

**Bridgerland Technical College  
Equipment Request**

<u>Program Priority</u>	<u>Item Needed</u>	<u>Cost</u>	<u>Program(s)</u>	<u>Cost Center</u>	<u>Explain how will this increase student retention, generate additional students (growth), support a minimum student</u>	<u>How will it benefit the program(s)? What negative impacts exist without this equipment?</u>
1	Sewing Machines (5)	\$5,000	Fashion	2050	Right now the sewing machines that our students are using are at least 12 years old and require a lot of instructor time on repair/maintenance/trouble shooting.	New machines would provide students the opportunity to work on current industry equipment. It would also allow students and instructors to work more efficiently. Without updated machines we will not be able to effectively teach the sewing requirements for prerequisite courses for our pathways connection.
1	CBCT Machine	\$90,000	Dental	3010	It's the new and exciting thing in dentistry. It would excite and motivate current high school students to continue as an adult student. Dentists and staff would also need training and potentially come to Bridgerland for that training.	This is a 3D imaging machine that would benefit the students and the community. The dental community has expressed support in sending their patients to our lab to get the scan done, which also would give our students valuable practice and experience using the machine. Our students will not be trained for employment properly.
1	Chairs (80 to 175; 80 critical need, 175 somewhat necessary)	\$21,900	Nursing/Health	3150	Safety. Variability in cost is due to the number of chairs and programs involved. This purchase will not expand student volume. However, it will create a safe environment and is requested vigorously every semester by students.	Will provide safe seating conditions for nursing and medical assisting students (most critical need). The current seats rear back (buck) because they have broken locking mechanisms. Many have seat cushions that are not secured. These have been repaired many times. Additionally, the height adjustment devices no longer work, making for a long day if you are in your seat for six hours.
1	Switches (6)	\$3,000	Information Technology		All equipment would be split between both campuses. The hands-on labs are what is drawing students to our school. Having up-to-date equipment that the students could work on would attract more students. It would increase retention by practicing what they are studying in their courses.	Equipment needed for teaching hands-on labs. Without it, students only have book knowledge and not practical experience. Current switches are old, outdated, slow, loud, and overheat. They need to be unplugged after each lab.
1	New classroom table tops, Router Table, Trimmer...	\$1,200	Interior Design	4080	The 15 tables used in my classroom were damaged due to the leak that occurred in December 2016. The laminate table tops are warping and pulling up from the table and can not be used by students because they are uneven and are no longer secured to the table.	The benefit is that students have desks and tables to work on for projects and assignments as well as for laying out floor plans, concept visuals, and homework. The negative impact is that we are already short on tables for all the students who need a work surface. Not having enough space for students to work on has made it difficult to work on even the simplest assignments. For example, you have to balance your laptop, etc., on your lap because there is no surface space available.
1	Desks (24+16)	\$48,000	Business	5250	Currently, we have desks at the Logan campus that continue to drop trays in students laps. We have fixed them over and over until we have run out of locations to add additional holes. Though updating this equipment won't provide growth, it will provide safety for the students.	Updated desks can assist us in being able to better perform in the classroom. The underneath of our desks look like wood beetles have been busy enjoying the material. Keyboard trays are loose and continue to fall into unsuspecting students' laps. Student safety.

