

1. New Program Proposal Form

Form NP

NEW PROGRAM PROPOSAL FORM

Sponsoring Institution(s): Southeast Missouri State University

Program Title: Certificate of Healthcare Facilities Operations

Degree/Certificate: Certificate (Upper Division)

Options: _____

Delivery Site(s): Southeast Missouri State University, St. Louis
Community College, and Online

CIP Classification
(provide a CIP code): 51.0702

Implementation Date: Fall 2011

Cooperative Partners: _____

Expected Date of First Graduation: Spring 2013

AUTHORIZATION

<u>Ronald Rosati, Provost</u>	_____	_____
Name/Title of Institutional Officer	Signature	Date

<u>Ragu Athinarayanan, Chairperson, Department of Industrial & Engineering Technology</u>	<u>573-651-2104</u>
Person to Contact for More Information	Telephone

2. Need:

A. Student Demand:

- i. Estimated enrollment each year for the first five years for full-time and part-time students

Form SE

STUDENT ENROLLMENT PROJECTIONS

Year	1	2	3	4	5
Full-Time	3	5	8	10	10
Part-Time	10	15	20	25	30
TOTAL	13	20	28	35	40

- ii. Will enrollment be capped in the future?
No, unless demand for program exceeds existing resources such as faculty and facilities.

B. Market Demand:

- i. National, state, regional, or local assessment of labor need for citizens with these skills

The Bureau of Labor Statistics (BLS) states the demand is strong for facility managers in the healthcare industry. According to information contained at BLS, streamlining facility operations to make processes more efficient and profitable have many organizations outsourcing their facility management services or they hire qualified facility managers who are capable of achieving these goals in-house. With only two universities nationwide offering programs to prepare facility managers for the healthcare industry, the demand nationwide could not be met by these two programs. Without a sufficient supply, the American Society for Healthcare Engineering (ASHE) voiced concerns for the need to train new professionals in this field since the existing personnel are rapidly approaching retirement age. Understanding this increased demand, ASHE worked closely with the Industrial & Engineering Technology Department at Southeast Missouri State University to support the development of the Certificate in Healthcare Facilities Operations. The department has received letters of support (see attached) from Director of Facilities at Southeast Health and at St. Francis Medical Center,

President of Southern Illinois Chapter for Healthcare Engineering (SICHE), and from President of the Missouri Society for Healthcare Engineering. They all expressed their support and acknowledging the need for this certificate.

Data from US Department of Labor (DOL) show that Facilities Managers held about 259,400 jobs in 2008 and projected to increase by 12% by 2018. About 50% worked for service providers such as the health care industry. Data from Missouri Economic Research and Information Center (MERIC) also show similar trends on demand for healthcare facility managers at the state and local levels. Statewide the expected growth is 8.7%, with 9.7% in the Southeast Missouri region, and more than 5.0% in the metro regions of Missouri over the 2008-18 period.

C. Societal Need:

The job functions of a healthcare facilities manager has become increasingly complex and requires individuals with specific education and skills to perform the required duties. With increased healthcare regulatory compliances and stringent construction, fire safety, air quality and maintenance standards, the need for qualified healthcare facility managers will continue to increase in this already demanding field of Healthcare Facilities Management. Introduction of this program will meet a very critical need at the two major hospitals located in our community, hospitals in the St. Louis area, and in the surrounding regions including Southern Illinois, Western Kentucky and Arkansas.

Data from Missouri Economic Research and Information Center (MERIC) show the healthcare is listed among the top five industries in Missouri for hiring healthcare facilities managers. In fact the healthcare industry ranks first and they are projected to employ close to 138,000 in this field alone in the next 10 years.

D. Methods and data collection

US Department of Labor, Bureau of Labor Statistics, Missouri Economic Research and Information Center, International Facilities Management Association, and American Society of Healthcare Engineers.

3. Duplication and Collaboration:

No other certificate, Bachelors, Masters or related Healthcare Facilities Operation in Missouri.

Does delivery of the program involve a collaborative effort with any external institution or organization? If yes, please complete Form CL.

No.

6. Program Characteristics and Performance Goals: **For collaborative programs**, responsibility for program evaluation and assessment rests with the institution(s) granting the degree(s).

Form PG

PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Institution Name: Southeast Missouri State University

Program Name: Certificate of Healthcare Facilities Operations

Date: Fall 2011

(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.)

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.
Response: Students shall present a portfolio documenting related work experience in facilities management. Students without prior work experience will be granted admission if already pursuing a degree in a technical field.
Characteristics of a specific population to be served, if applicable
Response: Employed or preparing to be employed in healthcare facilities management.

Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.
Response: The IET department has sufficient faculty expertise to address the curricular needs of the certificate program. They have degrees in Civil Engineering, Electrical Engineering, Industrial Engineering, and Facilities Management with related work experience. Collectively they have certifications as Certified Quality Engineer, Professional Engineer (P.E.), Facilities Management Associate, and Construction Methods and Materials Certification.
- 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.
Response: All of the courses in the certificate program will be taught by full time faculty in the IET department.
- Expectations for professional activities, special student contact, teaching/learning innovation.
Response: As expected of all faculty members at SEMO, faculty teaching in the proposed certificate program will have expectation for professional development activities to keep them current in their respective fields of expertise.

