

Research Competencies for BBA Students

1. LIBRARY RESOURCES AND THE INTERNET. Students should be able to use library resources and the Internet to:
 - a. identify and search for information, data, and authoritative literature;
 - b. access news outlets, professional and academic journals, and other publications, [and know the difference between the popular press, trade, and academic publications];
 - c. use both public and subscription services, and avoid overreliance on Google, Yahoo!Finance and other web search engines; and
 - d. access relevant government rules, regulations, filings, and publications.
2. AUTHORITATIVE DATA. Students should:
 - a. know the difference between primary- and secondary-source data;
 - b. be able to use library resources and the Internet to locate and collect primary and secondary source data;
 - c. appreciate the importance of obtaining primary source data, and of checking secondary source data for accuracy, reliability, currency, and its value as authority;
 - d. gather evidence from reliable and authoritative sources to support findings, recommendations, or conclusions; and
 - e. be able to cite sources effectively.
3. SEARCH. Students should be able to use the search features in information databases, including gaining proficiency employing keyword searches and Boolean search terms.
4. DATABASES: Students should be proficient using databases prevalent in their discipline / major.
5. LIBRARIANS. Students should know the role and value of librarians, and have experience interacting with librarians to learn about information and data sources.
6. JUDGMENT AND ETHICS. Students should be able to exercise judgment in gathering, storing, maintaining, and using confidential or proprietary data, and to use such data in a lawful and ethical manner.
7. TECHNOLOGIES. Students should be able to use technologies for researching, gathering, and using information and data.

Research Skills, Projects, and Resources

Research Skills, Projects, and Resources for Accounting Majors

The AICPA Perspective and the CPA Exam

The American Institute of Certified Public Accountants (AICPA) established a core competency framework to lay out the skills that students entering the accounting profession should possess. Research skills figure prominently in that framework. Ever-evolving rules and regulations in all areas of accounting demand that accounting professionals be equipped to search the professional literature, identify the relevant information, and render appropriate judgment.

To ascertain that future CPAs have the requisite research skills, the CPA exam asks research simulation questions that require citing an authoritative source that points to the solution of an accounting issue. The exam also has task-based simulations asking multiple questions from a case to test a candidate's ability to analyze a complex problem and formulate a solution. Both research and task-based simulations provide easy access to authoritative sources during the exam. These authoritative sources are:

Financial Accounting:

[Financial Accounting Standards Board \(FASB\) Accounting Standards Codification Database](#)

Access to this database is provided through American Accounting Association. Accounting professors have the username and password for Baruch students to gain access.

Auditing and Attestation:

Public Company Accounting Oversight Board (PCAOB) [Auditing](#) and [Attestation](#) Standards Publicly accessible.

Ethics:

[American Institute of Certified Public Accountants \(AICPA\) Code of Professional Conduct](#)

Publicly accessible.

Tax:

[IRS Internal Revenue Code](#)

Publicly accessible.

For the simulation questions, CPA candidates can access these databases with the click of an icon. Once accessed, each database provides a table of contents with hyperlinks to more detailed content. There is also the capability to use basic keyword search and advanced search, allowing Boolean searches. Once the initial set of search results is extracted, one can do keyword search within those results to arrive at more specific information (*i.e.* search within). Due to voluminous rules and regulations with which accountants must always be current, using the search features of these databases efficiently and effectively is an essential skill for all practicing CPAs.

CPA Exam Research Simulations

The following are examples of CPA exam research simulations. Professors assign homework problems that are similar to these simulations to foster the research skills of accounting students. Textbooks also provide many good exercises to facilitate student engagement in authoritative source research.

- Lanny Financial offers credit cards to college students at a variable rate on outstanding balances. The company also charges an annual fee for using the line of credit. Which section of the authoritative literature best defines how and when Lanny should recognize the annual fee revenue?

The relevant database to search to answer this question is the FASB Accounting Standards Codification Database

- You graduated from college recently and joined a CPA firm as a junior assistant. You have been assigned to the audit of PJ Wholesale, Inc. The CEO of the company cannot understand why a supervisor from your firm needs to review your audit work, given that you have a formal accounting education and took auditing courses in college. Which section of the Professional Standards addresses this issue and will be helpful in responding to the CEO?

The relevant database to search to answer this question is the AICPA Code of Professional Conduct

- Honestown Securities, a company with a March 31 year end, deals in copper and gold, and derivatives associated with those commodities. In the past, Honestown has elected to value its stock-based securities at the fair market value of the stock as of March 31 and would like to do the same with its copper and gold. Which section and subsection of the Internal Revenue Code allows Honestown to make this election?

The relevant database to search to answer this question is the IRS Internal Revenue Code

CPA Exam Task-based Simulations

Task-based simulations (distinct from the Research Simulations) are case studies that allow CPA candidates to demonstrate their knowledge and skills by answering a series of questions. Candidates have access to the above authoritative sources for the task-based simulations, which are similar to the end-of-chapter questions with multiple parts typically found in accounting textbooks. Professors often modify and assign those problems to ensure that students are proficient in searching the authoritative sources to formulate solutions to comprehensive problems.

General Research Sources: Databases

The Baruch Library provides a list of [most commonly-used accounting databases](#). An indispensable resource for financial and accounting data is the SEC's [EDGAR Pro](#). It provides access to all public company disclosures the most prominent of which are annual reports (10K), quarterly reports (10Q), and current reports (8K).

Accounting professionals needing access to any publicly traded company's financial statements / disclosures ought to be familiar with navigating EDGAR. Some simple questions that EDGAR can be used to answer are the following:

- Pick a company and locate its financial statements and the accompanying notes to answer the following questions:
 - (a) What were the company's total assets on December 31, 2019 and on December 30, 2020?
 - (b) How much cash and cash equivalents did the company have on December 31, 2020?

