

# PROGRAM BREAKDOWN

## BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

### CONCENTRATION IN DATA ANALYTICS

#### LOWER DIVISION GENERAL EDUCATION COURSES

LOWER DIVISION GENERAL EDUCATION COURSES (15.0 CREDITS REQUIRED)

COURSE NUMBER	COURSE NAME	CREDIT HOURS
<b>ORAL COMMUNICATIONS</b>		
ENGL 100	Language and Speech Communications	3.0 credit hours
ENGL 115	Fundamentals of Public Speaking	3.0 credit hours
SPC 200	Speech and Public Speaking	3.0 credit hours
<b>HUMANITIES</b>		
PHIL 102	Legal and Ethical Issues	3.0 credit hours
PHIL 200	Introduction to Philosophy	3.0 credit hours
<b>MATHEMATICS</b>		
MATH 102	College Algebra	3.0 credit hours
<b>ENGLISH</b>		
ENGL 200	English Composition I	3.0 credit hours
<b>BEHAVIORAL SCIENCE / SOCIAL ENVIRONMENT</b>		
PSY 201	Psychology	3.0 credit hours
SOC 210	Sociology	3.0 credit hours

#### UPPER DIVISION GENERAL EDUCATION COURSES

UPPER DIVISION GENERAL EDUCATION COURSES (15.0 CREDITS REQUIRED)

<b>ENGLISH</b>		
ENGL 302	English Composition II	3.0 credit hours
<b>FOREIGN LANGUAGE</b>		
SPN 310	Conversational Spanish	3.0 credit hours
<b>NATURAL SCIENCE</b>		
BSC 310	General Biology	3.0 credit hours
<b>ECONOMICS</b>		
ECON 302	Principles of Economics (Microeconomics)	3.0 credit hours
ECON 303	Macroeconomics	3.0 credit hours

# PROGRAM BREAKDOWN

## BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

LOWER DIVISION MAJOR COURSES  
 LOWER DIVISION MAJOR COURSES (45 CREDITS REQUIRED)

COURSE NUMBER	COURSE NAME	CREDIT HOURS
CIT 102	Introduction to Computer Programming	3.0 credit hours
CIT 105	Programming Practice	3.0 credit hours
CIT 110	Computer Operating Systems	3.0 credit hours
CIT 225	Management Information Systems	3.0 credit hours
CIT 280	Network Design	3.0 credit hours
CIT 281	Network Administration and Technical Support	3.0 credit hours
CIT 282	Advanced Network Administration	3.0 credit hours
CIT 283	Networking on Azure and AWS	3.0 credit hours
CIT 381	Linux Technology	3.0 credit hours
CIT 382	Cloud Technology Developer	3.0 credit hours
CIT 383	Advanced Cloud Technology Architect	3.0 credit hours
CIT 384	Manage Cloud Technology Identities	3.0 credit hours
CIT 385	Cloud Technology Compute Services	3.0 credit hours
Elective		3.0 credit hours
Elective		3.0 credit hours

UPPER DIVISION MAJOR COURSES  
 UPPER DIVISION MAJOR COURSES (30 CREDITS REQUIRED)

CIT 406	Database Design	3.0 credit hours
CIT 407	T-SQL: Queries Design and Tuning	3.0 credit hours
CIT 408	Database Management Operations & Optimization	3.0 credit hours
CIT 410	Non-SQL Databases	3.0 credit hours
CIT 411	Programming with Python	3.0 credit hours
CIT 480	Security Technology	3.0 credit hours
CIT 481	Security Ethical Hacking	3.0 credit hours
CIT 482	Security Analyst	3.0 credit hours
CIT 483	Information Systems Security	3.0 credit hours
CIT 484	Advanced Information Systems Security	3.0 credit hours

# PROGRAM BREAKDOWN

## BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

**TECHNICAL AND SPECIALIST MAJOR COURSES**

**CERTIFICATIONS DATA ANALYTICS**

TECHNICAL AND SPECIALIST MAJOR COURSES (18 CREDITS REQUIRED)

COURSE NUMBER	COURSE NAME	CREDIT HOURS
CDAC 420	Data Analytics for Business	3.0 credit hours
CDAC 430	Computing for Data Analytics	3.0 credit hours
CDAC 440	Machine Learning & Data Analytics for IT, Business and Finance	3.0 credit hours
CDAC 450	Computer Simulation & Risk Management	3.0 credit hours
CDAC 460	Big Data Process Analysis	3.0 credit hours
CDAC 470	Information Visualization	3.0 credit hours

**ELECTIVE COURSES**

ELECTIVE COURSES

CIT 386	Cloud Network Design	3.0 credit hours
CIT 387	IaaS: Cloud Virtualization	3.0 credit hours
CIT 388	PaaS: Google App Services	3.0 credit hours
CIT 389	PaaS: AWS App Services	3.0 credit hours
CIT 390	PaaS: Azure App Services	3.0 credit hours