

**Bachelor of Science in Math: Pure Math emphasis  
Worksheet & Pre-Requisites — 2014-15**

| Course #                                            | Course title                                        | Cr | Of'rd  | Pre-Requisites                         |
|-----------------------------------------------------|-----------------------------------------------------|----|--------|----------------------------------------|
| <b>MATH CORE</b>                                    |                                                     |    |        |                                        |
| MATH 1220                                           | Calculus II                                         | 4  | F/S    | "C" in MATH 1210 or <u>AP Calculus</u> |
| MATH 2210                                           | Calculus III                                        | 4  | F/S    | "C" in MATH 1220                       |
| MATH 2270                                           | Linear Algebra                                      | 3  | F/S    | MATH 1220                              |
| MATH 2280                                           | Differential Equations                              | 3  | S      | MATH 1220 & MATH 2270%                 |
| MATH 3120                                           | Transition to Advanced Mathematics                  | 3  | S      | MATH 1220 & MATH 2270                  |
| MATH 3700                                           | Probability & Statistics                            | 4  | F      | MATH 1220                              |
| MATH 4220                                           | Abstract Algebra I                                  | 3  | F      | MATH 3120                              |
| MATH 4400                                           | Advanced Calculus I                                 | 3  | F      | MATH 2210, 3120 & 2270                 |
| MATH 4580                                           | Complex Analysis                                    | 3  | S odd  | MATH 2210                              |
| <b>One of the following</b>                         |                                                     |    |        |                                        |
| MATH 4230                                           | Abstract Algebra II                                 | 3  | S-even | MATH 4220                              |
| MATH 4410                                           | Advanced Calculus II                                |    | S-odd  | MATH 4400                              |
| <b>One of the following</b>                         |                                                     |    |        |                                        |
| CSIS 1400                                           | Fundamentals of Programming                         | 3  | F/S    | C in MATH 1010 or ACT of 23            |
| CSIS 1410                                           | Object Oriented Programming                         |    | F/S    | CSIS 1400                              |
| <b>Math Electives (15 credits)</b>                  |                                                     |    |        |                                        |
| CSIS 3550 or any upper div Math except 3140 or 4900 |                                                     | 15 |        |                                        |
| <b>Up Div ELECTIVES</b>                             |                                                     |    |        |                                        |
|                                                     | To Total 40                                         | 4  |        |                                        |
| <b>FREE ELECTIVES</b>                               |                                                     |    |        |                                        |
|                                                     | To total 120                                        |    |        |                                        |
| <b>PROGRAM PREREQUISITES</b>                        |                                                     |    |        |                                        |
| MATH 1050                                           | College Algebra                                     | 4  | F/S/M  | "C" in MATH 1010 or <u>ACT of 23</u>   |
| MATH 1060                                           | Trigonometry                                        | 3  | F/S/M  | "C" in MATH 1010 or <u>ACT of 23</u>   |
| <b>University Requirement</b>                       |                                                     |    |        |                                        |
| UNIV 1010                                           | EDGE Program Introduction                           | 1  | F/S/M  |                                        |
| UNIV 3925                                           | EDGE Project Proposal                               | 1  | F/S/M  | UNIV 1010                              |
| UNIV 4925 or UNIV 4930                              | EDGE Program Completion/Select Track Completion     | 1  | F/S/M  | UNIV 3925                              |
| <b>GENERAL EDUCATION</b>                            |                                                     |    |        |                                        |
| ENGL 1010                                           | Intro to Academic Writing                           | 3  | F/S    |                                        |
| ENGL 2010                                           | Intermediate Writing                                | 3  | F/S    |                                        |
| <b>MATH 1210</b>                                    | <b>Calculus I</b>                                   | 4  | F/S/M  | "C" in MATH 1050/60                    |
| LM 1010                                             | Information Literacy                                | 1  | F/S    |                                        |
| American Institution                                |                                                     | 3  | F/S    |                                        |
| CSIS 1000                                           | Intro to Computer Applications & Internet           | 3  | F/S/M  |                                        |
| FINE ARTS:                                          |                                                     | 3  |        |                                        |
| HUMANITIES:                                         |                                                     | 3  |        |                                        |
| SOCIAL SCI:                                         |                                                     | 3  |        |                                        |
| LIFE SCIENCE                                        |                                                     | 3  |        |                                        |
| <b>PHYS SCI: PHYS 2210/15*</b>                      | <b>Physics for Scientists &amp; Engineers I/lab</b> | 4  | F/S    | MATH 1210                              |
| <b>*(Strongly Recommended)</b>                      |                                                     |    |        |                                        |

% Can take 2270 & 2280 concurrently