

SCHWEITZER ENGINEERING HALL PROGRAM



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Cover image sourced from WSU Facebook page with the following caption: Summer aerials with a drone on the campus of Washington State University, Monday, June 22, 2020.

Washington State University acknowledges that its locations statewide are on the homelands of Native peoples, who have lived in this region from time immemorial. Currently, there are 42 tribes, 35 of which are federally recognized that share traditional homelands and waterways in what is now Washington State. Some of these are nations and confederacies that represents multiple tribes and bands. The University expresses its deepest respect for and gratitude towards these original and current caretakers of the region. As an academic community, we acknowledge our responsibility to establish and maintain relationships with these tribes and Native peoples, in support of tribal sovereignty and the inclusion of their voices in teaching, research and programming. Washington State University established the Office of Tribal Relations and Native American Programs to guide us in our relationship with tribes and service to Native American students and communities. We also pledge that these relationships will consist of mutual trust, respect, and reciprocity.

PREPARED FOR:

Voiland College of Engineering and Architecture, Washington State University

PREPARED BY:

The Miller Hull Partnership

December 23, 2022

ACKNOWLEDGMENTS

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PLANNING COMMITTEE CHAIRS

Brett Stav, Staff Planning Committee
Haluk Beyenal, Research Planning Committee
Shelly Pressley and Krishnamoorthy Sivakumar, Teaching Planning Committee
Dar Neunherz, Shop Planning Committee
Mary Rezac, Steering Committee

STEERING COMMITTEE

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SCHOOLS AND DEPARTMENTS OF VOILAND COLLEGE

The Gene and Linda Voiland School of Chemical Engineering and Bioengineering
The Department of Civil and Environmental Engineering
The School of Design + Construction
The School of Electrical Engineering and Computer Science
The School of Engineering and Applied Sciences, WSU Tri-Cities
The School of Engineering and Computer Science, WSU Vancouver
Engineering and Technology Management
The School of Mechanical and Materials Engineering

ENGAGEMENT MEETINGS

On behalf of Voiland College and Washington State University we would like to acknowledge the students, employees, alumni, partners, donors and stakeholders that participated in shaping this program through the various meetings held in the fall of 2022.

SEPTEMBER 2022

Student Success Working Group
Teaching Working Group
Makerspace Focus Group
Campus Pop-up Open House
Faculty & Staff Open House
Shops Planning Committee
Research Planning Committee
Clubs & Faculty Advisors Focus Group
Engineering 120 and Capstone Student Working Group
Executive Leadership Advisory Board
Industry and Recruitment Partners
Capstone Sponsors
Schweitzer Engineering Laboratory Representatives

OCTOBER 2022

Steering Committee
Teaching Committee
Clubs Focus Group
Faculty & Staff Open House
Student Open House
Staff Committee
Shops Committee
Makerspace Focus Group
Student Success Working Group
WSU Community Open House
Energy & Environment
Engineering/Central Plant
Waste Management
Parking
Security
Scheduling
WSU Information Technology
Audio Visual Technology
Food Services
Advancement and Development
Maintenance and Custodial
Accessibility
Health and Safety

ADDITIONAL NOTES

PLANNING COMMITTEE CHAIRS

This group helped to identify big picture vision and project goals. They listened, discussed and evaluated recommendations from planning committee and focus group comments, and refined the final program on behalf of the VCEA community.

STUDENTS

Students participated in small focus groups, dropped by pop up kiosks, filled out surveys, attended large open houses, and worked with the team to identify priorities for student club and maker spaces in outreach groups. Their voices helped to shape the program and space narratives.

FACULTY + STAFF

This group reviewed user and stakeholder feedback from focus groups, helping to frame clear design principles and program goals used to shape program options. Through a variety of committees and open houses, they participated in building recommendations and options that support projects vision and goals.

INDUSTRY PARTNERS + DONORS

Industry professionals from architecture, engineering, and manufacturing shared their views of what this first step in the new precinct plan would need to be successful through focus groups, survey, and one-on-one conversations. Their understanding of what makes a successful VCEA graduate helped ensure that the project contained all aspects for student success.

EXECUTIVE SUMMARY

INTRODUCTION

The following program emerged from the thoughtful, stakeholder engagement process that considered a wide variety of possible space types and built consensus around key priority spaces. The program is loosely organized into four different groups, guided by verbs that tie to the project goals. There's lots of crossover between these verbs - showcase, connect, learn, and innovate, but it was helpful to break down the long list of program and allow people to consider how each space separately, and then together as a whole could support this bold vision.

SHOWCASE + INSPIRE + GATHER

The project will include lobby spaces with student collaboration zones, an office suite for building administration, a showcase conference room, a small food service venue, and welcome area in order to create a welcoming front door to the college community and culture hub that encourages students, faculty, alumni, and industry partners to gather together. In addition, visible from these spaces or as people are navigating the building, there will be a Club Hub with assembly and project space for large and small clubs to inspire people with the great work and activity of student groups on display. As the first step in the transformation and modernization of the district, this group of program spaces will build and reinforce VCEA culture, inspire engagement, and showcase new ways of working together.

CONNECT + SUPPORT

The project will include a variety of spaces such as advising, tutoring, career services, and entrepreneurship spaces that will create an inclusive, safe "one stop shop" for students throughout their journey with spaces for students to engage and connect with faculty, peers, advisors, career services, and tutors. With conference rooms and a variety of smaller spaces that support small groups gathering for study sessions, career advising, support, and interviews, the building will support interactions between different all stages of students, faculty, staff, industry, and alumni.

LEARN + STUDY

The program will include a variety of teaching spaces from 42, 60, and 72 seat classrooms to a 250 seat classroom and two capstone labs in order to create a state-of-the-art, flexible learning environment with classrooms and labs that enable future growth and evolution of pedagogy and allow students to test creative ideas in safe, inspiring spaces. Bringing spaces for first year classes with fourth year capstone studios in close proximity to each other will allow students at the early stages of their journey to have glimpses into future work along the path to core early courses.

INNOVATE + BUILD + TEST

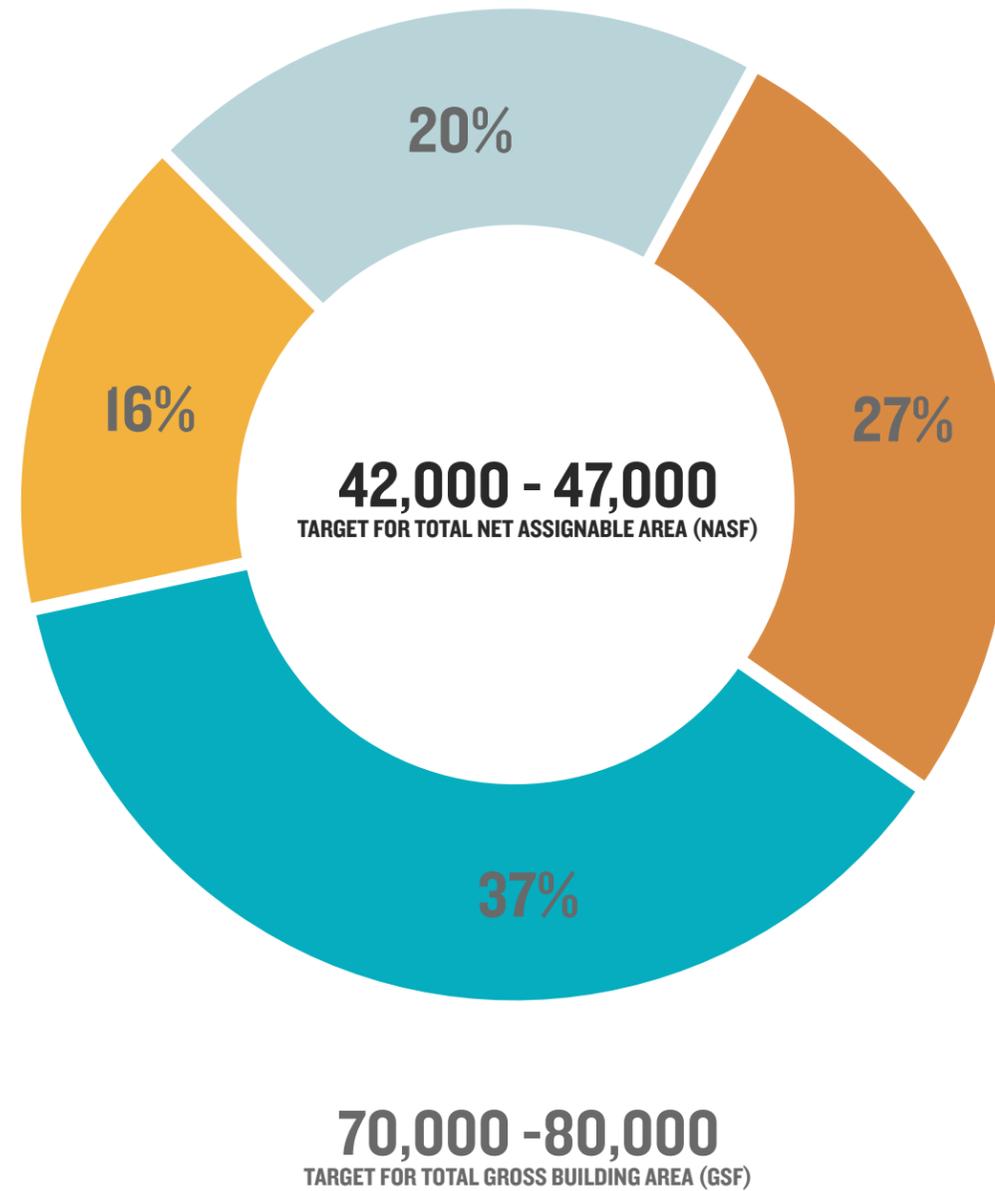
Finally, the project will include a variety of spaces to innovate, test and build, including wood, epoxies, metal, and digital fabrication spaces, maker spaces, and smaller rooms for painting, electronics, 3D and 2D printing. Together this group of spaces should create a new showcase for innovative engineering and design while allowing students to test creative ideas in safe, inspiring spaces. With a robust and diverse set of shop spaces, the next generation of students will be inspired by design, process, and engineering on display, demonstrating VCEA's commitment to embrace making, testing, and creating together.

PROJECT SUCCESS

SPACE NARRATIVES

SITE NARRATIVES

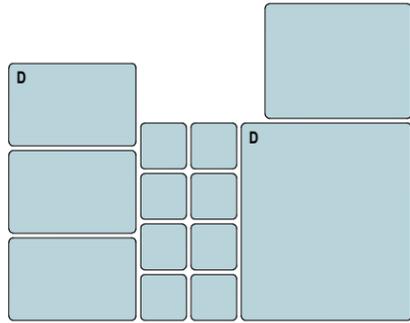
APPENDIX



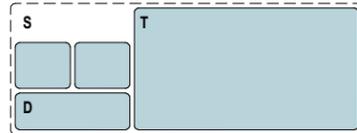
PROGRAM SUMMARY

INTRODUCTION

SHOWCASE + INSPIRE + GATHER 8,000 - 10,000 NASF (21%)



CLUBS - 4,700 SF
 (1) CLUB HUB @ 1,600 SF
 (3) CLUB STORAGE LARGE @ 500 SF
 (8) CLUB STORAGE SMALL @ 100 SF
 (1) PROJECT ASSEMBLY SPACE @ 800 SF



WELCOME AREA - 1,740 SF
 (1) WELCOME DESK @ 200 SF
 (2) WELCOME OFFICES @ 120 SF
 (1) WELCOME CONFERENCE ROOM @ 1,300 SF



FRONT DOOR - 3,500SF
 (1) LOBBY + STUDENT COLLABORATION ZONE @ 3,000 SF
 (1) FOOD AND BEVERAGE SERVICE @ 500 SF
 (1) OUTDOOR PLAZA @ N/A SF

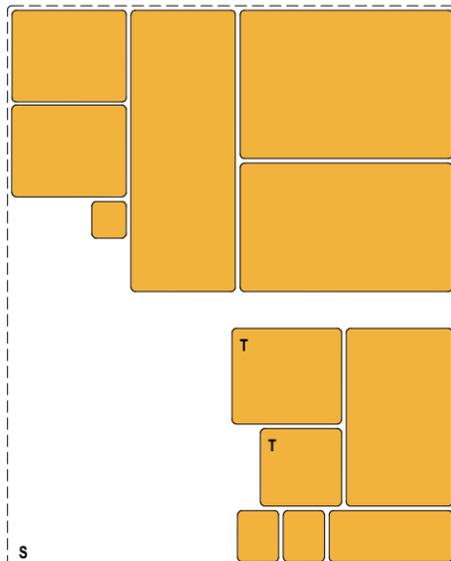
PROJECT SUCCESS

SPACE NARRATIVES

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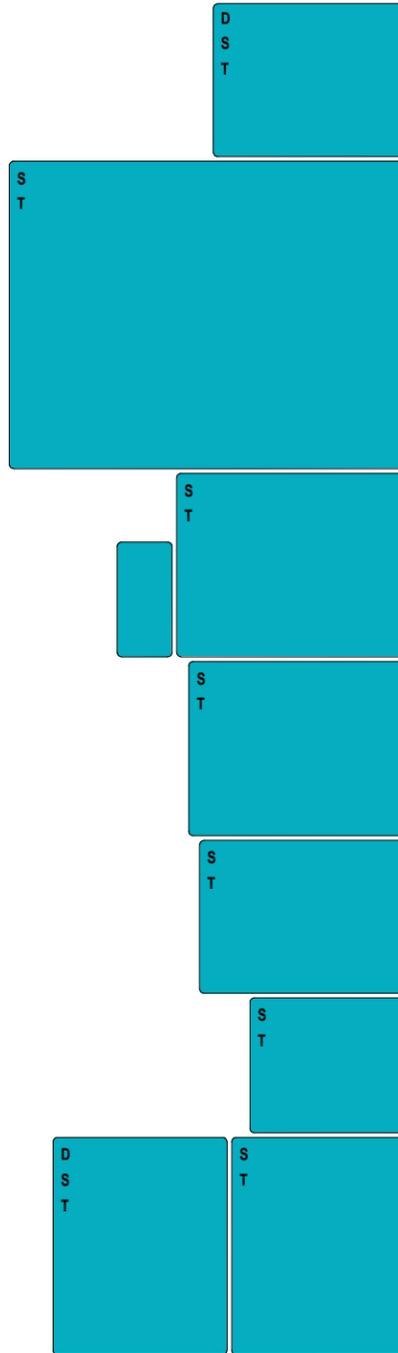
INNOVATE + BUILD + TEST 6,800 - 7,200 NASF (16%)



MAKERSPACE SHOP AREA - 5,260 SF
 (1) INNOVATION ZONE @ 1,400 SF
 (1) WOOD SHOP @ 1,500 SF
 (2) DIGITAL FABRICATION @ 1,300 SF
 (1) ELECTRONICS SHOP @ 500 SF
 (1) 3D PRINTING @ 500 SF
 (1) PAINT BOOTH @ 60 SF

MAKERSPACE SUPPORT - 2,300 SF
 (1) MATERIAL STORAGE @ 900 SF
 (1) WELCOME AREA @ 500 SF
 (1) OFFICE @ 300 SF
 (1) STUDENT LOCKERS @ 300 SF
 (2) SHOWERS @ 100 SF

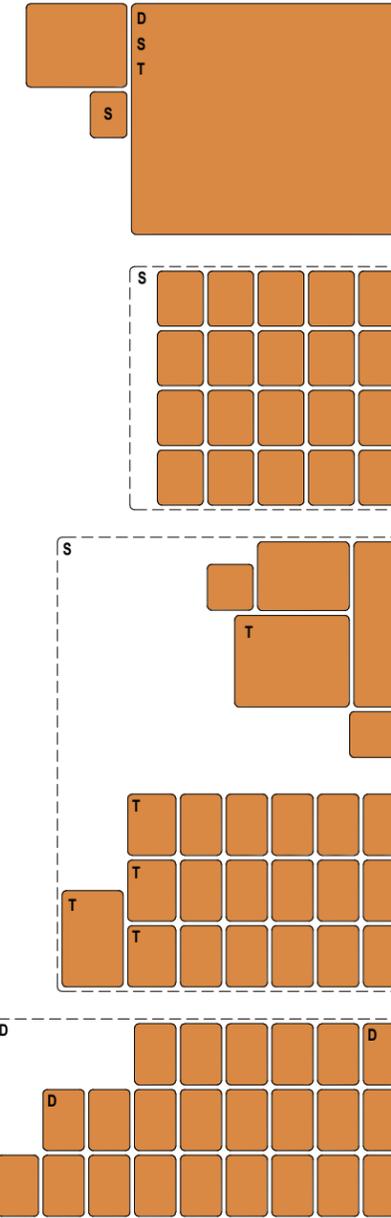
LEARN + STUDY 15,500 - 18,000 NASF (37%)



CLASSROOMS - 17,400 SF
 (1) DRY TEACHING LAB @ 1,400 SF
 (1) X-LARGE CLASSROOM @ 5,800 SF
 (1) LARGE CLASSROOM @ 2,000 SF + 300 SF EVENT STORAGE
 (1) LARGE CLASSROOM @ 1,800 SF
 (1) MEDIUM CLASSROOM @ 1,500 SF
 (2) CAPSTONE STUDIO @ 1,800 SF

NOTE: IN ADDITION TO THE INDIVIDUAL DONOR NAMED SPACES NOTED ON THIS PAGE THERE ARE ADDITIONAL SCOPES TO BE RECOGNIZED INCLUDING BUT NOT LIMITED TO:
 1. BUILDING
 2. STUDENT SUCCESS FLOOR

CONNECT + SUPPORT 11,000 - 13,000 NASF (27%)



TUTORING CENTER - 3,480 SF
 (1) TUTORING CENTER @ 3,000 SF
 (1) STUDENT SUPPORT SPACE @ 400 SF
 (1) WELLNESS @ 80 SF

GROUP STUDY - 2,400 SF TOTAL
 (12) ENCLOSED WITH AV @ 120 SF
 (8) SEMI-ENCLOSED @ 120 SF

OFFICE SUPPORT - 1,420 SF
 (1) RECEPTION @ 400 SF
 (1) CONFERENCE ROOM @ 500 SF
 (1) BREAKROOM/KITCHEN @ 300 SF
 (1) MAIL ROOM @ 100 SF
 (1) FILE STORAGE @ 120 SF

BUILDING ADMINISTRATION - 2,500 SF
 (15) OFFICES @ 120 SF
 (3) OFFICES @ 140 SF
 (1) OFFICE @ 280 SF

STUDENT SUCCESS - 2,760 SF
 (18) ADVISING OFFICES @ 120 SF
 (4) CAREER SERVICE OFFICES @ 120 SF
 (1) ENTREPRENEURSHIP OFFICE @ 120 SF

LEGEND

- D DONOR NAMED SPACE
- S SECURE ACCESS CONTROL ZONE/SPACE VIA COUGAR CARD
- T OCCUPANT REQUESTED DEDICATED THERMOSTAT CONTROL



PROJECT BACKGROUND

ABOUT VOILAND COLLEGE

Founded on the principles of collaboration, innovation, and transformation, the Voiland College of Engineering and Architecture is a world leader in providing solutions to societal grand challenges and quality “work-ready, day-one” graduates. The College was established in 1890, has a footprint on six campuses, supports twenty-nine fields of studies with over 4,500 undergraduates. In the fall of 2022 the makeup of enrolled undergraduates were:

- 86% in state
- 32% first generation
- 35% students of color
- 22% female
- 25% eligible for Pell Grants

A NEED

Voiland College of Engineering and Architecture (VCEA) has many amazing resources supporting a talented, successful group of students and faculty each year. With current spaces spread across multiple buildings, and many of them hidden away, many students are not aware of the student support services that are available or what shops, maker spaces, and equipment is available for them to use to innovate, test, and explore. Many of the buildings are in need of significant upgrades in order to continue to deliver the VCEA’s highly regarded programs. Most classrooms have limited area for group discussions and do not have the infrastructure to support new investments in audio visual and technology upgrades. The existing buildings don’t offer opportunities for group study in public spaces, and most activities, whether in scheduled learning environments or labs, are done behind closed doors. There is a huge opportunity to create a central hub that takes a big first step toward modernizing the VCEA precinct and inviting people to work, learn, support, and test in new ways.

THE FIRST STEP

This building will be the first step of a multi-phase plan to revitalize the VCEA precinct with a series of new construction, demolition, and renovation projects. This catalyst project will create a new central hub, allow for “decanting” of some of the functions from adjacent buildings, and pave the way for the future investments. The new facility will be located on the SE corner of Spokane Street and College Ave and is expected to be between 70,000 and 80,000 GSF. Following this critical first step, future phases of building will include spaces for Chemical Engineering and Bioengineering, Electrical Engineering, Computer Science, Civil and Environmental Engineering, Construction Engineering, Mechanical Engineering, Materials Science, Architecture, Interior Design, and Construction Management.

The journey to interdisciplinarity, shared spaces, and supporting student success will be a long one, starting years ago with a big idea, and continuing well after the building is built and occupied. This programming process is a critical step in maintaining momentum and offers a chance to focus entirely on space qualities and quantities to support VCEA’s mission and vision. This document will be incorporated into the RFQ/RFP to select a design-build team to deliver the project using the Progressive Design-Build delivery model.

