

### B. S. in Computer and Information Science or in Software Engineering

| UNIVERSITY of MICHIGAN – DEARBORN<br>Courses and Course Groups  | MONROE COUNTY COMM. COLLEGE<br>transferable courses applicable to the major:   | Monroe<br>Credits | U M-Db<br>Credits  |
|---|--|-------------------|--------------------|
| <b>1. Composition</b> 105 and 270 (6 credits)   | <b>English</b> 151 and either 155, or 152, or 254 *  | 6                 | 6                  |
| <b>2. Economics</b> 201 (3 credits)   | <b>Economics</b> 251   | 3                 | 3                  |
| <b>3. Humanities</b> (6 credits)<br>(Hum)<br>Take two courses in the humanities.<br>See note below **   | <b>Humanities</b> ** Take any two courses from:<br>Art 280, 281, 282; English 251, 252, 253, 255,<br>260, 267, 268; Foreign Language; Music 265,<br>268; Philosophy 151, 152, 253  | 6 (or 8)          | 6                  |
| <b>4. Behavioral/Social Sciences</b> (6 credits)<br>(BS/SS)<br>Take two courses in the behavioral/social<br>sciences. See note below **   | <b>Behavioral/Social Sciences</b> ** Take two from:<br>ANTH 152, 155, 165; ECON 252, 256;<br>HIST 151, 152, 153, 154, 155, 158, 159, 160, 255,<br>256; POLS 151, 211, 221, 252, PSYC 151, 152,<br>153, 254; SOC 151, 152, 251, 252 | 6                 | 6                  |
| <b>5. Mathematics</b> Math 115, 116, 217 (or 227)   | <b>Mathematics</b> Math 171, Math 172, Math 251  | 11                | 10                 |
| <b>6. Natural Science</b> – a 2-course sequence (8 hrs)<br>SE and CIS students, Computer Science (CS)<br>Option or Information Systems (IS) Option, need<br>to take eight credits in a sequence of two science<br>courses, <b>with labs</b> , in the same science discipline. | Take <b>two science courses</b> (8 credits) in a two-<br>course sequence (e.g. Phys I and Phys II) from:<br>EITHER Biology 151 and 153, OR Chemistry<br>151 and 152, OR Physics 151 and 152 ***,<br>OR Physics 251 and 252 ***     | 8                 | 8                  |
| <b>7. Natural Science</b> – additional course (4 hrs)<br><b>NOT needed for CIS-IS Option</b><br>The third laboratory science course (4 credits),<br>needed for CIS-CS and SE, may be in a different<br>science from the two science courses above.                            | Take <b>one other science course</b> from: ***<br><b>NOT needed for CIS-IS Option</b><br>Astronomy 151, Biology 151, 153, 251+252, 264<br>Chemistry 151, 152, 251, 252, ESC 151,<br>Physics 151, 152, 251, 252                     | 4 (or 5)          | 4                  |
| <b>8a. Computer and Information Science</b><br><br>CIS 150 (4 credits)<br>CIS 200 (4 credits)   | <b>Computer and Information Science</b><br>CIS 132 (2) [When CIS 132, 150, and 250 – all<br>CIS 150 (3) three courses – are taken they<br>CIS 250 (3) transfer as 8 credits of 150 & 200]  | 2<br>3<br>3       | 2<br>3<br>3        |
| <b>8b.</b> CIS 275, Discrete Structures (4 credits)   | CIS 167 (3) + 1 credit from CIS 152, 155, or 175   | 3 + 3             | 4 + 2              |
| <b>8c.</b> CIS 310, Computer Org & Assembly Lang (4)  | CIS 268  | 4                 | 4                  |
| <b>9. Specific Programming Language</b><br>Take only one from: CIS 294 or CIS 296 or 297  | Take only one from:<br>CIS 152; CIS 175 or 275   | 3                 | 3                  |
| <b>10. ACC 298</b> (3) [needed for IS Option only]  | <b>Accounting</b> 151 [required for IS Option only]  | 4                 | 3                  |
| <b>11. Electives outside cis, math, science, enginrng</b><br>6 credits for <u>CIS Computer Science</u> (CS) Option<br>4 credits for <u>Software Engineering</u> (SE) degree   | <b>Electives outside cis, math, science, engineering.</b><br>Additional courses from rows #3, #4, or other<br>transferable courses outside cis/math/science/engin  | Varies            | 6 in CS<br>4 in SE |
| <b>12. General Electives</b><br>8 credits for <u>CIS Information Systems</u> (IS) Option  | <b>General Electives</b> from: CIS 109, 112, 118, 130,<br>152, 155, 171, 172, 173, 175, 177, 205, 208, 209,<br>216, 220, 234, 252, 258, 267, 275, 276; ACCT<br>152, MATH 164, or other courses from above                          | Varies            | 8 in IS            |

- \* All U of M-Dearborn students, both freshmen and sophomores, are required to take a English Composition placement test. Students who took English 151 and 152 but place below Composition 105 will need to take Composition 227 at U of M-Dbn.
- \*\* After transfer to UM-Db, CS option students take **one** 300/400-level course in one **same** subject used in either Hum or BS/SS.
- \*\*\* Credit for only one of Physics 151 and 251 if both are taken. Credit for only one of Physics 152 and 252 if both are taken.

**Notes** (apply to both sides of this sheet):

- Seven undergraduate programs offered: BS in Computer & Information Science or in Software Engineering, and BSE in Electrical, Industrial and Systems, Manufacturing, Mechanical, or Computer Engineering – all with option of co-op program.
- GPA of 2.75** (overall GPA, separate math GPA, separate science GPA) needed to enter Coll of Engr and Comp Science.
- A maximum of 62 credits** transfer from community colleges. Courses with C- grade or below do not transfer.
- Transfer is possible before completion of all courses listed, for either Fall (Sept), Winter (Jan), or Summer (May) entry.
- Since requirements may change, it's a student's responsibility to check with UM-Dearborn Admissions for latest information.

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