

Contact: Rachel Boon

**REQUEST FOR NEW PROGRAM AT THE UNIVERSITY OF IOWA:
MASTER OF SCIENCE IN BUSINESS ANALYTICS (NEW LOCATION)**

Action Requested: Consider approval of the request by the University of Iowa to offer the existing Master of Science in Business Analytics in a new location.

Executive Summary: The proposed program is an on-campus offering of the existing Master of Science in Business Analytics (MSBA) that has been offered off-campus since Fall 2015. The program is designed to be self-sustaining within the College of Business. At the time of this proposal, no other university or college in Iowa offers a fulltime, on-campus graduate degree in business analytics (or even analytics defined more broadly). Iowa State University offers an online Master's in Business Analytics. The proposed new program location addresses the Board of Regents Strategic Plan objective 1.1; "The Regent institutions provide clear pathways for students to enter, move through and complete their education and career goals." The Council of Provosts and the Board office reviewed this proposal and recommend approval.

Background:

Description of proposed program. The proposed program is an on-campus offering of the existing Master of Science in Business Analytics (MSBA) that has been offered off-campus since Fall 2015. Since Fall 2015, the off-campus program has seen significant and growing demand, with 192 students currently active in the off-campus program.

Academic objectives. The on-campus offering will share the same academic objectives, including training students in the subfields of descriptive, predictive, and prescriptive analytics. An additional emphasis will be placed on communication skills and career preparation.

Need for proposed program. The Board of Regents previously approved this degree for off-campus delivery, and it is currently being offered very successfully for working professionals in Des Moines, Cedar Rapids, and the Quad Cities. In fact, demand in those markets exceeds the College's ability to meet it with existing offerings. Considerable demand on the Iowa City campus for the same degree is also now present.

Link to institutional strategic plan. As with the off-campus offering, an on-campus offering supports the University of Iowa's strategic plan, which seeks to "enhance undergraduate, graduate, and professional education, health care, and other services provided to the people of Iowa." In addition, during the academic year 2013-14 the University initiated a multi-year Cluster Hire Initiative in Informatics. The proposed Master of Science in Business Analytics directly supports and aligns with these goals and initiatives.

The strategic plan of the Tippie College of Business states the following priority: "Tippie students are innovative problem solvers who can communicate their solutions." The College strongly believes that solutions based in data and analysis are critical for solving today's problems, and it is in this spirit that the MSBA program is proposed.

Relationship to existing programs. The proposed on-campus offering of the MSBA will be unique at the University of Iowa. Programs with aligned goals include Computer Science, the School of Library and Information Sciences, and the Interdisciplinary Graduate Program in Informatics, and the Provost is executing Informatics cluster hires.

However, no current university program serves full-time graduate students with a clear focus on analytics and its intersection with the core business disciplines (operations, information technology, finance, marketing, accounting, human resources, etc.). Further, the program will enhance opportunities for students and faculty in the Master's of Accounting, Master of Science in Finance, and Informatics programs as well as the Marketing, Finance, Accounting, Computer Science, and Statistics Departments more generally.

At the time of this proposal, no other university or college in Iowa offers a fulltime, on-campus graduate degree in business analytics (or even analytics defined more broadly). Iowa State University offers an online Master's in Business Analytics, and Loras College has an undergraduate major, a graduate certificate, and an evening specialty MBA in business analytics. Finally, Drake University has an undergraduate major in data analytics, and Cornell College has a business analytics track within their Economics and Business undergraduate major.

Unique features. In addition to the experience gained running our off-campus program, the Department of Management Sciences has unique expertise and experience in business analytics, which make it highly appropriate for offering the proposed program. For example, the retooled Business Analytics and Information Systems undergraduate major has seen tremendous growth in the number of majors since Fall 2012. Specifically, the major currently has 233 majors (combined 1st and 2nd majors), which is approximately a 400% increase since the year before the major was introduced. The faculty are international leaders in the subfields of descriptive, predictive, and prescriptive analytics. Two faculty members have leading textbooks in the field, one has served on the taskforce responsible for creating the nationally recognized Certified Analytics Professional credential, and one faculty member has served in a leading role in developing the University of Iowa's Informatics initiative.

Resources to establish a high-quality program. The program is designed to be self-sustaining within the College of Business. Revenues include tuition payments, and costs include faculty salaries, staff salaries supporting the program's operation, and money for marketing and recruiting. The program will be administered and operated by the Department of Management Sciences (MS) with assistance provided by College of Business staff. MS will make admission decisions, develop the curriculum, provide student advising, and generally lead the academic aspects of the program. This will require a faculty coordinator, which is already filled due to the operation of the off-campus program. A committee appointed by the Department Executive Officer (DEO) would assist the faculty coordinator. College staff will provide logistical support for the program, including handling applications and enrollments, answering students' day-to-day questions, providing technological support, marketing the program, and assisting with student's career development. The net number of new staff required by the College will be zero due to reallocation of staff duties after the recent closure of the full-time, on-campus MBA program. Faculty from the Department of Management Science will provide the vast majority of instruction in the program, but there will also be opportunities for courses taught by outside faculty, for example from the Marketing, Finance, and Computer Science Departments. Existing facilities are in-place at the University of Iowa. No additional equipment will be required for the program.

In addition, due to the recent closure of the full-time MBA program, the net number of new courses required by the Department of Management Sciences will be zero. Faculty will teach in the program on-load. This is best way to ensure faculty interest in the program, which would in turn help the program succeed. The program will mainly rely on tenure-track faculty with some opportunities for lecturers, while trying to limit the role of adjunct faculty.

