

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

**Program Department** Business  
**Initiator** Terry Noel  
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**Coauthor(s)** None  
**Title of New Program** MBA Sequence--STEM

**Submission Date** Tuesday, March 1, 2022  
**Email** tnoel@ilstu.edu  
**Campus Address** 5570 MBA Program

**Version** 2 **ID** 175  
**Proposed Starting Catalog Year** 2023-2024

**1. Proposed Action**

- ✓ New Major                      **Major CIP Code** 52.1399  
 New Sequence  
 New Certificate  
 More than 50% of courses in this program are Distance Education

**Degree Type(s)**

Master of Business Administration

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

STEM MBA

Degree Offered: MBA

The STEM MBA degree is designed to give students a technology and analytics focused business education at the graduate level. The degree includes grounding in all functional and strategic aspects of business with an emphasis on business analytics, data analytics, data science, management science, technology and innovation management, statistical modelling, operations analysis, data mining, business forecasting, and quality management.

Required Credit Hours: 36

- 27 hours: MBA411, MBA412, MBA416, MBA421, MBA427, MBA430, MBA440, MBA450, MBA485
- 9 hours, chosen from: MKT440, BIS420, BIS471, MKT445

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

The proposed STEM MBA is a graduate business program with significant STEM (science, technology, engineering, and mathematics) content that conforms to a government-designated CIP (Classification of Instructional Programs) codes listed by the US Department of Homeland Security. Typically, STEM courses involve business analytics, data analytics, data science, management science, technology and innovation management, statistical modelling, operations analysis, data mining, business forecasting, and quality management. These topics will be offered in the proposed program through accounting, finance, information technology, marketing, supply chain management, and operations management courses. All the above courses are currently offered as part of the Traditional and CMBA programs. No courses need be created, nor will there be any significant change in program structure. The program can be offered immediately upon approval. All the above courses are currently offered as part of the Traditional and CMBA programs. No courses need be created, nor will there be any significant change in program structure. The program can be offered immediately upon approval.

Note: Attached Financial Impact Form .pdf contains a table of courses to be offered, enrollment and degree projections, and resource requirements of the program.

**4. Provide a rationale of proposed program.**

STEM-designated MBA programs, compared to regular MBA programs, are more attractive from the perspective of prospective employers of both domestic and international students. Employers value domestic STEM MBA graduates because they are better skilled at data-driven analysis and decision-making. A STEM degree also makes it easier to hire international students for post-graduation employment in the US. The Department of Homeland Security allows STEM MBA graduates to have 3 years of OPT (Optional Practical Training) as opposed to the standard one year of OPT. International students with a STEM-designated MBA benefit from visa rules that allow for a 24-month extension of OPT-based (Optional Practical Training) working permit post-graduation without requiring employer visa sponsorship. Many international students on OPT use this period to work with an employer to sponsor a work visa like an H1-B if they wish to continue their employment beyond OPT. Two additional years of OPT from STEM designation gives international students ample additional time to get practical experience, build networks, and transition into relevant jobs in USA with employers that sponsor them for longer term employment visas. This makes a STEM MBA extremely attractive for international students.

For the STEM MBA program to be offered, the Illinois Board of Higher Education must approve it as a program under the CIP (Classification of Instructional Programs) code 52.1399, Management Science and Quantitative Methods, Other. Though there is not a standard set of guidelines for STEM designation, experiences of other institutions suggest that the program must consist of 50% or more STEM-type coursework. To comply with the US Department of Homeland Security requirements for STEM designation, the proposed STEM MBA program contains eight STEM-type courses, well over the 50% threshold, shown in the table below. STEM students will take the same nine core courses as Traditional MBA program students along with three (chosen from four) STEM elective offerings.

This program will serve the needs of Illinois constituents by providing an opportunity for local and regional students who wish to study STEM content for business. It will also better serve the needs of international students, simultaneously providing increased diversity in our MBA classrooms.

Note: Attached Financial Impact Form .pdf contains a table of courses to be offered, enrollment and degree projections, and resource requirements of the program.

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

This program is not expected to have any effect on existing campus programs.

**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:**

The STEM MBA is comprised of existent courses. No new courses will be required.

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

Please see attached Financial Impact Form

**8. No 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.*

