B.S. Statistics

This is just one example of how a course of study could proceed. The degree offers lots of choice, see the audit for details.

First Year

Fall

Course	Prerequisite	Credit
UN 1015 Composition		3
MA 1160 Calculus with Technology I	Qualifying ALEKS/AP/ACT/SAT score	4
MA 1910/1920/1930/1940 Elementary Mathematics Topics		3
Essential Education: Math		3
Essential Education: Natural and Physical Science		3
Total		**16**

Spring

Course	Prerequisite	Credit
Essential Education: Foundations of the Human World		3
Essential Education: Activities for Well-being and Success		1
MA 2330 Introduction to Linear Algebra	MA 1160/1161/1135/1121	3
MA 2160 Calculus with Technology II	MA 1160/1161/1135/1121 or qualifying AP score	4
MA 2710 Intro to Statistical Analysis	MA 1160/1161/1135/1121	3
Total		**14**

Second Year

Fall

Course	Prerequisite	Credit
MA3720 Probability	MA2160	3
Essential Education: SHAPE		3
MA 3160 Multivariable Calc with Tech	MA 2160 or qualifying AP score	4
MA 3740 Statistical Programming and Analysis	MA 2710/2720 /3710/3715	3
Essential Education: Communication Intensive		3
Total		**16**

Spring

Course	Prerequisite	Credit
MA3450 Introduction to Real Analysis	MA2060	3
Essential Education: Arts & Culture		3
MA 3750 Introduction to SAS Programming	MA 2710/2720/3710/3715	1
Cognate coursework		3
Essential Education: Intercultural Competency		3
Total		**13**

Third Year

Fall

Course	Prerequisite	Credit
Essential Education: Experience		3
Essential Education: Activities for Well-being and Success		1
MA 4710 Regression Analysis	MA2710/2720/3710/3715/5701	3
MA 4760 Mathematical Statistics I	(MA 3720 or EE 3180) and MA 3160	3
Cognate coursework		3
Elective		3
Total		**16**

Spring

Course	Prerequisite	Credit
MA 4720 Design and Analysis of Experiments	MA 2710/ 2720 /3710 /3715 /5701	3
MA 4770 Mathematical Statistics II	MA4760	3
MA 4780 Time Series Analysis and Forecasting	(MA 2710/ 2720 /3710 /3715) and (MA 3720 or EE 3180)	3
Cognate Coursework		3
Elective		3
Total		**15**

Fourth Year

Fall

Course	Prerequisite	Credit
Essential Education: Activities for Well-being and Success		3
MA 4790 Predictive Modeling	MA 3740/4710/4720/4780	3
Elective		3
Elective		3
Elective		3
Total		**15**

Spring

Course	Prerequisite	Credit
Elective		3
Elective		3
Elective		3
MA 4900 Mathematical Sciences Project		3
Elective		3
Total		**15**

Grand Total = 120 Credits

Note about cognate coursework:

In consultation with an academic advisor, complete 9 credits in a chosen discipline.

Typically, students take 3 courses outside the statistics major that are closely related to, and support statistics training. These courses need to be taken from one major program at Michigan Tech, usually above 2000 level. If students are enrolled in a double major or in a minor offered by other departments, there is a high chance we will be able to identify three courses from their curriculum as cognate courses for B.S in Statistics.