<table>
<thead>
<tr>
<th>University Core and Graduation Requirements</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>University Core Requirements:</strong></td>
<td><strong>Suggested Sequence of Courses</strong></td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td><strong>FRESHMAN YEAR</strong></td>
</tr>
<tr>
<td><strong>#Classes</strong></td>
<td><strong>1st Semester</strong></td>
</tr>
<tr>
<td><strong>Hours</strong></td>
<td><strong>First Year Writing</strong></td>
</tr>
<tr>
<td><strong>Classes</strong></td>
<td><strong>MATH 112 (FWSpSu)</strong></td>
</tr>
<tr>
<td><strong>Religion Cornerstones</strong></td>
<td><strong>4.0</strong></td>
</tr>
<tr>
<td>Teachings and Doctrine of The Book of Mormon</td>
<td><strong>Religion Cornerstone course</strong></td>
</tr>
<tr>
<td>Jesus Christ and the Everlasting Gospel</td>
<td><strong>Total Hours</strong></td>
</tr>
<tr>
<td>Foundations of the Restoration</td>
<td><strong>15.0</strong></td>
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<tr>
<td>The Eternal Family</td>
<td></td>
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<tr>
<td><strong>The Individual and Society</strong></td>
<td></td>
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<tr>
<td>American Heritage</td>
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<tr>
<td>Global and Cultural Awareness</td>
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<tr>
<td><strong>Skills</strong></td>
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<tr>
<td>First Year Writing</td>
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<tr>
<td>Advanced Written and Oral Communications</td>
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<tr>
<td>Quantitative Reasoning</td>
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<tr>
<td>Languages of Learning (Math or Language)</td>
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<tr>
<td><strong>Arts, Letters, and Sciences</strong></td>
<td><strong>3rd Semester</strong></td>
</tr>
<tr>
<td>Civilization 1</td>
<td><strong>MATH 313 (FWSpSu)</strong></td>
</tr>
<tr>
<td>Civilization 2</td>
<td><strong>3.0</strong></td>
</tr>
<tr>
<td>Arts</td>
<td><strong>STAT 340</strong></td>
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<tr>
<td><strong>Total Hours</strong></td>
<td><strong>2.0</strong></td>
</tr>
<tr>
<td>Letters</td>
<td><strong>Civilization 1</strong></td>
</tr>
<tr>
<td>Biological Science</td>
<td><strong>3.0</strong></td>
</tr>
<tr>
<td>Physical Science</td>
<td><strong>Religion elective</strong></td>
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<tr>
<td>Social Science</td>
<td><strong>Total Hours</strong></td>
</tr>
<tr>
<td><strong>Core Enrichment: Electives</strong></td>
<td><strong>16.0</strong></td>
</tr>
<tr>
<td>Religion Electives</td>
<td><strong>3rd Semester</strong></td>
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<tr>
<td>Open Electives</td>
<td><strong>4th Semester</strong></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>MATH 314 (FWSpSu)</strong></td>
</tr>
<tr>
<td>Variable</td>
<td><strong>MATH 314 (FWSpSu)</strong></td>
</tr>
<tr>
<td>Variable</td>
<td><strong>3.0</strong></td>
</tr>
<tr>
<td>Personal choice</td>
<td><strong>STAT 123 or STAT 124</strong></td>
</tr>
<tr>
<td><strong>Graduation Requirements:</strong></td>
<td><strong>5th Semester</strong></td>
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<tr>
<td>Minimum residence hours required</td>
<td><strong>16.0</strong></td>
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<tr>
<td>Minimum hours needed to graduate</td>
<td><strong>30.0</strong></td>
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<tr>
<td><strong>120.0</strong></td>
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</tbody>
</table>

Note 1: The sequence of courses suggested may not fit the circumstances of every student. Students should contact their college advisement center for help in outlining an efficient schedule.

Note 2: Students are encouraged to complete an average of 15 credit hours each semester or 30 credit hours each year, which could include spring and/or summer terms. Taking fewer credits substantially increases the cost and the number of semesters to graduate.