- (c) What were the company's research and development costs in 2019 and in 2020?
 - (d) What were the company's revenues in 2019 and in 2020?
 - (e) In the company's financial statements and related notes, identify the items that may require adjusting entries for deferrals and accruals.
- Pick two companies that are competitors (e.g. GM and Ford). Locate their financial statements and the accompanying notes to answer the following questions:
 - (a) Identify any differences in income statement format between these two companies.
 - (b) What are the gross profits, operating profits, and net incomes for these two companies over the 3-year period 2018–2020? Analyze the data and comment on which company had better financial results over this period.
 - (c) What income statement format do these two companies use to report comprehensive income?
 - (d) Using the high-low method, estimate each company's cost structure variable and fixed cost of sales vis-à-vis its revenues and interpret the differences.

[ABI/INFORM Global](#) and [Business Source Complete](#) are two databases that feature an extensive set of academic and practitioner-oriented publications. These databases allow searching for real world cases of specific accounting rule applications and accounting practices. CPAs can easily research and analyze an accounting topic/event using the publications included in these databases. While these databases are not freely available over the internet, they are accessible to Baruch students and practitioners whose firms have a subscription.

General Research Sources: Accounting Journals and Magazines Accessible to Accounting Professionals

[Journal of Accountancy](#) – Available on ABI/INFORM; published by the AICPA
The Journal of Accountancy is the ultimate resource for today's CPA, providing daily professional and regulatory updates, breaking news and videos.

[The CPA Journal](#) - Available on ABI/INFORM; published by the NY Society of CPAs
The CPA Journal provides analysis, perspective, and debate on the issues that affect the CPA profession. Major topics include accounting and auditing, taxation, personal financial planning, finance, technology, and professional ethics.

[CFO Magazine](#) - Available on Factiva; published by Industry Dive
CFO Magazine provides insights into the most pressing issues in business as well as practical advice and innovative thinking on the technological forces that are disrupting industries and transforming the chief financial officer's role.

[Accounting Today](#) - Available on Factiva; published by Arizent
Accounting Today focuses on the industry's most important concerns, including tax law, accounting standards, technology, audit and assurance, and wealth management. Its analysis and breaking news, opinion and expert advice, and practical business-building ideas enable partners, principals and practitioners to make informed decisions about their business and the clients they serve.

[Strategic Finance](#) - Available on ABI/INFORM; published by the Institute of Management Accountants
Strategic Finance covers all the important topics and trends that impact accountants and financial professionals in business, including sustainability, risk management, strategy, financial

planning, the changing roles of the CFO and the finance function, budgeting, capital decisions, technology, careers, leadership.

[The Tax Advisor](#) - Available on ABI/INFORM; published by the AICPA

The Tax Advisor is a valuable monthly resource for the latest tax-planning techniques and tax-saving methods. Its in-depth analysis and clean format make it a premier source of cutting-edge tax strategies for even the most knowledgeable tax practitioner and corporate executive.

Potential Research Requirements and Resources for *Finance* Majors

Types of Research:

Company and other Economic Entity Research – The economic entity is a key level of investigation and research in finance. Usually the entity is a company, and the research may support efforts relating to equity investments, debt investments, possible merger and acquisition or corporate control activity, regulation or enforcement, additional fixed investment, reporting and agency issues, cross-border activities, and more. Occasionally, particularly for debt investments, the entity might be a government -- national, regional or local -- or a government-related organization.

Students will research the sources and levels of risk, simultaneously becoming aware of different ways of measuring risk. Students will also assess expected return, both from the vantage points of their own expectations and the expectations of the market as a whole. In formulating their risk and return analyses, students might investigate the business activities of a company in depth, considering factors such as market potential, revenue strategies, competitive threats, potential obstacles, technological capabilities, etc.

Even as an ever-increasing amount of company information becomes publicly available, some important company-level information is best obtained from paid sources. At Baruch access to this information comes in the form of library and Subotnick Financial Center subscriptions.

Examples of Public Sources: SEC-Edgar, Yahoo Finance

Examples of Subscription Sources: Bloomberg, Capital IQ (McGraw Hill/S&P), Factiva, WRDS Database Contributors

Industry and Market Research – Effective research in finance includes understanding the trends in specific industries and markets, including size, pace of change, success factors, and disruption possibilities. It includes having an awareness of the overall macroeconomic, cultural, legal and political environments.

Examples of Public Sources: U.S. Census Bureau, U.S. Bureau of Labor Statistics, Penn World Tables

Examples of Subscription Sources: IBISWorld, MarketResearch.com, Mintel Market Sizes

Academic Research – Undergraduate students in finance should be able to access and to gain some understanding from academic research in finance.

Examples of Public Sources: Google Scholar

Examples of Subscription Sources: EBSCOhost

Historical Performance Data – Assessing historical measures of risk and return provide a starting point for projections about the future. True total return requires more effort to track than simple reports of asset prices.

Examples of Public Sources: Yahoo Finance

Examples of Subscription Sources: Center for Research in Security Prices, Capital IQ (McGraw Hill/S&P)

Resources and Access:

Resource	Description	Access
U.S. Census Bureau	Provides information about the US population and economy	Direct Access: https://www.census.gov

U.S. Bureau of Labor Statistics	Measures labor market activity, working conditions, price changes, and productivity in the U.S.	Direct Access: https://www.bls.gov/
SEC - Edgar	Contains the regulatory filings that companies are required to submit	Direct Access: https://www.sec.gov/edgar.shtml and Edgar Pro via the Newman Library – Database – Edgar Pro
CRSP	The most authoritative database of historical security prices, returns	Access via the Newman Library – Database – CRSP
Bloomberg	A large compendium of data, research, and analytic capabilities	Access via the Subotnick Financial Services Center
WRDS Database	An extremely powerful collection of information providers, including Eventus, FactSet (Dow Jones), and ISS	Access via the Newman Library – Database – WRDS
EBSCOHost	Business database, providing the leading collection of bibliographic and full text content	Access via the Newman Library – Database – EBSCOHost
Factiva	Global business news from newspapers, magazines, and trade journals, including information on companies and industries	Access via the Newman Library – Database – Factiva
Capital IQ	From McGraw Hill/S&P, provides company information and performance data	Access via the Subotnick Financial Services Center
Mintel Market Sizes	Global industry information, including market share, market size, segmentation, growth rates	Access via the Newman Library – Database – Intel Market Sizes
IBISWorld	Provides U.S. industry analysis and global industry reports	Access via the Newman Library – Database – IBISWorld
Google Scholar	Using Boolean search, students may research articles and journals	To access some journal articles, students may need to use the Newman Library. Scholar.google.com
Yahoo Finance	An accessible source for the basics	https://finance.yahoo.com/
Penn World Tables	Country economic information including trade and capital flows	Direct Access: https://www.rug.nl/ggdc/

