

**FORM A**  
**Board of Regents, State of Iowa**

**REQUEST TO IMPLEMENT A NEW BACCALAUREATE, MASTERS,  
DOCTORAL, OR FIRST PROFESSIONAL DEGREE PROGRAM**  
**January 28, 2015**

**Master of Accounting Analytics**  
**11-10-2021**

THE PURPOSE OF ACADEMIC PROGRAM PLANNING: Planning a new academic degree program provides an opportunity for a Regent university to demonstrate need and demand as well as the university's ability to offer a quality program that is not unnecessarily duplicative of other similar programs offered by colleges and universities in Iowa.

Institution: Iowa State University

CIP Discipline Specialty Title: note: will be completed by the Provosts Office

CIP Discipline Specialty Number (six digits): note: will be completed by the Provosts Office

Level: B \_\_\_\_\_ M X \_\_\_\_\_ D \_\_\_\_\_ FP \_\_\_\_\_

Title of Proposed Program: Master of Accounting Analytics

Degree Abbreviation (e.g., B.S., B.A., M.A., Ph.D.): MAA

Approximate date to establish degree: Month January Year 2023

Contact person: (name, telephone, and e-mail) Brad Trinkle, 515-294-2645, trinkle@iastate.edu

College that will administer new program: Ivy College of Business

Please provide the following information (use additional pages as needed). Do not use acronyms without defining them.

1. Describe the proposed new degree program, including the following:
  - a. A brief description of the program. If this is currently being offered as a track, provide justification for a standalone program.

The Department of Accounting in the Ivy College of Business is proposing an online Master of Accounting Analytics degree. The proposed degree will further the Department of Accounting's vision to "Become an accounting program whose faculty supports each student in achieving their individual goals by engaging in innovative teaching and academic, educational, and applied research, positively impacting the accounting profession." The demand for online graduate education is on the rise and analytics skills are in high demand in the field of accounting, which will result in an increased number of graduates that will not only further the Department of Accounting's mission, but also Iowa State University's mission to "Create, share, and apply knowledge to make Iowa and the world a better place."

The proposed online Master of Accounting Analytics will enhance the offerings of the Department of Accounting by allowing us to provide students with the option of completing a Master of Accounting either in a traditional on-campus modality or in an online modality. Students have different learning styles and life goals and responsibilities. Having the option of either a traditional on-campus program or an online program will allow the students pick the program that meets their individual education goals and their personal life goals and responsibilities.

The online **Master of Accounting Analytics (MAA)** program offers students a flexible path to attain a specialized degree that will place students a step ahead in today's business environment. The program curriculum provides a deep dive into a well-rounded selection of accounting topics while placing an emphasis on expanding students' analytical skills - skills critical to the accounting profession. Details on the proposed curriculum are discussed in Appendix A.

All courses will be delivered in an online asynchronous format providing students the convenience of completing their coursework from anywhere and working at their own pace.

- b. A statement of academic objectives;

The online Master of Accounting Analytics is designed to achieve the following goals and objectives:

**Learning Goal 1: Learners will be critical thinkers**

LO 1.1 Develop innovative solutions to accounting problems

LO 1.2 Formulate recommendations based on research findings

LO 1.3 Identify accounting alternatives and analyze the impacts of each on financial statements

LO 1.4 Apply analytics to develop business solutions

LO 1.5 Prepare information to assist management with planning, control, and decision making

LO 1.6 Apply accounting, taxation, and auditing concepts in new and unfamiliar circumstances

**Learning Goal 2: Learners will be effective communicators**

LO 2. Communicate effectively

2.1 In writing

2.2 Orally

2.3 Through data visualization

2.4 Through electronic media

**Learning Goal 3: Learners will be effective team members**

LO 3. Demonstrate effective teamwork skills

**Learning Goal 4: Learners will be ethical decision makers**

LO 4.1 Identify ethical issues present in accounting and auditing scenarios

LO 4.2 Analyze ethical implications of accounting choices and disclosures

**Learning Goal 5: Learners will be adequately prepared for professional certification or licensure**

LO 5.1 Demonstrate adequate preparation for professional certification or licensure

c. What the need for the program is and how the need for the program was determined;

The COVID-19 pandemic and the increased interest in online education leads the Department of Accounting in the Ivy College of Business to propose an online Master of Accounting Analytics degree. Students across Iowa, the United States, and the world are desiring and needing options for earning master degrees online and the Department of Accounting at Iowa State University is very well-positioned to offer a program that fits the students' needs.

