

# MATHEMATICS, B.A. FOR ASSOCIATE DEGREE FOR TRANSFER (ADT) STUDENTS

| Code                                                        | Title                                           | Units |
|-------------------------------------------------------------|-------------------------------------------------|-------|
| <b>Lower-Division Requirements</b>                          |                                                 |       |
| Eighteen (18) units of transferred Mathematics <sup>1</sup> |                                                 | 18    |
| <b>Upper-Division Requirements</b>                          |                                                 |       |
| MTH 3012                                                    | Number Theory with Proofs                       | 2     |
| MTH 3052                                                    | History of Mathematics                          | 2     |
| MTH 3083                                                    | Mathematical Probability and Statistics         | 3     |
| MTH 4024                                                    | Real Analysis                                   | 4     |
| or MTH 4044                                                 | Abstract Algebra                                |       |
| MTH 4081                                                    | Senior Seminar in Computer Science              | 1     |
| Choose one (1) course from the following:                   |                                                 | 3     |
| MTH 3033                                                    | Differential Equations                          |       |
| MTH 3043                                                    | Discrete Mathematics                            |       |
| MTH 3073                                                    | Mathematical Modeling                           |       |
| MTH 4013                                                    | Complex Analysis                                |       |
| Choose one (1) sequence from the following:                 |                                                 | 3     |
| HON 4098                                                    | Honors Project I                                |       |
| and HON 4099                                                | and Honors Project II                           |       |
| MTH 4102                                                    | Independent Research in Mathematics I           |       |
| and MTH 4121                                                | and Independent Research in Mathematics II      |       |
| MTH 4133                                                    | Service Learning in Mathematics                 |       |
| <b>Elective Courses</b>                                     |                                                 |       |
| Choose twelve (12) additional units from the following:     |                                                 | 12    |
| CSC 1043                                                    | Introduction to Computer Programming            |       |
| and                                                         | and Introduction to Computer Programming Lab    |       |
| CSC 1043L                                                   |                                                 |       |
| CSC 1054                                                    | Objects and Elementary Data Structures          |       |
| and                                                         | and Objects and Elementary Data Structures Lab  |       |
| CSC 1054L                                                   |                                                 |       |
| CSC 3003                                                    | Python and UNIX                                 |       |
| CSC 3011                                                    | Machine Learning and Multivariate Modeling in R |       |
| CSC 3021                                                    | Computational Tools                             |       |
| CSC 3031                                                    | Data Visualization and Communication with R     |       |
| HON 4098                                                    | Honors Project I                                |       |
| HON 4099                                                    | Honors Project II                               |       |
| MTH 3033                                                    | Differential Equations                          |       |
| MTH 3043                                                    | Discrete Mathematics                            |       |
| MTH 3073                                                    | Mathematical Modeling                           |       |
| MTH 4002                                                    | Topics in Geometry                              |       |
| MTH 4013                                                    | Complex Analysis                                |       |
| MTH 4024                                                    | Real Analysis                                   |       |
| MTH 4044                                                    | Abstract Algebra                                |       |
| MTH 4071                                                    | History of Mathematics Study Tour               |       |
| MTH 4091                                                    | Independent Study in Mathematics                |       |
| MTH 4092                                                    | Special Topics in Mathematics                   |       |
| MTH 4102                                                    | Independent Research in Mathematics I           |       |
| MTH 4121                                                    | Independent Research in Mathematics II          |       |

|                    |                                      |
|--------------------|--------------------------------------|
| MTH 4133           | Service Learning in Mathematics      |
| MTH 4162           | Project for Data Analytics Minors I  |
| MTH 4171           | Project for Data Analytics Minors II |
| <b>Total Units</b> | <b>48</b>                            |

<sup>1</sup> Transferred in from the community college; 4 units are FE.

**Total Units for Degree: 48 (44 non-FE units)**

**Note(s):** Associate Degree for Transfer (ADT) (<https://pointloma-public.courseleaf.com/prior-catalogs/2023-2024/tug-catalog/colleges-schools-departments/adt/>) students only.