

Sample Four-year Plan for Applied Mathematics and Analytics

Note: The four-year plan is for example purposes only. Students should refer to the catalog in effect upon their entry to Viterbo for more specifics on requirements of the core curriculum, major, and degree. Some courses have certain semester rotations that may or may not be reflected below. Your advisor will assist you with actual registration planning to accommodate these rotations. For complete information, see the current undergraduate catalog.

| Fall Semester – First Year | | Spring Semester – First Year | |
|--|--------------|---|--------------|
| ENGL 103/104/105 – CCF Written Communication | 3–4 | ENGL 104/105/195 – CCF Written Communication | 3–4 |
| VUSM FVT – Franciscan Values and Traditions | 3 | MATH 150 – MATLAB Programming | 1 |
| ENGR 112 – Success in Engineering and Applied Math | 4 | MATH 221 – Calculus II | 4 |
| MATH 220 – Calculus I ¹ (CCF Quantitative Literacy) | 4 | MATH 230 – Statistics with R Programming | 4 |
| General Elective/Minor ² | 3 | General Elective/Minor ² | 3 |
| TOTAL CREDITS | 17–18 | TOTAL CREDITS | 15–16 |
| Fall Semester – Second Year | | Spring Semester – Second Year | |
| CCWOT (Recommend Artistic Engagement) | 3 | COMM 150 – Fundamentals of Speech (CCF Oral Communication) | 2 |
| MATH 320 – Calculus III (Multivariable Calculus) | 4 | MATH 365 – Mathematical Modeling (CCF Written Communications II) | 4 |
| MATH 325 – Differential Equations and Linear Algebra | 4 | MGMT 447 – Production and Operations Management | 3 |
| PHYS 260 – University Physics I (CCWOT Natural Science) | 3 | General Elective/Minor ² (Recommend University Physics II) | 3 |
| PHYS 270 – Introductory Physics Lab I | 1 | General Elective/Minor ² (Recommend Introductory Physics Lab II) | 1–3 |
| TOTAL CREDITS | 15 | TOTAL CREDITS | 13–15 |
| Fall Semester – Third Year | | Spring Semester – Third Year | |
| VUSM LDW – Living in a Diverse World | 3 | VUSM SJE – Social Justice and Equity | 3 |
| CCWOT (Recommend Theological Inquiry) | 3 | CCWOT (Recommend Social Science Reasoning) | 3 |
| MATH 261 – Discrete Mathematics | 4 | CCWOT (Recommend Philosophical Inquiry) | 3 |
| MATH 335 – Data Analysis | 3 | ENGR 370 – Systems Engineering | 4 |
| General Elective/Minor ² | 3 | MATH 344 – Abstract Algebra | 3 |
| TOTAL CREDITS | 16 | TOTAL CREDITS | 16 |
| Fall Semester – Fourth Year | | Spring Semester – Fourth Year | |
| VUSM TEL – The Ethical Life | 3 | CCWOT (Recommend Integrating Faith and Practice) | 3 |
| CCWOT (Recommend Literary Analysis) | 3 | CCWOT (Recommend Historical Analysis) | 3 |
| MATH 498/ENGR 498 – Analytics Capstone 1 | 3 | MATH 487 – Applied Math Internship | 1 |
| General Elective/Minor ² | 3 | MATH 499/ENGR 499 – Analytics Capstone 2 | 3 |
| General Elective/Minor ² | 3 | General Elective/Minor ² | 3 |
| TOTAL CREDITS | 15 | TOTAL CREDITS | 13 |

Notes

¹Contingent on math placement; if placed in MATH 112, student must take MATH 112 and 113 before MATH 220.

²A minor is recommend. Students must complete 120 credits (including 40 credits upper division) for BS degree.