



NEW PROGRAM PROPOSAL FORM

Sponsoring Institution(s): Ranken Technical College

Program Title: Building Systems Engineering Technology

Degree/Certificate: Associate of Technology

Options: Click here to enter text.

Delivery Site(s): 755 Parr Road, Wentzville, MO 63385

CIP Classification: 04.0902

*CIP code can be cross-referenced with programs offered in your region on MDHE's program inventory highered.mo.gov/ProgramInventory/search.jsp

Implementation Date: August 2013

Cooperative Partners: Click here to enter text.

*If this is a collaborative program, form CL must be included with this proposal

AUTHORIZATION:

Donald J. Pohl/Executive Vice President

Handwritten signature of Donald J. Pohl

2/21/2016

Name/Title of Institutional Officer

Signature

Date

June Poletti

314-286-4817

Person to Contact for More Information

Telephone



STUDENT ENROLLMENT PROJECTIONS

Year	1	2	3	4	5
Full Time	5	8	15	20	25
Part Time					
Total	5	8	15	20	25

Please provide a rationale regarding how student enrollment projections were calculated:

Years 1-3 are based on current enrollment. We project to maintain this rate of enrollment growth.

Provide a rationale for proposing this program, including evidence of market demand and societal need supported by research:

Building systems engineering technicians collaborate with engineers in systems design, applications, testing and development work. Graduates may find employment with engineering firms, residential and commercial contracting firms or industries such as petroleum, pharmaceuticals or manufacturing. This type of occupation is a green increased demand occupation. Related green activities include constructing new green buildings, retrofitting residential and commercial buildings, and installing other green construction technology. Annual projected job openings in the state of Missouri for Architectural Drafters is 20. Projected growth from 2012 to 2022 is an average of 1%.

E. Free elective credits:

none

(Sum of C, D, and E should equal A.)

F. Requirements for thesis, internship or other capstone experience:

none

G. Any unique features such as interdepartmental cooperation:

none



PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Institution Name Ranken Technical College
Program Name Building Systems Engineering Technology
Date 3/21/2016

(Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Quantification of performance goals should be included wherever possible.)

1. Student Preparation

- Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.

No special preparation will be required. Students must complete an application; submit a copy of their high school diploma, final high school transcript or GED certificate; take the Compass Placement Test for Reading, Math and Writing or submit ACT scores in Reading (16 or higher), Math (17 or higher) and composition (7 or higher); pay the \$95 non-refundable registration fee.

- Characteristics of a specific population to be served, if applicable.
None

2. Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.
 - AS or BS degree in building systems or related engineering field.
 - Professional registration or ability to become a registered professional engineer is preferred.
 - Four years of demonstrated successful full-time occupational experience in each of these four areas: building systems; HVAC/mechanical systems; electrical systems; piping & fire protection.
- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here. Each full time faculty member teaches one 12-credit hour course.
- Expectations for professional activities, special student contact, teaching/learning innovation.

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Faculty are expected to travel to area schools and industry to promote the program. Work closely with program advisory committee to maintain and enhance curriculum and assess program outcomes.

3. Enrollment Projections

- Student FTE majoring in program by the end of five years.
We expect to have 20 students enrolled in various levels of completion during year five of the program.
- Percent of full time and part time enrollment by the end of five years.
100% of the students are enrolled full time

4. Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation.
Year 3: 8 graduates Year 5: 15 graduates
- Special skills specific to the program.
Graduates earning the Associate of Technology or Associate of Science in Building Systems Engineering Technology will be able to:
•Effectively, Independently and flexibly design and layout mechanical, electrical and piping building systems to client parameters and specifications as by the uniform code. •Support professional engineers and contractors with the daily tasks of designing and implementing mechanical, electrical and piping systems within a given structure. •Estimate the potential cost of implementing mechanical, electrical and piping systems into existing or newly designed commercial structures.
- Proportion of students who will achieve licensing, certification, or registration.
No specific license or national certification will be earned with this program
- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.
There is not a nationally recognized assessment test at this time.
- Placement rates in related fields, in other fields, unemployed.
90% of students are placed within 6 months of graduation
- Transfer rates, continuous study.

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We anticipate 10% of graduates may transfer or continue study towards a bachelor degree.

5. Program Accreditation

- Institutional plans for accreditation, if applicable, including accrediting agency and timeline. **If there are no plans to seek specialized accreditation, please provide a rationale.**

Ranken Technical College is accredited by The Higher Learning Commission.

6. Alumni and Employer Survey

- Expected satisfaction rates for alumni, *including timing and method of surveys*. Alumni are invited to serve on departmental advisory boards that provide advice and information to keep faculty up to date on recent trends in industry for their degree.
- Expected satisfaction rates for employers, including timing and method of surveys. Employers who hire graduates are invited to serve on departmental advisory boards that provide advice and information to keep programs up-to-date on recent trends in their industry. These vital contributions ensure that Ranken's curriculum stays on the leading edge of the industries we serve.

7. Institutional Characteristics

- Characteristics demonstrating why your institution is particularly well-equipped to support the program.

Through a unique combination of classroom education and hands-on instruction, each student is fully educated to be successful in his or her technical field of choice. Our education formula is founded on success and career development. The formula for a student's success is based upon three equal components: technical education, general education and work ethic.