

Program Change Request

New Program Proposal

Date Submitted: 10/11/22 4:37 pm

Viewing: : Business: Data, Insights, and Analytics

Last edit: 11/09/22 11:16 am

Changes proposed by: baclemens

In Workflow

- 1. BUSINESS Dept. Approver
- 2. BUS School Admin Reviewer
- 3. BUS School Approver
- 4. APIR Admin
- 5. GFEC Approver
- 6. UAPC Approver
- 7. Registrar

Name of the school or college academic planner who you consulted with on this proposal.

| Name |
|------------------------|
| Brigid Patterson - BUS |

Proposal Abstract/Summary:

The Wisconsin School of Business is proposing a new, online master's degree -- the Master of Science in Business: Data, Insights, and Analytics (MSDIA). This is a 30 credit fully online degree targeted at a part-time global population. Time to completion is two years. The degree will be developed and delivered in collaboration with an online program manager, edX and serves as the pilot program for the campus partnership with edX in the for-credit space.

The development of the program responds to the increase of data availability and the desire of companies to use it as a competitive resource; resulting in dramatic increases in the number of career opportunities in business analytics. Establishing the program will provide students with a strong methodological foundation and the ability to utilize tools to generate insights from data.

Graduates will be better equipped to harness the power of analytical tools to uncover insights and provide actionable recommendations in any business setting.

Basic Information

Program State: Active

Type of Program: Degree/Major

Upload the Approved Notice of Intent and UW System Approval Memo. [Notice of Intent - MS Business - Data Insights and Analytics.pdf](#)

Upload completed draft of the full Board of Regents Authorization Proposal for this program. [Board of Regents Authorization Proposal for MSDIA 11-9-22.docx](#)

Who is the audience? Graduate or professional

Home Department: School of Business (BUSINESS)

School/College: School of Business

The program will be governed by the home department/academic unit as specified. Will an additional coordinating or oversight committee be established for the program? No

Is this in the Graduate School? Yes

Award: Master of Science

SIS Code:

SIS Description:

Transcript Title: Business: Data, Insights, and Analytics

Named Options:

Will this be offered as an additional major as well? No

Is this a non-admitting master's degree? No

Roles by Responsibility: List one person for each role in the drop down list. Use the green + to create additional boxes.

| Role Type | Name (Last, First) | Email | Phone | Title |
|-------------------------------|--------------------|--------------------|--------------|---|
| Faculty Director | Bauer, Daniel | dbauer5@wisc.edu | | Professor, Risk & Insurance |
| Primary Dean's Office Contact | Siemsen, Enno | esiemsen@wisc.edu | 608/890-3130 | Associate Dean of the MBA and Masters Programs |
| Primary Contact | Baldwin, Cody | cbaldwin6@wisc.edu | | Program Director, Masters in Business Analytics |
| Department Chair | Siemsen, Enno | esiemsen@wisc.edu | 608/890-3130 | |

List the departments that have a vested interest in this proposal.

| Departments |
|---|
| Economics (ECONOMICS) |
| Computer Sciences (COMP SCI) |
| Information School (I SCHOOL) |
| Statistics (STATISTICS) |
| Electrical and Computer Engr (ELEC C EGR) |
| School of Education (EDUCATION) |
| College of Engineering (ENGINEERG) |
| College of Letters & Science (L&S) |
| Industrial and Systems Engr (IND SY EGR) |

Are all program reviews in the home academic unit up to date? Yes

Are all assessment plans in the home academic unit up to date? Yes

Are all assessment reports in the home academic unit up to date? No

Please explain. Per discussion with Verda Blythe (WSB's Director of Assessment), both the BBA Certificate in Business and the Business Fundamentals, Summer Certificate are behind due to a maternity leave for the responsible party. These will both be back on track this year. Regina Lowery has confirmed in email 10/11/22 that these are the only reports missing - others were emailed to her, so they are not accurately reflected on the spreadsheet that feeds from AEFIS.

Mode of Delivery: Distance Education (100% online)

Provide information on how any lab courses required for the degree will be handled. No lab courses are included in this program.

| | |
|--|-----|
| Will this program be part of a consortial or collaborative arrangement with another college or university? | No |
| Will instruction take place at a location geographically separate from UW-Madison? | No |
| Will this program have outside accreditation? | Yes |

Guide Accreditation tab

Accreditation

[AACSB International—The Association to Advance Collegiate Schools of Business](#)

Accreditation status: Accredited. Next accreditation review: 2026–2027.

| | |
|--|------------------|
| Will graduates of this program seek licensure or certification after graduation? | No |
| First term of student enrollment: | Fall 2023 (1242) |
| Year of three year check-in to GFEC (3 years after first student enrollment): | 2026 |
| Year of first program review (5 years after first student enrollment): | 2028 |

If this proposal is approved, describe the implementation plan and timeline.

Beginning in October of 2022, we released a series of three non-credit courses on the edX platform to create a list of students who, upon approval of the degree, could be recruited to enroll in the Masters of Business: Data, Insights and Analytics degree. Interest in the non-credit courses has been significant, with 410 enrollments across all three courses as of October 24, 2022.

We aspire to gain new program approval on or before March 2023 so that we may begin admissions recruiting for this new fully-online degree offered on the edX platform to a global audience. The goal is to announce the program and open admissions application in late Spring, 2023 and have students matriculate in the Fall 2023 term.

Rationale and Justifications

Why is the program being proposed? What is its purpose?

The MSDIA program will build upon the WSB's standing as a preeminent business school focused on lifelong learning and the delivery of skills that address the evolving needs of the global digital economy. This program will serve as the pilot program for the campus partnership with edX in the for-credit space and is proposed to be offered on the edX platform in order to expand the reach and awareness of our highly rated business degrees to a broader, global audience. Our traditional marketing mechanisms have limitations in terms of reaching certain global markets and global marketing endeavors are extremely expensive. The edX platform has a proven marketing system, reaching audiences previously unavailable to UW-Madison. With the edX partnership, we will have access to their large global community. Based on market research conducted by edX, there is a significant content gap, employer need, and student demand for an online degree focusing on business analytics in the Americas, Europe, Asia and the Pacific regions, where edX has access to millions of potential students. The MSDIA is positioned to meet this need.

