1. Course: ENCP 102 - Introduction to Computer-Aided Design
2. Credits and Contact Hours: 3 credits, 3 lecture hours per week
3. Instructor: Varies
4. Example Textbook: Engineering Graphics Essentials with AutoCAD 2022 Instruction, Kirstie Plantenberg, SDC Publications, ISBN: 978-1-63057-434-5
5. Course Information
   1. Catalog Description: Principles and practice of visualization and graphical representation using modern computer-aided design tools.
   2. Prerequisites: none
   3. Substitute for ECIV 111 or EMCH 111
6. Course Goals
   1. Learning Outcomes. Students will be able to:
      1. Communicate mechanical designs via pictorial and orthographic hand sketching.
      2. Use CAD software to create sets of two-dimensional drawings that adhere to industrial graphics standards including dimensions, symbols, and views.
      3. Use CAD software to create three-dimensional, parametric, computer models and generate working drawings from the models.
   2. Learning Outcomes (LOs) relation to ABET EAC Criterion 3 Student Outcomes

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| ABET EAC Criterion 3 Student Outcomes | LO1 | LO2 | LO3 |
| an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics. | X | X | X |

1. Topics Covered

* Introduction to Engineering Drawings
* Computer Aided Design
* Orthographic Projections
* Pictorial Drawings
* Dimensioning
* Sectioning
* Advanced Drawing Techniques
* Tolerancing
* Threads and Fasteners
* Assembly Drawings

1. Document History

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