

This Academic Program Articulation Agreement (“Agreement”) is entered into by and between Community College of Baltimore County (the “Sending Institution”) and Stevenson University the “Receiving Institution”) (collectively, the “Institutions”) to facilitate the transfer of academic credits from Associate of Science in Engineering for the completion of the Bachelor of Science in Biomedical Engineering (the “Program(s))”.

A. Qualifying Students

This Agreement pertains to the transfer of “Qualifying Students”, *i.e.*, those students who:

1. Have successfully completed the program at the Sending Institution;
2. Are enrolled in the Sending Institution, in good standing; and
3. Are accepted for admission to the Receiving Institution

B. Responsibilities of the Institutions

The Institutions agree to implement the transfer of Qualifying Students in accordance with applicable law and the following requirements and protocols:

1. A Qualifying Student may transfer into from the Transferring Institution into the Receiving Institution for the completion of the Program.
2. Courses that the Receiving School will accept credits for towards completion of the Program include:

**Transfer Plan
Community College of Baltimore County
Associate of Science in Engineering to Stevenson University’s
Bachelor of Science in Biomedical Engineering**

This transfer plan is intended for students pursuing an **Associate of Science in Engineering** at Community College of Baltimore County who are interested in pursuing a Bachelor of Science in Biomedical Engineering at Stevenson University. The equivalencies below demonstrate how a student can meet both the requirements of the associate degree and prepare for a seamless transfer to Stevenson University. Please note:

- Only courses that have course equivalencies are displayed. This guide does not show all transferable courses from this college..
- Transfer plans are intended to be used as planning tools. If you need additional assistance Selecting courses to take prior to transferring to Stevenson University, contact Transfer Admissions at 1-877-468-6852 or admissions@stevenson.edu.

Course by Course Equivalency (SU Catalog, 2020-2021; CCBC Catalog, 2020-2021)

General Education Requirements

| CCBC Course | Credits | SU Equivalent | Credits | Notes |
|--|---------|-------------------------------------|---------|--|
| CHEM 131-General Chemistry I | 4 | CHEM 115/115L-General Chemistry I | 4 | Program Requirement and General Education SR |
| CMNS 101-Fundamentals of Communication | 3 | CM 120-Human Communication | 3 | General Education CI Requirement |
| CSIT 111-Logic and OO Design | 3 | IS 170-Systems Development with UML | 3 | General Elective Requirement |
| ENGL 101-College Composition I | 3 | ENG 151-College Writing I | 3 | General Education Requirement |
| MATH 251-Calculus I | 4 | MATH 220-Calculus I | 4 | Program Requirement and General Education QL requirement |
| PHYS 151-General Physics I | 4 | PHYS 215-General Physics I | 4 | Program Requirement and General Education SR-L |

General Education Electives

Choose courses in each category from list of approved General Education Courses in Catalog.

| CCBC Course | Credits | SU Equivalent | Credits | Notes |
|--------------------------------|---------|--|---------|---|
| Arts and Humanities | 3 | General Education Fine Arts/Humanities | 3 | General Education HUM or FA Requirement |
| Social and Behavioral Sciences | 6 | General Education Social Science | 6 | General Education SS Requirement |

Program Requirements

| CCBC Course | Credits | SU Equivalent | Credits | Notes |
|---|---------|--|---------|--|
| CHEM 133-General Chemistry I | 4 | CHEM 116/116L-General Chemistry II | 4 | Program Requirement |
| ENSC 101-Introduction to Engineering Design | 3 | BME 101-Introduction to Biomedical Engineering | 3 | Program Requirement |
| MATH 252-Calculus II | 4 | MATH 221-Calculus II | 4 | Program Requirement |
| MATH 253-Calculus III | 4 | MATH 222-Calculus III | 4 | Program Requirement |
| MATH 259-Elementary Differential Equations | 3 | MATH 299TR | 3 | Program Requirement Fulfills MATH 321- Introduction to Differential Equations |
| PHYS 251-General Physics II | 4 | PHYS 216-General Physics II | 4 | Program Requirement |