STAKEHOLDER ENGAGEMENT

A robust engagement effort was undertaken over several months. This study reached out to students, faculty, staff, alumni, industry advisors and industry partners to ensure that VCEA engaged and listened to as many critical voices as possible. In all interactions, the team worked to remind people to think 10, 20, and 50 years into the future so that the program could be shaped to support not just today’s students’ needs, but those out into the future as well. Programming involves talking to many people, and the team conducted open houses, pop-up kiosks, online surveys, as well as small and large group meetings both in person and hybrid/remote. Over 1,000 voices were able to help shape the number and type of spaces, the space qualities, project goals, and design principles that you will see throughout this document.

There is an inspiring African proverb that says, “If you want to go fast, go alone; if you want to go far, go together”. Every campus project brings with it many voices, desires, and concerns and projects are richer when these diverse voices are heard, shape the project, and then help build support for the future facility. In this programming process, VCEA leadership with the help of the project team synthesized the wants of many diverse voices; developed a shared vision; clarified roles and responsibilities and set up groups who can continue to shape the project in the progressive design build process; identified opportunities for synergies and communicated how decisions will be made and how they achieve VCEA’s shared goals.

DONOR SUPPORT

The project has conceived gracious donations that will make this building possible. Both unique single spaces and multiple spaces have received support. Recognizing and honoring this support will be a critical component of the building’s design.

A WELCOMING FRONT DOOR

This project offers a huge opportunity to create a central hub and welcoming front door for VCEA. As the first step in modernizing the VCEA precinct, Schwietzer Engineer Hall should be a new home that inspires the College to operate differently. With multipurpose classrooms, event spaces, club and showcase areas, collaborative teaming spaces, and shared maker and shop spaces, there will be opportunities to work differently in many ways. The building itself can also boldly announce the “home” of VCEA with visually engaging and vibrant public spaces and new outdoor spaces that represent a vision of the new precinct. In all of the spaces, the final design should embrace the building as a living learning laboratory, demonstrating cutting edge technology, showcasing systems visually as a teaching tool, inspiring students with a reflection of modern engineering and design practices including sustainable practices, and creating beautiful daylight spaces that draw people in and inspire them.

SUPPORTING STUDENT SUCCESS

“To maximize the educational benefits of a diverse campus community, institutions must foster inclusion, defined as the active engagement and learning across difference. The Office of Outreach and Education recognizes that this requires community building that engages multiple perspectives and voices. Thus, the Office seeks to provide enriching curricular and co-curricular opportunities that increase awareness, understanding, and knowledge of diversity, equity, and inclusion. Creating and sustaining an ethic of inclusion at WSU is a vital component to maintaining educational excellence and forwarding the Land-grant mission throughout our institution.” - WSU Office of Outreach and Education

One of the critical drivers for this project is student success. Many of the open houses and survey questions allowed the team to gain valuable insight into what student success means, how spaces and new ways of working can help to better support students throughout their journey at WSU and into their careers beyond.

This building will allow WSU to support a student-centered culture, strengthening the VCEA culture and community in connecting and supporting students and faculty. Student success is affected by space, as well as policies, experiences, relationships, and cultural norms. In this process, VCEA discussed the critical spaces to support student-to-faculty and peer-to-peer engagement, support high-impact learning, and promote connections.

Defining the full range of student support will continue to be a driver as the design work continues on this project. With the groundwork laid in this early process, there is potential to continue to engage with Black, indigenous, and people of color, people moving to economic success, veterans, LGBTQIA2+, people with a wide range of religious and cultural affiliations, people with disabilities, people with differences in cognitive functions, and students experiencing homelessness as essential collaborators. Student success can mean very different things to different students, so continuing to engage with a diverse range of students will be critical to realizing the mission of the project. This study captured many of the needs of VCEA’s student populations and continued engagement in future phases will help ensure this physical investment can reflect the paths of the students and support them.

PROJECT GOALS

The project goals weave together the various needs and wants collected from stakeholder workshops and surveys. They are intended to be used as a guide for decision making and a framework for developing the design of the new Schweitzer Engineering Hall.

Showcase + Inspire + Gather

Create a welcoming front door for the VCEA community that inspires engagement and gathering, reinforces culture, and showcases new ways of working together.

Build a new showcase building that models for students, faculty, and alumni the joy of giving back to their community and acts as a catalyst for the transformation and modernization of the entire precinct.

Connect + Support

Create spaces that support connections and collisions between groups as they hang out, take a break, and relieve stress with welcoming, comfortable spaces that bring people together and support students, faculty, staff, industry, and alumni.

Create an inclusive, safe “one stop shop” for students throughout their journey with spaces for students to engage with faculty, peers, advisors, career services, and tutors while increasing enrollment, graduation, placement and alumni support for programs.



Innovate + Build + Test

Design a new showcase for innovative engineering and design which encourage students to test creative ideas in safe, inspiring spaces.

Create a place that inspires the next generation with design, process, and engineering on display, demonstrating VCEA's commitment to embrace making, testing, and creating together.

Learn + Study

Create a state-of-the-art, flexible learning environment with classrooms and labs that enable future growth and evolution of pedagogy.

Embrace the building as a living learning laboratory, inspiring students with cutting edge technology, showcasing systems visually as a teaching tool, and creating beautiful daylit spaces that draw people in and inspire them.



SETTING AN ASSIGNABLE AREA TARGET

INTRODUCTION

The programming effort for Schweitzer Engineering Hall did not include cost validation. Benchmark data for total project cost per gross building area in relationship to industry standard building efficiency factors were used to identify a range of net assignable area that could likely be achieved.

The chart to the right illustrates the impact cost/GSF and building efficiency factor have on the achievable net assignable area. It is best used as a means to review the sensitivity of cost per area and building efficiency have on total assignable area are project needs

PROJECT SUCCESS

Targets for efficiency, cost, assignable area and total building area will be confirmed by the progressive design build team. The highlighted gradient represents a range of probable outcomes based on net assignable area targeted in this program document.

The target for net assignable area is 42,000-47,000 NASF.

A overall building target area of 70,000-80,000 GSF was identified for the building prior to programming phase. With a target of \$80,000,000 total project budget, and \$10,000,000 earmarked for infrastructure and utility improvements, the budget for the building scope is assumed to be \$70,000,000 total project cost (GMP + Owner Costs).

SPACE NARRATIVES

Please note that while this chart illustrates total project cost per building area as a means to benchmark a target assignable area the guaranteed maximum price (GMP) will be the construction budget for the building and the utilities associated with it, including the infrastructure component.

SITE NARRATIVES

* Cost/GSF shown in chart is representative of total project cost per building area inclusive of design services, fees, taxes and other non-construction costs associated with the project.

APPENDIX

- \$ 80,000,000 *Project (Target Total Cost)*
- \$ 10,000,000 *Infrastructure (Estimated Total Target Cost)*
- \$ 70,000,000 *Building (Target Total Cost)*

Cost/GSF	GSF	Building NASF								
		53%	54%	55%	56%	57%	58%	59%	60%	61%
\$ 750	93,333	49,467	50,400	51,333	52,267	53,200	54,133	55,067	56,000	56,933
\$ 800	87,500	46,375	47,250	48,125	49,000	49,875	50,750	51,625	52,500	53,375
\$ 850	82,353	43,647	44,471	45,294	46,118	46,941	47,765	48,588	49,412	50,235
\$ 900	77,778	41,222	42,000	42,778	43,556	44,333	45,111	45,889	46,667	47,444
\$ 950	73,684	39,053	39,789	40,526	41,263	42,000	42,737	43,474	44,211	44,947
\$ 1,000	70,000	37,100	37,800	38,500	39,200	39,900	40,600	41,300	42,000	42,700
\$ 1,050	66,667	35,333	36,000	36,667	37,333	38,000	38,667	39,333	40,000	40,667
\$ 1,100	63,636	33,727	34,364	35,000	35,636	36,273	36,909	37,545	38,182	38,818
\$ 1,150	60,870	32,261	32,870	33,478	34,087	34,696	35,304	35,913	36,522	37,130
\$ 1,200	58,333	30,917	31,500	32,083	32,667	33,250	33,833	34,417	35,000	35,583
\$ 1,250	56,000	29,680	30,240	30,800	31,360	31,920	32,480	33,040	33,600	34,160

Efficiency (NASF/GSF)

PROJECT SUCCESS

An introductory guide for building a shared vision of success for
the Student Success Building.

STAKEHOLDER ENGAGEMENT

Stakeholder engagement was critical to the development of the program for Schweitzer Engineering Hall. The team engaged with over 25 groups in a variety of settings, and heard from over 699 Voiland College community members including: students, employees, alumni, donors, industry partners and recruiters, and other stakeholders. The themes noted below were consistently heard across groups, throughout the engagement process.

BALANCE

- Balance between community spaces, group spaces and individual spaces;
- Balance between the analog and new technology;
- Balance of messy and clean spaces;
- Balance of reservable and non-reservable spaces; and
- Balance of loud spaces and quiet spaces.

ROBUSTNESS

Power for shop equipment and student convenience power, future-proofed building systems, and an abundance of connectivity is a project need.

VISIBILITY

Create a place to see and be seen, acknowledging that collaboration starts with seeing what others are doing, that visibility contributes to shop safety, and to highlight the great resources to be housed within this building.

PATHS

Throughout the building, adjacencies and circulation will be important. To be inspired and curious, people need to have a peek at what others are doing. They also noted that to know what resources exist, they need to be visible as people walk their path day to day.

SIMPLICITY

- Clear and intuitive wayfinding is critical.
- Functionality of spaces and systems comes first - people "don't need fancy,"
- Maintainability supports longevity.

MIRROR WORKPLACE EXPERIENCES

The building needs to have spaces that prepare students for success beyond graduation. Include spaces and curriculum that mirror workplace atmosphere: shared spaces, in-person and hybrid meeting rooms, hands-on equipment, group and project-based learning. The building should inspire students and employees to do their best work.



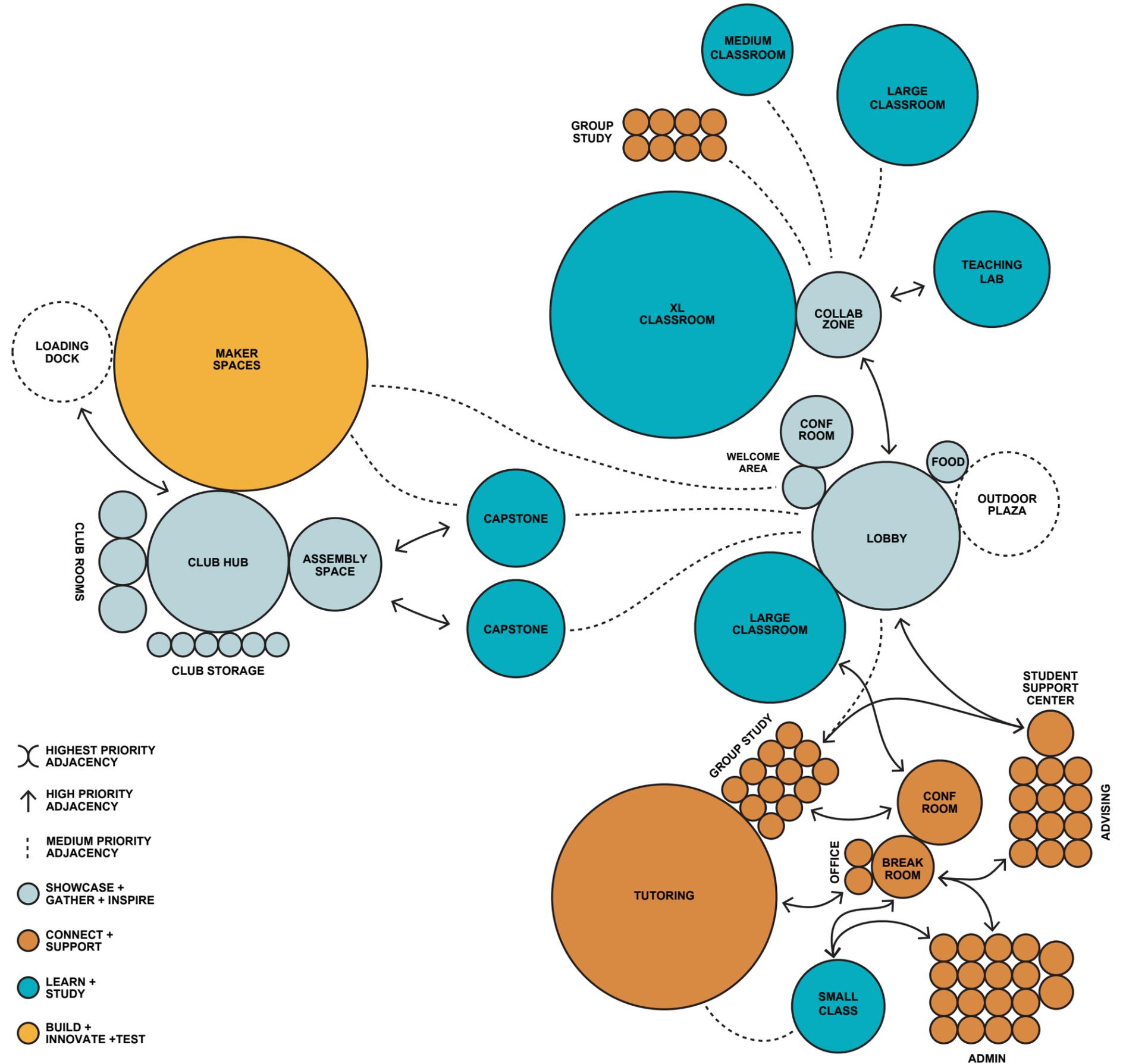
Image of open house, focus group, and pop up kiosk feedback on shops and student maker spaces

ADJACENCIES

Adjacency in architectural programming refers to the spatial relationships between different programmatic elements or spaces within a building and can impact the functionality, efficiency, and flow of the space, as well as the overall user experience. It can also impact the amount of natural light and ventilation that different spaces receive, as well as the level of privacy and noise between spaces.

The design of Schweitzer Hall will take careful consideration of adjacency to ensure that the final building meets the functional and operational needs of the users, while also creating a cohesive and enjoyable experience.

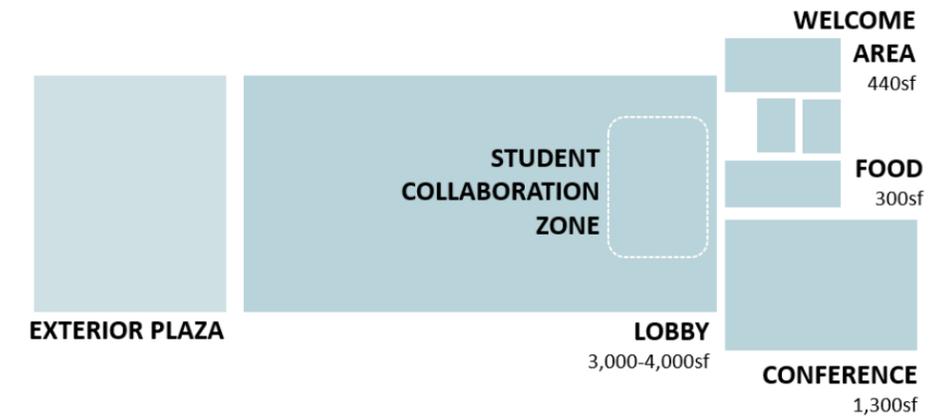
The diagram to the right is a starting point that captures users and stakeholder comments and opinions to date. The design-build team will revise, update, and add detail to adjacency diagrams as needed to support the project progress through design.



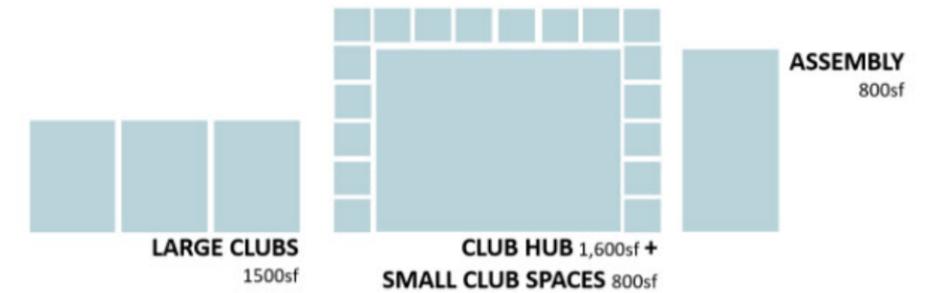
ECOSYSTEMS

Showcase + Inspire + Gather

The experience of the new VCEA Schweitzer Engineering Hall begins at the front door, where you are welcomed with views of students collaborating, sitting quietly having a moment to themselves between classes, and working with faculty members on an exhibit of engineering work. In a nearby conference room, a group of students, faculty, and industry professionals are engaged in a discussion about a new discovery. Greeted at the welcome area, you can easily interact with both staff and digital tools that will help you understand where to go, how to find resources, and what cultural and academic events are happening this week. This vibrant atmosphere pulls you in, inspiring engagement and inviting you to gather, experience the VCEA culture, and take part in the new ways of working together that this space encourages.



In the distance, the new Club Hub is visible, offering a peek into this critical part of student life. Through clubs and organizations, VCEA students gain hands-on opportunities to apply their skills and learn valuable lessons in cooperation, problem-solving, communication, and budgeting that will serve them well in future endeavors. VCEA is home to more than 40 student clubs, ranging from professional societies that engage in increasing professional knowledge and skills, to clubs that build projects to compete on regional or national platforms. On any given day, you will see students planning project work and fundraising, building and 3D printing designed objects, developing posters to display at conferences and competitions, and working on homework surrounded by friends and peers.



INTRODUCTION

PROJECT SUCCESS

SPACE NARRATIVES

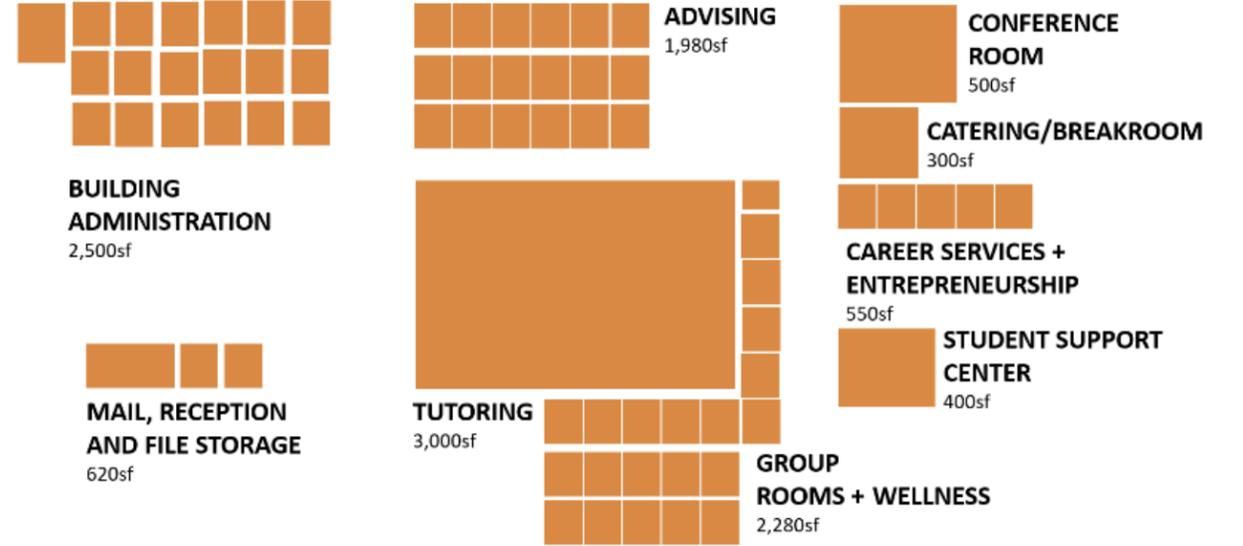
SITE NARRATIVES

APPENDIX

ECOSYSTEMS

Connect + Support

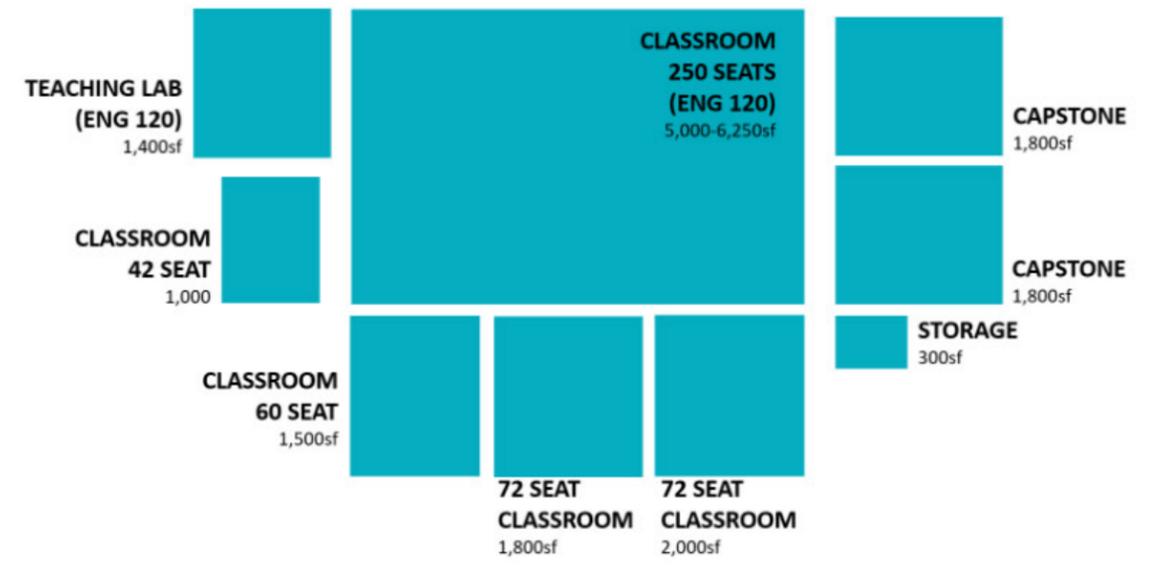
Walking through the building, you are greeted with a web of activities and services that VCEA offers to each student during their experience on campus and beyond. Beyond group rooms filled with students working together on data sets and projects, you see spaces for recruitment of prospective students, and a “one stop shop” approach to putting resources for tutoring, advising, entrepreneurship, and career services on display, helping to connect students with help in their day to day studies and industry professionals as they head out into the job market. This ecosystem includes spaces like conference rooms and break rooms that will build community within the student support staff, making sure there is someone ready to offer help and counsel for every student.



