### <u>MSE Mathematics Program</u> – COE CONCEPTUAL FRAMEWORK

	CONCEPTUAL FRAMEWORK				
	Professional Identity	Diversity	Advanced Knowledge/Skills	Ecological Dispositions (Collaboration, Family, Stakeholder Involvement)	Evidence- Based Performance (Student assessment data; impact of learning)
STANDARDS					
The graduate of the M.S.E. Mathematics degree will employ advanced mathematical terminology and notation accurately.			X		
The graduate of the M.S.E. Mathematics degree program will communicate advanced mathematics with clarity and effective exposition.			X		
The graduate of the M.S.E. Mathematics degree program will read and interpret written material in advanced mathematics effectively.			X		
The graduate of the M.S.E. Mathematics degree program			Х		

will possess the	ļ			
skills to read,				
interpret, and	<u> </u>			
analyze advanced	<u> </u>			
mathematical	ļ			
problems.				
The graduate of	ļ			
the M.S.E.	ļ			
Mathematics	ļ			
degree program	ļ			
will demonstrate	ļ			
competence	ļ			
transferring	ļ			
mathematical	ļ			
reasoning to	ļ			
written	ļ		Χ	
statements of				
mathematical				
proof through	<u> </u>			
the use of	<u> </u>			
definitions,	<u> </u>			
theorems, and	ļ			
formal	ļ			
mathematical	<u> </u>			
statements.	ļ			
The graduate of				
the M.S.E.	<u> </u>			
Mathematics	ļ			
degree program	<u> </u>			
will possess the	ļ			
ability to employ	ļ			
appropriate	ļ		Χ	
techniques,	ļ		Λ	
methods, and	<u> </u>			
procedures in	ļ			
solving advanced	ļ			
mathematical	<u> </u>			
problems.	ļ			
The graduate of				
the M.S.E.				
Mathematics				
degree program				
will possess technical skills in			Χ	
completing the mathematical				
processes for				
solving advanced				

mathematical					
problems.					
The graduate of					
the M.S.E.					
Mathematics					
degree program					
will experience					
interconnections					
within					
mathematics					
			X		
through			^		
employing mathematical					
proof, mathematical					
reasoning, and					
abstract thinking in advanced					
mathematics.					
The graduate of					
the M.S.E.					
Mathematics					
degree program					
will understand					
how philosophies	Х	Χ		X	Х
in the western					
world impact					
education and its					
implications on					
student learning.					
The graduate of					
the M.S.E.					
Mathematics					
degree program					
will have an in-					
depth					
understanding of	Х	X	X	X	Х
secondary school					
curriculum that					
includes design,					
implementation					
and assessment					
of learning					
The graduate of					
the M.S.E.					
Mathematics			X		Х
degree program					
will plan and					
		<u> </u>	1	1	

conduct research studies within the classroom setting and analyze the results				
The graduate of the M.S.E. Mathematics degree program will understand the basic principles of learning and their applications to classroom management and instructional design	X	X	X	Х