

PROPOSED – BIOPROCESSING SCIENCE PROGRAM

B.S. in BioProcessing Science (BBS)

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1	CH 101 – A Molecular Science	3
ZO 160 or BIO 181	4	CH 102 General Chemistry Lab	1
ENG 101 Academic Writing & Research	4	Humanities / Soc. Sci. Elective ¹	3
Humanities / Soc. Sci. Elective ¹	3	BBS 201 Intro to Biopharmaceutical Science	3
COM 110 or COM 112	3	MA 131 Calculus for Life and Management Sci. A	3
Any 100 Level PE in Fitness & Wellness	<u>1</u>	Free Elective ³	3
	16	Physical Education Elective	<u>1</u>
			17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 221 Organic Chemistry I	4	CH 223 Organic Chemistry II	4
FS 290 Careers in Food and Bioprocessing Science	1	FS 231 Principles of Food / Bioprocess Eng.	4
MA 231 Calculus for Life and Management Sciences B	3	PY 212 College Physics II	4
PY 211 College Physics I	4	Free Elective ³	3
Humanities / Soc. Sci. Elective ¹	<u>3</u>	Humanities / Soc. Sci. Elective ¹	<u>3</u>
	15		18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 201 Chemistry – Quantitative Chemistry	3	BCH 451 Elementary Biochemistry	4
CH 202 Quantitative Chemistry Lab	1	BAE (BBS) 425 Ind. Microbiology and Bioprocess.	3
Genetics or Anatomy / Physiology Elective ⁴	4	BBS 426 Ind. Micro. and Bioprocess. Lab	2
MB 351 General Microbiology	3	BIT 410 Manipulation of Recombinant DNA	4
MB 352 General Microbiology Lab	1	Humanities / Soc. Sci. Elective ¹	<u>3</u>
Free Elective ³	<u>3</u>		16
	15		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ST 311 Introduction to Statistics	3	FS 475 Problems & Design in Science	3
BBS 301 Process Validation Science	3	FS 416 Quality Control Food / Bioprocess. Mat.	3
FS 402 Chemistry of Food / Bioprocessed Materials	4	FS 403 Analytical Techniques in Food and Bioprocessing Science	4
BIT 466 Animal Cell Culture Tech. or BIT Elective ²	2	Humanities / Soc. Sci. Elective ¹	<u>3</u>
BIT Elective ²	2		13
Humanities / Soc. Sci. Elective ¹	<u>3</u>		
	17		

Minimum Credit Hours Required for Graduation 127