

PROGRAM REVIEW

**For Occupational Programs
Implemented Under the Provisions of Series 37 of the
West Virginia Council for Community and Technical College Education**

Institution: Southern West Virginia Community and Technical College
Program: Electrical Engineering Technology, Certificate

March 2017

PROGRAM REVIEW
Southern West Virginia Community and Technical College
Programs Without Specialized Accreditation
Summary of Findings
2016-2017

Program Name: Electrical Engineering Technology, Certificate

Hours Required for Graduation: 30

I. Synopses of significant findings, including findings of external reviewer(s)

A. Adequacy

1. The curriculum has adequate requirements that meet the needs of business and industry.
2. The program has established goals and objectives.
3. Provides a variety of skilled job pathways.
4. Entrance abilities for the students are within community college standards.
5. The program has appropriately trained faculty.
6. The program maintains appropriate assessment tools.

Conclusion: Program meets and exceeds minimum adequacy requirements.

B. Viability

1. The program is near capacity for enrollment.
2. Graduates are within expectations for the program.
3. Previous history of the program indicates number of future students seeking the degree will increase.
4. The program is the first year of the associate degree program.

Conclusion: Program meets and exceeds minimum viability requirements.

C. Necessity:

1. The program meets a validated industry demand.
2. The graduates find successful gainful employment.

Conclusion: The program meets minimum requirements for necessity.

D. Consistency with Mission:

1. The program does support the mission and vision of the institution.
2. The program and core courses support the compact.
3. There is limited impact on other programs.

Conclusion: The program is consistent with the mission of the college.

II. Plans for Program Improvement, Including Timeline

The math department has worked with program faculty to develop strategies to improve student math competencies through the introduction of a co-curricular model for delivery of remediation. The gateway math course also underwent a specific review to restructure class activities to better align with the technology students learning styles. Early indications are that this is increasing the number of individuals who successfully complete the program math requirements. Results of these changes will continue to be reviewed and improved as necessary.

Budget for the program is spent each year on upgrades for software and purchasing of additional simulators. Increased efforts on tracking and advising students to assist with completion of courses in sequence will continue to be monitored and improved as necessary. Additional efforts are being made to track students beyond graduation. All activities are ongoing.

III. Identification of Weaknesses or Deficiencies from the Previous Review and the Status of Improvements Implemented or Accomplished

The last program review was conducted in 2012. The weaknesses noted were a lack of lab space and weak student math skills leading to increased time to graduate. The lack of lab space is still a constraint on the program, but has been ameliorated in part by creation of the mechatronics lab at the Williamson Campus and creative scheduling of the Logan lab. The lack of math skills has been addressed by introduction of the co-curricular model. This strategy has increased the number of individuals successfully completing the math sequence on time.

IV. Five Year Trend Data on Graduates and Majors Enrolled

The majority of students do not list the certificate as their intended major. Program enrollment has been at capacity during the review period. This trend is expected to continue. The number of graduates has increased during the last five years.

V. Summary of Assessment Model and How Results Are Used for Program Improvement

The assessment model contains a variety of measurements for classroom performance. Student advising and progress toward graduation is monitored by the division head along with regular consultation with the program faculty. Outcomes are discussed at each department meeting and changes in delivery and content are made accordingly. Formal curriculum changes are presented in accordance with the established institutional policy and procedures for curriculum and instruction.

VI. Data on Student Placement

Approximately half of the graduates who responded to requests for information are working in the electrical field. The other half of respondents were continuing their education. A majority of graduates also obtained the associate degree.

VII. Final Recommendation Approved by the Governing Board

See the attached resolution for Board of Governors Final Recommendation and signatures.

Program Review
Southern West Virginia Community and Technical College.
Programs Without Specialized Accreditation.
2016-2017

Program Name: Electrical Engineering Technology, Certificate
Date of Last Review: 2011-2012

I. Program Description

The Electrical Engineering Technology (EET) Certificate degree program directly supports Southern's mission to provide programs of study in career and technical fields that lead to certificate degrees and/or the Associate in Applied Science degree for entry into the workforce. The program has also been used as a transfer program. The program's mission is to provide students with an academic and technical education with sequential/practical instruction for the development of the student as a mature, responsible engineering technician. The curriculum incorporates basic and advanced course in electricity, electronics, and electrical machinery applicable in multiple industries including mining, mining support, and construction. The certificate is the first year of the Electrical Engineering Technology Associate in Applied Science degree

The complete program is offered at the Logan Campus. Support courses for this program may be taken at any of Southern's campuses. Select engineering (EG) courses are also required in the Mechatronics and Electromechanical Instrumentation programs. Students may take these courses on the Williamson Campus as well as the Logan Campus.

II. Specialized Accreditation Information

This program does not have any specialized accreditation.

III. Program Statement on Adequacy, Viability, Necessity, and Consistency with College Mission

A. Adequacy

1. Curriculum (Appendix I)

The curriculum for the Electrical Engineering Technology Certificate Program consists of a total of 30 credit hours. Eleven of those hours are in general education. The remaining 19 being Electrical Engineering Technology specific courses. All courses in the program are required. There are no electives.

