



Master of Education Program - Concentration in Teaching & Technology (T&T)

VCSU has designed this concentration for teachers at either primary or secondary levels wishing to pursue a master's degree. It is a unique program, not only in the state, but also in the country. Curriculum focuses on the use of technologies to enrich teaching and learning and provides content specific course work in some subject areas.

Options are available with focused content that includes: Teaching and Learning, Communication, History Education, Health and Physical Education, Mathematics Education, Teacher Leadership, and Biology Education. Curriculum in this concentration is set up to provide students with an understanding of the National Educational Technology Standards (NETS) as defined by the International Society for Technology in Education (ISTE).

Course Rotation

TEACHING AND TECHNOLOGY (Teaching & Learning)

OPTION 1	TEACHING & LEARNING			
CORE	14 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	
EDUC 698	Capstone (2)	Fall	Spring	Summer
REQUIRED	13 hours			
EDUC 635	Technology for Learning (3)		Spring	
EDUC 650	Field Design and Implementation (3)	Fall		
EDUC 675	Teaching with 21st Century Tools (3)			Summer
EDUC 685	Action Research in Education (3)	Fall	Spring	
EDUC 689	Research Application (1)	Fall	Spring	Summer
ELECTIVES	6 hours			
EDUC 642	Supervision of Student Teachers (3)			Summer
EDUC 665	Learning Theory and Instructional Design (3)	Fall		
STEMED 660	Design for Engineering (3)	Fall		
STEMED 665	Invention and Innovation (3)			Summer
STEMED 670	Design, Technology, and Engineering for Elem (3)		Spring	

FALL Program of Study

FALL	SPRING	SUMMER	FALL	SPRING	SUMMER
EDUC 610	EDUC 685	EDUC 675	EDUC 625	EDUC 657	EDUC 698
EDUC 665 or	EDUC 640	EDUC 642 or	EDUC 650	EDUC 635	EDUC 689
STEMED 660		STEMED 665			

SPRING Program of Study

SPRING	SUMMER	FALL	SPRING	SUMMER	FALL
EDUC 610	EDUC 625	EDUC 685	EDUC 657	EDUC 640	EDUC 698
EDUC 635	EDUC 675	EDUC 650	STEMED 670	EDUC 642 or	EDUC 689
				STEMED 665	

SUMMER Program of Study

SUMMER	FALL	SPRING	SUMMER	FALL	SPRING
EDUC 610	EDUC 685	EDUC 657	EDUC 640	EDUC 650	EDUC 698
EDUC 675	EDUC 665 or	EDUC 635	EDUC 642 or	EDUC 625	EDUC 689
	STEMED 660		STEMED 665		



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TEACHING AND TECHNOLOGY (Communication Option)

OPTION 2	COMMUNICATION			
CORE	14 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	
EDUC 698	Capstone (2)	Fall	Spring	Summer
REQUIRED	22 hours			
COMM 611	Communication Theory (3)		Spring Even	
COMM 630	Instructional Communication and Technology (3)	Fall Even		
COMM 645	Media Uses and Effects (3)		Spring Odd	
COMM 650	Advanced Interpersonal Communication (3)			Summer Even
COMM 655	Advanced Intercultural Communication (3)	Fall Odd		
COMM 660	Group Communication, Team Building, and Leadership (3)			Summer Odd
EDUC 685	Action Research (3)	Fall	Spring	
EDUC 689	Research Application (1)	Fall	Spring	Summer

FALL Program of Study

	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)
Even year start	EDUC 610 COMM 630	EDUC 685 COMM 645	EDUC 625 COMM 660	EDUC 657 COMM 655	EDUC 640 COMM 611	EDUC 698 EDUC 689 COMM 650
Odd year start	FALL (o) EDUC 610 COMM 655	SPRING (e) EDUC 685 COMM 611	SUMMER (e) EDUC 625 COMM 650	FALL (e) EDUC 657 COMM 630	SPRING (o) EDUC 640 COMM 645	SUMMER (o) EDUC 698 EDUC 689 COMM 660

