

Duluth Campus

Business Analytics B.B.A.

Management Studies

Labovitz School of Business and Economics

- Program Type: Baccalaureate
- Requirements for this program are current for Fall 2021
- Required credits to graduate with this degree: 98
- Required credits within the major: 120
- Degree: Bachelor of Business Administration

Graduates in business analytics combine capabilities in data management, applied statistics, data analytic techniques, and business domain expertise to provide valuable support for management and strategic decision making in different business domains. This combination of technical skills and business acumen builds a valuable foundation for future growth. Among the topics covered, include managing databases, visualizing data, descriptive, predictive and prescriptive analytics, big data, spreadsheet modeling, and specialized business analytics concentrations.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Admission Requirements

Freshman and transfer students are usually admitted to pre-major status before admission to this major

A GPA above 2.0 is preferred for the following:

- 2.60 already admitted to the degree-granting college
- 2.60 transferring from another University of Minnesota college
- 2.60 transferring from outside the University

Completion of Level 2 (Expert) Microsoft Office Specialist (MOS) Excel Certification OR completion of Levels I and II Excel workshops made available by LSBE. Freshman and transfer students are typically admitted as pre-business students. Admission to candidacy status, which allows access to upper division LSBE classes, typically occurs at the end of the sophomore year when students have successfully completed all pre-major (pre-candidacy) course requirements and met all the GPA standards. Students with 2.60 overall GPA and 2.0 internal and pre-major GPAs are admitted upon completion of pre-major courses; students with 2.00-2.59 overall GPA and 2.00 internal and pre-major GPAs are pooled and reviewed for evidence of academic success in LSBE majors. Students who do not qualify for admission to candidacy may not take upper division LSBE courses (excluding some economics courses) without permission of the Director of LSBE Advising and Academics.

For information about University of Minnesota admission requirements, visit the [Office of Admissions website](#).

Required prerequisites

Learning in Community (1 cr)

Requirement will be waived for transfer students with at least 30 credits taken post high school, for UMD students who started in a UMD collegiate unit where this is not required, and upon request for first-year students with 30 PSEO credits.

[UST 1000](#) - Learning in Community (1.0 - 2.0 cr)

or [EHS 1000](#) - Into the World [GLOBAL PER] (3.0 cr)

or [ES 1000](#) - Global Cultural Perspectives on Environmental Sustainability [GLOBAL PER] (3.0 cr)

or [LING 1000](#) - Language and Culture in the U.S. What does it Mean to Speak American [CDIVERSITY] (3.0 cr)

or [PSY 1100](#) - Living Your Best Life: Applying Positive Psychology [CDIVERSITY] (3.0 cr)

Pre-major requirements (37 cr)

[ACCT 2001](#) - Principles of Financial Accounting (3.0 cr)

[ACCT 2002](#) - Principles of Managerial Accounting (3.0 cr)

[BLAW 2001](#) - The Legal Environment [LE CAT8, HUMANITIES] (3.0 cr)

[ECON 1022](#) - Principles of Economics: Macro [LE CAT, SOC SCI] (3.0 cr)

[ECON 1023](#) - Principles of Economics: Micro [LE CAT, SOC SCI] (3.0 cr)

[ECON 2030](#) - Applied Statistics for Business and Economics [LOGIC & QR] (3.0 cr)

[MIS 2201](#) - Information Technology in Business (3.0 cr)

[LSBE 2000](#) - Interpersonal and Teamwork Skills (1.0 cr)

[PSY 1003](#) - General Psychology [LE CAT, SOC SCI] (4.0 cr)

[WRIT 1120](#) - College Writing [LE CAT, WRITING] (3.0 cr)

