

BUSINESS: OPERATIONS AND TECHNOLOGY MANAGEMENT, BBA

The Operations and Technology Management (<https://wsb.wisc.edu/programs-degrees/undergraduate-bba/academics/majors/#operations-and-technology-management>) (OTM) major focuses on the design, production, and delivery of products and services to satisfy customer needs. It equips students with the essential tools and strategies to use resources efficiently, make desirable trade-offs, and strategically redesign or restructure operations. OTM majors distinguish themselves by strong analytical and problem-solving capabilities together with the ability to provide high-level managerial insights into value-based service and production management.

OTM majors have many career opportunities due to their process orientation and analytical training. They are especially well-equipped for positions in supply chain management and logistics, business analytics, management consulting, service operations management, and manufacturing management.

Related Student Organizations

Badger Operations Association (<https://win.wisc.edu/organization/BOA/>)
 Council of Supply Chain Management Professionals (CSCMP) (<https://cscmp.org/>)
 American Society for Quality (<https://asq.org/>)
 APICS—The Association for Operations Management (<http://www.apics.org/about/contact/>)

HOW TO GET IN

Students wishing to pursue this major must be admitted to the School of Business. Once admitted, students are able to pursue any business major they choose. To find out more about the school's admissions process for undergraduate students, please see *Entering the School* (<http://guide.wisc.edu/undergraduate/business/#enteringtheschooltext>).

REQUIREMENTS

UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin–Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (<http://guide.wisc.edu/undergraduate/#requirementsforundergraduatestudytext>) section of the *Guide*.

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| General Education | <ul style="list-style-type: none"> • Breadth—Humanities/Literature/Arts: 6 credits • Breadth—Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits • Breadth—Social Studies: 3 credits • Communication Part A & Part B * • Ethnic Studies * • Quantitative Reasoning Part A & Part B * |
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* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

SCHOOL OF BUSINESS REQUIREMENTS

The Wisconsin Bachelor of Business Administration (BBA) degree program is based on a broad educational foundation combined with courses in business and economics. This curriculum is designed for those students who wish to prepare for careers in business. Students completing any School of Business major (<http://guide.wisc.edu/undergraduate/business/#requirements-text>) are required to satisfy a common set of Pre-Business Requirements, Liberal Studies Requirements, Business Preparatory Requirement, Business Core Requirement, Business Breadth Requirement, and Credits for BBA Degree.

Code	Title	Credits
School of Business BBA Requirements		
Complete requirements: (http://guide.wisc.edu/undergraduate/business/#requirements-text)		
	Pre-Business	
	Liberal Studies	
	Business Prep	
	Business Core	
	Business Breadth	

OPERATIONS AND TECHNOLOGY MANAGEMENT (OTM) MAJOR REQUIREMENTS

It is recommended that the undergraduate core course OTM 300 Operations Management be taken as early as possible in preparation for this major.

Code	Title	Credits
OTM 351	Principles and Techniques of Quality Management	3
or OTM 370	Sustainable Approaches to System Improvement	
OTM 451	Service Operations Management	3
OTM 453	Operations Analytics	3
OTM 654	Production Planning and Control	3
or OTM/ MARKETNG 421	Fundamentals of Supply Chain Management	
or MARKETNG/ OTM 427	Information Technology in Supply Chains	

Complete two elective courses from the suggested tracks (found below)	6
Total Credits	18

OTM SUGGESTED ELECTIVE COURSES

Any OTM course taken after fulfilling the requirements above will count as an elective course. Non-OTM School of Business courses on the OTM electives list will be used to satisfy the OTM elective requirement first. If the OTM elective requirement is fulfilled, these courses can be used to satisfy the School of Business breadth requirement, provided they are not cross-listed with OTM.