SPRING Program of Study

	SPRING (e)	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)
Even year start	EDUC 610 COMM 611	EDUC 625 COMM 650	EDUC 685 COMM 630	EDUC 657 COMM 645	EDUC 640 COMM 660	EDUC 698 EDUC 689 COMM 655
Odd year start	SPRING (o) EDUC 610 COMM 645	SUMMER (o) EDUC 625 COMM 660	FALL (o) EDUC 685 COMM 655	SPRING (e) EDUC 657 COMM 611	SUMMER (e) EDUC 640 COMM 650	FALL (e) EDUC 698 EDUC 689 COMM 630

SUMMER Program of Study

	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)
Even year start	EDUC 610 COMM 650	EDUC 685 COMM 630	EDUC 640 COMM 645	EDUC 625 COMM 660	EDUC 657 COMM 655	EDUC 698 EDUC 689 COMM 611
Odd year start	SUMMER (o) EDUC 610 COMM 660	FALL (o) EDUC 685 COMM 655	SPRING (e) EDUC 640 COMM 611	SUMMER (e) EDUC 625 COMM 650	FALL (e) EDUC 657 COMM 630	SPRING (e) EDUC 698 EDUC 689 COMM 645

TEACHING AND TECHNOLOGY (History Option)

OPTION 3	HISTORY			
CORE	14 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	
EDUC 698	Capstone (2)	Fall	Spring	Summer
REQUIRED	22 hours			
HIST 610	Thinking Historically: Skills and Sources (3)			Summer (odd)
HIST 630	Democracy and Democratization (3)	Fall (odd)		
HIST 640	The World Wars (3)	Fall (even)		
HIST 650	Readings in American History (3)			Summer (even)
HIST 660	Readings in World History (3)		Spring (even)	
HIST 672	Modern Latin America (3)		Spring (odd)	
EDUC 685	Action Research (3)	Fall	Spring	
EDUC 689	Research Application (1)	Fall	Spring	Summer

FALL Program of Study

	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)
Even year start	EDUC 610 HIST 640	EDUC 685 HIST 672	EDUC 625 HIST 610	EDUC 657 HIST 630	EDUC 640 HIST 660	HIST 650 EDUC 689 EDUC 698
Odd year start	FALL (o) EDUC 610 HIST 630	SPRING (e) EDUC 685 HIST 660	SUMMER (e) EDUC 625 HIST 650	FALL (e) EDUC 657 HIST 640	SPRING (o) EDUC 640 HIST 672	SUMMER (o) HIST 610 EDUC 689 EDUC 698

SPRING Program of Study

	SPRING (e)	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)
Even year start	EDUC 657 HIST 660	EDUC 610 HIST 650	EDUC 685 HIST 640	EDUC 640 HIST 672	EDUC 625 HIST 610	HIST 630 EDUC 689 EDUC 698
Odd year start	SPRING (o) EDUC 640 HIST 672	SUMMER (o) EDUC 610 HIST 610	FALL (o) EDUC 685 HIST 630	SPRING (e) EDUC 657 HIST 660	SUMMER (e) EDUC 625 HIST 650	FALL (e) HIST 640 EDUC 689 EDUC 698

SUMMER Program of Study

	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)
Even year start	EDUC 610 HIST 650	EDUC 685 HIST 640	EDUC 640 HIST 672	EDUC 625 HIST 610	EDUC 657 HIST 630	HIST 660 EDUC 689 EDUC 698
Odd year start	SUMMER (o) EDUC 610 HIST 610	FALL (o) EDUC 685 HIST 630	SPRING (e) EDUC 657 HIST 660	SUMMER (e) EDUC 640 HIST 650	FALL (e) EDUC 625 HIST 640	SPRING (e) HIST 672 EDUC 689 EDUC 698



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TEACHING AND TECHNOLOGY (Health and PE Option)

