

Agricultural Technology Management (Biomanufacturing Technology Option)

120 credit hours total

YEAR 1		YEAR 2		YEAR 3		YEAR 4	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
CHM 210 (4) Chemistry I	BIOL 198 (4) Principles of Biology	*MATH 205 (3) General Calculus and Linear Algebra KSC-3	STAT 325 (3) Introduction to Statistics	CC 110 (2) Introduction to Computing	ATM 331 (1) Professional Practice for Agricultural Technology Managers PR: JR standing	ATM 536 (3) ATM Capstone Project PR: ATM 331 and SR standing	ATM 545 (3) Processing and Storage of Grains PR: ATM 160 or PHYS 113 or 115
ATM 160 (3) Engineered Systems and Technology in Agriculture	ECON 110 (3) Principles of Macroeconomics	MANGT 220 (3) Principles of Management	*PHYS 113 (4) General Physics I KSC-4	CC 111 (1) Elements of Computer Programming PR/CO: CC 110	ATM 450 (3) Sensors and Controls for Agricultural and Biological Systems PR: PHYS 113 or 115 PR: ATM 160 or MATH 100	ATM 511 (3) Agricultural Building Systems PR: ATM 160 or PHYS 113 or 115	▲ Elective (3) ATM/BAE
DEN 160 (1) College of Engineering Orientation	*ENGL 100 (3) Expository Writing I KSC-1	*ENGL 200 (3) Expository Writing II KSC-1 PR: ENGL 100	ACCT 231 (3) Accounting for Business Operation	BIOCH 265 (5) Introductory Organic Biochemistry PR: CHM 110	● BAE 345/346 (3) Properties of Biological Materials and Laboratory PR: CHM 210 or 220	BIOL 455 (4) General Microbiology PR: BIOL 198, one CHM course	▲ Elective (3) ATM/BAE
*COMM 106 (3) Public Speaking KSC-2	* Elective (3) Arts and Humanities KSC-6	▲ Elective (3) Graphics	* Elective (3) Social and Behavioral Sciences KSC-5	ATM 245 (3) Introduction to Biomanufacturing Technology PR: BIOL 198 or CHM 210 or BIOCH 265	ATM 345 (3) Cell Culture Technology in Biomanufacturing PR: MATH 205 or 220, BIOL 198 or CHM 210 or BIOCH 265	▲ Elective (3) ATM/BAE	▲ Elective (3) Technical
* Elective (3) Social and Behavioral Sciences KSC-5	* Elective (3) Institutional KSC-7	* Elective (3) Arts and Humanities KSC-6	▲ Elective (3) Technical	▲ Elective (3) Technical	* Elective (3) Institutional KSC-7	▲ Elective (2) Technical	Elective (3) Business Management
					▲ Elective (3) Business Management		

(14 credit hours)

(16 credit hours)

(15 credit hours)

(15 credit hours)

(14 credit hours)

(16 credit hours)

(15 credit hours)

(15 credit hours)

KEY

 = Prerequisite for another course	PR = Prerequisite requirement	PR/CO = Prerequisite or concurrent requirement
* = K-State Core (KSC) course	▲ = See department approved electives	● = Only offered in the semester shown

Agricultural Technology Management Curriculum Notes

Students who satisfy all or part of K-State Core Institutional Electives (KSC-7) with courses that satisfy other degree requirements may use additional unrestricted electives to meet the degree requirement of 120 credit hours.

Substitutions

AGEC 318 or MANGT 421 can substitute for MANGT 220.

CE 202 or GRSC 210 can substitute for BAE 250.

ECON 120 can substitute for ECON 110.

Technical Electives

ATM/BAE electives and technical electives must be selected from an approved departmental list and be used to complete one of the option areas listed below.

Agribusiness Management (43 credit hours total in option)

- 21 credit hours of required courses within option
- 15 credit hours of ATM/BAE electives
- 7 credit hours of technical electives

Biomanufacturing (43 credit hours total in option)

- 24 credit hours of required courses within option
- 9 credit hours of ATM/BAE electives
- 10 credit hours of technical electives

Precision Agriculture (43 credit hours total in option)

- 26 credit hours of required courses within option
- 12 credit hours of ATM/BAE electives
- 15 credit hours of technical electives

Production Agriculture (43 credit hours total in option)

- 19 credit hours of required courses within option
- 9 credit hours of ATM/BAE electives
- 15 credit hours of technical electives

Water Management (43 credit hours total in option)

- 17 credit hours of required courses within option
- 15 credit hours of ATM/BAE electives
- 11 credit hours of technical electives

Additional information is available at

bae.k-state.edu/academics/undergraduate/atm/atm-elective-lists.pdf.

K-State Core

The K-State Core (KSC) is the university's version of the systemwide general education framework established by the Kansas Board of Regents.

KSC requirement 1 – English (6 hours)

KSC requirement 2 – Communications (3 hours)

KSC requirement 3 – Math and Statistics (3 hours)

KSC requirement 4 – Natural and Physical Sciences (4-5 hours)

KSC requirement 5* – Social and Behavioral Sciences (6 hours)

KSC requirement 6* – Arts and Humanities (6 hours)

KSC requirement 7 – Institutional Electives (6 hours)

To view course lists for each requirement, visit k-state.edu/provost/kstate-core.

**Requires two courses from two different subject areas.*