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	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
EDUC 635	EDUC 675	EDUC 650	STEMED 670	EDUC 642 or 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				

TEACHING AND TECHNOLOGY (Communication Option)

OPTION 2	7.00	MUNICATION					
CORE	14 hou				Fall	Spring	Summer
EDUC 610		rch in Education (3			Fall	Spring	Summer
EDUC 625		in School, Commu			Fall		Summer
EDUC 640	Superv	ision and Assessn	nent of Teachers 8	k Learners (3)		Spring	Summer
EDUC 657	Except	tionality, Diversity	, and Difference (3	3)	Fall	Spring	
EDUC 698	Capsto	one (2)			Fall	Spring	Summer
REQUIRED	22 hou	ırs					
COMM 611	Comm	unication Theory	(3)			Spring E	ven
COMM 630	Instruc	tional Communic	ation and Technol	ogy (3)	Fall Even		
COMM 645	Media	Uses and Effects	(3)	0, 1,		Spring O	dd
COMM 650		ced Interpersonal		3)			Summer Eve
COMM 655		ced Intercultural (Fall Odd		
COMM 660		Communication,			ruirouu		Summer Ode
EDUC 685		Research (3)			Fall	Spring	Summer Gut
EDUC 689		rch Application (1)			Fall	Spring	Summer
EDOC 003	Nescal	cii Application (1)			I dii	Spring	Julillei
FALL Program	of Study						
.,	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)	SPRING	G (e)	SUMMER (e)
	EDUC 610	EDUC 685	EDUC 625	EDUC 657	EDUC		EDUC 698
Even year start	COMM 630	COMM645	COMM 660	COMM 655	COMN		EDUC 689
				00111111 000	0011111		COMM 650
	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)	SPRING	G (o)	SUMMER (o)
	EDUC 610	EDUC 685	EDUC 625	EDUC 657	EDUC		EDUC 698
Odd year start	COMM 655	COMM 611	COMM 650	COMM 630	COMM 645		EDUC 689
		00111111 022			0011111		COMM 660
SPRING Progr	am of Study						
_	SPRING (e)	SUMMER (e)	FALL (e)	SPRING (o)	SUMM	IER (o)	FALL (o)
-	EDUC 610	EDUC 625	EDUC 685	EDUC 657	EDUC	640	EDUC 698
Even year start	COMM 611	COMM 650	COMM 630	COMM 645	COMM	1 660	EDUC 689
							COMM 655
	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)	SUMM	IER (e)	FALL (e)
	EDUC 610	EDUC 625	EDUC 685	EDUC 657	EDUC	640	EDUC 698
Odd year start	COMM 645	COMM 660	COMM 655	COMM 611	COMM	1 650	EDUC 689
							COMM 630
SUMMER Pro	gram of Study						
	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)	FALL (a)	SPRING (e)
F	EDUC 610	EDUC 685	EDUC 640	EDUC 625	EDUC	657	EDUC 698
Even year start	COMM 650	COMM 630	COMM 645	COMM660	COMM	1 655	EDUC 689
							COMM 611
	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)	Spring (o)
	EDUC 610	EDUC 685	EDUC 640	EDUC 625	EDUC		EDUC 698
Odd year start	COMM 660	COMM 655	COMM 611	COMM 650	COMM	1 630	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, Communi	ty, and Family (3)	Fall		Summer
EDUC 640	Supervisi	on and Assessmer	nt of Teachers & Le	earners (3)	Spring	Summer
EDUC 657	Exception	nality, Diversity, a	nd 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	Democra	cy and Democrati	zation (3)	Fall (odd)	
HIST 640	The Worl	d Wars (3)		Fall (even)	
HIST 650	Readings	in American Histo	orv (3)			Summer (even
HIST 660		Readings in World History (3)			Spring (ev	
HIST 672		Latin America (3)			Spring (od	
EDUC 685		esearch (3)		Fall	Spring	-,
EDUC 689		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	HIST 650
Even year start	HIST 640	HIST 672	HIST 610	HIST 630	HIST 660	EDUC 689
						EDUC 698
	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	HIST 610
oud year start	HIST 630	HIST 660	HIST 650	HIST 640	HIST 672	EDUC 689
						EDUC 698
SPRING Progra						
	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	HIST 630
	HIST 660	HIST 650	HIST 640	HIST 672	HIST 610	EDUC 689
						EDUC 698
	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)
Odd year start	EDUC 640	EDUC 610	EDUC 685	EDUC 657	EDUC 625	HIST 640
	HIST 672	HIST 610	HIST 630	HIST 660	HIST 650	EDUC 689
						EDUC 698
SUMMER Prog		FAIL (-)	CDDUNG (-)	CUDANATO / 1	FALL ()	CDDING (-)
	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	HIST 660
	HIST 650	HIST 640	HIST 672	HIST 610	HIST 630	EDUC 689
						EDUC 698
	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)	Spring (o)
Odd year start	EDUC 610	EDUC 685	EDUC 657	EDUC 640	EDUC 625	HIST 672
	HIST 610	HIST 630	HIST 660	HIST 650	HIST 640	EDUC 689
						EDUC 698

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	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 Progra	m 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 Prog	ram 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)