OPTION 4	HEALTH AND PHYSICAL EDUCATION			
CORE	14 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	
EDUC 698	Capstone (2)	Fall	Spring	Summer
REQUIRED	22 hours			
HPER 610	Motor Learning (3)	Fall		
HPER 620	Current Literature in Health and Phys. Educ.(3)		Spring	
HPER 630	Advanced Developmental Adapted Phys. Educ. (3)			Summer
HPER 640	Advanced Techniques in Teaching Health and Phys. Ed. (3)	Fall		
HPER 650	Curriculum Development and Eval. In Health and PE (3)		Spring	
HPER 660	Leadership and Supervision in Health and Phys. Ed. (3)			Summer
EDUC 685	Action Research (3)	Fall	Spring	
EDUC 689	Research Application (1)	Fall	Spring	Summer

FALL Program of Study

FALL	SPRING	SUMMER	FALL	SPRING	SUMMER
EDUC 610	EDUC 685	EDUC 640	EDUC 625	EDUC 657	EDUC 698
HPER 610	HPER 620	HPER 630	HPER 640	HPER 650	EDUC 689
					HPER 660

SPRING Program of Study

SPRING	SUMMER	FALL	SPRING	SUMMER	FALL
EDUC 610	EDUC 625	EDUC 685	EDUC 657	EDUC 640	EDUC 698
HPER 620	HPER 630	HPER 610	HPER 650	HPER 660	EDUC 689
					HPER 640

SUMMER Program of Study

SUMMER	FALL	SPRING	SUMMER	FALL	SPRING
EDUC 610	EDUC 685	EDUC 657	EDUC 640	EDUC 625	EDUC 698
HPER 630	HPER 610	HPER 620	HPER 660	HPER 640	EDUC 689
					HPER 650

TEACHING AND TECHNOLOGY (Mathematics Option)

OPTION 5	MATHEMATICS			
CORE	14 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	
EDUC 698	Capstone (2)	Fall	Spring	Summer
REQUIRED	22 hours			
MATH 613	Algebra for Teachers	Fall (odd)		
MATH 614	Geometry for Teachers		Spring (even)	
MATH 621	Probability & Statistics for Teachers			Summer (odd)
MATH 690	Trends, Methods, & Technology in Mathematics Educ.	Fall (even)		
MATH 608	History & Philosophy of Mathematics for Teachers		Spring (odd)	
MATH 665	Calculus for Teachers			Summer (even)
EDUC 685	Action Research (3)	Fall	Spring	
EDUC 689	Research Application (1)	Fall	Spring	Summer

FALL Program of Study

	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)
Even year start	EDUC 610	EDUC 685	EDUC 625	EDUC 657	EDUC 640	MATH 665
	MATH 690	MATH 608	MATH 621	MATH 613	MATH 614	EDUC 689
						EDUC 698
Odd year start	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)
	EDUC 610	EDUC 685	EDUC 625	EDUC 657	EDUC 640	MATH 621
	MATH 613	MATH 614	MATH 665	MATH 690	MATH 608	EDUC 689
						EDUC 698

SPRING Program of Study

	SPRING (e)	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)
Even year start	EDUC 657	EDUC 610	EDUC 685	EDUC 640	EDUC 625	MATH 613
	MATH 614	MATH 665	MATH 690	MATH 608	MATH 621	EDUC 689
						EDUC 698
Odd year start	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)
	EDUC 657	EDUC 610	EDUC 685	EDUC 640	EDUC 625	MATH 690
	MATH 608	MATH 621	MATH 613	MATH 614	MATH 665	EDUC 689
						EDUC 698

SUMMER Program of Study

	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)
Even year start	EDUC 610	EDUC 685	EDUC 640	EDUC 625	EDUC 657	MATH 614
	MATH 665	MATH 690	MATH 608	MATH 621	MATH 613	EDUC 689
						EDUC 698
Odd year start	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)	Spring (o)
	EDUC 610	EDUC 685	EDUC 640	EDUC 625	EDUC 657	MATH 608
	MATH 621	MATH 613	MATH 614	MATH 665	MATH 690	EDUC 689
						EDUC 698

TEACHING AND TECHNOLOGY (Teacher Leadership)

