# 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)
- RST 2610 (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)
- ENG 2040 (IW)
- ENG 2050 (IW)
- MUS 1160 or CS 1180 or CEG 2170
- MUS 2140

### Element 5 Social Science
Choose two (2) courses from different disciplines:
- ATH 2200
- EC 2000 (IW)
- EC 2040
- EC 2100
- EC 2500 (IW,MC)
- EC 2900 (IW,MC)
- EC 2900 (IW,MC)
- EC 3900 (IW,MC)
- MTH 2310 Calculus II
- MTH 3060 Mathematical Modeling (3 credits)

### Additional Core Courses
- MTH 2310 Calculus II
- MTH 2320 Calculus III (4 hours)
- MTH 2530 Elementary Linear Algebra (3 hours)
- MTH 3060 Mathematical Modeling (3 credits)
- MTH 3260 Numerical Methods (3 hours)

## Departmental Requirements – 40 hours

### Required Core Courses (25 hours)
- MTH 2320 Calculus III (4 hours)
- MTH 2530 Elementary Linear Algebra (3 hours)
- STT 3600 Applied Statistics I (3 hours)
- STT 3610 Applied Statistics II (3 hours)
- STT 4610 Theory of Statistics I (4 hours)
- STT 4660 Statistical Methods I (4 hours)
- STT 4670 Statistical Methods II (4 hours)

### 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. (See list below.)

### Related Course Requirements – 16 hours
- CS 1160 or CS 1180 or CEG 2170 (4 hours)

### 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
- STT 4110 Applied Time Series (3 credits)
- STT 4120 Sampling Design (3 credits)
- STT 4240 Quality Control and Improvement (3 credits)
- STT 4260 Survival Analysis (3 credits)
- STT 4310 Statistical Methods for Clinical Trials (3 credits)
- STT 4620 Theory of Statistics II (4 hours)
- STT 4640 Computational Statistics (3 credits)
- STT 4700 Optimization Techniques (3 credits)
- STT 4810 Methods of Applied Mathematics I (3 credits)
- STT 4820 Methods of Applied Mathematics II (3 credits)

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Department of Mathematics and Statistics