Note 3: Students must have the statistics core completed before their senior year in order to graduate within four years.
REQUIREMENT 1 Complete 1 course
STAT 121 - Principles of Statistics 3.0

REQUIREMENT 2 Complete 2 courses
PREPARATION CORE COURSES:
*MATH 112 - Calculus 1 4.0
MATH 113 - Calculus 2 4.0

REQUIREMENT 3 Complete 8 courses
STATISTICS CORE COURSES:
STAT 123 - Introduction to R Programming 1.5
STAT 124 - SAS Base Programming Skills 1.5
STAT 223 - Applied R Programming 1.5
STAT 224 - Applied SAS Programming 1.5
STAT 230 - Analysis of Variance 3.0
STAT 240 - Discrete Probability 3.0
STAT 330 - Introduction to Regression 3.0
STAT 340 - Inference 3.0

REQUIREMENT 4 Complete 2 courses
MATH 313 - Elementary Linear Algebra 3.0
MATH 314 - Calculus of Several Variables 3.0

REQUIREMENT 5 Complete 12.0 hours from the following course(s)
C S 142 - Introduction to Computer Programming 3.0
IS 515 - Spreadsheets for Business Analysis 3.0
IS 520 - Business Programming and Spreadsheet Automation 3.0
MATH 334 - Ordinary Differential Equations 3.0
MATH 341 - Theory of Analysis 1 3.0
MATH 342 - Theory of Analysis 2 3.0
STAT 234 - Methods of Survey Sampling 3.0
STAT 251 - Introduction to Bayesian Statistics 3.0
STAT 274 - Theory of Interest 3.0
STAT 377 - Statistical Models for Financial Economics 3.0
STAT 381 - Statistical Computing 3.0
STAT 420 - Big Data Science 1 3.0
STAT 421 - Big Data Science 2 3.0
STAT 435 - Nonparametric Statistical Methods 3.0
STAT 437 - Applications in Biostatistics 3.0
STAT 451 - Applied Bayesian Statistics 3.0
STAT 462 - Quality Control and Industrial Statistics 3.0
STAT 466 - Introduction to Reliability 3.0
STAT 469 - Applied Time Series and Forecasting 3.0
STAT 475 - Life Contingencies 3.0
STAT 477 - Statistical Distributions for Actuarial Modeling and Data Analy 3.0
STAT 495R - Special Topics in Statistics 3.0

It is strongly recommended that students interested in graduate study in statistics choose electives to prepare for the BYU BS/MS statistics integrated program by meeting with the statistics graduate coordinator.

THE DISCIPLINE:
Statisticians apply sophisticated methods to increasingly massive data sets to discover insights into important business, government, and health policy questions. The curriculum and degrees offered through the Department of Statistics are designed to equip students with decision-making skills for careers as professional statisticians in industrial organizations, government agencies, insurance companies, pharmaceutical companies, universities, and research institutes.

While the Statistical Science emphasis is designed to prepare students for graduate programs, all students in the Statistical Science emphasis leave BYU with a resourceful, disciplined, and flexible approach to statistics, an enhanced capacity to analyze and interpret data, a broadened perspective on the impact of data in decisionmaking, and a well-developed capacity for understanding and communicating statistical results.

CAREER OPPORTUNITIES:
The increase of big data and analytics across disciplines is creating new challenges and opportunities for statisticians. The Statistical Science emphasis prepares students to enter competitive graduate programs in statistics. The technical tools statisticians acquire are useful in many areas and for this reason a statistics degree is also excellent preparation for public administration. Recent alumni who did not go to graduate school are working at Adobe, Saks Fifth Avenue, Qualtrics, Milliman, Pariveda Solutions, and the Utah Governor’s Office of Planning and Budget.

ADVISING:

SAS/BYU Applied Statistics and Advanced SAS Programming Certificate. Students who earn a B or higher in the applied computing core classes (Stat 124, 224, 230, 330, 424) are eligible to receive a certificate jointly issued by SAS and BYU which can be listed on a resume. More information is available at statistics.byu.edu/content/sas-certificateopportunities.


MAP DISCLAIMER
While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.

DEPARTMENT INFORMATION
Department of Statistics
223 TMCB
Brigham Young University, Provo, UT 84602
Telephone: (801) 422-4505

BS in Statistics: Statistical Science (695220)
2017-2018 Program Requirements (47 Credit Hours)
BS in Statistics: Statistical Science (695220)
2017-2018

FACULTY ADVISOR:
Del T. Scott
223C TMCB
Brigham Young University, Provo, UT 84602
Telephone: (801) 422-7054

ADVICE CENTER INFORMATION
FOR UNIVERSITY CORE OR PROGRAM QUESTIONS CONTACT
THE ADVISEMENT CENTER
Physical and Mathematical Sciences College Advisement Center
Brigham Young University
N-181 ESC
Provo, UT 84602
Telephone: (801) 422-2674