



FRED PIRKLE ENGINEERING TECHNOLOGY CENTER

Sam Houston State University

FRED PIRKLE ENGINEERING TECHNOLOGY CENTER

State-of-the-Art GATEWAY facility with emphasis on
Specialized Instructional capabilities showcasing:

Edison Innovation Level 1

- Collaboration Area with Adjacent Machine & Wood Shop, Clean Manufacturing, and Wet Labs
- Electronics/ Robotics Lab
- Student Group Meeting Rooms

Fred Pirkle Level 2

- Innovative Lobby / Pre-Function Space
- Fred Pirkle Honorific Museum
- Multipurpose Classrooms
- Computer Automated Drafting (CAD) with Plotter Room
- Alternative/Sustainable Energy complete with Wind Tunnel Lab and Energy Terrace
- Academic Outside Learning Courtyard

Thomas Jefferson Level 3

- Animal Science Physiology and Research Lab
- Agriculture Science Computer Lab
- Floral Design Lab
- Agriculture Science Student Teacher Classroom
- Adjunct Faculty Offices / Resource Room
- Student Lounge/Multimedia Workroom

Sam Houston Level 4

- Departments Chair Suite
- Faculty and Support Staff Offices
- Seminar and Conference Rooms
- Group Work Areas and Business Centers
- Grad Students & Teaching Assistant Areas

“EDISON INNOVATION LEVEL 1”

Collaboration Area:

- Innovation/Production
- Provides Support, Tools and Equipment for Designing, Building, Developing, and Prototyping Long-Term Multidisciplinary Projects

Electronics and Robotics Lab

- Electronics Components
- Robotics Workstations
- Lab Storage

Clean Manufacturing and Wet Lab

- 3D Printers
- Universal Laser System
- Lead Free Reflow Oven
- Cleaning Enclosure

Group Meeting / Break-out Rooms

- Fully IT/AV equipped
- On-Site Technician Supervisor

Machine Shop:

- 3D Printers
- Vertical Mills
- Drill Press & Belt Sanders
- Floor Mounted Band Saw

Woodworking Shop:

