[Biotechnology Laboratory Technician – Advanced Biotechnician](https://bluegrass.kctcs.edu/education-training/program-finder/biotechnology.aspx)

Certificate

Coordinator: Deborah Davis ([deborah.davis@kctcs.edu](mailto:deborah.davis@kctcs.edu)) (859) 246-6451

Student Name: Student ID:

*Students must meet college readiness benchmarks as identified by the Council on Postsecondary Education or remedy the identified skill deficiencies.*

NOTE: This certificate has a prerequisite admission requirement. Student must have completed at least one semester of college–level chemistry and college–level biology and have earned an associate or higher degree.

Semester 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| BTN 101 Introduction to Biotechnology | 1 |  |  |  |  |
| BTN 105 Applied Laboratory Calculations for Biotechnology | 3 |  |  |  |  |
| BTN 201 Biotechnology Techniques I | 4 |  |  | A semester of college biology with lab or college chemistry with lab | First 8 weeks |
| BTN 202 Biotechnology Techniques II | 4 |  |  | BTN 201 | Second 8 weeks |
| Total Semester Credit Hours | 12 |  |  |  |  |

Semester 2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| Required Technical Elective courses | 15 |  |  |  | See list |
| Total Semester Credit Hours | 15 |  |  |  |  |
| Total Certificate Credit Hours | 27 |  |  |  |  |

**Graduation Requirements:**

* 25% or more of Total Certificate Credit Hours must be earned at BCTC.
* Cumulative GPA must be 2.0 or higher.

Advisor Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Advisor Contact \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Biotechnology Elective Courses**

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| --- | --- | --- | --- |
| Course | Cr. Hrs. | Prerequisites | Notes |
| BTN 106 Fundamentals of Scientific Communication | 3 |  |  |
| BTN 110 Nucleic Acid Methods | 4 | One semester of college biology with lab or college chemistry with lab |  |
| BTN 115 Biomanufacturing | 4 | BTN 201 and BTN 202 with grade of C or better |  |
| BTN 120 Biofuels | 4 | BTN 201 and BTN 202 with grade of C or better |  |
| BTN 125 Bioinformatics I | 2 | Prereq or coreq: BTN 201 and BTN 202 |  |
| BTN 126 Bioinformatics II | 2 | BTN 125 with grade of C or better |  |
| BTN 160 Introduction to Agricultural Biotechnology | 4 | BTN 201 and BTN 202 with grade of C or better |  |
| BTN 210 Cell Culture and Function | 4 | BTN 110 with grade of C or better |  |
| BTN 220 Immunological Methods | 4 | BTN 110 with grade of C or better |  |
| BTN 225 Protein Bioseparation Methods | 4 | BTN 201 and BTN 202 with grade of C or better |  |
| BTN 295 Independent Investigation in Biotechnology OR  BTN 298 Biotechnology Learning Laboratory OR  COE 199 Cooperative Education | 1 – 8 | BTN 201 and BTN 202 with grade of C or better |  |
| Other courses approved by the Biotechnology Laboratory Technician Coordinator | 1 – 28 |  |  |

**Embedded Credentials**

|  |  |  |  |
| --- | --- | --- | --- |
| Credential | Title | Requirements | Total Cr. Hours |
| Certificate | Basic Biotechnician | BTN 101, BTN 105, BTN 201, BTN 202, One semester of college biology with lab or college chemistry with lab or course approved by Program coordinator | 16 – 17 |

*Reviewed by: Deborah Davis Effective Term: Fall 2021*

*Review Date: 02-03-2021*