Launching this in-demand program on the edX platform opens the school and university to a new revenue and enrollment stream, predicted to enroll 300 degree seekers in year 5 with \$3.5 million dollars in revenue. This innovative degree option is in alignment with campus mission and goals, and supports the Wisconsin School of Business' goal of reaching top national/international ratings for our online business degrees.

What is its relation to the institution's mission? (Consider the mission broadly as a major research university with missions in teaching, research, service, and the Wisconsin Idea.) How does it contribute to the mission of the sponsoring unit(s)?

The MSDIA degree contributes to the primary purpose of the University of Wisconsin-Madison by offering broad access to a highly respected degree in a field of significant need and market demand in order to provide global impact and unilateral opportunity to improve the quality of life for a global audience of students. By offering a high-quality program in an area of high expected impact, the MSDIA serves the UW Mission. In particular, the global program footprint will allow a very broad audience to benefit from this unique program and help foster cross-cultural understanding. The MSDIA degree program is in alignment with the Chancellor's 2020-2025 Strategic Framework. As a globally offered online degree that retains our high standards for academic rigor, we are: (1) promoting entrepreneurship, innovation and economic development both in Wisconsin and beyond and (2) sharing the benefits of a world-class university throughout Wisconsin and beyond our borders. The program aligns with and contributes to the University of Wisconsin-Madison strategic framework with regards to objective 2 in "Excellence in Teaching and Educational Achievement" related to expanding access and leveraging new modes of delivery to engaged learners throughout their lives. This is a fully online asynchronous program that targets part-time students on a global scale. This program will help students to realize their highest potential of intellectual and human development through offering easier access to solid academic rigor difficult to find in other online, asynchronous programs in this field of study. This program also contributes to objective 3 related to expanding programming in areas of high student demand. edX market research identified our program as having a particularly high chance of impact and success. Importantly, the program aligns with the first objective in rubric "High-Performing Organization" related to growing revenues. Based on the current enrollment projections, the revenue share UW receives for the program amounts to a total of more than \$8.6 million over the first five years of the program.

Do current students need or want the program? Provide evidence.

There is proven market demand for a business analytics degree, as gleaned from the success of the residential Master of Science in Business: Analytics program, approved by UW System Board of Regents in June 2020 with enrollment beginning Summer 2021. This program enrolled 87 students in year 1 and 110 in year 2. In addition edX has provided us with enrollment projections based on their expanded global access to this type of educational opportunity. Their low/medium/high enrollment projections at the proposed price point amount to 300+/750+/1600+ cumulative enrollments over the next five years for this new degree program. One of the key reasons edX anticipates a successful program is the combination of a strong brand, a high-demand topic, and a disruptive price, coupled with the high quality of a Wisconsin School of Business (WSB) program.

The MSDIA degree enrollment is supported by interest generated through a non-credit three course program sampler of the degree content, called a MicroMaster. The MicroMaster is a credential awarded by edX. Students are allowed to enroll in these courses on a non-credit basis to see if their knowledge and interest is sufficient to support applying for enrollment in the degree program. As of October 24, 2022, the MicroMaster courses have a total enrollment

of 410 students across all three courses. Of these 410 enrollments, 13 are paid enrollments. Per data provided by edX, we expect a conversion rate of 3-10% of paid MicroMaster enrollments to convert to degree seeking students. The three course program includes the following courses: Statistics Using Python, SQL Fundamentals, and Data Visualization & Cloud Technologies.

What is the market, workforce, and industry need for this program? Provide evidence.

The worldwide demand for data analysts has sparked a surge in business analytics programs across the country. These programs report robust applicant pools and impressive placement rates for graduates. Market research performed by edX shows a specific and highest need/demand for content in Big Data, Machine Learning, Business Analytics, Data Warehousing, Data Science, Data Visualization, and Statistical programming. The proposed degree provides value to students and their current and future employers in all of these key areas of need and demand. The U.S. Bureau of Labor Statistics (BLS) for management analysts lists the May 2021 median pay of \$93,000 annually, with 950,600 jobs in 2021, and a 11% growth in job outlook from 2021-31, which is much faster than average. For the state of Wisconsin, employment numbers are 16,930, with an annual mean wage of \$99,400. This is consistent with salary reports for this specific degree and peer institution reports indicating high placement rates for students graduating from business analytics programs.

How does the program represent emerging knowledge, or new directions in professions and disciplines?

Per Lumen guidance, this field is left blank since the program does not present new directions in a profession or discipline - in this case, business analytics.

In what ways will the program prepare students through diverse elements in the curriculum for an integrated and multicultural society (may include diversity issues in the curriculum or other approaches)?

By design, the MSDIA degree program on edX will expose enrolled students to working with multicultural populations studying in disparate geographic locations as peers. Activities involve interacting with peers in discussions and projects to develop empathy and understanding in solving problems together across differences in location with richer, inclusive solutions through diverse perspectives.

What gap in the program array is it intended to fill?

The WSB does not currently have a cohesive and fully-online graduate degree program. Whether it is from a position of remaining competitive with graduate programming, expanding our reach to a more global student population, or providing a more flexible and accessible learning opportunity for working professionals, the school must continue developing its infrastructure, student support resources, and instructor capabilities to provide high-quality, fully-online education. This online MSDIA program contributes to that capacity. This new program will provide direction, if not a blueprint, for future growth of the school's online portfolio, especially for graduate-level specializations.

Diversity and Inclusion

Describe how the proposed program curriculum and learning outcomes will advance inclusive excellence. Discuss specific components and requirements within the curriculum that will offer students opportunities and learning activities to engage in diversity with respect to perspectives, theories, practices, and populations different from themselves. If internships or clinical, practicum, or experiential learning experiences will be required, discuss how students will have access to diverse practice settings.

Diversity and inclusion are core values for the WSB. In alignment with the school's commitment to diversity and inclusion, program and course design is considered through a framework of inclusive teaching strategies which look at the students, instructor teaching methods, and course content. The program also provides DEI training as part of the orientation activities.

