

Advising Sheet (BS-DA)

Part 1: AA - Pathway to a Bachelors in Data Analytics (First 60 credits)

The recommendations below are based on **MDC's requirements for the Bachelors in Data Analytics**. All categories are required by MDC for AA degrees.

1. Communications	Credits	Notes
ENC1101	3	Required by MDC
ENC1102	3	Required by MDC

2. Oral Communications	Credits	Notes
SPC1017	3	Other courses are available. This one is recommended.

3. Humanities	Credits	Notes
PHI2010	3	[State Core] Other courses are available. This one is recommended.
PHI2604	3	[MDC Core] Other courses are available. This one is recommended.

4. Behav/Soc Science	Credits	Notes
POS2041	3	[State Core] Or AMH2020. Satisfies Civic Literacy requirement.
CLP1006	3	[MDC Core] Other courses are available. This one is recommended.

5. Natural Science	Credits	Notes
BSC1005	3	[State Core] Other courses are available. This one is recommended.
PSC1515	3	[MDC Core] Other courses are available. This one is recommended.

6. Math	Credits	Notes
MAC1105	3	Required for BS-DA degree
STA2023	3	Prerequisite for BS-DA degree

7. General Elective (3 cred)	Credits	Notes
CGS1060C	4*	Satisfies Computer Competency requirement.

Electives (24 credits)	Credits	Notes
<i>*Carryover credits (above)</i>	1	1 from CGS1060
CGS1540C (Database)	4	Prerequisite for BS-DA degree
CTS1437 (SQL Admin.)	4	Prerequisite for BS-DA degree
CTS2433 (SQL Implem.)	4	Prerequisite for BS-DA degree
GEB2100 (Bus. Analytics)	3	Prerequisite for BS-DA degree
Electives	8	Choose from a variety of electives. Speak with your advisor for a list of courses. COP1047 (Python programming) is strongly recommended.
Foreign Language	8	Two courses are required prior to graduation unless two years were completed in high school. If you must take these at MDC, substitute this requirement for the 8 credits above.

Sample Schedule

First Term

Course ID	Course Name	Credits	Notes
ENC1101	English Composition 1	3	
CGS1060C	Intro to Microcomputers	4	Recommended before other computer courses
MAC1105	College Algebra	3	
BSC1005	General Education Biology	3	

Second Term

Course ID	Course Name	Credits	Notes
ENC1102	English Composition 2	3	
PSC1515	Energy / Natural Environment	3	
STA2023	Statistical Methods I	3	
CGS1540C	Database Concepts	4	

Third Term (Summer)

Course ID	Course Name	Credits	Notes
PHI2604	Critical Thinking and Ethics	3	
SPC1017	Fundamentals of Speech	3	

Fourth Term

Course ID	Course Name	Credits	Notes
CLP1006	Psychology of Personal Eff.	3	
GEB2100	Intro to Business Analytics	3	Prerequisite: CGS1060
CTS1437	SQL Administration	4	8-week course
CTS2433	SQL Implementation	4	8-week course. Prerequisite: CTS1437

Fifth Term

Course ID	Course Name	Credits	Notes
PHI2010	Intro to Philosophy	3	
POS2041	American Federal Govt	3	
COP1047	Python Programming	4	Strongly recommended Elective 1
Elective 2	(See advisor)	3-4	

Advising Sheet (BS-DA)

Part 2: Upper Division courses in Data Analytics (Credits 61 – 120)

To begin taking upper division courses in this Bachelor's degree, you must have: (1) Completed your AA (60 credits); (2) A 2.5 GPA; (3) Completed the prerequisites for the BS-DA degree.

Upper Division Requirements (39 Credits)			
Course ID	Course Name	Credits	Notes
CAP4767	Data Mining	4	Prerequisite: CTS2433
CAP4744	Data Visualization	4	Prerequisite: CTS2433
CAP4784	Big Data	4	Prerequisite: CTS2433
CAP3770	Predictive Analytics Algorithms	4	Prerequisite: CTS2433 and STA3164
CAP4910	Data Analytics Capstone	4	Prereq: CAP4767, CAP4744, CAP4784, CAP3770, STA4210
CIS3368	Data Security & Governance	4	Prerequisite: CTS2433
CTS3452	Business Intelligence	4	Prerequisite: CTS2433
GEB3522	Applied Business Analytics	3	Prerequisite: GEB2100
STA3164	Statistical Methods II	4	Prerequisite: STA2023
STA4210	Regression Analysis	4	Prerequisite: STA3164

The following courses are recommended. Please speak with an advisor for assistance with electives.

Electives [ACG2, CGS, CIS, CNT, COP, CTS, FIN2, GEB1, GEB2, MAD, MAN1, MAN2, QMB2] (21 Credits)		
Course ID	Credits	Notes
Elective 1	3-4	Strongly Recommended: COP1047 – Python Programming
Elective 2	3-4	Recommended: CTS1800 - Web development
Elective 3	3-4	Recommended: CTS2361 - SharePoint Administration
Elective 4	3-4	Recommended: CTS2463 - C# Web Application Dev.
Elective 5	3-4	Recommended: CTS2303 - Windows Server
CIS2900	1-3	Directed I.T. Study. See advisor / chairperson for details.

Sample Schedule

First Term

Course ID	Course Name	Credits	Notes
CAP4744	Data Visualization	4	Prerequisite: CTS2433
CAP4784	Big Data	4	Prerequisite: CTS2433
Elective 1	Tech/Business Elective 1	3-4	
Elective 2	Tech/Business Elective 2	3-4	

Second Term

Course ID	Course Name	Credits	Notes
CTS3452	Business Intelligence	4	Prerequisite: CTS2433
CAP4767	Data Mining	4	Prerequisite: CTS2433
Elective 3	Tech/Business Elective 3	3-4	

Third Term (Summer)

Course ID	Course Name	Credits	Notes
STA3164	Statistical Methods II	4	Prerequisite: STA2023
GEB3522	Applied Business Analytics	3	Prerequisite: GEB2100

Fourth Term

Course ID	Course Name	Credits	Notes
STA4210	Regression Analysis	4	Prerequisite: STA3164
CAP3770	Predictive Analytics Algorithms	4	Prerequisite: STA2023 and STA3164
Elective 4	Tech/Business Elective 4	3-4	

Fifth Term

Course ID	Course Name	Credits	Notes
CAP4910	Data Analytics Capstone	4	Must be taken in graduating semester. Prerequisite: CAP4744 and CAP4784
CIS3368	Data Security & Governance	4	Prerequisite: CTS2433
Elective 5	Tech/Business Elective 5	3-4	
CIS2900	Directed Study IT	1-3	