- Wood Lathes
- Miter & Table Saws
- Planer

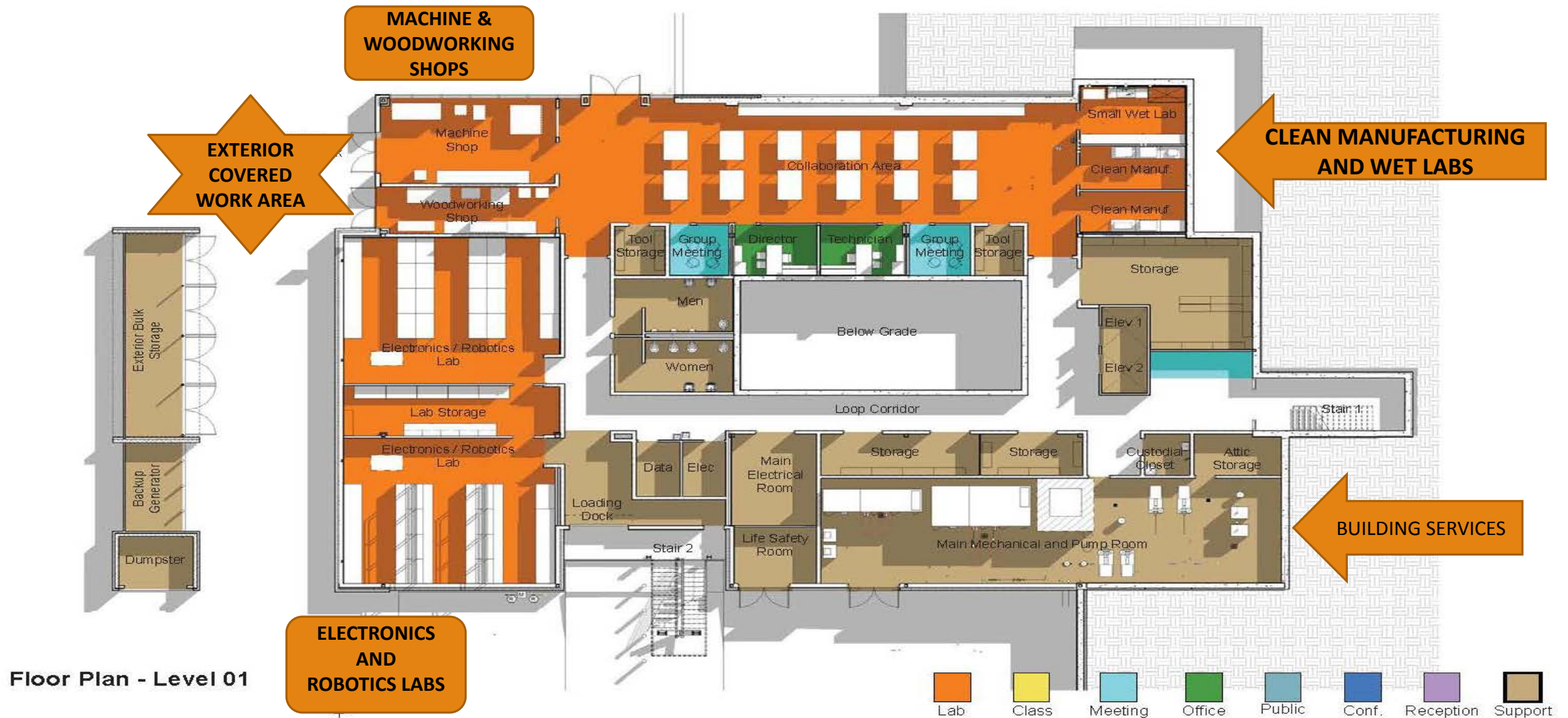
Exterior Covered Work Area

- With Separate Storage

Building Services

- Building Utility Room
- Elements of Teaching Incorporated with Visuals
- Storage Rooms

"EDISON INNOVATION LEVEL" 1



Fred Pirkle Engineering Technology Center

“FRED PIRKLE LEVEL 2”

Innovative / Pre-Function Lobby

- Fred Pirkle Rotating Display overlooking Collaboration Area
- Video Screen Wall
- Audio/Visual equipped for Presentations

Multipurpose Classroom(s)

- 3 Multipurpose Classrooms
- Opens to 1 Large Event Space/Classroom
- Furniture Storage

Alternative Energy/ Sustainability Lab

- Energy Systems and Sustainability Lab
- Wind Tunnel Lab
- Exterior Energy Terrace
- Lab Storage for Solar Powered Carts

Fred Pirkle Honoric Museum

- Fred Pirkle Honoric Memorial
- Interactive Museum Concept
- Reflection Lounge

Computer Laboratories

- Computer Automated Design (CAD)
- Print/ Plot Area
- Storage/ Tech Office

Outdoor Academic Courtyard

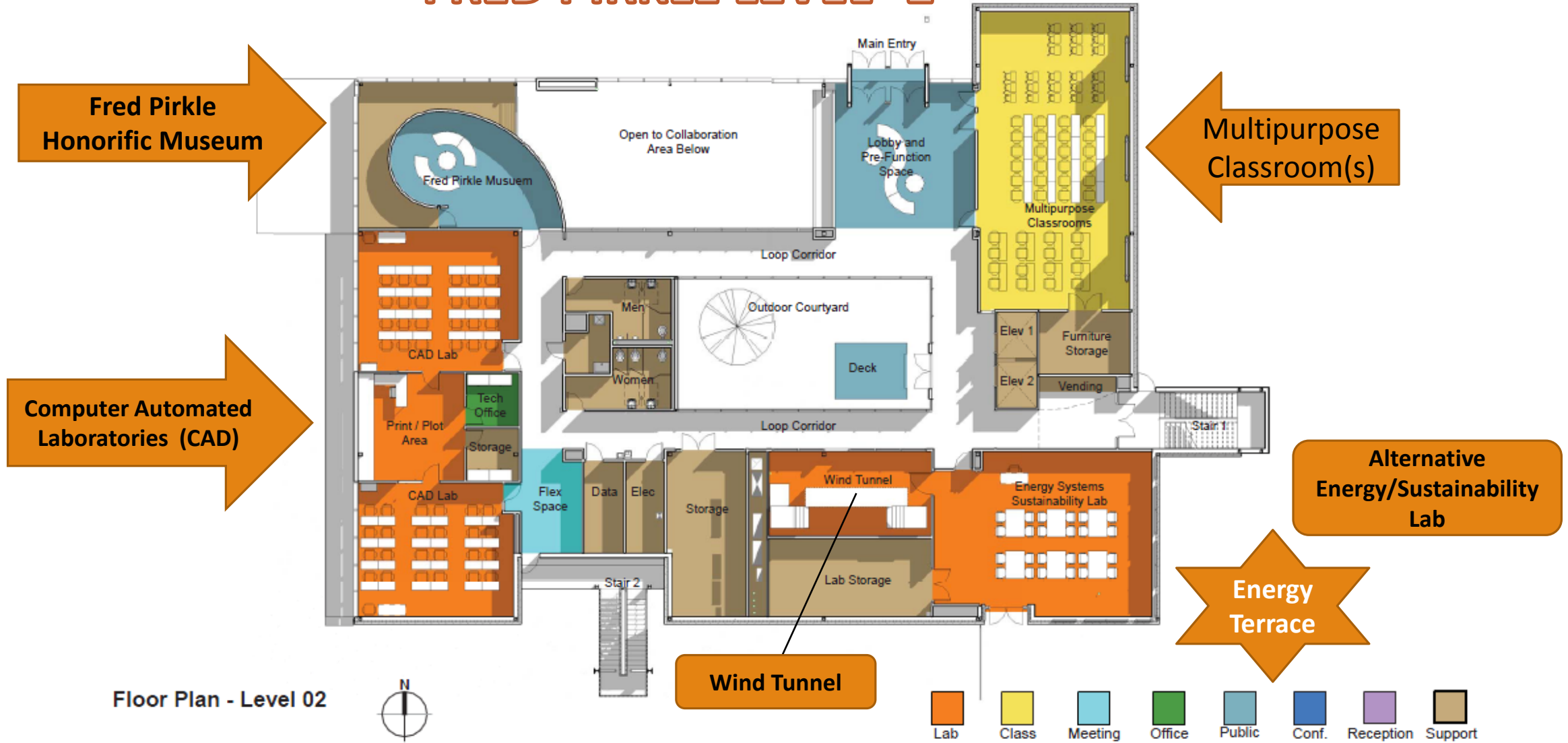
- Presentation Deck

“There are people who make things happen, there are people who watch things happen, and there are people who wonder what happened.

To be successful, you need to be a person who makes things happen.” Jim Lovell – Astronaut

Fred Pirkle Engineering Technology Center

“FRED PIRKLE LEVEL” 2



Floor Plan - Level 02



“THOMAS JEFFERSON LEVEL” 3

Animal Science Physiology Labs

- 2 Animal Science Labs
option to combine to 1 Large Group
- Prep Lab with Refrigerated Storage

Animal Science Research Lab

- Universal Testing Machine
- Imaging System
- Centrifuges
- Exhausted Fume Hood

Agricultural Science Student Teacher Classroom

- Practice Teaching Methods & Techniques
- Tutorial Rooms
- Multimedia Room for Lecture Preparation
- Curriculum/Storage Room

Agriculture Business Computer Lab / Seminar Room

- Collaborative Classroom Set-Up with 6 round tables
For Group Work Stations
- All Table Computers connect to Large Display
- Multimedia / Work Room Adjacent for Out-of-Class Work

Horticulture Science and Crop Lab

- Floral Design Lab featuring Display Case
- Direct Access to Receiving and Storage Space
- Walk-In Cooler
- Moveable Group Work Tables

Adjunct Faculty Offices / Resource

- 6 Adjunct Offices for Part Time or Temporary Faculty

Student Lounge

- Culminates Short-term Reading, Studying,
and Social Interaction

"THOMAS JEFFERSON LEVEL" 3

**Animal Science
Physiology and
Research Labs**



Floral Design Lab

**Agriculture Business
Computer Lab and
Multimedia Workroom**

**Agriculture Student Teacher
Classroom with Tutorial
and Multimedia Workroom**

Floor Plan - Level 03



- Lab
- Class
- Meeting
- Office
- Public
- Conf.
- Reception
- Support

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“SAM HOUSTON LEVEL 4”

Exclusively Administration

- Conference Room
- Group Work Areas
- Faculty Lounge with Kitchenette
- Work Room
- File Room

Department Chair Suite

- 2 Department Chairs
- 2 Assistant Chairs
- 2 Administrative Assistants
- Reception / Waiting Area
- Conference Room
- Faculty Lounge

Graduate Student and Teaching Assistant Carrel

- 3 Groups of Open Office Carrels
- Group Collaboration Areas
- Business Centers with networked Print Stations

Faculty Offices and Support Staff

- Conference Room
- Group Work Areas
- Faculty Lounge with Kitchenette
- Work Room
- Business Centers

Faculty Seminar Room

- Large Faculty Seminar / Meeting Room
- Audio / Visual equipped
- Countertop for Catering