The MSDIA is offered at a global scale, and we anticipate students from varying cultural, socio-economic, and other backgrounds. We intend to utilize the diversity of the class to enrich learning, e.g. via discussion boards. Students will collaborate and provide feedback to each other, requiring students to engage with others who may be of a different gender, ethnicity, or background.

The analytics curriculum also addresses the issues of bias and equity. The required class GEN BUS 894 "Pitfalls, Ethics, Communication, and Leadership in Business Analytics" actively engages with ethical dimensions of business analytics. Some of the key concepts covered in the class include bias and fairness. We discuss how bias can arise from measurement, data provenance, or predictive algorithms. Indeed, we demonstrate how algorithms can reinforce bias. Furthermore, algorithmic fairness is discussed, particularly different notions of fairness and the corresponding incompatibility. We reinforce these ideas and practice concepts and tools related to algorithmic bias and fairness in the Master's Capstone class (GEN BUS 995).

Discuss how the proposed program will actively pursue an equity in student recruitment, access, retention, and degree completion. Describe specific strategies to identify and recruit a diversified student population for programs that do direct admissions. Include evidence-based and effective practices. Provide examples of academic and student support services that will be implemented to support student learning success and completion.

As an online, part-time degree option, this program will allow candidates global access to quality education from wherever they are located. Barriers are reduced because everyone will have access to pursue this degree through the online learning channels, which will increase convenience. We will recruit through online methods such as online recruitment fairs, webinars, podcasts and consultation appointments. We will leverage our existing channels to promote the degree at events nationally and locally. Tactically, we will leverage purchasing lists from GMAC and ETS where candidates self-identify programs of interest to better target candidates who have an interest in data, insights and analytics. We will host events in the community and with corporations to promote the value of the degree. We will leverage our current corporate outreach efforts to share this new part-time opportunity to develop skills and knowledge in this area. We will continue to work closely with the marketing and strategic communications team to promote the advantages of online learning and a part-time program and will showcase the affordability of a premier education for career enhancement and development. As an additional note, we will make conscious efforts to increase the number of students that are underrepresented minorities. We plan to work with our marketing team in the Wisconsin School of Business to explore ways to reach this applicant community. Marketing funds have been allocated within the budget and the marketing efforts are intended to be inclusive of and targeted towards both underrepresented minorities as well as women. We will also leverage our current leads to cross-promote the degree and explore different search services to purchase new leads. We are also making connections across our campus in different student organizations, which can help us connect with this community.

The school will employ a range of strategies to attract a diverse pool of applicants. School-wide awareness and graduate advertising plans work together to directly target prospective students in key regions and cities. A full funnel approach will allow the school to guide prospects through the decision making journey across a range of channels. Our targeting strategies can reach prospective students by job/function, education, and demographics including gender and will reach prospects within diverse metropolitan areas. That plan is easily scalable to meet the program's growth goals and can provide essential insights to optimize messaging and targeting strategies. In addition, a robust website will provide up to date information about the program and email marketing allows the school to keep prospects engaged during their consumer journey.

In terms of student retention and support, each instructor is assigned an instructional designer as part of course development. The instructional designer will ensure that the course meets the high standards of accessibility and will utilize key practices of Universal Design for Learning to make a welcoming and inclusive course for all. An inclusive learning environment is established

when all students are supported in adapting to the structure, schedule, expectations, and technologies used in the course. Supporting students requires thorough communication about how their course is set up, what they have to do, how the course is run administratively, and what resources and services are available to help them succeed. It also includes providing students with clear opportunities to get feedback on their work and guidance on the appropriate way to interact with others in the course. The instructor and instructional designer will collaborate to make certain that these elements are in place. Each course design begins with an appropriate orientation module (known as Module 0) that establishes a sense of belonging through student and instructor introductions, rules for discussion forums and other course engagement, and strategies/resources to be successful as a learner. It is important to appropriately scaffold this work as students develop the deeper and more meaningful relationships that they need as they mature through the curriculum and into the more project-based capstone courses of the program. The instructional designers use standardized icons and work with the instructor to revise text into plain language that is accessible to all learners.

Support is made available to all students who are looking for strategies on how to persist and be successful in the coursework. This is particularly relevant given the online, asynchronous nature of the program. The metrics available within the online platform allow the opportunity to check each student's progress and engagement. Metrics will be closely monitored in order to quickly intervene if there are signs of a student struggling with the coursework. Time is budgeted to allow the instructors to assist struggling students.

Consider how the proposed program will ensure equity in recruiting and hiring of faculty, instructional staff, and staff who will oversee the program curriculum, professional/career development experiences, and research/scholarship where relevant.

The MSDIA program will also follow the WSB's diversity initiatives in recruiting and hiring faculty and staff. Examples of these initiatives include expanding advertising and outreach of open positions to increase diversity of the candidate pool, including cultural competency as a desired skill in all position vacancy listings and including cultural competency questions in each phase of the interview process. We will follow the WSB's hiring process in order to ensure fair practices and equity in recruiting and hiring of faculty and staff. Those practices include but are not limited to the development of a comprehensive guide to employment searches called Searching for Excellence & Diversity. The 100+ page document details best practices for running an effective and efficient search committee, how to recruit an excellent and diverse pool of applicants, how to recognize and eliminate unconscious bias during the candidate evaluation process, conducting a fair and thorough review, and ensuring a fair interview process. These steps are supported by staff members in HR, who attend the initial search kick-off meeting, and are proactively involved in the continuation of the process including conducting a review of search criteria prior to opening the pool of candidates. Additionally, they review interview questions prior to the start of interviews and conduct a salary review prior to an offer being extended.

Once hired, all new members of the learning community are introduced to a strategic focus on diversity and inclusion during onboarding and receive professional training in progressive levels of cultural competence. Faculty and staff actively participate in workshops that encourage conversations about inclusion and enable them to overcome their own unconscious biases. WSB's commitment to creating a positive, inclusive learning environment is further reinforced by insightful seminars for faculty members, focusing on strategies to create more inclusive classroom experiences. Staff diversity will be supplemented through guest speakers and the involvement of other industry leaders in order to mirror diversity within the industry.