ECOSYSTEMS

Learn + Study

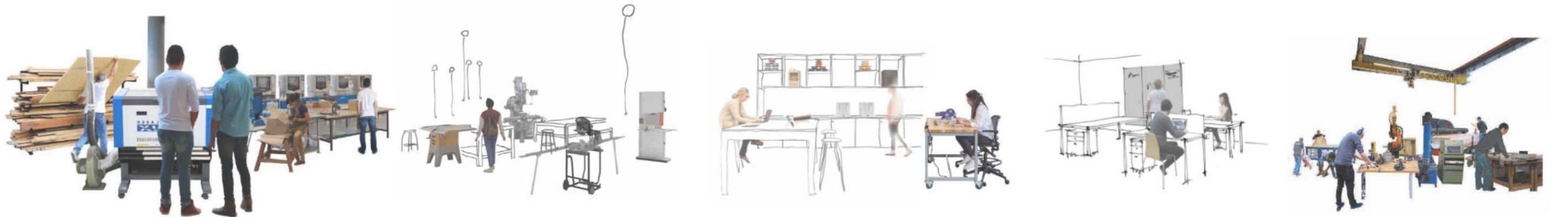
Walking by a carefully selected variety of classrooms, you can see first year students engaged in lectures and exploratory lab work, third year students discussing their latest engineering project in smaller learning spaces, and fourth year students passionately debating a solution in a capstone lab surrounded by models, parts, and whiteboards full of calculations. This balance of small, medium, and large learning spaces allow for students at all levels to see the breadth of work that will be done, and inspires curiosity and interest in what is possible at VCEA in the rich, diverse course offerings.



ECOSYSTEMS

Innovate + Build + Test

The vibrant culture of making and experimenting with at VCEA is evident from the moment you walk in the building. The Fab Lab and Frank Innovation Zone provide resources for students to engage in exploration of engineering, design, and construction principles with a strong core of dedicated support from shop experts. You stop to check out the welcome area, and are greeted by students making a small city out of legos while they joke about a question on the Engineering 120 exam. From the space, you can see into all of the shops, reminding you that co-location of spaces for making offers such potential for mentorship and sharing in shop, maker, and digital fabrication space. In addition to the huge investment in learning and supporting student success, this showcase of innovating and making will help to spark curiosity as you see the students passing by can't help but peek in at the small and large created work and admire the state-of-the-art tools being used to test creative ideas in a safe and inspiring space.



SPACE NARRATIVES

A detailed description of performance and character expectations organized by ecosystem.

GENERAL NOTES

OVERVIEW

Notes on this page are applicable to the entire project unless noted otherwise in the following space and site narratives.

CODE: The design build team will confirm in writing all applicable and standards. This should include, but not be limited to: local jurisdictional requirements, federal requirements and state requirements for state funded projects.

NETWORK: High density wireless coverage with data ports as needed in classrooms, conference room, and teaching spaces to meet WSU general university classroom standards and program requirements. Dedicated data ports required for all spaces that need university system phones. Dedicated data ports required for all offices. See WSU Facilities Design and Construction Standards for the IT standards.

MECHANICAL: General heating, cooling and fresh air with programmable thermostat control. System type(s), controls, temperature ranges, fume and dust exhaust, to be developed at the direction of WSU standards with recommendations from Voiland College's Utilitie Task Force Advisory Board. Occupant comfort and a preference for indirect air circulation should be a high priority when locating and designing air exchanges/vents and the like.

FIREPROTECTION: It is advised to fully sprinkler the building.

ACCESSIBILITY: Take care to meet all jurisdictional and owner requirements that may go beyond minimum code. Pay special attention to accessible table height, clearances around doors and equipment, mounting of writable surfaces and tacks surfaces. Provide ADA door operators at all major entrances and restrooms.

AUDIO VISUAL: Room displays: since there is a focus on ambient light in all the spaces, special attention should be taken to ensure displays are of sufficient size and lumens to be seen in these conditions.

Backbone to the AV infrastructure: Design build team work with WSU to confirm type of AV backbone infrastructure (HDBaseT or AV over IP) in a timely manner. This decision will dictate pathway size and location needs, and could dictated the type of switches IT needs to purchase.

Airflow: in newer lecterns and complex rooms with more equipment, we have had issues with overheating. Sufficient space within the rack and cooling options need to be considered when deciding on rack elevations.

Installation details: any equipment that is not located in a lectern should have a specific plan for how it will be mounted/stored/racked.

SIGNAGE: Provide signage outside of each space that clearly states what the room's purpose is. Additional thoughtfulness and visibility should be given to donor named spaces to acknowledge donors and giving levels. Spaces that support activities and equipment that require personal protection equipment, like makerspaces are to have signage posted outside the space to comply with WSU safety signage standards.

The building is a living learning environment - consider exposed building systems with clear and visible labels noting system, item mane hot/cold, flow direction, voltage, etc. as a visible building system learning laboratory.

WAYFINDING: Building layout should be intuitive and easy to navigate for students, visitors and guests - provide wayfinding signage in prominent locations.

SECURITY: Building entries/exits, hallways, public areas, loading dock and outdoor plaza to have security cameras. WSU Facilities to coordinate security camera locations with design builder. Design builder provides the infrastructure path, WSU provides and installs cameras.

ELEVATOR: A minimum of two elevators are required with a desire for one large freight elevator sized for small forklift and pallet jack with walls and floors that are highly resistant to damage.

SAFE ACCESS: Maintainability of building systems is a high priority. Locating building system access and maintenance items in locations that are accessible via standard ladder or scissor lift provides tremendous value to WSU and Voiland College. Design-build team to ensure all lighting and other regularly maintained equipment has reasonable and safe access.

CLASSROOMS: All classrooms must have the ability for guest lecturers from around the world to present into the classroom on the AV system, likely via zoom, and a means for students to interact back and forth with the guest lecturers.

All classrooms, team spaces, and collaboration spaces should have a reservable capability with a means of demonstrating any reservations made live in real time, and ability for anyone with a WSU network ID given the ability to reserve such spaces.

All classrooms will require windows be built in for showcasing activities and visibility into the classroom.

All classrooms will require window shades for safety protocols in compliance with active shooter protocols.

All classrooms will require safety locks that can be engaged (locked) from inside the classroom, per WSU standards, to comply with active shooter protocols.

All classrooms are to have exterior windows with access to natural daylight.

DESIGN & CONSTRUCTION STANDARDS

Washington State University has a robust set of design and construction standards that the design build team will familiarize themselves and incorporate into the project design and construction documents.

The DCS are Standards, not Specifications. The components within these documents are to be conveyed within the specifications developed by industry professionals for all WSU projects.

Any deviation shall be clearly communicated with the WSU Project Manager, and the legal responsibility for project document preparation shall continue to reside with the Design Professional.

Additional information can be found at:

<https://facilities.wsu.edu/facilities-services-capital/design-standards/>

SUSTAINABILITY

Schweitzer Engineering Hall will need to meet LEED Silver at a minimum.

Sustainable features and building systems are a learning opportunity to be celebrated and visible to students and guests alike.

Sustainability is important in the design of buildings as they are major consumers of energy and resources, and designing them in a sustainable way can help reduce their environmental impact. This includes using energy-efficient systems and materials, and incorporating features like solar panels and green roofs to generate clean energy and manage stormwater runoff.

Sustainability is also important in the design of buildings because it can help reduce operating costs over the long term. Energy-efficient buildings are more cost-effective to operate and maintain, and they can also help improve the indoor air quality and comfort of the occupants.

This new building can also help create a more livable and healthy built environment by intentionally incorporating accessible and inclusive design, and incorporating green space and natural elements into the design. By considering the long-term impacts of the building on the environment and the people who will use it, the design-build team can create a building that is not only functional and aesthetically pleasing, but also responsible and sustainable.

The Washington Clean Buildings Performance Standard focuses on reducing the greenhouse gas emissions from the existing building industry by putting a cap on the energy used in commercial buildings 50,000 square feet and larger across the state. Mandatory compliance begins in 2026 with early adoptive incentives in currently in place. The design builder is to work with WSU to determine how this project is to align with the Clean Buildings Act.

Additional information about WSU's sustainability executive policy can be found at:

<https://sustainability.wsu.edu/administrative/wsus-sustainability-executive-policy/>

**SHOWCASE
INSPIRE
GATHER**



OUTDOOR PLAZA

SHOWCASE + INSPIRE + GATHER

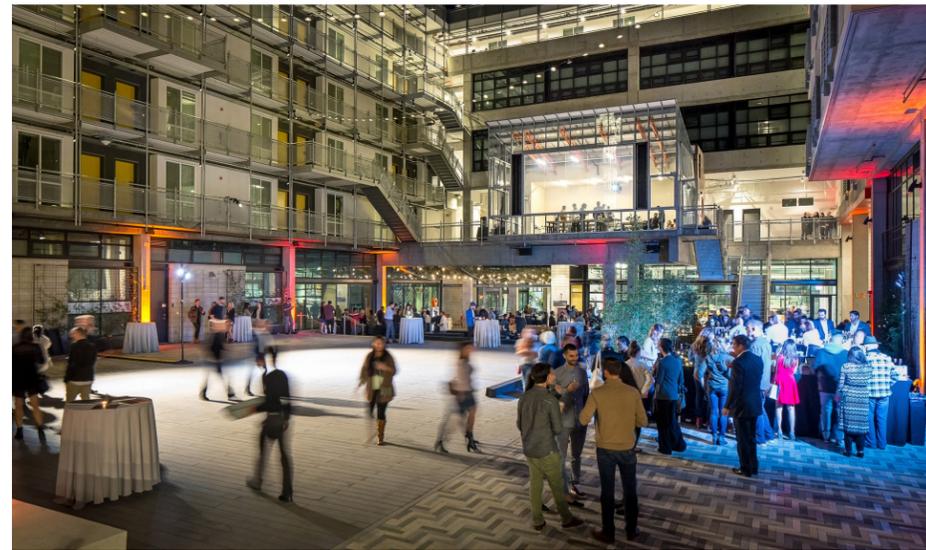
OVERVIEW

- QUANTITY: 1
- TARGET AREA: N/A
- CAPACITY: 400
- CLEAR HEIGHT: N/A
- DESCRIPTION: A welcoming plaza and courtyard space suitable for events with dispersed power, water and wifi. Space should have landscape features, lighting for evening safety and seating options for small groups. Space should be designed to coordinate well with future building planned to the east. Low maintenance landscaping is to be thoughtfully integrated into the design of the plaza.
See site narrative section for additional information.

CONTEXT IMAGERY



Hans Rosling Center for Population Health, UW



Courtyard at Idea1 Apartments, San Diego

ADDITIONAL NOTES

- VISIBILITY: Space to be visible from main pedestrian paths to the main building entry. Avoid locating adjacent to building systems like air intakes or exhausts.
- FINISHES: Seating or other benches should be robust, sturdy and reliable and weather well over time in Pullmans hot summer and cold winter climate.
- SPECIALTY: N/A
- FURNITURE: N/A
- EQUIPMENT: N/A
- AUDIO VISUAL: Provide infrastructure to support regular outdoor events.
- ACOUSTICS: N/A
- ELECTRICAL: Provide exterior power to support regular outdoor events.
- LIGHTING: Provide exterior lighting.
- PLUMBING: Provide exterior water hookups for irrigation and maintenance.
- MECHANICAL: N/A
- SECURITY: Provide security cameras and safety phones as directed by WSU.
- DATA: See general notes, provide robust wifi connectivity.
- OPERATIONS: N/A
- NICE TO HAVE: Food truck parking and hookups.

WELCOME DESK

SHOWCASE + INSPIRE + GATHER

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 200 sf
- CAPACITY: 1 receptionist plus visitors
- CLEAR HEIGHT: 10 FT MIN
- DESCRIPTION: A welcome desk and small waiting space for visitors with a significant focus on recruitment. Desk intended to be furniture solution, not casework. Space will serve as entry point to the 'welcome area' which includes the welcome offices and welcome conference room. Space is a named donor space with associated signage.

CONTEXT IMAGERY



Lease Crutcher Lewis Office



Geisel Library, Teaching + Learning Commons, UCSD

ADDITIONAL NOTES

- VISIBILITY: Space is highly visible from main entry and designed to be intuitively welcoming for visitors and students alike.
- FINISHES: High traffic, commercial grade and easily cleanable.
- SPECIALTY: Building directory as well as University and College branded signage should be thoughtfully considered.
- FURNITURE: Welcome desk and chair with privacy panel and small amount of storage for receptionist and soft seating with side table for visitors.
- EQUIPMENT: As needed to support reception/welcome functions.
- AUDIO VISUAL: Large flat panel display for digital signage, building directory and building event/calender.
- ACOUSTICS: Design space so that receptionist is able to comfortably talk with those at front desk and over the phone without disruption from adjacent spaces.
- ELECTRICAL: In addition to standard convenience power provided along the perimeter, ensure that at welcome desk has power to support equipment as needed.
- LIGHTING: General office LED lighting that is dimmable. Provide indirect natural daylight where feasible.
- PLUMBING: N/A
- MECHANICAL: Occupant comfort is a priority. See general notes
- SECURITY: Welcome area (desk/reception, offices and conference room) to be fully securable by movable partition or storefront system with Cougar Card access control. Desk storage should be lockable and office equipment securely anchored.
- DATA: See general notes. Confirm with owner if phone/data port is required at welcome desk.
- OPERATIONS: N/A
- NICE TO HAVE: Decorative lighting fixtures to help identify welcome space as a warm and welcoming space.

WELCOME OFFICE

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OVERVIEW

- QUANTITY: 2
- TARGET AREA: 120 SF
- CAPACITY: 1 PLUS VISITORS
- CLEAR HEIGHT: 8 FT 6 IN MIN
- DESCRIPTION: A private office for welcoming staff with a significant focus on recruitment.

CONTEXT IMAGERY



Whitworth Science Building



Structural & Materials Engineering Building, UCSD

ADDITIONAL NOTES

- VISIBILITY:** Office(s) to be immediately adjacent to welcome desk with interior glazing for natural light and a direct line of site for those entering the welcome area (desk/reception, offices and conference room).
- FINISHES:** Similar to class B office spaces. Appropriate for high traffic and easy to maintain.
- SPECIALTY:** University and College branded signage should be thoughtfully considered.
- FURNITURE:** Office desk, chair, storage and guest seating.
- EQUIPMENT:** As needed to support typical office functions.
- AUDIO VISUAL:** N/A
- ACOUSTICS:** Industry standard for typical private office.
- ELECTRICAL:** In addition to standard convenience power provided along the perimeter, ensure that desk has power to support equipment as needed.
- LIGHTING:** General office LED lighting that is dimmable. Provide indirect natural daylight where feasible.
- PLUMBING:** N/A
- MECHANICAL:** Occupant comfort is a priority. See general notes.
- SECURITY:** Individual office can be secured by key.
- DATA:** Provide dedicated data port(s).
- OPERATIONS:** N/A
- NICE TO HAVE:** Tackable wall panel or magnetic markerboard.

WELCOME CONFERENCE ROOM

SHOWCASE + INSPIRE + GATHER

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 1,300 SF
- CAPACITY: 45 TOTAL (26 AT CONFERENCE TABLE)
- CLEAR HEIGHT: 9 FT MIN
- DESCRIPTION: A professional board room environment to support development and donor meetings, administrative conference meetings and the Dean's advisory board conference meetings

CONTEXT IMAGERY



Hans Rosling Center for Population Health



Large Custom Conference Table by Paul Downs

ADDITIONAL NOTES

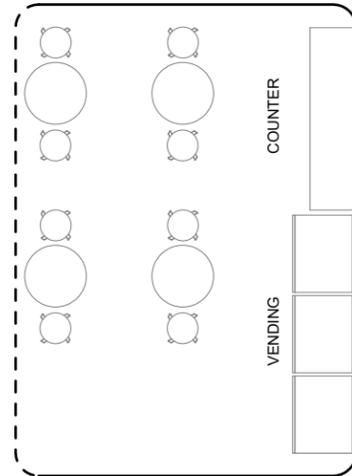
- VISIBILITY:** Space to be semi-public with a degree of visibility to welcome desk.
- FINISHES:** Similar to class A office spaces.
Appropriate for high traffic areas and easy to maintain.
Provide a chair rail or other design feature to protect wall finishes from movable furniture.
- SPECIALTY:** Magnetic marker boards.
- FURNITURE:** Modular powered tables, small storage casework and conference chairs.
All furniture should be able to handle food and drink without damage from condensation.
- EQUIPMENT:** Provide shades at windows.
Under-counter mini-fridge.
- AUDIO VISUAL:** AV system should be design to smoothly support virtual and hybrid meetings, interface and operability to match classrooms.
Provide AV connections at conference table to avoid cord crossing over walking paths.
- ACOUSTICS:** Sound absorption surfaces should be provided on walls and ceilings to meet industry standards for conference rooms of similar size.
- ELECTRICAL:** In addition to standard convenience power provided along the perimeter, provide convenience power (USB and 120v outlet) at the table.
- LIGHTING:** Dimmable LED lighting.
Provide indirect natural daylight where feasible.
- PLUMBING:** N/A
- MECHANICAL:** Dedicated thermostat control.
- SECURITY:** Access control via Cougar Card. May be secured with rest of welcome area functions (desk/reception and offices).
AV equipment should be securely anchored to deter theft.
- DATA:** Provide dedicated data port(s).
- OPERATIONS:** Room is a schedulable resource.
- NICE TO HAVE:** Under-counter mini-fridge

FOOD AND BEVERAGE SERVICE

SHOWCASE + INSPIRE + GATHER

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 500 SF
- CAPACITY: -
- CLEAR HEIGHT: 9 FT MIN
- DESCRIPTION: An un-staffed beverage and food micro market with healthy and hot vending options. Locate with easy access to loading dock, storage and adjacent to main lobby and student collaboration space.



CONTEXT IMAGERY



A smart market at Tarrant County College , Texas



Health vending options at San Diego Mesa College

ADDITIONAL NOTES

- VISIBILITY: Space should be highly visible from main building circulation path(s).
- FINISHES: As appropriate for high traffic areas and easy to maintain.
- SPECIALTY: Dedicated recycling and waste containers.
- FURNITURE: Cafe like table and chairs.
- EQUIPMENT: Food and beverage vending equipment with hot and cold options. Microwave(s).
- AUDIO VISUAL: N/A
- ACOUSTICS: N/A
- ELECTRICAL: As required by selected equipment.
- LIGHTING: LED lighting. Provide indirect natural daylight where feasible.
- PLUMBING: As required by selected equipment.
- MECHANICAL: See general notes.
- SECURITY: Space should have ability to partition off a secure area when needed. Security cameras and appropriate infrastructure for installation for visual monitoring of inventories, assets, financial transactions and employee safety.
- DATA: As needed to support selected equipment.
- OPERATIONS: N/A
- NICE TO HAVE: Staffed full-service coffee cart with grab-and-go food. Exterior parking space and supporting infrastructure for food truck. Small kitchenette counter space with sink.

