

**ILLINOIS STATE UNIVERSITY REQUEST FOR NEW PROGRAM APPROVAL *Financial
Implication Form***

Purpose: Proposed new undergraduate and graduate programs (degrees, sequences, minors, and certificates) must include information concerning how the program will be financially supported to proceed through the curricular process.

Procedure: This completed form is to be approved by the Department/School Curriculum Committee chair, department chair/school director, college dean, and Provost prior to submission of the proposal to the College Curriculum Committee.

Definition: A “program” can be a degree, a sequence within a degree, a minor, or a certificate. This form is to be used for both undergraduate and graduate programs.

Complete the following information:

Department: MBA Program

Contact person: Terry Noel, Associate Dean for Academic Programs and Curriculum

Date: March 14, 2022

Proposed new program: STEM MBA

BRIEF DESCRIPTION OF THE PROPOSED PROGRAM

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

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. The following table shows the courses will comprise the STEM MBA program. All students will take the designated core courses along with three of the four electives for a total of 12 courses (36 hours).

STEM MBA Courses

No.	Type	Course No.	Course Title	Course Description	Whether STEM based
1	Core	MBA 411	Fundamentals of Strategic Decision Making	Understanding how firms gain and sustain competitive advantage. Topics include analyzing markets and developing company strategy across business disciplines.	Yes
2	Core	MBA 412	Contemporary Business Perspectives & Leadership Skills	Interdisciplinary course designed to provide students with an integrative perspective of contemporary business environments and development of key professional competencies.	No
3	Core	MBA 416	Applied Tools for Business Decision Making	Introduction to quantitative tools used in business decision making. Students are introduced to research design, statistics, data analytics, and data visualization.	Yes
4	Core	MBA 421	Analysis of Organizational Behavior	A study of how people in organizations respond to managerial and organizational practices, using a systems orientation to analyze how environmental factors influence	

				organizational practices and climate. Topics include reactions of people to structure and control, problems of motivation and performance, resolution of inter-departmental conflicts, adaptation to change	No
5	Core	MBA 427	Operations and Quality Management	Course focus is on strategies, concepts, and tools for management of quality and the core function of producing goods and services.	Yes
6	Core	MBA 430	Advanced Marketing Management	Marketing principles, behavioral concepts, and quantitative techniques utilized in analyzing marketing problems and decisions. Emphasis on strategic and quantitative aspects of decision-making processes in marketing. A strategic marketing simulation game and/or rigorous case analyses are typical.	No
7	Core	MBA 440	Financial Management	Analysis of financial problems of business enterprises and the formulation of financial policies. Financing of current operations and long-term capital needs, income management and expansion policies. Includes case studies.	Yes
8	Core	MBA 450	Management Accounting	Designed for non-accounting majors. Emphasis on the interpretation and use of accounting data. The course cannot be presented for graduate credit by a degree candidate in the ACC program.	Yes
9	Core	MBA 485	Advanced Organizational Strategy	An integrating course analyzing the firm in its environment with emphasis on formulation of policies and strategies and application of concepts through case studies and/or simulation exercises integrating all functional areas.	No
10	Elective	MKT 440	Brand Management and Analytics	Based on the latest analytics techniques, this course offers advanced knowledge and practical skills for making day-to-day and long-term brand-related decisions.	Yes

11	Elective	BIS 420	Programming for Data Science	Programming languages and techniques used by data scientists to analyze big data sets of structured and unstructured data.	Yes
12	Elective	BIS 471	Advanced Business Analytics	This course will enable students to comprehend, explore and manage emerging issues confronting the field of advanced business analytics.	Yes
13	Elective	MKT445	Advanced Marketing Analytics	Introduces marketing analytic methods and statistical software skills to extract meaningful information from big data sets for business decision-making and strategic marketing management.	Yes

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.

RATIONALE FOR THE 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. Some business schools (including our own COB) are starting to offer data analytics-oriented MS programs. We

believe that the STEM MBA program will offer similar content but with additional education in all functional areas of business. The way we have designed the STEM MBA and the (now in the approval process) MS in Marketing Analytics program, there will be considerable overlap in course offerings. This keeps us from having to hire new faculty and create new courses. The increased enrollments we project can be accommodated with present resources.

The attached spreadsheet shows that among IL public universities, there are no STEM MBA programs offered. There are three among the private institutions. Note that there are several MS specialty programs among both public and private institutions. This leaves a niche for ISU to occupy. We would be the only IL public university offering a STEM MBA. This will also add another pipeline to the MBA programs. People who need a more tech-oriented graduate degree but who also aspire to upper management will not have to choose between an MS specialty program and an MBA. They will be able to get both in the STEM MBA.

Recruitment efforts will be directed at both domestic and international students. We are already in the process of strengthening our digital media promotional efforts on the domestic front. Segmenting the market to focus on STEM recruiting will follow straightforwardly from what we are already doing. International recruiting efforts will come from digital media marketing as well, but will also include marketing through such channels as EducationUSA.

