## **Bachelor of Science in Data Analytics**

## **Program Overview**

Associate Dean of Continuing Education: Mark Parker Program Manager: Henry Collier

The mission of the BSDA program is to help students acquire and refine the knowledge, skills, and abilities needed to collect and analyze data in a variety of professional settings, and to use the results to contribute to problem-solving within organization.

Upon successful completion of the BSDA program students will be able to:

- 1. Evaluate organizational needs and problems and create suitable data analyses to inform solutions.
- 2. Apply data analytics techniques and methods to a wide array of data types using industry-standard tools.
- 3. Demonstrate data analyses and conclusions in an effective, ethical manner to non-specialist audiences.

Program outcomes are assessed in the core courses and capstone course, which consists of a portfolio of prior coursework as well as an original, applied data analytics project under the supervision of a qualified faculty member

## Requirements

MA 107	Precalculus Mathematics	4	
MA 108	Applied Calculus	4	
MA 306	Discrete Mathematics	3	
MA 310	Linear Algebra	3	
MA 332	Advanced Statistical Methods	3	
CYBR 230	Relational Databases with SQL	3	
CS 150	(Programming Languages for Data Science)	3	
DTAN 301	Introduction to Data & Business Analytics	3	
DTAN 310	Algorithm Design and Implementation (Alogrithm Design and Implementation)	3	
DTAN 320	Introduction to Machine Learning & Artificial Intelligence (Introduction to Machine Learning and AI)	3	
DTAN 330	Introduction to Network Science	3	
DTAN 344	Data Visualization (Data Visualization)	3	
DTAN 410	CLIPS: Programming for Expert Systems (CLIPS: programming for Expert Systems)	4	
DTAN 400	Capstone (Capstone)	6	
Additional Required Courses			
COMM 301	Business & ProfessionalWriting	3	
PHLS 210	Ethics in the Modern World	3	
MNGT 330	Management Information Systems	3	
IA 340	Introduction to Information Assurance	3	
courses "not found" are under development and not yet approved by the University Curriculum Committee			
Total Cr.		60	

## Faculty

Faculty Member	Institution at which highest degree was earned
Henry Collier (Program Manager)	Champlain College