Note any plans or strategic initiatives at the university that are closely linked with the development of the proposed program. Note how efforts will align with the appropriate and applicable accreditation standards that address diversity where relevant. To the extent that the response to questions related to diversity, equity, and inclusion are connected to plans at the department, school/college or university, make those connections explicit where relevant.

The MSDIA degree program on the edX platform is in alignment with the Chancellor's 2020-2025 Strategic Framework. As a globally offered online degree that retains our high standards for academic rigor, we are:

1. Promoting entrepreneurship, innovation and economic development both in Wisconsin and beyond
2. Sharing the benefits of a world-class university throughout Wisconsin and beyond our borders

by innovating a degree structure and format with the ability to reach populations who are yet unable to embark on a traditional degree on campus, due to accessibility concerns, access concerns (financial or physical), or lifestyle concerns, due to work or family obligations preventing them from engaging with a degree bearing synchronous requirements.

Faculty and Staff Resources

List the core program faculty and staff with title and departmental affiliation(s) who are primarily involved and will participate in the delivery and oversight.

| Name (Last, First) | Department | Title |
|----------------------|---------------------------------------|---|
| Baldwin, Cody | School of Business (BUSINESS) | Program Director, Masters of Business Analytics |
| Bauer, Daniel | Risk and Insurance (ACT SCI RM) | Professor, Risk and Insurance |
| Liu, Qing | Marketing (MARKETING) | Associate Professor, Marketing |
| Malone, Mary Kathryn | School of Business (BUSINESS) | Director, Consulting Practicum |
| Sacks, Dan | Risk and Insurance (ACT SCI RM) | Associate Professor, Risk and Insurance |
| Siemsen, Enno | Operations & Information Mgmt (O I M) | Associate Dean of the MBA and Masters Programs |
| Sydnor, Justin | Risk and Insurance (ACT SCI RM) | Professor, Risk and Insurance |
| Tong, Jordan | Operations & Information Mgmt (O I M) | Associate Professor, Operations and Information Management |
| Kacizak, Betsy | School of Business (BUSINESS) | Director of Admissions and Recruitment, MBA and Master's Programs |

What resources are available to support faculty, staff, labs, equipment, etc.?

The most notable support resources are the campus and school instructional designers that will work with faculty to ensure that initial course designs and future iterations maintain the high quality that are expected of a Wisconsin School of Business online course. Again, designers are Quality Matters™ certified and have a direct hand in the actual construction and launching of the course. Additional campus resources include programming (workshops, webinars, online resources) around effective online instruction and course design, and library support from the campus' General Library System e-librarians.

Program advisor(s) with title and departmental affiliation(s).

| Name (Last, First) | Department | Title |
|--------------------|-------------------------------|--|
| Crombie, Joe | School of Business (BUSINESS) | Assistant Director, MBA and Masters Student Services |

Describe how student services and advising will be supported.

The Faculty Director and Program Director will have primary responsibility over the MSDIA program. This team will lead curriculum development, course planning, and academic guidance. They will work closely with the MBA and Master's Program Office within the School of Business, who will lead admissions, recruitment, student services, reporting, and rankings management. (However, as an important note, within the program, students have a defined course path, and there is no opportunity to take electives. This reduces the advising load.)

Additionally, programmatic services, including connections to web and guide information and the Registrar's Office, will be the responsibility of WSB Academic Affairs, in alignment with the work they currently perform related to existing WSB programs.

Confirm that the program advisor(s) or coordinator(s) have been consulted and reviewed this proposal. Yes

Select the Graduate Research Scholars Community for this program.

Business Graduate Research Scholars

Resources, Budget, and Finance

Is this a revenue program? Yes

Upload the Service-Based Pricing budget spreadsheet. [edX MSDIA Budget Model - Lumen Update 10 21 22.xlsx](#)

Service-Based Pricing Budget Review: 15.Aug.2022 Budget approved

What is the tuition structure for this program?

Service-Based Pricing Programs, per-credit – online

Select a tuition increment:

\$800/credit

What is the rationale for selecting this tuition increment?

This tuition increment allows the school to offer this degree in a very competitive space at a total price of \$24K. Comparable degrees are offered in the \$10K and \$60K+ price points. The \$10K degree is of lesser content value, and we feel we will be extremely competitive to the higher price point degrees with content of equal perceived value at a much lower price point.

Will segregated fees be charged?

No

Rationale for segregated fees.

Seg fees will not be charged per UW System Administrative Policy 805 A.24

Upload Online/Distance tuition proposal: [MSDIA Online Tuition Policy.docx](#)

Online/Distance tuition proposal review:

Upload Memo(s) of Agreement: [UWMadison Member Participation Agreement Master's terms and Business Analytics.pdf](#)

Provide a summary business plan.

The intention of the MSDIA Program is to expand the reach of the M.S. in Business: Analytics by offering similar content in an online asynchronous format to a global audience. UW-Madison has partnered with edX, a global learning platform, to launch this degree. In partnering with edX, the university receives the benefit of edX's extensive global marketing services to more effectively reach global audiences, the provision of data containing active leads our recruiters can nurture, as well as, twenty-four hour technology and support resources/services for staff and students engaged on the platform. In this partnership, UW-Madison will be responsible for: integrations between edX and UW-Madison systems, application process and admissions, financial aid and billing, curriculum development and instructional design, course instruction including grading, graduation clearance and awarding of degree, and student services such as advising and career support. The program is being built and scaled to be financially self-sustaining by the end of year four.

Provide an overview of plans for funding the program including but not limited to program administration, instructional/curricular delivery, technology needs and program assessment.

The MSDIA Program implementation is partially funded through generous WSB Venture (Donor) funding, in addition to a \$500K seed grant from the Provost. Since the edX partnership is a campus initiative, Campus is centrally funding the integration and project work required. As a revenue generating program, conservative projections estimate the program will be financially self-sustaining by the end of year four.

What is the marketing plan?

edX is a global learning platform with approximately 42 million users in 196 countries, more than 110 million enrollments, and more than 3,600 courses offered. An average of 160,000 persons engage with programs on the platform each day. In partnering with edX, the university receives the benefit of edX's extensive global marketing services to more effectively reach global audiences.

In addition to the school's traditional marketing efforts, edX will perform a robust marketing effort using their massive global network and rich sources of data. Their email, social media, and ethical direct user campaigns are extremely effective in producing targeted leads for our recruiters to nurture. Our peer institutions have been very satisfied with the degree enrollments produced by the edX marketing machine. We have requested statistics for performance to W/UMR populations, and expect for those enrollments to be the primary target..

Describe resource and fiscal considerations - A. Provide an overview of plans for funding the program including program administration, instructional/curricular delivery, academic and career advising, technology needs, marketing (if relevant), financial aid and scholarships (if relevant), capacity for student learning outcomes assessment and program review.

This MSDIA program will be a 131 program for the School of Business (WSB). Combined with donor funds designated for this program, the Business School dean's office is able to authorize support for all administration, instructional/curricular delivery, academic advising, technology needs, and marketing - through money generated in tuition and donations. The broader Wisconsin School of Business administrative infrastructure will support the learning outcome assessment and program review.

Describe resource and fiscal considerations - B. Are the faculty, instructional staff and key personnel existing or new faculty and staff? If they already serve existing programs, how are they able to add this workload? If new faculty and staff will be added, how will they be funded?

In the start-up year, we will be hiring a full-time program director, a part-time office manager, a part-time marketing specialist and a part-time IT support specialist to assist with the planning and implementation of this new program. In year one of the program, we will leverage current resources for instructional needs before committing to new instructional resources by leveraging overload and overtime payments. Prior to the start of year two of the program, we will need to add an additional instructional FTE. Hiring for both program support and instruction will continue each year as the program grows. By year five we anticipate having 3 full-time admissions team members, a full-time IT support specialist, a 0.5 FTE marketing specialist, a 0.5 FTE office manager, and a full-time program director in addition to 4.11 FTEs faculty/instructional staff and 23 FTEs of teaching assistant support. New faculty and staff will be funded by program revenues with any shortfalls covered by WSB Venture (Donor) funding and the WSB Dean's Office until the program becomes financially self-sustaining at the end of year four.

Describe resource and fiscal considerations - C. What impacts will the program have on staffing needs beyond the immediate program? How are those needs being met?

As this is a new market sector for us, we have attributed infrastructure costs to this offering in the marketing, admissions and IT realms. If we launch additional programs on the edX platform some of the infrastructure costs will be distributed.

Describe resource and fiscal considerations - D. For graduate programs, describe plans for funding students including but not limited to funding sources and how funding decisions will be made.

Given this is a fully online graduate program at a disruptive yet affordable price point we will not be offering additional funding support to students.

UW System Administration and the Board of Regents require submission of budget information in a specific format. These forms will be completed in collaboration with APIR after school/college approval and before submission to UWSA for Board consideration. These forms are uploaded here by APIR.

[MSDIA BUDGET NARRATIVE.docx](#)

Does the program or change require substantial new resources other than those just described? Describe the needs. Confirm that the dean is committed to providing the resources.

This program requires the successful implementation of the edX/U2 platform and integration with UW-Madison systems. The Dean of the WSB and the Provost have committed to providing the necessary resources for a successful implementation.

Are new Library resources needed to support this program?

No

Describe plans for funding students including but not limited to funding sources and how funding decisions are made.

Given this is a fully online graduate program at a disruptive yet affordable price point we will not be offering additional funding support to students.

Curriculum and Requirements

Guide Admissions/How to Get In tab

The following will be required for admission to the Master of Science: Business: Data, Insights, and Analytics program:

Application and application fee.

Undergraduate degree. Expected completion of an undergraduate degree is required prior to starting the Master of Science: Business: Data, Insights, and Analytics program.

Resume.

Response to essay(s) question(s).

TOEFL or IELTS test score, only for applications whose native language is not English.

Students may also submit GMAT or GRE scores and/or a professional letter of recommendation as part of their application package but this is not required.

The TOEFL is waived for students who have completed a four-year undergraduate degree and/or master's degree (minimum of eight semesters total) with instruction in English or who will complete such a degree prior to matriculation in the Master of Science: Business: Data, Insights, and Analytics program.

All undergraduate and master's degree transcripts will be evaluated. Schools outside the United States may be verified by World Education Services at the individual class level.

HOW TO APPLY

Students interested in business degrees do not apply through the Graduate School application system and should instead refer to the [School of Business Admissions page](#).

Describe plans for recruiting students to this program.

One method of recruiting students will be through our non-credit courses on edX. (Collectively, these courses compose our "MicroMaster in Business Analytics.") The MicroMaster is a credential awarded by edX. Learners will be able to register for these courses without having to apply to the masters program. This allows them to "try before they buy." When they finish, we will work to convert students that meet our admissions requirements into the masters program. Per data provided by edX, we expect a conversion rate of 3-10% of paid MicroMaster enrollments to convert to degree seeking students.

In addition, edX has a comprehensive, multi-channel/SEO (search engine optimization) proven marketing mechanism that is rigorously monitored and capable of precise identification and targeting of qualified and interested prospective students, while not targeting those who are more likely to be better candidates for our residential or existing online programs. edX has an existing user base of 42 million learners in 196 countries. Each of those users has a profile and associated data package allowing edX to algorithmically segment and market to potential enrollment leads. edX will provide those expressing interest directly to our UW recruiting staff through regular data feeds in order to nurture them into the application process. edX does not participate in aggressive or third party marketing schema, nor do they directly contact students on our behalf. edX's lead generation tools consist of paid digital advertising, dynamically targeted email marketing, edX website promotion and optimization, and comprehensive campaigns.

Prospective students can also request to engage with a recruiter via the WisconsinX presence on the edX platform if they are searching for content that matches our programs.

As an online, part-time degree option, this program will allow candidates global access to quality education from wherever they are located. Barriers are reduced because everyone will have access to pursue this degree through the online learning channels, which will make it more convenient for all.

In addition to the edX marketing, we will recruit through online methods such as online recruitment fairs, webinars, podcasts and consultations appointments. We will leverage our existing channels to promote the degree at events, nationally as well as locally, with candidates.

