Program Change Request

Approval Path

1. 11/27/18 9:31 am
   James G Morris (jgmorris): Approved for O I M Dept. Approver

2. 11/27/18 9:39 am
   Sharon M Kahn (smkahn): Approved for BUS School Admin Reviewer

3. 11/27/18 9:56 am
   Sharon M Kahn (smkahn): Approved for BUS School Approver

4. 12/03/18 2:19 pm
   Nicole Wiessinger (wiessinger): Rollback to BUS School Approver for APIR Admin

5. 12/03/18 2:29 pm
   Sharon M Kahn (smkahn): Approved for BUS School Approver

6. 01/02/19 11:38 am
   Nicole Wiessinger (wiessinger): Rollback to Initiator

7. 01/02/19 6:17 pm
   James G Morris (jgmorris): Approved for O I M Dept. Approver

8. 01/03/19 2:01 pm
   Sharon M Kahn (smkahn): Rollback to Initiator

9. 01/03/19 4:57 pm
   James G Morris (jgmorris): Approved for O I M Dept. Approver

10. 01/04/19 7:29 am
    Sharon M Kahn (smkahn): Approved for BUS School Admin Reviewer

11. 01/04/19 7:30 am
    Sharon M Kahn (smkahn): Approved for BUS School Approver

12. 01/04/19 8:53 am
    Nicole Wiessinger (wiessinger): Approved for APIR Admin

History

1. Sep 20, 2018 by clmig-kalatalo

   Date Submitted: 01/03/19 4:50 pm

Viewing: **MSB 848BUS : Business: Operations and Technology Management**

   Sub Plans: [Sub Plan Key 1032]

   Last approved: 09/20/18 1:02 pm

   Last edit: 01/03/19 4:50 pm

   Changes proposed by: kjbranch

   Catalog Pages Using this Program

   Business: Operations and Technology Management, M.S.
Name of the school or college academic planner who you consulted with on this proposal.

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharon Kahn - BUS</td>
</tr>
</tbody>
</table>

Proposal Abstract/Summary:

Need to revise parent program to support proposal for MS-Business: Operations and Technology Management, Named Option: Business Analytics. The areas adjusted include learning outcomes, admissions and curriculum requirements.

If approved, what term should the proposed change be effective?

Fall 2019 (1202)

Select yes if this proposal is only to add, remove, or rearrange curricular requirements, and will change less than 50% of the curriculum.

No

**Basic Information**

Program State:
Active

Type of Program:
Degree/Major

Who is the audience?
Graduate or professional

Home Department:
O I M

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:
MSB 848BUS

SIS Description:
Bus: Oper & Tech Mgmt MSB

Transcript Title:
Business: Operations and Technology Management

Named Options:
Parent Plan 1032: No Title Found

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.

<table>
<thead>
<tr>
<th>Role Type</th>
<th>Name (Last, First)</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department Chair</td>
<td>Morris, James G</td>
<td><a href="mailto:jgmorris@wisc.edu">jgmorris@wisc.edu</a></td>
<td>608/262-1284</td>
</tr>
<tr>
<td>Faculty Director</td>
<td>Tong, Jordan</td>
<td><a href="mailto:jtong9@wisc.edu">jtong9@wisc.edu</a></td>
<td>608/265-8220</td>
</tr>
<tr>
<td>Primary Contact</td>
<td>Branch, Kristin</td>
<td><a href="mailto:kjbranch@wisc.edu">kjbranch@wisc.edu</a></td>
<td>608/262-9116</td>
</tr>
<tr>
<td>Primary Dean's Office Contact</td>
<td>Kahn, Sharon M</td>
<td><a href="mailto:smkahn@wisc.edu">smkahn@wisc.edu</a></td>
<td>608/265-3579</td>
</tr>
<tr>
<td>Faculty Director</td>
<td>Bauer, Daniel</td>
<td><a href="mailto:dbauer5@wisc.edu">dbauer5@wisc.edu</a></td>
<td></td>
</tr>
</tbody>
</table>

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

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?
Yes

Mode of Delivery:
Face-to-Face (majority face-to-face courses)
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 No

Guide Accreditation tab

Will graduates of this program seek licensure or certification after graduation?
No

Year of three year check-in to GFEC (3 years after first student enrollment):
2022

Year of first program review (5 years after first student enrollment):
2024

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

This is to support a proposal for MS-Business: Operations and Technology Management, Named Option: Business Analytics. We hope to launch this new named option immediately and start enrolling students in the fall semester 2019. The implementation plan is already being thought through and is ready to implement pending approval.

### Rationale and Justifications

What is the rationale for this change?

We are proposing a new MS-Business: Operations and Technology Management, Named Option: Business Analytics.

What evidence do you have that these changes will have the desired impact?

The market place for a masters in business analytics is broad - both from prospective students and from the hiring partners in industry. Many other Universities have their masters in business analytics in a specific operations or information management department. So we know this to a viable home for the degree from a prospective student’s perspective.

### Faculty and Staff Resources

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?
No

What is the tuition structure for this program?

Profession-specific tuition, Regent-approved

Given considerations associated with the proposed change, describe the academic unit's fiscal capacity to support the instructional and curricular requirements, academic and career advising, student support services, technology needs, and relevant assessment of student learning and program review requirements. Is there sufficient capacity in the curricular and academic support services to meet the additional workload? For research graduate programs, include information on how the program will be administered and how student funding will be handled. For undergraduate programs, include information on academic advising, career advising, student support services.

This will be a 101 degree program. It will leverage existing infrastructure, at enrollments of 20 or fewer, however we believe this program will grow to 50-100 students quickly and that tuition revenue allocation will fund the additional resources.

