DATA SCIENCE (Z104)

Graduate Certificate Program
College: Computer, Mathematical, and Natural Sciences

Abstract
Data Science is an emerging field encapsulating interdisciplinary activities used to create data-centric products, applications or programs that address specific scientific, socio-political, or business questions. Data Science is also commonly referred to as big data analytics, predictive analytics, advanced analytics, etc. It is making deep inroads in industry, government, health, and journalism, and many other disciplines. The Harvard Business Review has called "Data scientist" the "sexiest job of the 21st century", and due to the growing need for data science, there is a significant shortage of trained data scientists.

Offered by the nationally ranked Department of Computer Science (https://www.cs.umd.edu), the University of Maryland's Graduate Certificate of Professional Studies in Data Science, provides a broad introduction to the field of Data Science, including how to extract and clean data, how to store and manage large volumes of data, and how to analyze such data and extract insights from it. Data Science requires the ability to integrate data, operate on data at scale, analyze data, make predictions, find patterns and form and test hypothesis. It incorporates practices from a variety of fields in computer science, chiefly Machine Learning, Statistics, Databases, and Visualization.

Financial Assistance

Contact
Amol Deshpande
Professor
3221 A.V. Williams Building
8223 Paint Branch Drive
University of Maryland
College Park, MD 20742
Telephone: 301.539.9422
Email: amol@cs.umd.edu

Website: http://ter.ps/datascience

Courses: CMSC

Admissions
General Requirements
• Statement of Purpose
• Transcript(s)
• TOEFL/IELTS/PTE (international graduate students) (https://gradschool.umd.edu/admissions/english-language-proficiency-requirements)

Program-Specific Requirements
• Letters of Recommendation (2)
• CV/Resume

• Prior Coursework: Prior coursework establishing quantitative ability (i.e. calculus, linear algebra, basic statistics etc.)
• Proficiency in programming languages: Proficiency in programming languages, demonstrated either through prior programming coursework or substantial software development experience.

*Visa Eligibility: This program is not eligible for I-20 or DS-2019 issuance by the University of Maryland.

Prior coursework establishing quantitative ability (i.e. calculus, linear algebra, basic statistics etc.), and proficiency in programming languages, demonstrated either through prior programming coursework or substantial software development experience, is required.

For more admissions information or to apply to the program, please visit our Graduate School website: www.gradschool.umd.edu/admissions

Application Deadlines

<table>
<thead>
<tr>
<th>Type of Applicant</th>
<th>Fall Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Applicants</td>
<td></td>
</tr>
<tr>
<td>US Citizens and Permanent Residents</td>
<td>26 July</td>
</tr>
<tr>
<td>International Applicants</td>
<td></td>
</tr>
<tr>
<td>F (student) or J (exchange visitor) visas; A, E, G, H, I and L visas and immigrants</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Other Deadlines: Please visit the program website at http://ter.ps/datascience

Requirements
• Data Science, Post-Baccalaureate Certificate (P.B.C.) (https://academiccatalog.umd.edu/graduate/programs/data-science-z104/data-science-pbc)

Faculty

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First/Middle Name</th>
<th>Graduate Faculty Status</th>
<th>Academic Credentials</th>
<th>Positions</th>
</tr>
</thead>
</table>

Visa Eligibility: This program is not eligible for I-20 or DS-2019 issuance by the University of Maryland.

Prior coursework establishing quantitative ability (i.e. calculus, linear algebra, basic statistics etc.), and proficiency in programming languages, demonstrated either through prior programming coursework or substantial software development experience, is required.

For more admissions information or to apply to the program, please visit our Graduate School website: www.gradschool.umd.edu/admissions

Application Deadlines

<table>
<thead>
<tr>
<th>Type of Applicant</th>
<th>Fall Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Applicants</td>
<td></td>
</tr>
<tr>
<td>US Citizens and Permanent Residents</td>
<td>26 July</td>
</tr>
<tr>
<td>International Applicants</td>
<td></td>
</tr>
<tr>
<td>F (student) or J (exchange visitor) visas; A, E, G, H, I and L visas and immigrants</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Other Deadlines: Please visit the program website at http://ter.ps/datascience

Requirements
• Data Science, Post-Baccalaureate Certificate (P.B.C.) (https://academiccatalog.umd.edu/graduate/programs/data-science-z104/data-science-pbc)

Faculty

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First/Middle Name</th>
<th>Graduate Faculty Status</th>
<th>Academic Credentials</th>
<th>Positions</th>
</tr>
</thead>
</table>