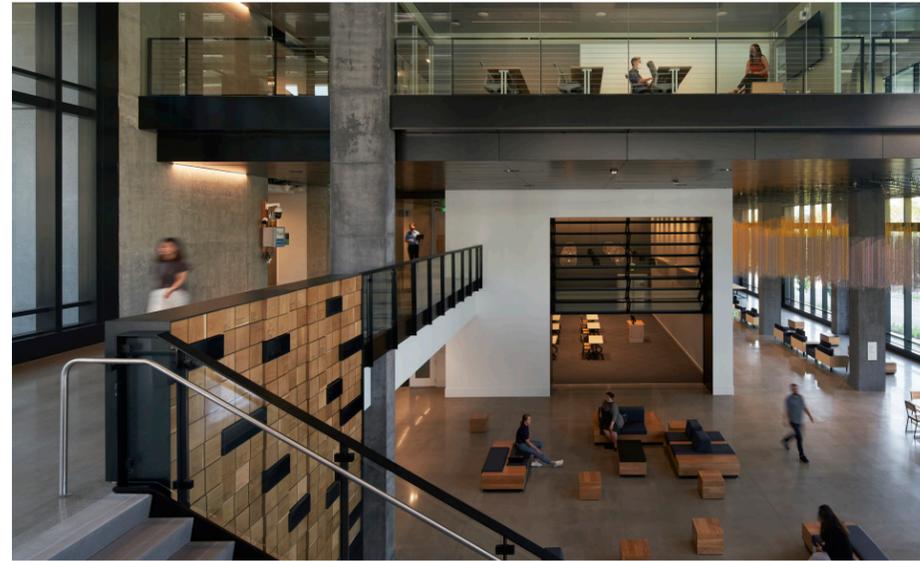
STUDENT COLLABORATION ZONE + LOBBY + INFORMAL STUDY

SHOWCASE + INSPIRE + GATHER

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 3,000 - 4,000 sf
- CAPACITY: 120+ PEOPLE
- CLEAR HEIGHT: 9 FT MIN WITH 12 FT MIN CEILING HEIGHT
- DESCRIPTION: An open and inviting lobby with student centric furnishings for collaboration and studying anchored by an attractive design feature that recognizes donors significant investment in student success. Student collaboration zone is a named donor space. Space should be adjacent to large classroom with ability to support events in classroom and lobby areas simultaneously.

CONTEXT IMAGERY



Hans Rosling Center for Population Health, UW



Health Science Education Building, UW

ADDITIONAL NOTES

- VISIBILITY:** Space should be highly visible from main building circulation path(s) and have views to the exterior.
- FINISHES:** As appropriate for high traffic areas and easy to maintain, similar to other recently completed buildings at WSU Pullman campus
- SPECIALTY:** N/A
- FURNITURE:** Robust mix of tables and chairs for student collaboration and study.
- EQUIPMENT:** N/A
- AUDIO VISUAL:** Provide provisions to support events and presentations in main lobby space.
- ACOUSTICS:** Provide acoustic absorptive materials as needed for occupant comfort.
- ELECTRICAL:** Provide dispersed charging stations and convenience power throughout informal study spaces and the student collaboration zone.
- LIGHTING:** Dimmable LED lighting. Provide indirect natural daylight where feasible.
- PLUMBING:** N/A
- MECHANICAL:** See general notes.
- SECURITY:** See general notes. Provide security cameras and card access at building entries.
- DATA:** See general notes.
- OPERATIONS:** Space should be available to WSU community after hours with secure access provided at building entry via cardreader.
- NICE TO HAVE:** A small flexible exhibition space to showcase rotating student work. Artwork that showcases or demonstrates the fields of engineering and architecture.

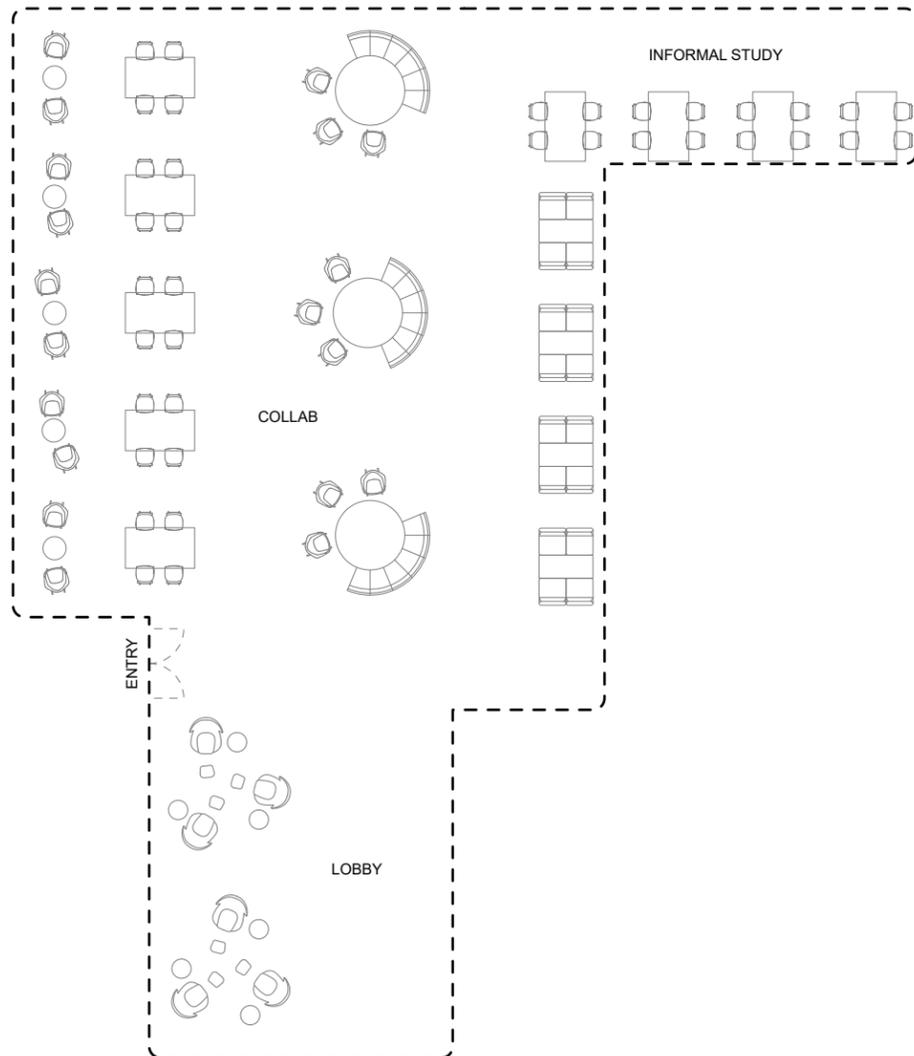
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CLUB HUB

SHOWCASE + INSPIRE + GATHER

OVERVIEW

QUANTITY: 1
TARGET AREA: 1,600 sf
CAPACITY: 76
CLEAR HEIGHT: 14 FT MIN CEILING
DESCRIPTION: Intended to be a community hub for student clubs this space should support light fabrication and project assembly as well as small collaborative meetings. Large or oversized doors should be incorporated to support movement of large projects in and out of the space. Ideally the space is column free and movable storage and furniture can be cleared for and rearranged for occasional student club events. Space has named donor support. Space is recommended to be on same level and adjacent to makerspaces and near freight elevator, loading dock and dumpsters. Oversized and/or roll up doors will be needed to support the movement of large equipment and projects. Ceiling or ceiling system to support mounting and displaying of student projects (airplanes, rockets, cars, etc.)

CONTEXT IMAGERY



Engineering Design Center, UBC



University of Waterloo



Washington State University, Everett

ADDITIONAL NOTES

- VISIBILITY:** Space should be moderately visible to bypassers and the general WSU community as a showcase area for tours and recruitment. Views to the outside are encouraged but could be supplemented with adequate interior glazing.
- FINISHES:** As appropriate for high-traffic, workshop like spaces that are easy to maintain. Ensure floors are non-slip. Corner guards and wall protection should be considered. Prefer to avoid ceiling and leave space open to structure with exposed systems.
- SPECIALTY:** Provide Magnetic markerboards and peg/slot board for student collaboration and tool storage. Safe storage for gas and other flammable substances will be needed.
- FURNITURE:** Movable workbench, storage cabinet and stools/chairs.
- EQUIPMENT:** TBD
- AUDIO VISUAL:** N/A
- ACOUSTICS:** While there is little concern of acoustical attenuation within the space, the design should address the acoustical concern of noise generated in space impacting other adjacent spaces of dissimilar use.
- ELECTRICAL:** In addition to standard convenience power it is recommend that additional power infrastructure capable of support shop-like tools and equipment be incorporated. Both 208v three phase 480v to the space will be needed. Provide retractable ceiling mounted power cords.
- LIGHTING:** Dimmable LED lighting with 95+ CRI. Provide natural daylight where feasible. Ability to manually override occupancy sensors in support of occupant safety has been requested.
- PLUMBING:** Provide utility sink(s) and floor drain(s). Space will need access to eye wash station.
- MECHANICAL:** Fume and dust extraction may be needed. Design-build team to work with owner to confirm design and functional capacity of space.
- SECURITY:** Space to be secured by Cougar card access and security camera coverage.
- DATA:** Some physical network ports will be needed in the space. Location and quantity to be determined with owner during design.
- OPERATIONS:** The operational model for how space is allocated and maintained is, at the time of this document not yet confirmed. Club Hub, Club Storage, Club Room and Project Assembly space layouts and concepts will need to develop and support operational model. Current intent is to provide a range of different type/size of spaces to support the diversity of club types at WSU Voiland College. Floor tape or paint may be needed to indicate walkways, clear zones and other assignable areas.
- NICE TO HAVE:** Direct access to loading dock and/or exterior work yard with water and power connections.

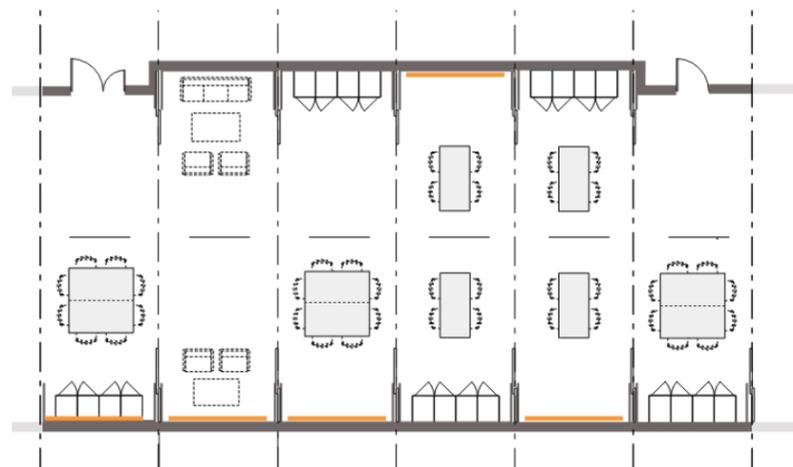
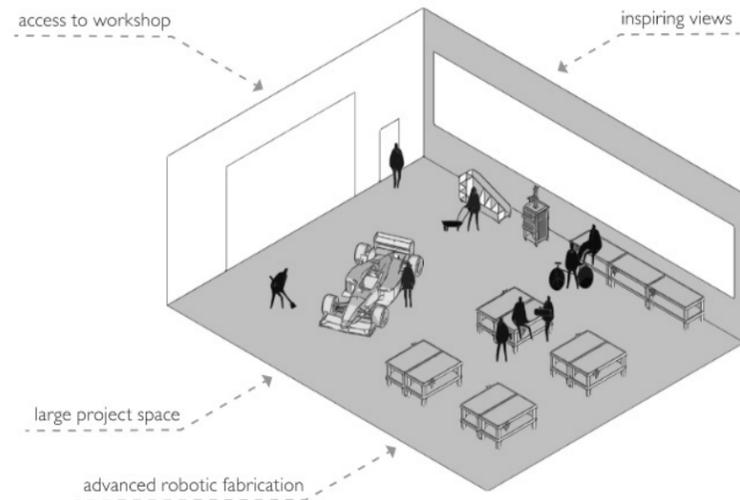
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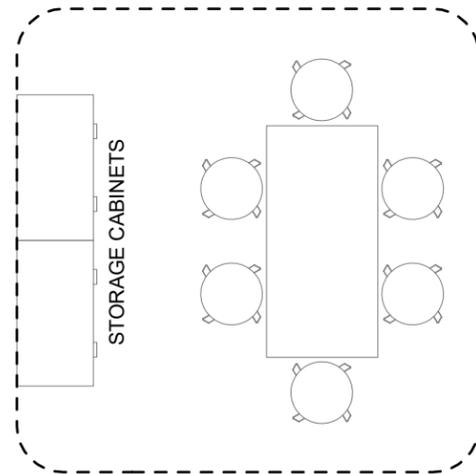
APPENDIX



SMALL CLUB AREA

OVERVIEW

- QUANTITY: 8
- TARGET AREA: 100 SF
- CAPACITY: 6 SEATS
- CLEAR HEIGHT: 9 FT MIN
- DESCRIPTION: Small, semi enclosed space dedicated to specific club(s) storage and collaboration. To be immediately adjacent or within the footprint of the general club hub space.



CONTEXT IMAGERY



Engineering Design Center, UBC

ADDITIONAL NOTES

- VISIBILITY: Spaces should be highly visible from club hub with signage to uniquely identify station and which club(s) it hosts.
- FINISHES: To match Club Hub.
- SPECIALTY: N/A
- FURNITURE: Storage cabinets, workbench and stools.
- EQUIPMENT: N/A
- AUDIO VISUAL: N/A
- ACOUSTICS: N/A
- ELECTRICAL: See general notes and Club Hub.
- LIGHTING: To match Club Hub.
- PLUMBING: N/A
- MECHANICAL: As needed to support activities.
- SECURITY: Storage to be securable by pad lock or other system that can regularly be changed out as needed.
- DATA: See general notes.
- OPERATIONS: The operational model for how space is allocated and maintained is, at the time of this document not yet confirmed. Club Hub, Club Storage, Club Room and Project Assembly space layouts and concepts will need to develop and support operational model. Current intent is to provide a range of different type/size of spaces to support the diversity of club types at WSU Voiland College.
- NICE TO HAVE: Magnetic markerboard.

LARGE CLUB AREA

SHOWCASE + INSPIRE + GATHER

OVERVIEW

QUANTITY: 3

TARGET AREA: 500 sf

CAPACITY: -

CLEAR HEIGHT: 14 FT MIN CEILING HEIGHT

DESCRIPTION: Intended to house a student club this space should support light fabrication and project assembly as well as small collaborative meetings. Large oversized or rollup doors are needed to support movement of large projects in and out of the space.

One of the three spaces is has named donor support.

Space is recommended to be on same level and adjacent to makerspaces and near freight elevator, loading dock and dumpsters.

Oversized and/or roll up doors will be needed to support the movement of large equipment and projects.

Ceiling or ceiling system to support mounting and displaying of student projects (airplanes, rockets, cars, etc.)

CONTEXT IMAGERY



Engineering Design Center, UBC



University of Waterloo

ADDITIONAL NOTES

VISIBILITY: Space(s) should be immediately visible to the Club Hub. Views to the outside are encouraged but could be supplemented with adequate interior glazing.

FINISHES: As appropriate for high-traffic, workshop like spaces that are easy to maintain. Ensure floors are non-slip.

Corner guards and wall protection should be considered.

Prefer to avoid ceiling and leave space open to structure with exposed systems.

SPECIALTY: Provide magnetic markerboards and peg/slot board for student collaboration and tool storage.

Safe storage for gas and other flammable substances will be needed.

FURNITURE: Movable workbench, storage cabinet and stools/chairs.

EQUIPMENT: TBD

AUDIO VISUAL: N/A

ACOUSTICS: While there is little concern of acoustical attenuation within the space, the design should address the acoustical concern of noise generated in space impacting other adjacent spaces of dissimilar use.

ELECTRICAL: In addition to standard convenience power it is recommend that additional power infrastructure capable of support shop-like tools and equipment be incorporated. Both 208v three phase 480v to the space will be needed. Provide retractable ceiling mounted power cords.

LIGHTING: Dimmable LED lighting with 95+ CRI. Provide natural daylight where feasible. Ability to manually override occupancy sensors in support of occupant safety has been requested.

PLUMBING: Provide utility sink(s) and floor drain(s). Space will need access to eye wash station.

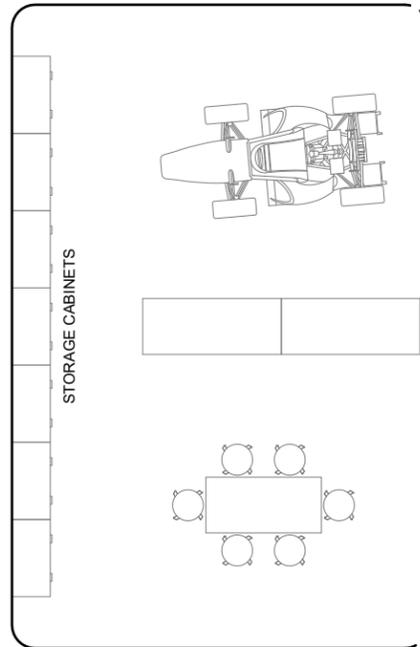
MECHANICAL: Fume and dust extraction may be needed. Design-build team to work with owner to confirm design and functional capacity of space.

SECURITY: Space to be secured by Cougar card access and security camera coverage.

DATA: Some physical network ports will be needed in the space. Location and quantity to be determined with owner during design.

OPERATIONS: The operational model for how space is allocated and maintained is, at the time of this document not yet confirmed. Club Hub, Club Storage, Club Room and Project Assembly space layouts and concepts will need to develop and support operational model. Current intent is to provide a range of different type/size of spaces to support the diversity of club types at WSU Voiland College.

NICE TO HAVE: Direct access to loading dock and/or exterior work yard with water and power connections.



PROJECT ASSEMBLY SPACE

SHOWCASE + INSPIRE + GATHER

OVERVIEW

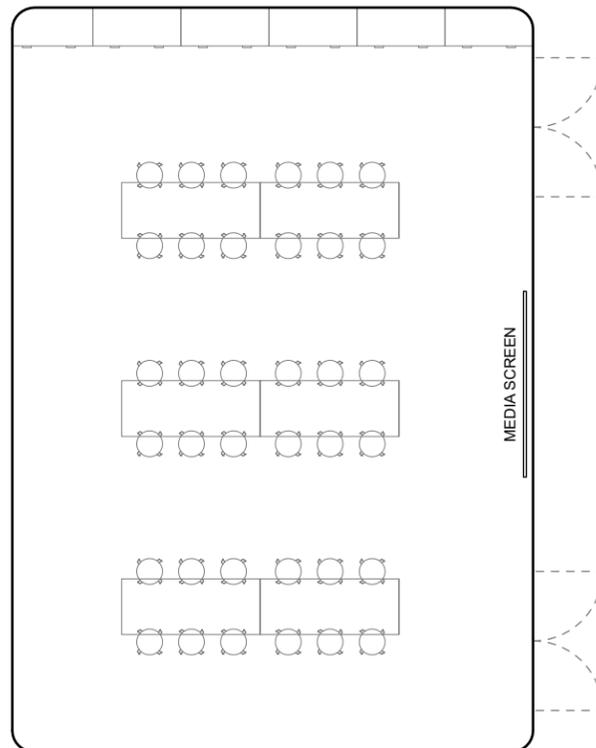
QUANTITY: 1

TARGET AREA: 800 SF

CAPACITY: 30 SEATS

CLEAR HEIGHT: 9 FT MIN

DESCRIPTION: Intended to support students that may not be involved in a club specific activity but still needs access to a space designed to support light fabrication and project assembly as well as small collaborative meetings. Large or oversized doors should be incorporated to support movement of large projects in and out of the space. Space is recommended to be on same level and adjacent to makerspaces and near freight elevator, loading dock and dumpsters. Oversized and/or roll up doors will be needed to support the movement of large equipment and projects in and out of the space.



CONTEXT IMAGERY



Student Success District, University of Arizona



Structural and Materials Engineering Building, UCSD

ADDITIONAL NOTES

- VISIBILITY:** Views to the outside are encouraged but could be supplemented with adequate interior glazing.
- FINISHES:** As appropriate for high-traffic, workshop like spaces that are easy to maintain. Ensure floors are non-slip. Corner guards and wall protection should be considered. Prefer to avoid ceiling and leave space open to structure with exposed systems.
- SPECIALTY:** Provide magnetic markerboards and peg/slot board for student collaboration and tool storage. Safe storage for gas and other flammable substances may be needed.
- FURNITURE:** Movable workbenches, storage cabinet and stools/chairs.
- EQUIPMENT:** TBD
- AUDIO VISUAL:** Design to support presentations for both in person and remote participation. Interface and operability to match classrooms.
- ACOUSTICS:** While there is little concern of acoustical attenuation within the space, the design should address the acoustical concern of noise generated in space impacting other adjacent spaces of dissimilar use.
- ELECTRICAL:** In addition to standard convenience power it is recommend that additional power infrastructure capable of support shop-like tools and equipment be incorporated. Provide retractable ceiling mounted power cords.
- LIGHTING:** Dimmable LED lighting with 95+ CRI. Provide natural daylight where feasible. Ability to manually override occupancy sensors in support of occupant safety has been requested.
- PLUMBING:** Provide utility sink(s) and floor drain(s). Space will need access to eye wash station.
- MECHANICAL:** Fume and dust extraction may be needed. Design-build team to work with owner to confirm design and functional capacity of space.
- SECURITY:** Space to be secured by Cougar card access and security camera coverage.
- DATA:** Space will require physical network ports, coordination locations with design and AV system.
- OPERATIONS:** The operational model for how space is allocated and maintained is, at the time of this document not yet confirmed. Club Hub, Club Storage, Club Room and Project Assembly space layouts and concepts will need to develop and support operational model. Current intent is to provide a range of different type/size of spaces to support the diversity of club types at WSU Voiland College. Floor tape or paint may be needed to indicate walkways, clear zones and other assignable areas. Space is intended to be a scheduled resource. Confirm operations with WSU.
- NICE TO HAVE:** Direct access to loading dock and/or exterior work yard with water and power connections.



