

Business Administration (BS): Information Technology Concentration

To see more about what you will learn in this program, visit the Learning Outcomes website (<https://apps.oirp.ncsu.edu/pgas/>)!

Information Technology students specialize in the support of business processes through the use of IT. Concentration students are business oriented but work with various technologies and systems to support business needs. In contrast with computer science programs, the IT concentration focuses on how to use information technology to support business needs rather than how to program and create new software. Our students focus on using technology to organize, represent and manipulate data to support business decision making. These students also gain experience with a variety of computing technologies. The IT concentration is valuable by itself, but it can provide other concentration students with a competitive advantage if they add IT as a second concentration.

Curriculum Overview

Students in the information technology concentration learn the basics of computer hardware, software and networking, and more importantly, how to apply that technical knowledge to business functions such as finance, marketing and product management.

The information technology concentration is designed to prepare students in the following areas:

- Software use and development
- Database development and management
- Basic computer networking and telecommunications
- Information security and privacy
- Knowledge management

Business Management

Poole College of Management
2300 Nelson Hall
Raleigh, NC 27695
Phone: (919) 515-5565
<https://poole.ncsu.edu/business-management/>

Sebastian Heese
Interim Department
Head Owens Distinguished Professorship of Supply Chain Management

Plan Requirements

Code	Title	Hours
Humanities and Social Sciences		
Acad Writing Research (p. 2)	¹	4
Foreign Language 201 (p. 2)		3
Select one of the following:		3
COM 110	Public Speaking	
COM 112	Interpersonal Communication	
COM 211	Argumentation and Advocacy	

PSY 200	Introduction to Psychology	3
Select one of the following:	¹	3
ARE 201	Introduction to Agricultural & Resource Economics	
ARE 201A	Introduction to Agricultural & Resource Economics	
EC 201	Principles of Microeconomics	
EC 202	Principles of Macroeconomics	3
Select one of the following:		3
ENG 331	Communication for Engineering and Technology	
ENG 332	Communication for Business and Management	
ENG 333	Communication for Science and Research	

GEP Humanities (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-humanities/)		6
--	--	---

GEP Additional Breadth (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/) (Humanities/Social Sciences/Visual and Performing Arts)		3
--	--	---

Select one of the following: (verify requirement)

MIE 306	Managing Ethics in Organizations	
PHI 214	Issues in Business Ethics	
PHI 221	Contemporary Moral Issues	
PHI 313	Ethical Problems in the Law	
PHI 375	Ethics	

Mathematical and Natural Sciences

GEP Natural Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-natural-sciences/)		7
--	--	---

Select one of the following: ¹

MA 121	Elements of Calculus	
MA 131	Calculus for Life and Management Sciences A	
MA 141	Calculus I	
MA 114	Introduction to Finite Mathematics with Applications	3
or MA 242	Calculus III	

Select one of the following: ¹

BUS 350	Economics and Business Statistics	
ST 350	Economics and Business Statistics	
ST 312	Introduction to Statistics II	
ST 370	Probability and Statistics for Engineers	
ST 372	Introduction to Statistical Inference and Regression	

BUS 351	Predictive Analytics for Business	3
---------	-----------------------------------	---

ST 307	Introduction to Statistical Programming- SAS	1
--------	--	---

Interdisciplinary Perspectives

GEP Interdisciplinary Perspectives (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-interdisciplinary-perspectives/)		2
--	--	---

Physical Education

GEP Health and Exercise Studies (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/)		2
---	--	---

Corequisites

GEP U.S. Diversity (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-us-diversity/) (verify requirement)		
GEP Global Knowledge (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-global-knowledge/) (verify requirement)		

Major Requirements

M 100	Personal and Professional Identity Development	1
MIE 201	Introduction to Business Processes	3
ACC 210	Concepts of Financial Reporting ¹	3
ACC 220	Introduction to Managerial Accounting ¹	3
MIE 310	Introduction to Entrepreneurship	3
BUS 320	Financial Management	3
MIE 330	Human Resource Management	3
BUS 340	Information Systems Management	3
BUS 360	Marketing Methods	3
BUS 370	Operations and Supply Chain Management	3
MIE 305	Legal and Regulatory Environment	3
MIE 480	Business Policy and Strategy	3

Concentration

Select two of the following: 6

BUS 440	Database Management
BUS 441	Business Data Communications and Networking
BUS 442	Information Systems Development

Select two of the following: 6

BUS 440	Database Management
BUS 441	Business Data Communications and Networking
BUS 442	Information Systems Development
BUS 443	Web Development for Business Applications
BUS 444	Systems Analysis and Design
BUS 449	Information Technology Capstone

Free ElectivesFree Electives (12 Hr S/U Lmt) ² 19

Total Hours 120

¹ C- or better² Students should consult their academic advisors to determine which courses fill this requirement.**Acad Writing Research**

Code	Title	Hours
------	-------	-------

Acad Writing Research

ENG 101	Academic Writing and Research	4
FLE 101	Academic Writing and Research	4

Transfer Sequence

ENG 202	Disciplinary Perspectives in Writing	3
ENG 1GEP	100 Level English Composition	3

