B.S. and B.A
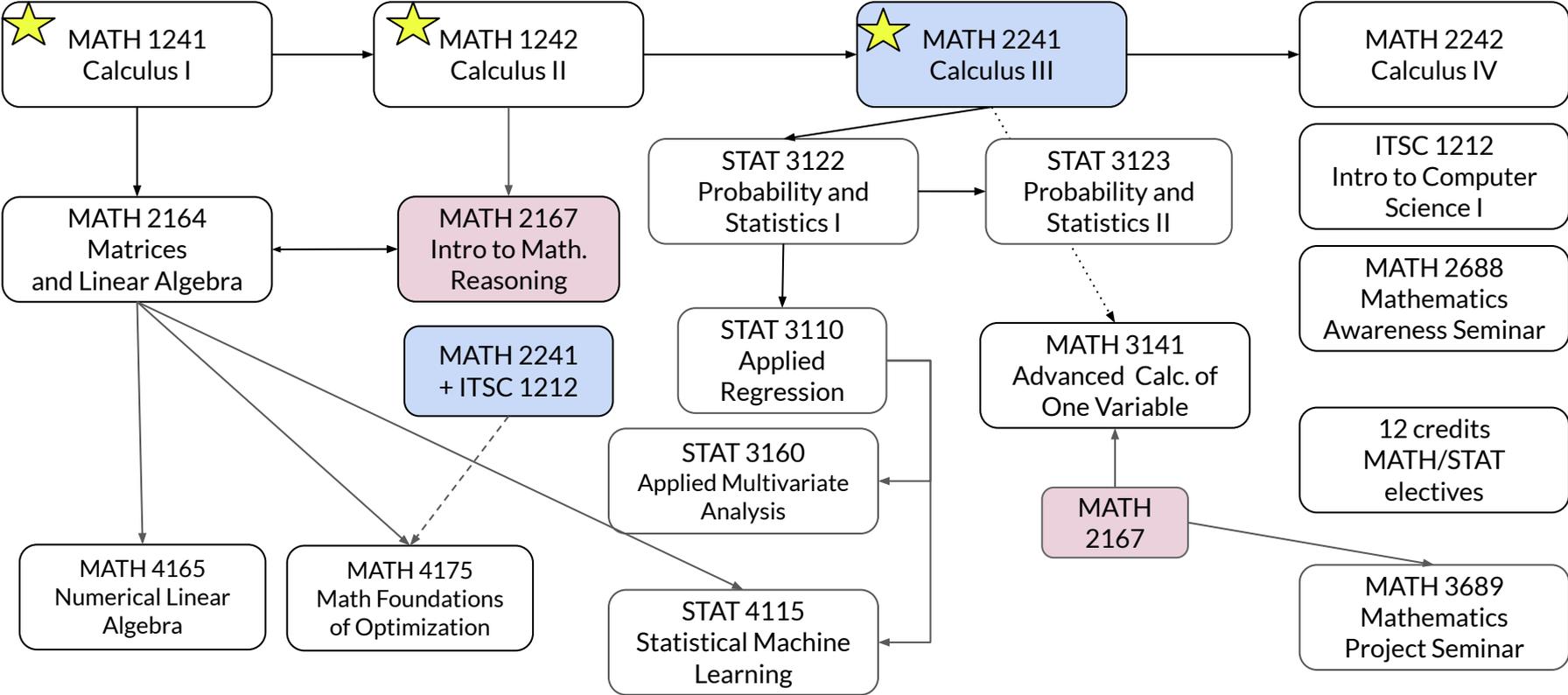# in Mathematics with
Statistics concentration
Flowcharts

B.S. in Math
with Statistics and Data Science concentration

MATH 1241 Calculus I ⭐ → **MATH 1242** Calculus II ⭐ → **MATH 2241** Calculus III ⭐ → **MATH 2242** Calculus IV

MATH 1241 Calculus I → **MATH 2164 Matrices and Linear Algebra**

MATH 1242 Calculus II → **MATH 2167 Intro to Math. Reasoning**

MATH 2164 Matrices and Linear Algebra ↔ **MATH 2167 Intro to Math. Reasoning**

MATH 2241 Calculus III → **STAT 3122 Probability and Statistics I**

MATH 2241 Calculus III ⇢ **STAT 3123 Probability and Statistics II**

STAT 3122 Probability and Statistics I → **STAT 3123 Probability and Statistics II**

ITSC 1212 Intro to Computer Science I

MATH 2688 Mathematics Awareness Seminar

MATH 2241 + ITSC 1212

STAT 3122 Probability and Statistics I → **STAT 3110 Applied Regression**

STAT 3123 Probability and Statistics II ⇢ **MATH 3141 Advanced Calc. of One Variable**

STAT 3110 Applied Regression → **STAT 3160 Applied Multivariate Analysis**

STAT 3110 Applied Regression → **STAT 4115 Statistical Machine Learning**

12 credits MATH/STAT electives

MATH 2167

MATH 2164 Matrices and Linear Algebra → **MATH 4165 Numerical Linear Algebra**

MATH 2164 Matrices and Linear Algebra → **MATH 4175 Math Foundations of Optimization**

MATH 2241 + ITSC 1212 ⇢ **MATH 4175 Math Foundations of Optimization**

MATH 2167 → **MATH 3689 Mathematics Project Seminar**

MATH 3141 Advanced Calc. of One Variable

STAT 4115 Statistical Machine Learning

⭐ Must have "C" or above

MATH 1241
Calculus I

MATH 1242
Calculus II

MATH 2241
Calculus III

MATH 2242
Calculus IV

MATH 2164
Matrices
and Linear Algebra

MATH 2167
Intro to Math.
Reasoning

*STAT 2122 Intro to
Probability and
Statistics

STAT 2223 or
STAT 3110

ITSC 1212
Intro to Computer
Science I

MATH 2688
Mathematics
Awareness Seminar

9 credits STAT
electives

MATH
2167

MATH 3689
Mathematics
Project Seminar

*Student can replace STAT 2122 by the sequence STAT 3122 + 3123.
Remark: STAT 2122 is not a valid prerequisite for STAT 3123.

Must have "C" or above

Upper Level STAT electives

*STAT 2122 or 3122

MATH/STAT 3180
Predictive Analytics

STAT 2223 or STAT 3110

MATH/STAT 3123
Probability and Statistics II

STAT 3140
Design of Experiments

STAT 4116
Statistical Computing

STAT 3150
Time Series Analysis

STAT 3160
Applied Multivariate Analysis

STAT 4115
Statistical Machine Learning

MATH 2164

*Student can replace STAT 2122 by the sequence STAT 3122 + 3123.
Remark: STAT 2122 is not a valid prerequisite for STAT 3123.