



## New Program Report

**Date Submitted:**

12/13/2023

**Institution**

Missouri State University

**Site Information**

**Implementation Date:**

8/1/2024 12:00:00 AM

**Added Site(s):**

**Selected Site(s):**

Missouri State University, 901 South National, Springfield, MO, 65897

**CIP Information**

**CIP Code:**

521301

**CIP Description:**

A general program that focuses on the application of statistical modeling, data warehousing, data mining, programming, forecasting and operations research techniques to the analysis of problems of business organization and performance. Includes instruction in optimization theory and mathematical techniques, data mining, data warehousing, stochastic and dynamic modeling, operations analysis, and the design and testing of prototype systems and evaluation models.

**CIP Program Title:**

Management Science

**Institution Program Title:**

Business Administration - STEM

**Degree Level/Type**

**Degree Level:**

Master Degree

**Degree Type:**

Master of Business Administration

**Options Added:**

Collaborative Program:

N

**Mode of Delivery**

Current Mode of Delivery

Classroom

**Student Preparation**

Special Admissions Procedure or Student Qualifications required:

Upon evaluation of baccalaureate degree transcripts, some or all of six 3 hour foundation courses may be waived, particularly for students holding an undergraduate degree in business.



## New Program Report

Specific Population Characteristics to be served:

STEM designated programs allow international students who qualify for Optional Practical Training (OPT) on F-1 visas to work in the United States for three years during or after their studies. There exists a shortfall of skilled scientists and engineers in the US. Further, the US desires to invest in more basic research and development which can be provided by graduates of a STEM MBA program.

### Faculty Characteristics

Special Requirements for Assignment of Teaching for this Degree/Certificate:

We already employ qualified faculty to teach the STEM MBA courses. Examples of qualified backgrounds include those with the following knowledge and expertise: statistical modeling, data warehousing, data mining, forecasting and operations research, and mathematical techniques.

Estimate Percentage of Credit Hours that will be assigned to full time faculty:

Because of the size of our program and the accreditation that we hold, we use almost exclusively full-time faculty to teach our courses.

Expectations for professional activities, special student contact, teaching/learning innovation:

Faculty are expected to maintain currency in their field of expertise by actively researching, attending conferences, and obtaining certifications and professional development.

### Student Enrollment Projections Year One-Five

<b>Year 1</b>	<b>Full Time: 15</b>	<b>Part Time: 3</b>	
<b>Year 2</b>	<b>Full Time: 20</b>	<b>Part Time: 5</b>	
<b>Year 3</b>	<b>Full Time: 25</b>	<b>Part Time: 10</b>	<b>Number of Graduates: 35</b>
<b>Year 4</b>	<b>Full Time: 30</b>	<b>Part Time: 15</b>	
<b>Year 5</b>	<b>Full Time: 35</b>	<b>Part Time: 20</b>	<b>Number of Graduates: 55</b>

### Percentage Statement:

n/a

### Program Accreditation

Institutional Plans for Accreditation:

The program will fall under our AACSB accreditation and, thus, will meet all requirements of the accrediting agency.

### Program Structure

#### Total Credits:

34

#### Residency Requirements:

All students must be state side to complete the program unless permission is granted by the program director.

#### General Education Total Credits:

0

#### Major Requirements Total Credits:

25

#### Course(s) Added



## New Program Report

COURSE NUMBER	CREDITS	COURSE TITLE
ACC 711	3	Managerial Accounting
ITC 761	3	Management Information Systems
MULTI	3	Select one course for International Requirement: FIN682,MGT747,MKT774,FIN686,MKT764,BUS792,FIN792,INS792
MGT 764	3	Organizational Behavior
MKT 772	3	Marketing Management
QBA 775	3	Quantitative Methods in Business Decision Making
FIN 780	3	Advanced Financial Management
COM 703	1	Professional Communication Skills
MGT 767	3	Organization Strategy and Policy

**Free Elective Credits:**

9

**Internship or other Capstone Experience:**

NA

**Assurances**

I certify that the program is clearly within the institution's CBHE-approved mission. The proposed new program must be consistent with the institutional mission, as well as the principal planning priorities of the public institution, as set forth in the public institution's approved plan or plan update.

