

| MONTGOMERY COLLEGE Requirements for Associate's Degree | | UNIVERSITY OF MARYLAND Requirements for Bachelor's Degree |
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| 3 | ENGL102 Critical Reading, Writing and Research | ENGL 101 |
| 4 | MATH 181 Calculus I (MATF) † | MATH 140 |
| 4 | CHEM 131 - Principles of Chemistry I (NSLD) | CHEM 131/132 |
| 3 | ENES100 Intro to Engineering Design (GEEL) | ENES 100 |
| 4 | MATH 182 - Calculus II | MATH 141 |
| 4 | CHEM 132 - Principles of Chemistry II (NSLD) | CHEM 271 |
| 4 | PHYS161 General Physics I: Mechanics and Heat | PHYS 161 |
| 3 | ENES120 Biology for Engineers (or BIOL150) | BIOE 120 or BIOL 170/171 |
| 3 | Behavioral and Social Sciences Distribution (BSSD)* | |
| 4 | MATH280 Multivariable Calculus | MATH 241 |
| 4 | PHYS262 Physics II: Electricity and Magnetism | PHYS 260/261 |
| 5 | Program Elective | |
| 3 | Arts Distribution (ARTD) | |
| 3 | MATH282 Differential Equations | MATH 246 |
| 4 | PHYS263 or Program Elective | PHYS 270/271 |
| 3 | ENES240 Scientific and Engineering Computation | ENCE 201 |
| 3 | Behavioral and Social Sciences Distribution (BSSD)* | |
| 3 | Humanities Distribution (HUMD) | |
| 63 | TOTAL CREDITS TRANSFERRED | |
| REMAINING UNIVERSITY OF MARYLAND DEGREE REQUIREMENTS RECOMMENDED SEQUENCE UPON TRANSFER WITH ASSOCIATE'S DEGREE | | |
| | ENBC301 Intro to Biocomputational Engineering | 1 |
| | ENBC311 Python for Data Analysis | 3 |
| | ENBC331 Applied Linear Systems and Differential Equations | 3 |
| | ENBC332 Statistics, Data Analysis, and Data Visualization | 3 |
| | ENBC341 Biomolecular Engineering Thermodynamics | 3 |
| | ENBC351 Quantitative Molecular and Cellular Biology | 3 |
| | ENBC312 Object Oriented Programming in C++ | 3 |
| | ENBC321 Machine Learning for Data Analysis | 3 |
| | ENBC322 Algorithms | 3 |
| | ENBC342 Computational Fluid Dynamics and Mass Transfer | 3 |
| | ENBC352 Molecular Techniques Laboratory | 2 |
| | ENBC4xx Elective | 3 |
| | ENBC403 Research Methods in Biological Data Mining | 3 |
| | ENBC425 Imaging and Image Processing | 3 |
| | ENBC431 Finite Element Analysis | 3 |
| | ENGL393 Technical Writing | 3 |
| | ENBC423 Applied Computer Vision | 3 |
| | ENBC441 Computational Systems Biology | 3 |
| | ENBC491 Senior Capstone Design in Biocomputational Engineering | 3 |
| | ENBC353 Synthetic Biology | 3 |
| | ENBC4xx Bioinformatics | 3 |
| TOTAL CREDITS REMAINING AT UNIVERSITY OF MARYLAND | | 60 |

MONTGOMERY COLLEGE NOTES

* BSSD courses must come from different disciplines

† MATH 165 if needed for MATH 181

UNIVERSITY OF MARYLAND NOTES

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