CONNECT + SUPPORT

TUTORING

CONNECT + SUPPORT

OVERVIEW

QUANTITY: 1

TARGET AREA: 3,000 SF

CAPACITY: 150 SEATS

CLEAR HEIGHT: 9 FT MIN

DESCRIPTION: An inviting space with student centric furnishings for collaboration and individual work. Easily to update signage for posting hours, staff, sessions etc. Incorporate a secure storage area for staff/tutor belongings and supplies as well as a check-in area near the main entry of the space.

CONTEXT IMAGERY



Utah State University, College of Engineering Tutoring Center



Collaborative Learning Space, University of Arizona

ADDITIONAL NOTES

VISIBILITY: Space should be highly visible from main building circulation path and group study spaces.

FINISHES: As appropriate for high traffic areas and easy to maintain, similar to other recently completed buildings at WSU Pullman campus.

SPECIALTY: Marker boards or other writable surfaces throughout.

FURNITURE: Robust mix of tables and chairs for student collaboration and study. Shelving for reference books. Provide under table coat/backpack hooks or alternate storage option.

EQUIPMENT: N/A

AUDIO VISUAL: Consider AV that allows for tutoring via remote connection at other campuses, with mixed small groups.

ACOUSTICS: Consider sound absorptive floor and ceiling surfaces, some movable acoustic dividers to ensure small groups and individuals can be heard.

ELECTRICAL: In addition to standard perimeter convenience power provide power at tables.

LIGHTING: Zoned LED lighting. Provide indirect natural daylight where feasible.

PLUMBING: N/A

MECHANICAL: See general notes. Provide dedicated thermostat control to this room.

SECURITY: Access controlled via Cougar card with security cameras for monitoring entry to space.

DATA: See general notes. Space may require physical data ports.

OPERATIONS: N/A

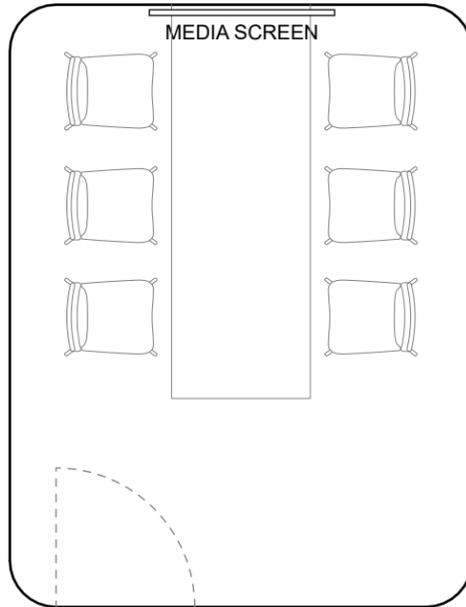
NICE TO HAVE: Digital sign-in kiosk. Graphics to brand tutoring and create welcoming atmosphere. Direct adjoining door from tutoring area to small classroom.

GROUP STUDY ROOM

CONNECT + SUPPORT

OVERVIEW

- QUANTITY: 12
TARGET AREA: 400 SF
CAPACITY: 2-6
CLEAR HEIGHT: 9 FT MIN
DESCRIPTION: Small room designed to hold groups up to 6 people to study, collaborate, meet, hold an interview, speak with a tutor or adviser. Also can serve as meeting space for clubs.



CONTEXT IMAGERY



Student Success District, University of Arizona



University of Washington, Odegaard Undergraduate Library

ADDITIONAL NOTES

- VISIBILITY:** Room should be semi-private to support focused work and concentration of occupants but it is encouraged to provide some level of visibility into the space for personal & psychological safety.
- FINISHES:** Similar to class A office spaces. Appropriate for high traffic and easy to maintain
- SPECIALTY:** Marker boards or other writable surfaces
- FURNITURE:** Variety of small table and chairs or comfortable lounge furnishings
- EQUIPMENT:**
- AUDIO VISUAL:** Flat panel display on rotational display on wall with small form factor computer and accessories to support remote conference calls.
- ACOUSTICS:** Sound absorption surfaces should be incorporated as needed for occupant comfort based on shape and room finish selections.
- ELECTRICAL:** Standard convenience power easily accessed with USB connection.
- LIGHTING:** LED lighting that is dimmable with occupancy sensor. Provide indirect natural daylight where feasible.
- PLUMBING:** N/A
- MECHANICAL:** See general notes
- SECURITY:** N/A
- DATA:** See general notes. Space will require physical data ports.
- OPERATIONS:** Reservable spaces with signage to indicate use and availability.
- NICE TO HAVE:** Dedicated thermostat and temperature control.
Operable window(s) for user comfort and ventilation.

SEMI-ENCLOSED GROUP STUDY SPACE

CONNECT + SUPPORT

OVERVIEW

QUANTITY: 8

TARGET AREA: 120 SF

CAPACITY: 5

CLEAR HEIGHT: 9 FT MIN

DESCRIPTION: Small semi-enclosed space designed to hold groups up to 5 people to study, collaborate, and meet informally. Also can serve as meeting space for clubs and impromptu interview or career services sessions.

Please note that in addition to the specific counts and targets listed here for group study individual seating areas should be located throughout the building.

CONTEXT IMAGERY



Odegaard Undergraduate Library and Learning Commons, University of Washington



Geisel Library, Teaching + Learning Commons, UCSD

ADDITIONAL NOTES

VISIBILITY: Space should be semi-private to support focused work and concentration of occupants.

FINISHES: Same as adjacent space(s).

SPECIALTY: N/A

FURNITURE: Variety of small table and chairs or comfortable lounge furnishings. Moveable marker boards or other writable surfaces

EQUIPMENT: N/A

AUDIO VISUAL: N/A

ACOUSTICS: Sound absorption surfaces should be incorporated as needed for occupant comfort based on shape and room finish selections.

ELECTRICAL: Standard convenience power

LIGHTING: LED lighting that is dimmable with occupancy sensor. Provide indirect natural daylight where feasible.

PLUMBING: N/A

MECHANICAL: See general notes.

SECURITY: Locating group study rooms within a secure building area is encouraged. Coordinate keying of group study rooms with VCEA and WSU facilities.

DATA: See general notes.

OPERATIONS: N/A

NICE TO HAVE: Consider flat panel display with opportunity to plug in individual devices to share content as a group .

STUDENT SUPPORT CENTER

CONNECT + SUPPORT

OVERVIEW

QUANTITY: 1

TARGET AREA: 400 SF

CAPACITY: 6 SEATS

CLEAR HEIGHT: 9 FT MIN

DESCRIPTION: A welcoming, inviting and flexible space to wait for meetings with student success employees. Potential could also have IT Help functions as well as student support and printing. Place to sell club gear, Voiland college gear, small items like pens, paper, notebooks, as well as nuts, bolts, raspberry PI, solder, filament for 3d printers, wood for models.

CONTEXT IMAGERY



Odegaard Undergraduate Library Print Station



University of Arizona Student Success Center

ADDITIONAL NOTES

VISIBILITY: Space should be highly visible from main building circulation path and service as the entry space to student success suite.

FINISHES: As appropriate for high traffic areas and easy to maintain, similar to other recently completed buildings at WSU Pullman campus.

SPECIALTY: N/A

FURNITURE: Small group seating with tables or casework for print station.

EQUIPMENT: 2D printer/copier station.

AUDIO VISUAL: N/A

ACOUSTICS: As recommended by acoustician.

ELECTRICAL: Power for printers & equipment.

LIGHTING: LED lighting. Provide indirect natural daylight where feasible.

PLUMBING: N/A

MECHANICAL: See general notes.

SECURITY: Space should be available to WSU community with secure access provided at building entry via cardreader.

DATA: As needed to support equipment.

OPERATIONS: This space could also be relocated/repurposed with makerspaces and help support large formation printing. Design-build team to develop design and locate by WSU direction.

NICE TO HAVE: Computer area to pull up files, set up printing.
Vending machines with school supplies and club materials.

WELLNESS ROOM

CONNECT + SUPPORT

OVERVIEW

QUANTITY: 1

TARGET AREA: 80-120 sf

CAPACITY: 1

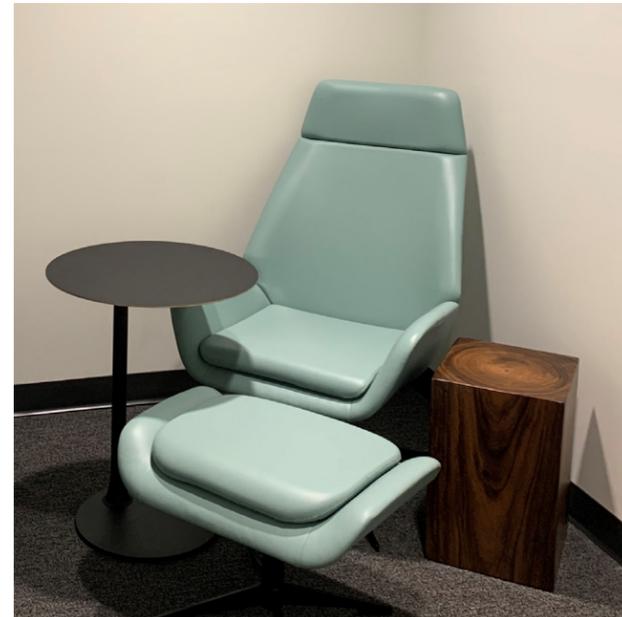
CLEAR HEIGHT: 8 FT 6 IN MIN

DESCRIPTION: A quiet and private space for rest. Intended to facilitate a calming atmosphere where an individual can feel comfortable and undisturbed. A variety of needs are met including lactation, autism "escape," migraine or headache, anxiety or panic attack, yoga, meditation, or prayer.

CONTEXT IMAGERY



Hans Rosling Center for Population Health



Health Sciences Education Center Wellness Suite

ADDITIONAL NOTES

- VISIBILITY:** Space is fully enclosed with no vision glazing for privacy.
- FINISHES:** Similar to type A office space, antibacterial commercial grade and easily cleanable.
- SPECIALTY:** N/A
- FURNITURE:** Comfortable recliner chair, foot rest, side table. No bed.
- EQUIPMENT:** Soap dispenser, paper towel dispenser.
Several storage lockers for storage of personal items.
- AUDIO VISUAL:** N/A
- ACOUSTICS:** Sound absorption should be included for human comfort and walls should be full height to minimize sound transfer to the outside of the space.
- ELECTRICAL:** Standard convenience power in easy to access locations.
- LIGHTING:** General and task level LED lighting that is dimmable. Provide indirect natural daylight where feasible. Floor or table lamp for task lighting.
- PLUMBING:** Sink and counter space.
- MECHANICAL:** See general notes.
- SECURITY:** Card access with "occupied/unoccupied" indicator thumb latch.
- DATA:** See general notes.
- OPERATIONS:** N/A
- NICE TO HAVE:** Artwork & custom features to enhance human comfort in space.
Small under counter refrigerator.

RECEPTION - BUILDING ADMINISTRATION

INTRODUCTION

PROJECT SUCCESS

SPACE NARRATIVES

SITE NARRATIVES

APPENDIX

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 400 SF
- CAPACITY: 2 EMPLOYEES PLUS SEATING FOR GUESTS
- CLEAR HEIGHT: 9 FT MIN
- DESCRIPTION: A welcome desk and small waiting space for visitors to support the building administration suite.

CONTEXT IMAGERY



Lease Crutcher Lewis Office

ADDITIONAL NOTES

- VISIBILITY: Space is semi-enclosed with one or two walls and design so that it is intuitively welcoming for visitors and students alike.
- FINISHES: Similar to class A office space. High traffic, commercial grade and easily cleanable.
- SPECIALTY: N/A
- FURNITURE: Reception desk and chair with privacy panel and small amount of storage for receptionist and soft seating with side table for visitors.
- EQUIPMENT: As needed to support reception/welcome functions.
- AUDIO VISUAL: N/A
- ACOUSTICS: Design space so that receptionist is able to comfortably talk with those at front desk and over the phone without disruption from adjacent spaces.
- ELECTRICAL: In addition to standard convenience power provided along the perimeter, ensure that at welcome desk has power to support equipment as needed.
- LIGHTING: General office LED lighting that is dimmable. Provide indirect natural daylight where feasible.
- PLUMBING: N/A
- MECHANICAL: Occupant comfort is a priority. See general notes. Independent zone and thermostat control has been requested by users.
- SECURITY: Building administration suite area to be fully securable by Cougar Card.
- DATA: See general notes. Confirm with owner if phone/data port is required at welcome desk.
- OPERATIONS: N/A
- NICE TO HAVE: Decorative lighting fixtures to help identify welcome space as a warm and welcoming space.

OFFICES

CONNECT + SUPPORT

OVERVIEW

QUANTITY: 42 TOTAL
STUDENT SUCCESS
18 ADVISING AT 120 SF
4 CAREER SERVICES AT 120 SF
1 ENTREPRENEURSHIP AT 120 SF
BUILDING ADMINISTRATION
15 AT 120 SF
3 AT 140 SF
1 AT 280 SF

TARGET AREA: 5,260 SF TOTAL

CAPACITY: 1 EMPLOYEE WITH CAPACITY FOR 2 GUESTS MINIMUM

CLEAR HEIGHT: 9 FT MIN

DESCRIPTION: A welcoming and professional office space with seating for visitor(s) with glazed door, relite and/or side light.
Provide donor recognition signage to named spaces.

CONTEXT IMAGERY



University of Arizona, Student Success District



Structural & Materials Engineering Building, UCSD



Hans Rosling Center for Population Health, UW

ADDITIONAL NOTES

- VISIBILITY:** Student success suite is strongly encouraged to be visible from main lobby and directly adjacent to student support center.
Room(s) should be semi-private to support focused work and concentration of occupant but it is encouraged to provide some level of visibility into the space for personal & psychological safety.
- FINISHES:** Similar to class B office spaces. Appropriate for high traffic and easy to maintain.
- SPECIALTY:** Window coverings.
- FURNITURE:** Powered adjustable standing desk with storage and chair for employee along with seating for a visitor.
- EQUIPMENT:** In addition to standard convenience power ensure desks, and other misc. office equipment have sufficient power.
- AUDIO VISUAL:** N/A
- ACOUSTICS:** Sound absorption surfaces should be incorporated as needed for occupant comfort based on shape and room finish selections. Acoustic privacy is critical care should be taken to minimize sound and speech transmittance between offices and adjacent spaces.
- ELECTRICAL:** Provide robust convenience power to support typical office equipment, including but not limited to computer and monitors.
- LIGHTING:** LED lighting that is dimmable with occupancy sensor. Provide indirect natural daylight where feasible. Task lighting may also be required.
- PLUMBING:** N/A
- MECHANICAL:** Occupant comfort is important. Minimize shared thermostat zones to the greatest extent possible. Some spaces are required to have dedicated/independent thermostat control, see general notes for additional information.
- SECURITY:** Building administration suite to be secured via Cougar Card, individual offices can be secured by key.
- DATA:** See general notes. Physical network ports will be required.
- OPERATIONS:** N/A
- NICE TO HAVE:** Dedicated thermostat and temperature control for each individual office. Operable window(s) for user comfort and ventilation.

CONFERENCE ROOM

CONNECT + SUPPORT

OVERVIEW

- QUANTITY: 1
TARGET AREA: 500 SF
CAPACITY: -
CLEAR HEIGHT: 9 FT MIN
DESCRIPTION: A large conference room to support advising, tutoring, career services, entrepreneurship office administrative functions. Provide space for smaller industry career sessions, large tutoring or advising meetings, recruiting and other student services functions.

CONTEXT IMAGERY



University of Arizona Student Success District



University of Arizona Student Success District

ADDITIONAL NOTES

- VISIBILITY:** Space to be moderately visible and easily accessed from student success and building administration areas.
- FINISHES:** Similar to class A office spaces. Appropriate for high traffic and easy to maintain.
- SPECIALTY:** Marker boards or other writable surfaces should be provided along the side of the room.
- FURNITURE:** Modular powered tables, small storage casework and conference chairs.
- EQUIPMENT:** N/A
- AUDIO VISUAL:** AV system should be design to smoothly support virtual and hybrid meetings, interface and operability to match classrooms. Provide AV connections at table(s) to avoid cord crossing over walking paths.
- ACOUSTICS:** Sound absorption surfaces should be provided on walls and ceilings to meet industry standards for conference rooms of similar size.
- ELECTRICAL:** In addition to standard convenience power provided along the perimeter, consider providing power to tables so that occupants are able to plug in during long meetings or use space as hotel-ing station when room is not in use.
- LIGHTING:** LED lighting that is dimmable. Provide indirect natural daylight where feasible.
- PLUMBING:** N/A
- MECHANICAL:** See general notes.
- SECURITY:** AV equipment should be securely anchored to deter theft.
- DATA:** Provide dedicated data port(s).
- OPERATIONS:** Scheduling monitor outside door.
- NICE TO HAVE:** Dedicated thermostat and temperature controls.
Additional mechanical capacity for potential future heating or cooling loads.

BREAKROOM AND CATERING KITCHEN

CONNECT + SUPPORT

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 300 SF
- CAPACITY: 8
- CLEAR HEIGHT: 9 FT MIN
- DESCRIPTION: A space for employees to prepare lunch, get water and coffee, and socialize/unplug from their work. With the investment in kitchen facilities, this space can double as catering kitchen for events.

CONTEXT IMAGERY



MHP San Diego Studio Renovation



UCSD Torrey Pines Center South 2nd Floor Renovation

ADDITIONAL NOTES

- VISIBILITY: Space should be semi-private as a space largely supporting staff, faculty, and events.
- FINISHES: As appropriate for high traffic areas and easy to maintain, similar to other recently completed buildings at WSU Pullman campus.
- SPECIALTY: N/A
- FURNITURE: Small tables and chairs with counter/island space.
- EQUIPMENT: Full size refrigerator, microwave(s), dishwasher, coffee maker(s).
- AUDIO VISUAL: N/A
- ACOUSTICS: N/A
- ELECTRICAL: Provide robust convenience power, outlets and circuiting to allow for simultaneous use of multiple appliances.
- LIGHTING: LED lighting. Provide indirect natural daylight where feasible.
- PLUMBING: Stainless steel sink, ice maker line to refrigerator, dishwasher.
- MECHANICAL: See general notes.
- SECURITY: Space to be located within a secure employee area.
- DATA: See general notes.
- OPERATIONS: Space may also be used as catering kitchen for events.
- NICE TO HAVE: Artwork that showcases or demonstrates the fields of engineering and architecture.

MAIL ROOM

OVERVIEW

QUANTITY:	1
TARGET AREA:	100 sf
CAPACITY:	4
CLEAR HEIGHT:	8 FT 6 IN MIN
DESCRIPTION:	Semi-enclosed mail and copier room. Shared by building administration suite and student success suite.
VISIBILITY:	N/A
FINISHES:	Similar to class B office space.
SPECIALTY:	Mail sorting shelving
FURNITURE:	Storage shelving and casework/countertop area.
EQUIPMENT:	N/A
AUDIO VISUAL:	N/A
ACOUSTICS:	N/A
ELECTRICAL:	Provide standard convenience power and support printing/copying equipment.
LIGHTING:	LED lighting. Provide indirect natural daylight where feasible.
PLUMBING:	N/A
MECHANICAL:	See general notes.
SECURITY:	Space to be secured by cougar card, can be accomplished within a larger control zone for employees and monitored with security cameras.
DATA:	See general notes. Will need physical data port.
OPERATIONS:	N/A
NICE TO HAVE:	N/A

FILE STORAGE

OVERVIEW

QUANTITY:	1
TARGET AREA:	120 sf
CAPACITY:	N/A
CLEAR HEIGHT:	8 FT 6 IN MIN
DESCRIPTION:	Space to securely store files and miscellaneous equipment.
VISIBILITY:	N/A
FINISHES:	Similar to class B office space.
SPECIALTY:	N/A
FURNITURE:	Storage shelving.
EQUIPMENT:	N/A
AUDIO VISUAL:	N/A
ACOUSTICS:	N/A
ELECTRICAL:	Provide standard convenience power.
LIGHTING:	LED lighting. Provide indirect natural daylight where feasible.
PLUMBING:	N/A
MECHANICAL:	See general notes.
SECURITY:	Space to be secured by cougar card, can be accomplished within a larger control zone for employees and monitored with security cameras.
DATA:	See general notes.
OPERATIONS:	N/A
NICE TO HAVE:	N/A

LEARN + STUDY



X-LARGE CLASSROOM

LEARN + STUDY

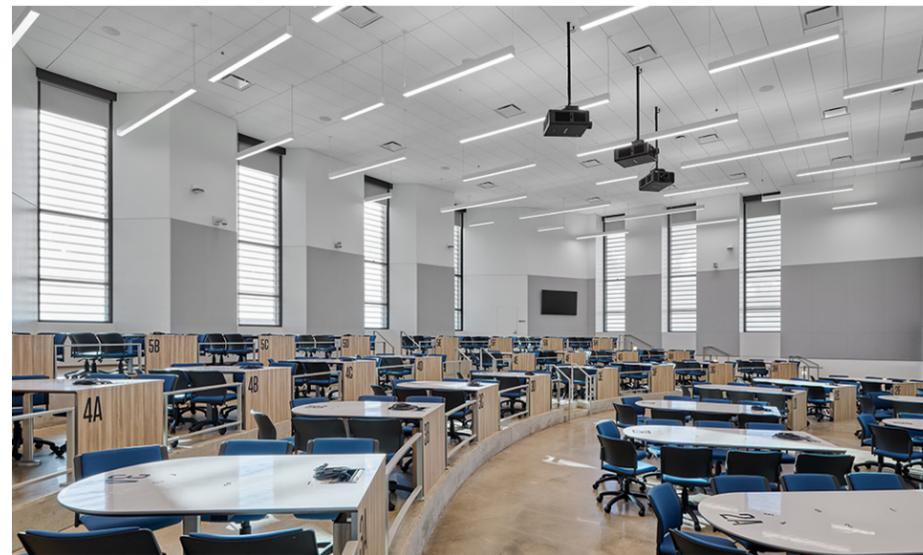
OVERVIEW

- QUANTITY: 1
- TARGET AREA: 5,800 SF
- CAPACITY: 250 STUDENT SEATS
- CLEAR HEIGHT: 14 FT MIN - ADDITIONAL CLEAR HEIGHT MAY BE NEEDED DEPENDING ON VIEW ANGLES
- DESCRIPTION: A large column free, terraced classroom that supports a group learning pedagogy. Space to meet WSU general classroom performance standards and support video conference capabilities to connectivity similar to a Global Campus Classroom. Ensure there is reasonable area for queuing outside classroom entries, provide garbage and recycle bins at classroom entries.