Communications or Foreign Languages

[COMM 1112](#) - Public Speaking [LE CAT, COMM & LAN] (3.0 cr)
 or [COMM 1222](#) - Interpersonal Communication [LE CAT, LECD C, COMM & LAN] (3.0 cr)
 or [AMIN 1103](#) - Beginning Ojibwe I [LE CAT3, LECD CAT03, COMM & LAN] (3.0 cr)
 or [AMIN 1104](#) - Beginning Ojibwe II [LE CAT3, LECD CAT03, COMM & LAN] (3.0 cr)
 or [CHIN 1101](#) - Beginning Chinese I: Mandarin Chinese [LE CAT, COMM & LAN] (4.0 cr)
 or [CHIN 1102](#) - Beginning Chinese II: Mandarin Chinese [LE CAT, COMM & LAN] (4.0 cr)
 or [CHIN 1201](#) - Intermediate Chinese I: Mandarin Chinese [LE CAT, COMM & LAN] (4.0 cr)
 or [CHIN 1202](#) - Intermediate Chinese II: Mandarin Chinese [LE CAT3, LEIP CAT03, COMM & LAN] (4.0 cr)
 or [FR 1101](#) - Beginning French I [LE CAT3, COMM & LAN] (4.0 cr)
 or [FR 1102](#) - Beginning French II [LE CAT3, COMM & LAN] (4.0 cr)
 or [FR 1201](#) - Intermediate French I [LE CAT3, COMM & LAN] (4.0 cr)
 or [FR 1202](#) - Intermediate French II [LE CAT3, LEIP CAT03, COMM & LAN] (4.0 cr)
 or [GER 1101](#) - Beginning German I [LE CAT, COMM & LAN] (4.0 cr)
 or [GER 1102](#) - Beginning German II [LE CAT, COMM & LAN] (4.0 cr)
 or [GER 1201](#) - Intermediate German I [LE CAT, COMM & LAN] (4.0 cr)
 or [GER 1202](#) - Intermediate German II [LE CAT, COMM & LAN] (4.0 cr)
 or [RUSS 1101](#) ~~(Inactive)~~ [LE CAT] (4.0 cr)
 or [RUSS 1102](#) ~~(Inactive)~~ [LE CAT, COMM & LAN] (4.0 cr)
 or [SPAN 1101](#) - Beginning Spanish I [LE CAT, COMM & LAN] (4.0 cr)
 or [SPAN 1102](#) - Beginning Spanish II [LE CAT, COMM & LAN] (4.0 cr)
 or [SPAN 1201](#) - Intermediate Spanish I [LE CAT, COMM & LAN] (4.0 cr)
 or [SPAN 1202](#) - Intermediate Spanish II [LE CAT, COMM & LAN] (4.0 cr)
 or [SPAN 2301](#) - Advanced Spanish [LE CAT, COMM & LAN] (4.0 cr)

Mathematics

[MATH 1160](#) - Finite Mathematics and Introduction to Calculus [LE CAT, LOGIC & QR] (5.0 cr)
 or [MATH 1290](#) - Calculus for the Natural Sciences [LE CAT2, LOGIC & QR] (5.0 cr)
 or [MATH 1296](#) - Calculus I [LE CAT, LOGIC & QR] (5.0 cr)

General Requirements

The Board of Regents, on recommendation of the faculty, grants degrees from the University of Minnesota. Requirements for an undergraduate degree from University of Minnesota Duluth include the following:

- Students must meet all course and credit requirements of the departments and colleges or schools in which they are enrolled including an advanced writing course. Students seeking two degrees must fulfill the requirements of both degrees. However, two degrees cannot be awarded for the same major.
- Students must complete all requirements of the [Liberal Education Program](#).
- Students must complete a minimum of 120 semester credits.
- At least 30 of the last 60 degree credits earned immediately before graduation must be awarded by UMD.
- Students must complete at least half of their courses at the 3xxx-level and higher at UMD. Study-abroad credits earned through courses taught by UM faculty and at institutions with which UMD has international exchange programs may be used to fulfill this requirement.
- If a minor is required, students must take at least three upper division credits in their minor field from UMD.
- The minimum cumulative UM GPA required for graduation will be 2.00 and will include only University of Minnesota coursework. A minimum UM GPA of 2.00 is required in each UMD undergraduate major and minor. No academic unit may impose higher grade point standards to graduate.
- Diploma, transcripts, and certification will be withheld until all financial obligations to the University have been met.

