

# MASTER OF APPLIED SCIENCE IN DATA SCIENCE WITH APPLIED ARTIFICIAL INTELLIGENCE

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At least nine credit hours must be taken of 400- or 500-level CS or CSP courses and nine credit hours of 400- or 500-level MATH courses.

| Code                                               | Title                                       | Credit Hours |
|----------------------------------------------------|---------------------------------------------|--------------|
| <b>Core Courses</b>                                |                                             | <b>(18)</b>  |
| MATH 564                                           | Regression                                  | 3            |
| or MATH 563                                        | Mathematical Statistics                     |              |
| MATH 569                                           | Statistical Learning                        | 3            |
| or CS 584                                          | Machine Learning                            |              |
| COM 523                                            | Communicating Science                       | 3            |
| CSP 571                                            | Data Preparation and Analysis               | 3            |
| MATH 546                                           | Introduction to Time Series                 | 3            |
| Select a minimum of one course from the following: |                                             | 3            |
| CSP 554                                            | Big Data Technologies                       | 3            |
| CS 525                                             | Advanced Database Organization              | 3            |
| CS 554                                             | Data-Intensive Computing                    | 3            |
| <b>Required Applied AI Courses</b>                 |                                             | <b>(9)</b>   |
| CS 585                                             | Natural Language Processing                 | 3            |
| CS 512                                             | Computer Vision                             | 3            |
| CS 577                                             | Deep Learning                               | 3            |
| <b>Elective Applied AI Courses</b>                 |                                             | <b>(3)</b>   |
| Select one course from                             |                                             | 3            |
| BUS 532                                            | Artificial Intelligence in Business         | 3            |
| CS 581                                             | Advanced Artificial Intelligence            | 3            |
| CSP 581                                            | Applied Artificial Intelligence Programming | 3            |
| MMAE 440                                           | Introduction to Robotics                    | 3            |
| MMAE 540                                           | Robotics                                    | 3            |
| <b>Electives</b>                                   |                                             | <b>(3)</b>   |
| Select one course from                             |                                             | 3            |
| MMAE 500                                           | Data Driven Modeling                        | 3            |
| MATH 574                                           | Bayesian Computational Statistics           | 3            |
| CS 422                                             | Data Mining                                 | 3            |
| CS 425                                             | Database Organization                       | 3            |
| CS 430                                             | Introduction to Algorithms                  | 3            |
| <b>Total Credit Hours</b>                          |                                             | <b>33</b>    |