ARIZONASTATEUNIVERS ITY

B.S.: Applied Computing Catalog Year 2007-2008 Advising Appointments: (602) 543-1650

> | ASU FRESHMEN MUST FOLLOW A CRITICAL TRACKING PATH WITH THE DEPARTMENTADVISOR. ALL ASU |
| :--- |
| FRESHMEN ARE REQUIRED TO TAKE ASU 101, THE ASU EXPERIENCE, IN THE FALL OF THEIR FIRST YEAR. |
| >  ASU 101 > |

Math Foundation/Core

| MAT 210 | Brief Calculus (MA) | 3 |
| :--- | :---: | :---: |
| MAT 243 | Discrete Mathematical Structures | 3 |
| STP 300 | Introduction to Probability | 3 |

Applied computing foundation/ core (15 hours)

| ACO 101 | Introduction to Computer Science (CS) | 3 |
| :--- | :---: | :---: |
| ACO 102 | Principles of Computer Science (CS) | 3 |
| ACO 201 | Data Structures and Algorithms (CS) | 3 |
| ACO 210 | Introduction to Systems Programming (CS) | 3 |
| ACO 220 | Introduction to Database Systems (CS) | 3 |

Concentration (21-22 hours) Students will select one of the following concentrations: Digital Media and Graphic Design, Advanced Database Systems, or Network and Distributed Processing.

| Digital Media and Graphic |
| :--- |
| Design |$|$| IAP 361 Digital Editing and |
| :--- |
| Media |
| Literacy (CS) (3) |
| IAP 365 Digital Interactivity |
| (3) |
| IAP 466 Digital Interactivity, |
| Advanced (3) |
| IAP 368 Digital Graphic |
| Technologies (3) |
| IAP 468 Digital Graphic |
| Applications (3) |
| IAP 484 Internship (6) |

## Advanced Database Systems

ACO 320 Database Systems and Transaction Processing (3)
ACO 420 Object Databases (3) ACO 421 Data Mining and Warehousing (3)
ACO 422 XML and Databases (3)
GCU 373 Introduction to Geographic
Information Science (SG) (4)
ACO 484 Internship
OR
ACO 499 Individualized Instruction

## Network and Distributed Processing

ACO 330 Computer Networks (3)
ACO 331 Network Design (3)
ACO 430 Wireless Networks (3)
ACO 431 Network Security (3)
ACO 432 Distributed Systems (3)
ACO 484 Internship
OR
ACO 499 Individualized
Instruction (6)

Liberal Arts Cluster (15 hours)
Select four liberal arts courses in consultation with the department advisor. At least nine semester hours must be upper-division courses. Approved pre-fixes include but are not limited to: AMS, ASB, ARS, CMN/COM, ECN, ENG, HIS, IAS, IAP, PHI, POL, PGS, SBS, SOC, and WST.

|  |  | 3 |
| :--- | :--- | :--- |
|  |  | 3 |
|  |  | 3 |
|  |  | 3 |

At least one course focusing on ethics/diversity must be complete from the following:

| CMN/COM 457 | New Media | 3 |
| :--- | :---: | :---: |
| IAP 464 | Media and Diversity | 3 |
| IAS 406 | Moral Dilemmas (L/HU) | 3 |

General Electives (Hours needed to fulfill the 120 hour graduation requirement)

|  |  | 3 |
| :--- | :--- | :--- |
|  |  | 3 |
|  |  | 3 |
|  |  | 3 |

For more information on our program, please visit our web site at http:// www.west.asu.edu/iap
Material on check sheet is unofficial and subject to change. Please see the advisor for more information. Updated on 2/ 19/2008

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| Total Hours <br> (120 Minimum) | Total Upper Division <br> Hours (50 Minimum) | Community College <br> Transfer Hours <br> (64 Maximum) | Total Major Hours <br> $(60$ Minimum $)$ | Total ASUW Hours <br> (30 Minimum) |
| :--- | :--- | :--- | :--- | :--- |

## UNI VERSITY AND COLLEGE REQUI REMENTS

GENERAL STUDIES ( 35 hours minimum): All students enrolled in a baccalaureate degree program must successfully complete minimum of 35 semester hours of approved general studies courses. Many General Studies courses are approved as satisfying more than one requirement. The following conditions govern the application of courses toward General Studies requirements:

1. A single course may be used to satisfy one core area and a maximum of two awareness area requirements.
2. A single course may be used to satisfy a maximum of two awareness area requirements.
3. A single course cannot be used to satisfy two core area requirements, even if it is approved for more than one core area.


FIVE CORE AREAS (Literacy, Mathematical Studies, Humanities, Social \& Behavioral Sciences, and Natural Sciences) Literacy and Critical I nquiry ( 6 hours): Requires at least three hours of upper division


Mathematical Studies (6 hours): Requires one course from Mathematics (MA) category and one from Statistics, Quantitative Reasoning, or Computer Applications (CS) categories. The MA course must have a grade of " C " or better to meet the college's mathematics requirement.

|  |  |  |  | MA |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | CS |  |  |

Combined Humanities and Fine Arts/ Social and Behavioral Sciences (15 hours): Must complete nine (9) hours in one core area, six (6) in the other; must include at least one upper division course. See catalog for details.

|  |  |  |  | HU |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | HU |  |  |
|  |  |  |  | HU or SB |  |  |
|  |  |  |  | SB |  |  |
|  |  |  |  | SB |  |  |

Natural Sciences (8 hours): Requires two natural science laboratory courses: Natural Science - Quantitative (SQ) or Natural Science - General (SG). Of these, at least four hours must be taken from the SQ category. See catalog for restrictions.

|  |  |  |  | SQ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | SQ/SG |  |  |

THREE AWARENESS AREAS (0-9 hours): Requires courses representing all 3 of the awareness areas: Cultural Diversity (C), Global Awareness (G), and Historical Awareness (H).

|  |  |  |  | C |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | G |  |  |
|  |  |  |  | H |  |  |

## Language \& Cultures Requirement:

The New College of Interdisciplinary Arts and Sciences requires either:

1. Knowledge of one foreign language equivalent to the completion of two years study at the college level (through 202 or equivalent) or
2. Completion of a foreign language course at the 300 level, taught in the foreign language or
3. Completion of secondary education at a school in which the language of instruction is not English or
4. Completion of 6 hours of upper division courses that have a Global Awareness ( G ) or Cultural Diversity (C) designation, in addition to the courses used to meet the University General Studies requirements, or
5. Completion of two sequential semesters of course work in a current computer language. ACO $101 \& 102$ Fulfills this requirement.
6. Completion of two sequential semesters of course work in a current computer language.

For more information on our program, please visit our web site at http:// www.west.asu.edu/iap
Material on check sheet is unofficial and subject to change. Please see the advisor for more information. Updated on 2/ 19/2008

