

**ISIT/FACILITIES/OTHER EQUIPMENT REQUEST 2018:**

Program or Service Unit:	Engineering
Submitter:	Pat Aderhold
Extension:	x4055
E-mail:	patrick.aderhold@bakersfieldcollege.edu

Funding Source or needs funding. Please explain	Needs funding
---	---------------

**PLEASE NOTE: If you have multiple requests, please submit multiple forms.**

*Please share as many details as possible such as room location(s), type of equipment and/or software requested. If you have a cost estimate, that would be helpful, we will contact you for more details.*

*Please share as many details as possible such as room location(s), type of facilities request, remodel or construction request, safety concern, or furniture request.*

You will have an opportunity to present your request to the ISIT/FACILITIES OR CTE committee.

I am requesting the following:

Several Engineering courses (ENGR B24, B19C, B20) rely on specific software packages to teach major principles and accomplish SLOs. Others (B45 lab, B47 lab, B47 lecture) have modules that rely on basic software (Excel, Word, internet browsers) to facilitate group projects, individual projects and experimentation. Scheduling for B24, B19C and B20 can be difficult because of competition for computer labs with COMP, INDR and ARCH courses. An ideal and long-term solution would be to greatly expand the availability of computer labs so scheduling conflicts could be avoided and students would have access outside of class time to work on homework assignments, lab reports and detailed projects that can't be completed during class. A work-around has been the placement of a small number (up to 14) laptops in a cabinet in SE-45 to allow on-demand computer access. These machines are several years old, leading to issues of hardware inadequacy when trying to run processor- or graphics-intensive programs like SolidWorks or Dev C++. Additionally, classes typically have enrollment of 24-30, meaning students have to work in pairs or bring their own devices, reducing time on task and slowing mastery of the programs. If new computer lab space cannot be provided, another possibility is replacing these laptops with newer machines and expanding the number of available machines from 14 to 30.

