

**COLLEGE OF BASIC AND APPLIED SCIENCES  
UPPER DIVISION FORM 2018-2019 CATALOG**

Student name: \_\_\_\_\_ M #: \_\_\_\_\_  
 Major: **FERMENTATION SCIENCE** Minor: \_\_\_\_\_  
 Concentration: **N/A** E-mail: \_\_\_\_\_

**Instructions: For students graduating in Fall 2018 or later. One (1) copy signed by major and minor advisors should be filed in DSB room 120 with the Graduation Analyst three semesters prior to graduation. An Intent to Graduate Form must accompany this Upper Division Form.**

General Education	Course	Semester	Grade	Notes	Credit Hours
<b>COMMUNICATION</b> (9 hours)	ENGL 1010				3
	ENGL 1020			Preq: ENGL 1020 with C- or better	3
	COMM 2200				3
<b>HISTORY</b> (6 hours) Choose two: HIST 2010, HIST 2020, or HIST 2030					3
					3
<b>HUMANITIES/FINE ARTS</b> (9 hours) Choose one: ENGL 2020, 2030, or HUM 2610 Choose two (different rubrics): ANTH 2210; ART 1030 or 1920; DANC 1000; HIST 1010, 1020, 1110, or 1120; MUS 1030; PHIL 1030; THEA 1030					3
					3
					3
<b>MATHEMATICS</b> (3 hours)				*MATH 1730 RECOMMENDED	3
<b>NATURAL SCIENCES</b> (8 hours) Recommend CHEM 1110/1111 and BIOL 1110/1111	BIOL 1110/1111			*see major courses for required sequences/pre-requisites	4
	CHEM 1110/1111			*see major courses for required sequences/pre-requisites	4
<b>SOCIAL/BEHAVIORAL SCIENCES</b> (6 hours) Choose two (different rubrics): AAS 2100, ANTH 2010, ECON 2410, ECON 2420, GEOG 2000, GS 2010, HLTH 1530/1531, JOUR/EMC/RIM 1020, PS 1010, PS 1005, PSY 1410, RS 2030, SOC 1010, SOC 2010, WGST 2100					3
					3
<b>Hours Required</b>					<b>41</b>

Major Courses	Course	Semester	Grade	Notes	Credit Hours
Introduction to Fermentation Science	FERM 1000				3
Consumer Motivation & Sensory Evaluation of Fermented Foods	FERM 3700				3
Fermentation Science Internship Experience	FERM 4910			SEE ADVISOR	
Fermentation Science Research Experience	FERM 4920			SEE ADVISOR	3
General Biology II	BIOL 1120/1121			Pre-requisite: BIOL 1110/1111	4
Microbiology	BIOL 2230/2231			Pre-requisite: BIOL 1110/1111, BIOL 1120/1121	4
Food and Industrial Microbiology (*see Advisor for POD)	BIOL 4510/4511			Pre-requisite: BIOL 2230/2231, *see Advisor for POD	4
General Chemistry II	CHEM 1120/1121			Pre-requisite: CHEM 1110/1111 with a C- or better	4
Elements of Organic Chemistry	CHEM 2030/2031			Pre-requisite: CHEM 1120/1121	4
Principals of Biochemistry	CHEM 3530/3531			Pre-requisite: CHEM 2030/2031	4
<b>Specialized Core; 21 credits required/approved by advisor</b>	<b>Course</b>	<b>Semester</b>	<b>Grade</b>	<b>Notes</b>	<b>Credit Hours</b>
Students will be advised into specialized tracks according to their areas of interest: Wine Industry, Brewing or Distillation, Fermented Dairy Foods, Fermented Meat or Baked Foods  Select 21 credits from ABAS 2010, FERM 2500, AGBS 3160, AGBS 3810, PLSO 4500, AGBS 4820, AGBS 4830, AGBS 4850, BIOL 4570/4571, LSTS 4140, FERM 2900, FERM 3710, FERM 3750, FERM 3850, FERM 4550, three additional courses in development, all Applied Fermentation courses				SEE ADVISOR	
				SEE ADVISOR	
				SEE ADVISOR	
				SEE ADVISOR	
				SEE ADVISOR	

MAJOR COURSES CONTINUED ON PAGE TWO

Major Courses, continued					
Specialized Core; continued	Course	Semester	Grade	Notes	Credit Hours
				SEE ADVISOR	
				SEE ADVISOR	
				SEE ADVISOR	
<b>Hours Required</b>					<b>57</b>

Supporting Courses; at least 120 credit hours must be earned for graduation					
	Course	Semester	Grade	Notes	Credit Hours
<b>Business Foundation: select twelve (12) credits from ACTG 3000, BCED 3510, BLAW 3400, ENTR 2900, FIN 3000, MGMT 3610, MKT 3820, MGMT/ENTR 4920,</b>				Pre-requisite: junior standing	3
				Pre-requisite: junior standing	3
				Pre-requisite: junior standing	3
				Pre-requisite: junior standing	3
<b>Remaining credits needed (10) to meet 120 required for graduation</b>					
<b>Remaining credit hours needed to meet the minimum 120 hour requirement</b>					

Optional Minor					
Minor Courses	Course	Semester	Grade	Notes	Credit Hours
<b>Hours Required</b>					
<b>Signed:</b>					
	<b>Minor Advisor</b>				<b>Date</b>

1. Degrees require a minimum of 120 semester hours (12 of the last 18 at MTSU) with a 2.0 GPA, a minimum of 42 upper-division hours (30 at MTSU) with a 2.0 GPA, and a minimum of 60 senior college hours.
2. Learning Support courses do not count toward the 120-hour requirement or cumulative degree GPA.

<b>Signed:</b>					
	<b>Major Advisor</b>				<b>Date</b>