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"SAM HOUSTON LEVEL" 4

Departments Chair Suite
and
Faculty Lounge & Work Room

Faculty / Staff Offices

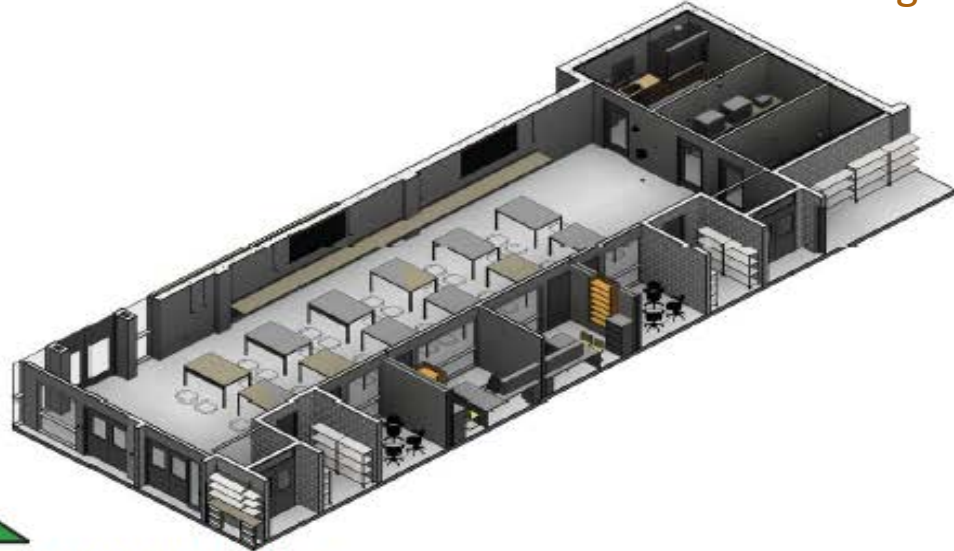


Floor Plan - Level 04



- Lab
- Class
- Meeting
- Office
- Public
- Conf.
- Reception
- Support

Fred Pirkle Engineering Technology Center

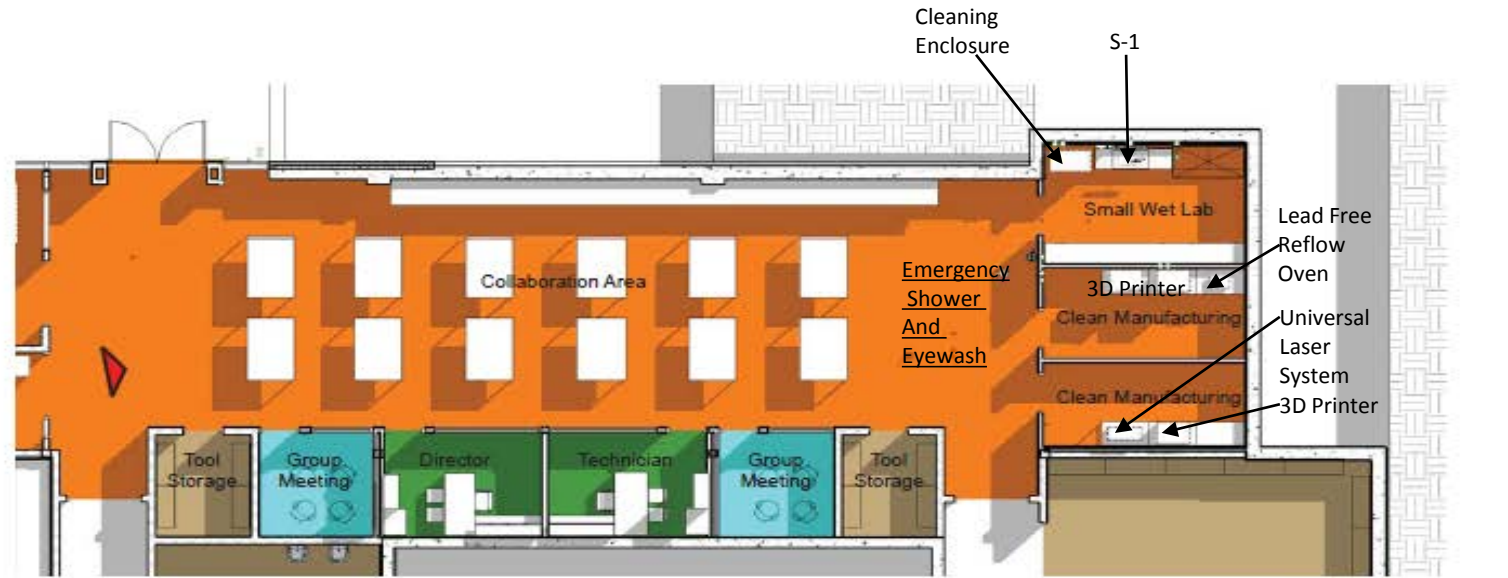


Axonometric View at Innovation Lab



Rendering at Innovation Lab

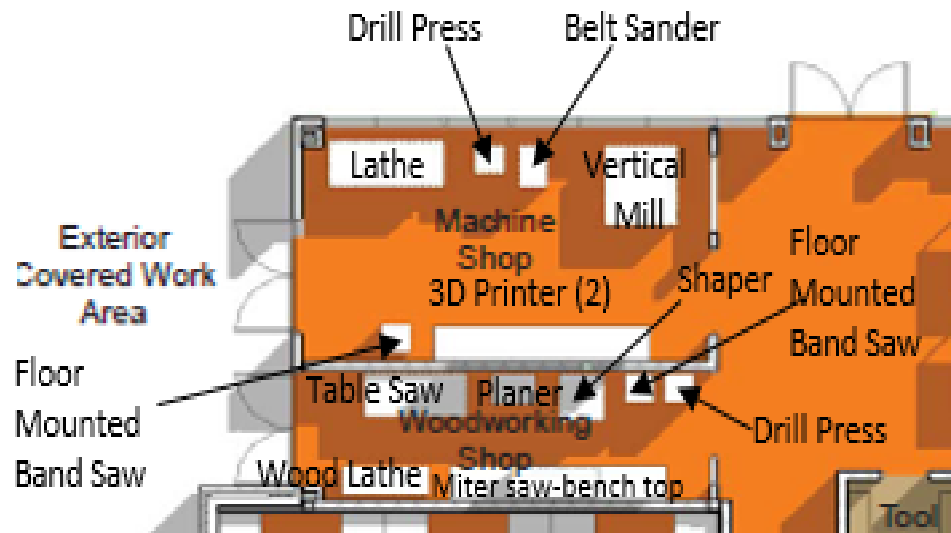
Innovation
Collaboration
Area



Enlarged Plan - Innovation Lab