CONTEXT IMAGERY



University of Texas Austin Dell Medical School (Designed by Slam)



Tiered Learning Studio at Texas A&M (Designed by Bora)

ADDITIONAL NOTES

- VISIBILITY:** Provide access to natural daylight and outdoor views. Interior glazing to showcase actives and visibility into the classroom is also expected.
- FINISHES:** Similar to other recently completed WSU classrooms. Robust and easily maintainable and low maintenance.
- SPECIALTY:** Magnetic markerboards throughout.
- FURNITURE:** Movable and modular tables and chairs suitable for a high-use classroom environment. No fixed seating or tablet chairs.
- EQUIPMENT:** Window coverings.
- AUDIO VISUAL:** AV system should meet general university classroom performance standards for a classroom of this size with ability to connect with other campuses (AOI capable - video/audio/streaming/recording).
- ACOUSTICS:** Sound absorption surfaces should be provided on walls and ceilings to meet industry standards for classrooms. Room should be acoustically separated from adjacent spaces.
- ELECTRICAL:** Maximize convenience power (standard outlet and USB) for every seat throughout space.
- LIGHTING:** LED lighting that is dimmable with zoned controls. Provide indirect natural daylight where feasible.
- PLUMBING:** N/A
- MECHANICAL:** Occupant comfort is to be thoughtfully considered.
- SECURITY:** Security cameras monitoring primary entry/exits. Locate in corridors outside of classroom as directed by WSU.
- DATA:** See general notes. Physical network ports will be required along with robust Wifi connectivity.
- OPERATIONS:** Primary purpose will be scheduled classroom instruction but may occasionally support events or guest lectures.
- NICE TO HAVE:** Additional mechanical capacity for potential future heating or cooling loads. Cougar Card Access control

LARGE CLASSROOM + EVENT SPACE

LEARN + STUDY

OVERVIEW

QUANTITY: 1

TARGET AREA: 2,300 SF TOTAL
2,000 SF CLASSROOM
300 SF STORAGE

CAPACITY: 72 STUDENT SEATS

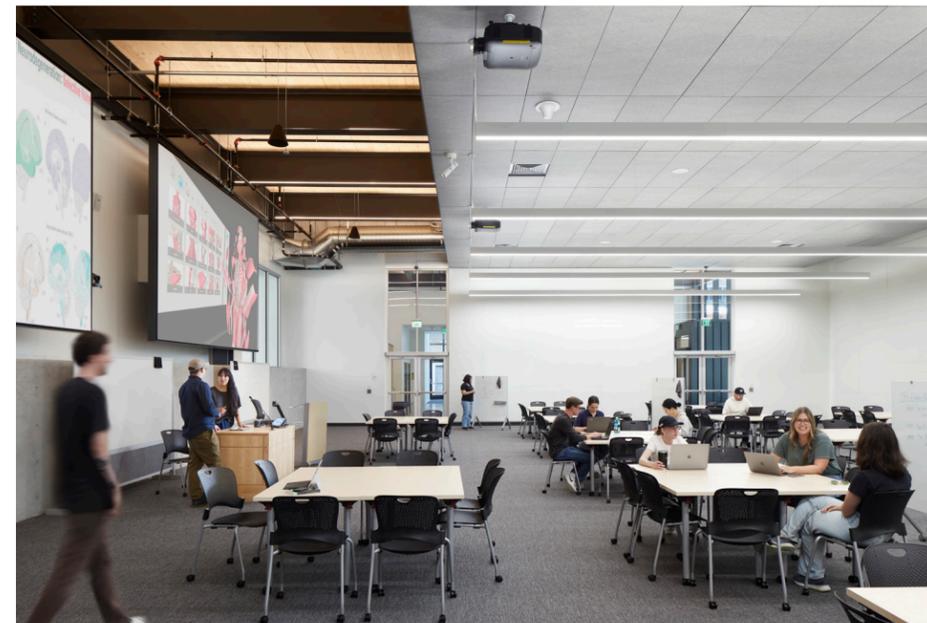
CLEAR HEIGHT: 14 FT MIN - ADDITIONAL CLEAR HEIGHT MAY BE NEEDED DEPENDING ON VIEW ANGLES

DESCRIPTION: A flexible flat floor classroom with movable furniture that meets WSU general classroom performance standards and facilities design guidelines. Designed to support event functions in addition to team based learning and lecture instruction.
Storage closet to be immediately accessed from space to store furniture and event supplies.
Large format doors to open up directly to lobby as needed for events.

CONTEXT IMAGERY



The Kendeda Building for Innovative Sustainable Design at Georgia Tech



Health Sciences Education Building, University of Washington

ADDITIONAL NOTES

VISIBILITY: Provide access to natural daylight and outdoor views. Interior glazing to showcase actives and visibility into the classroom is also expected.

FINISHES: Similar to other recently completed WSU classrooms. Robust and easily maintainable and low maintenance.

SPECIALTY: Magnetic markerboards throughout.
Large format doors to connect with adjacent lobby space.

FURNITURE: Movable and modular tables and chairs suitable for a high-use classroom environment. No fixed seating or tablet chairs.

EQUIPMENT: Window coverings.

AUDIO VISUAL: AV system should meet general university classroom performance standards for a classroom of this size with ability to connect with other campuses (AOI capable - video/audio/streaming/recording).

ACOUSTICS: Sound absorption surfaces should be provided on walls and ceilings to meet industry standards for classrooms. Room should be acoustically separated from adjacent spaces.

ELECTRICAL: Maximize convenience power (standard outlet and USB) at walls.

LIGHTING: LED lighting that is dimmable with zoned controls. Provide indirect natural daylight where feasible.

PLUMBING: N/A

MECHANICAL: Occupant comfort is to be thoughtfully considered.

SECURITY: Security cameras monitoring primary entry/exits. Locate in corridors outside of classroom as directed by WSU.

DATA: See general notes. Physical network ports will be required along with robust Wifi connectivity.

OPERATIONS: Primary purpose will be scheduled classroom instruction but may occasionally support events or guest lectures.

NICE TO HAVE: Additional mechanical capacity for potential future heating or cooling loads

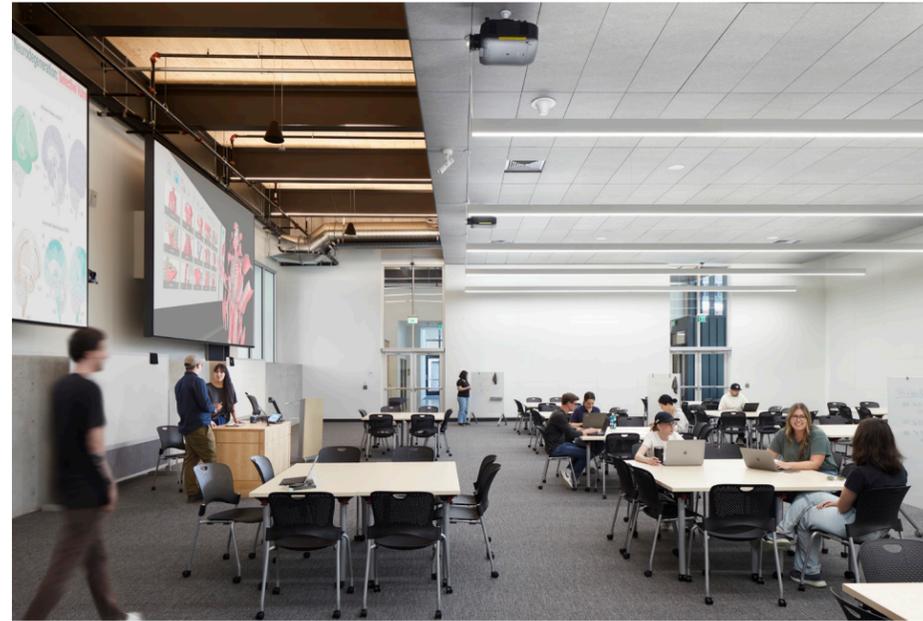
LARGE CLASSROOM

LEARN + STUDY

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 1,700 - 1,900 sf
- CAPACITY: 72
- CLEAR HEIGHT: 14 FT MIN - ADDITIONAL CLEAR HEIGHT MAY BE NEEDED DEPENDING ON VIEW ANGLES
- DESCRIPTION: A flexible flat floor classroom with movable furniture that meets WSU general classroom performance standards and facilities design guidelines.

CONTEXT IMAGERY



Health Sciences Education Building, University of Washington

ADDITIONAL NOTES

- VISIBILITY:** Provide access to natural daylight and outdoor views. Interior glazing to showcase actives and visibility into the classroom is also expected.
- FINISHES:** Similar to other recently completed WSU classrooms. Robust and easily maintainable and low maintenance.
- SPECIALTY:** Magnetic markerboards throughout.
- FURNITURE:** Movable and modular tables and chairs suitable for a high-use classroom environment. No fixed seating or tablet chairs.
- EQUIPMENT:** Window coverings
- AUDIO VISUAL:** AV system should meet general university classroom performance standards for a classroom of this size with ability to connect with other campuses (AOI capable - video/audio/streaming/recording).
- ACOUSTICS:** Sound absorption surfaces should be provided on walls and ceilings to meet industry standards for classrooms. Room should be acoustically separated from adjacent spaces.
- ELECTRICAL:** Maximize convenience power (standard outlet and USB) at walls.
- LIGHTING:** LED lighting that is dimmable with zoned controls. Provide indirect natural daylight where feasible.
- PLUMBING:** N/A
- MECHANICAL:** Occupant comfort is to be thoughtfully considered.
- SECURITY:** Security cameras monitoring primary entry/exits, locate in corridors outside of classroom as directed by WSU.
- DATA:** See general notes. Physical network ports will be required along with robust Wifi connectivity.
- OPERATIONS:** Primary purpose will be scheduled classroom instruction but may occasionally support events or guest lectures.
- NICE TO HAVE:** Additional mechanical capacity for potential future heating or cooling loads

MEDIUM CLASSROOM

LEARN + STUDY

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 1,500 SF
- CAPACITY: 60 SEATS
- CLEAR HEIGHT: 10 FT MIN - ADDITIONAL CLEAR HEIGHT MAY BE NEEDED DEPENDING ON VIEW ANGLES
- DESCRIPTION: A flexible classroom with movable furniture that meets WSU general classroom performance standards and facilities design guidelines and is capable of supporting corporate recruitment events.

CONTEXT IMAGERY



Tacoma Paper & Stationery, UW



Spark Digital Classroom Building, Washington State University

ADDITIONAL NOTES

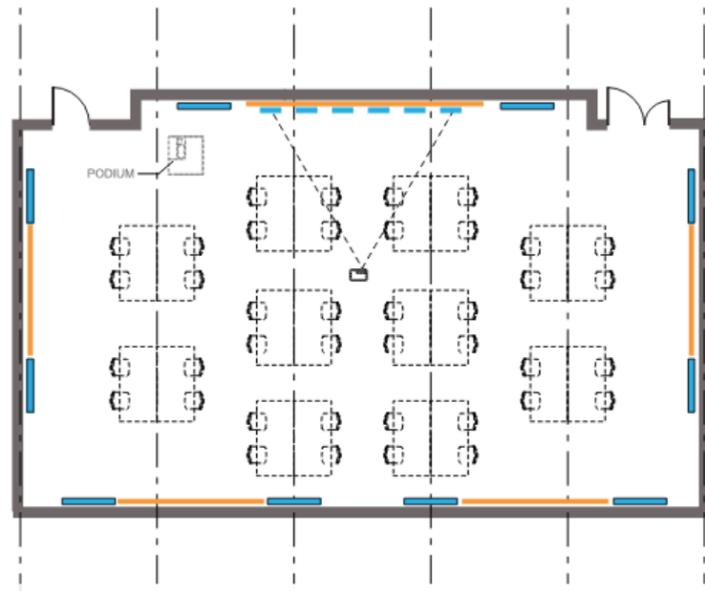
- VISIBILITY:** Provide access to natural daylight and outdoor views. Interior glazing to showcase actives and visibility into the classroom is also expected.
- FINISHES:** Similar to other recently completed WSU classrooms. Robust and easily maintainable and low maintenance.
- SPECIALTY:** Magnetic markerboards throughout.
- FURNITURE:** Movable and modular tables and chairs suitable for a high-use classroom environment. No fixed seating or tablet chairs.
- EQUIPMENT:** Window coverings
- AUDIO VISUAL:** AV system should meet general university classroom performance standards for a classroom of this size with ability to connect with other campuses (AOI capable - video/audio/streaming/recording).
- ACOUSTICS:** Sound absorption surfaces should be provided on walls and ceilings to meet industry standards for classrooms. Room should be acoustically separated from adjacent spaces.
- ELECTRICAL:** Maximize convenience power (standard outlet and USB) at walls.
- LIGHTING:** LED lighting that is dimmable with zoned controls. Provide indirect natural daylight where feasible.
- PLUMBING:** N/A
- MECHANICAL:** Occupant comfort is to be thoughtfully considered.
- SECURITY:** Security cameras monitoring primary entry/exits, locate in corridors outside of classroom as directed by WSU.
- DATA:** See general notes. Physical network ports will be required along with robust Wifi connectivity.
- OPERATIONS:** Primary purpose will be scheduled classroom instruction but may occasionally support events or corporate recruitment events.
- NICE TO HAVE:** Additional mechanical capacity for potential future heating or cooling loads. Infrastructure to support future computer lab.

SMALL CLASSROOM

LEARN + STUDY

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 1,000 SF
- CAPACITY: 42 STUDENT SEATS
- CLEAR HEIGHT: 12 FT MIN - ADDITIONAL CLEAR HEIGHT MAY BE NEEDED DEPENDING ON VIEW ANGLES
- DESCRIPTION: A flexible classroom with movable furniture that meets WSU general classroom performance standards and facilities design guidelines and is capable of supporting corporate recruitment events.



CONTEXT IMAGERY



Health Sciences Education Building, University of Washington



Student Success District, University of Arizona

ADDITIONAL NOTES

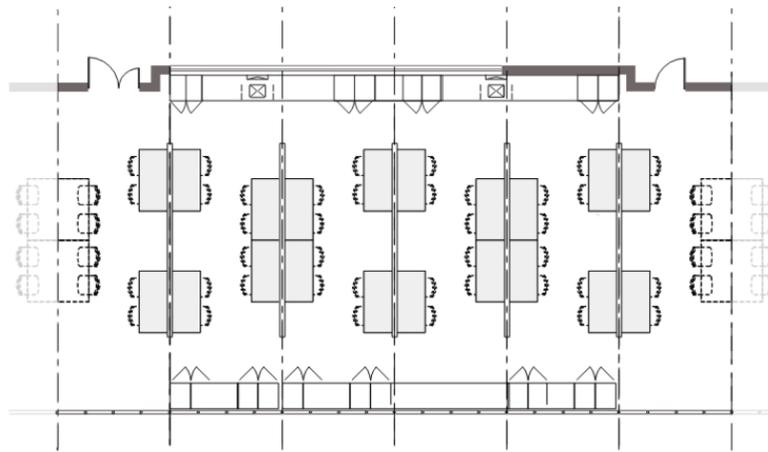
- VISIBILITY:** Provide access to natural daylight and outdoor views. Interior glazing to showcase actives and visibility into the classroom is also expected.
- FINISHES:** Similar to other recently completed WSU classrooms. Robust and easily maintainable and low maintenance.
- SPECIALTY:** Magnetic markerboards throughout.
- FURNITURE:** Movable and modular tables and chairs suitable for a high-use classroom environment. No fixed seating or tablet chairs.
- EQUIPMENT:** Window coverings
- AUDIO VISUAL:** AV system should meet general university classroom performance standards for a classroom of this size with ability to connect with other campuses (AOI capable - video/audio/streaming/recording).
- ACOUSTICS:** Sound absorption surfaces should be provided on walls and ceilings to meet industry standards for classrooms. Room should be acoustically separated from adjacent spaces.
- ELECTRICAL:** Maximize convenience power (standard outlet and USB) at walls.
- LIGHTING:** LED lighting that is dimmable with zoned controls. Provide indirect natural daylight where feasible.
- PLUMBING:** N/A
- MECHANICAL:** Occupant comfort is to be thoughtfully considered.
- SECURITY:** Security cameras monitoring primary entry/exits, locate in corridors outside of classroom as directed by WSU.
- DATA:** See general notes. Physical network ports will be required along with robust Wifi connectivity.
- OPERATIONS:** Primary purpose will be scheduled classroom instruction but may occasionally support events or corporate recruitment events.
- NICE TO HAVE:** Additional mechanical capacity for potential future heating or cooling loads. Infrastructure to support future computer lab.

CAPSTONE STUDIO TYPE A

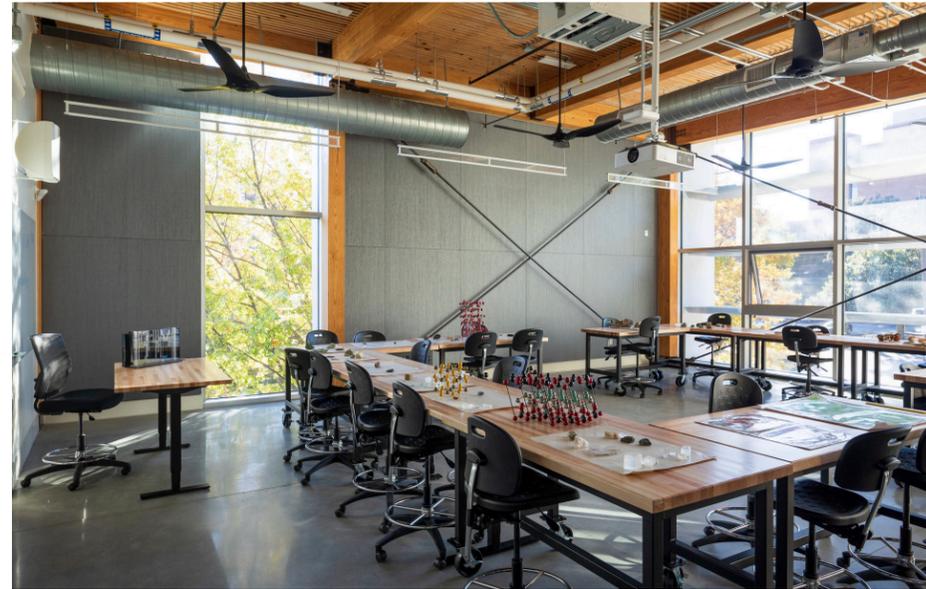
LEARN + STUDY

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 1,300-1,800 sf
- CAPACITY: 50-60 SEATS
- CLEAR HEIGHT: 10 FT MIN - ADDITIONAL CLEAR HEIGHT MAY BE NEEDED DEPENDING ON VIEW ANGLES
- DESCRIPTION: A flat floor classroom with movable furniture suitable for hands on learning modules in small student groups. May be branded under a specific discipline but intent is to be a functional instruction space available to all of Voiland College disciplines. Provide wall area for storage and tool boxes, Lockable casework, shelving with peg or slot board walls will also be needed for power hand tools.



