

BA Chemistry Checklist

This major only requires 34-35 upper division credits, must have 60 upper division credits to graduate.

General Chemistry Credits: 15 (taken in sequence)		
Course Name (prerequisites)	Credits	Term
CHEM 181 – General Chemistry I	4	
CHEM 181Lab – General Chemistry Laboratory I	1	
CHEM 182 – General Chemistry II <i>(minimum of C- in MATH 153 or qualify for MATH 154 on compass test)</i>	4	
CHEM 182Lab – General Chemistry Laboratory II	1	
CHEM 183 – General Chemistry III	4	
CHEM 183Lab – General Chemistry Laboratory III --OR--	1	
CHEM 193Lab – General Chemistry III Honors Laboratory		

Physics Credits: 15 (taken in sequence)		
Course Name (prerequisites)	Credits	Term
PHYS 111, PHYS 121, or PHYS 181 with lab <i>(variable)</i>	5	
PHYS 112, PHYS 122, or PHYS 182 with lab <i>(variable)</i>	5	
PHYS 113, PHYS 123, or PHYS 183 with lab <i>(variable)</i>	5	

Calculus Credits: 15 (taken in sequence)		
Course Name (prerequisites)	Credits	Term
MATH 172: Calculus I <i>(MATH 154 or qualified for MATH 172 on compass test)</i>	5	
MATH 173: Calculus II	5	
MATH 272: Multivariable Calculus I	5	

Organic Chemistry Credits: 8 (taken in sequence)		
Course Name (prerequisites)	Credits	Term
CHEM 361 – Organic Chemistry I <i>(Chem 183, as either a prerequisite or a co-requisite)</i>	3	
CHEM 361Lab – Organic Chemistry Laboratory I	2	
CHEM 362 – Organic Chemistry II	3	

Additional Required Upper Division Credits: 21		
Course Name (prerequisites)	Credits	Term
CHEM 332 – Quantitative Analysis <i>(CHEM 183 and CHEM 183Lab)</i>	3	
CHEM 332Lab – Quantitative Analysis Laboratory	2	
CHEM 350 – Inorganic Chemistry <i>(CHEM 183, PHYS 113/123/183)</i>	3	
CHEM 381 – Physical Chemistry I <i>(CHEM 183 and CHEM 183Lab, MATH 272, and PHYS 113/123/183 w/ lab)</i>	5	
CHEM 431 – Biochemistry I <i>(CHEM 362)</i>	3	
CHEM 431 – Biochemistry Laboratory I <i>(CHEM 361Lab)</i>	2	
CHEM 488 – Colloquium <i>(expected in winter or spring of final year)</i>	1	
CHEM 492 – Laboratory Experience in Teaching Chemistry	2	

Department Approved Electives: 5-6 Credits Required		
Course Name (prerequisites)	Credits	Term
CHEM 345 – Environmental Chemistry (CHEM 183)	5	
CHEM 363 – Organic Chemistry III -- AND -- CHEM 363Lab – Organic Chemistry Laboratory II	5	
CHEM 382 – Physical Chemistry III (CHEM 381) -- AND -- CHEM 382Lab – Physical/Inorganic Laboratory	5	
CHEM 383 – Physical Chemistry III (CHEM 382) -- AND -- CHEM 383Lab – Physical/Inorganic Laboratory (CHEM 382Lab)	5	
CHEM 432 – Biochemistry II (CHEM 431)	3	
CHEM 433 – Biochemistry III (CHEM 431) -- AND -- CHEM 433Lab – Biochemistry Laboratory II	5	
CHEM 452 – Instrumental Analysis (CHEM 332) -- AND -- CHEM 452Lab – Instrumental Analysis Laboratory (CHEM 322Lab)	5	
CHEM 473 – Transition Metal Chemistry (CHEM 350/382)	3	
CHEM 295/395/495 – Research* *a maximum of 6 credits of research may be applied to this degree.	variable	