 – 3 hrs<br>ARCH 1130 – 3 hrs<br>ARCH 1160 – 3 hrs<br>ARCH 2200 – 3 hrs<br>ARCH 2210 – 4 hrs<br>ARCH 2225 – 3 hrs<br>ARCH 2250 – 4 hrs<br>CIVL 2210 – 4 hrs<br>MECH 1100 – 3 hrs   |
| Electives       | min 6-29 | _6__hrs  | 3 hours of approved architecture electives, 3 hours of approved general electives  |
| <b>TOTAL</b>    | max 66   | 68__hrs  |  |

Programs not meeting the above requirements must request a continuation of their exception with a justification below:

#### Faculty Data

**Faculty Data Sheets Attached Here**

Philip M Freeman, Architect, NCARB, Associate Professor of Architecture

Kirk L. Morpew, Architect, NCARB, Associate Professor of Architecture

See Attached *Faculty Data Sheets Appendix A*

#### Accreditation/national standards

**Executive Summary with date of accreditation attached here  
Non-accredited programs report on conforming to national standards**

The AS in Architectural Engineering Technology program is not accredited by TAC ABET. The degree is an integral part of the BS in Architecture degree program, which is aligned to move toward NAAB accreditation. As a two year technical program it is not eligible for accreditation under the conditions of the National Architectural Accrediting Board (NAAB). It is extremely, if not impossible to meet the requirements of two separate and distinct accrediting bodies. It is suggested that the name be changed to AS in Architecture to more accurately reflect the program.

The BS in Architecture program is aligned with the NAAB Student Performance Criteria used to demonstrate that a graduate should possess the knowledge and skills to meet the minimum demands of an internship leading to registration for practice. The BS in Architecture curriculum has been revised to better position the program as a pre-requisite degree to meet the partial requirements for an NAAB accredited professional degree program (Master of Architecture). This curriculum revision was submitted to the College of Science and Technology in September of 2011.

Additionally, the architecture program has requested permission to plan from the HEPC for a Master of Architecture degree. This degree would be a professional degree using the existing undergraduate program to meet the necessary prerequisites as they pertain to NAAB accreditation.

### NECESSITY (§ 4.1.3.3)

**Placement and success of graduates**

Placement: Since very few students seek employment directly after completion of the associate degree, there is insufficient data to determine an accurate rate of placement of graduates in architectural and related jobs.

Comprehensive empirical data on AS Architectural Engineering Technology graduates is not available.

Information regarding placement, starting salary and number employed is obtained through informal contact between faculty and select employers. Recent information suggests that starting wages for an architectural engineering technician in North Central West Virginia average \$12.00/hour - \$14.00/hour.

No data is available for accurate tracking of students who matriculate into the BS in Architecture program or enter the work force.

**Similar Programs in WV**

Bluefield State College offers an ABET accredited A.S. in Architectural Engineering Technology.

**CONSISTENCY WITH MISSION (§ 4.1.3.4)**



**Explain how this program fits into the mission of the institution. Identify the relationship of this program to other programs at the institution, especially in terms of mutual support (e.g. shared faculty, shared facilities, shared course requirements for external program accreditation).**

Broadly speaking, the university catalog states that the mission of Fairmont State is to provide opportunities for individuals to achieve their professional and personal goals and discover roles for responsible citizenship that promote the common good. Specifically, the mission is to provide programs needed by those in its geographic service area.

The AS Architectural Engineering Technology degree comprises the first two years of the architecture program which is designed to address conditions that distinguish the character of the surrounding environment and its people. The key components of this program tend to address the built environment of the American small city and the regional uniqueness of their surroundings. All required courses are unified by the common thread of sustainable principles and community considerate design.

The program is uniquely housed in the School of Science and Technology where we rely on faculty from allied disciplines to teach certain technical courses such as MECH 1100, 2200 and CIVL 2210. We share facilities in the Engineering Technology building and Hunt Haught Hall.

The program has relied for many years on the School of Fine Arts to provide the variety of architecture electives. Required courses in architectural history and design fundamentals are taught by fine arts faculty. The school of fine arts has provided exhibition and lecture opportunities for the program. A member of the architecture faculty has been on the artist in residency committee since its inception.

The program has strong ties to the community. This is partly due to the professional advisory committee, composed of practicing architects from our region. The advisory committee provides input critical to aligning the architecture program with current trends and expectations of the profession.

The Fairmont State chapter of the American Institute of Architecture Students (AIAS) provides educational experiences and opportunities outside of the classroom. Over the past five years the students have traveled to San Francisco, New York City, Boston, Chicago, Pittsburgh and Washington DC. The organization also focuses on community outreach. Over the past five years the organization has been the largest donor of non-perishable food items to the Fairmont Soup Opera.