CONTEXT IMAGERY



The Kendeda Building for Innovative Sustainable Design at Georgia Tech



Seattle Academy of Arts and Sciences STREAM Building

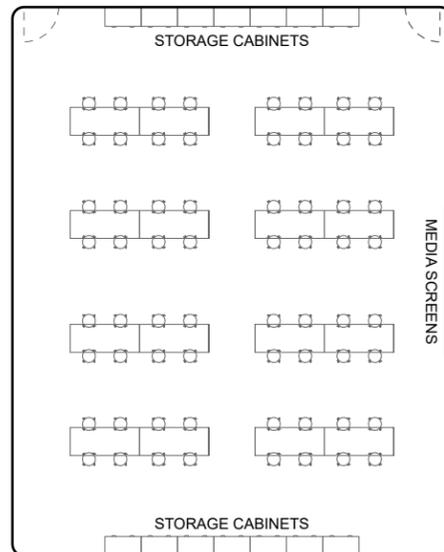
ADDITIONAL NOTES

- VISIBILITY:** Provide access to natural daylight and outdoor views. Interior glazing to showcase actives and visibility into the classroom is also expected.
- FINISHES:** Similar to other recently completed WSU classrooms with moppable floors. Robust and low maintenance.
- SPECIALTY:** Magnetic markerboards throughout.
- FURNITURE:** Movable and sturdy workbench like tables and chairs suitable for a high-use classroom environment. No fixed seating or tablet chairs.
- EQUIPMENT:** Window coverings
- AUDIO VISUAL:** AV system should meet general university classroom performance standards for a classroom of this size with ability to connect with other campuses (AOI capable - video/audio/streaming/recording).
- ACOUSTICS:** Sound absorption surfaces should be provided on walls and ceilings to meet industry standards for classrooms. Room should be acoustically separated from adjacent spaces.
- ELECTRICAL:** Maximize convenience power (standard outlet and USB) at walls.
- LIGHTING:** LED lighting that is dimmable with zoned controls. Provide indirect natural daylight where feasible.
- PLUMBING:** Utility sink and drain.
- MECHANICAL:** Occupant comfort is to be thoughtfully considered.
- SECURITY:** Security cameras monitoring primary entry/exits, locate in corridors outside of classroom as directed by WSU.
- DATA:** See general notes. Physical network ports will be required along with robust Wifi connectivity.
- OPERATIONS:** Primary purpose will be scheduled classroom instruction but may occasionally support events or corporate recruitment events.
- NICE TO HAVE:** Additional mechanical capacity for potential future heating or cooling loads.

CAPSTONE STUDIO TYPE B

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 1,300-1,800 SF
- CAPACITY: 50-60 SEATS
- CLEAR HEIGHT: 10 FT MIN - ADDITIONAL CLEAR HEIGHT MAY BE NEEDED DEPENDING ON VIEW ANGLES
- DESCRIPTION: A flat floor classroom with movable furniture suitable for hands on learning modules in small student groups. May be branded under a specific discipline but intent is to be a functional instruction space available to all of Voiland College disciplines. Provide wall area for storage and tool boxes, Lockable casework shelving with peg or slot board walls will also be needed for power hand tools. Donor named space with applicable signage and branding.



CONTEXT IMAGERY



Seattle Academy of Arts and Sciences STREAM Building



The Kendeda Building for Innovative Sustainable Design at Georgia Tech

ADDITIONAL NOTES

- VISIBILITY:** Provide access to natural daylight and outdoor views. Interior glazing to showcase actives and visibility into the classroom is also expected.
- FINISHES:** Similar to other recently completed WSU classrooms with moppable floors. Robust and easily maintainable and low maintenance. Countertops and tables to finish to be appropriate for handling bio samples.
- SPECIALTY:** Magnetic markerboards throughout.
- FURNITURE:** Movable and sturdy workbench like tables and chairs suitable for a high-use classroom environment. No fixed seating or tablet chairs.
- EQUIPMENT:** Window coverings. Two bio cabinet hoods with free standing independent filtration hoods.
- AUDIO VISUAL:** AV system should meet general university classroom performance standards for a classroom of this size with ability to connect with other campuses (AOI capable - video/audio/streaming/recording).
- ACOUSTICS:** Sound absorption surfaces should be provided on walls and ceilings to meet industry standards for classrooms. Room should be acoustically separated from adjacent spaces.
- ELECTRICAL:** Provide convenience power along perimeter as well as overhead retractable power reels at each group.
- LIGHTING:** LED lighting that is dimmable with zoned controls. Provide indirect natural daylight where feasible.
- PLUMBING:** Utility sink and drain.
- MECHANICAL:** Occupant comfort is to be thoughtfully considered.
- SECURITY:** Security cameras monitoring primary entry/exits, locate in corridors outside of classroom as directed by WSU.
- DATA:** See general notes. Physical network ports will be required along with robust Wifi connectivity.
- OPERATIONS:** Primary purpose will be scheduled classroom instruction but may occasionally support events or corporate recruitment events.
- NICE TO HAVE:** Additional mechanical capacity for potential future heating or cooling loads.

TEACHING LAB

LEARN + STUDY

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 1,300 - 1,500 sf
- CAPACITY: 42 SEATS
- CLEAR HEIGHT: 10FT MIN - ADDITIONAL CLEAR HEIGHT MAY BE NEEDED DEPENDING ON VIEW ANGLES
- DESCRIPTION: A flexible flat floor classroom/dry lab space with movable furniture suitable for hands on learning modules in small groups that supports the lab component of engineering 120 curriculum. Donor named space with applicable signage and branding.

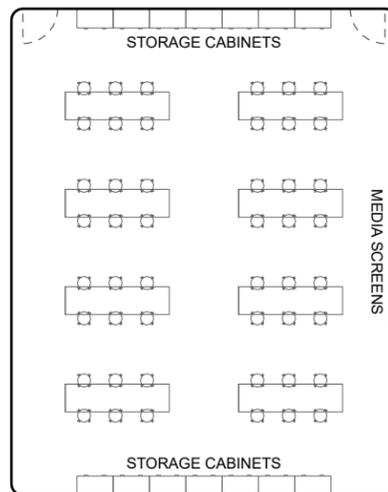
CONTEXT IMAGERY



Tacoma Paper and Stationery, University of Washington

ADDITIONAL NOTES

- VISIBILITY: Provide access to natural daylight and outdoor views. Interior glazing to showcase actives and visibility into the classroom is also expected.
- FINISHES: Similar to other recently completed WSU classrooms with moppable floors. Robust and easily maintainable and low maintenance.
- SPECIALTY: Magnetic markerboards throughout.
- FURNITURE: Movable and sturdy workbench like tables and chairs suitable for a high-use classroom environment. No fixed seating or tablet chairs.
- EQUIPMENT: Window coverings
- AUDIO VISUAL: AV system should meet general university classroom performance standards for a classroom of this size with ability to connect with other campuses (AOI capable - video/audio/streaming/recording).
- ACOUSTICS: Sound absorption surfaces should be provided on walls and ceilings to meet industry standards for classrooms. Room should be acoustically separated from adjacent spaces.
- ELECTRICAL: Provide convenience power along perimeter as well as overhead retractable power reels at each group.
- LIGHTING: LED lighting that is dimmable with zoned controls. Provide indirect natural daylight where feasible.
- PLUMBING: Utility sink and drain.
- MECHANICAL: Occupant comfort is to be thoughtfully considered.
- SECURITY: Security cameras monitoring primary entry/exits, locate in corridors outside of classroom as directed by WSU.
- DATA: See general notes. Physical network ports will be required along with robust Wifi connectivity.
- OPERATIONS: Primary purpose will be scheduled classroom instruction but may occasionally support events or corporate recruitment events.
- NICE TO HAVE: Additional mechanical capacity for potential future heating or cooling loads.





INNOVATE + BUILD + TEST

MAKERSPACE WELCOME AREA

INNOVATE + BUILD + TEST

OVERVIEW

QUANTITY: 1

TARGET AREA: 500 SF

CAPACITY: 15 SEATS

CLEAR HEIGHT: 9 FT MIN

DESCRIPTION: A dedicated space to safely welcome students and guests into makerspace and shop areas that does not require any personal protection equipment and provides space for safety orientation and informal gathering. Used as primary/controlled people entry into makerspace shop area.

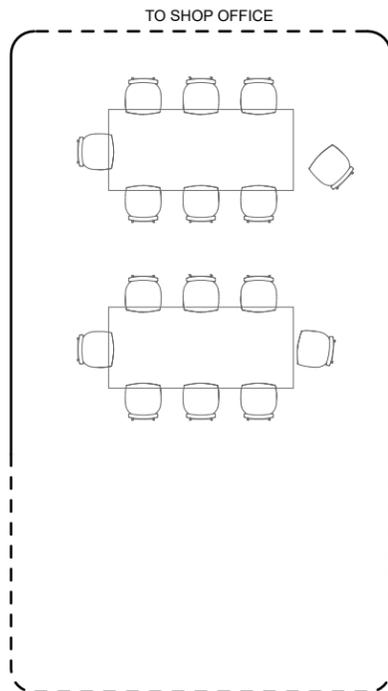
CONTEXT IMAGERY



Swarthmore College

ADDITIONAL NOTES

- VISIBILITY:** Room should be open and visible to general WSU community but not immediately adjacent to the main building lobby due to anticipated maker-space noise and smells.
- FINISHES:** As appropriate for high-traffic, workshop like spaces that are easy to maintain. Ensure floors are non-slip.
Prefer to avoid ceiling and leave space open to structure with exposed systems.
- SPECIALTY:** Magnetic markerboard(s). Provide wall space or furniture to display and showcase products made.
- FURNITURE:** Industrial movable tables with caster chairs.
- EQUIPMENT:** N/A
- AUDIO VISUAL:** Flat Panel Display or projector for instructional presentations.
- ACOUSTICS:** Configuration should help address the acoustical concern of noise generated in space impacting other adjacent spaces of dissimilar use.
- ELECTRICAL:** Maximize convenience power (standard outlet and USB) at walls.
- LIGHTING:** LED lighting that is dimmable with 95+ CRI with manual switch near entry.
Provide indirect natural daylight where feasible.
- PLUMBING:** N/A
- MECHANICAL:** See general notes.
- SECURITY:** Access to be controlled via Cougar Card and entry monitored by security camera.
- DATA:** See general notes. Will require physical data port, coordinate location with space design at direction of WSU.
- OPERATIONS:** N/A
- NICE TO HAVE:** Door stops to prop doors open when space is actively monitored.
Dedicated thermostat and temperature control.



MAKERSPACE SHOP AREA

INNOVATE + BUILD + TEST

OVERVIEW

QUANTITY: 1

TARGET AREA: 5,200 SF

CAPACITY: -

CLEAR HEIGHT: 14 FT MIN

DESCRIPTION: An adaptable student makerspace shop area able to support wood shop, digital fabrication, 3D printing, metal shop, electronics shop, textiles and paint booth with large oversized or roll up doors. Some equipment may require separation from other non compatible activities either which may be provided by adequate distance or may require physical separation. This space is intended to relocate the Frank Innovation Zone and ideally would also support relocation of the Fabrication Lab. Locate in close proximity to loading dock and freight elevator.

CONTEXT IMAGERY



Structural and Materials Engineering Building, UCSD



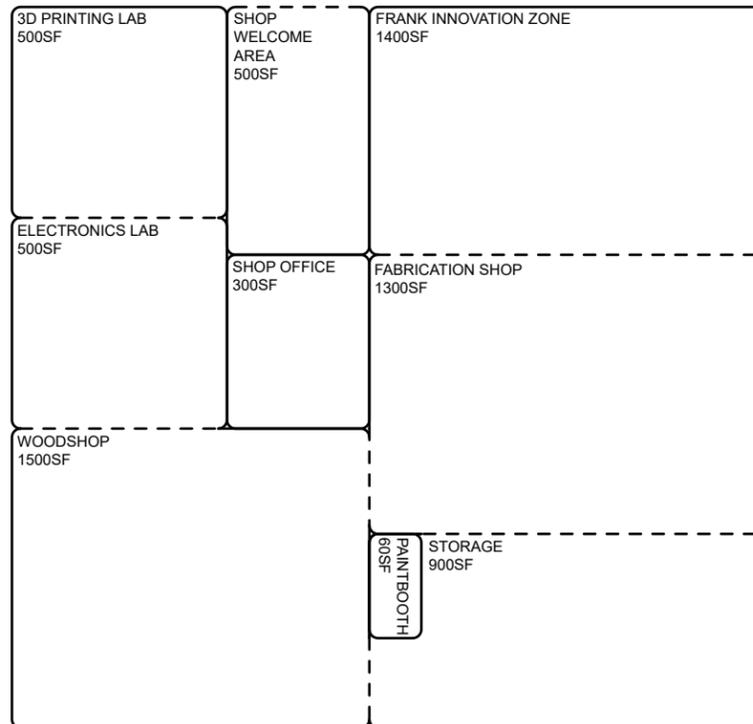
Wood Shop Area at the Invention Studio, Georgia Tech



University of Waterloo

ADDITIONAL NOTES

- VISIBILITY:** Space should be easy to locate and identifiable with some amount of visibility into the space from main building circulation path should not be atmospherically open to spaces of dissimilar use.
- FINISHES:** Similar to an industrial fabrication shop with impact resistant walls and moppable floors. Prefer to avoid ceiling and leave space open to structure with exposed systems.
- SPECIALTY:** Slot boards for reconfigurable storage and several marker-boards throughout the space are to be considered.
- FURNITURE:** Industrial workbenches and stackable stools.
- EQUIPMENT:** See equipment list provided by existing student makerspaces in the appendices. Intermittent access to a forklift would likely be needed for large deliveries and movement of equipment.
- AUDIO VISUAL:** N/A (see "nice to have" section below)
- ACOUSTICS:** Design build team should take care to mitigate noise transmittance to other adjacent spaces of dissimilar use.
- ELECTRICAL:** Electrical (both 208 and 480) along perimeter and overhead with retractable ceiling mounted power cords.
- LIGHTING:** Zoned LED lighting, 95+ CRI with manual switches near entry. Provide indirect natural daylight where feasible.
- PLUMBING:** Washer and dryer hookups. Two sinks with floor drain. Access to eye wash station.
- MECHANICAL:** Dust collection, fume ventilation and compressed air will be needed. Design build team to work with stake holders to evaluate systems of best value be it stand alone equipment or building systems.
- SECURITY:** Space should have secure access via Cougar Card.
- DATA:** See general notes. Space will require multiple physical data ports.
- OPERATIONS:** N/A
- NICE TO HAVE:** Space and equipment for composite material fabrication. Additional equipment and infrastructure to support concrete and plaster projects. Gantry crane. Digital display outside of shop to promote events, competitions, club activities and other information for students benefit. Security Cameras for remote monitory of equipment and safety.



MAKERSPACE OFFICE

INNOVATE + BUILD + TEST

OVERVIEW

QUANTITY: 1

TARGET AREA: 300 SF

CAPACITY: -

CLEAR HEIGHT: 8 FT 6 IN MIN

DESCRIPTION: A shared office for employees that manage and operate student makerspaces with ample storage space for small hand tools or other items that may be occasionally checked out to students.

CONTEXT IMAGERY



Seattle Public Utilities South Transfer Station

ADDITIONAL NOTES

- VISIBILITY:** Room should be semi-public but have direct line of site to shop area and welcome table.
- FINISHES:** Durable, impact resistant with moppable floor.
Prefer to avoid ceiling and leave space open to structure with exposed systems.
- SPECIALTY:** Magnetic whiteboard. Peg or slotboard wall for reconfigurable storage.
- FURNITURE:** Office desk, chair and storage for employees along with seating for visitors that supports multiple employees on individual zoom sessions.
- EQUIPMENT:** N/A
- AUDIO VISUAL:** N/A (see 'nice to have' section below)
- ACOUSTICS:** N/A
- ELECTRICAL:** Standard convenience power at perimeter to support office equipment and small hand tools. Provide additional outlets to support dedicated tool charging stations and several ceiling mounted convenience outlets.
- LIGHTING:** LED lighting that is dimmable with occupancy sensor. Provide indirect natural daylight where feasible.
- PLUMBING:** N/A
- MECHANICAL:** See general notes.
- SECURITY:** Space should be secure but available to assigned individuals and user groups. The preferred access control method is cardreader.
- DATA:** See general notes. Physical data drops will be required.
- OPERATIONS:** N/A
- NICE TO HAVE:** Dedicated thermostat and temperature control.
Flat panel display for web conferencing.

MAKERSPACE STORAGE

INNOVATE + BUILD + TEST

OVERVIEW

- QUANTITY: 1
- TARGET AREA: 900 SF
- CAPACITY: N/A
- CLEAR HEIGHT: 12 FT MIN
- DESCRIPTION: A dedicated storage room to support makerspaces. Double leaf doors or other wide opening like roll up doors should be considered to support movement of large materials in and out of space. Adjacency to loading dock and makerspace shop area are important.

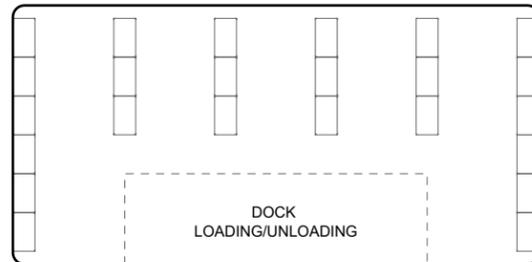
CONTEXT IMAGERY



Storage rack for misc. lumber

ADDITIONAL NOTES

- VISIBILITY:** Room does not have privacy or view needs but relite(s) or sidelite(s) at doors would improve future flexibility of the space if it needed to change use.
- FINISHES:** Durable back of house, impact resistant with moppable floor. Prefer to avoid ceiling and leave space open to structure with exposed systems.
- SPECIALTY:** Corner guards and wall protection should be considered. Pegboard or slotboard wall for reconfigurable storage.
- FURNITURE:** Movable storage shelves rack for raw materials storage would improve space efficiency and should be considered.
- EQUIPMENT:** N/A
- AUDIO VISUAL:** N/A
- ACOUSTICS:** N/A
- ELECTRICAL:** Standard convenience power at room perimeter with several additional ceiling mounted convenience outlets. Outlets should support chop saw and similar type tools.
- LIGHTING:** LED lighting with manual switch near the entry.
- PLUMBING:** N/A
- MECHANICAL:** See general notes.
- SECURITY:** Space should be secure but available to assigned individuals and user groups.
- DATA:** See general notes. May need physical data drop depending on point of sales system selected, confirm with WSU.
- OPERATIONS:** Space to support point of sales for selling of materials.
- NICE TO HAVE:** A fire rated enclosure so that space could serve as a containment area for chemicals or other materials of concern would improve overall flexibility of the space. Security cameras that monitor entry and exits.



STUDENT LOCKERS

INNOVATE + BUILD + TEST

OVERVIEW

QUANTITY: 1

TARGET AREA: 300 SF

CAPACITY: 60 LOCKERS

CLEAR HEIGHT: 9 FT MIN

DESCRIPTION: Semi open space for student lockers. Locate in close proximity to makerspace, can be along circulation path or in an alcove.

Lockers are primarily semester check out/assigned lockers. However a few day use lockers would provide options for students who only need intermittent use.

SHOWERS

INNOVATE + BUILD + TEST

OVERVIEW

QUANTITY: 2

TARGET AREA: 100 SF

CAPACITY: 1

CLEAR HEIGHT: 8 FT 6 IN MIN

DESCRIPTION: Single occupant ADA compliant restroom and shower located in close proximity to makerspaces.

SITE NARRATIVES

An overview of site conditions to account for in the design and construction of Schweitzer Engineering Hall

DISTRICT MASTER PLAN

INTRODUCTION

The Schweitzer Engineering Hall is the vanguard project to revitalize the Voiland College of Engineering and Architecture on the Pullman campus. Thoughtful consideration is to be given on how this building connects and supports students and employees as a central hub for the Voiland College.

