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 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
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 below. In this list, the 410s and the 444/455 courses are data-analytics oriented, and the 466/477 courses are operations oriented.
Note: Beginning in Fall 2018, OBA 340 was replaced by OBA 311 Business Analytics I, and OBA 330 was replaced by OBA 312 Business Analytics II.

Concentration Requirements

Course Title (Credit Hours)  Course  Prerequisites*
- Business Decision Analytics (4)  OBA 410  OBA 311, 312, 335
- Python Data Analytics (4)  OBA 410  OBA 311, 312, 335
- Sports Analytics (4)  OBA 410  OBA 311, 312, 335
- Business Database Management Systems (4)  OBA 444  OBA 311
- Predictive Modeling (4)  OBA 455  OBA 312 (or MATH 345)
- Project and Operations Management Models (4)  OBA 466  OBA 335
- Supply Chain Operations and Management (4)  OBA 477  OBA 335

*Older OBA 340/330 can sub for 311/312 respectively. The official prerequisite for OBA 410 electives is to have taken all three OBA core class, but speak to an advisor if this sequencing would affect your graduation timing.

2021-2022 planned Course Schedule (check classes.uoregon.edu for latest)

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**Concentration Course Descriptions**

**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 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 Sports Analytics**
Theory and application of data analytics in sports; data analytics methodologies apply to individual and team-based performance metrics, as well as other issues that impact overall organization profitability.

**OBA 444 Business Database Mgmt 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 455 Predictive Modeling**
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 466 Project and Operations Mgmt 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 Mgmt**
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. (latest details at: [https://business.uoregon.edu/student-life/clubs](https://business.uoregon.edu/student-life/clubs))

**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 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
- Project Management
- Business Analyst
- Materials Management
- Product Management
- Logistics
- Business Analyst
- Purchasing
- Inventory Management

**Advising**

**Location**
203 Peterson Lillis Business Complex

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

**Contact**
541-346-3303

**Website**
[business.uoregon.edu](https://business.uoregon.edu)