

GENETIC ENGINEERING AND BIOTECHNOLOGY Four-Year Graduation Guarantee 2021-2022 Catalog

Cedar Crest College's Four-Year Graduation (4YG) Guarantee is open to all academically qualified candidates enrolled full-time in a 4-year bachelor's degree program, with the exception of Nuclear Medicine Technology. It does not apply to dual degree, fifth-year, or graduate programs. Provided students comply with all of the conditions of the program, Cedar Crest College will guarantee graduation within four years. The guarantee extends to one major only. While many students add additional majors and minors and finish within four years, Cedar Crest will not be able to provide four year guarantee in those cases.

| litions |
|---------|
| |
| |

By signing below, ______ is enrolled in the 4YG program for the Genetic Engineering and Biotechnology major under the 2021-2022 catalog requirements and agrees to

- assume ultimate responsibility for monitoring academic progress and the completion of all academic requirements;
- enroll at Cedar Crest for four continuous academic years;
- remain in good academic standing;
- complete an average of 30 new credits in each academic year. Courses must be selected in consultation with her academic advisor and 4YG coordinator and must apply to the recommended course sequence on page 2;
- maintain the GPA requirements of the Genetic Engineering and Biotechnology major and Liberal Arts Curriculum;
- meet regularly with her assigned academic advisor and 4YG coordinator following the schedule outlined below;
- resolve all outstanding holds that would prevent registration prior to the start of registration for each semester;
- register for classes each semester on the date appropriate for class standing as set forth by the Registrar;
- be responsive to communication from Cedar Crest College, including advisors and the 4YG coordinator;
- officially declare a Genetic Engineering and Biotechnology major in the first semester. If a change of major is requested after the first semester, the ability to sign a new 4YG contract is not guaranteed.
- complete the following and all other Genetic Engineering and Biotechnology major requirements:
 - o Earn a minimum 2.0 cumulative GPA and 2.0 GPA in major coursework.
 - Earn a C- or better in all courses taken for major requirements.
 - o Earn a C- or better in all prerequisite courses before proceeding to subsequent courses.
 - Complete freshman core courses during the first year of enrollment; sophomore core courses during the second year of enrollment; BIO 350 in third fall semester; and BIO 356 in the fourth fall semester.
 - o Begin the BIO 335, 336, 345 sequence in the fall of junior year.
 - o Complete the CHE 111, 112, 205, 206 sequence before the junior year.
 - o Complete MAT 141 before the junior year.

Date

o Abide by all other departmental policies and successfully meet all other graduation requirements.

The 4YG does not guarantee that courses will be offered at a particular time or on particular days, nor can it assure graduation in four years if accreditation agencies require immediate curricular changes. This agreement pertains only to the catalog specified; if major requirements change and the student elects to follow the newer requirements, this contract is void.

If a student meets all of the degree/program requirements but cannot graduate in four years because a course or courses are not available, the student will meet with her advisor as soon as the problem is discovered to discuss options for completion. These options could include a course substitution, an independent study, or permission to enroll in the course in a subsequent semester at no tuition cost to the student.

Required Meeting Schedule:

Advisor Signature

| Beginning of | | Semester 2 | Semester 3 | Semester 4 |
|-------------------------|-----------------|-----------------|-----------------|-----------------|
| - | Advisor | Advisor | Advisor | Advisor |
| Semester _ | 4YG Coordinator | 4YG Coordinator | 4YG Coordinator | 4YG Coordinator |
| Prior to registration _ | Advisor | Advisor | Advisor | Advisor |
| - | 4YG Coordinator | 4YG Coordinator | 4YG Coordinator | 4YG Coordinator |
| | Semester 5 | Semester 6 | Semester 7 | Semester 8 |
| Beginning of _ | Advisor | Advisor | Advisor | Advisor |
| Semester _ | 4YG Coordinator | 4YG Coordinator | 4YG Coordinator | 4YG Coordinator |
| Prior to registration _ | Advisor | Advisor | Advisor | Advisor |
| _ | 4YG Coordinator | 4YG Coordinator | 4YG Coordinator | 4YG Coordinator |