Freedom by Design, a component of the AIAS, has worked with community groups to provide accessibility assistance for those with disabilities. Most recently, the group designed, built and donated accessible outdoor furniture to a local assisted living facility.

### Signatures and Recommendations

The required sheet with signatures and recommendation should be used as a cover sheet.

## Appendix A Faculty Data Sheets

**Name:** *Kirk Morphew, RA, NCARB, Associate Professor of Architecture*

**Courses Taught:** *(Two academic years prior to review)*  
*ARCH 2210 Design I*

ARCH 3350    *Design 4*  
ARCH 4460    *Design 6*  
ARCH 3320    *Site Planning*  
ARCH 4420    *Urban Design/Preservation*  
CIVL 2210    *Light Construction*  
TECH 2299    *Portfolio 1*  
TECH 3399    *Portfolio 2*

***Educational Credentials:***

*AS, Building Construction Technology, College of Central Florida, 1981*  
*AA, Liberal Arts, Santa Fe College 1982*  
*BS, Sciences Interdisciplinary, University of West Florida 1984*  
*M.Arch, Virginia Tech, 1990*

***Teaching Experience:***

*Instructor of Architecture, Fairmont State University, 1991 -1995*  
*Assistant Professor of Architecture, Fairmont State University, 1995 -1997*  
*Assistant Professor of Architecture, Fairmont State University, 2000 - 2003*  
*Associate Professor of Architecture, Fairmont State University, 2003 - present*

***Professional Experience:***

*Draftsman, James Tatom Architect, Ocala, FL , 1980-1981*  
*Draftsman/Estimator, Amspacher & Amspacher Architects, Pensacola, FL, June 1984-1986*  
*Estimator, Larry Hall Construction, Pensacola, FL, 1986*  
*Project Manager, CRG'd Architects/Planners/Interior Designers, JAX/Ocala, FL , 1987-1988*  
*Project Manager, Robert Winthrop & Associates, Farmville VA, 1997-1999*  
*Project Manager, Blackwood and Associates, Fairmont, West Virginia, 1999-2000*

***Licenses/Registration:***

*NCARB certification: 55964*  
*Licensed Architect in Commonwealth of Virginia: 011251*

***Selected Publications and Recent Research***

*In Defense of Architecture: Intention, Meaning and Place, 2002 Presidential Lecture, FSU*  
*Existential Phenomenology in the Curriculum of the Architectural Design Studio (paper for WVU 1994)*  
*In His Dream Time He Walked (Fairmont State Publication: Cold Fire, 1991)*

***Professional Memberships:***

*American Institute of Architects (2002 – 2009)*  
*West Virginia Society of Architects (2002 – 2009)*

***Name:*** Philip M Freeman, Architect, NCARB, Associate Professor of Architecture

***Courses Taught:*** (Two academic years prior review)

ARCH 2200    *Graphics*

ARCH 2225 Architectural CADD  
ARCH 2250 Design 2  
ARCH 3300 Design 3  
ARCH 3310 Construction Details  
ARCH 4430 Mechanical and Electrical Systems  
ARCH 4450 Design 5  
ARCH 4498 Undergraduate Research

**Educational Credentials:**

BSET Architecture, Fairmont State College 1993  
M.Arch, Virginia Tech, 1997

**Teaching Experience:**

Instructor of Architecture, Fairmont State University, 1997 -1998  
Assistant Professor of Architecture, Fairmont State University, 1998 – 2000; 2003 - 2009  
Associate Professor of Architecture, Fairmont State University, 2010 - present

**Professional Experience:**

Technician, Stanley Industries Inc., Bridgeport, WV 1993-1995  
Intern Architect, WYK Associates, Clarksburg, WV, 1998-1999  
Intern Architect, LD Astorino, Pittsburgh, PA, 2000-2001  
Intern Architect, WYK Associates, Clarksburg, WV, 2001-2002  
Head of Design, WYK Associates, Clarksburg, WV, 2002-2005  
Owner, Philip M Freeman, Architect, Bridgeport, WV, 2005 - present

**Licenses/Registration:**

NCARB certification: 60290  
Registered Architect: West Virginia 3689

**Selected Works and Recent Research**

“Small Changes for a Large Impact”– Faculty Mentor, Undergraduate Research Grant, 2007-2008 FSU  
“Between Art and Architecture” - Faculty Mentor, Undergraduate Research Grant, 2008-2009 FSU  
“Small Changes for a Large Impact- Applications”– Faculty Mentor, Undergraduate Research Grant, 2009  
“The Romanian Home” – Faculty Mentor, Undergraduate Research Grant, 2010 FSU  
Premier Medical Group Urgent Care Facility, 2008 - 2009, Architect  
Premier Medical Group Office Complex, 2009, Architect

