VALLEY CITY STATE UNIVERSITY

Program Fact Sheet

www.vcsu.edu - catalog.vcsu.edu - 101 College St SW, Valley City, ND 58072 - 800-532-8641 - 701-845-7202

Master of Education Program - Concentration in Technology Education (Tech Ed)

Valley City State University (VCSU) has designed this concentration for primary and secondary level educators wishing to pursue a master's degree in Technology Education or Career and Technical Education. Curriculum in the courses is set up to be consistent with the Standards for Technological Literacy defined by the International Technology and Engineering Educators Association (ITEEA) as well as the North Dakota Department of Career and Technical Education.

Course Rotation

Option 1

TECHNOLOGY EDUCATION

OPTION 1	SECONDARY STEM EDUCATION			
CORE	**12 hours**	**Fall**	**Spring**	**Summer**
EDUC 610	Research in Education (3)	Fall	Spring	Summer
EDUC 625	Issues in School, Community, and Family (3)	Fall		Summer
EDUC 640	Supervision and Assessment of Teachers & Learners (3)		Spring	Summer
EDUC 657	Exceptionality, Diversity, and Difference (3)	Fall	Spring	
REQUIRED	**18 hours**			
TECH 675	Research and Assessment in Tech Ed (3)		Spring	
STEMED 650	Standards-Based Curriculum and Methods (3)	Fall		
STEMED 660	Design for Engineering (3)	Fall		
STEM ED 665	Invention and Innovation (3)			Summer
STEMED 670	Design, Technology and Engineering for Elem (3)		Spring	
STEMED 680	Building Math (3)			Summer
or				
STEMED 682	Engineering the Future (3)		Spring	
ELECTIVES	**3 hours**			
TECH 688	Safety and Management in the Tech Lab (3)			Summer
EDUC 635	Technology for Learning (3)		Spring	
SPECIAL PROGRAM	**3 hours**			
TECH 689	Research Application (1)	Fall	Spring	Summer
TECH 698	Capstone (2)	Fall	Spring	Summer

Secondary STEM Education Option

FALL Program of Study

FALL	SPRING	SUMMER	FALL	SPRING	SUMMER
EDUC 610	EDUC 657	STEMED 680	EDUC 625	EDUC 640	TECH 698
STEMED 650	TECH 675	STEMED 665	STEMED 660	STEMED 670	TECH 689
	STEMED 682	EDUC 625	EDUC 657		TECH 688

*The fall program of study has the option to take STEMED 682 or 680, but use the courses grouped by color.

SPRING Program of Study

SPRING	SUMMER	FALL	SPRING	SUMMER	FALL
EDUC 610	EDUC 625	EDUC 657	EDUC 640	STEMED 680	TECH 698
STEM ED 670	STEMED 665	STEMED 650	TECH 675	TECH 688	TECH 689
					STEMED 660

SUMMER Program of Study

SUMMER	FALL	SPRING	SUMMER	FALL	SPRING
EDUC 610	EDUC 657	TECH 675	STEMED 680	EDUC 625	TECH 698
STEMED 665	STEMED 650	EDUC 640	TECH 688	STEMED 660	TECH 689
		or			STEMED 670 or
		STEMED 670			EDUC 640

Option 2

TECHNOLOGY EDUCATION

OPTION 2	ELEMENTARY STEM EDUCATION			
CORE	**12 hours**			
EDUC 610	Research in Education (3)	Fall	Spring	Summer
EDUC 625	Issues in School, Community, and Family (3)	Fall		Summer
EDUC 640	Supervision and Assessment of Teachers & Learners (3)		Spring	Summer
EDUC 657	Exceptionality, Diversity, and Difference (3)	Fall	Spring	
REQUIRED	**15 hours**			
TECH 675	Research and Assessment in Tech Ed (3)		Spring	
STEMED 655	STEM Curriculum, and Methods, Elementary (3)	Fall		
STEMED 670	Design, Technology, and Engineering for Elem (3)		Spring	
STEMED 671	Inquiry Based Thematic Instruction (3)	Fall		
STEMED 680	Building Math (3)			Summer
ELECTIVES	**6 hours**			
TECH 688	Safety and Management in the Tech Lab (3)			Summer
STEM ED 665	Invention and Innovation			Summer
EDUC 635	Technology for Learning (3)		Spring	
SPECIAL PROGRAM	**3 hours**			
TECH 689	Research Application (1)	Fall	Spring	Summer
TECH 698	Capstone (2)	Fall	Spring	Summer

Elementary STEM Education Option

FALL Program of Study

FALL	SPRING	SUMMER	FALL	SPRING	SUMMER
EDUC 610	EDUC 640	STEMED 680	EDUC 625	EDUC 657	TECH 698
STEMED 655	TECH 675	STEMED 665 or TECH 688	STEMED 671	STEMED 670	TECH 689 STEMED 665 or TECH 688

SPRING Program of Study

SPRING	SUMMER	FALL	SPRING	SUMMER	FALL
STEMED 610	EDUC 640	STEMED 671	EDUC 657	STEMED 665	TECH 698
STEM ED 670	STEMED 680	STEMED 655	TECH 675	TECH 688	TECH 689 EDUC 625

SUMMER Program of Study

SUMMER	FALL	SPRING	SUMMER	FALL	SPRING
STEMED 680	EDUC 610	TECH 675	EDUC 640	EDUC 625	TECH 698
STEMED 665 or TECH 688	STEMED 655	EDUC 657 or STEMED 670	STEMED 665 or TECH 688	STEMED 671	TECH 689 EDUC 657 or STEMED 670

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Option 3

TECHNOLOGY EDUCATION

OPTION 3	CAREER AND TECHNICAL EDUCATION			
CORE	**12 hours**			
EDUC 610	Research in Education (3)	Fall		Summer
EDUC 625	Issues in School, Community, and Family (3)	Fall	Spring	Summer
EDUC 640	Supervision and Assessment of Teachers & Learners (3)		Spring	Summer
EDUC 657	Exceptionality, Diversity, and Difference (3)	Fall	Spring	
REQUIRED	**15 hours**			
TECH 675	Research and Assessment in Tech Ed (3)		Spring	
TECH 651	Curriculum Development in CTE (3)		Spring (even)	
TECH 652	Instructional Strategies in Training & Occupational Ed (3)		Spring (odd)	
TECH 653	Trends and Issues in Occupational Ed (3)	Fall		
TECH 654	Admin. And Management in CTE (3)			Summer
ELECTIVES	**6 hours**			
STEMED 680	Building Math (3)			Summer
STEMED 682	Engineering the Future (3)		Spring	
STEMED 660	Design for Engineering (3)	Fall		
STEMED 665	Invention and Innovation (3)			Summer
TECH 688	Safety and Management in the Tech Lab (3)			Summer
EDUC 635	Technology for Learning (3)		Spring	
SPECIAL PROGRAM	**3 hours**			
TECH 689	Research Application (1)	Fall	Spring	Summer
TECH 698	Capstone (2)	Fall	Spring	Summer

Career and Technical Education Option

FALL Program of Study					
FALL	**SPRING**	**SUMMER**	**FALL**	**SPRING**	**SUMMER**
EDUC 610 TECH 653	TECH 651 TECH 675	TECH 654 EDUC 640	EDUC 657 STEMED 660 or EDUC 625	TECH 652 EDUC 625 or STEMED 682	TECH 698 TECH 689 TECH 688 or STEMED 680 or STEMED 665

SPRING Program of Study					
SPRING	**SUMMER**	**FALL**	**SPRING**	**SUMMER**	**FALL**
TECH 651 EDUC 657	TECH 654 EDUC 610	TECH 653 EDUC 625	TECH 652 TECH 675	EDUC 640 TECH 688, or STEMED 665 or STEMED 680	TECH 698 TECH 689 STEMED 660

SUMMER Program of Study					
SUMMER	**FALL**	**SPRING**	**SUMMER**	**FALL**	**SPRING**
EDUC 610 TECH 654	TECH 653 EDUC 625	TECH 651 TECH 675	EDUC 640 TECH 688 or STEMED 665 or STEMED 680	EDUC 657 STEMED 660	TECH 698 TECH 689 TECH 652

Core Values/Learning Outcomes

1. Effective use of Instructional Technologies
2. Expertise in Research, particularly Action Research
3. Expertise in Assessment
4. Supervisor/Leader/Coach
5. Expertise in Curriculum/Instruction
6. Diversity/Global Awareness

The program's Core Values and National Board of Professional Teaching Standards lay the broad foundation for the overall program design. Specific objectives are then addressed in each course, based on its curriculum. At the course level, the required projects and activities provide a rich and diverse collection of opportunities for assessment of student knowledge and understanding by the professor.