

ID _____ FALL 2009 Catalog Year Curriculum Sheet

CECS DISTRIBUTION Requirements 24**ENGLISH COMPOSITION**

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

HUMANITIES AREA (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 LITERATURE (ENGL)

FILM STUDIES (FILM or 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-AMERICAN (AAAS)

106, 275, 316, 320, 322, 325, 345,

349, 368, 369, 371, 386, 387, 403, 404

ANTHROPOLOGY (ANTH)

ECONOMICS (ECON)

ECON 201, 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

ECONOMICS (3 credits)

ECON 201 or ECON 202 (*Macro or Micro*)

*** SEQUENCE W/ UPPER-LEVEL COURSE:**

Two of the courses above, in Humanities Area

OR the Behavioral /Social Sciences Area,

OR ECON must be **in the same discipline**

AND at least one of them **300- or 400-level.**

ADDITIONAL COURSE (3 credits) **

One course, 100 to 400 level, from above

OR one ECE 400-level course

BASIC PREP Requirements 37**INTRO to ENGINEERING**

ENGR 100 (2)

MATHEMATICS (16)

MATH 115 (4) *Calculus I*

MATH 116 (4) *Calculus II*

MATH 205 (3) *Calculus III*

MATH 216 (3) *Diff Equations*

MATH 217 (2) *Matrix Algebra*

CHEMISTRY and PHYSICS

CHEM 144 (4)

PHYS 150 (4)

PHYS 151 (4)

DISCRETE MATH & PROB/STATS

MATH/ECE 276 (4) *Discrete Math*

IMSE 317 (3) *Engr Prob/Stats*

PROFESSIONAL Requirements 64**ECE CORE – 5 courses** (20 credits)

ECE 210 (4) *Circuits*

ECE 270 (4) *Computer Methods I*

ECE 273 (4) *Digital Systems*

ECE 311 (4) *Electronics I*

ECE 372 (4) *Microprocessors*

CE CORE – 8 courses (28 credits)

ECE 370 (4) *Adv Programs in CE*

ECE 375 (4) *Computer Architecture*

ECE 471 (4) *Computer Networks*

ECE 473 (4) *Embedded Systems*

ECE 475 (4) *Computer Hardware*

ECE 478 (4) *Operating Systems*

ECE 4982 (2) *Computer Engr Design I*

ECE 4984 (2) *Computer Engr Design II*

PROFESSIONAL ELECTIVES (6-8 crdts)

ECE 3171 (4) *Analog & Discr Signals & Sys*

ECE 387 (4) *Digital Forensics*

ECE 413 (3) *Introduction to VLSI Design*

ECE 433 (4) *Intro to Multimedia Technology*

ECE 434 (4) *Machine Learning in Enginr*

ECE 435 (4) *Intro Mobile/Smart Dev & Tech*

ECE 438 (4) *Web Enginr Principles & Tech*

ECE 467 (4) *Digital Forensics II*

ECE 4881 (3) *Introduction to Robot Vision*

Notes: A) ECE 3801 is not counted for the

CE/EE dual degrees. CE/EE dual degrees

students must take ECE 3171 instead.

B) Students receive credit for only one from

ECE 3171, ECE 317, and ECE 3801.

APPLIED BUSINESS Course (3)

ENGR 400 (3) *Applied Bus Techniques*

APPROVED ELECTIVES (5-7 credits)**A partial list of approved electives:**

ECE 3171, ECE 319, ECE 385, ECE 387,

ECE 414, ECE 415, ECE 433, ECE 434,

ECE 435, ECE 436, ECE 438, ECE 443,

ECE 4431, ECE 446, ECE 450, ECE 460,

ECE 467, ECE 480, ECE 4881, ECE 491,

ENGR 350, IMSE 3005, IMSE 381, IMSE

421, IMSE 4425, IMSE 4545, ME 230, ME

260, or other CECS courses with approval

from student's advisers.

Note: Credit for only one from ECE 3171,

ECE 317, and ECE 3801.

Note: Professional Electives and Approved

Electives must total at least 13 credits.

Optional Concurrent Degree**Requirements for CE/EE:**

CE majors who also want a concurrent
(dual) degree in EE, need to take:

A) The following 16 credits:

ECE 3171 (4) *Analog and Discrete
Signals and Systems*

* ECE 385 (3) *EE materials*

ECE 450 (4) *Communications*

ECE 460 (4) *Automatic Control Systems*

ECE 480 (4) *Digital Signal Processing*

* [ECE 385 (3) These 3 credits count as
PROFESSIONAL ELECTIVES only
for CE/EE dual degrees majors, for a net
of 16 credits for the concurrent degree
in EE under A)]

B) One of the following three courses:

ECE 414 (4) *Electronics II*

or ECE 415 (4) *Power Electronics*

or ECE 436 (4) *Electric Machines and
Hybrid Drives*

These 4 credits count towards the CE
degree's **APPROVED ELECTIVES.**

More detailed information about the
requirements leading to two concurrent
degrees, in EE and CE, available online:
[www.engin.umd.umich.edu/SRA/
circ_requir.php](http://www.engin.umd.umich.edu/SRA/circ_requir.php) <link>

NOTE: AAAS, STS, and WGST disciplines
have different courses for the Humanities Area
and Behavioral or Social Sciences Area.

NO-CREDIT courses DON'T count
towards the degree. NO-CREDIT
courses include ARTH 105, ECON 305,
POL 300, PSYC 381, SOC 383, and
many others. **Check the list!** [11/11]