



# BS Information Systems

## Knowledge outcomes:

Upon successful completion of this program students will be able to:

- › Demonstrate in-depth knowledge in the areas of programming techniques and use of programming languages; analysis and design of systems and concepts relevant to the managerial dimension and use of Information Technology;
- › Analyze, implement and manage Information Systems in both their technical and managerial dimensions. Emphasis is given to the ability to comprehend the business implications of IT and optimally manage information systems to achieve competitive advantage;
- › Understand and apply the theories and principles of systems design and management in real-life business IT projects;
- › Explain the principles and theories of ethical decision-making and their practical implications in the everyday conduct of business; and
- › Pursue postgraduate studies or professional qualifications in the fields of computer systems management, software engineering, information systems analysis and IT consultancy.

## Skills outcomes:

As a result of completing this program, students should have acquired the following skills and values:

- › effective written and oral communication skills;
- › analytical and critical-thinking skills necessary to make sound technical and managerial decisions;
- › numeric and quantitative skills including data analysis and interpretation, essential for IT professionals;
- › effective use of communication and information technology for business applications;
- › effective self-management in terms of time, planning and behaviour, motivation, self-starting, individual initiative and enterprise; and
- › self-awareness, openness and sensitivity to diversity in business and to people from other cultures.

**Start Dates:** October; February

**Assessment:** A variety of methods of assessing students progress are used including essays, reports, critical analyses, presentations, online assignments and discussions and proctored and open book examinations.

**Possible Career Options:**

Information Systems graduates, apart from sound technical knowledge, acquire managerial skills necessary for implementing and managing contemporary Information Systems. They may be employed as computer systems analysts, software engineers, IT sales professionals, computer systems managers, IT consultants and more.

# BS INFORMATION SYSTEMS

General Education - 30 credits		
COURSE		CREDITS
You must take these four courses = 12 credits		
1	Composition I	3
2	Composition II	3
3	College Algebra (required)	3
4	US History course	3
Select <b>4</b> of the following 7 areas = 12 credits		
1	Natural Science course	3
2	Psychology of Adjustment (required)	3
3	Western Civilization course	3
4	Other World Civilizations	3
5	Humanities course	3
6	Arts course	3
7	Computer Applications I	3
Take <b>2</b> courses from any category = 6 credits		
	Elective general education course	3
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New York College Concentration Prerequisites - 46 credits (plus any concentration relevant electives)		
COURSE		CREDITS
1	Computer Applications I (meets general education)	3
2	Computer Applications II	3
3	Introduction to Computing - C++	4
4	Discrete Mathematics I	3
5	Data Structures	3
6	Finite Mathematics	3
7	Statistics for Business	3
8	Financial Accounting	3
9	Intro. Microeconomics	3
10	Intro. Macroeconomics	3
11	Principles of Management	3
12	Management Information Systems	3
<b>Advanced level courses to be taken after student has earned 40 credits and taken introductory level prerequisite courses</b>		

13	Org. Behaviour (pre-req. Psych. Adj.)	4
14	System Analysis and Design	4
Electives credits (either or both NYC and ESC)		
Empire State College Concentration Courses - 32 credits		
COURSE		CREDITS
1	Data Communications and Networking	4
2	Project Management in Info. Sys.	4
3	IT for Competitive Advantage (Strategic Planning)	4
4	Final Project in Information Systems	4
5	Ethics for a Global Economy	4
6	Computer Security	4
Electives		
	Database Systems	4
	Programming in JAVA	4
	WEB Publishing w. HTML (pre-req.: Com. App. 1 & 2)	4
	WEB Systems Dev. (pre-req.: C++, Database Systems)	4
	Senior Seminar (to be taught by visiting ESC faculty)	4
	Educational Study Tour	4

