## New Graduate Program (Majors, Sequences, Certificates) Proposal Illinois State University - Graduate Curriculum Committee

 Program Department
 Technology
 Submission Date
 Tuesday, January 06, 2015

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 Initiator Department
 Technology
 Version 2

 Title of New Program
 Quality Management and Analytics Sequence

 Proposed Starting Catalog Year
 2015 Supplement

### 1. Proposed Action

New Major ✓ New Sequence New Certificate More than 50% of courses in this program are Distance Education

## Sequence Major

Technology

## 2. Provide Graduate Catalog copy for new program.

#### **Degree Programs Offered**

The department offers a Master of Science in Technology degree. A student may choose one of the following options: (a) 30 semester hour program with a thesis, or (b) 33 semester hour program, plus a comprehensive examination. Four sequences, including Project Management, Training and Development, Quality Management and Analytics and STEM Education and Leadership, are offered. The STEM Education and Leadership sequence is not a teacher licensure program. Licensed teachers pursue the degree for professional development. Non-licensed students also may pursue the master's degree in conjunction with other undergraduate courses required for teacher licensure. University requirements for master's degrees are listed elsewhere in this catalog. All courses, including transfer courses, must be listed on the Degree Audit and approved by the graduate coordinator and the Director of Graduate Studies.

### **Quality Management and Analytics Sequence:**

As part of either the thesis (30 hours) or comprehensive exam (33 hours) option, students can elect to be admitted into the Quality Management and Analytics Sequence. Sequence requirements include the 6-hour degree core courses and requirements necessary for the chosen thesis or comprehensive examination option, and the following 9 hours of coursework: TEC 437, 438, and 439.

### 3. Provide a description for the proposed program.

The proposed sequence introduces quality management tools to enhance customer and supplier relations, strategic planning, and measurement systems to improve overall organizational performance. Students will learn and apply quantitative analytical modeling techniques to solve decision problems and risk situations faced by project managers. In addition, an overview of six sigma data-driven decision making methodologies will be introduced to gain insights into advanced quality based industrial management techniques.

## 4. Provide a rationale of proposed program.

The three courses comprising this new sequence have been in existence for six years (previously as temporary courses). Students that have taken these courses have been in high demand and have helped recruit new and highly skilled graduate students to our department. The proposed sequence is a perfect supplement to the existing project management and training and development sequences. This new sequence would add a third strong pillar to the graduate education in our department. Based on the experience throughout the past 6 years (the courses were offered as temporary courses) students that successfully completed these three courses encountered excellent employment opportunities.

## 5. Describe the expected effects of the proposed program on existing campus programs (if applicable).

There are no direct effects to any existing programs on campus. No graduate program includes Quality Management and Analytics components at this time.

# 6. Describe the expected curricular changes required, including new courses. If proposals for new courses that will be or have been submitted, please reference those related proposals here:

No new courses are required.

## 7. Anticipated funding needs and source of funds.

No additional funding is needed as the three courses comprising this program already exist and have been taught for a number of years.

#### 8. Does this program count for teacher education? No

#### 9. The following questions must be answered.

Yes Have you confirmed that Milner Library has sufficient resources for the proposed program?

N.A. Have letter(s) of concurrence from affected departments/schools been obtained? A departments/school is affected if it has a program with significant overlap or if it teaches a required or

elective course in the program.

10. Routing and action summary for New	Graduate Program: Propos	al Routing	
1. Technology Department Curriculum Committee Chair			
Geoffrey Campbell (website)	Geoffrey Campbell	11/10/2014 2:49:01 PM	
Signature	Print	Date	
2. Technology Department Chair/School Director			
Theodore Branoff (website)	Theodore Branoff	11/10/2014 2:50:19 PM	
Signature	Print	Date	
3. College of Applied Science and Technology College Curriculum Committee Chair			
Adrian Lyde (website)	Adrian Lyde	1/7/2015 2:06:10 PM	
Signature	Print	Date	
4. College of Applied Science and Technology College Dean			
Todd McLoda (website)	Todd McLoda	1/7/2015 7:38:17 PM	
Signature	Print	Date	

5. Graduate Curriculum Committee Chair		
Denise Wilson (website)	Denise Wilson	3/17/2015 10:31:38 AM
Signature	Print	Date
<b>6. Director of Graduate School</b> <i>Amy Hurd (website)</i> Signature	Amy Hurd Print	3/17/2015 10:33:08 AM Date

All new graduate programs (majors, sequences, certificates) are routed by the G.C.C. to the Academic Senate