To market and recruit for the program, we will continue the efforts already in place for the off-campus program, which include a website, email and social-media outreach, and targeted traditional advertising.

Student demand. There continues to be strong demand for graduate education in business analytics. According to recent reports by the Graduate Management Admission Council (GMAC), which surveyed full-time, on-campus business analytics graduate programs (about 90% of which were located in the U.S.) as well as potential applicants seeking a full-time, in-person U.S.-based graduate program:

- Business analytics is the fastest growing destination for prospective graduate business students, 11% of whom are considering a Master's in business analytics.
- 36% of business analytics Master's programs were new in 2017.
- Business analytics is the fastest growing segment of graduate management education. 94% of programs reported growing application volumes for 2016 compared to 2015. To accommodate the growing popularity of these programs, 75% of existing programs planned to increase their incoming class size for 2016–2017.
- 74% of analytics programs reported application growth for 2017-2018.
- International student applications for the Master's in Business Analytics have grown in 67% of the schools and make up 89% of the applicant pool for these programs.

Workforce need/demand. Today's business face ever increasing amounts of data. For example, a Gartner, Inc. survey in 2010 found that nearly 50% of large companies see data growth as their biggest infrastructure challenge, and Eric Schmidt, Executive Chairman of Google, has stated that society now collectively creates as much data every two days as we did anytime up until 2003. Companies also realize that they must be able to access and analyze this data intelligently. In fact, a 2011 Accenture analysis found that "Companies that invest heavily in advanced analytical capabilities outperform the S&P 500 on average by 64%".

A 2011 report by the McKinsey Global Institute found that "demand for deep analytical talent in the United States could be 50 to 60 percent greater than its projected supply by 2018," and a 2014 survey by IDG Enterprise concluded that "organizations are facing numerous challenges with big data initiatives and limited availability of skilled employees."

In addition, the 2017 Graduate Management Admission Council (GMAC) Corporate Recruiters Survey reports that:

- 30% of employers plan to recruit Master's candidates in business analytics.
- 49% of Fortune Global 100 employers target Master of Business Analytics programs when recruiting graduate business students.
- Master's in Business Analytics and closely related programs are the top talent sought by employers in the consulting, finance and accounting, and health care industries.

Revenue.

Tuition revenue (via students): \$9,600 per semester per resident student X 2 semesters X 30 resident students + \$15,900 per semester per non-resident student X 2 semesters X 60 non-resident students
=\$2,484,000 (annual projected steady state)

Cost.

	TOTAL COSTS	TOTAL NEW COSTS
Year 1	\$150,000	\$150,000
Year 2	\$300,000	\$150,000
Year 3	\$450,000	\$150,000
Year 4	\$600,000	\$150,000
Year 5	\$750,000	\$150,000
Year 6	\$900,000	\$150,000
Year 7	\$1,050,000	\$150,000

Projected enrollment.

Graduate	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors	45	90	90	90	90	90	90
Non-Majors	N/A						

Anticipated sources of students. The College will market the program both locally, nationally, and internationally. It is expected to attract residents of Iowa as well as out-of-state and international applicants.

Articulation agreement. At this time, a concerted effort has not been made to explore cooperative efforts with Iowa State University, Loras College, Drake University, or Cornell College. However, regarding the off-campus Master's, a standing articulation agreement is in place with Iowa State, in which students in either program can take up to 9 semester hours of courses in the other program.

Accreditation. The University of Iowa's business programs are accredited by the prestigious AACSB International (Association to Advance Collegiate Schools of Business). This program will be covered under that accreditation.

Date of implementation. The anticipated implementation date is August 2018.

LETTERS OF SUPPORT

Office of the Provost and Executive Vice
President for Academic Affairs



DATE: November 1, 2017

TO: John Keller, Associate Provost for Graduate and Professional Education and Dean,
Graduate College, University of Iowa

FROM: Patrick Pease, Interim Associate Provost for Academic Affairs and Dean, Graduate
College, University of Northern Iowa

RE: Master of Clinical Anatomy, Master of Clinical Nutrition, Master of Science in Business
Analytics

Dear Dr. Keller,

Thank you for sharing your new program plans with University of Northern Iowa. Your proposed masters programs in Clinical Anatomy and Clinical Nutrition are of clear benefit to the state and to your existing healthcare curricula. UNI has no similar programs or significant areas of overlap. The Master of Science in Business Analytics has some overlap with course offerings at UNI but your program is unique and is an on-campus offering of an established program.

I've shared these with the Provost and Deans and we support your proposals and wish you best success.

Sincerely,

A handwritten signature in blue ink that reads "Patrick Pease". The signature is written in a cursive style with a large, looping initial "P".

Patrick Pease

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

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October 31, 2017

Dear Dr. Keller,

Thank you for consulting with Iowa State University regarding the proposed Master of Clinical Anatomy, Master of Clinical Nutrition within the Carver College of Medicine, and the Master of Science in Business Analytics.

We have reviewed the proposals and consulted with ISU leadership in the programs related to the three proposals. We do not see the Masters of Clinical Anatomy or Clinical Nutrition as duplicative of existing ISU majors/programs. The proposed University of Iowa Master of Science in Business Analytics has a different focus and is situated in a different academic department than our program at ISU. We are supportive of the three proposals.

Sincerely,



Ann Marie VanDerZanden
Associate Provost for Academic
Programs