Tactically, we will leverage purchasing of list from GMAC and ETS where candidates self-identify programs of interest to better target candidates who have an interest in data, insights, and analytics. We will host events in the community and with corporations to promote the value of the degree. We will leverage our current corporate outreach efforts, currently for Professional and Executive MBA, to share with companies the opportunity to support their workforce with opportunities to develop new skills and knowledge. We will continue to work closely with the marketing and strategic communications team to promote the advantages of online learning and a part-time program and will showcase the affordability of a premier education for career enhancement and development.

What is the recruiting and admissions strategy for underrepresented students?

Conscious efforts will be made to increase the number of students that are underrepresented minorities. Working with the marketing team in the WSB, the program will explore ways to reach this applicant community. Marketing funds have been allocated within the budget and the marketing efforts are intended to be inclusive of and targeted towards both underrepresented minorities as well as women.

Projected Annual Enrollment:

| Year | Projected Enrollment |
|--------|----------------------|
| Year 1 | 25 |
| Year 2 | 92 |
| Year 3 | 199 |
| Year 4 | 323 |
| Year 5 | 447 |

Describe plans for supporting enrollments that are much higher or much lower than the anticipated enrollment.

The impact of enrollment fluctuations is mitigated by the fully online, asynchronous structure of the program. The infrastructure for the MSDIA degree is planned to support a low to high range of students enrolled. In the unlikely event that enrollment should exceed our highest projections, the executive sponsors of the new degree will be faced with a decision whether to add instructional and administrative staff (recruiting, admissions, IT, et al) to support the additional enrollment, or instill caps on enrollment to align with faculty and staff available. This will ensure a student experience that is consistent with WSB quality and that the interests of the school/university are covered.

Those who are not familiar with using the html editor fields may upload a document with information about the curriculum for

use by those who will format and edit the content that will appear in the Guide.

Guide Requirements tab

Approved Shared Content from /shared/graduate-minimum-degree-requirements-and-satisfactory-progress/

Last Approved: Apr 26, 2022 10:55am

Minimum Graduate School Requirements

Review the Graduate School minimum [academic progress and degree requirements](#), in addition to the program requirements listed below.

MODE OF INSTRUCTION

| Face to Face | Evening/Weekend | Online | Hybrid | Accelerated |
|--------------|-----------------|--------|--------|-------------|
| No | No | Yes | No | No |

[Mode of Instruction Definitions](#)

Approved Shared Content from /shared/graduate-school-mode-instruction-definitions/

Last Approved: May 3, 2022 8:54am

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students are able to complete a program with minimal disruptions to careers and other commitments.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW–Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

| | |
|---|---|
| Minimum Credit Requirement | 30 credits |
| Minimum Residence Credit Requirement | 22 credits |
| Minimum Graduate Coursework Requirement | 15 credits must be graduate-level coursework. Details can be found in the Graduate School's Minimum Graduate Coursework (50%) policy (https://policy.wisc.edu/library/UW-1244). |
| Overall Graduate GPA Requirement | 3.00 GPA required. This program follows the Graduate School's policy: https://policy.wisc.edu/library/UW-1203 . |
| Other Grade Requirements | n/a |
| Assessments and Examinations | No formal examination is required. |
| Language Requirements | No language graduation requirement. |

REQUIRED COURSES

| | | |
|-----------------------------|---|----|
| GEN BUS 881 | Business Statistics Using Python | 2 |
| GEN BUS 882 | SQL Fundamentals | 2 |
| GEN BUS 883 | Data Visualization & Cloud Technologies | 2 |
| GEN BUS 884 | Applied Analytics - Case Studies | 2 |
| GEN BUS 885 | Python Fundamentals | 2 |
| GEN BUS 886 | Foundations of Predictive Modeling for Business Analytics | 2 |
| GEN BUS 740 | Experiments and Causal Methods for Business Insights | 2 |
| GEN BUS 888 | Applied Machine Learning for Business Analytics | 2 |
| GEN BUS 730 | Prescriptive Modeling and Optimization for Business Analytics | 2 |
| GEN BUS 746 | Advanced SQL & Data Warehousing | 2 |
| GEN BUS 891 | Text Mining for Business Analytics | 2 |
| GEN BUS 745 | Robotic Process Automation | 2 |
| GEN BUS 893 | Analytics Consulting Project Management | 2 |
| GEN BUS 894 | Pitfalls, Ethics, Communication, and Leadership in Business Analytics | 2 |
| GEN BUS 895 | Masters Capstone in Business Analytics | 2 |
| Total Credits | | 30 |

Approved Shared Content from /shared/division-continuing-studies-131-requirements/

Last Approved: Apr 26, 2022 10:55am

Students in this program may not take courses outside the prescribed curriculum without faculty advisor and program director approval. Students in this program cannot enroll concurrently in other undergraduate, graduate or certificate programs.

Total credits required:

30

Guide Graduate Policies tab

Approved Shared Content from /shared/graduate-school-policies/

Last Approved: Apr 26, 2022 10:55am

Graduate School Policies

The [Graduate School's Academic Policies and Procedures](#) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

MAJOR-SPECIFIC POLICIES

PRIOR COURSEWORK

Graduate Work from Other Institutions

With program approval, up to 6 credits of coursework at the graduate level from an AACSB-accredited school, and in which a grade of B or better was earned, may count toward the degree.

UW–Madison Undergraduate

Up to 6 credits numbered 300 or above of required courses from the undergraduate work completed at UW–Madison in which a B or better was earned may be used towards fulfillment of minimum degree and minor credit requirements. However, this work would not be allowed to count toward the 50% graduate coursework minimum unless taken at the 700 level or above.

UW–Madison University Special

With program approval, students are allowed to count no more than 8 credits of coursework numbered 700 or above taken as a UW–Madison University Special student. Coursework earned five or more years prior to the master's degree is not allowed to satisfy requirements.

PROBATION

This program follows the [Graduate School's Probation policy](#).

ADVISOR/COMMITTEE

This program follows the [Graduate School's Advisor policy](#).

CREDITS PER TERM ALLOWED

15 credits

TIME LIMITS

This program follows the [Graduate School's Time Limits policy](#).