The certificate program is aligned with the associate degree program so that the certificate program is the first year of the associate degree program.

2. Faculty (Appendix II)

The EET program has been delivered utilizing a combination of full-time and part-time faculty. All faculty are qualified to teach the courses they have taught. General education courses are taught by credentialed full-time and adjunct faculty in the respective areas. The bulk of the program major classes during the last five years have been taught by William (Bill) Moseley. John Evans and Steven White are full-time faculty who have taught EG courses. They attended training and earned Siemens Level I certification training in the summer of 2016. This will enhance the controls portion of the program. It is planned for Bill Moseley to attend Siemens training in summer 2017. Adjuncts have been used to supplement full-time faculty instruction and to provide instruction in their respective areas of expertise. Faculty data sheets for program faculty can be found in Appendix II.

3. Students (Appendix III)

a. Entrance Abilities

Southern has an open-door admission policy. Any person with a high school diploma or GED may take classes at Southern. All entering students will use ACT scores or take a placement test to be placed in the proper math and English courses. Southern utilizes a co-curricular model for delivery of remedial math and English. Southern has had good success in helping students elevate their abilities to be a success in college-level math and English. Use of the co-curricular model helps students to complete the certificate program on time (two semesters).

b. Exit Abilities

Upon completing the degree requirements, student will have the necessary knowledge and skills to be successful in some entry-level positions in the electrical engineering technology industry that require some education and training beyond high school. Students will also have an understanding of the importance of life-long learning and the need to continually upgrade their skills. Since this program is contained wholly within the associate degree program, it allows students to seamlessly continue toward an associate degree.

c. Graduate Follow-Up Data

Graduate follow-up data is collected in a variety of methods. Formal surveys are conducted each year to provide formal feedback. The program faculty and staff maintain positive relationships with most students beyond graduation that provide informal feedback. The majority of students who earned the certificate continued on in the associate degree program. These results continue to provide overall satisfaction with the program.

4. Resources

a. Financial

This program is supported by an institutional budget. In addition, grants have been used to implement mechatronics and electromechanical instrumentation programs at the Williamson campus. Having the lab and instructors at Williamson has allowed us to offer some EG classes there as well, thereby expanding the capacity of the program.

b. Facilities

This program has one dedicated lab on the Logan Campus that supports this program. Additional classrooms are used to teach the lecture portion of courses. Select engineering (EG) courses are also taught at the Williamson Campus. The lab portion of the course takes place in a well-equipped mechatronics lab at that campus.

5. Graduate and Employer Satisfaction

As noted previously, the majority of student continue in the associate degree program. The greatest indicator of student satisfaction with the certificate degree program is continuance in the associate degree program.

6. Assessment Information

Assessment of EET Certificate Program outcomes occurs at the course level.

7. Previous Program Reviews

The previous program review identified numerous strengths of the program with only a couple weaknesses. The strengths have continued and the two identified weaknesses have been improved. One identified weakness was limited capacity due to lab space. Using the mechatronics lab for EG classes that support the Mechatronics program provides additional capacity for EET students who choose to take the class at the Williamson Campus. The total capacity of the program is still limited by available lab space at the Logan Campus. The other reported weakness was weak student math skills leading to extended time to graduation. Southern has adopted a co-curricular model for delivery of developmental math and English. This model allows “just in time” remediation and has resulted in improved success in college-level math courses and shortened times to graduation.

8. Advisory Committee

Employers have provided feedback regarding our EET and Mechatronics programs in a combined forum. They report satisfaction with the programs as they are, and hope for them to continue. Our EET certificate graduates usually continue with the associate degree.

9. Strengths and Weaknesses

a. Strengths

- (1) Dedicated faculty who continue to receive new training to remain current in the field
- (2) Expanded capacity due to creation of a lab at the Williamson Campus.
- (3) Up-to-date equipment and software purchased.
- (4) Additional qualified faculty and adjunct faculty have been hired, which expand capacity of the program.

b. Weaknesses

- (1) The capacity of the program is limited due to lab space.

B. Viability

1. Program Enrollment and Graduates

Fall enrollment in this program has remained constant throughout the evaluation period. The number of people who have declared the certificate as their major is significantly lower than the number who declared the related associate degree. It is believed academic advising plays a role in this and there may be a financial aid consideration as well. It is anticipated that enrollment in this program will remain strong in the future.

| Semester | Total Duplicated Headcount | Nonduplicated Headcount | Certificate Declared Major Count |
|-------------|----------------------------|-------------------------|----------------------------------|
| Fall 2014 | 102 | 40 | 4 |
| Spring 2015 | 101 | 37 | 4 |
| Summer 2015 | 3 | 3 | 0 |
| Fall 2015 | 152 | 56 | 4 |
| Spring 2016 | 128 | 52 | 4 |
| Summer 2016 | 0 | 0 | 0 |
| Fall 2016 | 153 | 65 | 4 |
| Spring 2017 | 73 | 34 | 4 |
| Total | 709 | 284 | 24 |