Additional needs for the degree include results of an employer survey conducted by the Department of Accounting and a student survey conducted by CyBiz. The employer survey indicates that employers would favorably view an online Master of Accounting Analytics from ISU and that they would desire to enroll their employees in an online Master of Accounting Analytics program at Iowa State University. The student survey indicates that 52% of the respondents who are interested in obtaining a Master of Accounting would prefer that the program be offered online and that said program offer a specialization that included analytics.

Surveys of employers and students support the need for an online Master of Accounting Analytics degree. Results of a survey of employers of our recent alumni show that

Furthermore, The American Institute of Certified Public Accountants is altering the CPA Exam to include in-depth coverage of Business Analytics. Therefore, there is an

increased need for analytics-focused courses in Master of Accounting programs.

- d. The relationship of the proposed new program to the institutional mission and how the program fits into the institution's and college's strategic plan;

An online Master of Accounting Analytics will further the mission of Iowa State University, which is to "Create, share, and apply knowledge to make Iowa and the world a better place." by reaching students that desire and need to be able to complete a Master Degree in Accounting in an online setting.

The proposed online Master of Accounting Analytics will be STEM-designated, as is the on-campus Master of Accounting, and will emphasize the technology skills and their use in the Accounting profession. This will help further the vision of Iowa State University, which is that "Iowa State University will lead the world in advancing the land-grant ideals of putting science, technology, and human creativity to work.

- e. The relationship of the proposed new program to other existing programs at the institution; describe how the proposed program will enhance other programs at the university. Will the proposed program duplicate existing programs at the university?

The proposed online Master of Accounting Analytics will enhance the offerings of the Department of Accounting by allowing us to provide students with the option of completing a Master of Accounting either in a traditional on-campus modality or in an online modality. Students have different learning styles and life goals and responsibilities. Having the option of either a traditional on-campus program and an online program will allow the students pick the program that meets their individual education goals and their personal life goals and responsibilities.

While several of the courses in the online Master of Accounting Analytics are also in the traditional on-campus Master of Accounting, the two programs are not duplicates. The online Master of Accounting Analytics has a set curriculum of 30 credits with an analytics focus, while the traditional on-campus Master of Accounting has 15 required credits with 15 electives that lead to specializations in either financial reporting & assurance; information systems & analytics; tax; or managerial decision-making.

- f. The relationship of the proposed new program to existing programs at other colleges and universities in Iowa, including how the proposed program is different or has a different emphasis than the existing programs.

There are no online Master of Accounting or online Master of Accounting Analytics degrees offered at any of the colleges and universities in Iowa.

- g. Special features or conditions that make the institution a desirable, unique, or appropriate place to initiate such a degree program.

The Department of Accounting at ISU is perfectly positioned to initiate an online Master of Accounting Analytics. Our faculty are specialists in their respective teaching

areas and are nationally recognized for success in the classroom. Our faculty have an in-depth knowledge of the needs of the Accounting profession and the required knowledge for the Certified Public Accountant and Certified Managerial Accountant examinations, thus, they are well-positioned to ensure that our graduates have the necessary knowledge and skills that are required to be successful in the profession and on the certification exams. Due to the COVID pandemic and the subsequent taking of all courses to an online delivery modality, our faculty have developed the skill set necessary for offering high-quality course experiences in an online environment.

- h. Are the university's personnel, facilities, and equipment adequate to establish and maintain a high quality program?

