



**Department of Science, Technology, Engineering, and Mathematics (STEM) Education**  
**Curriculum Contract – Master’s Verification**  
**Master’s Degree with Rank II Certification – STEM Education**  
*STEM PLUS<sup>+</sup> – Producing +eacher Leaders for rUral/Urban Schools*

Please TYPE

<b>Name</b>				
<b>Email</b>				
<b>Address</b>				
	<b>Street</b>	<b>City</b>	<b>State</b>	<b>Zip</b>
<b>Phone</b>				<b>Semester of Admission to Master’s Program</b>
	<b>Home</b>	<b>Work</b>	<b>Cell/Other</b>	

**Professional Goals:** Briefly describe the professional growth goals you hope to meet in pursuing the Rank II Certification and STEM Education Master’s Degree. Please attach a copy of your Professional Growth Plan.

**Program Goals:** In helping you develop your own professional goals, the STEM PLUS<sup>+</sup> Master’s degree program will also focus on helping you:

1. Connect theory and practice through reflection, teaching, scholarship, and STEM educational action research.
2. Use student achievement data to design authentic, innovative, project-based learning experiences that consider students of diverse backgrounds and perspectives.
3. Explore uses of appropriate assessments and technological tools to enhance STEM teaching, learning, student achievement, and College and Career Readiness.
4. Develop communication skills through multiple forms of discourse and written, oral, and on-line narratives.
5. Explore and implement innovative and engaging curricula, especially around the Kentucky Core Academic Standards and College and Career Readiness, geared towards increasing student achievement.

**Required STEM Education Core:** SEM 610 required; choose 3 additional (12 hours)

Course	Title	Term	Grade	Credits
SEM 603	Curriculum and Instruction in STEM Education			3
SEM 604	History of STEM Education			3
EDC 607	Instructional Design I			3
<b>SEM 610</b>	<b><i>Teacher Leadership in STEM Education (required)</i></b>			<b>3</b>
SEM 613	Effective Use of Technology for Modeling-Based Inquiry in STEM			3

	Education			
SEM 670	Advanced Elementary Mathematics Methods			3
SEM 674	Advanced Studies in Teaching Elementary School Science			3
SEM 675	Mathematics Clinic			3
SEM 701	History of Mathematics Education			3
SEM 704	Designing Project-Enhanced Environments in STEM Education			3
SEM 706	Research in STEM Education			3
SEM 708	Engineering in STEM Education			3
SEM 770	Special Topics in STEM Education:			3

**Specialization STEM Coursework:** Choose 12 hours in STEM content area(s) outside the College of Education. See attached list for course suggestions. *(Recommended: 6 hours in your area of expertise and 6 hours outside of your area of expertise).*  
(12 hours)

Course	Title	Term	Grade	Credits
				3
				3
				3
				3
				3
				3

**Elective Leadership Coursework:** Choose from the following  
(6 hours)

Course	Title	Term	Grade	Credits
EDC/EPE/EDP 522	Educational Assessment			3
EDC 548	Instructional Technology Leadership			3
EDC 732	Curriculum Design for Learning and Leading			3
EDC 733	Leadership in Curriculum & Instruction: Strategies for Analytic Practice			3
EDL 600	Leadership for Learning-Centered Schools	Fall		3
EDL 601	Building a Professional Learning Community	Fall		1
EDL 602	Leadership Roles in Professional Learning Communities	Fall		1
EDL 603	Leadership for Student Learning	Fall		1
EDL 604	Leadership in Professional Learning Communities	Fall		3
EDL 605	Legal Rights and Responsibilities of Students	Spring		1
EDL 606	Legal Rights and Responsibilities for Teachers	Spring		1
EDL 607	Teacher Responsibilities in School-Based Decision Making	Spring		1
EDL 608	School Law and Governance for Teachers	Spring		3
EDL 609	Technology Leadership	Summer		1
EDL 610	Distributed Leadership in Schools	Summer		1
EDL 611	Current Issues for Education Leaders	Summer		1
EDL 612	Leadership for Technology and Innovation	Summer		3
EDL 613	Leadership in the Public Context of Education	Spring		1
EDL 614	Partnerships for Closing Achievement Gaps	Spring		1
EDL 615	Leadership for Response to Intervention in Inclusive Classrooms	Spring		1

EDL 616	Leadership for School as Inclusive Community	Spring		3
EDL 617	Teacher Leadership for Instructional Teams	Fall		1
EDL 618	Introduction to Leading Action Research for School Renewal	Fall		1
EDL 619	Evidence-Based Decision Making	Fall		1
EDL 661	School Technology Leadership			3
EDL 662	Digital Age Learning and School Technology Leadership			3
EDL 663	Professional Development for School Technology Leadership			3
EDL 664	School Technology Leadership for School Improvement			3
EDL 665	School Technology Leadership for Digital Citizenship			3

**Total Credit Hours**

*Minimum 30 credit hours required for graduation and Rank II certification*

**Continuous Assessment**

Checkpoint	Date
<b>Satisfactory Entry Review</b>	
<b>Satisfactory Mid-point Review</b>	
<b>Satisfactory Exit Portfolio/Review</b>	

**Master's Committee:**

Member	Department
<b>, Chair</b>	

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Advisory Signature

\_\_\_\_\_  
Date