The number of graduates per year has increased during the last five years. It is anticipated that this number will remain fairly steady as the program is at capacity. It may be noted that the number of graduates is greater than the number of declared majors in most years. This is likely due to people who are actually seeking the associate degree earning the certificate along the way.

| Number of EET graduates for last five years | |
|---|----|
| 2012 | 7 |
| 2013 | 6 |
| 2014 | 11 |
| 2015 | 9 |
| 2016 | 15 |
| Total | 48 |

2. Program Course Enrollments

The Electrical Engineering Technology program does not require formal admission to the program. Some of the lower level or special interest courses have no prerequisites. Although these courses would be open to anyone who wishes to take them, most people who enroll in these courses seek the Electrical Engineering Technology certificate and/or associate degree. As can be seen from Appendix III, course enrollment has remained relatively constant over the last few years. It is expected that program enrollment will remain at the current level or even increase in the next few years. A challenge to expansion is space and equipment for new technology labs that would be required to support additional sections of courses.

3. Service Courses

Three EG courses (EG 103, EG 105, EG 107) are required in the mechatronics program (Associate Degree and Industrial Technology Certificate – Mechatronics Option) and in the Electromechanical Instrumentation Technology Certificate program. Additional EG classes can be used as some of the specialization courses in the Mechatronics Associate in Applied Science degree.

4. Off Campus/Distance Delivery Classes

The EG courses in the program are delivered face-to-face. Of the support courses, EN 101 may be taken online.

5. Articulation Agreements (2+2, etc.)

No formal articulation agreements exist, but students can move seamlessly into Southern's EET Associate Degree program.

C. Necessity

This program continues to serve a need in the area. Employers throughout the region and the state continue to look for people with the skills taught in this program. It has been stated that companies in the Charleston area cannot hire enough qualified people. That is especially true if the people have skills and knowledge of controls.

D. Consistency with College Mission

Southern's mission is to provide accessible, affordable, quality education and training that promote success for those we serve. Southern's open door admission policy and low tuition help make education and training, affordable and accessible for people in the region. Southern employs full-time and part-time faculty that are highly qualified and highly motivated to

help people learn. The Electrical Engineering Technology program continues to provide graduates with the skills and knowledge that are in demand in the area, to meet students where they are, and train them for future jobs.

IV. Recommendation

It is recommended that the Electrical Engineering Technology Certificate Program at Southern West Virginia Community and Technical College be continued without corrective action.

Appendix I Curriculum

Electrical Engineering Technology
Certificate

Support Courses:

| | | |
|-------------------|-----------------------------------|----------------|
| EN 101 or EN 101A | English Composition I | 3 Credit Hours |
| MT 124 or MT 124A | Technical Math | 3 Credit Hours |
| OR 105 | Orientation to Technical Programs | 1 Credit Hour |
| PH 200 or higher | Introductory Physics | 4 Credit Hours |

Major Courses:

| | | |
|--------|--------------------------|----------------|
| EG 103 | Electrical Calculations | 3 Credit Hours |
| EG 105 | Industrial Safety | 1 Credit Hour |
| EG 107 | Introduction to Circuits | 4 Credit Hours |
| EG 123 | Electrical Schematics | 3 Credit Hours |
| EG 171 | Circuit Analysis I | 4 Credit Hours |
| EG 172 | Circuit Analysis II | 4 Credit Hours |

Appendix II Faculty Data

FACULTY DATA SHEET

(No more than **TWO** pages per faculty member)

Name John Evans Rank Instruc. Specialist

Check one: Full-time X Part-time _____ Adjunct _____

Highest Degree Earned: B.S.
 Date Degree Received: August 1974
 Conferred by: West Virginia Institute of Technology
 Area of Specialization: Electrical Engineering

Professional registration/licensure: Certified Electrical Engineer
 Years of employment at present institution: 1.5
 Years of employment in higher education: 1.5
 Years of related experience outside higher education: 41
 Non-teaching experience: 41

To determine compatibility of credentials with assignment:

- (a) List courses you taught this year and those you taught last year: (If you participated in team-taught course, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course title and enrollment.

| Year/Semester | Course Number & Title | Enrollment |
|---------------|--|------------|
| Fall 2015 | EG 103 Electrical Calculations | 1 |
| Fall 2015 | EG 107 Introduction to Circuits | 1 |
| Fall 2015 | EG 105 Industrial Safety | 1 |
| Fall 2015 | EG 123 Electrical Schematics | 1 |
| Fall 2015 | MX 120 Mechanical Power I | 1 |
| Fall 2015 | MX 250 Basic Instrumentation | 1 |
| Spring 2016 | EG 103 Electrical Calculations | 14 |
| Spring 2016 | MX 120 Mechanical Power I | 16 |
| Spring 2016 | MX 130 Fluid Power I | 2 |
| Spring 2016 | MX 180 PLC Fundamentals | 15 |
| Spring 2016 | MX 184 PLC Interfacing & HMIS | 15 |
| Spring 2016 | MX 186 PLC Applications | 15 |
| Spring 2016 | MX 250 Basic Instrumentation and Control | 8 |
| Spring 2016 | MX 254 Adv. Instrumentation and Control | 7 |
| Summer 2016 | MX 140 Manufacturing Processes I | 6 |
| Summer 2016 | TS 275 Special Topics: Control Loop Tuning & Instrumentation | 1 |
| Fall 2016 | EG 103 Electrical Calculations | 33 |