GRIEVANCES AND APPEALS

Approved Shared Content from /shared/graduate-school-grievance-policy/

Last Approved: Apr 26, 2022 10:55am

These resources may be helpful in addressing your concerns:

[Bias or Hate Reporting](#)

[Graduate Assistantship Policies and Procedures](#)

[Hostile and Intimidating Behavior Policies and Procedures](#)

[Office of the Provost for Faculty and Staff Affairs](#)

[Dean of Students Office](#) (for all students to seek grievance assistance and support)

[Employee Assistance](#) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, post-doctoral students, faculty and staff)

[Employee Disability Resource Office](#) (for qualified employees or applicants with disabilities to have equal employment opportunities)

[Graduate School](#) (for informal advice at any level of review and for official appeals of program/departmental or school/college grievance decisions)

[Office of Compliance](#) (for class harassment and discrimination, including sexual harassment and sexual violence)

[Office of Student Conduct and Community Standards](#) (for conflicts involving students)

[Ombuds Office for Faculty and Staff](#) (for employed graduate students and post-docs, as well as faculty and staff)

[Title IX](#) (for concerns about discrimination)

Approved Shared Content from /shared/school-of-business-grievance-policy/

Last Approved: Apr 26, 2022 10:55am

Any student who feels that they have been mistreated by a faculty or staff member has the right to lodge a complaint. Complaints may concern course grades, classroom treatment, program admission, or other issues. To ensure a prompt and fair hearing of any complaint and to protect both the student's rights and the person at whom the complaint is addressed, the grievance procedures below are used in the Wisconsin School of Business.

The person whom the complaint is directed against must be an employee of the School of Business. Any student or potential student may use these procedures unless other campus rules or contracts cover the complaint:

If the student feels comfortable/safe doing so, the student should first talk with the person against whom the grievance is directed. Most issues can be settled at this level. If the complaint is directed against a teaching assistant (TA) and the student is not satisfied after discussion of the grievance with the TA, the next step would be to talk to the TA's supervisor, who is usually the course professor. If the complaint is still not resolved satisfactorily, the student may continue to step 2.

If the complaint involves an academic department, the student should contact the chair of the department. The chair will attempt to resolve the problem informally. If this cannot be done to the student's satisfaction, the student may submit the grievance to the chair in writing. This must be done within 60 calendar days of the alleged unfair treatment.

a. If the complaint does not involve an academic department, the procedure outlined in Step 4 below should be followed.

On receipt of a written complaint, the chair will refer the matter to a departmental committee, which will obtain a written response from the person at whom the complaint is directed. This response shall be shared with the person filing the grievance. The chair will provide a written decision within 30 days to the student on the action taken by the committee.

If either party is not satisfied with the decision, they have five working days from receipt of the decision to contact the dean's office (at the number below), indicating the intention to appeal. If the complaint does not involve an academic department in the school, the student must contact the dean's office within 60 calendar days of the alleged unfair treatment.

In either case, there will be an attempt to resolve the issue informally by the appropriate associate dean. If this cannot be done, the complaint can be filed in writing with the Office of the Dean. This must be done within 10 working days of the time the appealing party was notified that informal resolution was unsuccessful.

On receipt of such a written complaint, the Chief Diversity and Inclusion Officer will convene a subcommittee of relevant stakeholders pending the nature of the issue. This subcommittee may ask for additional information from the parties involved and may hold a hearing at which both parties will be asked to speak separately. The subcommittee will then make a written recommendation to the dean of the School of Business who will render a decision. Unless a longer time is negotiated, this written decision shall be made within 20 working days from when the grievance was filed with the Office of the Dean.

Questions about these procedures can be directed to the School of Business, Office of the Dean, 4339 Grainger, 975 University Avenue, 608-262-7867.

State law contains additional provisions regarding discrimination and harassment. Wisconsin Statutes 36.12 reads, in part: "No student may be denied admission to, participation in or the benefits of, or be discriminated against in any service, program, course or facility of the system or its institutions or center because of the student's race, color, creed, religion, sex, national origin, disability, ancestry, age, sexual orientation, pregnancy, marital status or parental status." In addition, UW-System prohibits discrimination based on gender identity or gender expression. Students have the right to file discrimination and harassment complaints with the Office of Compliance, 361 Bascom Hall, 608-265-6018, uwcomplianceoffice@wisc.edu.

The Graduate School has procedures for students wishing to appeal a grievance decision at the school/college level. These policies are described in the Graduate School's Academic Policies and Procedures: <https://grad.wisc.edu/documents/grievances-and-appeals/>

OTHER

Not applicable.

Discuss expected progress to degree and time to degree. For undergraduate programs discuss considerations for supporting students to complete the degree in four academic years.

The degree is expected to be completed by students over two years. It is designed as a part-time program that includes accelerated courses, typically in an eight-week format. The initial launch of the program will be cohort based with all students taking 16 credits in the first academic year and 14 credits in the second academic year. In the initial launch if a student stops out for any reason, they will need to wait a full year to re-enter with the new cohort. As scale is reached with the program there will be multiple cohorts running at once which will decrease the length of the stop out period for students.

Program Learning Outcomes and Assessment

List the program learning outcomes.

| | Outcomes – enter one learning outcome per box. Use the green + to create additional boxes. |
|---|--|
| 1 | Apply business analytic tools and methods to solve business problems |
| 2 | Deliver insights and recommendations for organizations using cutting-edge descriptive, predictive, and prescriptive analytics techniques |
| 3 | Manage analytics projects, communicate professionally, and influence data-based changes within an organization |
| 4 | Use software tools to go from data collection to solution implementation |

When learning outcomes are changed, a new assessment plan must be uploaded.

Summarize the assessment plan.

The Master of Science in Business: Data, Insights and Analytics (MSDIA) assessment plan will be used to evaluate achievement of the program's learning outcomes, which are referenced earlier in this proposal. Although each course plays a role in contributing to those outcomes, the "Applied Analytics - Case Studies" course (GEN BUS 884) and the "Masters Capstone in Business Analytics" course (GEN BUS 895) are critical. They are placed at key points in the program -- in the second semester and the end of the program, respectively -- which help ensure students are on track to achieving the outcomes and have an opportunity to tie their learning together. Those classes are built around case studies in business analytics.

