

Open Educational Resources for CAD

Christina Hollenbeck, CET/MET, Ferris State University

Conceive



- Recognize that the cost of education is increasing and posing challenges for students.
- Be aware that the cost of textbooks is rising.
- Acknowledge that some students cannot afford to buy text or other materials for their courses.
- Be open to the idea that there may be free OER options available.

Develop



- Be part of the SOLUTION!
- Research the VAST amounts of OER content available.
- Scrutinize the content for quality and use as appropriate.
- Be willing to create your own OER materials and share them if none exist.
- Add new content to your course from OER sources when available.

Test



- Start small.... Think BIG!
- Try your new OER course material, assignments, and units on one or two course sections.
- Consider adding in only an assignment or a unit and when it works well, add in more.
- Continue to revise your course until all the material is OER if possible.

Implement



- Discuss OER options within your department.
- Offer students FREE open source educational materials.
- SHARE the successful assignments, units, chapters, and texts with the OER community.
- Make certain the OER materials meet all the course requirements.
- Documents success and practice continuous course improvement!



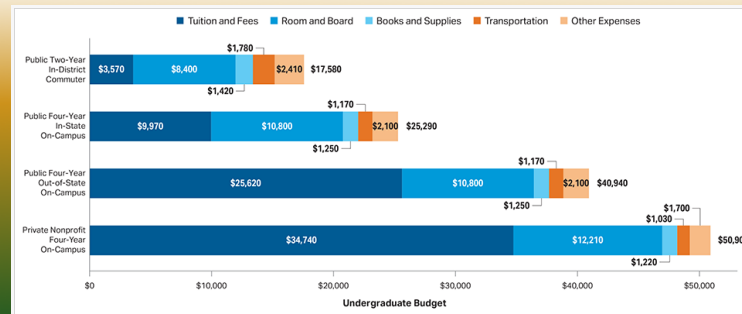
What Open Access Textbook and Program options exist for ETEC140 Engineering Graphics Comprehensive?

Which options will meet the course requirements yet also reduce textbook cost for students?... ONSHAPE does!

Onshape offers a FREE Education Plan that claims is the best CAD solution for academic settings. The educational version is a FULL version.

Onshape was used successfully in the Fall 2017 semester instead of other parametric CAD options in ETEC140. It will be used again in 2018.

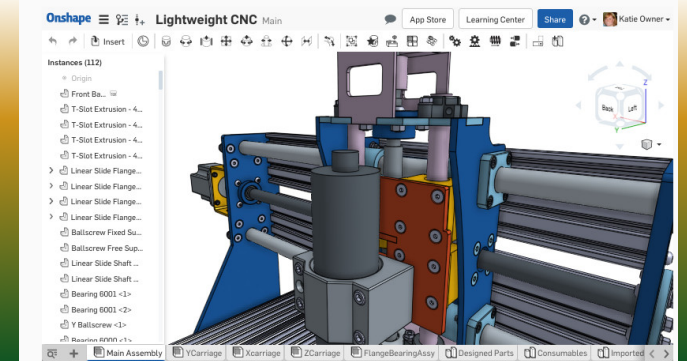
Average Estimated Undergraduate Budgets, 2017-18:



<https://trends.collegeboard.org/college-pricing/figures-tables/average-estimated-undergraduate-budgets-2017-18>

Onshape Fundamentals: CAD

Learn fundamental CAD concepts specific to Onshape



<https://learn.onshape.com/collections/onshape-fundamentals->