SDSU MS in Data Science Program Information

Admission to the MSDS program

- Application deadline: As explained below, this program begins with enrollment in summer courses. Applications to begin the program in a particular summer should be submitted no later than March 15 of the preceding spring.
- GRE scores: GRE scores are not used in the admission process.
- Undergraduate preparation: Applicants should have an overall undergraduate GPA of at least 3.0 on a scale of 4.0, and strong performance in prerequisite undergraduate courses, including the following SDSU courses or their equivalents. See SDSU’s Online Catalog for course descriptions.
  - MATH 125 Calculus II
  - STAT 381 Introduction to Probability and Statistics
  - STAT 541 Statistical Methods II
  - Familiarity with matrix algebra (MATH 215/315 or equivalent)
  - Familiarity with SQL (STAT 410/510 or equivalent)
  - Familiarity with programming fundamentals (CSC 150, INFO 101, or equivalent)
- Correcting undergraduate preparation deficiencies:
  - Students with no prior statistical programming experience may benefit from taking one or both of the following courses online during the prior academic year in order to prepare for summer STAT 700.
    - STAT 510 SAS Programming I (3 credits)
    - STAT 514 R Programming I (1 credit)
  - Students needing a refresher on statistics before taking STAT 701 and other program courses may benefit from taking STAT 541 Statistical Methods II (3 credits) online during the summer or fall preceding 701.

MSDS program delivery and timeline

- Online vs classroom delivery: This program is not a completely online program. Some courses are available online, but it is not currently possible to complete the program without being resident on or within driving distance of the SDSU campus in Brookings, South Dakota in the U.S.
- Program starts in summer: This program is designed to be started in the summer. Students will generally not be able to start in the fall semester, and will rarely be able to start in the spring.
- Program completion in one year: This program may be completed in one calendar year simply by following the default curriculum as describe in the table below, though completion in one year is not required.

<table>
<thead>
<tr>
<th>Summer courses</th>
<th>Fall courses</th>
<th>Spring courses</th>
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<tbody>
<tr>
<td>STAT 700 Statistical Programming</td>
<td>STAT 701 Modern Applied Statistics I</td>
<td>STAT 702 Modern Applied Statistics II</td>
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<tr>
<td>INFS 774 Big Data Analytics</td>
<td>INFS 762 Data Warehousing/Mining</td>
<td>INFS 772 Programming-Data Analytics</td>
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<td>STAT 560 Time Series Analysis</td>
<td>STAT 545 Nonparametric Statistics</td>
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<td>MATH 575 Operations Research</td>
<td>STAT 551 Predictive Analytics I</td>
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Program total cost and financial assistance

- The 2016/17 cost will be $11,612 for residents of the state of South Dakota, and $19,688 for others.
- Financial assistance in the form of a graduate teaching assistantship (GTA) or graduate research assistantship (GRA) is generally not available to students in this program. This is a professional master’s degree program designed to prepare students for immediate entry into careers as professional data scientists, not careers in teaching or academic research. Thus, GTA’s and GRA’s are rarely available to MSDS students.

Information for international applicants (DHS STEM OPT, TOEFL)

- The MS in Data Science program qualifies for DHS STEM OPT extension as CIP 11.0101.
- A TOEFL score of 575 (paper-based), 230 (computer-based), or 90 (internet-based) is required.