M.S. in Data Science

Master of Science in Data Science

The Master of Science in Data Science, a 36 credit degree program, is intended for students who have completed undergraduate degrees in science, mathematics, computer science or engineering and are interested in pursuing careers in industry-specific analytical fields (e.g. technology, pharmaceutical, research, government, public health, entrepreneurship, finance, business, etc.).

The Data Science degree program uses real-world problems and situations to prepare graduates for roles as strategic thought leaders who leverage predictive modeling to drive decision making. Students will develop in depth understanding of the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics. Students will practice problem analysis and decision-making. Students will gain practical, hands-on experience with statistics programming languages and big data tools through coursework and applied research experiences.

Vijay Voddi, M.S., Director, Master of Science in Data Science Program

Program Availability

The Data Science program will be offered on a semester schedule and is designed for both full-time and part-time study.

Degree Requirements

The degree requires 36 semester hour credits. A capstone course is required and will be taken the final semester of coursework.

Graduate Internship

As of January 1, 2016, completion of an internship related to Data Science is required for all students except: those who have 3+ years of professional work experience; those with full-time employment during the length of the program; and those who are participating in the exchange program. The graduate internship can start in the first semester of classes. Please consult your program advisor to determine if it is possible to obtain a waiver.

Advisement

Saint Peter's University assigns an academic advisor to every candidate.

Time Limitation

Students are expected to enroll continuously until their programs are completed. Students are required to maintain satisfactory academic progress by maintaining the required grade point average and accumulating sufficient credits within the stipulated time frame of five years. By federal regulation, F-1 International students must enroll as full-time students, so their time to completion will be considerably shorter.

Curriculum - Master of Science in Data Science

The Master's in Data Science program is divided into two levels as detailed below.

Required Core Courses		27
DS-510	Introduction to Data Science	
DS-520	Data Analysis and Decision Modeling	
DS-530	Data Management Systems	
DS-542	Python in Data Science	
DS-600	Data Mining	
DS-620	Data Visualization	
DS-630	Machine Learning	
DS-650	Data Ethics and Artificial Intelligence	
DS-670	Capstone: Big Data & Data Science	
Electives - Take 3 courses from the following:		9
DS-610	Big Data Analytics	
DS-640	Predictive Analytic & Financial Modeling	
DS-660	Business Analytics	
DS-680	Marketing Analytics & Operation Research	
DS-690	Data Science and Health	
Total Credits		36