| Year/Semester | Course Number & Title | Enrollment |
|----------------------|---|-------------------|
| Fall 2016 | EG 105 Industrial Safety | 36 |
| Fall 2016 | EG 123 Electrical Schematics | 6 |
| Fall 2016 | MX 120 Mechanical Power I | 7 |
| Fall 2016 | MX 230 Fluid Power II | 7 |
| Fall 2016 | MX 250 Basic Instrumentation and Control | 12 |
| Fall 2016 | OR 105 Orientation to Technical Programs | 8 |
| Spring 2017 | MX 110 Introduction to Mechatronics | 6 |
| Spring 2017 | MX 120 Mechanical Power I | 5 |
| Spring 2017 | MX 130 Fluid Power I | 10 |
| Spring 2017 | MX 140 Manufacturing Processes I | 5 |
| Spring 2017 | MX 190 Industrial Robotics | 6 |
| Spring 2017 | MX 254 Adv. Instrumentation and Control | 7 |
| Spring 2017 | MX 256 Control Loop Tuning & Wireless Communication | 5 |
| Spring 2017 | MX 298 Mechatronics System Design Capstone | 7 |

- (b). If degree is not in area of current assignment, explain.
Degree is in area of current assignment.
- (c). Identify your professional development activities during the past five years.

FACULTY DATA SHEET

(No more than **TWO** pages per faculty member)

Name Sivy Farhi Rank Instructor

Check one: Full-time Part-time _____ Adjunct _____

Highest Degree Earned: BSEE

Date Degree Received: _____

Conferred by: _____

Area of Specialization: _____

Professional registration/licensure: _____

Years of employment at present institution: _____

Years of employment in higher education: _____

Years of related experience outside higher education: _____

Non-teaching experience: _____

To determine compatibility of credentials with assignment:

- (a) List courses you taught this year and those you taught last year: (If you participated in team-taught course, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course title and enrollment.

| Year/Semester | Course Number & Title | Enrollment |
|---------------|-----------------------------------|------------|
| Fall 2015 | EG 103 Electrical Calculations | 19 |
| Fall 2015 | EG 107 Introduction to Circuits | 15 |
| Fall 2015 | EG 214 Electrical Control Systems | 16 |
| Fall 2015 | EG 181 Analog Electronics | 15 |
| Spring 2016 | EG 123 Electrical Schematics | 24 |
| Spring 2016 | EG 171 Circuit Analysis I | 11 |
| Spring 2016 | EG 220 Machines and Power Systems | 9 |
| Spring 2016 | EG 296 Program Logic Control | 13 |
| Spring 2016 | EG 297 National Electric Code | 18 |

- (b). If degree is not in area of current assignment, explain.
 Degree is in area of current assignment.
- (c). Identify your professional development activities during the past five years.

FACULTY DATA SHEET

(No more than **TWO** pages per faculty member)

Name Carol Howerton Rank Professor

Check one: Full-time X Part-time _____ Adjunct _____

Highest Degree Earned: MS

Date Degree Received: 1993

Conferred by: WV College of Graduate Studies

Area of Specialization: Information Systems

Professional registration/licensure: _____

Years of employment at present institution: 29

Years of employment in higher education: 29

Years of related experience outside higher education: 1

Non-teaching experience: _____

To determine compatibility of credentials with assignment:

- (a) List courses you taught this year and those you taught last year: (If you participated in team-taught course, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course title and enrollment.

| Year/Semester | Course Number & Title | Enrollment |
|---------------|---|------------|
| Fall 2012 | CS 102 Computer Literacy | 79 |
| Fall 2012 | IT 274 Information Technology Capstone | 1 |
| Fall 2012 | OR 105 Orientation to Technical Programs | 29 |
| Spring 2013 | EG 298 Electrical Engineering Technology Capstone | 6 |
| Spring 2013 | CS 102 Computer Literacy | 86 |
| Spring 2013 | IT 274 Information Technology Capstone | 5 |
| Summer 2013 | CS 102 Computer Literacy | 14 |
| Fall 2013 | EG 298 Electrical Engineering Technology Capstone | 9 |
| Fall 2013 | IT 274 Information Technology Capstone | 5 |
| Fall 2013 | OR 105 Orientation to Technical Programs | 18 |
| Spring 2014 | EG 298 Electrical Engineering Technology Capstone | 3 |
| Spring 2014 | IT 274 Information Technology Capstone | 1 |
| Spring 2014 | OR 105 Orientation to Technical Programs | 24 |
| Fall 2014 | EG 298 Electrical Engineering Technology Capstone | 2 |
| Fall 2014 | IT 274 Information Technology Capstone | 4 |
| Fall 2014 | OR 105 Orientation to Technical Programs | 62 |
| Spring 2015 | EG 298 Electrical Engineering Technology Capstone | 7 |

