

BS: Data Science (2020-21)

First Year

| Fall Semester | | | Spring Semester | | |
|----------------------|---------------------------------|------------------------|------------------------|----------------------------------|------------------------|
| MATH | 191 Calculus I | 4 | MATH | 192 Calculus II | 4 |
| CPTR | 151 Computer Science I | 3 | CPTR | 152 Computer Science II | 3 |
| STAT | 285 Intro to applied statistics | 3 | CPTR | 230 Data Science Fundamentals | 3 |
| ENGL | 115 College Writing I | 3 | ENGL | 215 College Writing II | 3 |
| RELT | 100 or RELB 210 | 3 | INEN | 221 Intro to Innovation & Entrep | 3 |
| | | | MATH | 395 Math colloquium | 0 |
| | | total <u>16</u> | | | total <u>16</u> |

Second Year

| Fall Semester | | | Spring Semester | | |
|----------------------|----------------------------------|------------------------|------------------------|---------------------------|------------------------|
| MATH | 215 Intro to Linear Algebra | 3 | MATH | 355 Fnd of Adv Math | 3 |
| CPTR | 276 Data Structures & Algorithms | 3 | INFS | 428 Database | 3 |
| CPTR | 420 Data Visualization & Mining | 3 | COGNATE | Science or Social Science | 4 |
| COGNATE | Science | 4 | COMM | 104 Communication Skills | 3 |
| ACE | Religion (RELB, RELG, RELT) | 3 | HLED | 135 Wellbeing 360 | 3 |
| MATH | 395 Math colloquium | 0 | | | |
| | | total <u>16</u> | | | total <u>16</u> |

Third Year

| Fall Semester | | | Spring Semester | | |
|----------------------|-------------------------|------------------------|------------------------|-----------------------------|------------------------|
| CPTR | 435 Machine Learning | 3 | STAT | 340 Probability theory | 3 |
| COGNATE | Social Science | 3 | CPTR | 487 Artificial Intelligence | 3 |
| COGNATE | Track specific course | 3 | CPTR | 350 Big Data Management | 3 |
| COGNATE | Track specific course | 3 | ACE | History | 3 |
| RELT | 340 Religion and Ethics | 3 | COGNATE | Track specific course | 3 |
| | | total <u>15</u> | | | total <u>15</u> |

Fourth Year

| Fall Semester | | | Spring Semester | | |
|----------------------|-----------------------------|------------------------|------------------------|--------------------------------|---|
| MATH | 426 Math Modeling | 3 | MATH | Math elective | 3 |
| CPTR | 430 Analysis of Algorithms | 3 | COGNATE | Track specific course | 3 |
| COGNATE | Track specific course | 3 | COGNATE | Track specific course/elective | 3 |
| COGNATE | Track specific course | 3 | ACE | Physical Activity | 1 |
| ACE | Religion (RELB, RELG, RELT) | 3 | ACE | Art/Humanity | 3 |
| | | total <u>15</u> | | General elective | 2 |
| | | | | total <u>15</u> | |

Total credits 124