ENROLLMENTS

In the table below, summarize enrollment and degrees conferred projections for the program for the first and fifth years of operation. If possible, indicate the number of full-time and part-time students to be enrolled each fall term in the notes section. If it is not possible to provide fall enrollments or fall enrollments are not applicable to this program, please indicate so and give a short explanation.

TABLE 1

STUDENT ENROLLMENT AND DEGREE PROJECTIONS FOR STEM MBA		
Category	Year One	Year Five
Number of Students Enrolled in Program (Fall Headcount)	5	25
Annual Full-time-Equivalent Students in Program (Fiscal Year)	4	20
Annual Number of Degrees Awarded	0	15

These numbers assume completion of the program in under two years. We project five STEM student enrollments in Year One with a five student per year growth rate. Eighty percent of students are assumed to be enrolled full-time. Note: Students may enroll in any semester.

Budget Rationale

Provide financial data that document the department or school’s capacity to implement and sustain the proposed program and describe the program’s sources of funding.

a. Is the unit's (College, Department, School) current operating budget (contractual, commodities, equipment, etc.) adequate to support the program when fully implemented? If "yes", please explain. If new resources are to be provided to the unit to support the program, what will be the source(s) of these funds?

Since the STEM MBA and the Traditional MBA coursework will overlap considerably, we anticipate no new resource demands. We anticipate being able to absorb the levels of growth shown above with our current resources.

b. What impact will the new program have on faculty assignments in the department? Will current faculty be adequate to provide instruction for the new program? Will additional faculty need to be hired, either for the proposed program or for courses faculty of the new program would otherwise have taught? If yes, please indicate whether new faculty members will be full-time or part-time faculty, tenure track or non-tenure track faculty.

Current faculty will be able to cover all required classes.

c. Will current staff be adequate to implement and maintain the new program? If "yes", please explain. Will additional staff be hired? Will current advising staff be adequate to provide student support and advisement, including job placement and or admission to advanced studies? If additional hires will be made, please elaborate.

Current staffing is adequate to support and advise students. No additional hires will be necessary.

d. Are the unit's current facilities adequate to support the program when fully implemented? Will there need to be facility renovation or new construction to house the program? (For a new degree program describe in detail the facilities and equipment available to maintain high quality in this program including buildings, classrooms, office space, laboratories, equipment, and other instructional technologies for the program).

Current facilities are adequate to support this program. No facility renovation or new construction is anticipated.

e. Are library resources adequate to support the program when fully implemented? Please elaborate.

Library resources are adequate to support this program.

f. Are there any additional costs not addressed in items a. – d.? If "yes" please explain.

We anticipate no additional costs not addressed above.

g. Are any sources of funding temporary (e.g., grant funding)? If so, how will the program be sustained once these funds are exhausted?

N/A

h. If this is a graduate program, discuss the intended use of graduate assistantships and where the funding for assistantships would come from.

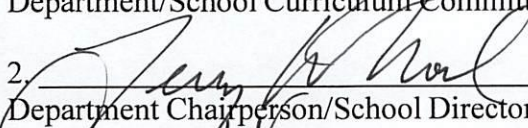
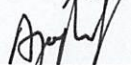
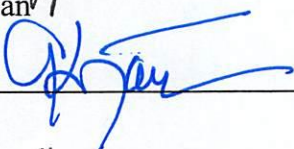
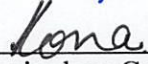
This program will have no net impact on our use of GAs. We will continue to offer GA positions as a recruitment and retention tool as current resources allow.

Table 2: RESOURCES REQUIREMENTS

TABLE 2

ESTIMATED COSTS OF THE PROPOSED PROGRAM- Only new resources not currently available to the program			
Category	Unit of Measurement	Year One	Year Five
Section 1: Operating Expenses			
Including but not limited to: Contractual, Commodities, Equipment, etc.	\$	\$0	\$0
Section 2: Personnel			
Faculty	FTE		
Faculty	\$	\$0	\$0
Other Personnel Costs – All Staff excluding Faculty	\$	\$0	\$0
Section 3: Facilities			
Including but not limited to rental, maintenance, etc.	\$	\$0	\$0
Section 4: Other Costs (itemized)			
Awards Banquet	\$	\$0	\$0
Student Welcome Package	\$	\$0	\$0
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
Total	\$	\$0	\$0

Routing and action summary – in sequential order:

1. N/A—College-level proposal
Department/School Curriculum Committee Chair Date Approved
2.  3/14/2022
Department Chairperson/School Director Date Approved
3.  3/14/2022
College Dean Date Approved
4.  3/22/22
Provost Date Approved
5.  03/15/2022
College Curriculum Committee Chairperson Date Approved
6. _____
Teacher Education Council Chair Date Approved
7. _____
University Curriculum Committee Chairperson Date Approved

Once approved, include this form with the curricular proposal for the new program.