### Minor Comparison Chart

<table>
<thead>
<tr>
<th>Statistics Minor</th>
<th>Mathematical &amp; Computational Science Minor</th>
<th>Data Science Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designed to complement major degree programs primarily in the social and natural sciences</td>
<td>Intended to provide an experience in Computer Science, Mathematics, Management Science and Engineering, and Statistics</td>
<td>Intended for majors in the humanities &amp; social sciences who want to gain practical knowledge of statistical data analytic methods as it relates to their field of interest. No previous programming or statistical background is assumed.</td>
</tr>
<tr>
<td>19 units</td>
<td>32 units</td>
<td>22 units</td>
</tr>
</tbody>
</table>

**Required Courses:**
- **Statistics Minor:**
  - STATS 116 – Probability
  - STATS 200 – Theoretical Statistics

**Qualifying Courses (choose 1):**
- Math 52 – Integral Calculus of Several Variables
- STATS 191 – Introduction to Applied Statistics
  (only 1 may be counted toward the minor)

**Elective Courses (3 courses):**
- At least one elective must be a STATS 200 level course. The remaining two elective courses may also be 200-level courses. Alternatively, one or two elective courses may be approved courses in other departments. Statistics courses below the 100-level do not count toward the minor. Some electives listed at [https://statistics.stanford.edu/statistics-minor](https://statistics.stanford.edu/statistics-minor)

**Required courses:**
- 6 core subjects + 3 elective courses
- **Math Core:** MATH 51 or MATH 104
- **CS Core:** CS 106A and either CS 106B or 106X
- **MS&E Core:** MS&E 211 or MS&E 221
- **STATS Core:** STATS 116* and either STATS 191 or 200
  - *STATS 116 cannot be substituted or waived

**Elective Courses**
- 3 courses from at least two different departments from the list below
  - https://mcs.stanford.edu/academics/mcs-minor

**Required courses:**
- **Linear Algebra:** MATH 51 or CME 100
- **Programming:** CS 106A or (CS 106AP/AJ)
- **Programming in R (one):** STATS 32, 48, 195, THINK 3
- **Data Science:** STATS 101
- **Statistics (one):** ECON 102A, PHIL 166, STATS: 48N, 141, 191, STATS 211
- **Data Mining & Analysis:** STATS 202 or 216

**Data Science Methodology (choose 1):**