Strategy and Viability Method

Engineering Management Graduate Certificates

BACKGROUND: The Master of Science of Operations Management Program began a review of student and employer needs in January of 2015. The review included a survey of current and prospective students, benchmarking skills desired by targeted employers and qualitative feedback received at conferences.

RESULTS OF MARKETING RESERACH: The review revealed student desire for five certificates in the following areas:

1. Project Management (including support to Operations Management and Engineering Management Principles and Engineering Analytics)
2. Lean Six Sigma
3. Homeland Security
4. Healthcare Logistics
5. Risk Management

Additionally, benchmarking of job requirements for advertised positions and discussions with employers and students show a strong desire to follow the professional association Body of Knowledge (BOK) in each area to reinforce preparation for certification. Feedback from students, employers and professional organizations has emphasized need for certificates with broad Operations Management skills, Engineering Management and Engineering Analytics.

STRATEGY: As a result of the research and to ensure long-term viability, the following strategy was developed:

1. Any course developments would stand independently and defined by an independent need for the course. No new courses required for this certificate.
2. The entire certificate can be encompassed within a program and, therefore, does not require additional budget requirements; this also allows application of financial aid when done concurrently, Additionally, because it may qualify for professional certification, some companies will provide reimbursement.
3. The highest demand expressed for project management that has broad application across several programs and disciplines; after testing the process, other certificates would be pursued with the same model.

The Project Management Certificate was approved for Fall 2017. The anticipated student load for the first year was 25; the enrollment has already exceeded 50, including MSOM students, MSOM students, former graduates returning for two classes and new students.

The research and work over two years appear to be valid and the certificates appear viable, therefore the next four certificates will be submitted for approval.