# ARTICULATION AGREEMENT BETWEEN GREAT FALLS COLLEGE MONTANA STATE UNIVERSITY AND MONTANA STATE UNIVERSITY BOZEMAN

#### **OVERVIEW:**

This formal program articulation agreement is made and entered into by Great Falls College Montana State University, hereinafter referred to as GFCMSU, and Montana State University Bozeman, hereinafter referred to as MSU. By this agreement GFCMSU and MSU express a shared commitment to increasing opportunities for student access to and success in higher education.

#### **PURPOSE**:

This agreement allows students to begin pursuit of a baccalaureate degree from Montana State University by following the 1+3 agreement below. By completing the agreed upon curriculum, students can be dually enrolled into MSU's Bachelor of Science in Biological Engineering program. Any GFCMSU student who has completed coursework that adheres to the guidelines within this agreement is guaranteed that MSU will accept designated major related credits and that all general education credits will apply to the Bachelor of Science in Biological Engineering degree in a manner consistent with the treatment of native MSU students.

### **CONDITIONS OF TRANSFER:**

### Section I: Admissions and Matriculation

GFCMSU students maintaining continuous enrollment under this agreement will be afforded the same treatment and protection as native MSU students enrolled under a specific catalog.

Criteria for acceptance into MSU will be the same for transfer as for native students.

GFCMSU, upon written request of students, will provide verification of completed courses to MSU through its Office of Admissions and Records. The transcript of students transferring from GFCMSU will be evaluated by the Registrar's Office at MSU.

Transfer students from GFCMSU will have access to financial aid, scholarships, and student services on the same basis as native students.

MSU will apply the same academic progress and graduation standards to GFCMSU transfer students as those applicable to native students at MSU.

## Section II: Program Plan

While a course-by-course equivalence was used in the development of this plan, this agreement presumes that the general education core requirements at GFCMSU meet general education requirements at MSU. Students falling under this program articulation agreement will be responsible for successfully completing the additional prescribed requirements.

#### TERMS of AGREEMENT:

This agreement is made and entered into in the academic year 2018-2019 and remains in force unless changed in writing by mutual agreement to both parties. The agreement may be amended at any time with the approval of both parties and is subject to regular review to assure currency with the respective degree requirements. Should either party desire to discontinue this agreement, one-year advance notification will be required.

### **SIGNATURES:**

Great Falls College Montana State University and Montana State University hereby enter into this program articulation agreement leading from the articulated coursework in Engineering and General Education to the Bachelor of Science in Biological Engineering degree by the affixing of signatures of the chief executive officers of both institutions.

Dr. Heidi Pasek

Associate Dean/Chief Academic Officer Great Falls College Montana State University

Dr. Brett Gunnink

Dean of Engineering-PhD

Montana State University-Bozeman

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# 1+3 AGREEMENT WITH ENGINEERING AND GENERAL EDUCATION COURSEWORK TRANSFER TO MONTANA STATE UNIVERSITY

The 1+3 Agreement with articulated coursework in Engineering and General Education is designed for students interested in a Bachelor of Science degree in Biological Engineering at Montana State University.

| Year 1                 |       |  | F  | S |
|------------------------|-------|--|----|---|
|                        |       | Courses taken through GFCMSU                                 |    |   |
| WRIT                   | 101W  | College Writing I or other W CORE course                     | 3  |   |
| M                      | 171Q* | Calculus I   | 4  |   |
| M                      | 172Q  | Calculus II  |    | 4 |
| PHSX                   | 220*  | Physics I  |    | 4 |
| СНМҮ                   | 141*  | College Chemistry I  | 4  |   |
| СНМҮ                   | 143   | College Chemistry II   |    | 4 |
| COMX                   | 111** | Introduction to Public Speaking                              | 3  |   |
| University<br>CORE     |       | Art (IA), Humanities (IH), Social Sci (IS), or Diversity (D) | 3  |   |
| University CORE        |       | Art (IA), Humanities (IH), Social Sci (IS), or Diversity (D) |    | 3 |
| Semester total         |       | 17   | 15 |   |
| Total credits for year |       | 32   |    |   |

<sup>~</sup>Many students need preliminary math courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math placement before planning out their full program schedule.

<sup>\*</sup>Placement in course(s) is determined by admissions assessment

<sup>\*\*</sup>Assumes COMX 111 transfers to MSU Bozeman with a US Core designation

| Year 2                 |      | F  | S  |   |
|------------------------|------|--|----|---|
|                        |      | Courses taken through MSU Bozeman                            |    |   |
| CHMY                   | 211  | Elements of Organic Chemistry                                | 5  |   |
| ECHM                   | 201  | Elementary Principles of Chem. and Biol. Eng.                | 3  |   |
| PHSX                   | 222  | Physics II (w/ calculus)                                     | 4  |   |
| M                      | 273Q | Multivariable Calculus                                       | 4  |   |
| EBIO                   | 216  | Elem Princ of Bioengineering                                 |    | 3 |
| ECHM                   | 321  | Fluid Mechanics Operations                                   |    | 3 |
| M                      | 274  | Introduction to Differential Equations                       |    | 4 |
| EGEN                   | 102  | Intro to Engineer Comp Apps                                  | A  | 2 |
| University CORE        |      | Art (IA), Humanities (IH), Social Sci (IS), or Diversity (D) |    | 3 |
| Semester total         |      | 16   | 15 |   |
| Total credits for year |      | 31   |    |   |

| Year 3  Courses taken through MSU Bozeman |       |  | F  | S   |
|---|-------|--|----|-----|
|   |       |  |    |     |
| EBIO                                      | 324   | Bioengineering Transport                 | 3  |     |
| EGEN                                      | 350   | Applied Engr Data Analysis               | 2  |     |
| ВСН                                       | 380   | Biochemistry                             | 5  |     |
|   |       | Engineering Elective (replaces EBIO 100) | 2  |     |
| EBIO                                      | 438   | Bioprocess Engin                         |    | 3   |
| EGEN                                      | 310R  | Multidisc Engineering Design             |    | 3   |
| EBIO                                      | 439   | Downstream Processing                    |    | 3   |
| BIOB                                      | 375   | General Genetics                         |    | , 3 |
| EMAT                                      | 251   | Materials Structures and Prop            |    | 3   |
| Semester                                  | total |  | 17 | 15  |
| Total credits for year                    |       | 3  | 2  |     |

| Year 4  Courses taken through MSU Bozeman |      |                                    | F   | S |
|---|------|------------------------------------|-----|---|
|   |      |                                    |     |   |
| EBIO                                      | 411R | Bioengineering Design I            | 3   |   |
| EBIO                                      | 442  | Bioengineering Laboratory I        | 3   |   |
|   |      | Engineering Elective               | 6   |   |
|   |      | Bioengineering Elective            | 2   |   |
|   |      | University Core (IA, IH, IS, or D) | 3   |   |
| EBIO                                      | 412R | Bioengineering Design II           |     | 3 |
|   |      | Engineering Elective               | . 1 | 4 |
|   |      | Bioengineering Elective            |     | 6 |
| EBIO                                      | 443  | Bioengineering Laboratory II       |     | 3 |
| EGEN                                      | 488  | FE Exam                            |     | 0 |
| Semester total                            |      | 17                                 | 16  |   |
| Total credits for year                    |      | 3                                  | 33  |   |

A minimum of 128 credits is required for graduation; 42 of these credits must be in courses numbered 300 and above.