1	PLCs for STEM program (100)	\$20,000	Automated Mfg and Robotics (AM STEM Program)	6070	Our current PLCs are discontinued and outdated. We need to adopt a new model that is current and keeps students engaged with the latest technology in automation controls. We need to purchase more to accommodate growth or put a limit on enrollment for lack of training equipment. We can add more trainers without adding more teachers, thus improving our student/teacher ratio.	We lost some that burned out during last year's training. We are finding them difficult to replace as they are not being manufactured anymore and are outrageously priced. Time to switch them out with new.
1	Fanuc Robot Safe I/O (6)	\$4,800	Automated Mfg and Robotics (Controls Engineering)	6070	This will enable us to tie the robots into a Master Control Relay that controls safety throughout a manufacturing system, and we would need this module to be able to do this for capstone projects and other advanced courses. Will be useful for future additional workshops and modules.	In order to be able to teach some of the advanced features of Duel Check Safety (DCS), then we will need this module installed on each robot.
1	Megohmmeter to check motors	\$1,000	Automated Mfg and Robotics (Industrial Maintenance)	6070	We only have one now to share with the Brigham City Campus, which creates a bottleneck to students' completion rate. Necessary to check motors and for preventative maintenance with additional courses.	Requested by industry in our last advisory committee meeting as an essential skill students need.
1	Printed Circuit Board Router	\$50,000	Electronics (West Campus and BCC)	7510	We would like to develop a capstone project where an electronics student could design a circuit, make the PCB, assemble and solder the components, troubleshoot if needed, and use it to do something awesome! This is also a great recruiting tool as students come to check out the program to show how a board is made from start to finish. It would be great to do prototype projects for students and companies alike who are sponsoring a student's capstone project. We could add new classes and modules to the program with design and build of circuit boards.	We presently rely on advisory board members to give us printed circuit boards for soldering practice. It is getting harder to get old boards from them, especially those with the older through-hole technology. It would be beneficial if we had a PCB router - we could solve this problem, and more importantly, teach our students how to make PCBs. We could make all our training boards for the IPC soldering certification courses. This is a big draw to get and keep student's excitement throughout the program. We used to make our PCBs with chemicals that were very dangerous and were hazardous waste. Our equipment has since broken down beyond repair and it is not safe anymore to use chemicals. This router is safe without any toxic chemicals and teaches CNC principles.
1	84" Microsoft Surface Hub (2)	\$47,000	Information Technology	7520	This will bring a much needed collaboration for the Logan and Brigham campuses. There is only one instructor in Brigham; and this will allow Logan to teach labs to the students in Brigham while the instructor stays in the classroom.	This will bring a much needed collaboration for the Logan and Brigham campuses. There is only one instructor in Brigham; and this will allow Logan to teach labs to the students in Brigham while the instructor stays in the classroom.
1	53' Semi Trailer	\$10,000	CDL	7560	This trailer will allow use when we have additional students that are not able to drive all of the time because of limited seat space in current vehicles.	The need for an additional semi-trailer is critical to the program. This trailer will update our fleet to industry standards instead of the 48' trailer that we are currently using.
1	Backhoe/Loader	\$60,000	Heavy Equipment	7550	Backhoes are part of the curriculum and are needed to maintain the current student numbers that we have.	We no longer have a state best value contract on backhoe rental/lease so we have to look at different options for the backhoe. We are currently renting one for about \$6,500 annually. The backhoe is used by maintenance also.
1	New Machining Computers	\$50,000	Machine Shop	7780	We are in dire need to new computers in both classrooms. Mastercam, our CAD/CAM software that is used in most of the local shops to program their machines, has released a new version of the software that will not even load on our current computers.	Without being able to offer the latest version of Mastercam training to our students and the businesses we support with this training, we are in <b>BIG</b> trouble. We are hopeful that we can get new computers via the school wide computer big buy; if this does not happen, would like to submit our request here.

1	High Capacity Data Storage(NAS)	\$50,000	IS	8600		We keep generating more data (videos, curriculum, documents, etc.) everyday. We need a reliable and secure place to put all these files. A NAS would allow us to increase the size of G: drives and other network drives.
1	Restroom Cleaning Machines (3)	\$4,700	Custodial	8850		All of the equipment that is being requested is worn out and needs replaced. This will help the department be more effective in keeping the building clean. The aging equipment has been repaired over and over again.
1	High Resolution Monitors	\$12,800	Drafting/Media Design	7710	Students expect equipment and software to match current industry standards and view a program with sub-par or old equipment as unprofessional and lacking. They are less likely to join and stay in our program when they see, and attempt to use, inferior work station displays.	Widescreen, high resolution monitors are needed to match industry, and to properly display modern CAD and graphics software. Lack of modern monitors directly affect students' ability to use these high resource demanding programs.
1	Vacumn Tumbler	\$8,600	Meat Services	7770	We are seeing more seasoned meats in the industry. This will help them understand the process and be prepared for the workplace.	The equipment we have is worn out. It would be a better teaching environment with updated equipment.
1	CNC Router Table Saw	\$30,000	Building Trades	7320	This will allow instructors to teach on current technology/ equipment that is being used in industry today.	To upgrade our shop and teach current skills and techniques for industry.
1	Remodel of Demo Kitchen and Upgrade Audio and Visual Components	15,000	Culinary Arts	4170	Demonstrations are a vital part of instruction and student participation.	Current demonstration kitchen needs an upgrade in equipment and appearance.
1	Auto Extrication Equipment	\$29,000	Fire & Rescue	7250	Without extrication equipment, we can not teach the Recruit Candidate Academy. There are four skills that require extrication equipment. No extrication equipment, no certification, no students.	Always have to borrow this equipment to teach required skills. Fire departments are getting tired of letting us borrow this equipment. It's getting harder to borrow. Update on 8/3/17, we received a donation of extrication tools, they appear to be in working order but have not been used on cars yet.
1	Desk - Accounting	\$3,000	Administration	8500		
1	Scanner - Accounting	\$3,000	Administration	8500		
1	Computer Replacement	\$265,900	Information Systems	8600	Bridgerland's current computer replacement schedule for instructional and non-instructional computers, based on the number of computers and available funding (which is entirely non-state funds) is a 13-year rotation. The rotation cycle needs to be reduced to 5 years or less. Having current state-of-the-art computers is essential to student retention and student growth. We have the word "technology" in our name, but not in our classrooms.	
	<b>Subtotal Equipment Request</b>	<b>\$833,900</b>				
	<b>Less: Ongoing Equipment Funding</b>	<b>\$354,500</b>				
	<b>Total Equipment Request</b>	<b>\$479,400</b>				