

ID \_\_\_\_\_

Curriculum Sheet for Catalog Year **Fall 2017****DEARBORN DISCOVERY CORE (DDC)  
Requirements 21****WRITTEN AND ORAL COMM.**

(6 credits)

*Composition Placement Exam required*

COMP 105 (3) and

COMP 270 (3)

*Both required if not taken to fulfill DDC**Written and Oral Communication***HUMANITIES AND THE ARTS**

(6 credits)

See DDC approved list in Degree Works or

<https://app.smartsheet.com/b/publish?EQ>[BCT=DAFF687F800B4FE89910A9CEA66B1627](https://app.smartsheet.com/b/publish?EQ&BCT=DAFF687F800B4FE89910A9CEA66B1627)**SOCIAL AND BEH. ANALYSIS (9 credits)**

ECON 201 (3 cr) and

OB 354 (3 cr)

*Both required if not taken in fulfillment of**DDC Soc. and Beh. Analysis*

Additional (3 credits) must be chosen from

DDC approved list in Degree Works or

<https://app.smartsheet.com/b/publish?EQ>[BCT=DAFF687F800B4FE89910A9CEA66B1627](https://app.smartsheet.com/b/publish?EQ&BCT=DAFF687F800B4FE89910A9CEA66B1627)**INTERSECTIONS (6 credits)**

Choose one course from DDC approved list in

Degree Works or

<https://app.smartsheet.com/b/publish?EQ>[BCT=DAFF687F800B4FE89910A9CEA66B1627](https://app.smartsheet.com/b/publish?EQ&BCT=DAFF687F800B4FE89910A9CEA66B1627)

Choose one of the following courses (3 cr) to

satisfy both INTERSECTIONS and

TECHNICAL ELECTIVES: CIS 479 (3),

ENGR 400 (3), ENT 400 (3).

**Important DDC Notes:**

- DDC requirements apply to Freshmen admitted fall 2015 and later, and to Transfers admitted fall 2017 and later.
- Many DDC courses fulfill multiple categories. However, a single DDC course may be used for a **maximum of three** DDC categories
- SWE students **MUST** graduate with a minimum **120 credits**

**\*\*Beware NO-CREDIT courses\*\***

NO-CREDIT listed at end of CECS

Handbook:

<https://umich.app.box.com/s/6a5c4j9hwlcnpzy7o2xjmvrlrtumvoj>**MATHEMATICS, Sciences, Mgmt 36****MATHEMATICS & STATISTICS (21)**MATH 115 (4) *Calculus I**(Fulfills DDC Quant. Thinking)*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)***(Fulfills DDC Natural Sciences)*

Two courses, 8 credits, in a sequence from:

BIOL 130 (4) and BIOL 140 (4)

*or* CHEM 134 (4) and CHEM 136 (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 144CHEM 136 *or* CHEM 146

CHEM 225 CHEM 226 CHEM 227

GEOL 118 GEOL 218

PHYS 125 *or* PHYS 150PHYS 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 (3 credits)**OB 354 (3) *Organizational Behavior**(Fulfills 3 cr. of DDC Soc. and Beh.**Analysis)*

**\*\* Only 1 course from CIS 294, CIS 296  
or CIS 297 may be used towards the 120  
credits of the degree**

**CIS COURSES and ELECTIVES 63****CIS CORE – 7 courses (28 credits)**CIS 150 (4) *Computer Science I*CIS 200 (4) *Computer Science II*CIS 310 (4) *Comp Org & Assembly Lang*CIS 3501 (4) *Data Struc & Alg for SE*CIS 375 (4) *Software Engineering I**(Fulfills DDC Upper-Level Writing)*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**(Senior Design fulfills DDC Capstone**and Critical / Creative Thinking)***ONE APPLICATION AREA SEQUENCE (7-9)**(Appl Area & Tech Electives must total **17**)Any courses taken in this sequence cannotbe used for Technical Electives credit.

a) Information Systems Sequence (7)

CIS 425 (4) *Information Systems*CIS 447 (3) *Compt & Network Security*

b) Computer Game Design Sequence (9)

CIS 297 (3) *Introduction to C#*

[CIS 297 is required. 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*

Take one of the following two courses:

CIS 435 (3) *Web Technology*CIS 436 (3) *Mobile Appl. Des & Imp***TECHNICAL ELECTIVES (8 to 10)**CIS 294, *or* CIS 296, *or* CIS 297 (3)\*\*CIS 381 (4) *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*CIS 435 (3) *Web Technology*CIS 436 (3) *Mobile App Des & Imp*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*CIS 488 (3) *Computer Game Design II*ECE 372 (4) *Microprocessors*ECE 473 (4) *Embedded System*ENGR 400 (3) *Applied Bus Tech*ENT 400 (3) *Intro to Entrepreneurship***GENERAL ELECTIVES (4 credits)\*\***