Research Requirements and Resources for *Marketing Majors*

Types of Research

Marketing professionals engage in the following broad types of research:

Market Research: Marketing professionals conduct research at disaggregated and aggregated levels. At the disaggregated level, students research customer attitudinal behaviors, purchase patterns, demographic and psychographic outlook, search and social sharing patterns and behavioral response to marketing communications. At the aggregated level, students investigate market consumption and purchase trends that vary by industry and geographies, firm performance and advertising response.

Industry Trends: Research industry-specific trends both within and across geographies to understand the change in the market over the years and inform their prediction of future trends.

Data and Information Sources

Marketing professionals predominantly conduct their research using proprietary data obtained from the firm for which they work. Attitudinal and psychographic information about customers is acquired through surveys and focus groups conducted by the firm or third-party services contracted by the firm. Marketing professionals also have access to the [IRI Data cloud](#) and [Nielsen Data to inform decision-making](#). Marketing executives (with Digital Marketing and Analytics background) are expected to be proficient obtaining data using web analytics portals such as Google Adwords, [Google Web Analytics](#), [Adobe Analytics](#) [Facebook Business Suite](#)).

Baruch Students can access public and private databases through the Baruch Library. The Library has a [listing of databases](#) that a marketing student can employ to obtain information and data. The Library also provides tutorials for using several of the databases listed under the marketing category (e.g., [Mintel](#)). Additional help in accessing databases and/or acquiring restricted database components is provided by librarians.

A list of resources and access are provided below:

Information/Database Resource	Description	Access
Business Source Complete	An information resource for obtaining journal articles and key trade publications relevant to Marketing such as Advertising Age, Adweek, Digital Marketing News, Nielsen Insights – to name a few. Students have access to abstracts and full-text content.	Access via the Newman Library – Database – Business Source Complete

ABI/INFORMS	Students have access to journal articles (abstracts and/or full-text)	Access via the Newman Library – Database – ABI/INFORMS
SSRN	Students get access to journal articles, manuscripts of research in progress, current research and forthcoming publications.	Access via the Newman Library – Database – SSRN
Google Scholar	Students get access to journal articles, manuscripts of research in progress, current research and forthcoming publications. Access to prior versions of published work is readily available.	https://scholar.google.com
eMarketer	Students get access to white paper reports and data on digital marketing, media spending and e-commerce from various industries within and across geographies.	Access via the Newman Library – Database – eMarketer
Statistica	Students get access to white paper reports and data on retailing, product consumption, ad spending from various industries within and across geographies.	Access via the Newman Library – Database – Statistica
MarketResearch.com	Students get access to white paper reports on industry performance.	Access via the Newman Library – Database – MarketResearch.com
AdSpender	Students get access to consumer advertising viewing patterns and firm ad spending patterns.	Access via the Newman Library – Database – AdSpender
Simmons Insights	Students get information on aggregate-level media and product consumption patterns.	Access via the Newman Library – Database – Simmons Insights
U.S. Census Bureau	Students can extract information on US population and economy.	https://data.census.gov/cedsci/
Intel	Students can extract information about International Markets and industry performance in these markets	Access via the Newman Library – Database – Intel
Bloomberg Professional Services – Market Data, CRPS and Compustat	Students get exposed to financial information about companies and their quarterly performances	Access via the Newman Library – Database –

Research Requirements and Resources for *International Business* Majors

Types of Research

International Business (IB) professionals conduct research predominantly using aggregated information. At aggregated levels, the data and information gathered are presented in a summary form. In contrast, the data and information can be analyzed for each constituent data unit at disaggregate levels. At the aggregated levels, professionals monitor global news and reports for information on traditional and emerging markets, understand business dynamics (households – income and expenditure, trade, finance and economy etc.) across different countries and employ data to conduct trend analysis and forecasting exercises. The information can be analyzed for each company/firm with an emerging market (quarterly or yearly) at the disaggregated levels. IB professionals also research country-specific cultural compositions, cultural differences across markets, and consumer product and services consumption patterns within and across geographies (e.g. Mintel, Passport)

Data and Information Sources

IB professionals have access to both proprietary data and commonly-used information sources to inform decision-making. The databases students use in the BBA IB degree program are the same or similar to those used by IB professionals.

Baruch Students can access both public and private (subscription-based) databases through the Baruch Library. The Library has a [listing of databases](#) that an IB student can use to obtain data and information. The listing also contains a curation of databases for specific IB courses (MKT 3400 and IBS 5750 – Capstone course), specific topics (e.g. BRICS, Emerging Markets) and frameworks for conducting particular types of research (e.g. PEST analysis of International Markets). The Library website provides tutorials for using several databases listed under the IB category (e.g., [Passport](#), [FitchConnect](#)). Additional help in accessing databases and/or acquiring restricted database components is provided by the librarians at Baruch.

