

ID \_\_\_\_\_

Curriculum Sheet for Catalog Year Fall 2008

**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-AMERIC (AAAS)  
239, 275, 333, 385, 389, 469, 470

ART HISTORY (ARTH)

COMMUNICATIONS (COMM)

COMPARATIVE LITERATURE (COML)

ENGLISH LITERATURE (ENGL)

JOURNALISM & SCREEN STUDIES (JASS)

FOREIGN LANGUAGE

MUSIC HISTORY (MHIS)

PHILOSOPHY (PHIL)

SCIENCE/TECH STUDIES (STS)

300, 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-AMERICN (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, 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, Mgmt 39****MATHEMATICS & STATISTICS (21)**

MATH 115 (4) *Calculus I*

MATH 116 (4) *Calculus II*

CIS 275 (4) *Discrete Structures I*

CIS 306 (4) *Discrete Structures II*

IMSE 317 (3) *Probability/Statistics*

One of the following two (*Matrix/Linear alg*)

MATH 217 (2) [*or* MATH 227 (3)]

**LABORATORY SCIENCE Sequence (8)**

Two courses, 8 credits, in a 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)

**ADDITIONAL SCIENCE Course (4)**

Four *additional* science credits from:

ASTR 130/131 [= old PHYS 130/131]

BIOL 130 BIOL 140

CHEM 134 *or* CHEM 144

CHEM 136 *or* CHEM 146

CHEM 225 CHEM 226 CHEM 227

GEOL 118 GEOL 218

PHYS 125 *or* PHYS 150

PHYS 126 *or* PHYS 151

[Credit for only one of following two courses:

CHEM 144 and CHEM 134,

CHEM 146 and CHEM 136,

PHYS 125 and PHYS 150, and

PHYS 126 and PHYS 151] \*\*

**BUSINESS COURSES (6 credits)**

OB 354 *Organizational Behavior*

ENGR 400 (3) *Applied Bus Techniques*

**CIS COURSES and ELECTIVES 60****CIS CORE – 7 courses (28 credits)**

CIS 150 (4) *Computer Science I*

CIS 200 (4) *Computer Science II*

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

CIS 3501 (4) *Data Struct & Alg for SE*

CIS 375 (4) *Software Engineering I*

CIS 427 (4) *Networks & Distrib Systems*

CIS 450 (4) *Operating Systems*

**REQUIRED for SOFTWARE ENGR (14)**

CIS 285 (3) *Software Engineering Tools*

CIS 376 (4) *Software Engineering II*

CIS 476 (3) *Softw Arch/Design Patterns*

CIS 4961 (2) *Design Seminar for SE I*

CIS 4962 (2) *Design Seminar for SE II*

**ONE APPLICATION AREA SEQUENCE (7-9)**

(Appl Area & Tech Electives must total **14**)

a) Information Systems Sequence (7)

CIS 425 (4) *Information Systems*

CIS 447 (3) *Comput & Network Security*  
[Pre-2012: CIS 4261 (4) and 4262 (4)]

b) Computer Game Design Sequence (9)

CIS 297 (3) *Introduction to C#*

[CIS 297 is required. CIS 294 or CIS 296  
cannot count as Tech Electives below]

CIS 487 (3) *Computer Game Design I*

CIS 488 (3) *Computer Game Design II*

c) Web Engineering Sequence (7 credits)

CIS 421 (4) *Database Systems*

CIS 435 (3) *Web Technology*

**TECHNICAL ELECTIVES (5 to 7)**

(Appl Area & Tech Electives must total **14**)

Five to seven *other additional* credits from:

Only 1 from CIS 294, or CIS 296,

*or* CIS 297 (3) counts towards degree.

CIS 381 (3) *Industrial Robotics*

CIS 387 (4) *Digital Forensics I*

CIS 400 (4) *Programming Languages*

CIS 405 (3) *Algorithm Analys/Design*

CIS 421 (4) *Database Systems*

CIS 423 (3) *Decision Sup & Expert Sys*

CIS 425 (4) *Information Systems [= 4261]*

CIS 4262 (4) *Information Systems Desg 2*

CIS 435 (3) *Web Technology*

CIS 437 (3) *Advanced Networking*

CIS 447 (3) *Computer & 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*

ECE 372 (4) *Microprocessors*

ECE 473 (4) *Embedded System.*

**GENERAL ELECTIVES (4 credits) \*\***

**These must all be outside CIS, math,  
natural science, and engineering**

**\*\* Avoid NO-CREDIT courses.**

NO-CREDIT courses don't count  
towards the degree, as general electives  
or anything else. List posted by 2000 EC  
and listed in CECS Handbook:

[www.engin.umd.umich.edu/SRA/pdf/  
Student\\_Handbook.pdf](http://www.engin.umd.umich.edu/SRA/pdf/Student_Handbook.pdf) <[link](#)>

They include ARTH 105, ECON 305,  
PSYC 381, SOC 383, STAT 325, and  
many others. **Check the list!** [11/11]

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