The facilities and equipment in the Ivy College of Business at Iowa State University, including a dedicated video recording studio, in-house instructional design support, and advanced technology (e.g., Echo 360, Lightboard studio, etc.) are exceptional and will allow the Department of Accounting to establish and maintain a high-quality online Master of Accounting Analytics.

- i. How does student demand for the proposed program justify its development?

A market analysis conducted for the Department of Accounting by CyBiz included a student survey concerning their demand for an online Master of Accounting Analytics. The student survey indicates that 52% of the respondents who are interested in obtaining a Master of Accounting would prefer that the program be offered online and that said program offer a specialization that included analytics.

2. Describe the state and/or national workforce need and/or demand for graduates of the proposed program currently and in the foreseeable future (provide documentation about the current sources of data used to estimate need and demand).

Iowa State University graduates are employed worldwide. The Department of Accounting conducted a survey of employers of our graduates to determine the employers view of an online Master of Accounting Analytics. The employer survey indicates that employers would favorably view an online Master of Accounting Analytics from ISU and that they would desire to enroll their employees in an online Master of Accounting Analytics program at Iowa State University

3. List all other public and private institutions of higher education in Iowa currently operating programs similar to the proposed new degree program. (For comparison purposes, use a broad definitional framework, e.g., such identification should not be limited to programs with the same title, the same degree designation, having the same curriculum emphasis, or purporting to meet exactly the same needs as the proposed program.)

There are no online Master of Accounting or online Master of Accounting Analytics degrees offered at any of the colleges and universities in Iowa.

If the same or similar program exists at another public or private institution of higher education in Iowa, respond to the following questions:

- a. Could the other institution reasonably accommodate the need for the new program

through expansion? Describe collaboration efforts with other institutions.

Not Applicable

- b. With what representatives of these programs has there been consultation in developing the program proposal? Provide a summary of the response of each institution consulted.

Not Applicable

- c. Has the possibility of an inter-institutional program or other cooperative effort been explored? What are the results of this study? (Consider not only the possibility of a formally established inter-institutional program, but also how special resources at other institutions might be used on a cooperative basis in implementing the proposed program solely at the requesting institution.)

Not Applicable.

- d. Do other colleges in Iowa offer programs similar to the proposed program at comparable quality and cost?

There are no online Master of Accounting or online Master of Accounting Analytics degrees offered at any of the colleges and universities in Iowa.

- e. Are letters of support included with the program proposal?

Letters of support from the University of Iowa, the University of Northern Iowa, and the Department of Information Systems and Business Analytics in the Ivy College of Business at Iowa State University are included in the program proposal.

4. Estimate the number of majors and non-majors students that are projected to be enrolled in the program during the first seven years of the program.

- a. Undergraduate

Undergraduate	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Non-Majors	n/a	n/a	n/a	n/a	n/a	n/a	n/a

- b. Graduate

Graduate	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors	10	10	20	20	25	25	30
Non-Majors	n/a	n/a	n/a	n/a	n/a	n/a	n/a

- c. What are the anticipated sources of these students?

Sources of our students will be:

- Graduates from undergraduate programs at Iowa State University and other colleges and universities in Iowa that offer a traditional on-campus Master of Accounting, but who learn better in an online modality and those that have a need to

- pursue the degree in an online modality.
- Graduates from colleges and universities in Iowa that do not offer a Master of Accounting.
- Employees in the workforce who desire a Master of Accounting Analytics, but do not have the option of pursuing the degree in a traditional on-campus setting.
- Learners worldwide who know the value of a graduate degree from Iowa State University, but do not have the means to take traditional on-campus classes in Ames, Iowa.

5. If there are plans to offer the program away from the campus, briefly describe these plans, including potential sites and possible methods of delivery instruction. Will off-campus delivery require additional **HLC accreditation**?