| Year/Semester | Course Number & Title | Enrollment |
|----------------------|---|-------------------|
| Fall 2015 | EG 298 Electrical Engineering Technology Capstone | 4 |
| Fall 2015 | IT 274 Information Technology Capstone | 5 |
| Spring 2016 | EG 298 Electrical Engineering Technology Capstone | 15 |
| Spring 2016 | IT 274 Information Technology Capstone | 20 |
| Fall 2016 | IT 274 Information Technology Capstone | 3 |
| Spring 2017 | EG 298 Electrical Engineering Technology Capstone | 7 |
| Spring 2017 | IT 274 Information Technology Capstone | 8 |

- (b). If degree is not in area of current assignment, explain.
OR 105 is the program class she taught. The degree is in the area of assignment.
- (c). Identify your professional development activities during the past five years.

FACULTY DATA SHEET

(No more than **TWO** pages per faculty member)

Name William Moseley Rank Instructor

Check one: Full-time X Part-time _____ Adjunct _____

Highest Degree Earned: BSEE
 Date Degree Received: May 1973
 Conferred by: West Virginia Institute of Technology
 Area of Specialization: Electrical Engineering

Professional registration/licensure: _____
 Years of employment at present institution: 8
 Years of employment in higher education: 8
 Years of related experience outside higher education: 33
 Non-teaching experience: 30

To determine compatibility of credentials with assignment:

- (a) List courses you taught this year and those you taught last year: (If you participated in team-taught course, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course title and enrollment.

| Year/Semester | Course Number & Title | Enrollment |
|---------------|-----------------------------------|------------|
| Fall 2012 | EG 103 Electrical Calculations | 18 |
| Fall 2012 | EG 105 Industrial Safety | 17 |
| Fall 2012 | EG 107 Introduction to Circuits | 18 |
| Fall 2012 | EG 171 Circuit Analysis I | 16 |
| Fall 2012 | EG 181 Analog Electronics | 10 |
| Fall 2012 | EG 214 Electrical Control Systems | 10 |
| Spring 2013 | EG 172 Circuit Analysis II | 13 |
| Spring 2013 | EG 214 Electrical Control Systems | 13 |
| Spring 2013 | EG 220 Machines and Power Systems | 8 |
| Spring 2013 | EG 296 Program Logic Control | 6 |
| Spring 2013 | EG 297 National Electric Code | 9 |
| Fall 2013 | EG 103 Electrical Calculations | 15 |
| Fall 2013 | EG 105 Industrial Safety | 15 |
| Fall 2013 | EG 107 Introduction to Circuits | 16 |
| Fall 2013 | EG 181 Analog Electronics | 9 |
| Fall 2013 | EG 220 Machines and Power Systems | 9 |
| Fall 2013 | EG 296 Program Logic Control | 10 |
| Fall 2013 | EG 297 National Electric Code | 11 |

| Year/Semester | Course Number & Title | Enrollment |
|----------------------|---|-------------------|
| Spring 2014 | EG 123 Electrical Schematics | 14 |
| Spring 2014 | EG 171 Circuit Analysis I | 11 |
| Spring 2014 | EG 172 Circuit Analysis II | 10 |
| Fall 2014 | EG 103 Electrical Calculations | 27 |
| Fall 2014 | EG 105 Industrial Safety | 24 |
| Fall 2014 | EG 107 Introduction to Circuits | 22 |
| Fall 2014 | EG 214 Electrical Control Systems | 10 |
| Fall 2014 | EG 296 Program Logic Control | 10 |
| Fall 2014 | EG 297 National Electric Code | 2 |
| Spring 2015 | EG 123 Electrical Schematics | 22 |
| Spring 2015 | EG 171 Circuit Analysis I | 20 |
| Spring 2015 | EG 220 Machines and Power Systems | 8 |
| Spring 2015 | EG 275 Special Topics: Intro. to Residential Wiring | 3 |
| Spring 2015 | EG 275 Special Topics: Commercial Wiring | 16 |
| Spring 2015 | EG 297 National Electric Code | 16 |
| Summer 2015 | EG 275 Special Topics: Intro. to Residential Wiring | 3 |
| Fall 2016 | EG 107 Introduction to Circuits | 11 |
| Fall 2016 | EG 172 Circuit Analysis II | 8 |
| Fall 2016 | EG 298 EET Capstone | 4 |
| Spring 2017 | OR 105 Orientation to Technical Programs | 13 |
| Spring 2017 | EG 171 Circuit Analysis I | 13 |
| Spring 2017 | EG 172 Circuit Analysis II | 9 |
| Spring 2017 | EG 220 Machines and Power Systems | 4 |
| Spring 2017 | EG 290 Digital Electronics | 3 |
| Spring 2017 | MX 180 PLC Fundamentals | 7 |
| Spring 2017 | MX 184 PCL Interfacing & HMIS | 7 |
| Spring 2017 | MX 186 PLC Applications | 7 |

- (b). If degree is not in area of current assignment, explain.
Degree is in area of current assignment.
- (c). Identify your professional development activities during the past five years.

