

# Zoom Q &A Session on Master in Data Science and Engineering

## Data Science Track

July 21, 2020

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Programs  
Department of Mathematics and Statistics

# Master in Data Science and Engineering

- Master degree offered by

*College of Sciences and Mathematics* &  
*Samuel Ginn College of Engineering.*

- Started in Fall 2019.

# Data Flooding

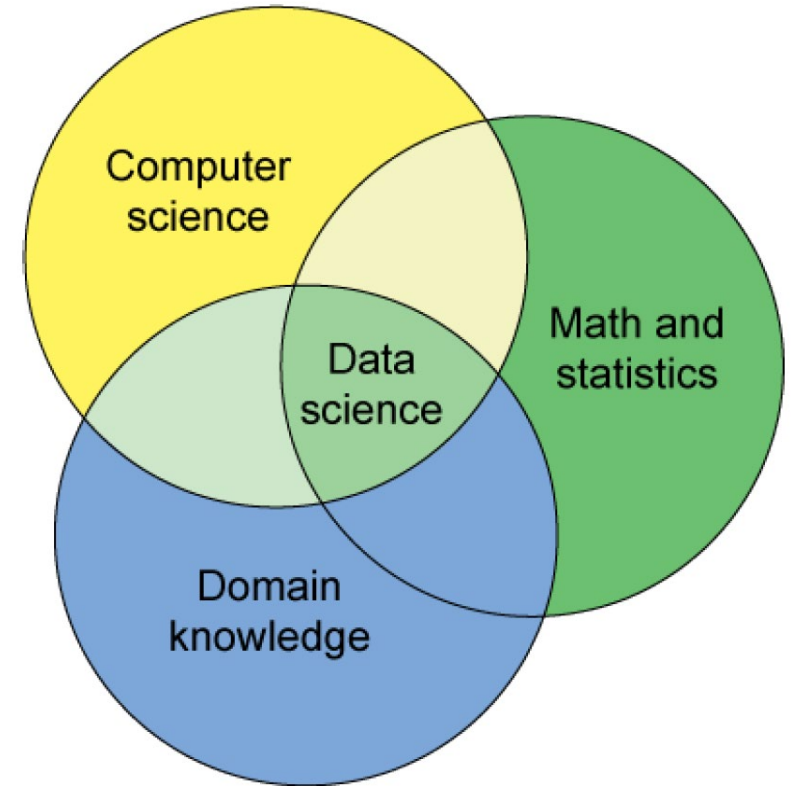
- <https://www.internetlivestats.com/>
- July 18, 2020 data on Tweets sent in 1 second



# Data Science

- The increasing of massive data in engineering and the applied sciences,
  - The advancement in computer technology
- resulted in the emergence of this new and inherently multidisciplinary field called

**Data Science.**



# Why should you earn a master's degree in Data Science/ Engineering?

- **More than 11 million new jobs will be created** in this field by 2026 according to the U.S. Bureau of Labor Statistics
- The Data Science/Engineering Field is one of the top emerging career tracks. LinkedIn reports that **jobs in Data Science/Machine Learning are one of the fastest growing areas.**
- The average base pay for a Data Scientist/ Engineer is **\$117,345** per year according to Glassdoor.com, June 2019.

# Careers: Where can you go with this degree?

You will learn how to derive valuable insights from massive amounts of raw data preparing you for *careers*

- *in industry or government*

as a **consultant, engineer, policy-maker or scientist ...**



# Two Tracks: Data Science & Data Engineering

- **Data Science option:** managed by the **Department of Mathematics and Statistics.**
- **Data Engineering option:** administrated by the **Department of Computer Science and Software Engineering.**

# Data Scientists vs. Data Engineers

- **Data scientists** are focused on advanced mathematics and statistical analysis on that generated data.
- **Data engineers** are typically in charge of managing data workflows, pipelines, and ETL (Extract, Transformation, Load) processes.