The online Master of Accounting Analytics will be offered completely online and will be under the existing umbrella of the Ivy College of Business' and the Department of Accounting's accreditation from the Association to Advance Collegiate Schools of Business (AACSB).

6. Has the proposed program been reviewed and approved by the appropriate campus committees and authorities?

Yes

7. List date the program proposal was submitted to the Iowa Coordinating Council for Post High School Education (ICCPHSE) and results of listserv review.

**Note: will be completed by the Provost Office.**

8. Will the proposed program apply for programmatic accreditation? When?

The online Master of Accounting Analytics will be under the existing umbrella of the Ivy College of Business' and the Department of Accounting's accreditation from the Association to Advance Collegiate Schools of Business (AACSB). The proposed program will be evaluated every five years along with all other degree programs offered by the Ivy College of Business as part of its Continuous Improvement Review.

9. Will articulation agreements be developed for the proposed program? With whom?

No.

10. Will there be opportunities for student internships?

Due to the nature of online education, students will be able to pursue internships at their discretion, but will not have the option of receiving academic credit for said internships.

11. Describe the faculty, facilities, and equipment that will be required for the proposed program.

The current faculty, facilities, and equipment in the Ivy College of Business at Iowa State University, including a dedicated video recording studio, are exceptional and will allow the Department of Accounting to establish and maintain a high-quality online Master of Accounting Analytics.

12. From where will the financial resources for the proposed program come (list all that apply, e.g., department reallocation, college reallocation, grants, new to the university)?

Iowa State University utilizes a decentralized financial management model for the

development of its annual operating budgets. The Resource Management Model (RMM) is a responsibility-centered and incentive-driven approach to financial planning and management. The model supports departments and colleges in making budgetary decisions that enhance student success (e.g., retention), innovate by meeting market demands from students and employers for degree programs of the future, and discontinue legacy curricula which are either not aligned with industry/employer needs or for which student demand is low. Through the RMM, for graduate and professional students, net tuition revenue is allocated to academic colleges based on a student's enrollment. Tuition revenue will include both base tuition and applicable differential rates. The proposed degree program will be funded through this existing, proven financial model, and is expected to be fully self-sustaining over time. In addition to the budget model as described, financial resources may also come from internal reallocations made within the college during the program's startup phase. The level of reallocation will depend, in part, on the numbers of new students attracted to the proposed program, and the number of existing students who choose the proposed program over another program, based on standard and differential tuition rates. The proposed program will not be dependent on grants, contracts, gifts, central university resources, or reallocations between academic colleges.

13. Estimate the total costs/total new costs (incremental increases in expenditures) that will be necessary for the next seven years as a result of the new program. Be as specific as possible.

There are no total new costs for this program. The department has the necessary faculty in place to begin offering the program. This program will not require investments in fixed expenses such as facility renovations, information technology software, or licenses.

14. Describe the marketing plan developed to communicate the new program and recruit students.

The Graduate Programs office in the Ivy College of Business will incorporate this new program into its overall marketing strategy for graduate student recruitment. The program will be included in print materials, websites, and other marketing strategies to attract students from within the state, from across the country, and globally. The program will also be included in the appropriate college and departmental recruiting materials, websites, and outreach programs. The program will be especially relevant to undergraduate students in the accounting major or minor, as well as alumni with an accounting analytics itch, and marketing will be targeted specifically to this demographic.

15. Describe the program evaluation plan to determine if the program is meeting the intended objectives, if the expected student enrollment has occurred, funding for the program, and any other components that affect the effective operation of the program.

As the Accounting department is AACSB-accredited, we evaluate our programs regularly to determine whether they are meeting their objectives. Also, this program will be incorporated into the university's normal academic review process, which assesses whether the program is achieving its mission, providing high quality academic experiences, and fulfilling the enrollment and success metrics identified for the program. In addition, as a part of the college budgeting process, the program will be monitored annually for achievement of enrollment goals.