I certify that the program will be offered within the proposing institution's main campus or CBHE-approved off-site location.

I certify that the program will not unnecessarily duplicate an existing program of another Missouri institution in accordance with 6 CSR 10-4.010, subsection (9)(C) Submission of Academic Information, Data and New Programs.

I certify that the program will build upon existing programs and faculty expertise.

I certify that the program can be launched with minimal expense and falls within the institution's current operating budget.

I certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful. Institutions' decision to implement a program shall be based upon demand and/or need for the program in terms of meeting present and future needs of the locale, state, and nation based upon societal needs, and/or student needs.

Contact Information

First and Last Name: Carol Green

Email: [carolgreen@missouristate.edu](mailto:carolgreen@missouristate.edu)

Phone: 418-836-4652

## **STEM MBA**

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### **Graduate programs**

#### **STEM MBA (Master of Business Administration)**

##### **Elizabeth Rozell, Graduate Program Director**

Glass Hall, Room 105, Phone: 417-836-5616

Email: [COBGraduatePrograms@MissouriState.edu](mailto:COBGraduatePrograms@MissouriState.edu)

Website: [MBA.missouristate.edu](http://MBA.missouristate.edu)

##### **Elizabeth Reger, Graduate Program Coordinator**

Glass Hall, Room 105, Phone 417-836-5616

Email: [COBGraduatePrograms@MissouriState.edu](mailto:COBGraduatePrograms@MissouriState.edu)

### **Program description**

The STEM Master of Business Administration (MBA) degree is a College of Business degree with courses taken in various departments. The program is specifically designed for students who hold undergraduate degrees in Arts, Science, Engineering, and Law, as well as for students who hold Baccalaureate degrees in Business Administration. The program will provide the background knowledge necessary for professional practice in the field of business.

The STEM MBA is accredited by the AACSB International - The Association to Advance Collegiate Schools of Business.

Students must select between the MBA or STEM MBA programs. Only one of these programs can be completed.

### **Admission**

Admission to the STEM MBA program is competitive. Applications are reviewed and decisions made on a rolling basis when application packets are complete. Candidates are encouraged to apply early.

The Program Director looks at a variety of criteria that measure a candidate's potential for being a successful STEM MBA student and business leader. We look at the following characteristics in making admission decisions:

- Past academic performance (official transcripts)
- Official GMAT or GRE score\*
- Professional work experience (Resume)
- Admissibility to the Graduate College

\*The GMAT may be waived for candidates who satisfy ALL of the following requirements:

- Earned a 3.25 cumulative GPA
- Admitted to or have graduated from a Missouri State COB business unit major in the past five years OR graduated with a business degree from an AACSB-accredited school in the past five years
- Completed a minimum of 80 hours at the time of application
- Meet all English proficiency requirements

To be considered for admission, students are required to submit the following\*\*:

- Graduate Application
- Official transcripts
- Official GMAT or GRE Scores
- Resume

\*\*Additional documents may be required for international students.

### **Accelerated master's degree option**

Undergraduate majors in the College of Business may apply for admission to the STEM Master of Business Administration program. If accepted, up to 12 hours of 600- or 700-level COB classes taken in the junior or senior year may be counted toward both the undergraduate and graduate degrees.

Before enrolling in a course that will apply to both the undergraduate program and the master's program, an undergraduate student must:

- Be accepted into the accelerated program.
- Receive prior approval from the graduate advisor, department head of the undergraduate program, and the Dean of the Graduate College. This is done by using a mixed credit form.

Acceptance into the program and all approvals must be completed prior to the end of the Change of Schedule Period for the course(s). See the Graduate College for further information.

### **Accelerated admission requirements (admission to the accelerated STEM MBA program is competitive):**

- Completion of 80 or more hours at time of application
- An overall GPA of 3.00 or better
- A competitive score on the Graduate Management Admissions Test (GMAT) or applicant must meet the requirements for a GMAT waiver (see Admissions Requirements for MBA Program).

## **XF policy**

High standards of professional conduct are required for admission to the STEM Master of Business Administration (MBA) program and other College of Business graduate certificate programs. Prospective graduate students who have been assigned a grade of XF (failure due to academic dishonesty) at Missouri State University (MSU), or the equivalent at another institution of higher education, may be denied admission to the STEM Master of Business Administration program or College of Business graduate certificate programs. Students who have been assigned a grade of XF at MSU, or the equivalent at another institution of higher education, are required to inform the MBA Program Director of such grade at the time of application, even if the X was subsequently removed. Failure to inform the MBA Program Director of this previous XF or equivalent grade will result in removal from the MBA or COB graduate certificate program. A student assigned a grade of XF while studying toward completion of the MBA or COB graduate certificate program will be immediately removed from the program(s).

## **GMAT preparation course**

MSU's International Center's English Language Institute offers a GMAT preparation course each semester. For additional information, contact 417-836-6540 or review [Test Preparation Courses](#).

## **Unclassified admission**

Students who meet general Graduate College requirements, but have not fulfilled all requirements to enter the STEM MBA program, may be admitted to the Graduate College as a "Graduate student - unclassified." This status will allow a student to enroll in an absolute **maximum of 9 graduate hours** before being fully admitted to the STEM MBA program. **All courses at the 600-level or higher are considered graduate hours.**

## **Computer application competency**

Students entering the STEM Master's of Business Administration program are expected to be proficient in the use of word processing, database, and spreadsheet software. No coursework is required to fulfill this criterion. Knowledge derived from professional or personal experience will qualify. If a student feels that he or she does not have the necessary base of knowledge to fulfill this requirement, there are various resources available on campus, such as self-paced tutorials and hands-on programs that would be helpful to increase computer knowledge and experiences.

## **International applicants**

Applicants from foreign countries whose native language is not English are required to submit scores on the Test of English as a Foreign Language (TOEFL). Review [English Proficiency Requirements](#).

## **English Language Institute**

The English Language Institute (ELI) began classes in June 1996 with five students. Since that time, the program has experienced continued growth and now serves more than 150 students, most of whom are preparing for study in undergraduate or graduate programs at Missouri State University. The ELI offers five levels of study in core areas of writing, grammar, reading/vocabulary, academic listening skills, and speaking pronunciation classes. Through an intensive twenty-five hours per week, students have the opportunity to prepare for the language challenges of American classrooms. The focus of the English

Language Institute, therefore, is to equip ESL students with the necessary language skills to achieve success in the degree program of their choice and to enhance their potential for future employment after graduation.

For more information, please contact: Director, English Language Institute, 301 S Jefferson, Springfield, MO 65806, USA, Phone 417-836-6540, Fax 417-836-4784, email [ELI@MissouriState.edu](mailto:ELI@MissouriState.edu). You may also visit the [ELI website](#).

### Degree requirements

With foundation courses met, the STEM MBA degree requires a minimum of 34 semester hours of graduate credit composed of:

Area	Hours
Core Requirements	22 hours
Additional Requirements	12 hours
<b>Total</b>	<b>34 hours</b>

#### 1. Core requirements - 22 hours

Course Code	Course Title	Credit Hours
COM 703	Professional Communication Skills	1 hr
ITC 761*	Management Information Systems	3 hrs
ACC 711*	Managerial Accounting	3 hrs
MKT 772*	Marketing Management	3 hrs
MGT 764*	Organizational Behavior and Leadership	3 hrs
FIN 780*	Advanced Financial Management	3 hrs
QBA 775*	Quantitative Methods in Business Decision Making	3 hrs
MGT 767	Organization Strategy and Policy	3 hrs

\*Students whose undergraduate major is in a STEM MBA core course discipline must consult with the MBA Program Director to determine if they should substitute another 600- or 700-level course in the College of Business for the core course in that discipline.