Program Requirements

- 50% of all required major coursework taken under LSBE subjects (excluding ECON 1022, 1023 and 2030) must be taken from LSBE faculty.
- No more than 9 credits of required major coursework can be taken from non-LSBE faculty, unless an exception is approved by petition.
- Graduation Requirements:
 - 2.0 or better University of Minnesota cumulative GPA,
 - 2.00 or better Required Major Coursework GPA
- Non-LSBE statistics courses cannot be used to fulfill elective requirements.

Advanced Writing and Professional Development (4 cr)

[BCOM 3141](#) - Business Communications (3.0 cr)

or WRIT 3121 - Advanced Writing: Business and Organizations (3.0 cr)
LSBE 3000 - Career Development for the Business Professional (1.0 cr)

LSBE Core (18 cr)

MGTS 3301 - Production and Operations Management (3.0 cr)
FIN 3601 - Corporate Finance (3.0 cr)
MGTS 3401 - Organizational Behavior and Management (3.0 cr)
MKTG 3701 - Principles of Marketing (3.0 cr)
MGTS 3801 - Human Resource Management (3.0 cr)
MGTS 4481 - Strategic Management (3.0 cr)

Business Analytics (21 cr)

Group A (15 cr)

MIS 3220 - Database Management and Design (3.0 cr)
ECON 3020 - Applied Statistics for Business and Economics II (3.0 cr)
BA 4410 - Data Visualization (3.0 cr)
or BA 5410 - Data Visualization (3.0 cr)
BA 4420 - Data Analytics for Managerial Decision Making (3.0 cr)
or BA 5420 - Data Analytics for Managerial Decision Making (3.0 cr)
BA 4490 - Business Analytics Capstone (3.0 cr)
or BA 5490 - Business Analytics Capstone (3.0 cr)

Group B (3 cr)

Take 1 or more course(s) totaling 3 or more credit(s) from the following:

- BA 4440 - Spreadsheet Modeling and Decision Analysis (3.0 cr)
- BA 4460 - Big Data Analytics (3.0 cr)

Group C (3 cr)

Additional Group B course or other analytics courses approved by petition.

Take 1 or more course(s) totaling 3 or more credit(s) from the following:

- BA 4497 - Business Analytics Internship (3.0 cr)
- ECON 3030 - Econometrics I (3.0 cr)
- ECON 4590 - Economic and Business Forecasting (3.0 cr)
- HCM 4580 - Health Services Data and Analysis (3.0 cr)
- MATH 4180 - Solving Industrial Mathematics Research Problems (3.0 cr)
- MGTS 4478 - Supply Chain Management (3.0 cr)
- MGTS 4825 - Human Resource Analytics (3.0 cr)
- MKTG 3711 - Marketing Research (3.0 cr)
- MKTG 3731 - Sales Analytics: An Introduction to Sales Analysis Techniques and Applications (3.0 cr)
- STAT 4050 - Introduction to Statistical Computing (3.0 cr)
- STAT 4060 - Introduction to Biostatistics (3.0 cr)

Supporting Courses (17 cr)

In addition to economics & international requirements listed below, you may complete up to 3 cr of additional internship credits in BA 4497 & upper division (3xxx or above) non-LSBE courses (which excludes ACCT BA BCOM BLAW BUS CIA FIN FMIS HCM INTB LSBE MGTS MIS MKTG or SBE), for a total of 17 cr of supporting courses. NOTE PSY 3020, STAT 3611 & SOC 3155 are equivalent to ECON 2030 and cannot be used to fulfill these requirements. Up to 12 cr from a LSBE 2nd major or minor may be applied.

