# Bachelor of Business Administration in Supply Chain Analytics

The supply chain analytics major is designed to equip students with the knowledge and skills necessary to leverage data and model-driven methodologies and analytical techniques for improving supply chain operations, enhancing decision-making, and driving operational excellence. Future career paths include: Supply Chain Analyst, Procurement Analyst, Demand Forecasting Analyst, and Logistics Analyst.

This major combines principles from operations management, data science, programming, and data analytics to prepare students for supply chain optimization careers in various industries. **120 credit hours.**

**Business Analytics**

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**What is Business Analytics?**

Business Analytics equips students with knowledge and skills to use descriptive, predictive, and prescriptive analytics across various business domains. This program is tailored for students interested in applying quantitative methods to extract insights from data and drive organizational value through data and model-driven decision-making.

**Should I have to be good at Programming?**

Do you have to be good at computer programming to be a Business Analytics major? Our intention is not to make you a software programmer, but we believe that knowledge of at least one programming knowledge will be helpful for you. Many Business Analytics majors will be more effective at their careers with knowledge in Python, R, and SQL. These technical skills are essential in working with data. Therefore, one programming language is required for this major. If you like programming, on the other hand, you can take multiple coding courses too!

**What is the difference between Data Science and Business Analytics?**

Data Science and Business Analytics both involve data analysis but differ in focus and application. Data Science is broader, emphasizing statistical and computational methods to extract insights from large datasets across various domains, often involving advanced machine learning, computer vision, and natural language processing methods. It requires strong programming and mathematical skills.

Business Analytics is more business-specific, focusing on using data to solve business problems, improve processes, and inform strategy, often using BI tools and requiring strong business and analytical skills with less emphasis on advanced programming. Data scientists typically have backgrounds in technical fields, while business analysts specializing in analytics often come from business-related backgrounds.

**What jobs do Business Analytics graduates get to work on?**

Business Analytics graduates are equipped to analyze data and provide insights to drive business decisions and improve performance. They work at the intersection of business processes and analytics, using various analytical tools and techniques to solve business problems. Here is a sample listing of jobs that Business Analytics graduates can pursue:

* Data analyst
* Business intelligence analyst
* Marketing analyst
* Operations analyst
* Healthcare analyst
* Risk analyst
* Business consultant
* Analytics manager

**How do my Job Prospects Look Like? Is there a risk of automation or outsourcing of these jobs?**

The U.S. Bureau of Labor Statistics reports that jobs related to operations research and logistics (a close field allied to business analytics as the data on business analytics is yet to be analyzed) are expected to grow faster than average from 2022 to 2032. The median annual salaries for operations research analysts were $83,640 in 2023, compared to the median of all occupations of $48,060.

Please see the link for more information on related jobs, summaries, education, and median pay: [**https://www.bls.gov/ooh/math/operations-research-analysts.htm**](https://www.bls.gov/ooh/math/operations-research-analysts.htm)

As for outsourcing and the risk of automation, these concerns have been raised in many fields, including all fields in operations and technology management. However, this doesn't mean there won't be any business analytics jobs in the USA. The United States has a complex and dynamic economy, and it continues to produce a significant number of analytics jobs each year. While some routine tasks may be automated or outsourced, many analytics jobs require deep understanding of local markets, regulations, and business practices, as well as strong problem-solving and communication skills. These factors make it challenging to fully outsource these roles. With ongoing advancements in AI, IoT, and advanced analytics, we believe that Business Analytics will remain an area of job growth and innovation for years to come.

**Management Information Systems**

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**What is MIS?**

MIS stands for Management Information Systems. It is the study of how to use technology in an organization to improve business outcomes. A supermarket could use an information system to process transactions, manage its inventory, and learn about which products sell the best. Imagine doing all this using file folders; that'd be a mess and not very effective!

**Should I have to be good at Programming?**

Do you have to be *good* at computer programming to be an MIS major? Our intention is not to make you a software programmer, but we believe that knowledge of at least one programming knowledge will be helpful for you. Only one programming course is required for you in UP’s curriculum to understand the role of programming in developing information systems. **There are many MIS jobs that don't require programming**. If you like programming, on the other hand, you can take multiple coding courses too!

**What is the difference between Computer Science (CS) and Management Information Systems (MIS)?**

Imagine you are a computer science (CS) major. You will have to focus on writing computer code to create a new program. Let's say a bunch of CS majors create a security software. But just purchasing security software doesn't make a client organization secure. They will have to audit their current systems, find out security vulnerabilities, create a security plan, use/modify security software to meet their needs, and train their users. Technology must be used effectively with people and business processes to make the company secure. It is the job of MIS majors to make this happen. In summary, the focus of CS majors is on writing reliable software, and the goal of MIS majors is to determine the business requirements of an organization and strategically use technology to meet business outcomes.

**What jobs do MIS graduates get to work on?**

Many jobs in MIS work at the intersection of business needs and technology. As an MIS major, you will have to be a bridge between "business" and "technology." It is an area with many employment possibilities, but here is a sample listing of jobs that MIS graduates get to do:

* Business Analyst
* Business Systems Analyst
* Database Analyst
* Database Administrator
* IT Consultant
* Business Application Developer
* IT Project Management
* IT Manager

**How do my Job Prospects Look Like? Will these Jobs be Outsourced?**

The U.S. Bureau of Labor Statistics reports that MIS-related jobs are expected to grow much faster than the average for all jobs from 2022 to 2032. The *median* annual salaries for MIS-related professions were $104,420 in 2023, compared to the median of all occupations of $48,060.

Please see the link for the types of MIS jobs, summary, education, and median pay: [**https://www.bls.gov/ooh/computer-and-information-technology/home.htm**](https://www.bls.gov/ooh/computer-and-information-technology/home.htm)

As for outsourcing and the risk of automation, these arguments have been around for more than two decades that there won't be any MIS or CS-related jobs in the USA. This is simply not true! The United States is the world's largest economy, and it continues to produce a large number of technology jobs every year. It is true that some portion of jobs are automated or outsourced, but this is not true for the entire category of MIS jobs. Because many MIS jobs require gathering requirements, communicating, working with programmers, and problem-solving, it is hard to move these jobs overseas. As we see many technology advancements in AI, Cloud, and Cybersecurity, we believe that MIS will be an area of job growth for many years to come.