Program Electives Stevenson Recommends

| CCBC Course | Credits | SU Equivalent | Credits | Notes |
|---|---------|---|---------|------------------------------|
| CHEM 200-Organic Chemistry I and CHEM 201-Organic Chemistry Lab | 4 | CHEM 210/210L-Organic Chemistry I | 4 | Program Requirement |
| BIOL 110-Biology I: Molecular and Cells | 4 | BIO 113/113L-General Biology I: Cell Biology and Genetics | 4 | Program Requirement |
| Choose from one of the following: CSIT 210-Introduction to Programming, or ENSC 114- Principles of Electronics/Electricity, or ENSC 111-Mechanics I (Statics) | 3-4 | IS 240-Programming Concepts General Elective General Elective | 3-4 | General Elective Requirement |
| Total Credits | 63-64 | Total Transferred | 63-64 | |

Courses with a grade of C (2.0) and above will transfer to Stevenson. Courses with a grade of D (1.0) will fulfill general education requirements unless the general education requirement is also a program requirement. A grade of “C” or higher is required for CCBC courses that fulfill ENG 151 and ENG 152 at Stevenson University.

Remaining Courses

Students who complete the plan above including all recommended courses and earn the A.S. in Engineering will take the following courses at Stevenson University to meet their graduation requirements. Students who transfer before completing the Associate of Science in Engineering may have additional program and graduation requirements to take and fewer free electives.

Major Requirements

All transfer students will be required to take a minimum of 60 credits of coursework at Stevenson University. A minimum total of 120 credits are required for the degree.

Completion of the Bachelor of Science in Biomedical Engineering requires students to successfully complete the following course work:

| Stevenson Course | Credits | Explanation |
|------------------------------------|---------|-------------------------------|
| ENG 152-College Writing II | 3 | General Education Requirement |
| SCI 215-Writing in the Sciences | 3 | Major Requirement |
| BME 205-Problem Solving and Design | 4 | Major Requirement |
| BME 210-Thermodynamics | 3 | Major Requirement |
| BME 230-Biofluids | 3 | Major Requirement |
| BME 313-Biostatistics | 3 | Major Requirement |
| BME 315-Biomaterials | 4 | Major Requirement |

| Stevenson Course | Credits | Explanation |
|--|---------|----------------------|
| BME 320-Biomedical Engineering Internship | 3 | Major Requirement |
| BME 335-Instrumentation | 3 | Major Requirement |
| BME 340-Systems Physiology | 4 | Major Requirement |
| BME 380-Biomechanics | 4 | Major Requirement |
| BME 470/475-Biomedical Engineering Design Capstone I & II | 6 | Major Requirement |
| Basic Science Electives (2 courses), choose from: BIO 217-Principles of Biochemistry BIO 222-Human Anatomy BIO 230-Genetics BIO 310-Cell Biology BIO 322-Human Physiology BIO 330-Molecular Genetics BIOCH 327-Biochemistry BICH 427-Advanced Biochemistry CHEM 211-Organic Chemistry II/CHEM 211L Organic Chemistry II Laboratory CHEM 340-Medicinal and Drug Chemistry | 6-8 | Elective Requirement |
| BME electives. Take two courses, choose from: BME 325-Transport Systems BME 330-Bioelectric Systems BME 365-Independent Research in Biomedical Engineering BME 425-Synthetic Biology | 6 | Elective Requirement |
| Up to 3 credits of general electives if needed to meet the 120 credit minimum for the B.S. degree | 3 | Elective Requirement |
| Total Credits | 55-58 | |

BME 475, 325, 330, 365, and 425 are currently under development. Suitable substitutes will be identified as needed.

Additional Credits Needed

Total credits to be taken at SU: 55-58

3. Additional Provisions

- Courses that fulfill program requirements are only eligible for transfer if students have earned a grade of “C” or better. Courses used to fulfill only general education

requirements are eligible for transfer if students have earned a grade of “D” or better, with the exception of college composition, which must be passed with a “C”— 70 or higher.