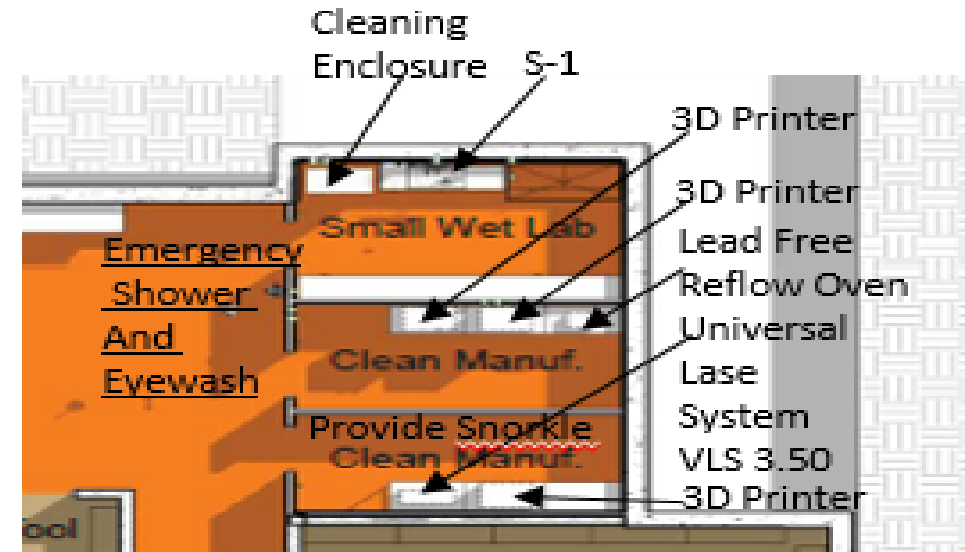


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Northwest side of level 1:

1. Lathe
2. Drill Press(2)
3. Belt Sander
4. Vertical Mill
5. 3D Printer
6. Floor Mounted Band Saw(2)
7. Table Saw
8. Planner
9. Shaper
10. Wood Lathe
11. Miter Saw-bench Top



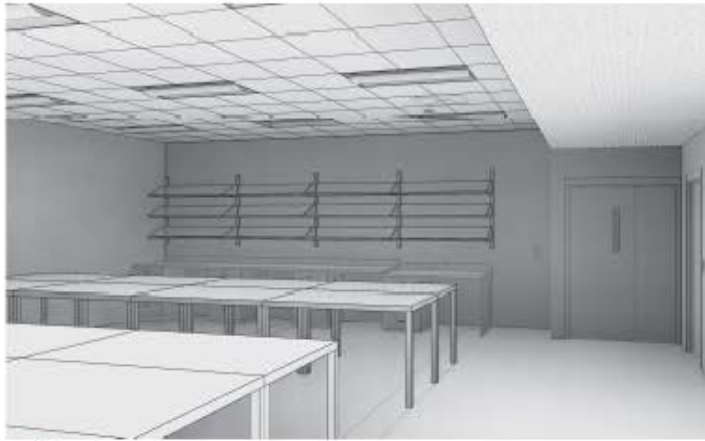
Northeast side of level 1:

1. Cleaning Enclosure
2. S-1
3. 3D Printer(3)
4. Lead Free Reflow Oven
5. Universal Lase System VLS 3.50

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Axonometric View at Electronics / Robotics Lab



