

**BACHELOR OF SCIENCE IN DATA SCIENCE (BSDSC)****2020-2021**

<b>UNIV. CORE REQUIREMENTS (45 CR)</b>	<b>CR</b>	<b>GR</b>
<b>I. Communications (6 Credits)</b>		
ENG 1301 English Composition I	3	
ENG 1302 English Composition II	3	
<b>II. Mathematics (4 Credits)</b>		
MTH 1401 Calculus I	4	
<b>III. Mathematics Reasoning (3 Credits)</b>		
MTH 2300 Discrete Mathematics	3	
<b>IV. Natural Sciences (8 Credits)</b>		
PHY 1401 Principles of Physics I	4	
PHY 1402 Principles of Physics II	4	
<b>V. Humanities (3 Credits) <i>Select one course</i></b>		
See List of Humanities Courses	3	
<b>VI. Government (6 Credits)</b>		
POL 1301 Intro. to American Government	3	
POL 2315 Global Issues	3	
<b>VII. History (6 Credits) <i>Select one course</i></b>		
HIS 1305 Intro. to Afri. & African-American His.	3	
HIS 2305 Survey of US History	3	
<b>VIII. Visual and Performing Arts (3 CR) <i>Select one course</i></b>		
ART 1302 History of Western Art	3	
ART 1303 Art of Africa, Oceania and Americas	3	
ART 2301 Contemporary African Art	3	
ART 2305 Introduction to Theater	3	
<b>IX. Social Sciences (3 Credits) <i>Select one course</i></b>		
See List of Social Science Courses	3	
<b>X. Writing (3 Credits)</b>		
COM 2301 Technical Communication	3	
<b>PROGRAM REQUIREMENTS (19 Credits)</b>		
MTH 1402 Calculus II	4	
MTH 2302 Introduction to Linear Algebra	3	
CSC 2300 Principles of Computer Science	3	
CSC 3302 Data Structures	3	
STA 3300 Exploratory Data Analysis & Graphics	3	
STA 4300 Applied Regression Analysis	3	

<b>MAJOR REQUIREMENTS (34 Credits)</b>		
DSC 2301 Principles of Data Science with Python and SQL	3	
DSC 2302 R Programming for Data Science	3	
DSC 3300 Data Warehousing	3	
DSC 3301 Introduction to Machine Learning	3	
DS 3303 Relational and No SQL Databases	3	
DSC 4305 Data Analytics	3	
DSC 4315/CSC 4315 Introduction to Artificial Intelligence	3	
DSC 4311/CSC 4311 Data Mining Techniques	3	
DSC 4320/CSC 4320 Computer Graphics and Data Visualization	3	
DSC 4499 Capstone	4	
DSC 4333 Internship	3	
<b>ADVANCED DSC COURSES (13 Credits)</b>		
DSC 4498 Special Topics in Data Science	4	
<i>Select three courses</i>		
CIS 4303 Introduction to Business Intelligence	3	
MTH 4311 Operations Research	3	
STA 4301 Applied Statistical Methods	3	
STA 4302 Monte-Carlo Simulation and Resampling Methods	3	
<b>ELECTIVES (9 Credits)</b>		
<b>TOTAL NUMBER OF CREDITS</b>	<b>120</b>	

