

Information System Concentration (CIS-INSY)

Curriculum Sheet for Catalog Year **Winter 2008**

ID _____

CECS DISTRIBUTION Requirements 21

ENGLISH COMPOSITION (6)
Composition Placement Exam required, and
Take both COMP 105 (3) & COMP 270 (3)

ECONOMICS (3)
ECON 201 (3) *Macroeconomics*

HUMANITIES (See Notes * & **)

Two courses, 100- to 400-level, 6 credits, from
AFRICAN/AFRICAN-AMERICAN (AAAS)
239, 275, 333, 385, 389, 469, 470

ART HISTORY (ARTH)
COMMUNICATIONS (COMM)
COMPARATIVE LITERATURE (COML)

ENGLISH (ENGL)
FILM STUDIES (FILM or JASS)

FOREIGN LANGUAGE
MUSIC HISTORY (MHIS)

PHILOSOPHY (PHIL)
SCIENCE/TECH STUDIES (STS)

307, 312, 360, 403, 410, 485, 488

WOMEN/GEN STUDIES (WGST)

303, 385, 386, 387, 416, 425, 445, 487

BEHAVIORAL/SOCIAL SCIENCES **

Two courses, 100- to 400-level, 6 credits, from
AFRICAN/AFRICAN-AMERICAN (AAAS)
106, 275, 316, 320, 322, 325, 345,
349, 368, 369, 371, 386, 387, 403, 404

ANTHROPOLOGY (ANTH)
ECONOMICS (ECON)

ECON 202, ECON 300-level only
GEOGRAPHY (GEOG)

GEOG 201, 205, GEOG 300-level only
HISTORY (HIST)

POLITICAL SCIENCE (POL)
PSYCHOLOGY (PSYC)

SCIENCE/TECH STUDIES (STS)
300, 305, 308, 309, 321, 325, 340, 345,

349, 365, 374, 383, 385, 386, 409,
421, 430, 441, 442, 464

SOCIOLOGY (SOC)
WOMEN/GEN STUDIES (WGST)

303, 325, 326, 338, 362, 370,
405, 406, 407, 420, 446, 455, 3955

Mathematics, Sciences, & Cognates 39

MATHEMATICS & STATISTICS (18)

MATH 115 (4) *Calculus I*
MATH 116 (4) *Calculus II*

CIS 275 (4) *Discrete Structures I*
IMSE 317 (3) *Probability/Statistics*

MATH 227 (3) *Linear Algebra*

LABORATORY SCIENCE Sequence (8)

Two courses, 8 credits, in 1 sequence from:

BIOL 130 (4) and BIOL 140 (4)
or CHEM 134 (4) and CHEM 136 (4)

or CHEM 144 (4) and CHEM 146 (4)
or GEOL 118 (4) and GEOL 218 (4)

or PHYS 125 (4) and PHYS 126 (4)
or PHYS 150 (4) and PHYS 151 (4)

BUSINESS & OPERATIONS RESRCH

The following four courses (13 credits):

ACC 298 (3) *Accounting I*
OB 354 (3) *Organizational Behavior*

IMSE 3005 (4) *Operations Research*
ENGR 400 (3) *Applied Bus Techniques*

CIS Courses & Electives 60

CIS CORE – 7 courses (28 credits)

CIS 150 (4) *Computer Science I*
CIS 200 (4) *Computer Science II*

CIS 310 (4) *Computer Organizatn
& Assembly Language*

CIS 350 (4) *Data Structures*
CIS 375 (4) *Software Engineering*

CIS 427 (4) *Computer Networks
& Distributed Systems*

CIS 450 (4) *Operating Systems*

CIS-INSY Programming Lang (3 credits)

One of the following two courses:

CIS 294 (3) *Visual Basic*
CIS 296 (3) *Java Programming*

CIS-INSY Required – 5 courses (15 credits)

CIS 421 (4) *Database Systems*
CIS 425 (4) *Information Systems* [or 4261]

CIS 476 (3) *Softw Arch/Design Patterns*
[or old CIS 4262 (4)]

CIS 4951 (2) *Design Seminar I*
CIS 4952 (2) *Design Seminar II*

CIS-INSY Electives (7 credits)

Seven (7) credits from the following:

[only (6) credits if CIS 4262 (4) was
taken instead of CIS 476 (3)]

CIS 285 (3) *Software Engr Tools*
CIS 297 (3) *C# Programming*

CIS 306 (4) *Discrete Structures II*
CIS 376 (4) *Software Engineering II*

CIS 381 (3) *Industrial Robotics*
CIS 387 (4) *Digital Forensics I*

CIS 400 (4) *Programming Langs*
CIS 405 (3) *Algorithm Analys/Design*

CIS 423 (3) *Decision Support
& Expert Systems*

CIS 435 (3) *Web Technology*
CIS 437 (3) *Advanced Networking*

CIS 447 (3) *Comput & Network Security*
CIS 451 (3) *Computer Graphics*

CIS 452 (3) *Computer Animation*
CIS 467 (4) *Digital Forensics II*

CIS 474 (3) *Compiler Design*
CIS 479 (3) *Artificial Intelligence*

CIS 487 (3) *Computer Game Design I*
CIS 488 (3) *Computer Game Design II*

CCM 404 (3) *Dynamical Systems*
CCM 472 (3) *Numerical Analysis*

CCM 473 (3) *Matrix Computation*
ECE 372 (4) *Microprocessors*

ECE 473 (4) *Embedded Systems*
GENERAL ELECTIVES (7 credits)

See note to left **

**** Avoid NO-CREDIT courses.**
NO-CREDIT courses posted by 2000 EC
and listed at end of CECS Handbook:
[www.engin.umd.umich.edu/SRA/pdf/
Student_Handbook.pdf](http://www.engin.umd.umich.edu/SRA/pdf/Student_Handbook.pdf) <link>

NO-CREDIT courses DON'T count
for the degree. NO-CREDIT courses
include ARTH 105, ECON 305,
POL 300, PSYC 381, SOC 383,
STAT 325, and many others.

Check the list! [10/11]

* Note: AAAS, STS, and WGST disciplines
have different courses for Humanities and
for the Behavioral or Social sciences.