



**University of Hawai'i at Mānoa – Four-Year Academic Plan 2013-2014**  
**Colleges of Tropical Agriculture and Human Resources**  
**Bachelor of Science (BS) in Molecular Biosciences and Biotechnology**

**Track: General Biotechnology**

This is a sample academic plan. Students should meet with an academic advisor prior to registration to formulate their own plan.

Year 1		Year 2		Year 3		Year 4	
Fall		Fall		Fall		Fall	
CHEM 161 (DP)	3	CHEM 272	3	MBBE 402	4	MBBE/PEPS/TPSS 499	6
CHEM 161L (DY)	1	CHEM 272L	2	MBBE 402L	2	MBB Elective	3
BIOL 171 (DB)	3	MATH 215 or 241 (FS)	4	PEPS 371 or BIOL 375 or	3	PHYS 100/100L or	4
BIOL 171L	1	MBBE 304	3	ANSC 446		151/151L and 152/152L	
H/SL	3	DA/DH/DL	3	BIOL 407	3		
FW	3			Elective	3		
FG (A/B/C)	3						
Credits	17	Credits	15	Credits	15	Credits	13
Spring		Spring		Spring		Spring	
CHEM 162	3	BIOL 275	3	MBBE 401	3	MBB Elective	3
CHEM 162L	1	BIOL 275L	1	BIOL 408	3	MBB Elective	3
BIOL 172	3	NREM 310	3	MBB Elective	3	MBB Elective	3
BIOL 172L	1	DS	3	MBB Elective	3	DS	3
NREM 220 (DS)	3	DA/DH/DL	3	Elective	3		
H/SL	3	Elective	3				
FG (A/B/C)	3						
Credits	17	Credits	16	Credits	15	Credits	12
Summer		Summer		Summer		Summer	
Credits		Credits	0	Credits	0	Credits	0
<b>Total Credits</b>	<b>34</b>	<b>Total Credits</b>	<b>65</b>	<b>Total Credits</b>	<b>95</b>	<b>Total Credits</b>	<b>120</b>

**Notes:**

Students must take placement exams to be able to register for CHEM 161 and MATH 215 or 241.

Students must take 18 credits in General Biotechnology from the following: CHEM 273/273L; MICR 351/351L, MICR 461, MICR 475, MICR 485/485L; OCN 310; TPSS 440, TPSS 453; or MBBE/PEPS/TPSS 499 credits beyond 3.

Students must incorporate all focus requirements into this plan.

Minimum 45 upper division (300+ course) credits are required.