Rendering at Electronics / Robotics Lab

Electronics / Robotics Labs

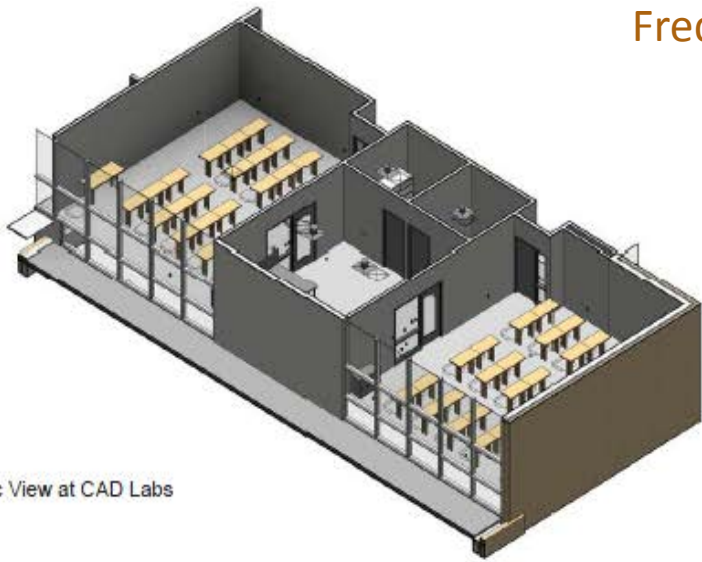



Enlarged Plan - Electronics / Robotics Labs

Electronics/ Robotics
Advance Equipment
and Technology

- Lab
- Class
- Meeting
- Office
- Public
- Conf.
- Reception
- Support

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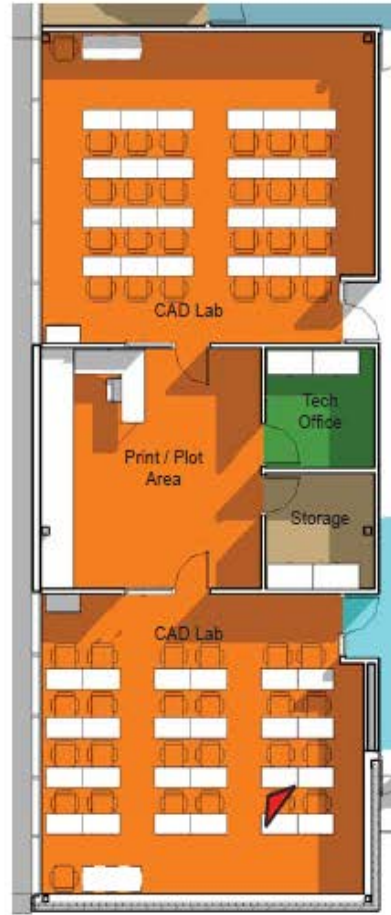


 Axonometric View at CAD Labs



 Rendering at CAD Labs

CAD Labs

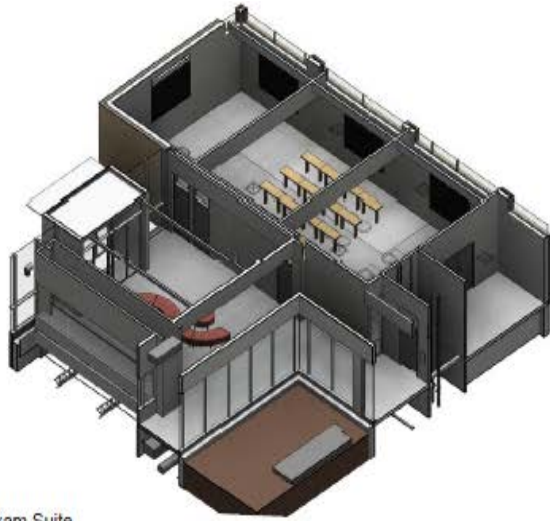


  Enlarged Plan - CAD Labs



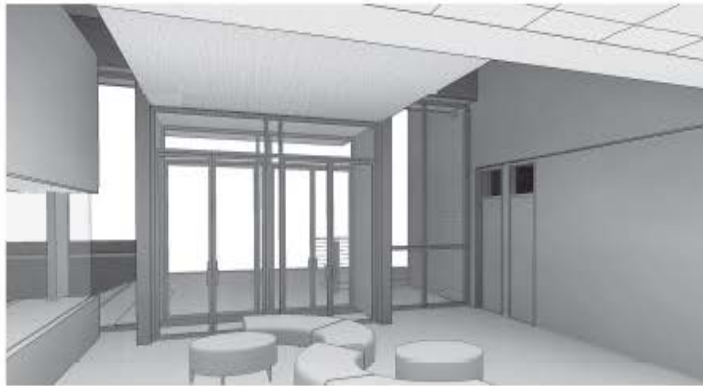
Computer Automated Drafting (CAD)

