**Adapted CTE Course Blueprint for**

**IC61 dRAFTING I**

(Recommended hours of instruction: 135 to 150 hours)

| Essential Std # | Units, Essential Standards, and Indicators  (The Learner will be able to:) | Course  Weight | RBT  Designation |
| --- | --- | --- | --- |
| 1 | 2 | 3 | 4 |
|  | **Total Course Weight** | **100%** |  |
|  |  |  |  |
| **1.00** | **Understand Fundamental Concepts and Trends of Drafting** | **5%** | **B2** |
|  | * 1. Understand BIM, and Rapid Prototyping.   2. Understand Industrial Design, Sustainable Design, and LEED.   3. Understand Career Options. |  |  |
|  |  |  |  |
| **2.00** | **Understand the Ideation process (big 6 in academia) (SUPPLEMENTAL)** |  |  |
|  | [**Click here for link to curriculum**](http://curriculum.autodesk.com/student/public/index/download/file/DesignThinking.pdf) |  |  |
|  |  |  |  |
| **3.00** | **Apply sketching skills and techniques (Architectural & Engineering)** | **15%** | **C3** |
|  | 3.01 Apply Rough sketching (lettering for clarity, uppercase caps).  3.02 Apply 2D sketching – Single and Multi-view.  3.03 Apply 3D sketching – Pictorials. |  |  |
|  |  |  |  |
| **4.00** | **Apply CAD User Skills for Certification**  **AutoCAD (**[**Click here for link to curriculum**](http://curriculum.autodesk.com/student/public/level1/download/download_type/pdf/software_id/1)**)**  **OR**  **Solidworks** | **80%** | **C3** |
|  | 4.01 Apply procedures for working with the User interface (navigation tools).  4.02 Apply procedures for creating drawings (coordinates and draw tools).  4.03 Apply procedures for manipulating objects (grips, object selection, drawing aids).  4.04 Apply procedures for working with the drawing organization and inquiry commands (layers).  4.05 Apply procedures for altering objects (modifying).  4.06 Apply procedures for working with layouts (templates, viewports).  4.07 Apply procedures for annotating the drawing (adding Text).  4.08 Apply procedures for dimensioning.  4.09 Apply procedures for hatching objects( Drawing enhancements).  4.10 Apply procedures for working with reusable content (blocks).  4.11 Apply procedures for creating Additional drawing objects (polylines splines ellipse).  4.12 Apply procedures for plotting the drawing. |  |  |