

TEXAS A&M UNIVERSITY CORPUS CHRISTI  
 MASTER OF SCIENCE IN MATHEMATICS - 2020-2021 CATALOG  
**APPLIED AND COMPUTATIONAL MATHEMATICS (APCM)**

Name: \_\_\_\_\_

ID#: \_\_\_\_\_

**COMPETENCY REQUIREMENTS**

|      |      |      |                          |       |
|------|------|------|--------------------------|-------|
| 5310 | MATH | 3311 | LINEAR ALGEBRA           | _____ |
| 5310 | MATH | 3315 | DIFFERENTIAL EQUATIONS   | _____ |
|      | MATH | 2415 | CALCULUS III             | _____ |
| 5310 | MATH | 4301 | INTRODUCTION TO ANALYSIS | _____ |

**CORE COURSES (12 HOURS)**

|           |  |  | Grade | HRS. | TERM  |
|-----------|--|--|-------|------|-------|
| MATH 5333 | <u>NUMERICAL LINEAR ALGEBRA</u>        |  | _____ | 3    | _____ |
| MATH 5336 | <u>ADVANCED DIFFERENTIAL EQUATIONS</u> |  | _____ | 3    | _____ |
| MATH 5339 | <u>NUMERICAL ANALYSIS</u>              |  | _____ | 3    | _____ |
| MATH 5351 | <u>REAL ANALYSIS</u>                   |  | _____ | 3    | _____ |

**ELECTIVES from MATH or closely related field (15-18 SCH)**

|           |  |  |       |   |       |
|-----------|--|--|-------|---|-------|
| MATH 5337 | <u>THEORY &amp; APPLICATIONS OF PD EQUATIONS</u>           |  | _____ | 3 | _____ |
| MATH 5341 | <u>STATISTICAL METHODS &amp; DATA ANALYSIS</u>             |  | _____ | 3 | _____ |
| MATH 5342 | <u>LINEAR STATISTICAL MODELS</u>                           |  | _____ | 3 | _____ |
| MATH 5343 | <u>MATHEMATICAL THEORY OF STATISTICS</u>                   |  | _____ | 3 | _____ |
| MATH 5345 | <u>COMPUTATIONAL METHODS FOR STATISTICS</u>                |  | _____ | 3 | _____ |
| MATH 5348 | <u>OPTIMIZATION</u>  |  | _____ | 3 | _____ |
| MATH 5360 | <u>COMBINATORICS AND GRAPH THEORY</u>                      |  | _____ | 3 | _____ |
| MATH 5375 | <u>APPLIED ANALYSIS</u>                                    |  | _____ | 3 | _____ |
| MATH 5993 | <u>LITERATURE REVIEW &amp; RESEARCH (1-9 SCH variable)</u> |  | _____ | 3 | _____ |
| MATH 6344 | <u>SPATIAL STATISTICS</u>                                  |  | _____ | 3 | _____ |

*WITH PRIOR APPROVAL FROM THE DEPARTMENT CHAIR, A STUDENT MAY SELECT OFFERINGS OF:*

|           |                                      |  |       |   |       |
|-----------|--------------------------------------|--|-------|---|-------|
| MATH 5390 | <u>SPECIAL TOPICS IN MATHEMATICS</u> |  | _____ | 3 | _____ |
| MATH 5396 | <u>DIRECTED INDEPENDENT STUDY</u>    |  | _____ | 3 | _____ |

*OR GRADUATE COURSES OUTSIDE THE DEPARTMENT AS ELECTIVES.  
 PROPER DOCUMENTATION IS REQUIRED.*

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**THESIS (6-9 HOURS)**

|           |   |  |       |   |       |
|-----------|---|--|-------|---|-------|
| MATH 5994 | <u>PROPOSAL RESEARCH (1-3 credits) 3 SCH required</u> |  | _____ | 3 | _____ |
| MATH 5995 | <u>THESIS</u>   |  | _____ | 3 | _____ |
|           |   |  |       | 9 | 0     |

NOTE: Please refer to catalog for more detailed information

**TOTAL HOURS:**    36

**GPA (MIN. 3.0):** \_\_\_\_\_