# SOUTHERN UNIVERSITY AND A&M COLLEGE BATON ROUGE, LOUISIANA THE GRADUATE SCHOOL COLLEGE OF SCIENCES AND ENGINEERING DOCTORAL PROGRAM IN SCIENCE/MATHEMATICS EDUCATION

## **PLAN OF STUDY**

Name of Student:		Ва	Banner ID#:					
Admission Date: (Semester & Year)			E-mail Address:					
Departmental Advisor:		Da	ate:					
MASTER'S DEGRI	EE OR EQUIVALENT (2	24 hours Min.)						
Master's Degree U	niversity:							
Major:		Gradua	ation Date: _					
(24) GRADUATE CF	REDITS FOR MASTER'S I	EQUIVALENT						
Course No.	Title	University	Credits	Grade	Semester	Year		

## PRACTICUM (for students without teaching experience and/or credentials) 3-6 credit hours

Course No.	Title	Credits	Grade	Semester	Year	Instructor
SMED 735*	Practicum in Mathematics Teaching at the Elementary, Secondary or College Levels	3				
SMED 736*	Practicum in Science Teaching at the Elementary, Secondary or College Levels	3				

# **REQUIRED CORE COURSES (30 credit hours minimum)**

Course No.	Title	Credits	Grade	Semester	Year	Instructor	
	FOUNDATIONS 6 credits total						
SMED 702	Cognitive Foundations of Learning Science/Math	3					
<b>SMED 705</b>	Foundations of Science/Mathematics Education	3					
or SMED 710	History and Structure of Science and Math	3					
	RESEARCH	15 credi	ts total				
<b>SMED 739</b>	Applied Statistics	3					
*SMED 740	Quantitative Research in Science/Mathematics Education	3					
SMED 741	Qualitative Research in Science/Mathematics Education	3					
*SMED 743	Science/Mathematics Research Design	3					
*SMED 750	Advanced Quantitative Methods in Science/Mathematics Education Research	3					
SMED 755	Advanced Qualitative Methods in Science/Mathematics Education Research	3					
	CURRICULUM	6 credi	ts total				
SMED 716	Science/Mathematics Curriculum II (Secondary)	3					
SMED 715	Science/Mathematics Curriculum I (Elementary)	3					
or SMED 717	Science/Mathematics Curriculum III (College)	3					
	TECHNOLOGY	3 credi	ts total				
SMED 720	Technology in Science/Mathematics Education	3					

# OPEN ELECTIVES (9 credit hours minimum at the graduate level, while enrolled in the doctoral program)

Course No.	Title	Credits	Grade	Semester	Year	Instructor
SMED 701	Developmental Psychology and	3				
	Science/Mathematics Education					
SMED 721	Design in Science/Mathematics Education:	3				
	Instruction and Outcome Assessment					
SMED 722	Instructional Design and Multimedia Technology	3				
SMED 725	Critical Thinking in the Sciences and Mathematics	3				
SMED 726	Evolution and Science Education	3				
SMED 732	Topics in Number Theory	3				
SMED 737	Practicum with Emphasis on Writing for Publication	3				
SMED 760	Informal Science Education	3				
SMED 770	Special Topics in Science/Mathematics Education (you can take this course more than one time)	3				

Course No.	Title	Credits	Grade	Semester	Year	Instructor
SMED 780	Research in Mathematics Education	3				
SMED 790*	Independent Study in Science Education	3				
SMED 791*	Independent Study in Mathematics Education	3				

RESEARCH	/DISSERTATION	12 cradit	hours minimum	١
RESEARCH	DISSERTATION	12 Crean	nours minimum	ı

Course No.	Title	Credits	Grade	Semester	Year	Instructor
SMED 798*	Doctoral Qualifying Examination	0				
SMED 799*	Advanced Research	3-15				
SMED 800*	Dissertation Research	3-15				

<sup>\*</sup>denotes courses with prerequisites or enrollment by instructor permission only\* please refer to the graduate catalog for detailed course descriptions and prerequisite information.

### **MINIMUM COURSEWORK REQUIREMENTS**

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Total hours beyond master's degree:	36 hours + dissertation = 48 credit hours

(without teaching experience): 36 hours + dissertation + 3 hours practicum = 51 credit hours

Total hours beyond bachelor's degree: 60 hours + dissertation = 72 credit hours

(without teaching experience): 60 hours + dissertation + 3 hours practicum = 75 credit hours

Student's Signature:	Date:
Department Advisor Signature:	Date:
Department Chair Signature:	Date: