RUTGERS
Business School
Newark and New Brunswick

Business Analytics & Information Technology (BAIT) Major - New Brunswick

The Field

Business Analytics and Information Technology (BAIT) is Rutgers Business School's quantitative and computing major. It covers information technology, data analysis, and decision support, which are becoming more strongly intertwined and are essential components of the modern enterprise.

Most modern organizations use computer systems to manage data and operations, analyze data, and support operational decision-making. The BAIT major trains students in the technology and quantitative skills needed for the converging fields of information technology and business analytics.

Most business information systems currently being developed include not only aspects of data management and online transactions, but also sophisticated data analysis and often aspects of decision support, helping organizations to make better decisions, or in some cases automating operational-level decision making. BAIT prepares students to work on all levels of developing such systems. Graduates will be particularly well-positioned to work on "big data" projects, analyzing data on unprecedented scales.

Key Facts:

- BAIT students have been recruited by ADP, Becton Dickinson, Burlington Coat Factory, Ernst and Young LLP, Goldman Sachs, Mondelez, New York Life Investment Management, PricewaterhouseCoopers, Teradata, Verizon, Deloitte, and UPS

- Business graduates with strong information technology and analytical skills are highly prized, with demand exceeding supply for most of the last decade

- The BAIT major teaches skills in Information Technology, Data Analysis, and Decision Analysis and Modeling

Career Paths

Graduates can expect to work on information technology project development teams in a wide variety of organizations. The projects concerned will involve collecting, managing, analyzing, and acting on business data. In addition, graduates may work directly on analyzing particular datasets or operational decisions and plans. Graduates will work in all employment sectors, including consulting, consumer products, financial services, government, health care, information services, retail, technology services, and transportation/logistics.

Compensation

According to the Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, 2019 Edition, Computer Systems Analysts, graduates with bachelor's degrees similar to business analytics & information technology received offers with a median salary of $90,920.

The Field

Required Courses (12 credits)

COURSE#	TITLE	CREDITS
33:136:470	Business Data Management	3
33:136:400	Business Decision Analytics under Uncertainty	3
33:136:388	Foundations of Business Programming	3
33:136:485	Time Series Modeling for Business	3

Elective Courses (9 credits)

Group 1

COURSE#	TITLE	CREDITS
33:136:494	Data Mining for Business Intelligence	3
33:136:465	Enterprise Architecture	3
33:136:471	Information System Security	3
33:136:487	Large-Scale Business Data Analysis	3
33:136:486	Optimization Modeling	3
33:136:405	Risk Modeling	3
33:136:450	Investment Modeling with 'R'	3
33:136:455	Introduction to ERP	3

Group 2

At most two courses can be chosen from the following list of approved electives in other business majors, computer science, economics, mathematics, statistics, and supply chain management. Please note that most of these courses have prerequisites in their respective departments.

COURSE#	TITLE	CREDITS
01:960:467	Applied Multivariate Analysis	3
01:198:425	Computer Methods in Statistics	4
01:198:419	Computer Security	4
01:198:344	Design and Analysis of Computer Algorithms	4
01:220:481	Economics of Uncertainty	3
33:799:450	Fundamentals of Supply Chain Solutions with SAP	3
01:220:482	Game Theory	3
01:198:352	Internet Technology	4
01:198:440	Introduction to Artificial Intelligence	4
01:960:476	Introduction to Sampling	3
01:640:478	Introduction to Stochastic Processes	3
01:640:354	Linear Optimization	3
01:220:485	Mathematical Economics	3
01:220:487	Operations Research II	3
01:198:336	Principles of Information and Data Management	4
01:198:314	Principles of Programming Languages	3
01:960:463	Regression Methods	3
01:198:431	Software Engineering	4
01:198:213	Software Methodology	4
01:640:424	Stochastic Models in Operations Research	3

Visit our website for more information:

https://myrbs.business.rutgers.edu/undergraduate-new-brunswick/business-analytics-and-information-technology-major