OPERATIONS & BUSINESS ANALYTICS (OBA) CONCENTRATION

Concentration Overview
The OBA curriculum integrates operations management and data-analytics, and is a unique program in the Pacific Northwest. Operations expertise provides a strong foundation for managing today’s complex business processes, including challenges related to sourcing and supply chains, and manufacturing and service systems. Data-analytics expertise has quickly become a must-have skill for aspiring business graduates, and, like operations expertise, is widely applicable across a range of career paths. Therefore, the OBA curriculum is not only a dedicated concentration, its courses are also a valuable complement to all students in other business concentrations.

Advising Notes
Beginning in Fall 2018 there were changes to the OBA core curriculum. OBA 340 became OBA 311 Business Analytics I, and OBA 330 became OBA 312 Business Analytics II. See your business advisor for more information about the transition and how it affects your academic plan. Students interested in the OBA concentration are strongly encouraged to take upper division core courses OBA 311, OBA 312, and OBA 335 as early as possible.

Earning the OBA concentration requires successfully completing four of the 400-level courses listed below. In this list, the 410-numbered courses are data-analytics oriented, and the 466 and 477 courses are operations oriented (the 444 database topic relates to both areas).

Concentration Requirements

<table>
<thead>
<tr>
<th>Course Title (Credit Hours)</th>
<th>Course</th>
<th>Pre-requisites*</th>
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</thead>
<tbody>
<tr>
<td>Students must choose 4 courses from:</td>
<td></td>
<td>(340/330 can sub for 311/312 below)</td>
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<tr>
<td>• Predictive Analytics (4)</td>
<td>OBA 410</td>
<td>OBA 311, 312, 335</td>
</tr>
<tr>
<td>• Analyzing Big Data (4)</td>
<td>OBA 410</td>
<td>OBA 311, 312, 335</td>
</tr>
<tr>
<td>• Python for Data Analytics (4)</td>
<td>OBA 410</td>
<td>OBA 311, 312, 335</td>
</tr>
<tr>
<td>• Business Decision Analytics (4)</td>
<td>OBA 410</td>
<td>OBA 311, 312, 335</td>
</tr>
<tr>
<td>• Business Database Management Systems (4)</td>
<td>OBA 444</td>
<td>OBA 311</td>
</tr>
<tr>
<td>• Project and Operations Management Models (4)</td>
<td>OBA 466</td>
<td>OBA 335</td>
</tr>
<tr>
<td>• Supply Chain Operations and Management (4)</td>
<td>OBA 477</td>
<td>OBA 335</td>
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*The official pre-requisite for OBA 410 electives is all OBA core, speak to an advisor if this affects your graduation timing.
** CIT 382 will no longer be accepted as a substitute for OBA 311/340 for students who complete their degree requirements for graduation after summer of 2019.

2019-2020 Course Offering Schedule

Check Duckweb for current listings

<table>
<thead>
<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
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<tbody>
<tr>
<td>OBA 444</td>
<td>OBA 466</td>
<td>OBA 477</td>
</tr>
<tr>
<td>OBA 410 (Analyzing Big Data)</td>
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<td>OBA 410 (Business Decision Analytics)</td>
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<tr>
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<td>OBA 410 (Predictive Analytics)</td>
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<td>OBA 410 (Predictive Analytics)</td>
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Concentration Course Descriptions

OBA 410 Predictive Analytics
Machine-learning and statistical techniques for developing predictive models to be used in different classification and pattern recognition problems; tools for applying predictive methods on real-world datasets.

OBA 410 Analyzing Big Data
Processes for cleaning, transforming and merging large data sets; techniques for extracting and summarizing information contained in such data sets, which are increasingly common given modern advances in digital technologies.

OBA 410 Python for Data Analytics
An introduction to the Python language and its supporting packages with applications to data analytics problems; programming constructs including variables, objects, conditional statements, loops, and functions.

OBA 410 Business Decision Analytics
Optimization and risk assessment approaches for aiding managerial decision making; using analytics-based tools for prescribing an appropriate decision or course of action in complex business situations.

OBA 414 Business Database Management Systems
Models for structuring, storing, and querying business data in relational databases and data warehouses; primary focus on relational database designs with extensive coverage of the SQL language.

OBA 466 Project and Operations Management Models
Frameworks and solutions for managing complex projects and operations; implementing optimal strategies for producing profitable new products and services in the competitive global business environment.

OBA 477 Supply Chain Operations and Management
Strategic and tactical issues pertaining to the distribution & delivery of products & services; methodologies and systems for designing, tracking, and managing complex global operations.

Professional Activities

- Business Operations and Technology Club (BOTA): OBA concentration students are encouraged to participate in the BOTA club. For details go to: orgsync.com/85089/chapter.
- Job Shadow: Job Shadow Program – explore careers in OBA by spending a day with professionals at their workplace. Participating companies have included Nike, Jama Software, FactSet, Fred Meyer, UPS and PeaceHealth. Learn more at business.uoregon.edu/ug/job-shadow.

Who Should Concentrate in OBA?
Students who:
- Want to develop the ability to translate the big picture into appropriate details.
- Enjoy being critical and logical thinkers (out of the box for both the big picture as well as tactics).
- Want to develop the ability to back up their decisions with good business sense.
- Want to develop the ability to relate across functional areas.
- Are definitely not technology averse.
- Are interested in finding how to leverage information technology (and other technologies) in improving manufacturing and services.
- Have the desire to understand, organize and manage the implementation of projects.

Careers
- Supply Chain Management
- E-Business Strategy and Operations
- Information Systems Management
- Systems Analysis
- Customer Relationship Management
- Project Management

Advising
Hours
Monday-Friday
8:00 a.m.-5:00 p.m.

Location
203 Peterson
Lillis Business Complex

Contact
541-346-3303

Website
business.uoregon.edu