# PROGRAM NAME: BS DEGREE in Analytics & Technology-Data Science & Analytics Track

## ROGRAM COLLEGE: Helzberg School of Management CATALOG TERM: 2019-20

As access to data continues to grow, companies are relying even more on data science and data analytics to make informed business decisions. Because of this, the field of data and analytics is one of the fastest growing and highest-paid sectors in the 21<sup>st</sup> century. Data science jobs are in great demand and a degree in analytics and technology from Rockhurst University equips students with the business intelligence skills to fill these challenging roles.

Students in the Data Science and Analytics track takes a deeper focus on the core science of data and statistics.

NOTE: Individual Programs of Study will vary in consultation with your Advisor and course/section availability each term. The below schedule serves only as an **example** four year degree plan.

### YEAR 1

Fall Semester			
Course Name	Credits	Minimum Grade Required	Experience Notes
Core: EN 1110 College Composition I (WCP)	3		Join an RU Academy
Core/Prereq: MT 1800 Calculus I (MTP) (requires a 26 on Math Component of ACT)	4	С	Participate in the Finucane
Prereq: *CS 1000 Programing for Analytics	3		Service Project
Core: PL 1100 Reality and Human Existence	3		Attend the New Student Retreat
Core: Relational, Level 1	3		
General Elective: MG 1001 Professional Readiness I	1		
TOTAL HOURS	17		

## Spring Semester

Course Name	Credits	Minimum Grade Required	Notes	
Core: EN 1120 College Composition II (WCP)	3		•	Join a campus club/organization
Core: TH 1000 or 1020 or 2000 (TH, Level I)	3			(can be dept. specific)
Prereq: BIA 1800 Data Analysis	3			
Prereq: *BIA 2000 Foundations of Business Intelligence	3			
Major: MT 1810 Calculus II	4	С		
TOTAL HOURS	16			

## YEAR 2

Fall Semester	
Course Name	

Course Name	Credits	Minimum Grade Required	Notes	
Prereq: BSS 2100 Intro: Statistics for Behavioral Sciences	3		•	Students want to have a
Major: *BIA 3000 Data Visualization	3	С		Minimum of 60 hours
Major: *CS 3100 Data Structures	3	С		completed, by the end of Year 2,
Core: CT 2000 Fundamentals of Communication (OCP)	3			to progress to Junior Standing.
Core: Natural Science with Lab (Science/Causal, Level I)	4			
TOTAL HOURS	16			

# Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
Major: *BIA 3200 Foundations of Data Mining	3	С	
Major: *CS 3000 Data Structures	3	С	
Core: Relational Mode, Level I	3		
Core: Literary Mode, Level I	3		
Core: Artistic Mode	3		
TOTAL HOURS	15		

#### YEAR 3

Fall Semester				
Course Name	Credits	Minimum Grade Required	Notes	
Major: *EN 3180 Business Writing (or Upper-Division Related course)	3	С	•	Courses with an * indicate
Major: MT 3400 Probability & Statistics (Fall/Even) (or Upper-Division Related Course)	3	С		that they are only offered in
Core: Theological Mode, Level II (at least one TH must be Christian Based)	3			that semester, i.e., Fall or
Core: HS 1100 or 1500 or 1701 or 1702 (HS, Level 1)	3			Spring.
General Elective	6			
TOTAL HOURS	18			

Spring Semester

Course Name	Credits	Minimum Grade Required	Notes	
Major: Upper-Division Related course (or MT 4420 Statistical Learning-Spring/Even)	3	С	•	Courses offered Fall/Spring,
Core: PL 3100 Ethical Theory	3			Even/Odd may have to be
Core: Historical Mode or Literary Mode, Level II	3			taken in the year before or
General Elective	6			after indicated.
TOTAL HOURS	15			

Summer Semester

Course Name	Credits	Minimum Grade Required	Notes
Major: CO-OP	1	С	

## YEAR 4

#### Fall Semester

Course Name	Credits	Minimum Grade Required	Notes
Major: Upper-Division Related course (or EN 3180 Business Writing)	3	С	• Core: 53-56 hrs;
Major: Upper-Division Related Course (or MT 3400 Probability & Statistics-Fall/Even)	3	С	• Prerequisites: 12-16 hrs;
Core: Relational Mode Level II	3		Major: 26 hrs;
Core: GPR	3		Related Coursework: 12 hrs;
General Elective	3		• General Electives: 18-25 hrs.
TOTAL HOURS	15		

## Spring Semester

Course Name	Credits	Minimum Grade Required	Notes
Major: MT 4420 Statistical Learning (Spring/Even) (or Upper-Division Related course	3	С	
Major: Upper-Division Related Course	3	С	
Core: PL or TH Swing Course, Level II	3		
General Elective	6		
TOTAL HOURS	15		

**Credit Hours** 

- Core: 53-56 hrs;
- Prerequisites: 12-16 hrs;
- Major: 26 hrs;
- Related Coursework: 12 hrs;
- General Electives: 18-25 hrs.

TOTAL Credit Hours: 128