# Bachelor of Science in Statistics

### Wright State Core – 40 hours

**Element 1 Communications**
- ENG 1100 Academic Writing and Reading
- ENG 2100 Research and Argument

**Element 2 Mathematics**
- MTH 2300 Calculus I

**Element 3 Global Traditions**
Choose one interdisciplinary course:
- AFS 2000 (IW, MC)
- ATH 2500
- CS 1000
- CST 2210 (IW, MC)
- CST 2310 (IW, MC)
- CST 2320 (IW, MC)
- CST 2410 (MC)
- CST 2420 (IW, MC)

Choose one History course:
- CLS 1500
- HST 1100
- HST 1200

**Element 4 Arts/Humanities**
Choose one course:
- ART 2140
- CLS 2040 (IW)
- CST 2310 (IW)
- CST 2420 (IW, MC)
- ENG 2040 (IW)
- ENG 2070 (IW, MC)
- MUS 1210
- MUS 2140
- MUS 2900 (IW, MC)

**Element 5 Social Science**
Choose two (2) courses from different disciplines:
- ATH 2200
- EC 2000 (iw)
- EC 2040
- EC 2050
- EC 2100
- EC 2200 (IW, MC)
- EC 2310 (IW)
- MTH 2310 Calculus II
- MTH 2320 Calculus III
- MTH 3060 Mathematical Modeling
- MTH 3260 Numerical Methods
- MTH 3320 Complex Variables
- MTH 3330 Partial Differential Equations
- MTH 4070 Optimization Techniques
- MTH 4150 Introduction to Scientific Computation
- MTH 4240 Coding Theory
- MTH 4260 Matrix Computations
- MTH 4290 Cryptography and Data Security
- MTH 4320 Real Variables II
- MTH 4400 History of Mathematics
- MTH 4520 Modern Algebra II
- MTH 4550 Advanced Linear Algebra
- MTH 4570 Combinatorics and Graph Theory
- MTH 4710 Geometry
- MTH 4710 Geometry
- MTH 4810 Methods of Applied Mathematics I
- MTH 4820 Methods of Applied Mathematics II
- MTH 4920 Undergraduate Mathematics Seminar

### Departmental Requirements – 40 hours

**Required Core Courses (25 hours)**
- MTH 2320 Calculus III
- MTH 2530 Elementary Linear Algebra
- STT 3600 Applied Statistics I
- STT 3610 Applied Statistics II
- STT 4610 Theory of Statistics I
- STT 4660 Statistical Methods I
- STT 4670 Statistical Methods II

**Electives (15 hours)**
At least fifteen (15) hours of departmental courses with at least two (2) STT courses numbered 4000 or higher. With advisor’s permission, a student may satisfy departmental electives with suitable mathematics courses.

**Related Course Requirements – 16 hours**
- CS 1160 or CS 1180 or CEG 2170

**Cognate Area: Twelve (12) hours of approved electives in any area to which statistics may be applied. At least six (6) hours must be at the 3000-level or above.**

**General Elective – 24 hours**
Choose from the Wright State University Undergraduate Catalog

**Department Approved Elective Courses**
- MTH 3060 Mathematical Modeling
- MTH 3260 Numerical Methods
- MTH 3320 Complex Variables
- MTH 3330 Partial Differential Equations
- MTH 4070 Optimization Techniques
- MTH 4150 Introduction to Scientific Computation
- MTH 4240 Coding Theory
- MTH 4260 Matrix Computations
- MTH 4290 Cryptography and Data Security
- MTH 4320 Real Variables II
- MTH 4400 History of Mathematics
- MTH 4520 Modern Algebra II
- MTH 4550 Advanced Linear Algebra
- MTH 4570 Combinatorics and Graph Theory
- MTH 4710 Geometry
- MTH 4810 Methods of Applied Mathematics I
- MTH 4820 Methods of Applied Mathematics II
- MTH 4920 Undergraduate Mathematics Seminar
- STT 4620 Theory of Statistics II

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*Revised: 12/9/2014  Department of Mathematics and Statistics*