# CSU San Bernardino <br> Master of Arts in STEM Education 

Classification Date: $\qquad$ SID\# $\qquad$
Name: $\qquad$

Bulletin Year Held: $\qquad$ Phone \#: $\qquad$
Address (Street, City, State, Zip):
Email:
Baccalaureate degree from: $\qquad$ —

Writing Requirement for Graduate Candidacy (WRGC): ESTM 6104, ESTM 6344, WREE, GRE, Paper

## Program Plan (Total Units: 30)

| Core Courses (15 units) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| COURSES | UNITS | SMTR/YEAR | GRADE | NOTES |
| ESTM 6104: Foundations of STEM Education | 3 |  |  |  |
| ESTM 6344: Research Methods in STEM Education | 3 |  |  |  |
| ESTM 5114: Technology and Engineering in STEM Education | 3 |  |  |  |
| ESTM 6203: Advanced Teaching Methods in STEM Education | 3 |  |  |  |
| ESTM 6344: Assessment in STEM Education | 3 |  |  |  |
| Electives (12 Units) |  |  |  |  |
| Option 1. Elementary Education (12 units from the following courses) |  |  |  |  |
| EMAT 5101 Education, Diversity and Social Justice | 3 |  |  |  |
| EDMS 5104 Mathematics Teaching and Learning | 3 |  |  |  |
| EDMS 5105 Science Teaching and Learning | 3 |  |  |  |
| EDMS 4100 Psychological Foundations of Education | 3 |  |  |  |
| EDMS 4102 Pedagogical Foundations for Teaching English Learners | 3 |  |  |  |
| Option 2. Secondary Education (12 units from the following courses) |  |  |  |  |
| ESEC 6002 Educational Equity and Advocacy | 3 |  |  |  |
| ESEC 6003 Pedagogical Foundations for English Language Learners in Secondary Classrooms | 3 |  |  |  |
| ESEC 6004 Adolescent Development and Educational Theory | 3 |  |  |  |
| ESEC 6013 Methods of Teaching in the Content Areas: Mathematics | 3 |  |  |  |
| ESEC 6016 Methods of Teaching in the Content Areas: Science | 3 |  |  |  |
| Option 3. 5000- and 6000- level courses related to STEM Education with consent of program coordinator.(12 units) Example programs that students can take courses for electives are: Single or Multiple Subject Teaching Credential Program, MA in Education, MA in Instructional Technology, MA in Career and Technical Education, Master level or upper level courses in the College of Natural Sciences (science disciplines, mathematics and computer science). |  |  |  |  |
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| Culminating Experience (3 Units) |  |  |  |  |
| Option A: Comprehensive Exam |  |  |  |  |
| ESTM 6954: Advanced Topics in STEM Education | 3 |  |  |  |
| ESTM 6980: STEM Education: Comprehensive Exam | 0 |  |  |  |
| Option B: Master's Thesis/Project Option (choose one) |  |  |  |  |
| ESTM 6973: STEM Education Master Thesis | 3 |  |  |  |
| ESTM 6963: STEM Education Master Project | 3 |  |  |  |

Program Coordinator's Signature: $\qquad$ Date
Xinying Yin, Ph.D.
Office and phone number: _CE 328/ 909 537-5696
$\qquad$ Date: $\qquad$