SUPPLY CHAIN MANAGEMENT

Code	Title	Credits
OTM 351	Principles and Techniques of Quality Management	3
OTM 370	Sustainable Approaches to System Improvement	3
OTM 442	Database Management and Applications	3
OTM 654	Production Planning and Control	3
OTM/MARKETNG 421	Fundamentals of Supply Chain Management	3
OTM/MARKETNG 422	Logistics Management	3
OTM/MARKETNG 423	Procurement and Supply Management	3
OTM/MARKETNG 427	Information Technology in Supply Chains	3
OTM/MARKETNG 428	Supply Chain Capital Management	3

BUSINESS ANALYTICS

Code	Title	Credits
OTM 442	Database Management and Applications	3
MARKETNG 310	Marketing Research	3
INFO SYS 365	Contemporary Topics	3
INFO SYS 371	Technology of Computer-Based Business Systems	3
INFO SYS 422	Computer-Based Data Management	3
INFO SYS 424	Analysis and Design of Computer-Based Systems	3

BUSINESS PROCESS DESIGN AND IMPROVEMENT

Code	Title	Credits
OTM 351	Principles and Techniques of Quality Management	3
OTM 370	Sustainable Approaches to System Improvement	3
OTM 442	Database Management and Applications	3
ACCT I S 310	Cost Management Systems.	3
INFO SYS 365	Contemporary Topics	3
INFO SYS 371	Technology of Computer-Based Business Systems	3

INFO SYS 422	Computer-Based Data Management	3
INFO SYS 424	Analysis and Design of Computer-Based Systems	3
I SY E 515	Engineering Management of Continuous Process Improvement	3
I SY E/PSYCH 549	Human Factors Engineering	3

UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW–Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW–Madison. "In residence" means on the UW–Madison campus with an undergraduate degree classification. "In residence" credit also includes UW–Madison courses offered in distance or online formats and credits earned in UW–Madison Study Abroad/Study Away programs.

Quality of Work Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

LEARNING OUTCOMES

1. Understand how to analyze and evaluate business processes combined with a capability for improving those processes.
2. Understand how the effects of increased utilization and variability impact process capacity and flow times, and will be able to suggest approaches to improve system performance.
3. Build analytical models to solve business problems.
4. Articulate the commonalities and differences between service and manufacturing processes, and be able to manage and make improvements within either context.
5. Apply principles of supply chain management in business contexts.
6. Analyze and implement operational business decisions from both strategic and tactical perspectives.

FOUR-YEAR PLAN

This is a **sample** four-year plan for students directly admitted into the School of Business from high school. We encourage all students to consult with their academic advisor to develop an individualized plan that meets their specific needs.

Freshman

Fall	Credits Spring	Credits Summer	Credits
ECON 101	4 MATH 211	5 MARKETNG 300	3
PSYCH 202	3 Communications A	3	
Science	3 Ethnic Studies	3	
Social Science	3 ECON 102	4	

GEN BUS 110	1		
	14	15	3
Sophomore			
Fall	Credits	Spring	Credits
GEN BUS 306	3	GEN BUS 307	3
ACCT I S 100	3	ACCT I S 211	3
OTM 300	3	FINANCE/ ECON 300	3
M H R 300	3	GEN BUS 360	3
Elective	3	Elective	3
	15	15	
Junior			
Fall	Credits	Spring	Credits
Communications B	3-4	OTM/ MARKETNG 421, 654, or MARKETNG 427	2-3
OTM 451	3	OTM 453	3
OTM 351 or 370	3	Ethics ¹	3-4
Humanities	3	Science	3
	12-13	11-13	
Senior			
Fall	Credits	Spring	Credits
Business Breadth	3	Business Breadth	3
OTM Elective	3	OTM Elective	3
Literature	3	Elective	3
GEN BUS 301	3	Elective	3
	12	12	

Total Credits 109-112

¹ Students must choose one of the following courses: PHILOS 241 Introductory Ethics, PHILOS 243 Ethics in Business, PHILOS 341 Contemporary Moral Issues, ENVIR ST/PHILOS 441 Environmental Ethics

ADVISING AND CAREERS**ADVISING**

Advising is an integral part of any student's educational journey in the Wisconsin School of Business Undergraduate Program. Starting at Student Orientation, Advising, and Registration (SOAR), we encourage all students to connect with academic advisors. Business academic advisors have a wealth of knowledge about courses on campus, as well as policies and procedures.

