

# Undergraduate Curriculum in Industrial Technology Biological and Biomanufacturing Systems Technology Option

2023-2024 Catalog

Total Credits 120

## First Year (31 cr.)

Fall Semester 1 (16 cr.)			Spring Semester 2 (15 cr.)		
1	TSM 110	Introduction to Technology (F)	1	TSM 111	Experiencing Technology (FS)
3	TSM 116	Introduction to Design in Technology (FS)	3	TSM 115	Solving Technology Problems (FS)
*3	ENGL 150	Crit. Think. and Communication (FSSS)	3	MATH 151	Calculus for Business and Social Sciences (FSSS)
1	LIB 160	Introduction to College Level Research (FSSS)	4	PHYS 131	General Physics I (FSSS)
3	MATH 145	Applied Trigonometry (FS)	1	PHYS 131L	General Physics I Laboratory (FSSS)
4	CHEM 163	College Chemistry (FS)	3		<b>Option core course – See list</b>
1	CHEM 163L	Laboratory in College Chemistry (FS)			

## Second Year (29 cr.)

Fall Semester 3 (14 cr.)			Spring Semester 4 (15 cr.)		
1	TSM 201	Preparing for Workplace Seminar (FS)	3	TSM 270	Principles of Injury Prevention (FS)
1	TSM 214	Managing Technology Projects (FS)	2	MICRO 201	Introduction to Microbiology (FSSS)
3	TSM 210	Fundamentals of Technology (FS)	1	MICRO 201L	Introductory Microbiology Laboratory (FS)
3	BIOL 211	Principles of Biology I (FSSS)	3	BIOL 212	Principles of Biology II (FSSS)
3		<b>Option core course – See list</b>	3	ECON 101	Principles of Microeconomics (FSSS)
*3	ENGL 250	Writ/Oral/Vis/Elec Composition (FSSS)	*3		Speech Communication – See list (FSSS)

*\*Must earn a C or better*

**Summer – R TSM 397 or TSM 399 Internship in Technology (FSSS)**

Must submit paperwork to enroll.

GPA minimum 2.5 sophomore, 2.0 junior and senior.

## Third Year (32 cr.)

Fall Semester 5 (16 cr.)			Spring Semester 6 (16 cr.)		
3	TSM 370	Occupational Safety (FS) [Ethics requirement]	3	TSM 310	Total Quality Improvement (FS)
3	STAT 104	Introduction to Statistics (FSSS)	4	TSM 363	Electric Power and Electronics for Agriculture and Industry (FS)
2	CHEM 211	Quantitative and Environmental Analysis (FS)	3	TSM 380	Fundamentals and Modeling in Biological Systems (S)
2	CHEM 211L	Quantitative and Environmental Analysis Lab (FS)	3	ACCT 215 or ACCT 284	Legal Environment of Business or Financial Accounting (FSSS)
3	LD ST 322	Leadership in a Diverse Society (FS) [U.S. Diversity requirement]	3		<b>Option core course – See list</b>
3		Humanities - See list (FSSS)			

## Fourth Year (28 cr.)

Fall Semester 7 (14 cr.)			Spring Semester 8 (14 cr.)		
2	TSM 415	Applied Project Management in Technology (FS)	3	TSM 416	Technology Capstone (FS)
3		Advanced English – See list (FSSS)	3		<b>Option core course – See list</b>
3		<b>Option core course – See list</b>	8		Elective (FSSS)
3		International Perspectives – See list (FSSS)			
3		Elective (FSSS)			

**“See list” – Refer to your Degree Audit (available in AccessPlus) for options for each list.**

**NOTE: This is a sample four-year plan. Your actual semester schedules may vary.**