A list of resources useful to IB professionals is provided below:

Information/Database Resource	Description	Access
Business Source Complete	An information resource for obtaining <i>journal articles</i> and key trade publications relevant to international business	Access via the Newman Library – Database – Business Source Complete

ABI/INFORMS	Students get access to <i>journal articles</i> (abstracts and/or full-text)	Access via the Newman Library – Database – ABI/INFORMS
Emerald Insight		Access via the Newman Library – Database – Emerald Insight
SSRN	Students get access to <i>journal articles</i> , manuscripts of research in progress, current research and forthcoming publications.	Access via the Newman Library – Database – SSRN
Google Scholar	Students get access to <i>journal articles</i> , manuscripts of research in progress, current research and forthcoming publications. Access to prior versions of published work is readily available.	https://scholar.google.com
Bloomberg Professional Services – Market Data, CRPS and Compustat Mergent Online	Students get exposed to <i>financial information</i> about companies and their quarterly performances	Access via the Newman Library – Database – Bloomberg Professional Services CRPS Compustat Mergent Online
EMIS	<i>News from emerging market</i> countries about company profiles and industry information, and financial outlook.	Access via the Newman Library – Database – EMIS
FitchConnect	Contains country-level quarterly <i>risk reports</i> , and macroeconomic forecasts	Access via the Newman Library – Database – FitchConnect
Factiva	Global <i>news database</i> containing articles from newspapers, <i>magazines and trade journals</i> globally	Access via the Newman Library – Database – Factive
Intel	Students can extract information about International Markets, industry performance and	Access via the Newman Library – Database –Intel

	cultural differences in these markets	
Passport (Euromonitor)	A necessary information and visualization portal that students need to know about. Students can access market research reports and consumer lifestyles across multiple countries, including the US.	https://www-portal-euromonitor-com.remote.baruch.cuny.edu/
WorldFactBook	Students get access to <i>profiles and statistical indicators</i> of countries globally along with current news and links to selected government Websites.	https://www.cia.gov/the-world-factbook/
Global Edge - Insights by Country		Michigan State University Database
Europa World Plus		New York Public Library Database
Kwintessential		https://www.kwintessential.co.uk/resources-types/guides
WorldDataBank	Analysis and visualization portal containing time series social and development data from multiple countries globally.	https://databank.worldbank.org/home.aspx
Country Commercial Guides U.S. Export Regulations.	Survey of Import/Export regulations prepared by Trade.gov	https://www.trade.gov/ccg-landing-page https://www.trade.gov/us-export-regulations-0
OECD Library	Students get access to an array of resources from the Organisation for Economic Cooperation and Development (OECD) library through its publications, reports and databases.	https://www.oecd-ilibrary.org/

Potential Research Requirements and Resources for Entrepreneurship Major

BBA in Entrepreneurship Graduates are proficient in creative thinking, seeking, and creating opportunities, validating ideas through prototyping, and creating solutions for real world problems in an entrepreneurial manner. These competencies are partially achieved through specific research methods taught throughout the Entrepreneurship Curriculum.

Types of Research:

Market Research – Entrepreneurship graduates research the market through primary research, by conducting surveys, focus groups, customer feedback, observation, conversations with potential users, and product testing. Through secondary research, they identify the potential market size, problem/solution areas, revenue strategies, and the competitive landscape, including the technology competitive scan.

Examples of Public Sources: U.S. Census Bureau, U.S. Bureau of Labor Statistics, Local Government websites.

Resources: Reference Solutions, MarketResearch.com, Crunchbase, eMarketer, Factiva.

Industry trends – Entrepreneurship graduates can research the trends in a specific industry they are interested in, to demonstrate how the market has changed over the years, and to identify what the forecasts and trends are.

Resources: Mintel, IBISWorld, Business Source Complete, International Trade Administration.

PESTEL Analysis – Entrepreneurship graduates may need to conduct a feasibility study of their innovative venture, using PESTEL Analysis of a market/country as a tool. The macro-environmental PESTEL analysis refers to the Political, Economic, Socio-Cultural, Technological, Environmental, and Legal factors that influence an industry and the global environment.

Resources: U.S. Census Bureau, The Global Economy, Business Source Complete, Mintel Market Sizes.

Special Topics Research – Entrepreneurship graduates can research Academic Journals, management, business, psychology, and magazine articles to gain a more in-depth knowledge of entrepreneurship in a specific field or industry, and to apply it in their ventures.

Examples of research: Entrepreneurial culture and its business impact, family firms and sibling rivalry, innovation, gender differences among entrepreneurial leaders, and challenges faced by entrepreneurs within a certain industry.

Resources: SAGE Journals (example: Entrepreneurship Theory and Practice), Entrepreneurship Research Journal, Strategic Management Journal, Business Source Complete, Google Scholar, HBR, MIT Sloan Management Review.

Resources and Access:

Resource	Description	Access
U.S. Census Bureau	It provides information about the US population and economy.	Direct Access: https://www.census.gov/economic-indicators/

		https://data.census.gov/cedsci/
U.S. Bureau of Labor Statistics	It measures labor market activity, working conditions, price changes, and productivity in the U.S. economy to support public and private decision making.	Direct Access: https://www.bls.gov/
Reference Solutions	It provides business and consumer data. It is a good resource to research the competitive landscape.	Access via the Newman Library – Database – Reference Solutions
MarketResearch.com	Market Research reports.	Limited access via the Newman Library – Database – MarketResearch.com
Crunchbase	Find prospects, investments, investors, conduct market research. Understand funding trends.	Limited free access: chunchbase.com
eMarketer	Provides data and insights on digital marketing, media, and commerce.	Access via the Newman Library – Database – eMarketer
Business Source Complete	Business database, providing the leading collection of bibliographic and full text content.	Access via the Newman Library – Database – Business Source Complete
Factiva	Provides global news, business, and financial information from newspapers, magazines, and trade journals. Includes information on companies and industries, and financial profiles.	Access via the Newman Library – Database – Factiva
The Global Economy	It provides global economic data.	Direct Access: theglobaleconomy.com
Mintel Market Sizes	It provides global industry information and country economic data. Industry data includes market size, market segmentation, market and share and Compound Annual Growth Rate.	Access via the Newman Library – Database – Mintel Market Sizes
IBISWorld	It provides U.S. industry analysis and Global industry reports.	Access via the Newman Library – Database – IBISWorld
SAGE Journals	Full access to journals published by SAGE, such as Entrepreneurship Theory and Practice.	Access via the Newman Library – Database – SAGE Journals
Google Scholar	Using Boolean search, students may research articles and journals based on each assignment.	Access: Scholar.google.com . To gain access to journal articles found on Google Scholar, students might need to use the Newman Library.
MIT Sloan Management Review	Management ideas and research to help entrepreneurs capitalize on opportunities.	Access via the Newman Library - ProQuest

Types of Research and Resources for *Human Resource Management* Major

Types of research

Graduates in Human Resource Management are entering the field at a dynamic time. Recent graduates find jobs across all types of industries in both for-profit and not-for-profit organizations. Employment opportunities include recruiting specialists, HR generalists, and HR coordinators. Other graduates go on to graduate school, pursuing degrees in industrial/organizational psychology or human resources.