MATHEMATICS

SUMMER (o)

EDUC 610

MATH 621

Odd year start

FALL (o)

EDUC 685

MATH 613

EDUC 640

MATH 614

OPTION 5

OF HON 3	IVIATITEIV	IATICS					
CORE	14 hours				Fall	Spring	Summer
EDUC 610	Research	in Education (3)			Fall	Spring	Summer
EDUC 625	Issues in	School, Commun	ity, and Family (3)		Fall		Summer
EDUC 640	Supervisi	on and Assessme	nt of Teachers & L	earners (3)		Spring	Summer
EDUC 657	Exception	nality, Diversity, a	ind Difference (3)		Fall	Spring	
EDUC 698	Capstone	(2)			Fall	Spring	Summer
REQUIRED	22 hours						
MATH 613	Algebra f	or Teachers			Fall (odd	n	
MATH 614	Geometr	y for Teachers				Spring (eve	n)
MATH 621		, ty & Statistics for			Summer (odd)		
MATH 690			ology in Mathema	tics Educ.	Fall (ever	1)	
MATH 608			athematics for Te			Spring (odd)	
MATH 665		for Teachers				opring (odd)	Summer (ever
EDUC 685		esearch (3)			Fall	Spring	Julillier (ever
EDUC 689		Application (1)			Fall	Spring	Summer
FALL Program of		annus ()	cusasen ()	5411 ()		nnus ()	
Even year start	FALL (e) EDUC 610	SPRING (o)	SUMMER (o) EDUC 625	FALL (o) EDUC 657		PRING (e) DUC 640	SUMMER (e) MATH 665
	MATH 690	EDUC 685 MATH 608	MATH 621	MATH 613		1ATH 614	EDUC 689
	IVIA I H 090	IVIA ITI 000	WATHOZI	IVIA I II 013	WATHOIS		EDUC 698
	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)	•	PRING (o)	SUMMER (o)
	EDUC 610	EDUC 685	EDUC 625	EDUC 657		DUC 640	MATH 621
Odd year start	MATH 613	MATH 614	MATH 665	MATH 690		1ATH 608	EDUC 689
		344 444 444					EDUC 698
SPRING Program	of Study						
	SPRING (e)	SUMMER (e)	FALL (e)	SPRING (o)	S	UMMER (o)	FALL (o)
Even year start	EDUC 657	EDUC 610	EDUC 685	EDUC 640	E	DUC 625	MATH 613
Even year start	MATH 614	MATH 665	MATH 690	MATH 608	N	1ATH 621	EDUC 689
							EDUC 698
	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)	S	UMMER (e)	FALL (e)
Odd year start	EDUC 657	EDUC 610	EDUC 685	EDUC 640		DUC 625	MATH 690
oud your start	MATH 608	MATH 621	MATH 613	MATH 614	N	1ATH 665	EDUC 689
							EDUC 698
SUMMER Progra							
	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (ALL (o)	SPRING (e)
Even year start	EDUC 610	EDUC 685	EDUC 640	EDUC 625		DUC 657	MATH 614
	MATH 665	MATH 690	MATH 608	MATH 621	N	1ATH 613	EDUC 689
							EDUC 698

SUMMER (e)

EDUC 625

MATH 665

FALL (e)

EDUC 657

MATH 690

Spring (o) MATH 608

EDUC 698

TEACHING AND TECHNOLOGY (Teacher Leadership)

* Course rotations de	termined by the academy leadership team
OPTION 6	TEACHER LEADERSHIP
CORE	14 hours
EDUC 610	Research in Education (3)
EDUC 621	School Law and Organizational Structure of Education (3)
EDUC 623	Personnel, Supervision and Staff Development (3)
EDUC 657	Exceptionality, Diversity, and Difference (3)
EDUC 688	Leadership Capstone (2)
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 (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	BIOL 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
Odd year start	BIOL 640	BIOL 641	BIOL 615	BIOL 647	BIOL 611	EDUC 689
						BIOL 659
SPRING Progr	am of Study					
	SPRING (e)	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)
	EDUC 610	EDUC 625	EDUC 685	EDUC 657	EDUC 640	EDUC 698
Even year start	BIOL 641	BIOL 615	BIOL 647	BIOL 611	BIOL 659	EDUC 689
						BIOL 640
	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)
Odd year start	EDUC 610	EDUC 625	EDUC 685	EDUC 657	EDUC 640	EDUC 698
Odd year start	BIOL 611	BIOL 659	BIOL 640	BIOL 641	BIOL 615	EDUC 689
						BIOL 647
SUMMER Pro	gram of Study					
	SUMMER (e)	FALL (e)	SPRING (o)	SUMMER (o)	FALL (o)	SPRING (e)
F	EDUC 610	EDUC 685	EDUC 640	EDUC 625	EDUC 657	EDUC 698
Even year start	BIOL 615	BIOL 647	BIOL 611	BIOL 659	BIOL 640	EDUC 689
						BIOL 641
	SUMMER (o)	FALL (o)	SPRING (e)	SUMMER (e)	FALL (e)	Spring (o)
	EDUC 610	EDUC 685	FDUC 640	FDUC 625	EDUC 657	FDUC 698
Odd year start						

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

BIOL 611

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.