



**COLLEGE OF LIBERAL ARTS & SCIENCES**

**Master of Science**

**APPLIED MATHEMATICS & COMPUTER SCIENCE**

Total Credits Required: 30

Degree Requirements for those entering the program after July 2016

<b>NAME:</b>	<b>ID#:</b>	<b>DATE:</b>
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**A. Necessary Prerequisites**

Computer Science Prerequisites	Mathematics Prerequisites
C101/A504 Programming I (C++) : _____	M208 /M215 Calculus I : _____
C201/A506 Programming II (C++) : _____	M209 /M216 Calculus II : _____
C243/A594 Data Structures : _____	M301 / Linear Algebra : _____
C335/ A593 Computer Structures : _____	M365 or M463/M466 - Probability/Statistics : _____

**B. Graduate Level Classes (24-30 Credits)**

**Computer Science Concentration**

- B503 - Algorithms Design & Analysis : \_\_\_\_\_
- B538 - Networks & Distrib. Computing : \_\_\_\_\_
- B551 - Artificial Intelligence : \_\_\_\_\_
- B561 - Advanced Database Concepts : \_\_\_\_\_
- B581 - Advanced Computer Graphics : \_\_\_\_\_
- P565 - Software Engineering : \_\_\_\_\_
- B553 - Biomorphic Computing : \_\_\_\_\_
- B582 - Image Synthesis : \_\_\_\_\_
- B583 - Game Programming & Design : \_\_\_\_\_
- B651 - Natural Language Processing : \_\_\_\_\_
- B524 - Parallel & Distributed Computing : \_\_\_\_\_
- B657 - Computer Vision : \_\_\_\_\_
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**Mathematics Concentration**

- M560 - Applied Stochastic Processes : \_\_\_\_\_
- M562 - Stat. Design of Experiments : \_\_\_\_\_
- M571 - Analysis of Numerical Methods I : \_\_\_\_\_
- M575 - Simulation Modeling : \_\_\_\_\_
- M576 - Forecasting : \_\_\_\_\_
- M577 - Operations Research : \_\_\_\_\_
- M551 - Markets & Asset Pricing : \_\_\_\_\_
- M565 - Analysis of Variance : \_\_\_\_\_
- M546 - Control Theory : \_\_\_\_\_
- M572 - Numerical Analysis II : \_\_\_\_\_
- M574 - Applied Regression Analysis : \_\_\_\_\_
- M590 - Graduate Seminar : \_\_\_\_\_

**C. Optional 400 Level Undergraduate classes (max 6 credits)**

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| C431 – Assemblers & Compilers I : _____    | M414 - Linear Transformations : _____             |
| B438 - Computer Networks : _____           | M415 - Complex Variables & Applications : _____   |
| C435 - Operating Systems : _____           | M451 - Math of Finance & Interest : _____         |
| C421 - Computer Organization : _____       | M463 - Introduction to Probability Theory : _____ |
| C441 - Info Org & Retrieval : _____        | M466 - Introduction to Math Stats : _____         |
| C442 - Database Management Systems : _____ | M447 - Math Modeling I : _____                    |
| C490 - Topics in CS : _____                | M448 - Math Modeling II : _____                   |

**D. Thesis or Project Option (6 credits for thesis and 3 credits for project)**

<b>Thesis or Project Title:</b>			
Graduate Advisor:			
Committee Member:			

Advisor's Name and Signature