Enrollment Projections

- Student FTE majoring in program by the end of five years:
Response: FTE=25
- Percent of full-time and part-time enrollment by the end of five years:
Response: Full Time=25%; Part Time=75%.

Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation:
Response: 6 per year after 3 years and 10 per year after the fifth year.
- Special skills specific to the program:
Response: Students will develop the ability to manage healthcare facility functions, understand compliance issues, and integrate technology in the management of materials and resources. They will also develop and understand of regulations and environmental, health, energy, and sustainability standards.
- Proportion of students who will achieve licensing, certification, or registration:
Response: Courses in program provides a pathway for students to obtain the Certified Healthcare Facilities Manager (CHFM) certification.
- 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.
Response: n/a
- Placement rates in related fields, in other fields, unemployed:
Response: Related Field=80% and Other Fields=20%
- Transfer rates, continuous study
Response: n/a

Program Accreditation

- Institutional plans for accreditation, if applicable, including accrediting agency and timeline. If there are no plans to seek specialized accreditation, please provide reasons.
Response: No accreditation currently available for certificate programs in healthcare facilities management. However courses for the proposed certificate are derived from a program accredited by Association of Technology Management and Applied Engineering (ATMAE).

Alumni and Employer Survey

- Expected satisfaction rates for alumni, including timing and method of surveys
Response: Surveys will be conducted of program graduates to request among other things, their satisfaction with the quality of the program. This will be done within six months of their graduation.
- Expected satisfaction rates for employers, including timing and method of surveys.
Response: Surveys will be conducted of employers within one year of graduation to request their input on quality of the program and its graduates. Feedback will also be solicited from members of an Industrial Advisory group consisting of facilities management professionals.

7. Accreditation: If accreditation is not a goal for this program, provide a brief rationale for your decision. If the institution is seeking program accreditation, provide any additional information that supports your program.

Response: No accreditation currently available for certificate programs in healthcare facilities management. However courses for the proposed certificate are derived from a program accredited by Association of Technology Management and Applied Engineering (ATMAE).

8. Institutional Characteristics: Please describe succinctly why your institution is particularly well equipped or well suited to support the proposed program.

Response: The Department of Industrial and Engineering Technology is well suited to offer the Certificate in Healthcare Facilities Operations because of excellent faculty credentials, facilities, and other resources associated with the department. In addition to this, all courses associated with the proposed certificate are currently available and being offered in the department.

9. Any Other Relevant Information:



January 21, 2011

Dr. Ragu Athinarayanan
One University Plaza, MS 6825
Cape Girardeau, MO 63701

Dr. Ragu,

I am very excited to see the progress toward implementing a Healthcare Facilities Management Certificate at SEMO University. As you know from our personal discussions, I believe this is a vital step in assuring there will be qualified candidates to fill Healthcare Facilities Management positions in the future. In addition, it catapults SEMO into a leading position among universities responding to this need across our country.

One of the reasons this program is needed for our community and surrounding region is the work of a Facilities Management Director has become increasingly complex. The role demands more and more computer and finance knowledge and the industry trend is to now require a college graduate for these positions. In healthcare, unique and stringent construction, fire safety, air quality, and preventive maintenance codes require specific education to pass inspection and retain accreditation. Students who have this education early will be at an advantage.

The American Hospital Association has developed the Certified Healthcare Facility Manager credential to distinguish those people with demonstrated expertise in the field. The proposed SEMO program includes areas covered by the CHFM certification, which blends education with experience. I am happy to help provide experience through internships at our facility and will help in any way I can to see the program established and become a success.

As a member of the American Society of Healthcare Engineers (ASHE), I am also happy to see the cooperation between the School of Polytechnic Studies and ASHE in the development of this program. ASHE is an organization with many resources to help its members through education and networking. Student memberships are very affordable, and a student chapter at SEMO would be an additional benefit to students interested in pursuing a career in the healthcare industry.

Thank you for your work on this important project.

Jerry Bender
Director, Facilities Management

1701 Lacey Street · Cape Girardeau, Missouri 63701 573-334-4822
www.southeastmissourihospital.com



January 25, 2011

Dr. Ragu Athinarayanan
One University Plaza, MS 6825
Cape Girardeau, MO 63701

Dear Dr. Athinarayanan:

I am very excited to see that SEMO University is progressing towards implementing a Healthcare Facilities Management Certificate. I am personally just getting involved in this program with my peers in Missouri Society of Healthcare Engineers (MOSHE). I believe this is a vital step in helping assure there will be qualified candidates in the future to fill the roles of Healthcare Facilities Managers. To my knowledge there are few universities that offer such a program that is sure to make a difference in the Healthcare Facilities Management arena in the years to come.