The faculty co-directors and the staff director will be the primary responsible members of the MS-Business: Operations and Technology Management, Named Option: Business Analytics. This team will lead curriculum development and academic guidance - course planning. This team will also be responsible for the student professional development and partner on employer relations.

The Masters in Business Administration Program Office (MBA PO) will work closely to support the MS-Business: Operations and Technology Management, Named Option: Business Analytics students. The MBA PO team will lead admissions, recruitment, admissions operations, financial aid and merit aid processing, academic guidance - policies and procedures, student services - general, career and leadership development, employer relations, data reporting and rankings management.

Programmatic services, including connections to web and Guide information and the Registrar’s Office will be the responsibility of School of Business Academic Affairs, in alignment with the work they currently perform related to existing Business programs.

Communication with the Business School Dean’s Office will be the responsibility of the Director
of Business Analytics or the Business Analytics Faculty Director(s).

Professional development opportunities will be primarily provided through Applied Learning events.

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 needed.

The dean is fully supportive of this initiative and is committed to providing the resources needed.

## Curriculum and Requirements

If you are proposing a change to the curriculum, what percentage of the curriculum is changing?

- No change

Guide Admissions/How to Get In tab

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

Total credits required:

- 30

Guide Graduate Policies tab

## Program Learning Outcomes and Assessment

List the program learning outcomes.

<table>
<thead>
<tr>
<th>Outcomes – enter one learning outcome per box. Use the green + to create additional boxes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>1 2</td>
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</tbody>
</table>
Outcomes – enter one learning outcome per box. Use the green + to create additional boxes.

| Improvement of organizational and system performance from both financial and nonfinancial perspectives. |
| 2 3 |
| Leverage expertise in data management software (e.g., SQL) & statistical programming (e.g., R, Python) to go from data to decisions. Effectively lead and manage organizational and technological change that supports and improves business processes and creates value for customers. |
| 3 4 |
| Deliver insights and recommendations for organizations using cutting-edge descriptive, predictive, and prescriptive analytics techniques. Develop enduring networks and relationships with industry partners. |
| 4 |
| Manage analytics projects, communicate professionally, and influence data-based changes within an organization |

Summarize the assessment plan.

The first semester of the MS-Business: Operations and Technology Management, Named Option: Business Analytics teaches students methodological foundations of business analytics, including descriptive (data acquisition, data visualization, e.g.), predictive (statistical programming, machine learning, e.g.), and prescriptive (optimization, spreadsheet modeling, e.g.) analytic techniques. The second semester leverages this foundation in an array of elective classes focused on the application of business analytics across various business functions (marketing, finance, supply chain, etc.) and industries (health care, finance, technology, etc.) as well as in real world consulting experiences.

The MS-Business: Operations and Technology Management assessment plan reflects this separation by assessing the methodological skills linked to learning objectives 2 and 3 at the end of the first semester in the context of core classes focused on predictive (GEN BUS 656 – Machine Learning for Business Analytics) and prescriptive (GEN BUS 730 Prescriptive Modeling & Optimization for Business Analytics) techniques. The skills with regards to business analytics applications and associated learning outcomes 1 and 4 are assessed in the Analytics Consulting Practicum (Gen Bus 770) and the Current Topics class that draws on the experiences in the diverse set of applications classes.

Approved Assessment Plan:
MS-Business Operations and Technology Management - Learning Outcomes Assessment Plan.xlsx

Related Programs

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

**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 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:

Approved WSB Master’s Curriculum Committee - 11.5.2018
Approved WSB APC - 11.15.2018
Approved WSB Faculty - 11.26.2018

Entered by and date:
Sharon Kahn
Date entered:
11.27.2018

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

Reviewer Comments

Nicole Wiessinger (wiessinger) (12/03/18 2:19 pm): Rollback: Rolling back for additional edits per email with Sharon K.

Sharon M Kahn (smkahn) (12/03/18 2:28 pm): updated accreditation information - smk - 12/3/2018

Maureen A N Bischof (mabischof) (12/10/18 4:36 pm): Learning Outcomes and assessment plan updates are complete.

Nicole Wiessinger (wiessinger) (01/02/19 11:38 am): Rollback: Rolling back for revisions discussed in email with Sharon Kahn 1/2/19.

Sharon M Kahn (smkahn) (01/03/19 2:01 pm): Rollback: additional edits needed
<table>
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<tr>
<th>Learning Opportunity</th>
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<th>Term</th>
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<tbody>
<tr>
<td>GB 705 - Statistics &amp; Programming for Bus. Analytics</td>
<td>Projects/Cases/Simulations</td>
<td>Fall</td>
<td>Project</td>
<td>Summer/Fall</td>
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<td>GB 730 - Prescriptive Modeling &amp; Optimization for Bus. Analytics</td>
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<td>Exam</td>
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<td>Analytics Project</td>
<td>Spring</td>
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<td>GB 656 - Machine Learning for Business Analytics</td>
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<tr>
<td>GB 840 - Current Topics in Business Analytics</td>
<td>Reflection Paper</td>
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<td>Reflection Paper</td>
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**Learning Goal 1**: Apply business analytic tools and methods across various business functions (marketing, finance, supply chain, etc.) and industries (health care, finance, technology, etc.).

**Learning Goal 2**: Leverage expertise in data management software (e.g., SQL) & statistical programming (e.g., R, Python) to go from data to decisions.

**Learning Goal 3**: Deliver insights and recommendations for organizations using cutting-edge descriptive, predictive, and prescriptive analytics techniques.

**Learning Goal 4**: Manage analytics projects, communicate professionally, and influence data-based changes within an organization.