SUPPLY CHAIN ANALYTICS - GRADUATE CERTIFICATE

The supply chain analytics certificate courses comprise the major foundational topics in any supply chain management curriculum, providing necessary background for further advanced study. The four courses have been specifically selected in order to teach students core concepts and targeted skills in the fundamentals of supply chain analytics.

Designed for nondegree students including working professionals, our online graduate certificates allow students to enroll part-time and advance at their own pace. Following the same curriculum provided to students on campus, online certificate students participate in coursework both synchronously (scheduled delivery time) and asynchronously (no scheduled delivery time). As students progress through the certificate, they have the option to become graduate degree-seeking, applying their certificate coursework toward a formal MS supply chain degree.

Students educated in supply chain analytics will have the knowledge to expand their careers as analysts in supply chain network design, logistics, purchasing and procurement, inventory and production control, transportation network design, facilities location planning, demand forecasting, long term aggregate planning and sub-specialties therein.

Requirements

Admission Requirements

To be considered for the graduate certificate, applicants must possess an undergraduate degree. Leeds graduate students can apply through the Leeds online application (https://leeds.apply.colorado.edu/apply/).

Course Prerequisite

Students applying to the graduate certificate are required to complete a course prerequisite. The course prerequisite may be satisfied by *one* of the following:

- Successful completion of MSBC 5460 (or successful completion of similar coursework at another university)
- Successful completion of the non-credit Coursera course Supply Chain Management Strategy
- Relevant work experience

Students seeking to meet the prerequisite with experience will need to demonstrate and document proficiency in the relevant topic area by submission of work history and work product. A qualifying test may also be required.

Additional Materials

In addition, applicants must provide:

- Statement of purpose (1–2 pages) explaining how the supply chain analytics graduate certificate will further their professional and/or personal interests
- Formal transcript from an accredited institution of higher education showing proof of completion of an undergraduate degree
- Current resume
- One letter of recommendation

Courses

Supply chain analytics certificate courses are listed below. All courses must be passed with a B grade or better to count towards the certificate.

Code	Title	Credit Hours
MSBC 5070	Survey of Business Analytics	3
MSBC 5180	Machine Learning in Python	3
Choose 2 from the following:		6
MSBC 5190	Modern Artificial Intelligence: Introduction to AI for Business	
MBAX 6410	Process Analytics	
MBAX 6843	Supply Chain and Operations Analytics	
Total Credit Hours		**12**

Plan(s) of Study

Year One

Fall Semester		Credit Hours
MSBC 5180	Machine Learning in Python	3
	Credit Hours	**3**
Spring Semester		
Electives (see Requirements tab)		6
	Credit Hours	**6**
Summer		
MSBC 5070	Survey of Business Analytics	3
	Credit Hours	**3**
	Total Credit Hours	**12**

New students will work out a plan with an advisor to meet all certificate requirements in their desired timeline. Some courses are only offered in specific semesters. Students will choose 2 of the following 3 classes in the spring: MBAX 6843, MBAX 6410 and MSBC 5190.

Learning Outcomes

By the completion of the program, students will be able to:

- Explain the principles and techniques of data management, exploration and visualization.
- Demonstrate proficiency in analytics software and tools.
- Understand and make recommendations regarding ethical impacts of supply chain decisions.
- Interpret and present data-driven insights clearly and effectively to stakeholders.
- Build analytical models to solve real-world supply chain problems.