

Computer Aided Design and Drafting Program Assessment Plan

Chair: Mark Broyles

Program Student Learning Outcomes

1. Digital Representation: Proficiency in a variety of industry standard CAD software platforms in order to design and document manufacturing projects.
2. Modeling: Proficient in ability to produce accurate digital models of mechanical parts using multiple CADD software platforms.
3. Assembly: Proficient in ability to create working assemblies of mechanical parts that accurately represents motion.
4. Drawings: Proficiency in creating drawing sets that effectively communicates all necessary dimensional and non-dimensional information.
5. Communication: Competent in ability to understand the needs of a project or client based on written, drawn or spoken information. Ability to communicate back to stakeholders, necessary technical information in an effective and timely manner.

Curriculum Map

We will be using the projects of our students in CAD 259 Advanced Solidworks, our class that synthesizes much of the course learning objectives of our degree program.

Key:

I-Introduced

R-Reinforced

P-Practiced

D-Demonstrated

TBD-To be determined

Course	PSLO 1	PSLO 2	PSLO 3	PSLO 4	PSLO 5
CAD 101	I	I		I	TBD
CAD 102	R	R		R	TBD
CAD 240	P	R	I	R	TBD
CAD 244	P	P	P	P	TBD
CAD 255	D	P	I	P	TBD
CAD 259	D	D	D	D	TBD
CAD 262	D	D	D	D	TBD
CAD 264	P	P			TBD
CAD 280	P/D	P/D	P/D	P/D	TBD
CAD 289	P/D	P/D	P/D	P/D	TBD

Assessment Schedule

In the Summer of each year, between the end of the Spring semester and beginning of the Fall semester and over a four-week period between the program will conduct its annual assessment of its PSLO(s) for the academic year. The assessment will be scored by a jury of instructors representative of the particular curriculum areas that we intend to evaluate.

We will present and review student work to the Department Chair, Adjunct Faculty, and select Advisory Board members.

Assessment Timeline

The proposed Assessment schedule will alternate over a four-year period as follows:

Year 1: Combined Outcome Assessment: Practice Readiness (as a starting point to gauge overall effectiveness and bring awareness to the interrelationship of all our curricular outcomes relative to the achievement of any one successful PSLO).

Year 2: Digital Representation and Modeling

Year 3: Assembly and Drawings

Year 4: Combined Outcome Assessment (repeating the cycle)

Use of Results

During the annual assessment meeting the chair will meet with the instructors to review the assessment results from the prior year. Assessment will be used as the basis for critiquing the current approaches to the materials and methodologies in the contributing courses and for development of more curricular integration and cross-learning across the course offerings. The assessment results and any planned actions will be shared with the Dean of CTE, our Advisory Board, and CU Denver's College of Architecture stakeholders.

Continuous Improvement of the Assessment Process

During the annual assessment meeting, there will be discussion of the current tools in use and a determine made as to whether the tools warrant any revision. Also, the chair and adjunct instructors will determine whether to continue with the current assessment timeline or to make any changes.