What is Adaptive Design?
Adaptive Design is the process of modifying or adapting a product for use by a person who cannot use existing “off-the-shelf” versions of those products.

Why Adaptive Design?
People have unique needs which often require a customized solution. With FUSE, individuals are actively involved in working with a team of engineering students to design and build custom solutions to meet those needs.

FUSE Project Schedule

**Fall Semester**
- Projects Solicitation – Year-round
- Projects Selected – End of September
- Projects Begin – Mid-October
- Projects Completed – Early December

**Spring Semester**
- Projects Solicitation – Year-round
- Projects Selected – End of February
- Projects Begin – Mid-March
- Projects Complete – Early May

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OUR MISSION
FUSE (First Undergraduate Service Learning Experience) provides students with the opportunity to contribute to the community in a meaningful way. Through the application of the engineering design process, FUSE students, working with an individual client, will design, develop and deliver a solution to a real-world problem.

Students in the FUSE program designed and built a functional activities bench for the Boise VA Medical Center’s Occupational Therapy Department.

Pictured on front: Grayson is shown testing his new chair which allows him to sit independently in an upright position.

Pictured on Back: FUSE client Emily worked with engineering students to develop a collapsible carry-on for her walker (not pictured).

PAST PROJECTS

Bear, Lisa’s service dog, is shown wearing the customized harness and carrying system developed by FUSE students.

Dakota’s new backpack holder, which swings to his left side, allows him easy access to his backpack.

NEED A SOLUTION?
Prospective clients should have an unmet need or problem they would like help in solving which would allow them to become more independent with tasks of daily living.

Prospective clients should be aware of the following:

- There is no out-of-pocket expenses for clients that choose to participate in the program.
- Clients will be required to meet with students at various times at a location of the clients choosing within a 15 mile radius of BSU.
- Clients should be aware that there will be no Occupational or Physical Therapists involved in the FUSE program.
- There are no guarantees the students will be able to solve the client’s problem. There are however, strong expectations that students will deliver a working solution.
- There will be no long-term support available for devices created.
- Clients will be required to sign a liability waiver and photo release.
- The instructor will meet with prospective clients to ensure that the project is of an appropriate scope and scale for freshman students to complete in the allotted time.

FUSE: Real-World Adaptive Engineering Design