**BS IN COMPUTER ENGINERRING CHECKLIST**

**Mount Vernon Nazarene University, 2022-2023**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student ID \_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_

**BA/BS DEGREE REQUIREMENTS:**

Must complete ALL of the following:

\_\_ 1. Minimum of 120 semester hours.

\_\_ 2. General Education Core.

\_\_ 3. One (1) semester foreign language at the college level

 OR two (2) years of one high school foreign language.

\_\_ 4. Algebra (MAT0093) OR two (2) years of high school algebra and/or geometry

\_\_ 5. 40 semester hours of courses numbered 3000 or above. (marked with \* below)

\_\_ 6. Complete course work for an approved major.

\_\_ 7. Cumulative GPA of at least 2.00 in all courses at MVNU.

\_\_ 8. No grade below "C-" in required major courses.

\_\_ 9. Complete Junior-Senior assessment program.

**GENERAL EDUCATION CORE REQUIREMENTS**

**Competencies 10-15 Common Core 22**

\_\_ ENG1083 or ENG1084 College Writing 3-4 \_\_ HUM1012 Discipleship, Christian Mind 2

\_\_ Foreign Lang or Communication 3-4 \_\_ BIB1013 Narrative of Scripture 3

~~\_\_ Quantitative Reasoning 3-4~~ \_\_ HIS1013 Western Tradition 3

\_\_ Health & Wellness 1-3 \_\_ PHI2013 Love, Justice and Good Life 3

 or Honors Core Conversations

 \_\_ HUM2013 Arts and Human Identity 3

**Explorations** **11-17** \_\_ SCI3012 Science and Modern Mind 2\*

\_\_ Crossing Cultures 0-4 \_\_ THE3003 Christian Beliefs 3\*

~~\_\_ Natural Science with lab 4~~ \_\_ ITD5013 Contemporary Concerns 3\*

\_\_ Social Science 3

\_\_ The Arts 1-3

\_\_ Literature or Honors Core Conversation 3

# BS COMPUTER ENGINEERING REQUIREMENTS

**Major Courses 62-65**

\_\_ CSC1024 Computer Science I 4 \_\_ EGR3002 Engineering Economics 2\*

\_\_ CSC2024 Computer Science II 4 \_\_ EGR3123 Digital Signal Processing 3\*

\_\_ EGR1001 Comp. Eng. w/MATLAB 1 \_\_ EGR3133 Intro to Microcontrollers 3\*

\_\_ EGR1033 Computer-Aided Design 1 \_\_ EGR3174 Analog Electronics 4\*

\_\_ CSC1053 Elementary Discrete Math 3 \_\_ EGR3184 Adv. Digital Logic Design 4\*

\_\_ CSC2033 Data Structures & Algorithms 3 \_\_ EGR3164 Communication Systems 4\*

\_\_ EGR2043 Statics 3 \_\_ EGR4001 Engineering Ethics 1\*

\_\_ EGR2033 Digital Systems 3 \_\_ EGR4012 Senior Design Project I 2\*

\_\_ EGR2033 Dynamics 3 \_\_ EGR4022 Senior Design Project II 2\*

\_\_ EGR2064 Electric Circuit Analysis 4 \_\_ Electives (Ex. CSC-3044) 5-8

\_\_ CSC3054 Computer Org & Architecture 4\* \_\_ Electives (EGR 3014/3063/3033/CSC-3/4 level)

**Corequisites Math Courses 18**

\_\_ MAT1034 Calculus I 4 \_\_ MAT2063 Intro to Statistics 3

\_\_ MAT2034 Calculus II 4 \_\_ MAT3043 Differential Equations 3\*

\_\_ MAT3034 Multivariable Calculus 4\*

**Corequisites Science Courses 14**

\_\_ CHE1034 General Chemistry I 4 \_\_ PHY2065 University Physics II w/ Lab 5

\_\_ PHY2055 University Physics w/ Lab 5