Comparison of Common Chemistry Programs for students interested in Secondary Education

	B.S. in CHEMISTRY w/ SEED Minor (Licensure requires 5th yr MAT, not included below)			B.S in CHEM & SEED (4 yr)
	ACS - Chemistry,	ACS - Chem Ed,	Chem - General,	Chem Ed
	Conc I	Conc IV	Conc V	Conc VII
MAJOR REQUIREMENT	ΓS			
CHEM 131-132	Х	Х	Х	Х
CHEM 135L-136L	Х	Х	Х	Х
CHEM 241-242	Х	Х	Х	Х
CHEM 270	Х	Х	Х	Х
CHEM 287L-288L	Х	Х	Х	Х
CHEM 331	Х	Х	Х	Х
CHEM 336L			Х	Х
CHEM 351	Х	Х	Х	Х
CHEM 361	Х	Х	Х	Х
CHEM 481-482	Х	Х	Х	CHEM 481 only
PROGRAM SPECIFIC C	HEMISTRY REQUI	REMENTS		
CHEM 325	x ¹	X	x ¹	x ¹
CHEM 352	X	Х	X	
CHEM 352L	Х	Х	х	
CHEM 432	Х	Х		
CHEM 438L	Х	Х		
CHEM 470	Х			
CHEM elective			х	
at least 400 lab hrs (required for all ACS programs)	х	Х		
	¹ requirement for Secondary	/ Education		
COGNATE REQUIREM	ENTS			
MATH 235 (or 231-232)	Х	Х	х	Х
MATH 236	Х	Х	х	Х
MATH 237-238	Х			
PHYS 240-250	Х	Х	Х	Х
PHYS 240L-250L	Х	Х	Х	Х
	A DECUIDEMENTO	NON OUTMOTE	<u></u>	
EDUCATION PROGRAM				
BIO elective	x ^{ge,1}	x ^{ge}	x ^{ge,1}	ISCI 173 ^{ge}
GEOL elective	x ^{ge,1}	x ^{ge}	x ^{ge,1}	
COE courses	8 courses ^{ge,1}	8 courses ^{ge}	8 courses ^{ge,1}	15 courses ¹
GenEd Ed Requiremt	40			2 courses
	geat least one course might also count toward General Education 1 requirement for Secondary Education			
CREDIT TOTALS	requ	irement for Secondary Edu	ualiUTI	
Major, Program, Cognate	72	89-91	60	52
Secondary Ed, in addition to major	29-31	29-31	29-31	61
GenEd not included above	28	28	28	25
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