#### 2. Additional requirements - 12 hours

Requirement	Description	Credit Hours
International	Select one course from FIN 682 or FIN 686.	3 hrs

Electives	In consultation with the MBA Director, students will select six hours of approved STEM elective courses.	6 hrs
Seminar	Students will select from ITC 790, FIN 790, FIN 787, or MKT 670, although other courses may be acceptable.	3 hrs

## Electives

The following are approved STEM electives for the STEM MBA:

- FIN 670: Foundations of Fintech
- FIN 681: Professional Financial Planning
- FIN 682: International Financial Management\*
- FIN 685: Portfolio Management and Alternative Assets
- FIN 686: International Financial Statement Analysis\*
- FIN 687: Security Valuation
- FIN 689: Management of Financial Institutions
- FIN 698: Financial Research and Portfolio Management
- FIN 699: Directed Study for CFA Level I Exam
- FIN 787: Seminar in Derivatives
- FIN 790: Seminar in Finance
- ITC 645: Data Infrastructure for Data Analytics
- ITC 655: Data Visualization
- ITC 663: Telecommunications and Network Security
- ITC 664: Ethical Hacking and Incident Response
- ITC 680: Fundamentals of Blockchain Technology
- ITC 683: Cloud Computing
- ITC 720: Project Management in Information Systems
- ITC 735: Neural Networks for Machine Learning
- ITC 748: Principles of Information Security
- ITC 760: Foundations of Cybersecurity
- ITC 762: Legal Issues in Cybersecurity
- ITC 765: Computer Forensics
- ITC 766: Web Application Security
- ITC 767: Management of Information Security
- ITC 790: Seminar in Management Information Systems
- ITC 797: Special Topics
- MKT 670: Marketing Analytics
- MKT 730: Logistics and Transportation
- MKT 740: Supply Chain Models and Systems
- RMI 620: Risk Modeling and Analytics
- RMI 630: Risk Transfer

Other elective courses may be approved by the MBA Director.

**\* If not used to meet the international requirement**



### Graduate certificates

Many students will choose to complete a COB Graduate Certificate in conjunction with their MBA, as most COB Graduate Certificates do not require additional coursework outside the 34 hours required for the STEM MBA.

No more than 9 hours of 600-level courses may be applied to the degree program.

### 3. Research

Students are expected to demonstrate research and writing proficiency appropriate to the business environment. Significant written projects are required within each of the core courses. In lieu of the required seminar course and one elective, a student may complete a thesis for 6 hours of credit.

### Possible foundation courses

Upon evaluation of baccalaureate degree transcripts, some or all of these courses may be waived, particularly for students holding an undergraduate degree in business.

This foundation is composed of the following six graduate-level courses which are designed to provide accelerated coverage of the knowledge base necessary for students to benefit most from the STEM MBA curriculum:

Course Code	Course Title	Credit Hours
<a href="#">ACC 600</a>	Accounting Concepts for Managers	3 hrs
<a href="#">ECO 600</a>	Fundamentals of Economics	3 hrs
<a href="#">FIN 600</a>	Managerial Finance	3 hrs
<a href="#">MGT 600</a>	Administrative, Organizational, and Operations Concepts for Managers	3 hrs
<a href="#">QBA 600</a>	Statistical Methods in Business Research	3 hrs
<a href="#">LAW 600</a>	Legal Environment for Business Managers	3 hrs
	<b>Total</b>	<b>18 hrs</b>

All of the foundation courses (or their undergraduate equivalents) are now available online at least once each year. These online courses do not have a campus component and can be completed entirely from the student's location. Contact the MBA Program Director regarding questions about these courses.

Those considering entering the STEM MBA program are encouraged to email [COBGraduatePrograms@MissouriState.edu](mailto:COBGraduatePrograms@MissouriState.edu) with an unofficial copy of transcripts, requesting a transcript analysis by the MBA Program Coordinator.

### Academic standing

A student who fails to attain a 3.00 GPA after completing the approved program may enroll for additional course work not to exceed 6 semester hours to raise the GPA. The course work will be approved by the Director of the MBA Program and the Dean of the College of Business.

The maximum class load for a full-time student is normally 12 hours per semester. An overload is permitted only after students have demonstrated their ability to achieve an outstanding graduate record at this university. Students employed in a full-time job should not enroll for more than 6 semester hours.

All other University and Graduate College requirements governing grading and attendance will apply.

To enroll in graduate courses in the College of Business, a student must satisfy one of the two conditions listed below:

1. be admitted to a graduate program in the College of Business, or
2. have permission to enroll from the Director of the MBA Program.

Students who do not meet one of these two conditions will be dropped from the course(s) at any time during the session involved.



1. Submitted by: Missouri State University
2. Program Title: Business Administration - STEM
3. Degree/Certificate: Masters in Business Administration
4. Options: None Click here to enter text.
5. Delivery Site(s): Springfield campus
6. CIP Classification: 52.1301
7. Implementation Date: Fall 2024
8. Cooperative Partners: none

AUTHORIZATION

<u>Dr. John Jasinski, Provost</u>	<u><i>John Jasinski</i></u>	<u>December 13, 2023</u>
Name/title of Institutional Officer	Signature	Date
<u>Dr. Julie Masterson, Associate Provost</u>	<u>417-836-5335</u>	
Person to Contact for More Information	Telephone Number	

**STUDENT ENROLLMENT PROJECTIONS (Form SE:)**

	1	2	3	4	5
Full Time	15	20	25	30	35
Part Time	3	5	10	15	20
<b>Total</b>	<b>18</b>	<b>25</b>	<b>35</b>	<b>45</b>	<b>55</b>

1. Please provide a rationale regarding how student enrollment projections were calculated  
 We gathered enrollment data from other STEM MBA programs. Because our program is so much larger than these schools, we believe our projections are extremely conservative. See below for MSU MBA and Master’s in Project Management (a STEM graduate program at MSU) enrollment for the past five years:

[Click here to enter text.](#)**Enrollment for MBA and MPM for the Past 5 Years**

(We expect widespread interest in the STEM MBA from international students, so enrollment would be primarily full time students.)

<b>Enrollment</b>	<b>Fall 2018</b>	<b>Fall 2019</b>	<b>Fall 2020</b>	<b>Fall 2021</b>	<b>Fall 2022</b>
Traditional MBA	120	109	121	97	118
Online MBA	291	294	342	337	234
Accelerated MBA	71	92	119	102	89
<b>Total MBA</b>	<b>482</b>	<b>495</b>	<b>582</b>	<b>536</b>	<b>441</b>

<b>Enrollment</b>	<b>Fall 2018</b>	<b>Fall 2019</b>	<b>Fall 2020</b>	<b>Fall 2021</b>	<b>Fall 2022</b>
Full-time MBA (9+ hrs)	144	144	191	149	124
Part-time MBA (6-8 hr)	195	212	240	198	172
Less (5-0 hrs)	129	128	136	175	130
<b>Total MBA</b>	<b>468</b>	<b>484</b>	<b>567</b>	<b>522</b>	<b>426</b>

<b>Enrollment</b>	<b>Fall 2018</b>	<b>Fall 2019</b>	<b>Fall 2020</b>	<b>Fall 2021</b>	<b>Fall 2022</b>
MPM	60	60	68	76	173
Accelerated MPM	5	4	5	1	2
<b>Total MPM</b>	<b>65</b>	<b>64</b>	<b>73</b>	<b>77</b>	<b>175</b>

**University of Wisconsin – Madison STEM – MBA Enrollment**

Program notes: “We are a specialized MBA so not all of our specializations are STEM designated so we pulled the total enrollment and then the STEM enrollment.”

<b>Entry Term</b>	<b>FTMBA Total Class Size</b>	<b>FTMBA - STEM</b>
Fall 2018	79	24
Fall 2019	67	20
Fall 2020	96	23
Fall 2021	83	25
Fall 2022	71	26

**Texas Tech University – STEM MBA Enrollment**

Program notes: The STEM MBA is only available seated. For comparison, their online MBA program has an enrollment of approximately 60 students.

<b>Entry Term</b>	<b>STEM MBA</b>
Spring 2020	24
Summer 2020	32
Fall 2020	42

Spring 2021	30
Summer 2021	29
Fall 2021	50
Spring 2022	25
Summer 2022	23
Fall 2022	39
Spring 2023	19
Summer 2023	22
Fall 2023	25* (in progress)

2. Provide a rationale for proposing this program, including **evidence of market demand and societal need supported by research** (i.e., please cite sources for evidence used).

**a. Market Demand:**

Prospective MBA applicants frequently inquire about the program’s STEM status particularly those international students interested and admitted to our traditional MBA that are having difficulty obtaining visas. Having a STEM designated MBA can make our institution more attractive than other institutions that do not hold this designation. The Master’s in Project Management has seen increased demand among international students because of their STEM designation. Many students cite the STEM-designation and the associated 3 years of OPT as an attractive feature of the program. We have seen multiple international students pursue the MBA and an additional STEM designated graduate degree simultaneously to have the opportunity to complete 3 years of OPT. Additionally, some MBA students have switched to STEM designated graduate programs because of this reason. There is also potential for demand from working professionals in STEM fields. A business graduate degree may seem intimidating to a student with a non-business academic background, so offering the STEM degree may ease some apprehension from working professionals who would benefit from an MBA education.

**b. Societal Demand (i.e., factors other than employment indicating need for degree)**

It is widely known that there exists a shortfall of skilled scientists and engineers in the US. One strategy is to encourage the best students from abroad to enroll in our colleges and universities and to remain in the US after completing their studies. Extending the OPT could provide opportunities for international students to work in jobs that are connected to their degree program. OPT has been extended to three years post-graduation. The hope is that this can alleviate the crisis employers are facing due to the skilled worker shortage. The extension is limited to students with degrees in major areas of study falling within a technical field where there is a shortage of qualified, highly skilled US workers and that is essential to this country’s technological and innovative competitiveness. The STEM MBA could provide such opportunities.

## COLLABORATION (FORM CL):

Does delivery of the program involve a collaborative effort with any external institution or organization?  
No. NA

If yes, please complete the rest of this section. If no, state not applicable and go to Program Structure (Form PS).

Sponsoring Institutions: [Click here to enter text.](#)

Degree Program for Collaboration [Click here to enter text.](#)

Length of agreement (open-ended or limited): [Click here to enter text.](#)

1. Which institution(s) will have degree-granting authority?  
[Click here to enter text.](#)
2. Which institution(s) will have the authority for faculty hiring, course assignment, evaluation, and reappointment decisions?  
[Click here to enter text.](#)
3. What agreements exist to ensure that faculty from all participating institutions will be involved in decisions about the curriculum, admissions standards, exit requirements?  
[Click here to enter text.](#)
4. Which institution(s) will be responsible for academic and student-support services (e.g., registration, advising, library, academic assistance, financial aid, etc.)?  
[Click here to enter text.](#)
5. What agreements exist to ensure that the academic calendars of the participating institutions have been aligned as needed?  
[Click here to enter text.](#)
6. In addition to the information provided by each participating institution regarding Financial Projections (below), please address the following items:
  - a) How will tuition rates be determined if they differ among the institutions?  
[Click here to enter text.](#)
  - b) Has a formal agreement been developed regarding cost-sharing policies? If yes, please include it as part of the proposal. If no, please summarize the current understanding between all parties and the plans for developing a formal agreement.  
[Click here to enter text.](#)
  - c) What arrangements, if any, have been made for exchange of money between participating institutions?  
[Click here to enter text.](#)
7. What commitments have been made by all participants to evaluate the program systematically?  
[Click here to enter text.](#)
8. If one institution wishes to discontinue the program, what agreements exist for terminating the offering?  
[Click here to enter text.](#)

**PROGRAM STRUCTURE (FORM PS):**

1. Total credits required for graduation: 34
2. Residency requirements, if any: All students must be state side to complete the program unless permission is granted by the program director.
3. General education: Total credits: Not applicable
4. **Degree** requirements (includes required, electives, thesis, capstone, internship): Total credits: Click here to enter text.