Each spring semester, the program director will review the assessment results and prepare a report with recommendations based on the measures of student success. The report will be presented to the WSB Master's Curriculum Committee (MCC) members at a Spring meeting. Recommendations on revising the assessment plan will be voted on by meeting attendees and if approved, those recommendations will be incorporated into course plans for the following academic year (or as quickly as the governance process permits).

Department Approved

[MSDIA Assessment Plan.docx](#)

Assessment Plan:

[WSB Assessment Plan and Tracker.xlsx](#)

Related Programs

Provide information in related programs offered by other UW System institutions and explain the extent to which the proposed program is distinct and how it overlaps or duplicates those programs.

The most similar program at UW-Madison is the face-to-face MS in Business: Analytics degree. However, there is substantial distinction between the programs in delivery mode and target audience. The proposed program is offered fully online on the edX platform and will be designed for a part-time, global audience as opposed to a full-time residential audience. Given the partnership with edX and the technical integrations that are needed for a seamless flow and exchange of data between UW and edX, we must pursue a new degree rather than a named option.

The delivery mode and audience are also key distinctions to other in-person UW-Madison programs, including the MS in Data Science jointly offered by the Departments of Statistics and Computer Science; the MS in Data Engineering offered by the School of Computer, Data & Information Sciences; the MS in Statistics (Statistics and Data Science named option); the MS in Economics (Graduate Foundations named option); and the MS in Industrial Engineering (Systems Engineering and Analytics named option). In addition, these degrees require a deeper technical background whereas the proposed program does not require a technical background or quantitative skills prior to entering the program.

The College of Engineering's Interdisciplinary Professional Programs offer an online master's degree in

The College of Engineering & Information Technology offers an online Master's degree in Engineering Data Analytics (MEDA). While the curriculum is similar in that both programs cover machine learning, visualization tools and predictive analytics, the contexts used to teach the content is different. The MEDA degree focuses on data analytics in various applications. The MS in Business: Data, Insights, and Analytics degree will focus on data analytics in terms of business applications and industries.

Other programs on campus that have some similarity with the proposed degree are the MS Information, and the MS in Learning Analytics. The MS Information degree, particularly the Data Analytics track within the degree, focuses on Data Mining and Data Management, topics which are more peripheral in the proposed degree, which will focus more on analysis, automation and decision making. The MS in Learning Analytics focuses on applications of analytics in an educational context, whereas the proposed degree focuses on applications of analytics in a business context.

Within the UW system, there is a system-wide UW MS in Data Science offered by six UW campuses and extensions. However, the focus here is on data science, with a heavy emphasis on computer-science methods and more specialized tools (for instance, the degree lists "Hadoop engineer" as one of the key career opportunities). In contrast, the MS in Business: Data, Insights, and Analytics degree is more applications focused.

UW Whitewater offers an Online MS in Data Analytics. The curricula between this degree and the proposed MS in Business: Data, Insights, and Analytics degree differ significantly. Forty percent of the credits in the UW Whitewater degree are electives focusing on business functions/areas, whereas there are no electives in the proposed program. In contrast, the proposed MS in Business: Data, Insights, and Analytics goes more deeply into analytics tools applied in a business context.

Commitments

Courses in the curriculum are numbered 300 or higher.

Yes

The program faculty/staff will ensure the program website, Advance Your Career materials if applicable, and other presentations are consistent with the Guide information for this program.

Yes

Credential will not be awarded retroactively to students who completed all of the requirements before the credential was approved.

Yes

Supporting Information

List name and department of those who are in support of this proposal.

If those supporting the proposal provided a letter or email of support upload [Support_BusinessDataInsightsandAnalyticsMS_DeptoEconomics_20221108.pdf](#) here. A letter is NOT required. Upload any other explanatory information about support from other UW-Madison units.

Additional information:

Approvals

Department Approval - This proposal has been approved by the faculty at the department/academic unit level. The program faculty confirm that the unit has the capacity and resources (financial, physical, instructional, and administrative) to meet the responsibilities associated with offering the program, including offering the necessary courses, advising students, maintaining accurate information about the program in the Guide and elsewhere, conducting student learning assessment and program review, and otherwise attend to all responsibilities related to offering this program.

Enter any notes
about approval
here:

Entered by:

Date entered:

School/College Approval - This proposal has been approved at the school/college level and it is submitted with the Dean's support. The Dean and program faculty confirm that the unit has the capacity and resources (financial, physical, instructional, and administrative) to meet the responsibilities associated with offering the program, including offering the necessary courses, advising students, maintaining accurate information about the program in the Guide and elsewhere, conducting student learning assessment and program review, and otherwise attend to all responsibilities related to offering this program.

Enter any notes
about approval
here:

Entered by and
date:

Date entered:

GFEC Approval - This proposal has been approved by the Graduate Faculty Executive Committee and the Dean of the Graduate School.

Enter any notes
about the approval
here:

Entered by:

Date entered:

UAPC Approval - This proposal has been approved by the University Academic Planning Council and the Provost.

Enter any notes
about approval
here:

Entered by:

Date entered:

For Administrative Use

Admin Notes:

Guide URL:

SIS effective date:

Guide publish
date/type:

Tuition start term:

Career:

SIS Program Code:

SIS Short
Description:

SIS code for
additional major:

Other plan codes
associated with this
program:

Diploma Text:

Diploma Text 2:

Degree:

Field of Study:

Program Length:

National Student
Clearing House
Classification:

Plan Group:

Educational Level:

Award Category:

Enrollment
Category:

CIP Code:

STEMOPT

UWSTEM:

HEALTH:

NSF STEM:

Educational
Innovation
Program:

Distance Education
Program:

Non Traditional
Program:

Special Plan Type:

Added to UW

System Crosswalk:

Scan this proposal:

Upload documents that should
be scanned:

Reviewer

Regina Lowery (lowery3) (10/19/22 11:24 pm): Learning outcomes: Format accepted.

Comments

Regina Lowery (lowery3) (10/19/22 11:25 pm): Assessment plan: Format accepted.

Key: 1375