**Professional Memberships:**

American Institute of Architects (1998 – 2008)  
West Virginia Society of Architects (1998 – 2008)

## Appendix B

### Course Data and Course Description Sheets

***Architecture Grade Counts by Course  
(A.S. Architectural Engineering Technology  
courses are Highlighted)***

| <i>Sum of GRADE_COUNT</i> |                  | <b>GRADE</b> |          |            |           |          |          |           |          |          |            | <b>Grand Total</b> |             |
|---------------------------|------------------|--------------|----------|------------|-----------|----------|----------|-----------|----------|----------|------------|--------------------|-------------|
| <b>SUBJ_CODE</b>          | <b>CRSE_NUMB</b> | <b>A</b>     | <b>U</b> | <b>B</b>   | <b>C</b>  | <b>D</b> | <b>F</b> | <b>FI</b> |          | <b>W</b> |            |                    |             |
|                           |                  |              |          |            |           |          |          | <b>W</b>  | <b>I</b> | <b>W</b> |            |                    |             |
| <b>ARCH</b>               | <b>1130</b>      | <b>101</b>   |          | <b>48</b>  | <b>21</b> | <b>5</b> | <b>3</b> |           | <b>1</b> | <b>7</b> | <b>236</b> |                    |             |
|                           | <b>1160</b>      | <b>63</b>    |          | <b>36</b>  | <b>15</b> | <b>6</b> | <b>7</b> |           | <b>3</b> | <b>1</b> | <b>141</b> |                    |             |
|                           | <b>1199</b>      | <b>2</b>     |          |            |           |          |          |           |          |          | <b>2</b>   |                    |             |
|                           | <b>2200</b>      | <b>26</b>    |          | <b>28</b>  | <b>11</b> | <b>3</b> | <b>8</b> |           |          | <b>2</b> | <b>98</b>  |                    |             |
|                           | <b>2210</b>      | <b>53</b>    |          | <b>25</b>  | <b>16</b> | <b>5</b> | <b>3</b> | <b>1</b>  |          | <b>7</b> | <b>110</b> |                    |             |
|                           | <b>2225</b>      | <b>34</b>    |          | <b>25</b>  | <b>11</b> | <b>7</b> | <b>6</b> |           | <b>1</b> | <b>8</b> | <b>102</b> |                    |             |
|                           | <b>2250</b>      | <b>23</b>    |          | <b>28</b>  | <b>13</b> | <b>2</b> | <b>3</b> |           |          | <b>2</b> | <b>71</b>  |                    |             |
|                           | <b>3300</b>      | <b>29</b>    | <b>1</b> | <b>28</b>  | <b>7</b>  | <b>8</b> | <b>1</b> |           |          | <b>2</b> | <b>76</b>  |                    |             |
|                           | <b>3310</b>      | <b>18</b>    |          | <b>37</b>  | <b>14</b> | <b>2</b> | <b>1</b> |           |          | <b>1</b> | <b>73</b>  |                    |             |
|                           | <b>3320</b>      | <b>22</b>    |          | <b>35</b>  | <b>13</b> | <b>1</b> | <b>1</b> |           | <b>1</b> | <b>2</b> | <b>75</b>  |                    |             |
|                           | <b>3350</b>      | <b>24</b>    |          | <b>24</b>  | <b>6</b>  | <b>3</b> | <b>4</b> |           |          | <b>2</b> | <b>63</b>  |                    |             |
|                           | <b>4420</b>      | <b>19</b>    |          | <b>23</b>  | <b>12</b> | <b>2</b> | <b>5</b> |           |          | <b>2</b> | <b>63</b>  |                    |             |
|                           | <b>4430</b>      | <b>9</b>     |          | <b>22</b>  | <b>22</b> | <b>4</b> | <b>1</b> |           |          |          | <b>58</b>  |                    |             |
|                           | <b>4450</b>      | <b>23</b>    |          | <b>33</b>  | <b>12</b> | <b>1</b> | <b>1</b> |           |          | <b>1</b> | <b>71</b>  |                    |             |
|                           | <b>4460</b>      | <b>23</b>    |          | <b>23</b>  | <b>13</b> | <b>1</b> |          |           |          |          | <b>60</b>  |                    |             |
|                           | <b>4998</b>      | <b>9</b>     |          |            |           |          |          |           |          |          | <b>9</b>   |                    |             |
| <b>ARCH Total</b>         |                  |              |          | <b>478</b> | <b>1</b>  | <b>5</b> | <b>6</b> | <b>0</b>  | <b>4</b> | <b>1</b> | <b>6</b>   | <b>7</b>           | <b>1308</b> |
| <b>Grand Total</b>        |                  |              |          | <b>478</b> | <b>1</b>  | <b>5</b> | <b>6</b> | <b>0</b>  | <b>4</b> | <b>1</b> | <b>6</b>   | <b>7</b>           | <b>1308</b> |

The Architecture Program offers the following program courses:

## **A.S. Architectural Engineering Technology (College of Science and Technology)**

ARCH 1130 S-FSU Architectural History I.....3 hrs.