<b>Core Courses (Required of all students)</b>		
<b>Total credits = <u>  25  </u></b>		
<b>Course ID</b>	<b>Course Title</b>	<b>Credits</b>
<u>ACC 711</u>	Managerial Accounting	3 hrs
<u>ITC 761</u>	Management Information Systems	3 hrs
<u>FIN 780</u>	Advanced Financial Management	3 hrs
<u>MGT 764</u>	Organizational Behavior	3 hrs
<u>MGT 767</u>	Organization Strategy and Policy	3 hrs
<u>MKT 772</u>	Marketing Management	3 hrs
<u>QBA 775</u>	Quantitative Methods in Business Decision Making	3 hrs
<u>COM 703</u>	Professional Communication Skills	1 hr
	International Requirement: Select one course from <u>FIN 682</u> , <u>MGT 747</u> , <u>MKT 774</u> , <u>FIN 686</u> , <u>MKT 764</u> , <u>BUS 792</u> , <u>FIN 792</u> or <u>INS 792</u> .	3 hrs
<b>Elective Courses</b>		
<b>Total credits = <u>  9  </u></b>		
<b>Course ID</b>	<b>Course Title</b>	<b>Credits</b>
	Seminar (Only STEM seminar courses can be taken)	3 hrs
	Elective courses (Only STEM elective courses can be taken)	6 hrs
<b>Thesis/Non-Thesis/Capstone/Internship</b>		
<b>Total credits = <u>  NA  </u></b>		
<b>Course ID</b>	<b>Course Title</b>	<b>Credits</b>

5. Any unique features such as interdepartmental cooperation:  
The MBA is an interdisciplinary degree and, hence, does require interdepartmental cooperation within the College of Business. We have experienced long-standing cooperation since the MBA was instituted in 1974.

**Financial Projections (FORM FP):**

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>1. Expenditures:</b>					
<b>A. One-time</b>					
New / renovated spaces					
Equipment					
Library					
Consultants					
Other					
<b>Total for One-time Expenditures</b>	0	0	0	0	0
<b>B. Recurring:</b>					
Faculty					
Staff					
Benefits					
Equipment					
Library					
Other					
<b>Total for Recurring Expenditures</b>	0	0	0	0	0
<b>TOTAL (A + B)</b>	0	0	0	0	0
<b>2. Revenues</b>					
*State Aid - CBHE					
*State Aid - DESE					
Tuition / Fees*	\$ 219,483	\$ 299,295	\$399,060	\$ 498,825	\$598,590
Institutional / Resources					
Other					
<b>TOTAL REVENUES</b>	\$ 219,483	\$ 299,295	\$399,060	\$498,825	\$598,590

**No additional resources are needed to offer the STEM MBA as required elective courses that are STEM related and core courses are already offered for the traditional MBA program. Capacity exists within these courses. If future enrollment warrants additional resources, we will address at that time.**

**\*Assuming that most students are international and, thus, full-time. Estimates are conservative as they do not include student services fees.**



## PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS (FORM PG):

Institution Name: Missouri State University

Program Name: STEM MBA

Date: 7-7-2023

(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.)

### 1. Student Preparation

- a) 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.

Upon evaluation of baccalaureate degree transcripts, some or all of six 3 hour foundation courses may be waived, particularly for students holding an undergraduate degree in business.

- b) Characteristics of a specific population to be served, if applicable.  
STEM designated programs allow international students who qualify for Optional Practical Training (OPT) on F-1 visas to work in the United States for three years during or after their studies. There exists a shortfall of skilled scientists and engineers in the US. Further, the US desires to invest in more basic research and development which can be provided by graduates of a STEM MBA program.

### 2. Faculty Characteristics

- a) Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.

We already employ qualified faculty to teach the STEM MBA courses. Examples of qualified backgrounds include those with the following knowledge and expertise: statistical modeling, data warehousing, data mining, forecasting and operations research, and mathematical techniques.

- b) 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.