4YG Coordinator Signature

Date



GENETIC ENGINEERING AND BIOTECHNOLOGY **Recommended Course Sequence** 2021-2022 Catalog

| FALL 2021 | | | SPRING 2022 | | | | |
|-----------|-----|------------------------|-------------|---------|-----|---|---------------|
| Course | Cr | Title | ✓ | Course | Cr | Title | $\overline{}$ |
| BIO 123 | 4 | Foundations in Biology | | BIO 124 | 4 | Principles of Cell and Molecular Biology | |
| CHE 111 | 4 | Chemical Principles | | CHE 112 | 4 | Chemical Equilibrium and Analysis | |
| MAT 141 | 3 | Calculus I | | | 3 | Mathematics and Logic LAC course | |
| FYS | 3 | First Year Seminar | | WRI 100 | 3 | College Writing | |
| CCC 101 | 0.5 | College Life | | CCC 102 | 0.5 | Exploring Your Future | |

| FALL 2022 | | | | SPRING 2023 | | | |
|-----------|----|--|----------|-------------|-----|---------------------------|---------------|
| Course | Cr | Title | √ | Course | Cr | Title | $\overline{}$ |
| BIO 239 | 4 | Animal Ecology, Development, and Evolution | | BIO 231 | 4 | Genetics | |
| ETL 235 | 3 | Ethical Life | | CHE 206 | 4 | Organic Chemistry II | |
| CHE 205 | 4 | Organic Chemistry I | | CCC 20X | 3 | Sophomore Expedition | |
| | 3 | Humanities LAC course | | | 3 | Social Science LAC course | |
| | | | | | 1-4 | elective*** | |

| FALL 2023 | | | | | SPRING 2024 | | | |
|-----------|-----|---|----------|---------|-------------|---|----------|--|
| Course | Cr | Title | ✓ | Course | Cr | Title | ✓ | |
| BIO 350 | 2 | Junior Colloquium | | BIO 345 | 3 | Advanced Recombinant DNA | | |
| BIO 335 | 4 | Molecular Genetics I | | BIO 336 | 4 | Molecular Genetics II | | |
| | 3 | Social Science LAC course | | | 3-4 | Genetic Engineering elective** or elective*** | | |
| | 3-4 | Genetic Engineering elective** or elective*** | | BIO | 1.5 | Genetic Engineering minilab* | | |
| | 3 | elective*** | | | 3 | Arts LAC course | | |

| FALL 2024 | | | | SPRING 2025 | | |
|-----------|-----|---|--------------|-------------|-----|---|
| Course | Cr | Title | \checkmark | Course | Cr | Title ✓ |
| BIO 356 | 3 | Science, Ethics, and Society | | | 3-4 | Genetic Engineering elective** or elective*** |
| CHE 307 | 4 | Biochemistry | | | 3 | Humanities LAC course |
| | 3-4 | Genetic Engineering elective** or elective*** | | | 3 | elective*** |
| BIO | 1.5 | Genetic Engineering minilab* | | | 3 | elective*** |
| | 3 | Arts LAC course | | | 3 | elective*** |

^{*} Choose two courses for a total of 3 credits from: BIO 341, 343, 344, or 349.

Liberal Arts Curriculum (LAC) and College-Wide Requirements

Natural Science (SCI): 7 cr. total, one must be a lab-based course Writing (WRI1, WRI2): 2 courses, 6 cr. total 1. WRI 100 1. BIO 123 **BIO 356 BIO 124** 2. 2. Arts (ART): 6 cr. total, one must be a 3 cr. course Humanities (HUM): 2 courses, 6 cr. total Mathematics & Logic (ML): 6 cr. total, one must be a MAT course Social Science (SS): 2 courses, 6 cr. total 1. **MAT 141** 1. 2. 2. Ethics (ETH): 1 course, 3 cr. Global Studies (GS): 1 course, 3 cr. 1. ETL 235 1. CCC 201 Technology: Information Literacy: 1. BIO 231, 239, 350, and 356 1. BIO 231, 239, 350, and 356 **Oral Presentation:** 1. BIO 124, 239, 350, and 356

^{**} Choose 7 credits from: BIO 227, 300, 317, 327, 332, 339, or 348; CHE 308; FSC 348. At least 1 must contain a lab.

^{***} Electives must be included to ensure that the overall total number of credits reaches the 120 credits needed to complete a degree.