Economics Requirement

Take exactly 1 course(s) from the following:

- ECON 3xxx
- ECON 4xxx
- ECON 5xxx

International Requirement

Take exactly 1 course(s) from the following:

- AMIN 3410 - Fur Trade in Canada and the United States [CDIVERSITY] (3.0 cr)
- ANTH 3628 - Women in Cross-Cultural Perspective (3.0 cr)
- ANTH 3632 - Latin American Cultures (3.0 cr)
- ANTH 3638 - Peoples and Cultures of the Middle East (3.0 cr)
- ECON 3150 - Development Economics (3.0 cr)
- ECON 3402 - Global Economic Issues (3.0 cr)
- ENGL 3501 - British Literature I [HUMANITIES] (4.0 cr)
- ENGL 3502 - British Literature II [HUMANITIES] (4.0 cr)
- FIN 3649 - International Finance (3.0 cr)
- FR 4412 - Contemporary French Culture and Society [HUMANITIES, GLOBAL PER] (4.0 cr)
- FST 4225 - INTB 4201, Chinese Business and Economics [GLOBAL PER] (3.0 cr)
- FST 4295 - INTB 4211 Innovation in Ireland (GLOBAL PER) [GLOBAL PER] (3.0 cr)
- GEOG 3461 - Geography of Global Resources (3.0 cr)
- GER 4302 - German Women Writers and Filmmakers [HUMANITIES] (4.0 cr)



- GER 4305 - German Cinema [HUMANITIES] (4.0 cr)
- GER 4404 - Contemporary Germany [HUMANITIES, GLOBAL PER] (4.0 cr)
- HCM 4560 - International Comparisons of Health Care Systems (3.0 cr)
- HIST 3243 - Europe in Crisis in the 20th Century (4.0 cr)
- HIST 3244 - Holocaust & Genocide in Europe in the 20th Century (4.0 cr)
- HIST 3264 - Russian Empire under the Tsars: Russia under the Romanovs from Peter the Great to Lenin [GLOBAL PER] (4.0 cr)
- HIST 3386 - The United States and the World since 1898 (4.0 cr)
- HIST 3615 - Modern Africa (4.0 cr)
- HIST 3616 (*Inactive*) (4.0 cr)
- HIST 3726 - Modern Middle East: 18th Century-Present [GLOBAL PER] (4.0 cr)
- HIST 3825 - Islamic History from Muhammad to the Ottomans [GLOBAL PER] (4.0 cr)
- MGTS 4474 - International Management (3.0 cr)
- POL 3451 - Theories of International Relations (4.0 cr)
- POL 3456 - International Security: War and More (4.0 cr)
- POL 3517 - Western European Political Systems (4.0 cr)
- POL 3570 - Politics of Developing Nations (3.0 cr)
- SOC 3945 - Social Stratification (3.0 cr)
- SPAN 3042 - Civilization, Cultures and Communities in Latin America [HUMANITIES, GLOBAL PER] (4.0 cr)
- SPAN 3044 - Civilization, Cultures and Communities of Spain [HUMANITIES, GLOBAL PER] (4.0 cr)
- SPAN 4011 - Latin American Prose [HUMANITIES] (4.0 cr)
- SPAN 4018 - Latin America From Within [HUMANITIES] (4.0 cr)
- SPAN 4027 - Contemporary Literature and Culture of Spain [HUMANITIES] (4.0 cr)
- WS 3000 - Transnational Perspectives on Feminism [SOC SCI, GLOBAL PER] (3.0 cr)
- WS 3001 - Gender Relations in the Global South [GLOBAL PER] (3.0 cr)
- WS 3002 - Latin American Women: Culture and Politics (3.0 cr)
- WS 3400 - Women and Film [GLOBAL PER] (3.0 cr)
- ACCT 4505 - International Accounting (3.0 cr)
or ACCT 5505 - International Accounting (3.0 cr)
- ECON 4410 - International Economics (3.0 cr)
or ECON 5410 - International Economics (3.0 cr)
- MGTS 4861 - International Human Resource Management (3.0 cr)
or MGTS 5861 - International Human Resource Management (3.0 cr)
- MKTG 4774 - International Marketing (3.0 cr)
or MKTG 5774 - International Marketing (3.0 cr)