16. Include any additional information that justifies the development of this program.



# Appendix A

## Ivy College of Business Master of Accounting Analytics

The online **Master of Accounting Analytics (MAA)** program offers students a flexible path to attain a specialized degree that will place students a step ahead in today's business environment. The program curriculum provides a deep dive into a well-rounded selection of accounting topics while placing an emphasis on expanding students' analytical skills - skills critical to the accounting profession.

All courses will be delivered in an online asynchronous format providing students the convenience of completing their coursework from anywhere and working at their own pace.

### Master of Accounting Analytics Degree

#### Full Time

*2 semester program*

#### Part Time

*4 semester program*

### Program Curriculum (30 credits)

- **ACCT 515, Accounting Analytics** (3 credit hours, fall semester only)
- **ACCT 581, Accounting for Decision Making** (3 credit hours, spring semester only)\*
- **ACCT 584, Advanced Accounting Information Systems** (3 credit hours, spring semester only)
- **ACCT 598, Financial Accounting: Theory & Contemporary Issues** (3 credit hours, fall semester only)
- **ACCT 591, Fraud Examination and Prevention** (3 credit hours, fall semester only)
- **ACCT 593x, Corporate Tax** (3 credit hours, spring semester only)
- **ACCT 597, Advanced Auditing and Assurance Services** (3 credit hours, spring semester only)
- **MIS 536, Business Analytics Foundation** (3 credit hours, fall semester only)
- **MIS 546, Advanced Business Analytics** (3 credit hours, spring semesters)
- **MIS 548, Applications of Machine Learning for Bus. Intelligence** (3 credit hours, Approx. Nov. 30 – Jan. 14)\*

\* Students who intend to pursue CPA licensure or CMA certification may choose to participate in 6 credit hours of CPA or CMA preparation instead of taking ACCT 581 and MIS 548. Three credit hours of CPA or CMA preparation would be taken in the Fall semester and another three credit hours in the Spring semester.

<b>Master of Accounting Analytics Program Coursework Timelines</b>			
<b>Full Time - 2 Semester Enrollment</b>			
<b>Fall (15 hours)</b>	<b>Spring (15 hours)</b>		
ACCT 515 (3 hrs)	ACCT 581 (3 hrs)		
ACCT 591 (3 hrs)	ACCT 584 (3 hrs)		
ACCT 598 (3 hrs)	ACCT 593X (3 hrs)		
MIS 536 (3 hrs)	ACCT 597 (3 hrs)		
MIS 548 (3 hrs)	MIS 546 (3 hrs)		
<b>Part Time - 4 Semester Enrollment</b>			
<b>Fall (6 hours)</b>	<b>Spring (6 hours)</b>	<b>Fall (9 hours)</b>	<b>Spring (9 hours)</b>
ACCT 515 (3 hrs)	ACCT 581 (3 hrs)	ACCT 591 (3 hrs)	ACCT 584 (3 hrs)
ACCT 598 (3 hrs)	ACCT 597 (3 hrs)	MIS 536 (3 hrs)	ACCT 593x (3 hrs)
		MIS 548 (3 hrs)	MIS 546 (3 hrs)

### **CPA PREP (alternative for those seeking CPA licensure)**

\*A maximum of 6 credits are allowed for CPA/CMA prep.

\* **ACCT 580A:** AUD, **ACCT 580B:** BEC, **ACCT 580C:** FAR, **ACCT 580D:** REG

\* ACCT 580 credits for CPA prep require that the student follow the standards set out in *The Becker Promise*. For each 3 credits, it is required that students meet the following requirements for any one section of the CPA exam review:

- Correctly complete 90% of MCQs & TBS problems
- Complete at least one simulated exam with a score of at least 50% correct
- Provide a CPA exam score report showing that you sat for the respective section of the exam

### **CMA PREP (alternative for those seeking CMA certification)**

\* A maximum of 6 credits are allowed for CPA/CMA prep.

