# University of Lynchburg

## Bachelor of Science in Statistics and Data Science
2023-2024 Catalog Year

## UNIVERSITY DELL REQUIREMENTS (42 Credits)

### Core (12 Credits)

| | | SEM | GR |
|---|---|---|---|
| COMM 101 | Oral Argumentation & Advocacy | _____ | _____ |
| ENGL 123W | College Writing Workshop | _____ | _____ |

*Integrative Seminars* — NMBR

| | | NMBR | SEM | GR |
|---|---|---|---|---|
| DELL 100-level | First-Year Seminar | _____ | _____ | _____ |
| DELL 400-level | Senior-Year Seminar | _____ | _____ | _____ |

### Artistic & Creative Thinking* (3 Credits)
_____  _____  _____

### Ethics or Civic Engagement* (3 Credits)
_____  _____  _____

### Historical Interpretation* (3 Credits)
_____  _____  _____

### Language & Intercultural Competence** (6 Credits)
_____  _____  _____

_____  _____  _____

### Literary Analysis* (3 Credits)
_____  _____  _____

### Living Well* (2 Credits)
_____  _____  _____

### Quantitative Reasoning* (3 Credits)
STAT 222    Introductory Statistics_____  _____  _____

### Scientific Literacy* (4 Credits)
_____  _____  _____

### Social Science Literacy* (3 Credits)
_____  _____  _____

## GENERAL ELECTIVES*** (33-36 Credits)

| | SEM | GR |
|---|---|---|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

## MAJOR REQUIREMENTS (39 Credits)

### Statistics Core (24 Credits)

| | | SEM | GR |
|---|---|---|---|
| CS 131 | Fundamentals of Programming | _____ | _____ |
| MATH 103 | Calculus I | _____ | _____ |
| MATH 104 | Calculus II | _____ | _____ |
| MATH 311 | Probability Theory | _____ | _____ |
| STAT 222 | Introductory Statistics | _____ | _____ |
| STAT 305 | Data Handling for Statistics | _____ | _____ |
| STAT 333 | Mathematical Statistics | _____ | _____ |
| STAT 400W | Statistical Methods | _____ | _____ |

### Statistics Core[a] (6 Credits)
*Two from the following*:

| | | SEM | GR |
|---|---|---|---|
| STAT 300 | Applied Data Analysis | _____ | _____ |
| STAT 302 | Introduction to Statistical Inference | _____ | _____ |
| STAT 325 | Applied Regression Analysis | _____ | _____ |

### Internship or Research[b] (3 Credits)
*One from the following*:

| | | SEM | GR |
|---|---|---|---|
| STAT 399 | Internship in Statistics | _____ | _____ |
| STAT 451W | Senior Project | _____ | _____ |

### Additional Major Electives[c] (6 Credits)

| | SEM | GR |
|---|---|---|
| _____ | _____ | _____ |
| _____ | _____ | _____ |

### NOTES
*Refer to the class schedule for lists of courses that satisfy University requirements.
**Must take two sequential courses.
***Courses that do not satisfy a major or DELL requirement. Can include coursework for a minor.

[a]Choose two courses from the list provided.
[b]Choose one course from the list provided.
[c]Choose 6 credits from Other CS courses (any level) or other MATH courses 200 level and above or STAT courses 300 level and above.

**Total credits required for graduation: 124 Credits**
For graduation with Honors, see Undergraduate Catalog

# Statistics & Data Science Major (Bachelor of Science)
## Sample Four-Year Plan

While not all students will take all the courses in the same sequence, the guide below can be used in combination with the online graduation progress report as a pathway to degree completion. See the Academic Regulations in the University of Lynchburg Undergraduate Catalog for all academic degree requirements. Students should consult their major advisor for more specific guidance.

| Semester 1 | Credits |
| --- | --- |
| MATH 103 | 3 |
| Quantitative Reasoning (STAT 222) | 3 |
| College Success Strategies (G S 104) | 1 |
| ENGL 123W | 3 |
| First-Year Seminar | 3 |
| Language & Intercultural Competence I | 3 |
| **Semester Credits:** | **16** |

| Semester 2 | Credits |
| --- | --- |
| MATH 104 | 3 |
| STAT 305 | 3 |
| COMM 101 | 3 |
| Language & Intercultural Competence II | 3 |
| Elective | 3 |
| **Semester Credits:** | **15** |

| Semester 3 | Credits |
| --- | --- |
| MATH 311 | 3 |
| Statistics Core | 3 |
| Historical Interpretation | 3 |
| Scientific Literacy | 4 |
| Artistic & Creative Thinking | 3 |
| **Semester Credits:** | **16** |

| Semester 4 | Credits |
| --- | --- |
| STAT 333 | 3 |
| Statistics Core | 3 |
| Literary Analysis | 3 |
| Living Well | 2 |
| Elective | 3 |
| Elective | 3 |
| **Semester Credits:** | **17** |

| Semester 5 | Credits |
| --- | --- |
| Major Elective | 3 |
| Ethics or Civic Engagement | 3 |
| Elective | 3 |
| Elective | 3 |
| Elective | 3 |
| **Semester Credits:** | **15** |

| Semester 6 | Credits |
| --- | --- |
| CS 131 | 3 |
| Major Elective | 3 |
| Social Scientific Literacy | 3 |
| Elective | 3 |
| Elective | 3 |
| **Semester Credits:** | **15** |

| Semester 7 | Credits |
| --- | --- |
| STAT 451W | 3 |
| Elective | 3 |
| Elective | 3 |
| Elective | 3 |
| Elective | 3 |
| **Semester Credits:** | **15** |

| Semester 8 | Credits |
| --- | --- |
| STAT 400W | 3 |
| Senior-Year Seminar | 3 |
| Elective | 3 |
| Elective | 3 |
| Elective | 3 |
| **Semester Credits:** | **15** |

**Minimum Credits Required to Graduate: 124**