Certificate in Data Science

*Note course has prerequisites. Completion of prerequisites or instructor consent required.

Data Science Certificate Program Objectives

1. Enhance the skill-set of students to improve their marketability in the job market
2. Streamline accessibility of classes by building prerequisites within the program and offering them in online format
3. Serve current CSUSB students/recent graduates and working professionals with a background in Math and/or Computer Science looking to update/expand their skill sets
4. Provide hands-on experience with statistical packages and Big Data tools through coursework
5. Be able to communicate effective statistical concepts orally and in writing

Data Science Certificate Program Outcomes

1. Develop proficient users of various Data Analysis tools
2. Use statistical data analysis techniques to solve Data Analytics and Data Science problems
3. Design and develop Data Analytics projects effectively

Pre-requisites include satisfying one of the following:

Group A: Completion of the following courses for currently matriculated undergraduates:

CSE 2010	Computer Science I	4
MATH 2210	Calculus I	4
MATH 2220	Calculus II	4
MATH 2310	Applied Linear Algebra	4
MATH 2320	Multivariable Calculus	4
MATH 3460	Probability Theory	3

Group B: Completion of a BA or BS in Data Science, Computer Science, Mathematics, or a related field. Admission is determined on an individual basis based on course work and background. Please contact us for more information at (909) 537-5326.

Additional Information

Students who complete the certificate program will have the option of continuing their education in the CSUSB Master of Science (MS) in Applied Data Science program as the certificate program includes some of the required coursework in the MS in Applied Data Science curriculum.

Certificate Requirements (19 units)

CSE 2020	Computer Science II [*]	4
MATH 2265	Statistics with Applications	3
MATH 3465	Computational Statistics [*]	3
MATH 5360	Statistical Methods for Machine Learning [*]	3
CSE 5160	Machine Learning	3
CSE 5720	Database Systems	3
Total Units		**19**