



Complementary Elementary Endorsement STEM K-8

Students majoring in Elementary Education are required to select at least one endorsement area in addition to the Elementary Education major requirements. Students must earn a minimum 3.0 GPA in courses required for the endorsement. No D grades are accepted. Please see the Elementary Education major sheet and/or the university catalog for additional information.

Iowa Teaching Endorsement: #975

Requirements for the Endorsement: 36 semester credits

Students must complete the designated coursework in each of the categories (A, B, C, D).

Category A: Science – 12 credits

Essential Competencies-Outcome Iterations **Transfer courses do not receive outcome iterations**

				CI	IL	W	O	Q	GA	V
	CHEM 107 or CHEM 111	Fundamentals of Organic and Biochemistry or General Chemistry I	4	x				x		
	BIOL 100 or BIOL 101	How Life Works or General Biology I	4	x	x					
	PHSC 101 or PHYS 131/241 and EDUC 408	Physical and Earth Science or Introduction to Physics I/General Physics I and STEM Teaching: Earth Science	4 or 4/5 and 3	x		x		x		
OR										
	A minimum of 12 credit hours of approved college level science coursework including content in Chemistry, Biology, Physics, and Earth Science		12							

Category B: Mathematics – 12 credits

Essential Competencies-Outcome Iterations **Transfer courses do not receive outcome iterations**

				CI	IL	W	O	Q	GA	V
	MATH 145	Mathematics for the Elementary Teacher I	3	x				x		
	MATH 155	Mathematics for the Elementary Teacher II	3							
	CPSC 155 or CPSC 241 or Approved CPSC course	Programming Using Visual Basic or Computer Science I or Approved computer programming course	3							

Take 3 credits from:

	MATH 121	College Algebra	3	x				x		
	MATH 122	Trigonometry	3							
	MATH 231	Calculus with Analytic Geometry I	5	x				x		
	STAT 241	Principles of Statistics	4	x				x		
	Other approved college level math course		3							

ANY CHANGES/SUBSTITUTIONS MUST BE APPROVED BY THE GRAND VIEW UNIVERSITY EDUCATION DEPARTMENT CHAIR.

This information must be used in conjunction with the 2018-2019 Grand View University Catalog and does not reflect a student's official record of progress. Students are expected to use the Progress tool found on myView > GV Self Service when monitoring and planning coursework. Other available resources include: Course Planning Documents (found on myView under Academics) and the faculty and staff who work with academic requirements.

Category C: Engineering – 3 credits**Essential Competencies-Outcome Iterations******Transfer courses do not receive outcome iterations****

				CI	IL	W	O	Q	GA	V
	EDUC 410	Engineering, Programming, and Design for Educators	3							

Category D: Methods – 13 credits**Essential Competencies-Outcome Iterations******Transfer courses do not receive outcome iterations****

				CI	IL	W	O	Q	GA	V
	EDUC 312	Teaching of Elementary Science (note: this course is required for all Elementary Ed majors)	3							
	EDUC 313	Teaching of Elementary Mathematics (note: this course is required for all Elementary Ed majors)	3							
	EDUC 411	The Nature of STEM	3							
	EDUC 450	Models and Methods of Teaching STEM	3							
	EDUC 451	Experiential STEM	1							

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