Foreign Language 201

Code	Title	Hours
------	-------	-------

FLA 201	Intermediate Arabic I	3
FLC 201	Intermediate Chinese I	3
FLF 201	Intermediate French I	3
FLF 212	French: Language, Culture, and Technology	3
FLG 201	Intermediate German I	3
FLG 212	German Language, Culture, Science, and Technology	3
FLI 201	Intermediate Italian I	3
FLJ 201	Intermediate Japanese I	3
FLN 201	Intermediate Hindi-Urdu I	3

FLP 201	Intermediate Portuguese I	3
FLR 201	Intermediate Russian I	3
FLS 201	Intermediate Spanish I	3
FLS 212	Spanish: Language, Technology, Culture	3
GRK 201	Intermediate Greek I	3
LAT 201	Intermediate Latin I	3
PER 201	Intermediate Persian I	3

Semester Sequence

This is a sample.

Course	Title	Hours
First Year		
Fall Semester		
M 100	Personal and Professional Identity Development	1
ENG 101	Academic Writing and Research (or GEP Natural Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-natural-sciences/) with Lab) ¹	4
Select one of the following: ¹		3
MA 121	Elements of Calculus	
MA 131	Calculus for Life and Management Sciences A	
MA 141	Calculus I	
FLx 201		3
MIE 201	Introduction to Business Processes	3
GEP Health and Exercise Studies (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/)		1
Hours		15

Spring Semester

MA 114 or MA 242	Introduction to Finite Mathematics with Applications or Calculus III	3
Select one of the following:		3
COM 110	Public Speaking	
COM 112	Interpersonal Communication	
COM 211	Argumentation and Advocacy	
GEP Humanities (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-humanities/)		
ENG 101	Academic Writing and Research (or GEP Natural Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-natural-sciences/) with Lab) ¹	4
EC 201 or ARE 201	Principles of Microeconomics ¹ or Introduction to Agricultural & Resource Economics	3
ACC 210	Concepts of Financial Reporting ¹	3
Hours		16

Second Year**Fall Semester**

ACC 220	Introduction to Managerial Accounting ¹	3
Select one of the following:		3
COM 110	Public Speaking	

COM 112	Interpersonal Communication	
COM 211	Argumentation and Advocacy	
GEP Humanities (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-humanities/)		
BUS/ST 350	Economics and Business Statistics ¹	3
GEP Natural Sciences (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-natural-sciences/)		
EC 202	Principles of Macroeconomics	3
GEP Health and Exercise Studies (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-health-exercise-studies/)		
	Hours	16

Spring Semester

Select three of the following:		9
BUS 320	Financial Management	
BUS 340	Information Systems Management	
BUS 360	Marketing Methods	
BUS 370	Operations and Supply Chain Management	
MIE 305	Legal and Regulatory Environment	
MIE 310	Introduction to Entrepreneurship	
MIE 330	Human Resource Management	
PSY 200	Introduction to Psychology	3
GEP Additional Breadth (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/) (Humanities/Social Sciences/Visual and Performing Arts)		
ST 307	Introduction to Statistical Programming-SAS	1
	Hours	16

Third Year**Fall Semester**

Select two of the following:		6
BUS 320	Financial Management	
BUS 340	Information Systems Management	
BUS 360	Marketing Methods	
BUS 370	Operations and Supply Chain Management	
MIE 305	Legal and Regulatory Environment	
MIE 310	Introduction to Entrepreneurship	
MIE 330	Human Resource Management	
Select one of the following:		3
ENG 331	Communication for Engineering and Technology	
ENG 332	Communication for Business and Management	
ENG 333	Communication for Science and Research	
Free Electives		6
	Hours	15

Spring Semester

Select two of the following:		6
BUS 320	Financial Management	
BUS 340	Information Systems Management	
BUS 360	Marketing Methods	
BUS 370	Operations and Supply Chain Management	
MIE 305	Legal and Regulatory Environment	

MIE 310	Introduction to Entrepreneurship	
MIE 330	Human Resource Management	
Concentration course		3
Free Electives		6
	Hours	15

Fourth Year**Fall Semester**

Select two Concentration courses		6
GEP Interdisciplinary Perspectives (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-interdisciplinary-perspectives/)		2
GEP Humanities (http://catalog.ncsu.edu/undergraduate/gep-category-requirements/gep-humanities/)		3
Free Elective		4
	Hours	15

Spring Semester

MIE 480	Business Policy and Strategy	3
Concentration course		3
Free Electives		6
	Hours	12
Total Hours		120

¹ Must be completed with "C-" or better.

Students must also complete as a part of their degree requirements one course from the GEP U.S. Diversity list (no credit hour requirement) and one course from the GEP Global Knowledge list (no credit hour requirement).

GPA Graduation Requirements

- Overall GPA *for all courses* attempted at NC State must be 2.0 or higher; and
- Overall GPA *for all BUS, MIE, and M courses* attempted at NC State must be 2.0 or higher.

Career Opportunities

Graduates in business administration are prepared for a variety of careers in business or industry including new product development, marketing, manufacturing, human resources, IT management, business analysis, banking and finance, consulting, and business development. They have the knowledge and tools to launch new business ideas and succeed in management positions.