Because of the size of our program and the accreditation that we hold, we use almost exclusively full-time faculty to teach our courses.

- c) Expectations for professional activities, special student contact, teaching/learning innovation. Faculty are expected to maintain currency in their field of expertise by actively researching, attending conferences, and obtaining certifications and professional development.

### 3. Enrollment Projections

- a) Student FTE majoring in program by the end of five years.

FTE Projected Enrollment

	1	2	3	4	5
Full Time	15	20	25	30	35
Part Time*	1.5	2.5	5	7.5	10
Total	16.5	22.5	30	37.5	45

\*Assuming part time students are half time.

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b) Percent of full time and part time enrollment by the end of five years.

	Year 5
Full Time	64%
Part Time	36%
Total	100%

#### 4. Student and Program Outcomes

a) Number of graduates per annum at three and five years after implementation.

Year 3	Year 5
16	28

c) Special skills specific to the program.

Students in the STEM MBA will complete courses that qualify as management science. Such skills will enable graduates to fill vacancies in the marketplace where management science skills are needed.

d) Proportion of students who will achieve licensing, certification, or registration.

NA

e) 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.

Our current non-STEM MBA graduates regularly score above the national average on the ETS nationally normed Major Field Test (MFT) for graduate business students. We are confident that STEM MBA students will achieve even higher scores on the MFT with the management science emphasis in the required curriculum.

f) Placement rates in related fields, in other fields, unemployed.

MSU COB placement rates are regularly around 95%.

g) Transfer rates, continuous study.

Few, if any, transfers are expected. We would follow the university rules on handling transfer students.

#### 5. Program Accreditation

a) Institutional plans for accreditation, if applicable, including accrediting agency and timeline. If there are no plans to seek specialized accreditation, please provide reasons.

The program will fall under our AACSB accreditation and, thus, will meet all requirements of the accrediting agency.

#### 6. Alumni and Employer Survey

a) Expected satisfaction rates for alumni, including timing and method of surveys.

We will plan to send an online alumni survey after the first group of students graduate from the program (completion is expected by May 2026).

- b) Expected satisfaction rates for employers, including timing and method of surveys.

We will plan to send an online employer survey 6 months after the first group of students graduate from the program (completion is expected by May 2026).

## **7. Institutional Characteristics**

- a) Characteristics demonstrating why your institution is particularly well-equipped to support the program.

The MSU MBA program is one of the largest MBA programs in the Midwest. Because of our size, we are able to offer numerous STEM related elective courses to our students. Additionally, our program can be completed entirely seated, online, or a combination of the two modalities. By offering such flexibility, our program is attractive to both local and students located all over the US.

**Estimated costs for first five years:**

No additional resources are needed to offer the STEM MBA as required elective courses are STEM related and already offered for the traditional MBA program. Additionally, all core courses in the program are already being offered and have capacity.

### **Rationale for STEM MBA**

STEM designated programs allow international students who qualify for Optional Practical Training (OPT) on F-1 visas to work in the United States for three years during or after their studies. There exists a shortfall of skilled scientists and engineers in the US. Further, the US desires to invest in more basic research and development which can be provided by graduates of a STEM MBA program.

Prospective MSU MBA applicants frequently inquire about the program's STEM status, particularly those international students interested and admitted to our traditional MBA that are having difficulty obtaining visas and have a desire to work in the US post-graduation. Having a STEM designated MBA can make our institution more attractive than other institutions that do not hold this designation.

The Masters in Project Management has seen increased demand among international students because of their STEM designation. Many students cite the STEM-designation and the associated 3 years of OPT as an attractive feature of the program. We have seen multiple international students pursue the MBA and an additional STEM designated graduate degree simultaneously to have the opportunity to complete 3 years of OPT. Additionally, some MBA students have switched to STEM designated graduate programs because of this reason. There is also potential for demand from working professionals in STEM fields. A business graduate degree may seem intimidating to someone with a non-business academic background (e.g. engineering), so offering the STEM degree may ease some apprehension from working professionals who would benefit from an MBA education.