

ADVANCED LABORATORY PRACTICES**Embedded Certificate****Degree Sheet**

2026-2027 Catalog

General Education Courses			13 Credit Hours	<i>Credit Hours</i>	Prerequisites
ENGL	1113	English Composition I		3	[R] [W]
<i>Select One:</i>				3	
ENGL	1213	English Composition II			ENGL 1113
ENGL	2333	Introduction to Technical Writing			ENGL 1113
SPCH	1113	Introduction to Speech Communications			[R] [W]
<i>Select One:</i>				3	[M]
MATH	1483	Mathematical Functions and Their Uses (A)			
MATH	1513	Precalculus I (A)			
BIOL	1303	Principles of Biology (N)		3	[R] ICSM 0113
BIOL	1311	Principles of Biology Lab (LN)		1	[R] ICSM 0113
Support and Related Courses <th>9 Credit Hours</th> <td></td> <td></td>			9 Credit Hours		
CHEM	1154	General, Organic and Biochemistry (LN)		4	[R] [M]
CHEM	1315	General Chemistry I (LN)		5	MATH 1483 or 1513, CHEM 1104, CHEM 1154, or High School
Technical Occupational Specialty <th>14 Credit Hours</th> <td></td> <td></td>			14 Credit Hours		
BMFT	1002	Aseptic Techniques		2	[R] [W] [M]
BMFT	2203	Bioreactors and Cell Culture		3	BIOL 1303, 1311, BMFT 1002
BMFT	2232	Cell Harvesting		2	BIOL 1303, 1311
BMFT	2254	Downstream Laboratory Operations		4	BIOL 1303, 1311
BMFT	2273	Chromatography		3	CHEM 1315

Total to Graduate 36

The courses in this certificate program are embedded within the Biomanufacturing Technologies A.A.S. degree, and this certificate may be earned independently.

This certificate has not been approved by the Dept. of Education to be eligible for federal student aid

ADDITIONAL GRADUATION REQUIREMENTS:

- 2.0 Graduation/Retention GPA
- 9 credit hours earned in residence at OSU-OKC
- Students must complete the prerequisite course with a grade of 'C' or better to advance to the next course in the required sequence

NOTES LEGEND:

- [R] Reading Proficiency/Placement
[W] Writing Proficiency/Placement
[M] Math Proficiency/Placement

Learn more about proficiency requirements at <https://osuokc.edu/proficiency>.