## 2+2 Computer Engineering Transfer Agreement with Shepherd U and Hagerstown CC

| Нас                | gerstown Community College Cou      | Shepherd University Equivalent Course |       |                  |   |        |        |  |
|--------------------|-------------------------------------|---------------------------------------|-------|------------------|---|--------|--------|--|
| YEAR ONE           |                                     | YEAR ONE                              |       |                  |   |        |        |  |
| Fall Course ID     | Course Title                        | Cred.                                 | CORE  | Fall Course ID   | Course Title                            | Cred.  | CORE   |  |
| ENG 101            | English Composition                 | 3                                     |       | ENGL 101         | Writing and Rhetoric I                  | 3      | T1-ENG |  |
| MAT 203            | Calculus I                          | 4                                     |       | MATH 207         | Calculus I                              | 4      | T1-MA  |  |
| ECO 201            | Macroeconomic Principles            | 3                                     |       | ECON 205         | Principles of Macroeconomics (CK)       | 3      | T2-SO  |  |
| EGR 103            | Introduction to Engineering Science | 3                                     |       | ENGR 101         | Engineering I                           | 3      |        |  |
| CHM 103            | General Chemistry I                 | 4                                     |       | CHEM 207/207 L   | General Chemistry I                     | 4      |        |  |
| FALL TOTAL         | YEAR 1                              | 17 hrs                                |       | FALL TOTAL       | YEAR 1                                  | 17 hrs |        |  |
| Spring Course ID   | Course Title                        | Cred.                                 | CORE  | Spring Course ID | Course Title                            | Cred.  | CORE   |  |
| ENG 102            | Composition and Literature          | 3                                     |       | ENGL 102         | Writing and Rhetoric II                 | 3      | T1-ENG |  |
| MAT 204            | Calculus II                         | 4                                     |       | MATH 208         | Calculus II                             | 4      |        |  |
| GEO 105            | World Regional Geography            | 3                                     | DIV   | GEOG 202         | World Regions (GL)                      | 3      | T2-SO  |  |
| ART 101            | Intro to Visual Arts                | 3                                     | AR/HM | ART 103          | Introduction to Visual Art (GL)         | 3      | T2-AR  |  |
| CHM 104            | General Chemistry II                | 4                                     |       | CHEM 209/209 L   | General Chemistry II (Not required)     | 4      |        |  |
|                    |                                     |                                       |       |                  |   |        |        |  |
| SPRING TOTAL       | YEAR 1                              | 17 hrs                                |       | SPRING TOTAL     | YEAR 1                                  | 17 hrs |        |  |
| YEAR TWO           |                                     |                                       |       | YEAR TWO         |   |        |        |  |
| Fall Course ID     | Course Title                        | Cred.                                 | CORE  | Fall Course ID   | Course Title                            | Cred.  | CORE   |  |
| PHY 203            | Principles of Physics I             | 5                                     |       | PHYS 221/221L    | General Physics I w/ Lab Elective 1cr.  | 4+1    | T1-LS  |  |
| EGR 210            | Digital Logic Design                | 4                                     |       | CPE 305          | Digital Logic Design w/ Lab             | 4      |        |  |
| HIS 101            | World History to 1500               | 3                                     |       | HIST 101         | Hist Civ: Ancient Worlds                | 3      | T1-HIS |  |
| MAT 205            | Calculus III                        | 4                                     |       | MATH 309         | Calculus III                            | 4      |        |  |
|                    |                                     |                                       |       |                  |   |        |        |  |
| FALL TOTAL         | YEAR 2                              | 16 hrs                                |       | FALL TOTAL       | YEAR 2                                  | 16 hrs |        |  |
| Spring Course ID   | Course Title                        | Cred.                                 | CORE  | Spring Course ID | Course Title                            | Cred.  | CORE   |  |
| PHY 204            | Principles of Physics II            | 5                                     |       | PHYS 222/222L    | General Physics II w/ Lab Elective 1cr. | 4+1    | T1-LS  |  |
| MAT 206            | Differential Equations              | 4                                     |       | MATH 310         | Differential Equations                  | 4      |        |  |
| EGR 208/208 L      | Systems and Circuits w/ Lab         | 4                                     |       | CPE 221/222      | Intro. To Electrical Engineering w/ Lab | 4      |        |  |
| IST 232 or CSC 232 | Introduction to Java Programming    | 3                                     |       | CIS 211          | Computer Language Concepts              | 3      |        |  |
|                    |                                     |                                       |       |                  |   |        |        |  |
| SPRING TOTAL       | YEAR 2                              | 16 hrs                                |       | SPRING TOTAL     | YEAR 2                                  | 16 hrs | 66 hrs |  |

|                |   | Shep       | herd Un | iversity Courses |                                 |        | 1000  |
|----------------|---|------------|---------|------------------|---------------------------------|--------|-------|
| YEAR THREE     |   | YEAR THREE |         |                  |                                 |        |       |
| Fall Course ID | Shepherd Course Title                     | Cred.      | CORE    | Spring Course ID | Shepherd Course Title           | Cred.  | CORE  |
| CPE 224/225    | Electrical Circuits w/ Lab                | 4          |         | ENGR 102         | Engineering II                  | 3      |       |
| CPE 234        | Introduction to Networking                | 3          |         | MATH 321         | Probability and Statistics      | 3      |       |
|                |   |            |         | MATH 314         | Statistics                      | 3      | T1-MA |
| MATH 307       | Introduction to Linear Algebra            | 3          |         | CPE 386          | Computer Organization           | 4      |       |
| MATH 254       | Discrete Mathematics                      | 3          |         | COMM 202         | Fundamentals of Speech (MD)     | 3      | T2-HM |
| CIS 104        | Introduction to Computer & Infor.Sciences | 3          |         |                  |                                 |        |       |
| FALL TOTAL     | YEAR 3                                    | 16 hrs     |         | SPRING TOTAL     | YEAR 3                          | 16 hrs |       |
| YEAR FOUR      |   |            |         | YEAR FOUR        |                                 |        |       |
| Fall Course ID | Shepherd Course Title                     | Cred.      | CORE    | Spring Course ID | Shepherd Course Title           | Cred.  | CORE  |
| CPE 489        | Engineering Capstone Project I            | 1          | T2-WM   | CPE 490          | Engineering Capstone Project II | 2      | T3-CP |
| CPE 221/222    | Intro to Electrical Engineering w/ Lab    | 4          |         | ENGR 242         | Engineering Dynamics            | 3      |       |
| ENGR 241       | Engineering Statics                       | 3          |         | CIS 390          | Operating Systems               | 3      |       |
| CPE 433        | Microprocessor System Design w/ Lab       | 4          |         | Gen Ed 300+      | Social Sciences (SO)            | 3      | T2-SO |
| ENGR 326       | Signal Processing                         | 3          |         | Wellness         | GSPE 210/FACS 120/NURS 310      | 3      | T2-WE |
| Gen Ed 300+    | Humanities (HM)                           | 3          | T2-HM   |                  |                                 |        |       |
| FALL TOTAL     | YEAR 4                                    | 18 hrs     |         | SPRING TOTAL     |                                 | 14 hrs |       |
|                |   |            | TOTAL   | CREDITS          | FOR ALL FOUR YEARS              | 130    |       |

Approved By:

Mary J.C. Hendrix, President

**Shepherd University** 

**Date** 

Carol A. Rothstein, Acting Chief Academic Officer

on behalf of C. David Warner, Interim President

**Hagerstown Community College** 

Date