Master of Science in Data Science

Required Foundational Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 532</td>
<td>Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>STAT 541</td>
<td>Experimental Design</td>
<td>3</td>
</tr>
<tr>
<td>M 508</td>
<td>Mathematics of Machine Learning</td>
<td>3</td>
</tr>
</tbody>
</table>

Curriculum for a student with a dominant interest in Computer Science:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CSCI 532 - Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 540 - Advanced Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 547 - Machine Learning</td>
<td>3</td>
</tr>
<tr>
<td>M 441 - Numerical Linear Algebra &amp; Optimization</td>
<td>3</td>
</tr>
<tr>
<td>STAT 408 - Statistical Computing and Graphical Analysis</td>
<td>3</td>
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<tr>
<td>Year Total:</td>
<td>15</td>
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<table>
<thead>
<tr>
<th>Year 2</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CSCI 535 - Computational Topology</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 550 - Data Mining</td>
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<tr>
<td>M 508 - Mathematics of Machine Learning</td>
<td>3</td>
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<tr>
<td>STAT 511 - Methods of Data Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 541 - Experimental Design</td>
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Total Program Credits: 30

Curriculum for a student with a dominant interest in Mathematics:

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<tr>
<td>M 441 - Numerical Linear Algebra &amp; Optimization</td>
<td>3</td>
</tr>
<tr>
<td>M 560 - Methods of Applied Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 408 - Statistical Computing and Graphical Analysis</td>
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Curriculum for a student with a dominant interest in Statistics:

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<tr>
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<td>3</td>
</tr>
<tr>
<td>STAT 511 - Methods of Data Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 512 - Methods of Data Analysis II</td>
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</tr>
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Font Notice
This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.