

PROGRAM BREAKDOWN

BACHELOR IN COMPUTER ENGINEERING

CONCENTRATION IN DATA ANALYTICS

LOWER DIVISION GENERAL EDUCATION COURSES

GENERAL EDUCATION COURSES (15.0 CREDITS REQUIRED)

COURSE NUMBER	COURSE NAME	CREDIT HOU
ORAL COMMUNICATIONS		
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
HUMANITIES		
PHIL 102	Legal and Ethical Issues	3.0 credit hours
PHIL 200	Introduction to Philosophy	3.0 credit hours
MATHEMATICS		
MATH 102	College Algebra	3.0 credit hours
ENGLISH		
FNOI 000	English Composition I	3.0 credit hours
ENGL 200		
BEHAVIORAL SCIENCE / SOCIA	AL ENVIRONMENT	
		3.0 credit hours
BEHAVIORAL SCIENCE / SOCIA PSY 201 SOC 210	Psychology Sociology RSES	3.0 credit hours 3.0 credit hours
PSY 201 SOC 210 R DIVISION GENERAL EDUCATION COUR DIVISION GENERAL EDUCATION COU	Psychology Sociology RSES RSES (15.0 CREDITS REQUIRED)	3.0 credit hours
PSY 201 SOC 210 R DIVISION GENERAL EDUCATION COUR R DIVISION GENERAL EDUCATION COUR ENGLISH ENGL 302	Psychology Sociology RSES RSES (15.0 CREDITS REQUIRED)	3.0 credit hours
PSY 201 SOC 210 R DIVISION GENERAL EDUCATION COUR DIVISION GENERAL EDUCATION COUR ENGLISH ENGL 302 FOREIGN LANGUAGE	Psychology Sociology RSES RSES (15.0 CREDITS REQUIRED)	3.0 credit hours 3.0 credit hours
PSY 201 SOC 210 R DIVISION GENERAL EDUCATION COUR R DIVISION GENERAL EDUCATION COUR ENGLISH ENGL 302	Psychology Sociology RSES RSES (15.0 CREDITS REQUIRED)	3.0 credit hours 3.0 credit hours
PSY 201 SOC 210 R DIVISION GENERAL EDUCATION COUR DIVISION GENERAL EDUCATION COUR ENGLISH ENGL 302 FOREIGN LANGUAGE	Psychology Sociology RSES RSES (15.0 CREDITS REQUIRED) English Composition II	3.0 credit hours 3.0 credit hours
PSY 201 SOC 210 R DIVISION GENERAL EDUCATION COUR R DIVISION GENERAL EDUCATION COUR ENGLISH ENGL 302 FOREIGN LANGUAGE SPN 310	Psychology Sociology RSES RSES (15.0 CREDITS REQUIRED) English Composition II	3.0 credit hours 3.0 credit hours
PSY 201 SOC 210 R DIVISION GENERAL EDUCATION COUR DIVISION GENERAL EDUCATION COUR ENGLISH ENGL 302 FOREIGN LANGUAGE SPN 310 NATURAL SCIENCE	Psychology Sociology RSES RSES (15.0 CREDITS REQUIRED) English Composition II Conversational Spanish	3.0 credit hours 3.0 credit hours 3.0 credit hours
PSY 201 SOC 210 R DIVISION GENERAL EDUCATION COUR R DIVISION GENERAL EDUCATION COUR ENGLISH ENGL 302 FOREIGN LANGUAGE SPN 310 NATURAL SCIENCE BSC 310	Psychology Sociology RSES RSES (15.0 CREDITS REQUIRED) English Composition II Conversational Spanish	3.0 credit hours 3.0 credit hours 3.0 credit hours



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BACHELOR IN COMPUTER ENGINEERING

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 280	Network Design	3.0 credit hours
CIT 281	Network Administration & 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 & Requirements	3.0 credit hours
CIT 385	Cloud Technology Compute Services	3.0 credit hours
EGN 101	Introduction to Computer Engineering	3.0 credit hours
EGN 201	Engineering Drawing	3.0 credit hours
PHY 101	Introduction to Physics	3.0 credit hours

UPPER DIVISION MAJOR COURSES

UPPER DIVISION MAJOR COURSES (30 CREDITS REQUIRED)

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
EGN 310	Data Structures	3.0 credit hours
EGN 321	Engineering Software Technology	3.0 credit hours
EGN 325	Computer Architecture	3.0 credit hours
EGN 410	Product Design	3.0 credit hours
PHY 440	Solid State Physics	3.0 credit hours



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BACHELOR IN COMPUTER ENGINEERING

MAJOR CONCENTRATION COURSES

CERTIFICATIONS DATA ANALYTICS(18 CREDITS REQUIRED)

TECHNICAL AND SPECIALIST MAJOR COURSES

This Certification prepares students with the technical capacity of Data Analytics for planning, forecasting, new production and / or marketing, data analysis within the organization.

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