| AA CIS Program $\quad$ Semester: Fall/Spring/Summer |  | Required Courses in Major |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Level of Instruction Criteria | Program Outcomes | $\begin{gathered} \text { CS1313 } \\ \text { Programming } \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{CS} 1333 \\ \text { Programming } \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} \text { CS2020 } \\ \text { Networking } \\ 1 \end{gathered}$ | $\begin{gathered} \text { CS2243 } \\ \text { Internet } \\ \text { Programming } \\ \hline \end{gathered}$ |  |
| (I) Introduced <br> At the collegiate level, students are not expected to be familiar with the content or skill. <br> Instruction and learning activities focus on basic knowledge, skills, and/or entry-level complexity. | 1. Upon completion of the program, the student will build a program in an industry standard programming language. <br> A. Identify common programming nomenclature. <br> B. Demonstrate efficient programming structure. <br> C. Troubleshoot syntax errors. | IR | A |  | A |  |
| (R) <br> Reinforced <br> At the collegiate level, students are expected to possess a basic level of knowledge and familiarity with the content or skills. <br> Instruction and learning concentrate on enhancing and strengthening previous collegiate knowledge/skills and complexity | 2. Upon completion of the program, the student will demonstrate the design of fundamental networks. <br> A. Identify common components of a network. <br> B. Recognize and correct networking faults. <br> C. Define IP Address structure. |  |  | 1 | R |  |
| (A) <br> Advanced <br> At the collegiate level, students are expected to possess a strong foundation in the knowledge, skill or competency. <br> Instruction and learning activities continue to build upon previous competencies with increased complexity and application of use. | 3. Upon completion of the program, the student will identify security practices that apply to computing and demonstrate graphic processing. <br> A. Give examples of security practices and select appropriate security measures. <br> B. Demonstrate different file types. <br> C. Construct a graphic using standard design software. |  | 1 | IR | I |  |