The role of Healthcare Facilities Management is becoming much more complex as technologies continue to advance in all aspects of healthcare. Healthcare reform is sure to only increase this already demanding responsibility of Facility Management to be knowledgeable in best practices in building management. This would include energy efficiency, code compliance, finance, safety, quality and customer satisfaction just to name a few.

The American Hospital Association has developed the Certified Healthcare Facility Manager (CHFM) credential to distinguish those people who have demonstrated expertise in the field of Healthcare Facilities Management. I believe this program will help prepare students for a future in Healthcare Facility Management and also those that maybe just looking to better prepare for the CHFM exam.

As a member of American Society of Healthcare Engineers (ASHE), I am encouraged to see the cooperation between the School of Polytechnic Studies and ASHE in the development of this program. ASHE has many resources to offer its members through education and networking. The program SEMO is working towards implementing would be an additional benefit to students and existing Facilities Managers alike.

Thank you for your work and considerations on this important project,

Sincerely,

A handwritten signature in black ink that reads "Mike L. Bock".

Mike L. Bock S.M.A., CHFM, President Elect MOSHE
Director Facilities



January 25, 2011

Dr. Ragu Athinarayanan
One University Plaza, MS 6825
Cape Girardeau, MO 63701

Dear Dr. Ragu:

The responsibility for Facility Management in healthcare continues to grow and the need for our next generation of Healthcare Facility leaders to be knowledgeable in best practices in building management is greatly needed. The role of Healthcare Facility Management is becoming much more complex as technologies continue to advance in all areas of healthcare. With the increased emphasis on facilities' Environment of Care and the increased Healthcare regulatory compliance the need for qualified Facility Managers is sure to only increase in this already demanding field.

The American Hospital Association has developed the Certified Healthcare Facility Manager (CHFM) credential to distinguish those people whom have demonstrated expertise in the field of Healthcare Facilities Management.

I am very excited to see that South East Missouri University is progressing towards implementing a Healthcare Facility Management Certificate program. I believe this is a vital step in helping assure that there will be qualified candidates in the future to fill the demanding roles of Healthcare Facility Management.

As President of the Missouri Society for Healthcare Engineering (MOSHE) and as a member of American Society of Healthcare Engineers (ASHE), I am excited and encouraged to see the progress being made at South East Missouri University for Healthcare Facility Management. I offer my full support and cooperation for the advancement of this program.

Thank you for your work on this important goal and the advancement of our next generation of Healthcare Facility leaders.

Respectfully yours,

Martin Grabanski, CHFM
2011 President
Missouri Society for Healthcare Engineering

SOUTHERN
ILLINOIS
CHAPTER
FOR

HEALTHCARE ENGINEERING

an affiliate of American Society for Healthcare Engineering and Illinois Hospital & HealthSystems Association

January 26, 2011

Dr. Ragu Athinarayann
Mail Stop 6825
One University Plaza
Cape Girardeau, MO 63701

Subject: Healthcare Facility Management

Dr. Ragu:

The purpose of this letter is to present the need for qualified individuals to manage healthcare facilities and healthcare construction. The field of healthcare facilities management has become increasingly complex and there is a need in our region and across the United States to prepare the next generation of facility managers for this important industry.

The role of a healthcare facility manager has become more critical to the operations of healthcare facilities due to this individual's role in the areas of:

- Facility maintenance
- Facility planning
- Code compliance
- Infection Control
- Energy procurement and management
- Asset management
- Fiscal management
- Property management
- Safety
- Construction management
- Patient/customer satisfaction
- LEAN processes

In the past, a person with technical skills in building maintenance could qualify for these positions. Now, many organizations require a bachelors degree and specific knowledge of the healthcare business model, codes, construction management, and an understanding of business and economic principles.

The Southern Illinois Chapter for Healthcare Engineering (SICHE) fully supports the development of a curriculum at Southeast Missouri State University to provide the required education and skills for this important career. Please let us know if there are ways we can provide assistance towards the development and implementation of this program.



Sincerely,

Ken Conley
Ken Conley
SICHE President

PO BOX 192
CARBONDALE
ILLINOIS
62903

**DEPARTMENT OF INDUSTRIAL & ENGINEERING TECHNOLOGY
CERTIFICATE PROGRAM
HEALTHCARE FACILITIES OPERATIONS**

Short-term curricula are provided for students interested in pursuing a career in facilities management with focus on the healthcare industry. Earned credit is applicable toward later completion of a degree. Students completing a short-term program are awarded appropriate certificates at that semester's graduation ceremony.

CURRICULUM CHECKLIST

HEALTHCARE FACILITIES MANAGEMENT & OPERATIONS PROGRAM (27 Hours)

___ MA134 College Algebra	3
___ MN220 Engineering Economic Analysis	3
___ CM310 Construction Building Codes	3
___ CM315 Construction Contracts & Legal Issues	3
___ CM325 Building Mechanical & Electrical Systems	3
___ FM554 Facilities Operation & Supervision	3
___ FM564 Sustainable Facilities Planning & Design	3
___ FM565 Building Energy Management	3
___ IM317 Cooperative Industrial Internship	
OR	
___ IM506 Projects in Industrial & Engineering Technology	3