# Statistics (PhD)

## Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST 779</td>
<td>Advanced Probability for Statistical Inference</td>
<td>12</td>
<td>Required Course Work</td>
</tr>
<tr>
<td>ST 793</td>
<td>Advanced Statistical Inference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST 758</td>
<td>Computation for Statistical Research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST 841</td>
<td>Statistical Consulting ¹</td>
<td></td>
<td></td>
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</tbody>
</table>

### Ethics Sequence

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ST 810 &amp; PHI 816</td>
<td>Advanced Topics in Statistics and Introduction to Research Ethics (Ethics in Statistics)</td>
</tr>
</tbody>
</table>

### Core Elective Courses

Select nine credit hours of the following:

<table>
<thead>
<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>ST 732</td>
<td>Longitudinal Data Analysis</td>
</tr>
<tr>
<td>ST 733</td>
<td>Spatial Statistics</td>
</tr>
<tr>
<td>ST 740</td>
<td>Bayesian Inference and Analysis</td>
</tr>
<tr>
<td>ST 746</td>
<td>Introduction To Stochastic Processes</td>
</tr>
<tr>
<td>ST 790</td>
<td>Advanced Special Topics</td>
</tr>
</tbody>
</table>

### Supporting Elective Courses

Select a minimum of three credit hours of coursework approved in conjunction with the academic committee ²

### Additional Courses

"Additional Courses" are approved in conjunction with the academic committee to meet 72 total hours ³

### Total Hours

72

³ Additional courses may include ST 895 and courses taken from a Master of Statistics or Master of Science in Statistics degree at NCSU.

## Faculty

### Department Head

K. Sellers

### Associate Department Heads

E. Griffith

W. Lu

### Director of Statistics Graduate Programs

W. Lu

### Director of Statistics Undergraduate Programs

S. Muse

### Director of Online Programs

J. Post

### Director of Bioinformatics Research Center

F. Wright

### Director of Bioinformatics Graduate Program

S. Muse

### R.A. Fisher Distinguished Professor of Statistics

L. Stefanski

### J. Stuart Hunter Distinguished Professor

M. Davidian

### Cox Distinguished Professor of Statistics

B. Reich

¹ Unless student has taken ST 542 Statistical Practice

² A 500-level or 700-level course in either statistics or another department with material relevant to the student’s plan of work. Examples include ST 520, ST 733, ST 744 and ST 745.
Alumni Distinguished Graduate Professors
M. Davidian
A. Wilson

Alumni Distinguished Undergraduate Professor
T. Reiland

Goodnight Innovation Distinguished Professor
F. Wright

University Distinguished Professor
S. Ghosal

Professors
D.D. Boos
M. Davidian
S. Ghosal
S.K. Ghosh
K. Gross
M. Gumpertz
W. Lu
A. Maity
R. Martin
S. Muse
J. Osborne
B. Reich
K. Sellers
A. Staicu
L.A. Stefanski
J.-Y. Tzeng
A. Wilson
F. Wright
D. Zhang

Associate Professors
J. Jeng
D. Martin
T.W. Reiland
E. Schliep
S. Sengupta
C.E. Smith
J. Stallrich
L. Xiao
S. Yang

Assistant Professors
A. Booth
E. Hector
N. Josephs
L. Opperman
M. Tang
J. Williams

Teaching Associate Professors
J. Duggins
H. McGowan
J. Post
P. Savariappan

Teaching Assistant Professors
J. Duggins
L. Opperman
S. Wang

Associate Professor of the Practice
E. Griffith
Lecturers
R. Danaher
D. Harris
T. Johnson
M. Winters

Emeritus Faculty
P. Bloomfield
D. Dickey
T. Gerig
M. Gumpertz
J. Hughes-Oliver
J. Monahan
W. Swallow
J. Thorne
A. Tsiatis

Associate and Adjunct Faculty
H. Bondell
J. Guiness
I. Ipsen
A. Montsinger-Reif
Y. Zhou