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**Biotechnology Laboratory Technician – Advanced Biotechnician**

**Certificate**

**Program Coordinator: Deborah Davis E-mail:** **deborah.davis@kctcs.edu** **Phone: 859-246-6451**

**Program Website:** [**https://bluegrass.kctcs.edu/education-training/program-finder/biotechnology.aspx**](https://bluegrass.kctcs.edu/education-training/program-finder/biotechnology.aspx)

**Student Name: Student ID:**

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

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| **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.** |
| **First Semester** | **Credit Hours** | **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** |  |  |  |

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| **Second Semester** | **Credits** | **Term** | **Grade** | **Prerequisites** | **Notes** |
| Required Technical Elective courses | 15 |  |  |  | See list on back. |
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| **Total Semester Credit Hours** | **15** |  |  |  |
| **Total Certificate Credit Hours** | **27** |  |  |  |

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| * **25% or more of Total Certificate Credit Hours must be earned at BCTC**
* **Grade of C or higher in each course required for the certificate**
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**Graduation Requirements:**

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

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| **Technical Elective Courses** |
| **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 – 31 – 8 | BTN 201 and BTN 202 with grade of C or better |  |
| Other courses approved by the Biotechnology Laboratory Technician Coordinator | 1 – 28 |  |  |

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| **Embedded Credential** |
| Credential | Title | Requirements | Total Credit 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 |