Organizations are relying on evidence-based human resource management to make critical decisions about how they structure work and nurture the most important resources they have – their people. It has become imperative to understand how to identify resources and data to support our recommendations and claims.

Some resources by subfield

There is no single, comprehensive list of sources for data and information; one must look to the specific question being asked. For example, sometimes HR practitioners will need to explore statutes, cases, and precedent when answering questions about employment law; or they will consult the scholarly research and professional publications to consider, *e.g.* how to facilitate diversity of perspective in a team’s work. In other instances, HR professionals need to collect data from their employees, to assess for example employee engagement, or from government or private sources to analyze benchmarks and trends.

A good starting point for any research project is [our Library’s website](#). There, you have access to a [database guide](#) and multiple field-specific [research guides for management](#), with topics ranging from “managing millennials” to “management of compensation.” Among other resources, the Guide has curated links to white papers, industry reports, and data sources. The Guide also contains valuable career advice.

Other field-specific resources include:

Resource	Description	Access
O*Net OnLine	This is the nation's primary source of occupational information. The O*NET database contains hundreds of standardized and occupation-specific descriptors on almost 1,000 occupations covering the entire U.S. economy. It also includes job growth and salary projections, which might be helpful to students.	Direct Access: https://www.onetonline.org/
U.S. Census Bureau	The Census Bureau provides information about the U.S. population and economy.	Direct Access: https://www.census.gov/economic-indicators/ https://data.census.gov/cedsci/
U.S. Bureau of Labor Statistics	The Bureau measures labor market activity, working conditions, price changes, and	Direct Access: https://www.bls.gov/

	productivity in the U.S. economy to support public and private decision making.	
Business Source Complete	Business database, providing the leading collection of bibliographic and full text content.	Access via the Newman Library – Database – Business Source Complete The video at https://baruch.mediaspace.kaltura.com/media/How+to+Find+Scholarly+Journal+Articles/1_f68zyx0d/8883671 offers guidance into how to conduct a database search
APA PsycInfo	A database of organizational behavior and psychology journals, providing full text content.	Access via the Newman Library – Database – APAPsycInfo
Google Scholar	An academic search engine that can find both unpublished (but highly cited and influential) and published work. It can find pre-prints in the arXiv and published articles in a vast array of journals.	https://scholar.google.com
New York City and State Open Data Initiatives	The city and state each host a website with a tremendous amount of data including a lot of information about jobs.	New York City: https://opendata.cityofnewyork.us New York State: https://data.ny.gov

Potential Research Requirements and Resources for *Operations Management* Major

BBA in Operations Management (analytics track or consulting track) are proficient in the use of data and analytical tools to analyze business operations, manage processes and projects, and make recommendations for improvements. Fundamental to the discipline of operations management is the practice of matching supply and demand for products or services.

Types of Research:

Input markets: matching supply and demand for products or services requires understanding markets and pricing for raw materials and labor, among other key inputs. Students with a BBA in Operations Management therefore should understand how to research and find authoritative data on markets, and use that data to inform operational decisions.

Forecasting: estimating the demand for products or services requires understanding both overall economic conditions, and the market for the firm’s specific products or services. Students with a BBA in Operations Management therefore should understand how to research and find authoritative economic data, and use that data to inform operational decisions.

Supplier and competitor performance: much of the work in operations management requires understanding the relationships between a firm and its suppliers and competitors. Students with a BBA in Operations Management should be able to research the structure of supply chains, evaluate the performance of potential suppliers, and understand the supply chains of competitors.

Resources and Access:

Resource	Description	Access
U.S. Census Bureau	It provides information about the US population and economy.	Direct Access: https://www.census.gov/economic-indicators/ https://data.census.gov/cedsci/
U.S. Bureau of Labor Statistics	It measures labor market activity, working conditions, price changes, and productivity in the U.S. economy to support public and private decision making.	Direct Access: https://www.bls.gov/
Mergent Supply Chain	Offers public company profiles that highlight the relationships between a company's major customers, suppliers, competitors and partners. All supplier connections are identified from SEC filings. Suppliers can be named by the company or can be named as customers by other companies The Supplier list can be sorted or ranked by revenues or market cap. The list can be filtered by product category or geographic	Access via the Newman Library—Mergent Online

	location. The Supplier table can be printed or downloaded to Excel.	
Bloomberg	Bloomberg offers a function for supply chain analysis, SPLC <GO> , that tracks a company's key customers, suppliers and competitors.	Access via the Newman Library
S&P Capital IQ	View both the company's Customers and Suppliers. The list will show the customer and supplier name, the supplier's relationship type and primary industry, and the source document.	Access via the Newman Library
Gartner	Reports on industry trends including operations, supply chain, and technology.	https://library.baruch.cuny.edu/gartner/
Supply chain management review	Industry news on supply chain and logistics	https://www.scmr.com/
Business Source Complete	Business database, providing the leading collection of bibliographic and full text content.	Access via the Newman Library – Database – Business Source Complete
Factiva	Provides global news, business, and financial information from newspapers, magazines, and trade journals. Includes information on companies and industries, and financial profiles.	Access via the Newman Library – Database – Factiva
Dun & Bradstreet Hoovers	Provides Company profiles and management information	https://www.dnb.com/
Mintel Market Sizes	It provides global industry information and country economic data. Industry data includes market size, market segmentation, market and share and Compound Annual Growth Rate.	Access via the Newman Library – Database – Mintel Market Sizes
IBISWorld	It provides U.S. industry analysis and Global industry reports.	Access via the Newman Library – Database – IBISWorld
Institute for Supply Management	Features industry news and information	https://www.instituteforsupplymanagement.org/
Google Scholar	Using Boolean search, students may research articles and journals based on each assignment.	Access: Scholar.google.com . To gain access to journal articles found on Google Scholar, students might need to use the Newman Library.
MIT Sloan Management Review	Management ideas and research to help entrepreneurs capitalize on opportunities.	Access via the Newman Library - ProQuest

