MASTER OF SCIENCE IN APPLIED DATA SCIENCE

Master of Science in Applied Data Science

New College offers a Master's Degree in Applied Data Science, under the Classification of Instructional Programs (CIP) code 11.0104. The degree requires 36 credit hours of graduate work. Students complete 11 courses at 3 credit hours each, one practicum at 3 credit hours, and one non-credit earning course (the Industry Workshops).

The Applied Data Science Degree Program is cohort-based and emphasizes project-based work, often in small teams, but also emphasizes mathematical rigor and computational mastery in the collection, management, visualization, analysis and interpretation of data. All New College graduate students enroll full-time in the fall; there are no part-time enrollment options for this program, nor spring enrollments.

Admissions Factors

The following admission factors will be considered for applicants to the Master of Science in Applied Data Science program:

1. Graduate Application for the Master of Science in Applied Data Science program
2. Recent employment and/or academic experience (including fellowships, internships, research positions)
3. Academic record (all post-secondary transcripts), with documentation of a bachelor's degree from an accredited US college or university (or the foreign equivalent, as determined by a NACES-member transcript evaluation service)
4. Letters of recommendation
5. GRE, GRE Subject, or GMAT scores (if provided)
6. Students with academic records from non-US colleges or universities should arrange for professional evaluation (and translation, if necessary) of their transcripts by a NACES-member service.
7. Students who are not US citizens or US Permanent Resident Aliens, and whose first language is not English, must provide proof of English proficiency. Typically, recent scores (within the past two years) will be required, as follows:
   a. Test of English as a Foreign Language (TOEFL): score of 83 or better on the TOEFL IbT, or 560 on the Paper-Based TOEFL; or
   b. International English Language Testing System (IELTS): score of 6.5 or better; or
   c. Recent records (within the past two years) of successful academic or professional work in a setting where English is the primary language in use may be considered as a substitute for the testing requirement.

Graduate Admission Selection Committee

The Admission Selection Committee for the Master of Science in Applied Data Science Program is charged with reviewing candidate application files and selecting students to be offered admission to the Master of Science in Applied Data Science Program.

The Committee is comprised of three core faculty of the Applied Data Science Program:

1. The Director of the Applied Data Science Program, who chairs the Committee
2. Two other members of the Data Science core faculty group, selected by the Director for one-year terms

Selection for an offer of admission to the Program requires the following:

1. Each member of the Committee has reviewed the candidate's file.
2. Each member of the Committee has certified that the candidate's file is complete.
3. Each member of the Committee has considered the candidate's course work and any information regarding relevant job experience with regard to demonstrated skills involving computation, mathematics and statistics.
4. Each member of the Committee has certified that the candidate satisfies the minimum admission requirements.
   a. If any member of the Committee believes an applicant does not meet the minimum requirements, admission can only be offered on a provisional basis, through unanimous consent of the Committee.
   b. Provisional admission may be extended for the first semester, for example, if course work and/or the bachelor's degree is still in progress at the time of review and the candidate can reasonably be expected to provide official transcripts to document meeting the requirement(s) before the second semester begins. *If provisional admission is extended, the Committee will specify successful completion of the unmet requirement(s) as a condition required for enrollment after the first semester.*

The Committee will determine two tiers of candidates eligible for admission. In determining the tiers, the Committee will acknowledge the importance of a widely representative distribution of computational, mathematical and statistical skill sets.

Program enrollment goals are set by the NCF President. The Director will prepare a list of names of an appropriate number of qualified candidates recommended for admission to meet Program enrollment goals. In the event that a candidate does not accept an offer of admission, the Director may identify another eligible candidate.

Degree Requirements

Total Semester Credit Hours Required: 33 semester credit hours (SCH)

- Successful completion of all credit and non-credit courses in the first and second years of the program as listed in the Academic Program
- Successful completion of the Industry Practicums
- A minimum of 3.00 cumulative grade point average (GPA) by the end of the program

First Year	
Fall Term	**Spring Term**
Introduction to Data Science Bootcamp (3 days)	IDC 5295 (January Interterm)
IDC 5204	IDC 5205
IDC 5110	IDC 5112
IDC 5120	IDC 5210
IDC 5130	IDC 5131
Second Year	
Fall Term	**Spring Term**
IDC 6200	IDC 6294
IDC 6215	
IDC 6250	

Applied Data Science Faculty

Bernhard Klingenberg (https://www.ncf.edu/directory/bernhard-klingenberg/), Ph.D., University of Florida; ScienceProfessor of Statistics, Director of Applied Data Science
Interests: Statistical Modeling, Categorical Data Analysis, Multiple Comparisons, Biostatistics, Statistics Education, R, Mobile & Web Apps for Education

Rohan Loveland (https://www.ncf.edu/directory/rohan-loveland/), D. Phil., University of Oxford; Assistant Professor of Computer Science

Tyrone Ryba (https://www.ncf.edu/directory/tyrone-ryba/), Ph.D., Florida State University; Associate Professor of Bioinformatics

Gil Salu (https://www.ncf.edu/directory/19000/), Visiting Assistant Professor of Computer Science

Andrey Skripnikov (https://www.ncf.edu/directory/andrey-skripnikov/), Ph.D., University of Florida; Assistant Professor of Applied Statistics
Interests: High Dimensional Data, Econometric Time Series Analysis, Gene Expression Data, Brain Activity Measurement, Sports Data

Toby Wade (https://www.ncf.edu/directory/toby-wade/), Ph.D., London School of Economics; Assistant Professor of Statistics and Data Science and Director of Artificial Intelligence and Crypto
Interests: Quantitative Finance