By DataCamp





# Skills: Learn how to

- Analyze data by statistical learning techniques
- Create machine learning solutions
- Understand and interpret patterns
- Develop programs and design apps
- Communicate big data concepts with non-technical stakeholders



# Curriculum: Total 30 credits

## Core Courses:

STAT 6000 Intermediate Statistical Methods for Data Science

STAT 6600 Probability and Statistics for Data Science

STAT 6650 Statistical Learning

COMP 6120 Database Systems I

COMP 6130 Data Mining

COMP 6630 Machine Learning

Select 6 Credits in COMP/STAT 6000+

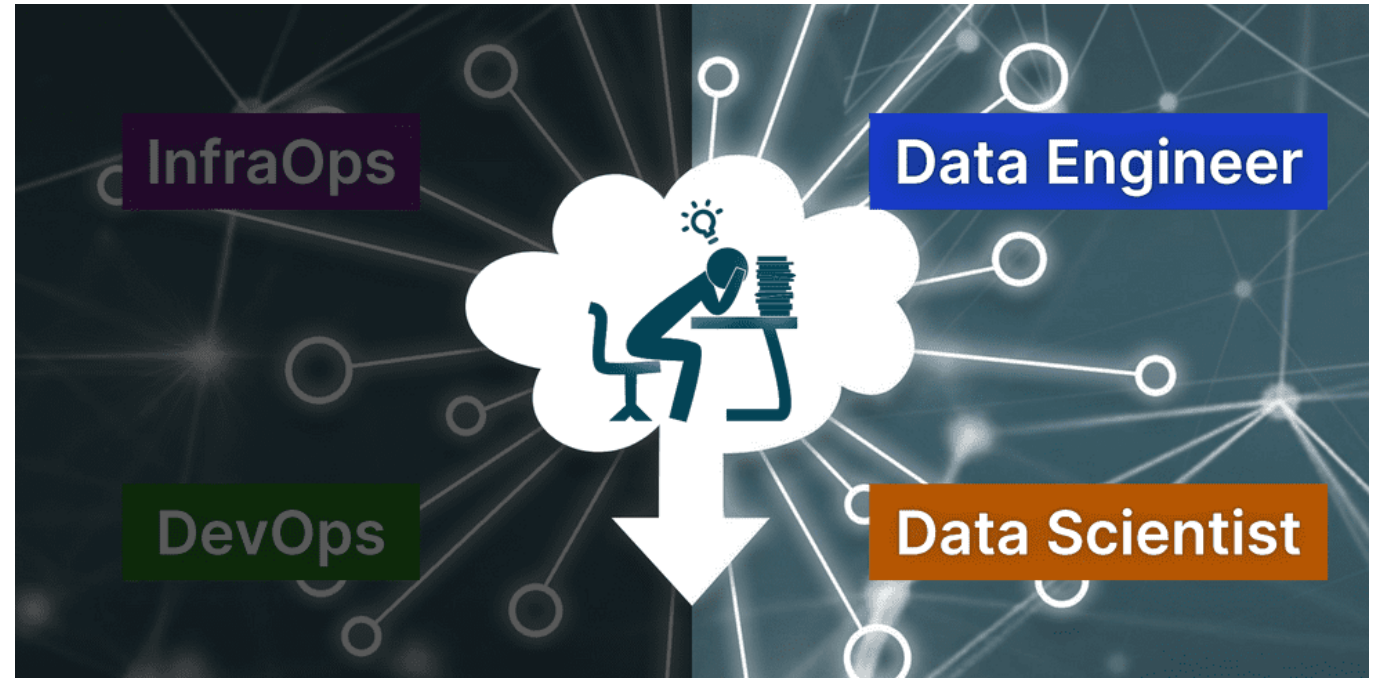
Select 3 Credits in 6000+

COMP/STAT 7980 Capstone Data Science or Engineering Project

# Want to know more?

## Contact us directly:

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By Adaaltas