



Universidad Politécnica de Puerto Rico  
Graduate School  
Master Program in Sciences of Education in Natural  
Sciences and Mathematics



**M.S.ED**

Sciences of Education in Natural Sciences and Mathematics

Education Courses: 18 credit-hours  
Area of Interest Courses: 18 credit-hours  
Total: 36 credit-hours

**Education Courses**

18 credits-hours

EDUC 5000 – Problem based Education (PBE)  
EDUC 5010 – Curriculum Design and Evaluation  
EDUC 5020 – Research Methods  
EDUC 5030 – Teaching and Methodology: 6<sup>th</sup> to 12<sup>th</sup> grade Mathematics  
EDUC 5031 – Teaching and Methodology: 6<sup>th</sup> to 12<sup>th</sup> grade Sciences  
EDUC 6020 – Assessment and Improvement of Instruction  
EDUC 6030 – Differentiating Instruction  
EDUC 6100 – Action Research for Teachers

**Area of Interest Courses**

Select one (1) Area of Interest  
18 credits-hours

**Sciences and Mathematics at Elementary Level**

MATH 6020 – Rational Numbers and Proportional Reasoning  
MATH 6030 – Measurement, Data and Geometric Thinking  
MATH 6040 – Algebraic Reasoning, Functions and Equations  
SCIE 5010 – Fundamental of Environmental Education  
SCIE 5020 – Software Applications and Technology  
SCIE 6010 – Investigating the Living World  
SCIE 6020 – Exploring the Physical World  
SCIE 6030 – Exploring the Earth and Beyond

**Natural Sciences at Secondary Level**

SCIE 5010 – Fundamental of Environmental Education  
SCIE 5020 – Software Applications and Technology  
SCIE 6010 – Investigating the Living World  
SCIE 6020 – Exploring the Physical World  
SCIE 6030 – Exploring the Earth and Beyond  
SCIE 6040 – Chemistry for Teachers

**Mathematics at Secondary Level**

(Select 18 credits)

MATH 5100 – Math Modeling  
MATH 5210 – Calculus for Teachers I  
MATH 5220 – Calculus for Teachers II  
MATH 5500 – Advanced Math for Teachers  
MATH 6110 – Discrete Mathematics II  
MATH 6120 – Probability and Statistics for Teachers  
MATH 6130 – Probability Models for Teachers  
MATH 6150 – Introductory Topology  
MATH 6160 – Applied Modern Algebra  
MATH 6180 – Modern Geometry for Teachers

Contact Information:  
Graduate School

E-mail: [escuelagraduada@upr.edu](mailto:escuelagraduada@upr.edu)  
Phone: 787-622-8000 Ext. 686

Rev. SP-23