FACULTY DATA SHEET

(No more than **TWO** pages per faculty member)

Name Steven White Rank Instruc. Specialist

Check one: Full-time X Part-time _____ Adjunct _____

Highest Degree Earned: Masters

Date Degree Received: May 2006

Conferred by: University of Fayetteville, Arkansas

Area of Specialization: Operations Management Safety Management

Professional registration/licensure: Yes

Years of employment at present institution: 5

Years of employment in higher education: 11

Years of related experience outside higher education: 33

Non-teaching experience: 22

To determine compatibility of credentials with assignment:

- (a) List courses you taught this year and those you taught last year: (If you participated in team-taught course, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course title and enrollment.

| Year/Semester | Course Number & Title | Enrollment |
|---------------|--|------------|
| Spring 2013 | CS 102 Computer Literacy | 19 |
| Spring 2013 | DR 204 Computer Aided Design and Drafting I | 7 |
| Spring 2013 | EG 123 Electrical Schematics | 14 |
| Fall 2014 | DR 204 Computer Aided Design and Drafting I | 11 |
| Fall 2014 | EG 123 Electrical Schematics | 5 |
| Spring 2015 | EG 105 Industrial Safety | 5 |
| Spring 2015 | MX 110 Introduction to Mechatronics | 5 |
| Spring 2015 | MX 120 Mechanical Power I | 3 |
| Spring 2015 | MX 130 Fluid Power I | 2 |
| Spring 2015 | MX 180 PLC Fundamentals | 2 |
| Spring 2015 | MX 186 PLC Applications | 2 |
| Spring 2015 | ST 110 Industrial Safety and Risk Management | 5 |
| Summer 2015 | DR 204 Computer Aided Design and Drafting I | 3 |
| Fall 2015 | OR 105 Orientation to Technical Programs | 35 |
| Fall 2015 | EG 103 Electrical Calculations | 19 |
| Fall 2015 | EG 105 Industrial Safety | 9 |

| Year/Semester | Course Number & Title | Enrollment |
|----------------------|--|-------------------|
| Fall 2015 | EG 107 Introduction to Circuits | 17 |
| Fall 2015 | MX 110 Introduction to Mechatronics | 5 |
| Fall 2015 | MX 130 Fluid Power I | 5 |
| Fall 2015 | MX 220 Mechanical Power II | 2 |
| Spring 2016 | EG 105 Industrial Safety | 13 |
| Spring 2016 | EG 107 Introduction to Circuits | 13 |
| Spring 2016 | MX 110 Introduction to Mechatronics | 19 |
| Spring 2016 | MX 130 Fluid Power I | 36 |
| Spring 2016 | MX 190 Industrial Robotics | 14 |
| Spring 2016 | MX 230 Fluid Power II | 12 |
| Spring 2016 | TS 275 Special Topics: Mechatronics Capstone | 2 |
| Fall 2016 | DR 204 Computer Aided Design and Drafting I | 14 |
| Fall 2016 | EG 171 Circuit Analysis I | 7 |
| Fall 2016 | EG 214 Electrical Control Systems | 21 |
| Fall 2016 | MX 220 Mechanical Power II | 8 |
| Fall 2016 | MX 298 Mechatronics System Design Capstone | 3 |

- (b). If degree is not in area of current assignment, explain.
Degree is in area of current assignment.
- (c). Identify your professional development activities during the past five years.

FACULTY DATA SHEET

(No more than **TWO** pages per faculty member)

Name William Anderson Rank N/A

Check one: Full-time _____ Part-time _____ Adjunct X

Highest Degree Earned: Associates

Date Degree Received: _____

Conferred by: Southern West Virginia Community and Technical College

Area of Specialization: Electrical Engineering

Professional registration/licensure: Master Electrician

Years of employment at present institution: _____

Years of employment in higher education: _____

Years of related experience outside higher education: _____

Non-teaching experience: _____

To determine compatibility of credentials with assignment:

- (a) List courses you taught this year and those you taught last year: (If you participated in team-taught course, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course title and enrollment.

| Year/Semester | Course Number & Title | Enrollment |
|---------------|--|------------|
| Fall 2015 | EG 105 Industrial Safety | 16 |
| Fall 2015 | EG 172 Circuit Analysis II | 20 |
| Spring 2016 | EG 275 Special Topics: Residential Wiring | 6 |
| Fall 2016 | EG 181 Analog Electronics | 7 |
| Fall 2016 | EG 107 Introduction to Circuits | 4 |
| Spring 2017 | EG 225 Commercial Wiring | 9 |
| Spring 2017 | EG 297 National Electric Code | 8 |

- (b). If degree is not in area of current assignment, explain.
Degree and licensure are in area of current assignment.
- (c). Identify your professional development activities during the past five years.

FACULTY DATA SHEET

(No more than **TWO** pages per faculty member)

Name Minness Justice Rank N/A

Check one: Full-time _____ Part-time _____ Adjunct X

Highest Degree Earned: _____

Date Degree Received: _____

Conferred by: _____

Area of Specialization: _____

Professional registration/licensure: _____

Years of employment at present institution: _____

Years of employment in higher education: _____

Years of related experience outside higher education: _____

Non-teaching experience: 25+

To determine compatibility of credentials with assignment:

- (a) List courses you taught this year and those you taught last year: (If you participated in team-taught course, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course title and enrollment.

| Year/Semester | Course Number & Title | Enrollment |
|---------------|---------------------------------|------------|
| Fall 2016 | EG 107 Introduction to Circuits | 19 |
| Spring 2017 | EG 123 Electrical Schematics | 9 |

- (b). If degree is not in area of current assignment, explain.
Mr. Justice has over 20 years' experience as a federal mine inspector, inspecting electrical work. He is frequently called as an expert witness in court cases involving electrical work.
- (c). Identify your professional development activities during the past five years.

Appendix III Student Data

| <u>Term</u> | <u>Subject</u> | <u>Course</u> | <u>Title</u> | <u>Enrolled</u> | <u>FTE</u> |
|-------------|----------------|---------------|----------------------------|-----------------|------------|
| 201301 | EG | 103 | Electrical Calculations | 18 | 3.6 |
| 201301 | EG | 105 | Industrial Safety | 17 | 1.13 |
| 201301 | EG | 107 | Introduction to Circuits | 18 | 4.80 |
| 201301 | EG | 171 | Circuit Analysis I | 16 | 4.27 |
| 201301 | EG | 181 | Analog Electronics I | 10 | 2.67 |
| 201301 | EG | 214 | Electrical Control Systems | 10 | 2.67 |
| 201302 | EG | 123 | Electrical Schematics | 14 | 2.8 |
| 201302 | EG | 172 | Circuit Analysis II | 13 | 3.47 |
| 201302 | EG | 214 | Electrical Control Systems | 13 | 3.47 |
| 201302 | EG | 220 | Machines and Power Systems | 8 | 2.13 |
| 201302 | EG | 296 | Program Logic Control | 6 | 1.60 |
| 201302 | EG | 297 | National Electric Code | 9 | .60 |
| 201302 | EG | 298 | Capstone | 6 | .40 |
| 201401 | EG | 103 | Electrical Calculations | 15 | 3.0 |
| 201401 | EG | 105 | Industrial Safety | 16 | 1.07 |
| 201401 | EG | 107 | Introduction to Circuits | 15 | 4.0 |
| 201401 | EG | 181 | Analog Electronics I | 9 | 2.40 |
| 201401 | EG | 220 | Machines and Power Systems | 9 | 2.40 |
| 201401 | EG | 296 | Program Logic Control | 10 | 2.67 |
| 201401 | EG | 297 | National Electric Code | 11 | .73 |
| 201401 | EG | 298 | Capstone | 9 | .60 |
| 201402 | EG | 123 | Electrical Schematics | 13 | 2.6 |
| 201402 | EG | 123 | Electrical Schematics | 1 | .20 |
| 201402 | EG | 171 | Circuit Analysis I | 10 | 2.67 |
| 201402 | EG | 171 | Circuit Analysis I | 1 | .27 |
| 201402 | EG | 172 | Circuit Analysis II | 10 | 2.67 |
| 201402 | EG | 298 | Capstone | 3 | .20 |
| 201501 | EG | 103 | Electrical Calculations | 27 | 5.4 |
| 201501 | EG | 105 | Industrial Safety | 24 | 1.6 |
| 201501 | EG | 107 | Introduction to Circuits | 15 | 4. |
| 201501 | EG | 107 | Introduction to Circuits | 7 | 1.87 |
| 201501 | EG | 123 | Electrical Schematics | 5 | 1.0 |
| 201501 | EG | 214 | Electrical Control Systems | 10 | 2.67 |
| 201501 | EG | 296 | Program Logic Control | 10 | 2.67 |