Fred Pirkle Engineering Technology Center

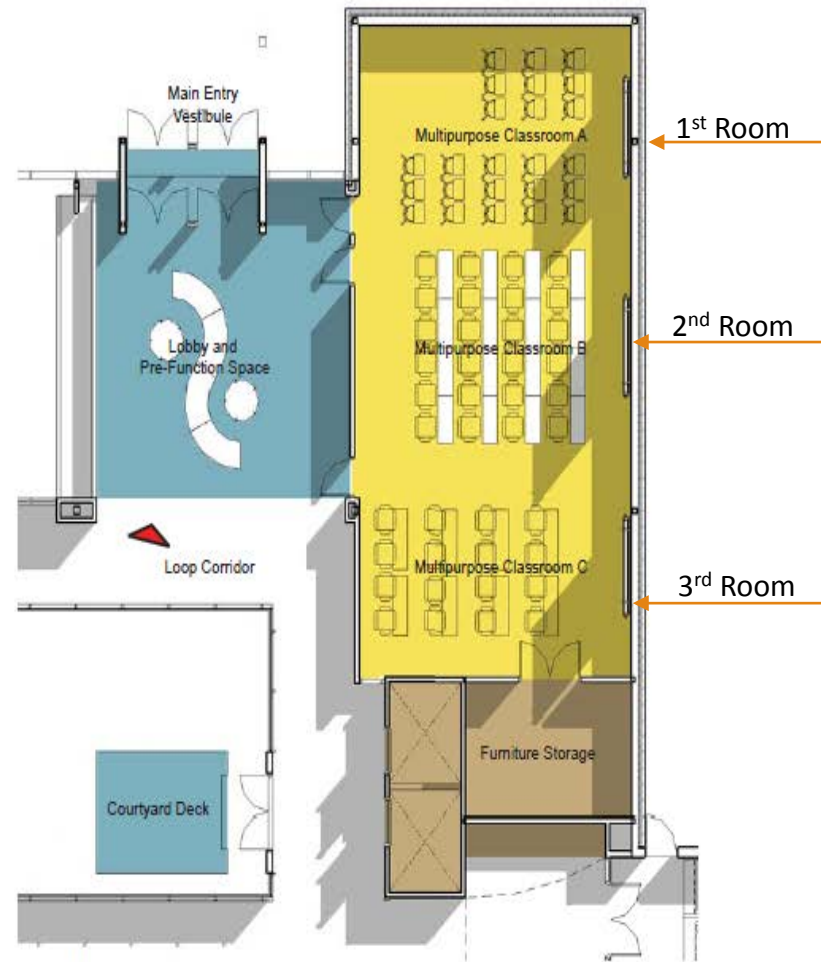


3D View at Exam Suite

Axometric View at Entry and Multipurpose Classrooms



Rendering at Entry and Multipurpose Classrooms



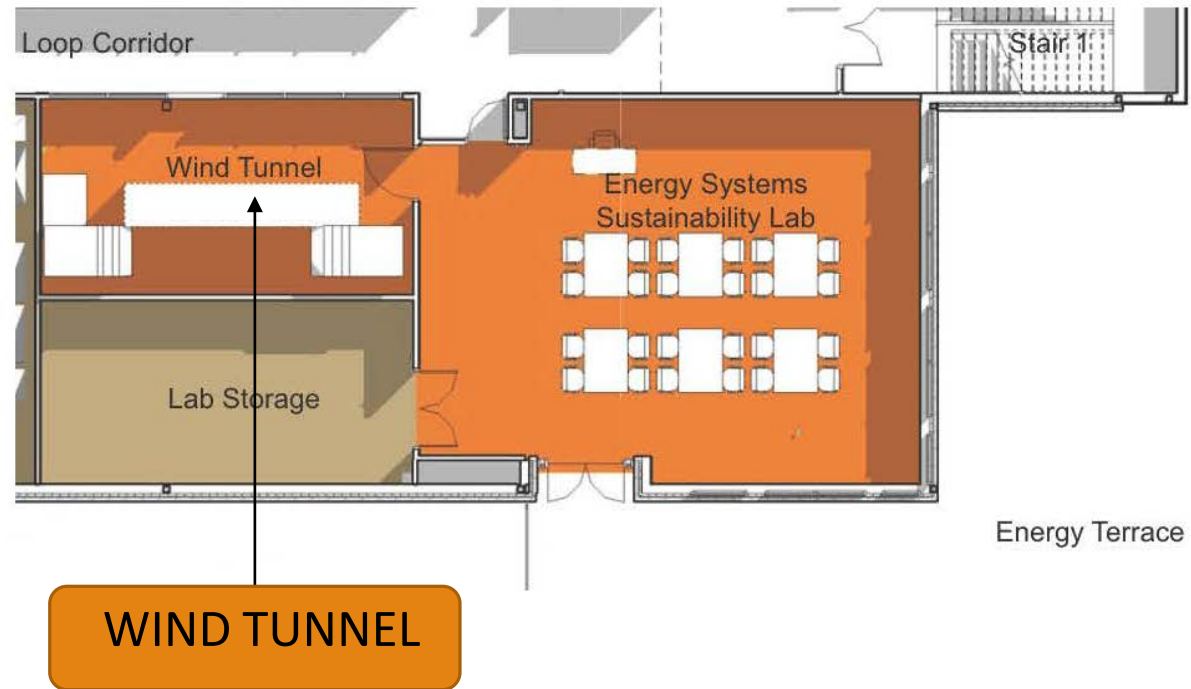
Enlarged Plan - Entry and Multipurpose Classrooms

Three multipurpose Classrooms with an option to open to one large auditorium.

Entry and Multipurpose Classrooms



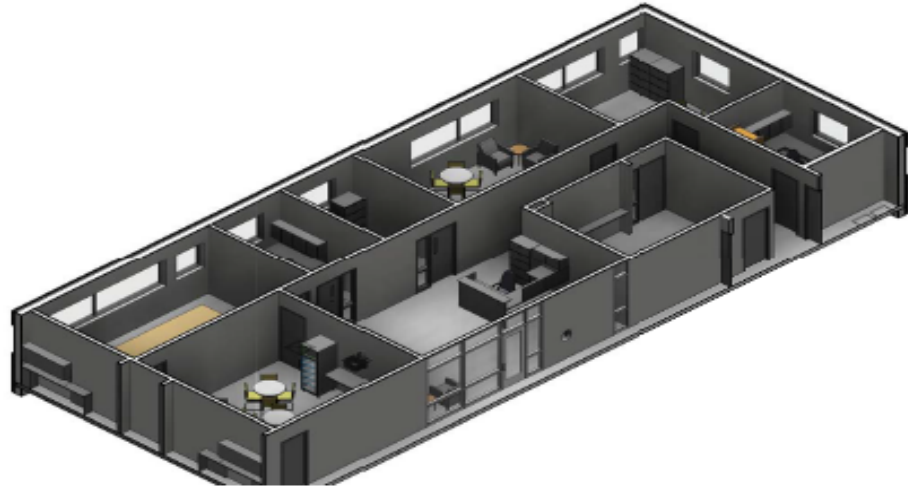
Fred Pirkle Engineering Technology Centre



