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	
MATH 220 – Calculus I[1] (CCF Quantitative Literacy)	4	MATH 221 – Calculus II	4
ENGR 112 – Success in Engineering and Applied Math	3	MATH 150 – MATLAB Programming	1
ENGL 103/104/105 – CCF Written Communication	3–4	MATH 230 – Statistics with R Programming	4
VUSM FVT – Franciscan Values and Traditions	3	ENGL 104/105/195 – CCF Written Communication	3–4
General Elective/Minor[2]	3	General Elective/Minor[2]	3
TOTAL CREDITS	**16–17**	**TOTAL CREDITS**	**15–16**
Fall Semester – Second Year		Spring Semester – Second Year	
MATH 320 – Calculus III (Multivariable Calculus)	4	MGMT 447 – Production and Operations Management	3
PHYS 260 –University Physics I (CCWOT Natural Science)	3	MATH 365 – Mathematical Modeling[4] (CCF Written Communications II)	4
PHYS 270 – Introductory Physics Lab I	1	COMM 150 – Fundamentals of Speech (CCF Oral Communication)	2
MATH 325 – Differential Equations and Linear Algebra	4	General Elective/Minor[2]	3
CCWOT (Recommend Artistic Engagement)	3	General Elective/Minor[2]	3
TOTAL CREDITS	**15**	**TOTAL CREDITS**	**15**
Fall Semester – Third Year		Spring Semester – Third Year	
MATH 344 – Abstract Algebra	3	MATH 420 – Real Analysis	3
MATH-335 – Data Analysis	3	ENGR 370 – Systems Engineering	4
CCWOT (Recommend Theological Inquiry)	3	VUSM SCG – Serving the Common Good	3
VUSM LDW – Living in a Diverse World	3	CCWOT (Recommend Social Science Reasoning)	3
General Elective/Minor[2]	3	CCWOT (Recommend Philosophical Inquiry)[3]	3
TOTAL CREDITS	**15**	**TOTAL CREDITS**	**16**
Fall Semester – Fourth Year		Spring Semester – Fourth Year	
MATH 498/ENGR 498 – Analytics Capstone 1	3	MATH 499/ENGR 499 – Analytics Capstone 2	3
CCWOT (Recommend Literary Analysis)	3	MATH 487 – Applied Math Internship	1
VUSM TEL – The Ethical Life	3	CCWOT (Recommend Integrating Faith and Practice)	3
General Elective/Minor[2]	3	CCWOT (Recommend Historical Analysis)	3
General Elective/Minor[2]	3	General Elective/Minor[2]	3
TOTAL CREDITS	**15**	**TOTAL CREDITS**	**13**

NOTES

[1]Contingent on math placement; if placed in MATH 112, student must take MATH 112 and 113 before MATH 220.
[2]A minor is recommend. Students must complete 120 credits (including 40 credits upper division) for BS degree.
[3]PHIL 105 – Critical Thinking is recommended as the CCWOT philosophy course.
[4]Embedded Written Communication II requirement.