Types of Research and Resources for *Information Systems* Major

Types of research

The field of Information Systems covers many fields because computing and management of information is an element in every business endeavor. This sheet provides an overview of data and research sources with a focus on topics relevant to Information Systems.

Some helpful resources

[The Baruch Library's website](#) offers the search function OneSearch to find books, articles, videos, journals, newspapers and magazines. It also contains links to [Databases](#) and Research Guides.

CUNY SPS publishes a guide the [Online Undergraduate Program in Information Systems](#). Among other resources, this guide has links to useful databases, trade journals, and news for Information Systems. The guide also offers [tips about searching](#).

We highlight below some of the best subject-specific resources you will need:

NEWSPAPERS/PERIODICALS

The best source of information for current topics is often newspapers and news services. Good news databases that offer broad-based sources covering all points of view are:

- [Factiva](#). Provides access to newspapers, journals, magazines, television and radio transcripts, photos, etc. from nearly every country worldwide;
- [NexisUni](#) (formerly LexisNexis). Offers access to newspapers, wire services and many other sources of news and current information.

Reliable business newspapers include the Financial Times, Wall Street Journal, and New York Times. Business periodicals with good coverage of technology include the Economist, Wired, MIT Technology Review, Forbes, Fortune, McKinsey Quarterly, and Bloomberg Businessweek.

FINANCIAL DATA PLATFORMS

The [Library website](#) has a page which provides information about access to financial data platforms available to students. Those interested in Finance and Financial Technology should be proficient with these tools.

- Bloomberg Professional. The Bloomberg Professional platform is used by the world's leading banks, corporations and government agencies to research nearly every aspect of business. Employers value students who are proficient in the Bloomberg platform. It is utilized by political and economic leaders for up-to-the-minute information. Bloomberg Professional is a service that allows users to monitor and analyze real-time financial market data and trades. The system is a secure, proprietary network that provides information from over 129 countries and 250 exchanges. Bloomberg also provides "real time" access to an amazing variety of news and information sources from around the globe
- The Bloomberg Professional is accessible from a limited number of dedicated computers in the Subotnick Center. Use the Excel Add-In to download and organize Bloomberg data in

spreadsheets. Details on how to register for the [Bloomberg Certification](#) program is provided. Bloomberg data is subject to a restrictive license; students may only access the system for assignments, projects, and other school-related work.

- Factset and S&P Capital IQ. Baruch students have access to these financial data platforms at the Library and/or the Subotnick Center.
- The [Library](#) and the [Subotnick Center](#) routinely offer workshops into the Financial Data Software; classes are offered at different levels of proficiency. Information can be located on the Subotnick Center webpage.

LIBRARY DATABASES

Large, general-interest databases are available through the library. These databases are used to locate articles of all types--popular, professional, and scholarly:

- *Academic Search Complete*. A large multi-subject database covering every topic with scholarly journals and popular magazines.
- *ABI/ Inform Global*. Business focus, but includes materials from many disciplines.
- *ACM Digital Library*. Provides full text articles from magazines, journals and proceedings - everything ACM has published - on topics such as ERP and knowledge management directly relevant to information management students.
- *Business Source Complete*. Contains premium content of peer-reviewed, business related journals. Provides detailed company information for more than 1.1 million of the world's largest public and private companies
- *Google Scholar*. Find articles from academic publishers, professional societies, research institutes, and scholarly repositories from colleges and universities.
- *Directory of Open Access Journals*. Community-curated online directory that indexes and provides access to high-quality, open-access, peer-reviewed journals.
- *Gartner*. Use Gartner for technology intelligence, market analysis and issues on IT topics.
- *IEEE Xplore*. Collection of journal articles, conference proceedings, ebooks, and standards published by the Institute of Electrical and Electronics Engineers.
- *O'Reilly Safari for Higher Education*. Provides access to eBooks, videos, learning paths, case studies and online tutorials via intuitive learning interface across technical and business subjects.
- *SpringerLink*. Search journals, e-books, conference proceedings, and reference titles from Springer Publishing. Coverage includes computer science and information technology.

INDUSTRY/GOVERNMENT DATA

- [Statista](#). Features data on over 60,000 topics from over 18,000 sources, including market research reports, trade publications, scientific journals, and government databases.

- [Open Data Resources](#). Contains large datasets from U.S. government, world organizations, data science communities and academia. Students can learn to read, clean, organize, merge, aggregate, and generate visualizations of data.
- [Standard & Poor's NetAdvantage](#). Provides company information and industry surveys on 52 major U.S. industries.

WEB RESOURCES

- [Association for Information Systems](#)
- [Decision Support Systems Resources](#) from DSSResources.com
- [Information Retrieval Resources](#) from ACM SIGIR
- [Knowledge Management](#), the WWW Virtual Library

ACADEMIC RESOURCES

The College of Senior Scholars creates a "basket" of top journals in the IS field. The eight journals in the list (in alphabetical order) are: *European Journal of Information Systems*; *Information Systems Journal*; *Information Systems Research*; *Journal of AIS*; *Journal of Information Technology*; *Journal of MIS*; *Journal of Strategic Information Systems*; and *MIS Quarterly*.