| <u>Term</u> | <u>Subject</u> | <u>Course</u> | <u>Title</u> | <u>Enrolled</u> | <u>FTE</u> |
|-------------|----------------|---------------|-----------------------------|-----------------|------------|
| 201501 | EG | 297 | National Electric Code | 2 | .13 |
| 201501 | EG | 298 | Capstone | 2 | .13 |
| 201502 | EG | 103 | Electrical Calculations | 3 | .60 |
| 201502 | EG | 105 | Industrial Safety | 5 | .33 |
| 201502 | EG | 107 | Introduction to Circuits | 4 | 1.07 |
| 201502 | EG | 123 | Electrical Schematics | 22 | 4.4 |
| 201502 | EG | 171 | Circuit Analysis I | 20 | 5.33 |
| 201502 | EG | 220 | Machines and Power Systems | 8 | 2.13 |
| 201502 | EG | 275 | Commercial Wiring | 16 | 4.27 |
| 201502 | EG | 275 | Intro to Residential Wiring | 3 | .80 |
| 201502 | EG | 297 | National Electric Code | 16 | 1.07 |
| 201502 | EG | 298 | Capstone | 7 | .47 |
| 201601 | EG | 103 | Electrical Calculations | 9 | 1.80 |
| 201601 | EG | 103 | Electrical Calculations | 19 | 3.80 |
| 201601 | EG | 103 | Electrical Calculations | 5 | 1. |
| 201601 | EG | 103 | Electrical Calculations | 5 | 1. |
| 201601 | EG | 103 | Electrical Calculations | 1 | .20 |
| 201601 | EG | 105 | Industrial Safety | 9 | .60 |
| 201601 | EG | 105 | Industrial Safety | 20 | 1.33 |
| 201601 | EG | 105 | Industrial Safety | 1 | .07 |
| 201601 | EG | 107 | Introduction to Circuits | 9 | 2.4 |
| 201601 | EG | 107 | Introduction to Circuits | 15 | 4. |
| 201601 | EG | 107 | Introduction to Circuits | 1 | .27 |
| 201601 | EG | 107 | Introduction to Circuits | 4 | 1.07 |
| 201601 | EG | 107 | Introduction to Circuits | 4 | 1.07 |
| 201601 | EG | 123 | Electrical Schematics | 1 | .20 |
| 201601 | EG | 172 | Circuit Analysis II | 16 | 4.27 |
| 201601 | EG | 181 | Analog Electronics I | 15 | 4 |
| 201601 | EG | 214 | Electrical Control Systems | 16 | 4.27 |
| 201601 | EG | 298 | Capstone | 4 | .27 |
| 201602 | EG | 103 | Electrical Calculations | 14 | 2.8 |
| 201602 | EG | 105 | Industrial Safety | 13 | .87 |
| 201602 | EG | 107 | Introduction to Circuits | 13 | 3.47 |
| 201602 | EG | 123 | Electrical Schematics | 24 | 4.8 |
| 201602 | EG | 171 | Circuit Analysis I | 11 | 2.93 |

| <u>Term</u> | <u>Subject</u> | <u>Course</u> | <u>Title</u> | <u>Enrolled</u> | <u>FTE</u> |
|-------------|----------------|---------------|----------------------------|-----------------|------------|
| 201602 | EG | 220 | Machines and Power Systems | 9 | 2.4 |
| 201602 | EG | 275 | Residential Wiring | 6 | 1.60 |
| 201602 | EG | 296 | Program Logic Control | 13 | 3.47 |
| 201602 | EG | 297 | National Electric Code | 18 | 1.20 |
| 201602 | EG | 298 | Capstone | 11 | .73 |
| 201701 | EG | 103 | Electrical Calculations | 22 | 4.4 |
| 201701 | EG | 103 | Electrical Calculations | 11 | 2.2 |
| 201701 | EG | 105 | Industrial Safety | 21 | 1.4 |
| 201701 | EG | 105 | Industrial Safety | 15 | 1 |
| 201701 | EG | 107 | Introduction to Circuits | 19 | 5.07 |
| 201701 | EG | 107 | Introduction to Circuits | 11 | 2.93 |
| 201701 | EG | 107 | Introduction to Circuits | 4 | 1.07 |
| 201701 | EG | 123 | Electrical Schematics | 6 | 1.20 |
| 201701 | EG | 171 | Circuit Analysis I | 4 | 1.07 |
| 201701 | EG | 171 | Circuit Analysis I | 3 | .80 |
| 201701 | EG | 172 | Circuit Analysis II | 8 | 2.13 |
| 201701 | EG | 181 | Analog Electronics I | 7 | 1.87 |
| 201701 | EG | 214 | Electrical Control Systems | 14 | 3.73 |
| 201701 | EG | 214 | Electrical Control Systems | 4 | 1.07 |
| 201701 | EG | 214 | Electrical Control Systems | 3 | .8 |
| 201701 | EG | 298 | Capstone | 4 | .27 |
| 201702 | EG | 123 | Electrical Schematics | 11 | 2.2 |
| 201702 | EG | 123 | Electrical Schematics | 9 | 1.8 |
| 201702 | EG | 171 | Circuit Analysis I | 12 | 3.20 |
| 201702 | EG | 172 | Circuit Analysis II | 9 | 2.40 |
| 201702 | EG | 220 | Machines and Power Systems | 4 | 1.07 |
| 201702 | EG | 225 | Commercial Wiring | 9 | 2.4 |
| 201702 | EG | 290 | Digital Electronics | 4 | 1.07 |
| 201702 | EG | 297 | National Electric Code | 8 | .53 |
| 201702 | EG | 298 | Capstone | 8 | .53 |