

**Sample Curriculum for Five-year BS/MS in Applied Mathematics – This Table will be modified for Honors Students subject to the Distribution Requirement**

| <b>Year 1: Fall</b>  | <b>Crs</b>            | <b>Spring</b>  | <b>Crs</b>                 |
|--|-----------------------|--|----------------------------|
| 3450:221 Analytic Geometry-Calculus I<br>3300:111 English Composition I<br>Beginning Foreign Language I<br>Social Science Requirement<br>Area Studies and Cultural Diversity                     | 4<br>4<br>4<br>3<br>2 | 3450:222 Analytic Geometry-Calculus II<br>3450:112 English Composition II<br>Beginning Foreign Language II<br>Social Science Requirement<br>Area Studies and Cultural Diversity<br>Physical Education/Wellness | 4<br>3<br>4<br>3<br>2<br>1 |
| Total  | 17                    | Total  | 17                         |
| <b>Year 2: Fall</b>  | <b>Crs</b>            | <b>Spring</b>  | <b>Crs</b>                 |
| 3450:223 Analytic Geometry-Calculus III<br>Intermediate Foreign Language I<br>Natural Science Requirement<br>3460:209 Introduction to Computer Science<br>Elective                               | 4<br>3<br>4<br>4<br>3 | 3450:335 Introduction to ODEs<br>3450:312 Linear Algebra<br>7600:105 Introduction to Public Speaking<br>Natural Science Requirement<br>Intermediate Foreign Language II  | 3<br>3<br>3<br>4<br>3      |
| Total  | 18                    | Total  | 16                         |
|  |                       | <b>Summer:</b> Elective  | 7                          |
| <b>Year 3: Fall</b>  | <b>Crs</b>            | <b>Spring</b>  | <b>Crs</b>                 |
| 3450:427 Applied Numerical Method I<br>3450:421 Advanced calculus I<br>3470:461 Applied Statistics I<br>300/400 Level Outside (non-math) Elective<br>3400: 210 Humanities In Western Tradition I | 3<br>3<br>4<br>3<br>4 | 3450: 428 Applied Numerical Method II<br>3450: 436 Mathematical models<br>3450:422 Advanced calculus II<br>300/400 Level Outside (non-math) Elective<br>3450: 539 Advanced Engineering Math II**               | 3<br>3<br>3<br>3<br>3      |
| Total  | 17                    | Total  | 15                         |
|  |                       | <b>Summer:</b> 300-600* Level Electives  | 6                          |
| <b>Year 4: Fall</b>  | <b>Crs</b>            | <b>Spring</b>  | <b>Crs</b>                 |
| 3450:627 Advanced numerical analysis I<br>3450:633 Methods of applied mathematics I<br>3450:621 Real Analysis  | 3<br>3<br>3           | 3450:628 Advanced numerical analysis II<br>3450:634 Methods of applied mathematics II<br>3450:730 Adv numerical solution of PDEs   | 3<br>3<br>3                |
| Total  | 9                     | Total  | 9                          |
|  |                       | <b>Summer:</b> Humanities Electives  | 6                          |
| <b>Year 5: Fall</b>  | <b>Crs</b>            | <b>Spring</b>  | <b>Crs</b>                 |
| 3450:692 Seminar in mathematics<br>Elective*<br>3450:500/600 Level Elective**<br>3450:699 Thesis Research  | 2<br>3<br>3<br>2      | Elective*<br>3450:698 Master's research<br>3450:699 Thesis research  | 3<br>4<br>2                |
| Total  | 10                    | Total  | 9                          |

**Note:** Courses marked with \* are possibly graduate level courses to be applied toward the elective requirement of the bachelor's degree. Courses marked with \*\* are to be applied to the elective requirements of **both** the bachelor's and master's degree. All general education and college requirements are satisfied in this accelerated five-year BS/MS program.