Des Moines Area Community College Transfer Guide Industrial Technology - Biological and Biomanufacturing Systems Technology Option

This transfer plan should be a guide only and not replace consultation with an adviser from the ABE Department and DMACC.

To ensure a smooth transfer process, utilizing the DMACC-ISU connect program is highly encouraged.

DMACC First Year (32 cr.)

Fall Semester 1 (15 cr.)			ISU Course	Sp	ring Semester 2 (17 c	ISU Course	
1	SDV 108	The College Experience	ORTR 1000T – TSM 1100	3	ENG 106	Composition II	ENGL 2500
3	ENG 105	Composition I	ENGL 1500	4	*BIO 113	General Biology II	BIOL 2120/L
3	MAT 156	Statistics	STAT 1040	4	CHM 175		CHEM 1780/L – BBST Core Option
4	*BIO 112	General Biology I	BIOL 2110/L	3	ISU Humanities	Refer to recommended list	
4	CHM 165	General Chemistry I	CHEM 1770/L		ISU International Perspectives	Refer to recommended list	

DMACC Second Year (33 cr.)

Fall Semester 3 (17 cr.)			ISU Course	Spring Semester 4 (16 cr.)			ISU Course
5	MAT 211	Calculus I	**MATH 1650	3	BIO 146	(÷enetics	BIOL 2000T – BBST Core Option
4	BIO 186	Microbiology	MICRO 2010/L	5	BIOLONI		BIOL 2000T – BBST Core Option
3	CPC 101	Fund of Oral Communication	SPCM 2120	5	BIO 251	Kell & Mal Rialogy Profess	BIOL 2000T – BBST Core Option
5	PHY 160	General Physics I	PHYS 1310/L	3	ECN 130	Principles of Microeconomics	ECON 1010

^{*} When BIO 112 and BIO 113 are both taken, the courses will transfer as BIOL 2110, BIOL 2110L, BIOL 2120, and BIOL 2120L.

**Course fulfills MATH 1450 and MATH 1510

ISU Third Year (35 cr.)

Fall Semester 5 (15 cr.)			Spring Semester 6 (14 cr.)			
3	TSM 2700	Principles of Injury Prevention (FS)	3	Advanced English – See list (FSSS)		
2	CHEM 2110	Solving Technology Problems (FS)		ACCT 2150	Legal Environment of Business or Financial	
2	CHEM 2110I	Quantitative and Environmental Analysis Lab (FS)		Orall	Accounting (FSSS)	
2	CHEWI 2110L		3	TSM 3800	Fundamentals and Modeling in Biological Systems	
1	LIB 1600	Introduction to College Level Research (FSSS)	3	1 SW1 3000	Fundamentals and Wodering in Biological Systems (3)	
3	TSM 1160	Introduction to Design in Technology (FS)	3	TSM 2100	Fundamentals of Technology (FS)	
3	TSM 1150	Quantitative and Environmental Analysis (FS)	1	TSM 2140	Managing Technology Projects (FS)	
1	TSM 1110	Experiencing Technology (FS)	1	TSM 2010	Preparing for Workplace Seminar (FS)	

Credit: R TSM 3970 or TSM 3990 Internship in Technology (FSSS)

Must submit paperwork to enroll. GPA minimum 2.5 sophomore, 2.0 junior and senior.

ISU Fourth Year (33 cr.)

Fall Semester 7 (17 cr.)			Spring Semester 8 (15 cr.)			
2	TSM 4150	Applied Project Management in Technology (FS)	3 TSM 4160 Technology Capstone (FS)		Technology Capstone (FS)	
3	TSM 3100	Total Quality Improvement (FS)	3		Option core course – See list	
3	TSM 3700	Occupational Safety (FS) [Ethics requirement]	5		Elective (FSSS)	
3	LDST 3200	Leadership in a Diverse Society (FS) [US Cultures & Communities requirement]	4	TSM 3630	Electric Power and Electronics for Agriculture and	
6		Elective (FSSS)			Industry (FS)	

"See list" – Refer to your Academic Progress Report (APR) in Workday for options for each list. NOTE: This is a sample four-year plan. Your actual semester schedules may vary.

Drafted 8/28/2025

This document is only a guide in planning your coursework. Please contact your DMACC advisor to understand the impact on your DMACC transcript.

Humanities and International Perspectives Electives (3 credits needed)

This list indicates courses that meet both the Humanities and international Perspective requirements at ISU.

For a complete list of Humanities courses at ISU please visit:

https://www.cals.iastate.edu/studentservices/humanities. For a complete list of International Perspective courses at ISU please visit: https://www.registrar.iastate.edu/students/div-ip-guide/IntlPerspectives-current. Compare this list with the Transfer Equivalency Guide for your institution to choose your 3 credits of Humanities and International Perspectives. Below are some popular options from DMACC that will meet this requirement.

DMACC Course	DMACC Description	Credits	ISU Course
HIS 110	Western Civilization: Ancient to Early Modern	3	HIST 2010
HIS 111	Western Civilization: Early Modern to Present	3	HIST 2020
MUS 100	Music Appreciation	3	Music 1020
REL 101	Survey of World Religions	3	RELIG 2050

Other Degree Course Options

Below are some additional options from DMACC that will meet this other BBST option requirements.

DMACC Course	DMACC Description	Credits	ISU Course
ACCT 131	Principles of Accounting I	4	ACCT 2840
BUS 185	Business Law I	3	ACCT 2150
*MATH 130	Trigonometry	3	MATH 1000T
MATH 164	Calculus for Business and Social Science	3	MATH 1510

^{*}Course has transferred as MATH 1450 in the past

A <u>MAXIMUM</u> OF 65 COMMUNITY COLLEGE CREDITS CAN BE APPLIED TOWARDS YOUR MAJOR AT IOWA STATE UNIVERSITY.