This course covers architectural history from prehistoric times through the Gothic period. The emphasis will be on the historical, social and technological factors behind the structures discussed.

ARCH 1160 S-FSU Architectural History II.....3 hrs.

This course is a continuation of architectural history, covering the Renaissance period to the present. The emphasis will be on the historical, social and technological factors behind the structures discussed. PR: ARCH 1130.

ARCH 1199 Special Topics in Architecture.....1-12 hrs.

Studies in special selected topics, to be determined by the instructor and approved by the department chairperson. Credits earned will be applicable as free electives in degree and certificate programs.

ARCH 2200 Graphics .....3 hrs.

This course is an introduction to architectural presentation drawings. The course emphasizes rendering techniques and perspective drawing.

ARCH 2210 Design I .....4 hrs.

Introduction to developing design methodology and its integration into the process of design. Topics include form studies and theory, and incorporation of these into the design of architectural elements. Introduction of sketching, graphic and modeling skills to communicate design concepts. Emphasis on developing the student's presentation skills. PR: ARCH 1160, 2225, ART 1111

ARCH 2225 Architectural CADD.....3 hrs.

Introduction to computer-aided drafting and design. Will include an introduction to the basic drawing processes of the computer and subsequent application to design solutions in architecture.

ARCH 2250 Design II .....4 hrs.

A continuing study of design methodology as applicable to the design of simple structures. Emphasis on tectonics, as well as the nature of materials and the site. Further development of sketching, graphic and modeling skills as students learn to understand, interpret, and represent spaces and receive further training in presentation skills. Students will develop a first-year design portfolio. PR: ARCH 2210.

March 26, 2012

Dear Madam or Sir,

As a practicing architect in north central West Virginia Area, I have gained exposure to a number of previous Fairmont State University Graduates and in particular the area of Architecture. I have also been invited to see the level of investigation and commitment which is sought by the faculty and student of Fairmont State University. Synthesizing my own experiences in the development of young architects, both others and myself, I have made the following observation and thoughts:

- The change in the program to B.S Architecture and the requisite changes in the curriculum have been very positive.
- The curriculum structure provides a logical base for the implementation of the proposed Accredited MArch program.
- The curriculum coordinates well with a variety of existing MArch programs and facilitates the acceptance to and success in those programs of FSU BS Arch graduates.
- Both fulltime faculty members are registered architects who have worked in private practice. This is an asset to the program.
- It is vital to the success and growth of the program to continue pursuit of the accredited degree program, and to maintain and nourish relationships with the FSU Administration, NAAB, HEPC and other agencies that will act upon that implementation and approval.
- The existing program has been very successful in providing and maintaining the design and drafting software that is current and applicable to the professional marketplace. It is important for the program to continue this feature.
- From personal experience with my own firm and discussion with colleagues in the North Central West Virginia area, FSU students are well prepared for professional practice, and contribute at a high level very quickly upon employment. The quality of student continues to rise due to the elevated atmosphere willed to the students from these faculties.

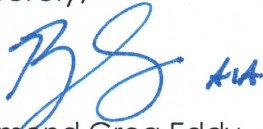
"Designing on the principles of the past and preserving for the future"



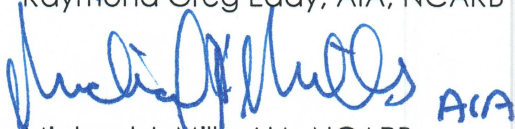
- The AS Architectural Engineering Technology program mirrors the first two years of the BS Architecture program. Students, who complete that program, are employable as technicians in design offices. Because of the matching curriculum, the program is clearly oriented to Architecture and consideration should be given to changing the program name to A.S. Architectural Technology. This presents a more accurate picture of the students' education to prospective employers and accreditation agencies.

In my opinion, the Architecture Program at Fairmont State University is at a significant crossroads. Every reasonable effort needs to be made to implement the MArch program and gain NAAB Accreditation. As an accredited, professional degree program, I believe that the FSU Program can broaden its appeal to students from the entire Mid-Atlantic region, and implement faculty and facility development which will contribute to the real and perceived quality of the institution as a whole.

Sincerely,



Raymond Greg Eddy, AIA, NCARB



Michael J. Mills, AIA, NCARB