

| Mohawk Valley Community College<br>LAS: Mathematics and Science - Mathematics |   |             |  | SUNY Polytechnic Institute<br>B.S Applied Mathematics |                                     |  |                  |  |
|---|---|-------------|--|---|-------------------------------------|--|------------------|--|
| Course #  | Course Title  | SUNY Gen Ed | Credits Granted                            | Course #  | Equivalent Course Title             | SUNY Gen Ed                                      | Credits Accepted |  |
| CF 100  | College Foundation Seminar                              |             | 1  | FYS 100   | First Year Seminar                  |  | 1                |  |
| EN101   | English 1: Composition                                  | X           | 3  | ENG 101   | Freshman Composition                | X  | 3                |  |
| MA150   | Pre-Calculus  | X           | 4  | MAT 120   | Precalculus                         | X  | 3                |  |
|   | Social Science Elective (see 'B' below)                 | X           | 3  | SOS 001   | Gen Ed Social Science               | X  | 3                |  |
| CI 110  | Sequence Elective (see 'D' below) (CI 110)              |             | 3  | CSC 317   | Computer Systems & C Programming    |  | 3                |  |
| HI101 or HI 102   | History of Civilization I or History of Civilization II | X           | 3  | OCV 001/WCV 001                                       | Gen Ed Other World Civ/ Western Civ | X  | 3                |  |
|   | Physical Education                                      |             | .5   | REC 000   | Recreation Elective                 |  | 0.5              |  |
| EN102   | English 2: Ideas & Values in Literature                 | X           | 3  | ENG 110   | Intro to Literature                 | X  | 3                |  |
| MA151   | Calculus 1  | X           | 4  | MAT 151   | Calculus I                          | X  | 4                |  |
| PY 101  | Social Science Elective (see 'B' below) (PY 101)        | X           | 3  | PSY 100   | Principals of Psychology            | X  | 3                |  |
| HI101 or HI 102   | History of Civilization I or History of Civilization II | X           | 3  | OCV 001/WCV 001                                       | Gen Ed Other World Civ/ Western Civ | X  | 3                |  |
| CI 130  | Sequence Elective (See "D" below)                       |             |  | CS 108  | Computing Fundamentals              |  | 3                |  |
|   | Physical Education                                      |             | .5   | REC 000   | Recreation Elective                 |  | 0.5              |  |
| MA152   | Calculus 2  | X           | 4  | MAT 152   | Calculus II                         | X  | 4                |  |
| MA275   | Discrete Algebraic Structures                           | X           | 4  | MAT 115   | Finite Math for Comp Sci            | X  | 4                |  |
| PH 261  | Natural Science Elective (see 'A' below)                | X           | 4  | PHY 201   | Calculus Based Physics              | X  | 4                |  |
|   | Restricted Elective (see 'C' below) See SUNY Poly Notes |             | 3  |   | Open Elective                       |  | 4                |  |
|   | Physical Education                                      |             | .5   | REC 000   | Recreation Elective                 |  | 0.5              |  |
| MA253   | Calculus 3  | X           | 4  | MAT 253   | Calculus III                        | X  | 4                |  |
| MA280   | Linear Algebra  | X           | 3  | MAT 280   | Linear Algebra                      | X  | 3                |  |
| PH 262  | Natural Science Elective (see 'A' below)                |             | 4  | PHY 202   | Calculus Based Physics II           |  | 4                |  |
|   | Restricted Elective (see 'C' below) See SUNY Poly Notes |             | 3  | MAT 260   | Ord Diff Eqtns & Series Sltns       |  | 4                |  |
|   | Physical Education                                      |             | .5   | REC 000   | Recreation Elective                 |  | 0.5              |  |
|   |   |             |  | MAT 370   | Applied Probability                 |  | 4                |  |
|   |   |             |  | MAT 381   | Modern Algebra                      |  | 4                |  |
|   |   |             |  | CSC XXX   | Computer Science Course             |  | 4                |  |
|   |   |             |  | COM 306 or 308  | Upper Division Writing              |  | 4                |  |
|   |   |             |  | MAT XXX   | Restricted Elective                 |  | 4                |  |
|   |   |             |  |   | Open Elective                       |  | 4                |  |
|   |   |             |  |   | Open Elective                       |  | 4                |  |
|   |   |             |  |   | Open Elective                       |  | 4                |  |
|   |   |             |  | MAT 420   | Complex Analysis                    |  | 4                |  |
|   |   |             |  | MAT XXX   | Restricted Elective                 |  | 4                |  |
|   |   |             |  |   | Open Elective                       |  | 4                |  |
|   |   |             |  |   | Open Elective                       |  | 4                |  |
|   |   |             |  | Spring  |                                     |  |                  |  |
|   |   |             |  | MAT 425   | Real Analysis                       |  | 4                |  |
|   |   |             |  | MAT XXX   | Restricted Elective                 |  | 4                |  |
|   |   |             |  |   | Open Elective                       |  | 4                |  |
|   |   |             |  |   | Open Elective                       |  | 4                |  |
|   |   |             | <b>Total Credits Eligible for Transfer</b> |   |                                     |  | <b>64</b>        |  |
|   |   |             |  |   |                                     | <b>Total Transfer Credits Applied to Program</b> | <b>60</b>        |  |
|   |   |             |  |   |                                     | <b>Total Credits Required after Transfer</b>     | <b>64</b>        |  |
|   |   |             |  |   |                                     | <b>Total Credits Required for Degree</b>         | <b>124</b>       |  |

A.) Natural Sciences: BI142, CH142, GL102, PH142, PH152, PH 261,PH262  
**Poly Recommends students take PH 261 & PH 262**

B.) Social Science: AN101, BM101, PS101, PY 101, SO101. **Poly recommends students take PY 101 as one of**

**the two Social Sciences electives.**

C.) Restricted Elective: six credits except PE or TRF **POLY Recommends students take either CI 230, CI 24 or CI 260n & MA 260**

**if a student wants to pursue a minor in computer science**

D.) Sequence Elective: two classes in CI110 or CI130 **POLY Recommends completing this sequence or two classes in FL, FR, GR, IT, SP**