ASSOCIATIONS

Trade / Industry Associations are valuable resources for businesses. These organizations provide information such as regulations, trends, statistics, and publications. The list of such organizations includes (but is not limited to):

Cybersecurity

- List of [cybersecurity associations](#)

Data

- [Analytics Week](#)
- [Digital Analytics Association](#)
- [Consumer Data Industry Association](#)

Technology

- Association for Information Systems (AIS)
- Association of Information Technology Professionals (AITP)
- Center for Information Systems - MIT CISR
- CERT Software Engineering Institute, Carnegie Mellon U
- European Research Center for Information Systems (ERICIS)
- Information Technology Industry Council
- Society for Information Management
- Association for Computing Machinery
- Association for Women in Computing
- National Science Foundation Computer & information Science & Engineering (CISE)
- Information Systems Audit and Control Association (ISACA)

Potential Research Requirements and Resources for *Real Estate* Majors

Type of Research:

Market Research – Students will research the relevant real estate market through primary and secondary research, by analyzing past performance of real estate equity and debt.

Through secondary research, students will compare analyst reports from a variety of different sources. They will do this critically and determine which reports are more credible.

Examples of Public Sources: [FHFA](#), [Zillow ZHVI](#), [NAREIT](#), U.S. Census Bureau, U.S. Bureau of Labor Statistics

Industry trends – Students research the trends in a specific market they are interested in, how the market has changed over the years, and what the forecasts are. (For example, the rise of REITs as resort owners in Las Vegas.)

Resources and Access:

Resource	Description	Access
Federal Housing Finance Association	Provides house price indexes and mortgage survey data.	Direct access: https://www.fhfa.gov/DataTools/Downloads
Zillow Data	Provides data and forecasts on house prices, rents, and inventories.	Direct Access: https://www.zillow.com/research/data/
U.S. Census Bureau	It provides information about the US population and economy.	Direct Access: https://www.census.gov/economic-indicators/ https://data.census.gov/cedsci/
U.S. Bureau of Labor Statistics	It measures labor market activity, working conditions, price changes, and productivity in the U.S. economy to support public and private decision making.	Direct Access: https://www.bls.gov/
Factiva	Provides global news, business, and financial information from newspapers, magazines, and trade journals. Includes information on companies and industries, and financial profiles.	Access via the Newman Library – Database – Factiva
The Global Economy	It provides global economic data.	Direct Access: theglobaleconomy.com
Mintel Market Sizes	It provides global industry information and country economic data. Industry data includes market size, market segmentation, market	Access via the Newman Library – Database – Mintel Market Sizes

	and share and Compound Annual Growth Rate	
IBISWorld	It provides U.S. industry analysis and Global industry reports.	Access via the Newman Library – Database – IBISWorld
Google Scholar	Using Boolean search, students may research articles and journals based on each assignment.	Scholar.google.com. To gain access to journal articles found on Google Scholar, students might need to use the Newman Library.

Types of Research and Resources for *Statistics and Quantitative Modeling* Majors

Types of research

Graduates in Statistics and Quantitative Modeling work in diverse fields. Recent graduates find jobs in finance, pharma, or local agencies (such as the Department of Education). Other graduates go on to graduate school, pursuing degrees in e.g. biostatistics, data science, and computational social science.

John Tukey, one of the most prominent statisticians of all time, once said that “the best thing about statistics is that you get to play in everyone’s backyard.” But to be able to play in different fields, we have to be aware of the customs and most common data sources of these diverse areas.

Some resources by subfield

There is no single, comprehensive list of sources for data and information; one must often look to the subfield of application. In general, however, a good starting point is [our Library’s website](#). There, you have access to a [database guide](#) and [field-specific research guides](#).

The Library has a [research guide on data science](#). Among other resources, the Guide has curated links to tutorials, data sources, job boards, and online data competitions.

Other helpful field-specific resources include:

Finance

- As Baruch students, you have access to [Bloomberg Professional](#), [FactSet](#), and [S&P Capital IQ](#). Employers value students who are proficient in these data sources. The [Library](#) and the [Subotnick Center](#) routinely offer workshops at different levels of proficiency. Anyone interested in a career in Finance should sign up for these workshops..
- The Library has a [very useful research guide](#) about financial research.

Biomedical Sciences

- Research in the Biomedical Sciences and accompanying datasets are posted on [PubMed](#), which has a very powerful search engine. [PubMed](#) can be intimidating at first, but it has a [helpful FAQ section](#). We can search using Boolean operators (that is, “and”, “or”, and “not”), Medical Subject Headings (MeSH), and subject filters. We can also filter by publication date, author, and journal name. More advanced search options are available; online training is [available here](#).

Official Statistics / Government

- New York City has an excellent [Open Data Initiative](#). The City’s website has a search engine to search for specific keywords; one can also browse by category, agency, etc.
- New York State also has an [Open Data Initiative](#). The website is similar to the city-specific website.
- U.S. Government: At a national level, there are different sources for data and information. A good starting point is the [US Census](#). The website has a search engine and we can browse by topic and surveys / programs. We can also browse and search by [North American Industry Classification System \(NAICS\)](#) and [North American Product Classification System \(NAPCS\)](#). These numerical systems can assist in doing industry-specific research. For economic data, the most helpful resource is [FRED](#), hosted by the Federal Reserve Bank of St. Louis.

Academic Resources

- The most well-regarded journals in Statistics are the [Annals of Statistics](#), the [Journal of the American Statistical Association](#), [Biometrika](#), and the [Journal of the Royal Statistical Society: Series B](#). Most academic research in Statistics is inaccessible to those who don't have a PhD in the field because it is highly theoretical and students and practitioners don't have the appropriate mathematical background. The journal [Significance](#) and, to some extent, [The American Statistician](#) aim to build bridges between research-level academic work and students and practitioners.
- Most recent articles in Statistics are posted as pre-prints in the [arXiv](#). Researchers post their articles to the [arXiv](#) before they are peer-reviewed, and update their submissions based upon comments received. The [arXiv](#) has a convenient search engine that allows searching for specific keywords, authors, etc.
- [Google scholar](#) is an academic search engine that can find both unpublished (but highly cited and influential) and published work. It can find pre-prints in the [arXiv](#) and published articles in a vast array of journals.

Marketing and International Business

Course Type	Course Number	Course Name	Library Resources and The Internet	Authoritative Data	Search	Databases	Librarians	Judgment and Ethics	Technologies
BBA Core	MKT 3000	Principles of Marketing	X	X		X	X	X	
Marketing Core	<u>MKT 3600</u>	Marketing Research	X	X	X	X	X	X	X
	<u>MKT 3605</u>	Consumer Behavior		X	X			X	
	MKT 5750	Marketing Strategy (Capstone)	X	X	X	X	X	X	X
IB Core	MKT 3400	International Business Principles	X	X	X	X	X	X	X
	IBS 4200	Foreign Markets, Cultures, and Institutions	X	X	X	X	X	X	X
	IBS 5750 (Capstone)	International Competitiveness	X	X	X	X	X	X	X
Marketing Tracks Core -Digital Marketing, Advertising, Marketing Analytics and International Marketing	<u>MKT 3520</u>	Advertising and Marketing Communications		X	X	X	X	X	X
	<u>MKT 4123</u>	Marketing Web Analytics and Intelligence	X	X	X	X	X	X	X
	<u>MKT 4410</u>	International Trade Operations	X	X	X	X	X	X	
	<u>MKT 4420</u>	International Marketing Research and Management	X	X	X	X	X	X	
	<u>MKT 4555</u>	Internet Marketing	X	X	X	X		X	X
	<u>MKT 4561</u>	Marketing Analytics	X	X	X	X	X	X	X
Marketing/IB Elective Pool	<u>MKT 4131</u>	Advertising Creative Strategy and Tactics			X	X		X	
	<u>MKT 4160</u>	Advertising Account Management		X	X	X		X	
	<u>MKT 4171</u>	Public Relations		X				X	X
	<u>MKT 4401</u>	International Trade Financing		X	X	X		X	X
	<u>MKT 4460</u>	International Supply Chain Management		X		X	X	X	
	<u>MKT 4540</u>	Branding		X				X	X
	<u>MKT 4557</u>	Digital Advertising		X	X			X	X
	<u>MKT 4560</u>	Entertainment Marketing		X	X			X	X
	<u>MKT 4620</u>	Text Analytics and Marketing		X	X	X		X	X
	<u>MKT 4630</u>	Marketing Analytics with Big Data	X	X	X	X	X	X	X
	<u>MKT 4876</u>	Advertising Account Planning		X				X	
	<u>MKT 4966</u>	Social Media Marketing and New Ventures	X	X	X		X	X	X
	<u>MKT 5150-51</u>	Ad Competition	X	X	X	X	X	X	X
	<u>IBS 3000</u>	Innovation, Technology and the Global Enterprise	X	X	X	X	X	X	X

Entrepreneurship

Competencies	MGT 3950: Developing an Entrepreneurial Mindset	MGT 3951: Creating Entrepreneurial Opportunities	MGT 4952: Designing for Innovation	MGT 5985: Entrepreneurs hip in the Wild	MGT 3960 An Entrepreneurs hip Pre-launch Journey	MGT 3962: Family Enterprise Dynamics	MGT 3968: The Art of Persuasion	MGT 3971: Multicultural Entrepreneurial Experiences	MGT 4954: New Venture Funding	MGT 4960 New Venture Management	MGT 4967 Technology and Innovation in Entrepreneurs hip	MGT 4969 Social Entrepreneurs hip
Library Resources and The Internet	X			X	X	X	X	X		X	X	X
Authoritative Data		X		X	X	X	X	X	X	X		X
Search	X	X		X	X	X		X	X	X		X
Databases				X	X	X				X	X	X
Librarians				X	X	X		X		X		
Judgment and Ethics	X	X		X	X	X	X	X		X	X	X
Technologies	X	X	X	X	X	X		X	X	X	X	X

Human Resource Management

Competency	MGT 3300: Management: A Behavioral Approach	MGT 3800: Management and Society	MGT 4400: Human Resource Management	MGT 4330: Advanced Organizational Behavior	MGT 4340: Organizational Change	MGT 4420: The Management of Compensation	MGT 4430: Employee Development & Training	MGT 4460: Labor Relations and Collective Bargaining	MGT 4475: HR Metrics	MGT 4480: Conflict Management Procedures	MGT 4493: Special Topics: Evidence-based HR Management
LIBRARY RESOURCES AND THE INTERNET	X	X	X	X		X	X	X	X		X
AUTHORITATIVE DATA	X	X		X		X			X		X
SEARCH	X	X	X	X					X		X
DATABASES				X		X			X		X
LIBRARIANS	X	X		X							X
JUDGMENT AND ETHICS		X		X		X			X		X
TECHNOLOGIES	X	X	X	X		X	X	X	X		X

Statistics and Quantitative Modeling

Core courses	Library Resources and The Internet	Authoritative Data	Search	Databases	Librarians	Judgment and Ethics	Technologies
STA3000 - Statistical Computing	ID	ID	ID	ID	ID	ID	IDA
OPR3450 - Quantitative Decision Making for Business I	D	D			D	D	DA
STA3154 - Business Statistics II#							
STA4155 - Regression and Forecasting Models for Business Applications	DA	DA	DA	DA	D	DA	DA
Selected electives*							
STA/CIS3920 - Data Mining for Business Analytics	D	D	D	D	D	D	DA
STA/CIS4170 - Data Visualization	D	D		D	D	D	DA
OPR3451 - Quantitative Decision Making for Business II	D	D			D	DA	DA

Legend

- I: Research competency is introduced.
- D: Research competency is developed.
- A: Research competency is assessed.

STA3154 is a course on mathematical statistics (mainly probability theory; some instructors teach some statistical inference as well). There is no emphasis in data analysis, so these learning objectives do not apply.

* Electives in STA/OPR that have been offered in the last three years.