PROJECT SUCCESS

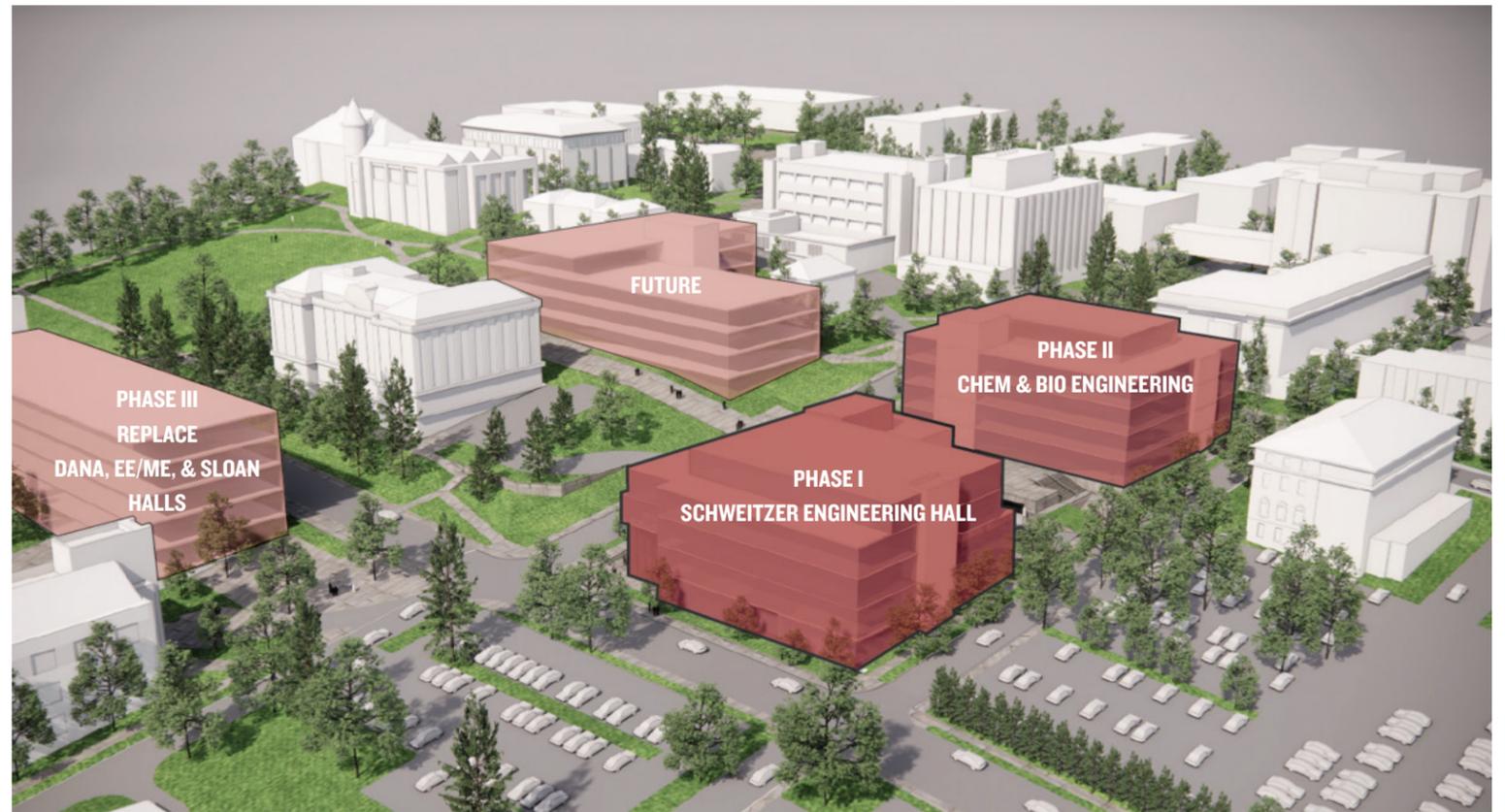
SPACE NARRATIVES

SITE NARRATIVES

APPENDIX



District map of Voiland College of Engineering and Architecture



Aerial view of planned development within Voiland College of Engineering and Architecture district

EXISTING SITE CONDITIONS

INTRODUCTION

CLIMATE

Pullman, Washington, is located in the Inland Northwest region of the United States. The climate in Pullman is characterized by hot, dry summers and cold, snowy winters.

In the summer, temperatures in Pullman regularly reach into the high 90s Fahrenheit and are often accompanied by low humidity and clear skies. Winters are colder, with average high temperatures ranging from the mid-30s to mid-40s Fahrenheit. Snowfall is common in the winter months, and the region can experience strong winds and cold temperatures during this time of year.

Care should be taken in design to avoid for snow drifts accumulating near entries and loading dock in the winter.

PROJECT SUCCESS

SPACE NARRATIVES

SITE NARRATIVES

APPENDIX

VEHICULAR AND PEDESTRIAN TRAFFIC

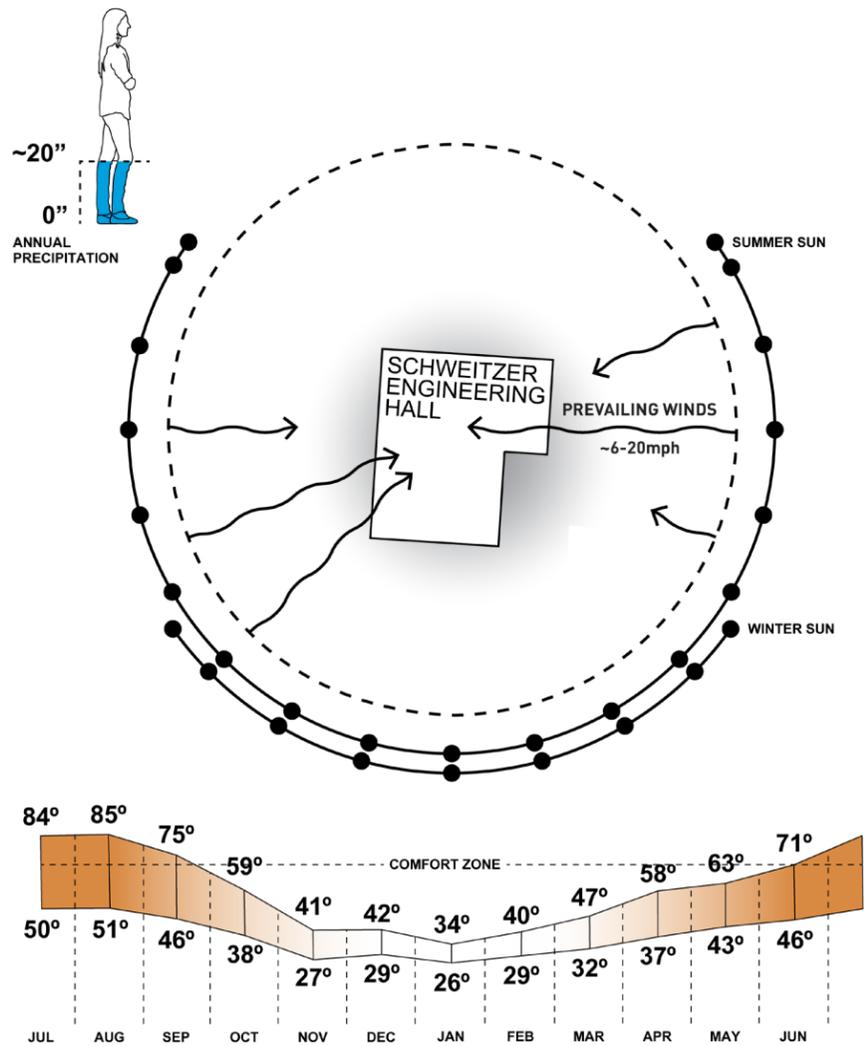
NE Spokane Street is a significant vehicular route through campus that supports daily commuters, public transit and is a truck/freight route. Meanwhile NE College Ave. is a primary pedestrian route. The pedestrian intersection between these two roads at the north west corner of project site should be thoughtfully considered. Project design should help ease pedestrian crossing and access issues rather than exacerbate them.

1. Pullman Transit Spokane and College bus stop
2. Building will require a loading dock that can accommodate large trucks. During programming meetings SE Columbia street was identified as a potential location.
3. Outdoor plaza/courtyard should be thoughtfully design to connect to future phases of the district master plan and support regular college events.

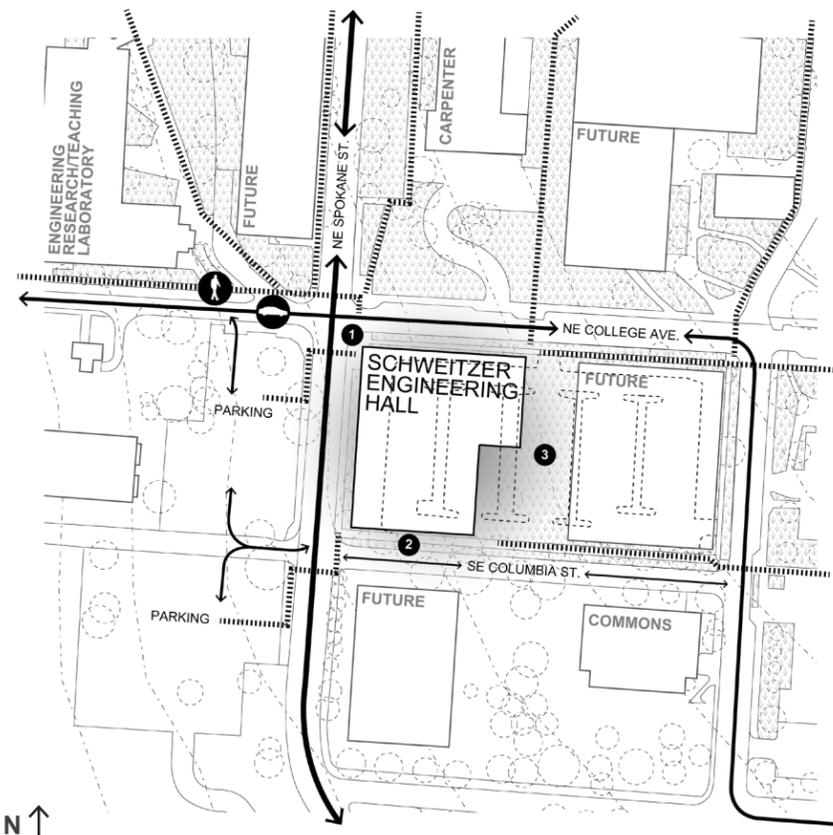
INFRASTRUCTURE

Below is an introductory overview of infrastructure near the project site. The majority of utilities and tunnel system for the district are located to the north of the project site.

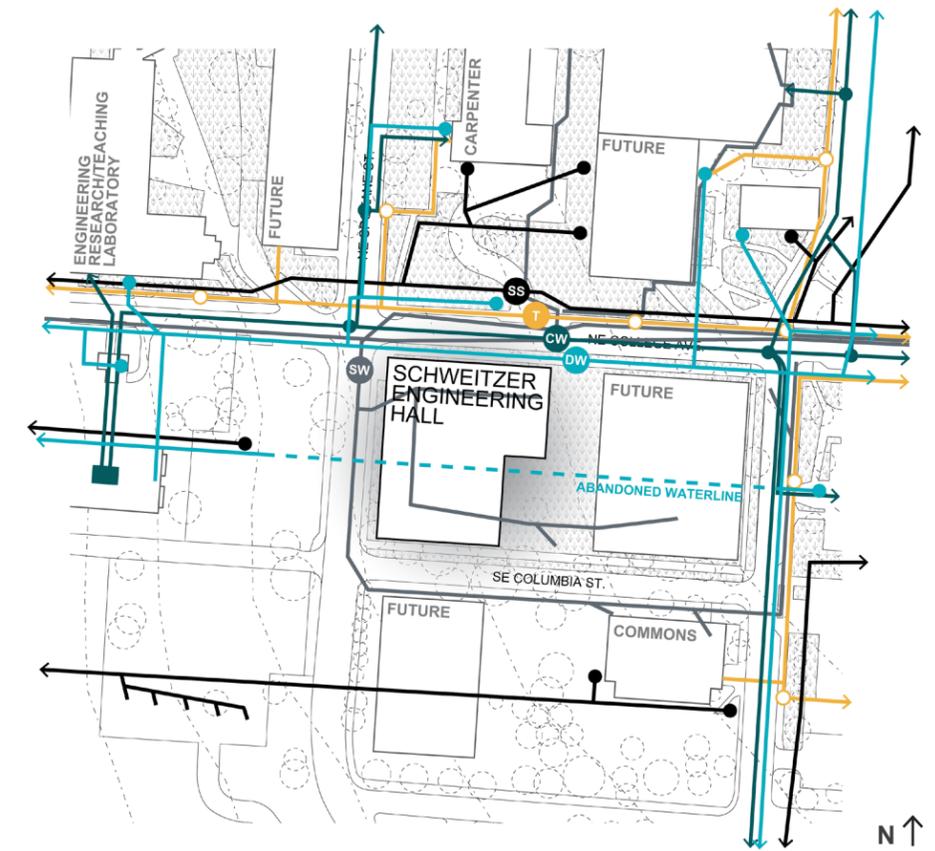
- SW: Storm Water
- SS: Sanitary Sewer
- T: Tunnel (Steam, Power, Data)
- CW: Chilled Water
- DW: Domestic Water



Top: Pullman receives approximately 20" of precipitation
 Middle: Prevailing winds and solar
 Bottom: Annual temperature Ranges



Traffic Diagram



Site Utilities Diagram - for reference only full site survey will be required for design and construction efforts.

PROJECT SITE SCOPE NARRATIVE

INTRODUCTION

INFRASTRUCTURE

A sizable amount of work may be required to be completed along Spokane Street and College Avenue to connect this building with utilities and support the future development of the district. Design build team will work with WSU on confirming scope extents during design.

LOADING DOCK

Site access and large truck deliveries to the new building will need to be accommodated. Current truck route is along Spokane Street and given the desire to improve pedestrian experience along College Ave. the design-build team should study locating the loading dock, truck route and other services along Columbia street to the south. Provide exterior hose bib and outlets for student makerspace and club activities.

OUTDOOR PLAZA

This building will be directly adjacent to a future building to the east. Thoughtfully design this space to be a welcoming space for students, faculty, staff and guests to enjoy as well as support regular college events. See additional notes under Space Narratives section of this document for additional information.

PARKING

At this time the parking lots located to the west across Spokane street are scheduled to remain, however consideration for this project to provide short term passenger loading/unloading space and accessible parking near the main entry is important component for project success. Space and infrastructure for a future food truck location near the building was a strong idea during engagement with users. The value of covered bike parking repeatedly came up during conversations with user groups and should be studied with owner during design. Electric vehicle charging stations would be a nice to have if they can be accommodated.

PEDESTRIAN EXPERIENCE

A safe and pleasant pedestrian experience along College Ave. is important component for connecting this building to the rest of the engineering and architecture district.

LANDSCAPE

Provide low maintenance landscape design and plants. Consider using native vegetation that can thrive in Pullman's hot summer, cold winter and relatively arid climate.

SECURITY

Building entry and exits, loading docks are to have security cameras and access control via Cougar Card.

ADDITIONAL NOTES

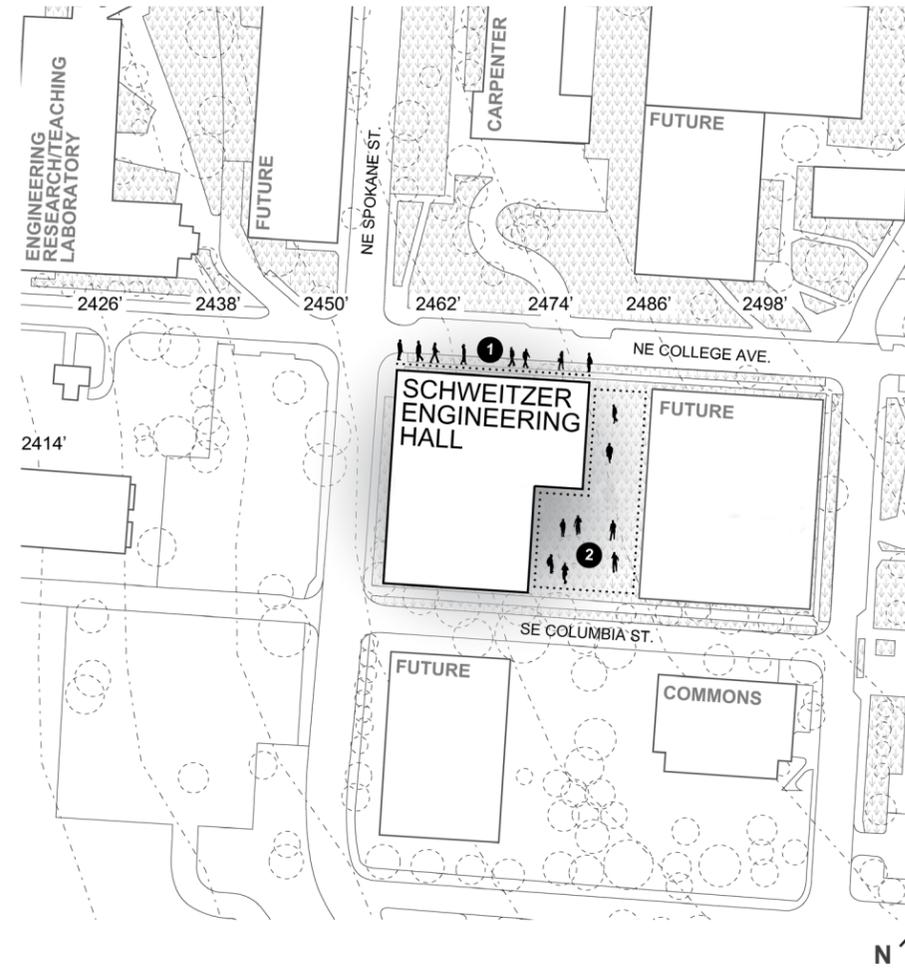
Additional site appurtenances (site wifi, exterior lighting, signage, storm water management, site safety phones, etc.) is to be assumed and coordinated with owner during design.

PROJECT SUCCESS

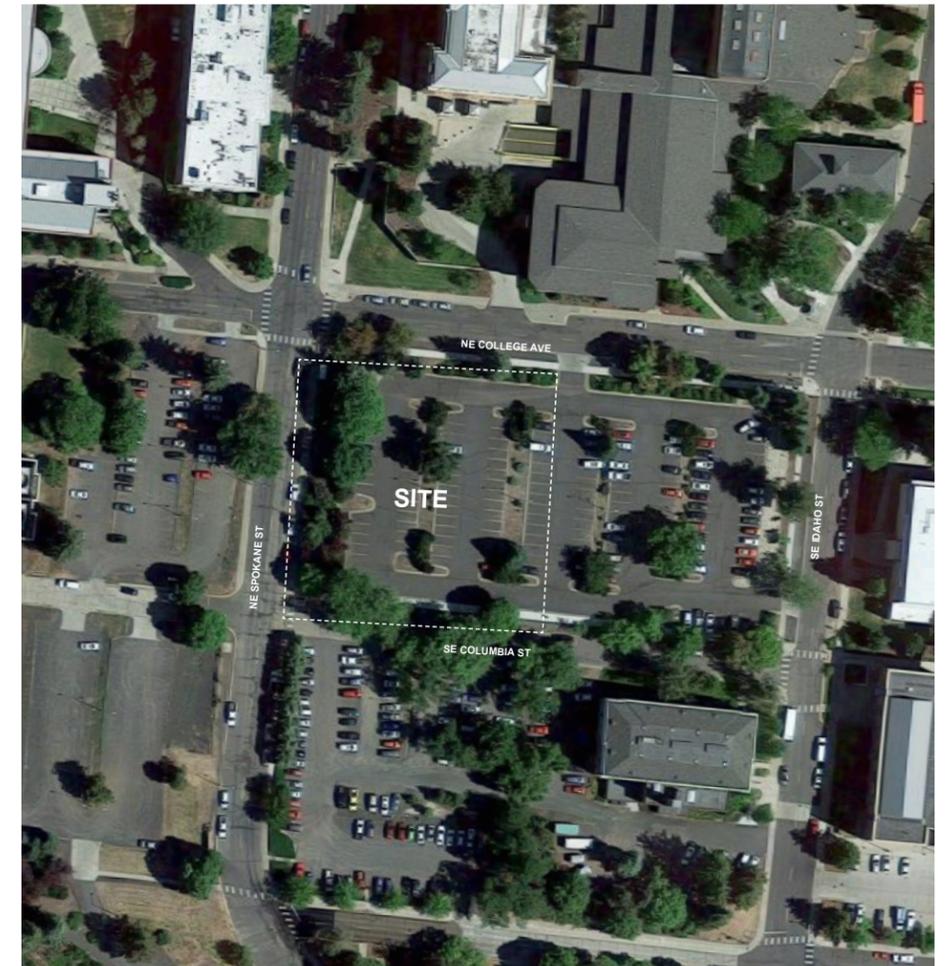
SPACE NARRATIVES

SITE NARRATIVES

APPENDIX



1. Safe and pleasant pedestrian experience along College Ave.
2. Welcoming outdoor plaza



Existing Conditions

APPENDIX

Additional Resources Available as Attachments:

22-0812 Leadership Group Kickoff.pdf
22-0920 Industry Working Groups - Presentation.pdf
22-0920 StudentSuccessBuildingSurveyResults.pdf
22-0920 VCEA Capstone Sponsor - Notes.pdf
22-0920 VCEA Executive Leadership Board - Notes.pdf
22-0920 VCEA Industry Partners - SEL - Notes.pdf
22-0920 VCEA Industry and Recruitment Partner - Notes.pdf
22-0921 Leadership Group Update - Notes.pdf
22-1000 Facilities and Stakeholders - Presentation.pdf
22-1011 Facilities and Stakeholders - Notes.pdf
22-1012 Facilities and Stakeholders - Notes.pdf
22-1014 Steering Committee - Notes.pdf
22-1014 Steering Committee - Presentation.pdf
22-1019 Leadership Group - Notes.pdf
22-1019 Leadership Group - Presentation UPDATED.pdf
22-1109 Leadership Group - Notes.pdf
22-1215 Leadership Group - Notes.pdf
22-1215 Leadership Group - Presentation.pdf
VCEA Student Makerspace Equipment Lists.xlsx