**School of Business – Computer Science Program**

**Advising and Course Record Worksheet**

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| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | Student ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | Adviser: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
|  | **General Education Requirements** – Advisement Evaluation | | | |  |
|  | Enter work in progress; record grades only for work completed. | | | |  |
|  |  |  |  | Grades of Completed |  |
| **AREA 1 COMMUNICATIONS** | |  | **9 semester hours** | Courses |  |
|  |  |  |
|  | |  |  |  |  |
| a) | English (a minimum of 6 hours in English Composition, ending with English 102 with a grade of ‘C’ or higher in each course.) | | 6 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| b) | Speech 101 |  | 3 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
|  |  |  |  |  |  |

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| --- | --- | --- | --- |
| **AREA 2 SOCIAL SCIENCES** | | **9 semester hours** |  |
|  | |  |  |
| a) | Political Science 101 or 103 | 3 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| b) | Anthropology, Economics, Geography, or Sociology | 3 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| c) | Anthropology, Economics, Geography, |  |  |
|  | Political Science, Sociology, or  Honors 250-259 | 3 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| --- | --- | --- | --- |
| **AREA 3 HUMANITIES** | | **12 semester hours** |  |
|  |  |  | \_\_\_\_ |
| a) | Literature (any language) | 3 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| b) | History | 3 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| c) | Art 101, Music 101, or Theatre 101 | 3 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| d) | Art, History, Literature (any language), Music |  |  |
|  | Philosophy and Religious Studies, Theatre, or  Honors 260-269 | 3 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **AREA 5 MATHEMATICS** | | **6 Semester hours** |  |
|  | Mathematics (A minimum of 6 hours in Mathematics |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | 111 or higher) | 6 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **AREA 6 NATURAL SCIENCES** | | **12 semester hours** |  |
|  | (**Laboratories are required with all courses)** |  |  |
| a) | Biology | 4 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| b) | Chemistry, Physics, or Physical Science | 4 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| c) | Astronomy, Biology, Chemistry, Physics,  Physical Science, Psychology 206/216  or Honors 280-289 | 4 hours | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | **TOTAL:** | **48 hours** |  |

**Computer Science Courses with their Prerequisites and Co-requisites\***

**Required Computer Science Courses:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course** | **Description** | **Prerequisites** | **Completed** |  |
|  |  |  |  |  |
| CS 226 | Programming and | **CS 190 with Lab** |  |  |
|  | Algorithmic Design(I) |  |  |
| CS 227 | Programming and |  | \_\_\_\_\_\_\_\_\_\_\_ |  |
|  | Algorithmic Design(II) | CS 226 | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 280 | Digital Systems Design | Math 230 | \_\_\_\_\_\_\_\_\_\_ |  |
| **Mathematics 230 should normally be taken before taking any CS course above the 280 Level** | | | |  |
| CS 310 | Computer Architecture and |  |  |  |
|  | Organization | CS 280 | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 313 | Systems Design and |  |  |  |
|  | Development | CS 226, CS 227 (pre/co-requisite) | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 318 | Data Structures and Algorithm | |  |  |
|  | Analysis | CS 227 | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 340 | Software Design and |  |  |  |
|  | Development | CS 313 | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 350 | Theory of Computation | CS 318 and Math 230 | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 401 | Programming Languages | CS 350 (pre/co-requisite) | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 410 | Operating Systems | CS 310 and CS 318 | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 430 | Database Management | CS 313 | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 440 | Computer Networks | CS 310 and CS 318 | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 480 | Capstone I | Senior Status | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 482 | Capstone II | Senior Status | \_\_\_\_\_\_\_\_\_\_ |  |

**Computer Science Electives: (6 hours)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course** | **Description** | **Prerequisites** | **Completed** |  |
|  |  |  |  |  |
| CS 330 | Special Topics in |  |  |  |
|  | Computer Science | Varies by content | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 360 | Introduction to Computer | CS 318, Math 304 strongly |  |  |
|  | Graphics | recommended | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 420 | Compiler Construction | CS 318, CS 350, and CS 401 (pre/co-requisite) | \_\_\_\_\_\_\_\_\_\_ |  |
| CS/Math 425 | Numerical Analysis | Math 203 and either Math 213 or CS 226 | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 437 | Artificial Intelligence | CS 318 and Math 230; CS 350 is |  |  |
|  |  | Recommended | \_\_\_\_\_\_\_\_\_\_ |  |
| CS 475 | Internship in Computer Science | Approval of course coordinator | \_\_\_\_\_\_\_\_\_\_ |  |

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**Math Requirements for Computer Science Majors:**

**Math Minor Required**

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| --- | --- | --- | --- | --- |
| **Course** | **Description** | **Prerequisites** | **Completed** |  |
|  |  |  |  |  |
| Math 201 | Calculus I | Math 132 or Math 137 or qualifying placement scores or |  |  |
|  |  | permission of the Math |  |  |
| Math 202 | Calculus II | Department | \_\_\_\_\_\_\_\_\_\_ |  |
| Math 201 or qualifying AP score | \_\_\_\_\_\_\_\_\_\_ |  |
| Math 230 | Discrete Mathematics | Eligibility to take Math 202 |  |  |
|  |  | or permission of the Math |  |  |
|  |  | Department | \_\_\_\_\_\_\_\_\_\_ |  |
| Math 312 | Probability and Statistics | Math 230 or Both Math 134 and |  |  |
|  |  | Math 202 or permission of the |  |  |
|  |  | Math Department | \_\_\_\_\_\_\_\_\_\_ |  |

**The Math Minor requires the four courses listed above as well as the additional hours from either the Math A option or the Math B option.**

(A) Math 203 Calculus III

1. Math 425 Numerical Analysis
2. Math 304 Linear Algebra

(B) Math 305 Linear Programming

Math 202 or qualifying AP score \_\_\_\_\_\_\_\_\_\_

Math 203 **and** either Math 213

or CS 226 \_\_\_\_\_\_\_\_\_\_

Math 202 \_\_\_\_\_\_\_\_\_\_

Math 304 and either Math 213 or

CS 226 \_\_\_\_\_\_\_\_\_\_

**English Requirements for Computer Science Majors:**

Eng. 318 Technical Communication Eng. 102 \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_

\* Note: Computer Science majors must have grades of “C” or better in CS and Math prerequisites for all courses. A CS GPA of 2.25 or better is required to take any course above the 299 level.

\* The CS major is comprised of 48 hours; there are 48 hours of general education requirements for a BS degree; 18 hours are for the Math minor; 3 hours are from English.

\* A minimum of 120 credit hours is required for graduation.