Business career coaches help students with career exploration, internships, resumes, job search, interviewing and more. We encourage students to connect with their career coach once they arrive on campus.

Business academic advisors and career coaches are passionate about student success. Students experiencing academic difficulty or personal struggles are encouraged to talk to their advisor about how their individual situation may affect their academic performance.

ASSIGNED ACADEMIC AND CAREER COACHES

For admitted business students, academic advisors and career coaches are assigned by academic major. If you have more than one major, you may have more than one assigned advisor and coach. You can find your assigned advisor and coach by logging into your Starfish portal through MyUW.

For students not yet admitted to the Wisconsin School of Business, we have a team of pre-business advisors available to you.

ACCESSING ADVISING

Drop-in advising and scheduled appointments are available for admitted business students. Pre-business students may also schedule an appointment with a pre-business academic advisor or utilize drop-in academic advising.

For more information on accessing academic advising, please see our academic advising page (<https://bus.wisc.edu/current-student-resources/bba/academic-support-resources/academic-advising/>).

For more information on accessing career coaching, please see our career coaching page (<https://bus.wisc.edu/current-student-resources/bba/careers-internships/career-advising/>).

CAREERS

All products and services—from cars to surgeries—are delivered by organized systems. It's the job of operations managers to make sure those activities occur when they are planned, in the right way, in the right quantity, and with the right quality. Operations management transforms inputs—such as labor, equipment, facilities, materials, energy, and information—into goods and services for customers. To make this all happen, the operations function is responsible for critical activities such as materials management, resource planning, purchasing, scheduling, and quality.

Common Career Paths**Production Management**

- Production management involves the design, operations, and improvement of processes used to manufacture goods valued by end users. Key tasks involve planning and control of materials and resources to enable these processes and make them error-free, fast, and low cost.

Service Operations Management

- Service operations management is concerned with the design, operations, and improvement of processes used to produce and deliver services to end customers. Key tasks involve planning control of resources (including training of service personnel) to enable these processes and make them error-free, fast, and low cost.

Technology Management

- Technology management allows an organization to manage its technological fundamentals to create a competitive advantage. The role of technology management is to understand the value technologies can have for an organization and for its customers—and to decide when to invest in technology development and/or when to withdraw from using it.

Supply Chain Management

- Supply chain management focuses on the movement of products and information along the value chain. The organizations that make up the supply chain are “linked” together through physical flows and information flows. Key tasks are focused on integrating marketing, sourcing, production, logistics, and information systems—not only within the organization, but also with business partners and customers.

Consulting

- Operations consulting is the process of assisting various types of businesses to assess the current status of internal procedures and strategies, and enhance the overall operation of the company. While operations consulting is often thought to focus on manufacturing plants or production facilities, the scope of operations consulting is actually broader than that. Even businesses that are service-based rather than product-based can benefit from operations consulting.

Project Management

- Project management is the application of processes, methods, knowledge, skills, tools, and experience to achieve project goals. Projects are separate to business-as-usual activities, requiring people to come together temporarily to focus on specific project objectives

Please visit our website (<https://wsb.wisc.edu/programs-degrees/undergraduate-bba/academics/majors/#operations-and-technology-management>) for further details about potential career areas and responsibilities.

PEOPLE

FACULTY AND STAFF IN OPERATIONS MANAGEMENT

For more information about the faculty and their research interests, please visit the directory (<https://bus.wisc.edu/faculty-research/faculty-directory/>).

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ACCREDITATION

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AACSB International—The Association to Advance Collegiate Schools of Business (<http://www.aacsb.edu/>)

Accreditation status: Accredited. Next accreditation review: 2021–2022.