- Students must have a 2.5 cumulative grade point average at time of application.
- Stevenson participates in general education block transfer. Students entering Stevenson with an A.A., A.S., or A.A.T. degree from a Maryland community college will have met all of Stevenson’s general education requirements, with the exception of a second composition course if not already taken. The equivalencies above detail the coursework students would take under the block transfer program. Not all programs are eligible for block transfer.
- Stevenson University will accept up to 70 credits from 2-year institutions. Up to 90 credits can be applied to degree requirements from a combination of 2-year institutions, 4-year institutions, and non-direct classroom instruction (including CLEP, AP, and other nationally recognized standardized examination scores). For additional information about credit transfer, please see: <http://www.stevenson.edu/admissions-aid/getting-started/transfer-students/transfer-credit-evaluation/>
- For non-direct classroom instruction, an appropriate score is determined by Stevenson University, and student must submit original test scores/results to Stevenson University. Tech Prep credits will not transfer. Credit awarded for prior learning (“life experience”) is not recognized by, and is not transferable to, Stevenson University.
- For financial aid and scholarship information, please see the [Apply for Financial Aid](#) webpage. Students intending to transfer should complete the admission application for Stevenson University once they complete 45 credits of the Associate Degree program. Students should contact the Financial Aid Office at Stevenson University as soon as possible in regard to college deadlines for financial aid. Students who have completed an associate degree at a Maryland community college are guaranteed admissions to Stevenson.

4. The Receiving Institution shall designate, and shall provide to the Sending Institution, the contact information for a staff person at the Receiving Institution who is responsible for the oversight of the transfer of Qualifying Students. The Sending Institution shall designate, and shall provide to the Receiving Institution, the contact information for a staff person at the Sending Institution who is responsible for the oversight of the transfer of Qualifying Students.

| Oversite of Records | Sending Institution | Receiving Institution |
|--|--|--|
| Name of staff person responsible for oversight | Deb Baker | Dave Copenhaver |
| Title of staff person | Assistant Registrar | Assistant Director of Transfer Admissions |
| Email address | dbaker@cbbcmed.edu | wcopenhaver@stevenson.edu |
| Telephone Number | 443-840-4647 | 443-352-4409 |

Should the staff person or position change, the institution will promptly provide new contact information to the partner institution and inform the Maryland Higher Education Commission of the change.

Additional contact information:

| Articulation Agreement Contact | Sending Institution | Receiving Institution |
|---------------------------------------|--|--|
| Name of person | Nicole Zampino | Amanda Hostalka |
| Title of person | Coordinator of Transfer and Degree Acceleration | Vice Provost, Outreach |
| Email address | nzampino@ccbcmd.edu | ahostalka@stevenson.edu |
| Telephone Number | 443-840-4647 | 443-334-9549 |

5. If the Qualifying Student is using federal Title 38 VA Education Benefits (GI Bill® Education Benefits), the Institutions shall adhere to all applicable U.S. Department of Veterans Affairs’ regulations, including the regulations governing the awarding prior credit, as regulated under Title 38, Code of Federal Regulations, Sections 21.4253(d)(3) and 21.4254(c)(4). For scholarship information please see the “Paying for College” page on: <http://www.stevenson.edu/transfer>
6. Each Institution shall adhere to all applicable transfer requirements set forth in the Annotated Code of Maryland and the Code of Maryland Regulations.
7. Each Institution shall advise students regarding transfer opportunities under this Agreement, and shall advise students of financial aid opportunities and implications associated with the transfer.
8. Should either Institution make changes to program requirements, the institution will inform the partner institution immediately.

C. Term and Termination

1. This agreement shall be effective on the date that it is signed by the appropriate and authorized representatives of each Institution.
2. Either Institution may, at its sole discretion, terminate this Agreement upon delivering 60 days written notice to the other Institution.
3. Both Institutions agree to meet once every 2 year(s) to review the terms of this agreement.

D. Amendment

1. This Agreement constitutes the entire understanding and agreement of the Institutions with respect to their rights and obligations in carrying out the terms of the Agreement, and supersedes any prior or contemporaneous agreements or understandings.

2. This Agreement may be modified only by written amendment executed by both Institutions.

E. Governing Law

This Agreement shall be governed by, and construed in accordance with, the laws of the State of Maryland.

F. Counterparts

This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

G. Notice of Agreement

1. The Institutions agree to provide copies of this Agreement to all relevant individuals and departments of the Institutions, including but not limited to students, academic department chairs participating in the transfer, offices of the president, registrar's offices, and financial aid offices.

H. No Third-Party Beneficiaries

There are no third-party beneficiaries to this Agreement.

I. Representations and Warranties of the Parties

Both Institutions represent and warrant that the following shall be true and correct as of the Effective Date of this Agreement, and shall continue to be true and correct during the term of this Agreement:

1. The Institutions are and shall remain in compliance with all applicable federal, state, and local statutes, laws, ordinances, and regulations relating to this Agreement, as amended from time to time.
2. Each Institution has taken all action necessary for the approval and execution of this Agreement.