

DECISION & SYSTEM SCIENCES

Business Intelligence and Analytics (BIA) majors acquire general business skills plus knowledge and experience in the theory of decision making, process analysis, database management, decision support systems, data visualization, data mining, statistical analysis, business analytics, competitive intelligence, knowledge management, business intelligence, supply chain, operations management, and enterprise security. Technology employed in the DSS curriculum includes Microsoft Office, Oracle, SAP, Python, R, JMP, Minitab, Tableau, Qlik and Power BI.

The Business Intelligence and Analytics (BIA) minor is designed to enhance the skill set of both business and arts & sciences majors so that they are fundamentally better equipped to succeed in a data-intensive world. Organizations typically gather information in order to assess their operating environment to conduct marketing research or customer relationship management, and to perform competitor analysis. Organizations accumulate business intelligence in order to gain sustainable competitive advantage and regard such intelligence as a valuable core competence.

Most disciplines offered within a business school have a very clearly defined path. Students who study business intelligence and analytics at Saint Joseph's University take a different approach. The breadth of subjects explored within the BIA programs uniquely prepare students for careers in technology management and management consulting.

Job prospects and potential salary for our graduates and pay are excellent. Our programs were developed by industry for industry. BIA programs are designed for people who want to distinguish themselves from their peers by acquiring a set of essential skills that really make a difference in today's organizations.

The Artificial Intelligence for Business (AIB) major and minor are designed to provide an opportunity to all business majors. They will gain an understanding of the applied use of data mining, data visualization, and machine learning and artificial intelligence. The International Data Corporation (<https://www.idc.com/>) predicts that data will grow from 33 zettabytes to 175 zettabytes by 2025. A zettabyte is approximately the size of a trillion gigabytes. This is a 61% compounded annual growth rate. Around half of this data will likely live in the cloud. The numbers are staggering and the implications are huge. AIB give analysts the ability to process and find meaning in these extremely large data sets. AIB are not only prized skills, but will likely become the most demanded skill for job applicants in the coming years.

The Supply Chain Management (SCM) major and minor present additional, separate and unique, programs of study for BIA majors and minors, as well as other majors in the business school. By adding a major in Supply Chain Management to the existing curriculum, students will obtain the specialized knowledge required for supply chain decisions and efficiencies in operations. This area of study has been around for many years, but with major disruptions and increased technical applications, is one of the most important frontiers in industry and will be important for many years to come.

Master of Science in Business Intelligence and Analytics program prepares students to be leaders in their organizations who can leverage organizational knowledge and find success in their data. This focus prepares 21st century professionals to drive organizational performance

in all functional areas by using data to develop new opportunities, gain competitive advantage, identify effective strategies, and improve decision-making.

Master of Science in Medical Health Informatics program prepares students to implement and utilize information technology to support any healthcare organization. Our students are guided by a philosophy of inquiry, insight, and innovation. Students will be challenged to think boldly and to seek out and answer difficult questions using healthcare data. The learning environment will prepare students for the challenges of a professional career in a healthcare setting. The program will help students to develop the competencies and acquire the practical tools to succeed in today's digital healthcare environment.

Please note: Due to the nature of software applications used in our majors, we ask that students purchase windows based operating systems. The recommended configuration may be found here (<https://www.sju.edu/haub-school-business/resources/laptop/>).

Faculty

Well respected in the business intelligence and analytics industry, the faculty members in Saint Joseph's University's decision and system sciences department bring a wide range of applicable experience. The majority of our faculty members have been published in well-regarded technical publications and bring hands-on knowledge from previously held high-level positions with prestigious organizations and Fortune 500 companies.

Department of Decision and System Sciences Faculty & Staff (<https://www.sju.edu/departments/dss/faculty-staff/>)

Programs Undergraduate Majors

- Artificial Intelligence for Business (<https://academiccatalog.sju.edu/business/decision-system-sciences/machine-learning-business-applications-major/>)
- Business Intelligence & Analytics (<https://academiccatalog.sju.edu/business/decision-system-sciences/business-analytics-intelligence-major/>)
- Supply Chain Management (<https://academiccatalog.sju.edu/business/decision-system-sciences/supply-chain-major/>)

Undergraduate Minors

- Artificial Intelligence for Business (<https://academiccatalog.sju.edu/business/decision-system-sciences/minor-machine-learning-business-applications/>)
- Business Intelligence & Analytics (<https://academiccatalog.sju.edu/business/decision-system-sciences/minor-business-intelligence-analytics/>)
- Supply Chain Management (<https://academiccatalog.sju.edu/business/decision-system-sciences/minor-supply-chain-mgt/>)

Graduate

- Business Intelligence and Analytics (<https://academiccatalog.sju.edu/business/decision-system-sciences/ms-business-intelligence-analytics/>)

- Dual MHI/MS Health Informatics/Business Intelligence (<https://academiccatalog.sju.edu/business/decision-system-sciences/health-informatic-business-intell-dual/>)

Graduate Certificates

- Data Analytics (<https://academiccatalog.sju.edu/business/decision-system-sciences/certs-data-analytics/>)
- Data Management (<https://academiccatalog.sju.edu/business/decision-system-sciences/certs-data-manageament/>)
- Data Science (<https://academiccatalog.sju.edu/business/decision-system-sciences/certs-data-science/>)