## Sample Graduation Plan - MATHEMATICS & STATISTICS MAJOR

Track of Study - STATISTICS

| Fall - Year 1 (15 hours)        | Pre-Req           | Cr Hr |
|---------------------------------|-------------------|-------|
| MA 125 - Calculus I             | C or better in MA | 4     |
|                                 | 113 or MA 115 or  |       |
|                                 | sufficient MMT    |       |
|                                 | score*            |       |
| Fine & Perf Arts (Bulletin)     |                   | 3     |
| EH 101 - Composition I          |                   | 3     |
| CAS 100 - First Year Experience |                   | 2     |
| Hum & Fin Arts                  |                   | 3     |
|                                 | TOTAL HOURS:      | 15    |

| Fall - Year 2 (16 hours)             | Pre-Req           | Cr Hr |
|--------------------------------------|-------------------|-------|
| MA 227 - Calculus III                | C or better in MA | 4     |
|                                      | 126               |       |
| ST 335 - Applied Regression Analysis | ST 210 or ST 315  | 3     |
|                                      | or ST 320         |       |
| Natural Science (Class 1 of 2 - see  |                   | 3     |
| catalogue)                           |                   |       |
|                                      |                   |       |
| Natural Science Lab (see catalogue)  |                   | 1     |
|                                      |                   |       |
| Lit Comp                             |                   | 3     |
|                                      |                   |       |
| Elective (minor field)               |                   | 3     |
|                                      | TOTAL HOURS:      | 17    |

| Fall - Year 3 (15 hours)                   | Pre-Req   | Cr Hr |
|--|---|-------|
| MA 451 - Probability                       |   |       |
|  |   | 3     |
| MA 238 - Applied Differential Equations I  | Should have taken<br>or currently taking<br>MA 227                                  | 3     |
| MA 334 - Advanced Calc I                   | C or better in MA<br>227 and MA 237;<br>taken MA 320 or<br>consent of<br>instructor | 3     |
| Foreign Language (Class 1 of 2)            |   | 3     |
| HY 101 - History of Western Civilization I |   | 3     |
|  | TOTAL HOURS:  | 15    |

| Fall - Year 4 (15 hours)              | Pre-Req          | Cr Hr |
|---------------------------------------|------------------|-------|
| ST 350 - Applied Time Series Analysis | ST 210 or ST 315 | 3     |
|                                       | or ST 320        |       |

Cr Hr Spring - Year 1 (16 hours) Pre-Req MA 126 - Calculus II C or better in MA 4 125 ST 315 - Applied Probability and Statistics C or better in MA 3 125 EH 102 - Composition II 3 3 CA 110 - Public Speaking 3 Hum & Fin Arts TOTAL HOURS: 16

| Spring - Year 2 (16 hours)          | Pre-Req           | Cr Hr |
|-------------------------------------|-------------------|-------|
| MA 237 - Linear Algebra I           | C or better in MA | 3     |
|                                     | 126               |       |
| ST 340 - Design and Analysis        | ST 210 or ST 315  | 3     |
|                                     | or ST 320         |       |
| MA 320 - Foundations of Mathematics | C or better in EH | 3     |
|                                     | 102 or EH 104 and |       |
|                                     | MA 125            |       |
| Natural Science (Class 2 of 2 - see |                   | 3     |
| catalogue)                          |                   |       |
| Natural Science Lab (see catalogue) |                   | 1     |
|                                     |                   |       |
| Elective (minor field)              |                   | 3     |
|                                     | TOTAL HOURS:      | 16    |

| Spring - Year 3 (15 hours)                  | Pre-Req          | Cr Hr |
|---|------------------|-------|
| ST 345 - Sampling and Survey Techniques     | ST 210 or ST 315 | 3     |
|   | or ST 320 and    |       |
|   | MAT 451 or MAT   |       |
|   | 237              |       |
| ST 470 - Theory of Statistics               |                  | 3     |
|   |                  |       |
| oreign Language (Class 2 of 2)              |                  | 3     |
|   |                  |       |
|   |                  |       |
| UV 102 Uictory of Western Civilization II   |                  | 3     |
| HY 102 - History of Western Civilization II |                  | 5     |
| Elective (minor field)                      |                  | 3     |
|   |                  |       |
|   | TOTAL HOURS:     | 15    |

| Spring - Year 4 (15 hours)     | Pre-Req          | Cr Hr |
|--------------------------------|------------------|-------|
| ST 425 - Applied Linear Models | ST 335 or ST 340 | 3     |
|                                | and MAT 237      |       |

Total Credit Hours: 124 \*\*

| ST 475 - Statistical Computing and | ST 210 or ST 315 | 3  |
|------------------------------------|------------------|----|
| Graphics                           | or ST 320        |    |
| Hist, Soc, Beh (Bulletin)          |                  | 3  |
| Elective (minor field)             |                  | 3  |
| Elective (minor field)             |                  | 3  |
|                                    | TOTAL HOURS:     | 15 |

| ST 480 - Statistical Practicum |              | 3  |
|--------------------------------|--------------|----|
| Hist, Soc, Beh (Bulletin)      |              | 3  |
| Elective (minor field)         |              | 3  |
| Elective (minor field)         |              | 3  |
|                                | TOTAL HOURS: | 15 |

The General 4-Year Graduation Plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made with the advice of a faculty adviser. For detailed information and course descriptions consult the University of South Alabama catalog.

Undergraduate students need 47 hours in Gen Ed and 44 hours in Mathematics/Statistics courses. See bulletin for required courses.

All College of Arts and Sciences (CAS) students must take CAS 100 their first semester. See bulletin for details.

\* - MMT = MyMathTest (this is the Math Placement Test the university uses)

\*\* - See breakdown of credit hours on Gen Ed and Math Req Tab

| Elective courses | 21 Hours |
|------------------|----------|
| Math course      | 45 Hours |

Required Introductory and Intermediate Course for All Math Students

Required Course for STATISTICS track of study

Required elective (may Substitute ST 355 Nonparametric Statistical methods, ST 415 Statistical Quality Control and Reliability, ST 450 Categorical data Analysis, ST 460 Multivariate Statistical Analysis, ST 490 Special Topic)

Students planning to attend graduate school are strongly encouraged to take MA 334 (Note: MA 334 substituted for elective in schedule)

MA 320 is highly recommended for all Math Majors