

| Mohawk Valley Community College LAS: Mathematics & Science - Chemistry | | | | | University at Albany Physics B.S. (combined major/minor) | | | | |
|---|--|-------------|------------------|-----------------|--|---|-------------|------------------|------------------|
| Course # | Course Title | SUNY Gen Ed | Major or Pathway | Credits Granted | Course # | Equivalent Course Title | SUNY Gen Ed | Major or Pathway | Credits Accepted |
| | | | | 1 | QNCRE00 | No Credit Given at UAlbany | | | 0 |
| CF100 | College Foundations Seminar (1) | | | 4 | ACHM 120/124 | General Chemistry I/Lab | X | X | 4 |
| CH141 | General Chemistry 1 | X | X | 3 | ANEG 100Z | Introduction to Analytical Writing | X | | 3 |
| EN101 | English 1: Composition | X | | 4 | AMAT 112 | Calculus I | X | X | 4 |
| MA151 | Calculus 1 | X | X | 3 | | SUNY Gen Ed Social Science Elective | X | | 3 |
| | Core GE Social Science (A) | X | | .5 | | General Elective Credit | | | .5 |
| | Physical Education | | | | | | | | |
| CH 142 | General Chemistry II | X | X | 4 | ACHM 121/125 | General Chemistry II/Lab | X | X | 4 |
| EN102 | English 2: Ideas & Values in Literature | X | | 3 | AENG 121 | Reading Literature | X | | 3 |
| MA152 | Calculus 2 | X | X | 4 | AMAT 113 | Calculus 2 | X | X | 4 |
| PH261 | Engineering Physics 1 | X | X | 4 | APHY 140/145 | Physics I: Mechanics/Lab | X | X | 4 |
| | Physical Education | | | .5 | | General Elective Credit | | | .5 |
| CH247 | Organic Chemistry 1 | X | | 5 | ACHM 220/222 | Organic Chemistry I/Lab | X | | 5 |
| PH262 | Engineering Physics 2 | X | X | 4 | APHY 150/155 | Physics II: Electromagnetism/Lab | X | X | 4 |
| MA 253 | Calculus 3 (Suggested Restricted Elective) (2) | | X | 4 | AMAT 214 | Calculus of Several Variables | | X | 4 |
| | Physical Education | | | .5 | | General Elective Credit | | | .5 |
| CH248 | Organic Chemistry 2 | X | | 5 | ACHM 221/223 | Organic Chemistry II/Lab | X | | 5 |
| HI101 | History of Civilization 1 | X | | 3 | AHISE10WD | 100-Level History Elective | X | | 3 |
| | Restricted Elective (B) | | | 3-4 | | General Elective Credit | | | 3-4 |
| | Restricted Elective (B) | | | 4-5 | | General Elective Credit | | | 4-5 |
| | Physical Education | | | .5 | | General Elective Credit | | | .5 |
| | | | | | Total Credits Eligible for Transfer | | | | |
| | | | | | Additional Required and Elective Courses for the Major at UAlbany | | | | |
| | | | | | | Challenges of the 21 st Century | X | X | 3 |
| | | | | | APHY 235 | Mathematics in Physics (3) | | X | 3 |
| | | | | | APHY 240/245 | Physics III: Structure of Matter/Lab | | X | 4 |
| | | | | | APHY 250 | Physics IV: Waves | | X | 3 |
| | | | | | APHY 320 | Classical Mechanics | | X | 3 |
| | | | | | APHY 335Z | Advanced Physics Lab | | X | 3 |
| | | | | | APHY 340 | Electromagnetism I | | X | 3 |
| | | | | | APHY 350 | Electromagnetism II: Optics | | X | 3 |
| | | | | | APHY 440 | Quantum Physics I | | X | 3 |
| | | | | | APHY 450 | Quantum Physics II | | X | 3 |
| | | | | | APHY 460 | Thermodynamics and Statistics Physics | | X | 3 |
| | | | | | AMAT 220 or AMAT 314 or AMAT 367 or AMAT 412 | Linear Algebra or Analysis of Applications I or Discrete Probability or Complex Variables for Applications | | X | 3 |
| | | | | | | Physics Elective (4) | | X | 3 |
| | | | | | ICEN/ICSI 201 | Introduction to Computer Science | | X | 4 |
| | | | | | | Elective Credits Required for Degree Completion | | X | 15-17 |
| Total credits required for degree completion at MVCC | | | | | Total Credits required at UAlbany | | | | |
| 60-62 | | | | | 59-61 | | | | |
| | | | | | Total Credits Applied to Program | | | | |
| | | | | | 59-61 | | | | |
| | | | | | Total Credits Required for Degree | | | | |
| | | | | | 120 | | | | |

- (A) Social Science (choose one): AN 101, GE 101, PS 101, PY 101, or SO 101,
 (B) Restricted Elective (choose three): BI 141, BI 142, BI 201, CH 246, ES 161, GL 101, MA 253, MA 260, or OH 263.
 (1) The University at Albany does not accept transfer credit for College Foundations Seminar courses.
 (2) This course is suggested because it meets a requirement for the major at UAlbany upon transfer.
 (3) Students may substitute and take AMAT 314 and AMAT 315 in place of APHY 235.
 (4) Physics Elective must be selected from the 300-level or above.

A transfer student admitted to the University at Albany who has completed his/her A.A. or A.S. degree will be given credit for meeting SUNY's General Education requirements.