BACHELOR OF SCIENCE
INFORMATION TECHNOLOGY
MAJOR CONCENTRATION: DATA ANALYTICS

CLEARY UNIVERSITY founded 1883

PROGRAM DESCRIPTION

Harness the power of data with Cleary's Bachelor of Science (BS) in IT: Data Analytics. This program combines a comprehensive foundation in IT with specialized skills in data analytics, preparing students to transform complex datasets into actionable insights. Graduates will pursue impactful careers in business intelligence, data architecture, and analytics, helping organizations evolve through informed decision-making and technology solutions.

LEARNING OUTCOMES

- Analyze a complex computing problem and apply information technology principles and other relevant disciplines to identify solutions.
- Design, implement, and evaluate an information technology-based solution to meet a given set of requirements in the context of the program's discipline.
- Use systemic approaches to select, develop, apply, integrate, and administer secure information technologies to accomplish user goals.

Graduates with a Bachelor of Science in Information Technology and a major concentration in Data Analytics are prepared for careers such as:

- Computer and Information Analyst
- Business Intelligence Developer
- Data Quality Analyst
- Big Data Architect
- Business Intelligence Analyst
- Data Assurance Analyst
- Data Scientist

THE EIGHT ATTRIBUTES OF THE CLEARY MIND™

The Cleary Mind™ defines who we are and sets us apart from other universities. Students, whether online or on campus, embrace its principles throughout their studies, shaping their approach to thinking, leading, and living. By graduation, they're not only job-ready but they also excel as critical thinkers, problem solvers, effective communicators, and ethical leaders. Employers value Cleary graduates for exceeding expectations!

COMMUNICATION   LEADERSHIP   PROBLEM SOLVING   CREATIVE THINKING

PERSUASION   ETHICS   ENTREPRENEURSHIP   CRITICAL THINKING

* The Key Attributes Employers Seek on Students' Resume, NACE Center, 11/30/17. The Top 10 Traits Employers Want in Business School Graduates, GoodCall, 8/17/18. College vs Business Training: What Do Employers Want?, Wharton, University of Pennsylvania, 2/11/16. 8 Essential Skills Every Employer Looks For In Recent Graduates, Inc 10/13/15. What Employers Really Look For in Recent College Graduates, USA Today, 7/22/15. What Employers Are Looking For When Hiring Recent College Grads, Forbes, 7/6/15. New College Grads: Who employers want to hire, CBS News Money Watch, 1/20/15. What Employers Want From MBAs This Year , Poets & Quants. 5/19/14. The 10 Skills Employers Most Want In 2015 Graduates, Rorbes, 11/12/14. What Employers Want, GraduateOpportunities.com

Cleary University
BS in Information Technology with a Major Concentration in `Data Analytics` **– Curriculum Pathway***
v1.0 – 1.1.25

Year One

Fall Semester		
ENG 1000	English Composition	3.0
PHL 1200	Critical Thinking in an Illogical World	3.0
BUS 1000	The Business of Environmental Sustainability	3.0
TCM 1000	Business Arts Immersion	3.0
	Total Semester Credits	**12.0**

Spring Semester		
ENG 1100	Discourse and Delivery	3.0
ECO 1000	Economies and Economics I (Macroeconomics)	3.0
GE HCC	Human Civilization, Legacy and Creation Course	3.0
QLR 1000	Data Foundations	3.0
ITS 1500	Fundamentals of Information Technology	3.0
	Total Semester Credits	**15.00**

Year Two

Fall Semester		
COM 1400	Speak Up!	3.0
ECO 2000	Economies and Economics II (Microeconomics)	3.0
ACC 1000	Principles of Accounting and Economic Renaissance I	3.0
ITS 1610	Introduction to Python Programming	3.0
CIS 2100	Computer Operating Systems	3.0
	Total Semester Credits	**15.0**

Spring Semester		
LAW 2900	Business Law	3.0
GE ELE	General Education Elective Course^	3.0
ITS 1620	Introduction to UNIX/LINUX Programming	3.0
ITS 1710	Fundamentals of Data Structures	3.0
PMG 3380	Management of Information Technology Projects	3.0
CAR 1050	Navigating Academic and Life Challenges^^	1.0
	Total Semester Credits	**16.0**

Year Three

Fall Semester		
MGT 3400	Managing Projects and Processes in Organizations	3.0
DMA 4200	Data Analysis in Business	3.0
ITS 4310	Systems Operations, Architecture, and Automation	3.0
ITS 2710	Data Base Design and Implementation	3.0
CIS 2450	Fundamentals of Networking and Communications	3.0
	Total Semester Credits	**15.0**

Spring Semester		
GE NPW	Observation and Analysis of the Natural and Physical World Course	3.0
GE PDW	Perspective on a Diverse World Course	3.0
CIS 3450	Network Structures and Administration	3.0
CIS 3610	Introduction to System and Network Security	3.0
ITS 4330	Strategic Integration of AI and Process Optimization	3.0
CAR 3050	Navigating Future Career and Life Challenges^^	1.0
	Total Semester Credits	**16.0**

Year Four

Fall Semester		
MGT 4071	Organizational Behavior**	3.0
ITS 4320	Applications Development	3.0
CIS 2250	Fundamentals of User Interface Design	3.0
DMA 3200	Introduction to Data Analytics	3.0
DMA 4070	Analyze Data with SQL and R	3.0
ELE	Elective Course	1.0
	Total Semester Credits	**16.0**

Spring Semester		
PHL 4900	The Social Contract	3.0
DMA 3600	Data-Driven Decisions	3.0
DMA 4080	Analyze Data with Python	3.0
ITS 3061	Application and Integration of AI in IT Management and Data Analytics	3.0
ITS 4900	Capstone: Information Technology Project	3.0
	Total Semester Credits	**15.0**
	Total Program Credits	**120.0**

All Students (See the Cleary University Catalog for further details)
*Students receiving transfer or prior learning credits may alter this curriculum pathway.
**Required or elective course may be taken at the graduate level if a student plans to pursue a Cleary University graduate program.
Non-traditional Students (See the Cleary University Catalog for further details)
^Non-traditional students take LED 3010 Leadership Applications instead of the General Education Elective Course.
^^Non-traditional students do not take CAR 1050 and CAR 3050.