* Course rotations determined by the academy leadership team

OPTION 6	TEACHER LEADERSHIP			
CORE	14 hours	Fall	Spring	Summer
EDUC 610	Research in Education (3)	Fall	Spring	Summer
EDUC 621	School Law and Organizational Structure of Education (3)	Fall		Summer
EDUC 623	Personnel, Supervision and Staff Development (3)		Spring	Summer
EDUC 657	Exceptionality, Diversity, and Difference (3)	Fall	Spring	
EDUC 688	Leadership Capstone (2)	Fall	Spring	Summer
REQUIRED	18 hours			
EDUC 620	Leadership, Planning and Organizational Behavior (3)			
EDUC 622	Personal Communication and Ethics in Education (3)			
EDUC 630	Principles of Teaching and Learning Secondary (3)			
Or EDUC 631	Principles of Teaching and Learning Elementary (3)			
EDUC 635	Technology for Learning (3)			
EDUC 665	Learning Theory and Instructional Design (3)			
EDUC 685	Action Research in Education (3)			

TEACHING AND TECHNOLOGY (Biology Option)

OPTION 7	BIOLOGY			
CORE	14 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	
EDUC 698	Capstone (2)	Fall	Spring	Summer
REQUIRED	22 hours			
BIOL 611	Botany (3)		Spring Odd	
BIOL 615	Genetics (3)			Summer Even
BIOL 640	Environmental Contaminants (3)	Fall Odd		
BIOL 641	Cell Biology (3)		Spring Even	
BIOL 647	Aquatic Entomology (3)	Fall Even		
BIOL 659	Evolution (3)			Summer Odd
EDUC 685	Action Research (3)	Fall	Spring	
EDUC 689	Research Application (1)	Fall	Spring	Summer

FALL Program of Study

	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)
Even year start	EDUC 610	EDUC 685	EDUC 625	EDUC 657	EDUC 640	EDUC 698
	BIOL 647	BIOL 611	BIOL 659	BIOL 640	EDUC 641	EDUC 689
						BIOL 615

	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)
Odd year start	EDUC 610	EDUC 685	EDUC 625	EDUC 657	EDUC 640	EDUC 698
	BIOL 640	BIOL 641	BIOL 615	BIOL 647	BIOL 611	EDUC 689
						BIOL 659

SPRING Program of Study

	SPRING (e)	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)
Even year start	EDUC 625	EDUC 685	EDUC 640	EDUC 657	EDUC 640	EDUC 698
	BIOL 641	BIOL 615	BIOL 647	BIOL 611	BIOL 659	EDUC 689
						BIOL 640
Odd year start	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)
	EDUC 610	EDUC 625	EDUC 685	EDUC 657	EDUC 640	EDUC 698
	BIOL 611	BIOL 659	BIOL 640	BIOL 641	BIOL 615	EDUC 689
						BIOL 647

SUMMER Program of Study

	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)
Even year start	EDUC 610	EDUC 685	EDUC 640	EDUC 625	EDUC 657	EDUC 698
	BIOL 615	BIOL 647	BIOL 611	BIOL 659	BIOL 640	EDUC 689
						BIOL 641
Odd year start	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)	Spring (o)
	EDUC 610	EDUC 685	EDUC 640	EDUC 625	EDUC 657	EDUC 698
	BIOL 659	BIOL 640	BIOL 641	BIOL 615	BIOL 647	EDUC 689
						BIOL 611

TEACHING AND TECHNOLOGY (Learner Centered Instruction)

* EDUC 615-619 rotations determined by Learner Centered Instruction Team

OPTION 8	LEARNER CENTERED INSTRUCTION			
CORE	14 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	
EDUC 698	Capstone (2)	Fall	Spring	Summer
REQUIRED	19 hours			
EDUC 615	Learner Centered Systems (3)			
EDUC 616	The Performance Assessment Cycle (3)			
EDUC 617	Capacity to Transform (3)			
EDUC 618	Personalized Learning in Practice (3)			
EDUC 619	Designing for Deeper Learning (3)			
EDUC 685	Action Research in Education (3)	Fall	Spring	
EDUC 689	Research Application (1)	Fall	Spring	Summer



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.