## Program: Statistics Major (BS STAT)

Emphasis (optional):

Fall Semester
Course


Requirement Met SH

| GE Goal 1 | $3-4$ |
| :--- | :---: |
| GE Goal 4/Major | 4 |
| Major | 3 |
| GE Goal 5-10 | 3 |
| Recommended | 1 |
|  |  |


|  |  | Major |
| :--- | :--- | :---: |
| $\mathbf{1 4 - 1 5}$ |  |  |
|  | Major | 3 |
|  | Major/CAI | 3 |
|  | GE Goal 3 | 3 |
|  | GE Goal 5-10 | 3 |

General Education Course
s of each student. Students interested in actuarial science should take the VEE certification courses. Note - ECON 201 \& 202 are General
Education Program courses. Students interested in Graduate School are strongly encouraged to double major in Mathematics \& Statistics. Students interested in pursuing carees or graduate work in biostatistics should consider taking some courses in biology.

|  | Second-Year Fall Semester Credit Hour Total |  | 16 | Second-Year Spring Semester Credit Hour Total |  | 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 3 | STAT 450 Introduction to Mathematical Statistics I or Additional Elective* | Major/WI or Major Elective/OI | 3 | DSCI 325 Management of Structured Data | Major | 3 |
|  | Statistics Elective** | Major Elective | 3 | STAT 460 Introduction to Mathematical Statistics II or Additional Elective* | Major/WI or Major Elective/OI | 3 |
|  | General Education Course | GE Goal 5-10 | 3 | Statistics Elective** | Major Elective | 3 |
|  | General Education Course | GE Goal 5-10 | 3 | STAT 395 Professional Skill Development for Statistics | Major | 2 |
|  | General Education Course | GE Goal 5-10 | 3 | General Education Course | GE Goal 5-10 | 3 |
|  | NOTE: *See Course Catalog or DARS for a full list of courses. **Statistics Elective must choose a STAT course between STAT 320 to 499. |  |  | NOTE: *See Course Catalog or DARS for a full list of courses. **Statistics Elective must choose a STAT course between STAT 320 to 499. |  |  |
|  | Third-Year Fall Semester Credit Hour Total |  | 15 | Third-Year Spring Semester Credit Hour Total |  | 14 |
| Year 4 | STAT 488 Statistics Projects or STAT 492 Practicum in Statistics | Major | 3 | STAT 495 Communication of Capstone Outcomes | Major | 1 |
|  | Additional Elective* (recommend DSCI 425 or STAT 370 which will meet Oral Intensive) or STAT 450 Introduction to Mathematical Statistics I | Major Elective/OI or Major/WI | 3 | Additional Elective * or STAT 460 Introduction to Mathematical Statistics II | Major Elective or Major/WI | 3 |
|  | General Elective | Elective | 3 | General Education Course or General Elective | GE Goal 510/Elective | 3 |
|  | General Education Course | GE Goal 5-10 | 3 | General Elective | Elective | 3 |
|  | General Education Course | GE Goal 5-10 | 3 | General Elective | Elective | 3 |
|  |  |  |  | Personal Development Wellness | PDW | 1 |
|  | NOTE: *Additional Electives (6 S.H. required) see DARS for a full list of courses that are offered to fulfill requirement. |  |  | NOTE: *Additional Electives (6 S.H. required) see DARS for a full list of courses that are offered to fulfill requirement. |  |  |
|  | Fourth-Year Fall Semester Credit Hour Total |  | 15 | Fourth-Year Spring Semester Credit Hour Total |  | 14 |

NOTE: *Additional Electives (6 S.H. required) see DARS for a full list of courses that are offered to fulfill requirement

Spring Semester

Course CMST 191 Public Spkg or 192 Speech Comm or ENG 111 Rdg/Wrtg MATH 213 Calculus II
MATH 242 Linear Algebra
STAT 310 Intermediate Statistics
Personal Development Wellness
NOTE: Some elective courses are not offered every year.

| First-Year Spring Semester Credit Hour Total | $\mathbf{1 5 - 1 6}$ |  |
| :--- | :--- | :---: |
| STAT 365 Experimental Design and Analysis | Major | 3 |
| MATH 337 Probability | Major | 3 |
| DSCI 210 Data Science | Major | 3 |
| General Education Course (Lab) | GE Goal 3 | 4 |
| General Education Course | GE Goal 5-10 | 3 |
| NOTE: Students must have 40 S.H. of 300 \& 400 Level Courses. To remain under 120 credits, take courses that |  |  |

NOTE: Students must have 40 S.H. of 3 meet two goal areas within GOALS 5-10

## Guide to 4 Year Major Maps

- 4 Year Major Maps are intended to show a recommended four-year pathway to a degree. Students must be fulltime, college ready, and ready to declare a major to follow the map exactly as shown. Maps are only a sample; there may be other pathways that lead to completion of the degree in four years.
- Major Maps are NOT intended to take the place of meetings with advisors.
- Major Maps are NOT intended to take the place of the Degree Audit System (DARs).

All courses listed on a major map will be labelled as one or more of the following:

| GE Goal | General Education Goal <br> Area | Indicates that the course meets one of the 10 <br> General Education Goals |
| :--- | :--- | :--- |
| Gen <br> Elec | General Elective | Indicates that the course does not meet a <br> General Education, Major or Minor requirement <br> but does count toward the degree |
| Major | Major Requirement | Indicates that the course meets a Major <br> requirement |
| Major <br> Elec | Major Elective | Indicates that the course counts toward the <br> major as an elective, must be chosen from list <br> of approved courses |
| Minor | Minor Requirement | Indicates that the course meets a Minor <br> requirement |
| CAI | Critical Analysis <br> Intensive | Indicates that the course counts as a Critical <br> Analysis Intensive |
| OI | Oral Intensive | Indicates that the course counts as an Oral <br> Intensive |
| WI | Written Intensive | Indicates that the course counts as a Written <br> Intensive |
| PDW | Personal Development <br> and Wellness | Indicates that the course counts as a Personal <br> Development and Wellness Requirement |

General Education Goal Areas:

|  |  | Minimum credits <br> required |
| :--- | :--- | :--- |
| Goal 1 | Communication | 7 credits |
| Goal 2 | Critical Thinking (Met with completion of <br> all other goal areas) | -- |
| Goal 3 | Natural Science | 7 credits |
| Goal 4 | Mathematics | $3-4$ credits |
| Goal 5 | History, Social/Behavioral Sciences | 9 credits |
| Goal 6 | Humanities and Fine Arts | 9 credits |
| Goal 7 | Human Diversity | 3 credits |
| Goal 8 | Global Perspective | 3 credits |
| Goal 9 | Ethic and Civic Responsibility | 3 credits |
| Goal 10 | People and the Environment | 3 credits |

## Graduation Requirements:

- Minimum of 120 total credits (semester hours) required for Bachelors' Degree
- Minimum of 40 General Education credits required
- Minimum of 40 Upper Division credits required
- Minimum of 30 Residence credits required in Junior/Senior years
- Minimum WSU cumulative grade point average of 2.00; some programs require higher grade point averages

Major Maps are not contracts. Winona State University reserves the right to make changes at any time, without prior notice, to programs, policies, procedures and information described in this major map. Students should consult the appropriate academic department or college for currently accurate program information.