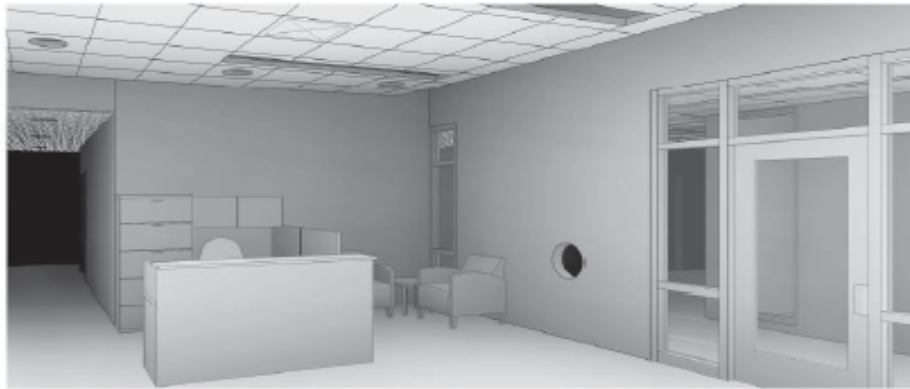
Southeast of level 2:

1. Wind Tunnel
2. Energy Systems
3. Sustainability Lab

Faculty & Staff Offices
with Support Space and
Conference Rooms



Axonometric View at Chair's Office Suite



Rendering at Chair's Office Suite

Chair's Office Suite

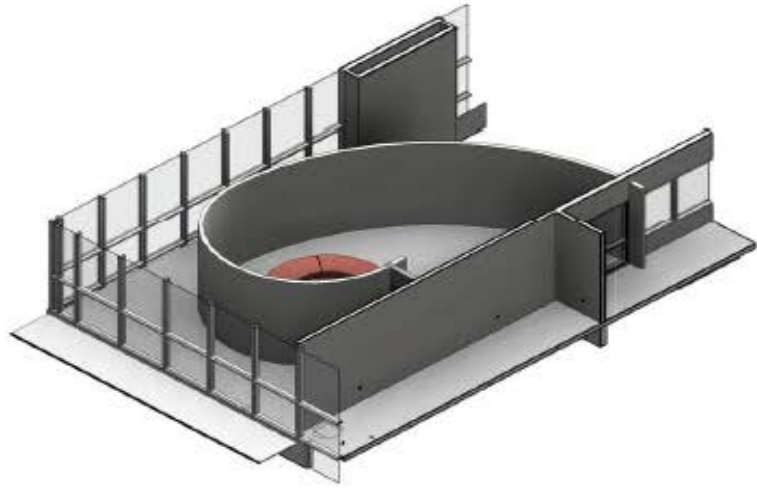


Enlarged Plan - Chair's Office Suite

- Lab
- Class
- Meeting
- Office
- Public
- Conf.
- Reception
- Support

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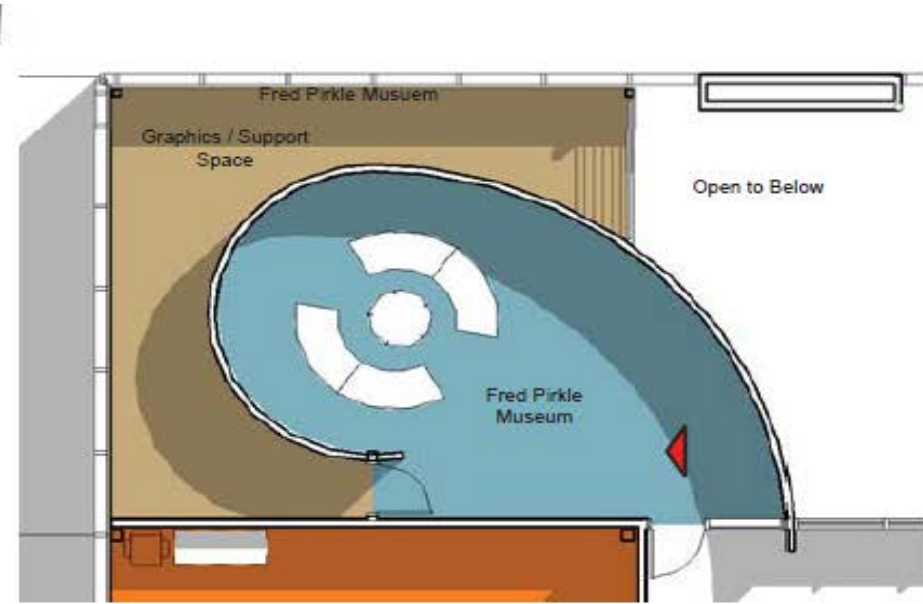
Fred Pirkle Museum



Axonometric View at Fred Pirkle Museum



Rendering at Fred Pirkle Museum



Enlarged Plan - Fred Pirkle Museum

Fred Pirkle Museum

- Lab
- Class
- Meeting
- Office
- Public
- Conf.
- Reception
- Support