

DEPARTMENT of MATHEMATICS

Degree Program: Bachelor of Science in Applied Mathematics

Catalog: 2009-2010 (Revised April 21, 2009)

Required Courses (70 credits in Mathematics plus 17-20 credits in supporting courses)

| <u>Course Number</u> | <u>Prerequisite</u> |
|----------------------|----------------------------------------------------------------------------------|
| MATH 124 or 134 | Suitable score on Advanced Placement test or at least C- in MATH 115 or 118 |
| MATH 125 or 135 | MATH 124 or 134 |
| or MATH 138 | Permission of instructor |
| MATH 204 | MATH 125 or 135 or 138, 224 recommended |
| MATH 209 or 302 | MATH 124 or 134 or 138; MATH 302: MATH 125 or 135 or 138 |
| MATH 224 | MATH 125 or 135 or 138 |
| MATH 226 | MATH 125 or 135 or 138 |
| MATH 304 | MATH 204, 224 |
| MATH 312 | MATH 226, one of 209, 302 |
| MATH 331 | MATH 204; 224 recommended or concurrent |
| MATH 341-342 | MATH 341: MATH 125 or 135 or 138; MATH 342: MATH 341 |
| or | |
| MATH 441-442 | MATH 441: MATH 204, 224, 312; MATH 442: MATH 441 |
| M/CS 375-475 | M/CS 375: MATH 204; one of CSCI 140, 141, MATH 207; M/CS 475: M/CS 375, MATH 224 |

Note: The pair MATH 203, 303 may be substituted for the pair MATH 204, 331.

One of the following computer science or math courses:

CSCI 139, 140, 141 MATH 112

MATH 207 Basic computer literacy (CSCI 101 or equivalent); MATH 125 or 135 or 138; 204

No fewer than 3 additional credits at the 400 level from Math, M/CS, or CSCI 405 or 480

| | |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------|
| CSCI 405 | CSCI 305. Note: CSCI 305 has CSCI 211, 241 as prerequisites; CSCI 211 and 241 has CSCI 145 or 146; 241 also requires MATH 124 or 134 or 157 |
| CSCI 480 | CSCI 351, MATH 125, 204 |

One of the following concentrations:

Operations Research Concentration

| <u>Courses</u> | <u>Prerequisite</u> |
|----------------|--------------------------------------------------------------------------------|
| M/CS 335-435 | MATH 335: MATH 204 and one of CSCI 140, 141, MATH 207 M/CS 435: MATH 224 |
| MATH 410 | MATH 204, 224, 331 |

Engineering Concentration

| <u>Courses</u> | <u>Prerequisite</u> |
|----------------|-----------------------------------|
| MATH 225 | MATH 224 |
| MATH 430 | MATH 204, 226, 331 or MATH 432 |
| MATH 438 | MATH 204, 331, MATH 225, 226 |

One of the following sequences:

PHYS 121, 122, 123,

CHEM 121, 122, 123 or 125, 126, 225

CSCI 141, 145, 211, 241, 401

ECON 206, 207, 306, and one of 375, 470, 475