# INFORMATION SYSTEMS CONCENTRATION GUIDE

As an IS professional, your employment opportunities are innumerable.

You might work within a specialized industry such as health care, telecommunications, retail, utilities, financial services, or in one of the many technology-related products and service companies. For exposure to a variety of different industries, consider working as a consultant at one of the major consulting firms. Companies call on IT consulting firms to implement a variety of technological solutions, analyze their IT operations, or take over entire IT processes. The IS concentration can be paired with multiple other concentrations and a variety of minors. Popular choices include Strategy, Business Analytics, Finance, Accounting, and Entrepreneurship & Innovation.

Additionally, many students also seek minors outside of Questrom and interest can range based on the area most interested in. For all available minors, please visit the Boston University programs website found **here**.

For more information about required courses and to contact the Concentration Faculty Advisor, please visit <u>here.</u>

### EXTERNAL CONSULTING \_\_\_\_

External Consultants focus on identifying opportunities for improving a business's processes and using technology to eliminate problems that affect productivity, output, distribution and ultimately, the bottom line. Therefore, knowing how technology can solve business problems is vital to success. This is the most common track for Information Systems students. Most hiring positions in the IS area are for External Consultants who work with a variety of clients.

**Careers Include:** Systems Analyst, Business Analyst, Technical Consultant, Data & Analytics Consultant

# INTERNAL CORPORATE INFORMATION SYSTEMS

Internal Corporate Information Systems roles work in house for corporations and address the implementation of new Information systems or maintaining Legacy systems. They also analyze, test, troubleshoot, and evaluate existing network systems, data communications networks, operating systems, and servers. In addition, they may support system monitoring, user access, and upgrading of internal use programs.

**Careers Include:** IT Specialist, Systems Administrator, Network Analyst, Program Analyst, Information Systems Analyst

### DATABASE ANALYST \_\_\_\_\_

Database Analysts focus on evaluating and designing strategies for enterprise databases, data warehouse systems, and multidimensional networks as well as complex applications problems, system administration issues, or network concerns. They also set standards for database operations, programming, query processes, and security. They may also model, design, construct or optimize large relational databases or data warehouses, and integrate new systems with existing structure to refine system performance and functionality.

**Careers Include:** Database Administrator, Applications Analyst, Business Systems Analyst, Data Analyst

### CYBER SECURITY \_

Individuals in cyber security often plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. They often conduct predictive or reactive analyses on security measures to support cyber security initiatives and propose or implement risk mitigation strategies. They may also be the ones who analyze log files or other digital information to identify perpetrators of security breaches or viruses. These roles can be both internal and external facing.

Careers Include: Information Security Analyst, Cyber Security Analyst, Cyber Risk Analyst, Information Security Engineer, Security Auditor



## **OPERATIONS**

Individuals in cyber security often plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. They often conduct predictive or reactive analyses on security measures to support cyber security initiatives and propose or implement risk mitigation strategies. They may also be the ones who analyze log files or other digital information to identify perpetrators of security breaches or viruses. These roles can be both internal and external facing.

**Careers Include:** Information Security Analyst, Cyber Security Analyst, Cyber Risk Analyst, Information Security Engineer, Security Auditor

### CLASSES TO CAREER GRID \_

Interested in seeing how different career paths connect back to the classes you take? Take a look at the grid below to help you strategize which classes will help you build the skills and knowledge you need to meet your career goals.

CLASS	EXTERNAL CONSULTING	INTERNAL CORPORATE INFORMATION SYSTEMS	DATABASE Analyst	CYBER SECURITY	ANALYTICS
IS 465 Database Management	X	X	X	X	X
<b>IS 467</b> AGILE Development Methodologies	×	X	X	X	X
<b>IS 469</b> Designing Information Systems	×	X	X		
IS 428 Managing Security	X		X	X	
<b>IS 454</b> Web Application Development		X	X		X
IS 474 Platform Strategy and Design	X	X			
<b>IS 479</b> Innovating with Info Systems (Decision Support Systems)	×	X	X		×
BA 476 Machine Learning	X		X		X
<b>FE 449</b> Corporate Financial Management	×	X			
<b>FE 459</b> Computational Techniques for Finance					X
AC 420 Introduction to Financial Analytics					×
MK 442 Digital Marketing Analytics					X
OM 441 Operations Analysis	X	×	X		
<b>SI 482</b> Strategy for Technology Based Firms	×	X			
<b>LA 484</b> Online Privacy and Internet Law	×			X	

<sup>\*</sup>To complete the IS concentration, you must take a minimum of three (3) IS 4XX prefix courses to complete the concentration.

### INTERNSHIP AND JOB SEARCH RESOURCES

- Vault
- Pardee Library
- <u>Dice.com</u> High tech jobs online
- <u>BU Technology Department</u>
   Gain experience on campus
- Computerworld.com
   Career and industry insights
- Indeed
- Simply Hired
- Internships
- Glassdoor

### **POPULAR EMPLOYERS**

Accenture

Boston Scientific

PricewaterhouseCoopers

Cigna

The Hartford Financial Services

Deliotte Consulting

Thermo Fisher Scientific

**United Technologies** 

Deliotte & Touch

**Ernst & Young** 

**EMC** 

**Eze Castle** 

**Fidelity Investments** 

Microsoft

### **NEXT STEPS**

### QUESTROM/BU CLUBS

Questrom/BU Clubs: Joining clubs is a great way to gain experience and build your professional network.

Below is a list of Questrom clubs those interested in Information Systems should consider:

- BizTech
- BU Consulting Group Contact bucg@bu.edu
- FinTech Club

### PROFESSIONAL ASSOCIATIONS

Professional Associations exist on the regional and national level. They host national conferences discussing relevant topics, networking events and training and professional development opportunities.

If you are interested in careers in Information Systems here are some professional associations, you may want to consider joining:

- Association for Informational Systems
- Information Systems Security Information
- Association of Information Technology Professionals
- Business Technology Association
- <u>Latinos in Information Sciences</u>
   and Technology Association (LISTA)

### **LINKEDIN GROUPS**

LinkedIn is a crucial part of anyone's job search and networking strategy. Using LinkedIn groups, you can develop more targeted networks for various criteria including location, industry, function and more!

Below is a list of sample LinkedIn groups Information Systems concentrators may want to consider, for more assistance on using this feature please make an appointment with a UDC Career Advisor at <a href="mailto:bu.joinhandshake.com">bu.joinhandshake.com</a>:

- Information Systems Security Association (ISSA)
- Information Security Systems-Implementation and Audit
- HR Information Systems