\* **ACCT 580E:** Part 1, **ACCT 580F:** Part 2

\* ACCT 580 credits for CMA prep require that the student complete the following for any one section of the CMA exam review:

- Correctly complete 90% of MCQs
- Complete at least one simulated exam with a score of at least 50% correct

## Course Catalog Descriptions

### **ACCT 515, Accounting Analytics (3-0) Cr. 3.**

Applications and skills for performing data analytics in accounting contexts. Explores conceptual framework for providing data-driven insights and recommendations. Includes hands-on experiences working with different types of data and the latest analysis tools.

### **ACCT 581, Accounting for Decision Making (3-0) Cr. 3.**

Decision analysis applied to managerial accounting issues. Generation of information for management decision-making and control. Responsibility accounting and non-recurring decisions.

**ACCT 584, Advanced Accounting Information Systems (3-0) Cr. 3.**

Advanced accounting information systems concepts; database design and information retrieval, internal controls within computerized accounting information systems, financial reporting in an electronic environment.

**ACCT 591, Fraud Examination and Prevention (3-0) Cr. 3.**

Principles and methodology of fraud detection and deterrence. Addresses the causes and elements of fraud, asset theft, corruption, financial statement misrepresentation, internal controls for fraud prevention, investigative evidence gathering, and legal aspects of fraud.

**ACCT 593x, Corporate Tax (3-0) Cr. 3.**

Introduction to the fundamentals of corporate taxation issues. Discussion of concepts related to the formation and capital structure of corporations. Identification and effect of tax codes and regulations related to corporations. Discussion of operating rules, earnings and profits, distributions, as well as redemptions and liquidations of corporations.

**ACCT 597, Advanced Auditing and Assurance Services (3-0) Cr. 3.**

A study of advanced auditing and assurance issues. Topics include auditor independence, audit risk analysis, internal control evaluation, and reporting, fraud detection, data analytic applications in auditing, audit reporting, auditors' legal liability, and non-financial information assurance.

**ACCT 598, Financial Accounting: Theory & Contemporary Issues (3-0) Cr. 3.**

Theoretical discussion of the financial accounting and reporting environment. The usefulness of financial accounting information for decision-making. Current financial accounting issues, the financial accounting standard setting process, FASB Standards Codification, and the role of the SEC in financial reporting.

**MIS 536, Business Analytics Foundation (3-0) Cr. 3.**

Introduction to Business Analytics (BA) concepts and tools. Hands-on lab exercises and business case studies in data preparation, data querying, and data visualization. Also covers various modeling techniques in predictive and prescriptive analytics.

**MIS 546, Advanced Business Analytics (3-0) Cr. 3.**

An in-depth discussion of various advanced topics in Business Analytics (BA) such as Big Data Analytics, Text Analytics, and Web Analytics. Extensive hands-on exercises of using BA tools to solve real-world problems. Preparation for students' capstone projects.

**MIS 548: Applications of Machine Learning for Business Intelligence (3-0) Cr. 3**

Introduction to applications for data science concepts in the business domain. As big data, machine learning, business analytics, business intelligence and other concepts grow in business applications, it is essential for students to understand the underlying concepts, data, models, and applications to be successful in a data-driven world. Learn to determine problem types, data restrictions, model selection, tool choice, and analysis of data science concepts for greater business value.

## Appendix B

### Summary of Programs from Benchmarking Study

School	Degree Program	Total Number of Credits
Auburn University	Master of Accountancy Online	30
Mississippi State University	Online Master of Professional Accountancy	30
University of Connecticut	Online Master of Science in Accounting	30
University of Illinois	online Master of Science in Accountancy program	32
University of Oklahoma	Online Master of Accountancy	30

## Appendix C

### Voting Record

Voting Body	Votes			Date of Vote
	For	Against	Abstain	
Department of Accounting Curriculum Committee	5	0	0	11/11/2021
Department of Accounting Faculty	16	1	0	11/18/2021
Ivy College of Business Curriculum Committee				
Ivy College of Business Faculty				
Graduate Council				
Faculty Senate Curriculum Committee				