1.1 Programs & Curriculums

Redesign the Curriculum for the Tools of the Future

Prompt:

Over the last 20 years, the design and architecture professions have transitioned to complex design media tools such as parametric modeling, BIM, and real-time rendering. The College of Architecture and Design has far fewer credit hours devoted to learning the tools and techniques of drawing, modeling, and representing designs than many peer institutions. How could we rethink the degree plans for Architecture, Industrial Design, and Interior Architecture to provide a better foundation for the tools students need both in school and in the profession? How might extracurricular programs such as workshops, short sessions, and summer courses help students, faculty, and professionals learn the necessary tools of the future studio? What can be implemented now? Using the existing degree plans, develop a graphic representation of your program that manages to find a new balance between the existing and any new courses.

Recommendations:

- Change the Undergrad degree plans to include at 3-4 new required courses in Design Media to match or exceed the average of our peer institutions. These classes should mostly be in the Foundation and Intermediate levels.

- Offer more online, short courses in specific approaches such as BIM, Computational Design, Rendering, etc. focused on intermediate level students.

- Offer more advanced level courses in Design Media to better prepare students for research and collaboration with the upcoming CRAFT Lab facility.

- Offer Summer Bootcamps for transfer and existing students to catch up with required skills.

Key Student Quotes:

- "Having software skills taught at the Foundation Level in school will allow students to have an equal level of knowledge and standing in program usage. This will help students be able to develop design to a deeper level."

- "As third years...we all had to teach ourselves these programs outside of studio in order to not fall behind."

- "I wasted a lot of time and got very frustrated because I didn't know how to make the program do it. I ended up doing things the long way and could have saved hours of my time if I knew one shortcut or knew how to resolve a glitch on my own."

- "Online classes are great, they allow flexibility and are a realistic adjustment in the changing world of technology that we live in."

- "Our proposal is to require a course freshman year semester that teaches students about various software [adobe suite, rhino, etc.) that will coincide with studio."

- "[We] need more exposure to new ways/tools of designing."

- "Most digital media courses are electives. Sometimes students take these courses to fulfull their design program curriculum and not intentionally. However, it would be helpful if the College can instruct students how to structure their courses to take these digital media courses as part of their learning growth."

- "In the graduate studio levels, some students come from a different background than architecture and due to their short attendance time and large amount of knowledge to be learnt, students expressed confusion as to what specific design media software would be more applicable to their future professional career. "

1.2 Programs & Curriculums

Programs of the Future

Prompt:

The College of Architecture and Design started 76 years ago with one program: Architecture. Over the years, we have added Interior Architecture, Industrial Design, and Environmental Design. In looking at other Schools and Colleges, there is wide diversity in what programs and degrees are offered. For example, some offer degrees in Landscape Architecture and Urban Design. Colleges of architecture and design are often the launching pads for alumni in careers as diverse as film making, writing, and real estate development. As you are the future of the design professions, how do you think the College should adapt to changes in the design world? What new degrees or programs should the College offer? How should existing degrees be strengthened to reflect these changes in the short and long term? From Smart Cities to Game Design, how might the College better prepare students for the future of the design professions?

Recommendations:

- Restructure the Degree Plans to allow more opportunities for specializations in existing areas such as Design Media, HTC, and Technology as well as related areas of the college or outside the college (Urban Design and Planning, Construction Management, Business, etc.)

- Introduce a program connecting local architects and projects with each year of the College so that students follow the life of a project or projects throughout their degree. This is a great way to engage alumni and local AEC community.

- Issue PDF and website of all course descriptions for the upcoming term 4 weeks prior to registration. Post all course descriptions and a diagram of the schedule on a wall in the school so that students can better map out their path. It's easy to miss emails so having a physical wall of information and website would help.

Key Student Quotes:

- "Integrated Internships: [The CoAD should offer] opportunities for a semester of paid internship work to be integrated as a studio course."

- Specialized Degree Plan: [The CoAD should offer] a curriculum for students who want to study a more specific architecture such as landscape, film, urban design, and sustainable design.'

- Speculative Project Planning: [The CoAD should offer] thoughtful projects that align with ongoing issues in the real world and are relative to the current climates outside of architecture."

- "Having a degree track with a focus on the business of architecture would help a student looking to run their own firm in the future. Though students can minor in business, many students don't have space in their degree plan to enroll in extra classes to gain this valuable knowledge. Possible 'tracks' could include a focus in engineering, arts, and business."

- "Allowing students to follow along with one project will provide a more comprehensive understanding of the real world design process. Over the course of the degree path a class of students (class of 26' for example) will follow one project brought in by Faculty or alum. The faculty/ alum will then breif the yeargroup during the 4 major points of the buildings design process (The research, design+ Documentation (split into 2 parts) the pricing and the construction Phase) with the final brief being the a site visit where the students get insight into the challenges faced during the construction phase and the things done to solve said challenges."

- "Providing an opportunity to develop an in-depth understanding of materials, collaborative work, reading technical drawings, and understanding the construction process can enrich students and their architectural education. "

- "How can it be more convenient to find and enroll into classes? [The CoAD should] create a class booklet every semester that lists out all the available classes and separates them into branches of interests."

1.3 Programs & Curriculums
Radical Pedagogies

Prompt:

As long as design schools have existed, faculty and students have engaged in radically rethinking the curriculum—addressing questions of the physical space in which design education occurs, the function of the classroom and studio, the relationships between faculty and students, the way that design schools plug into their surrounding cities and communities. Many of these proposals "shook the foundations and disturbed assumptions" about architecture. Within CoAD is a history of these types of "challenges" to traditional design education. Here, we ask you here to consider new and radical approaches to design pedagogy in light of your understanding of the "traditional" methods. In what ways can design studios become a part of the environment or the cities that surround them? In what ways can they become more vital or essential, addressing topics of urgency with practicable solutions? In what ways can they destabilize the traditional hierarchies of the design academy and the design field?

Key Student Quotes:

- "Incorporating trips to different cities can be beneficial to our education a UHCoAD. You can find tremendous inspiration from other places and architectures."

- "Make a road trip a universal requirement please! Would take this course in a heartbeat!"

- "Recognizing, appreciating, and understanding others' cultures is so important. **How are we supposed to design for a diverse world when we don't ever leave studio?**"

- "The idea of a trip to Marfa is a very beneficial radical pedagogy. Marfa is an interesting location as it offers so much art and culture in such an interesting environment. Marfa has a very desert environment, so could examine questions of climate change, desertification, etc."

- Save the world—less passive design activities, more action and activism.

Recommendations:

- More opportunities for travel and traveling studios—Radical Pedagogies through road trips looking at infrastructure, architecture and art. Some could be close to home (a tour of Austin/San Antonio) while others could venture further in the US (Houston to LA, Houston to Marfa, Houston to Baton Rouge) or abroad (Japan, London Spain). Lower levels should be included in travel options.

- Introduce in the curriculum's sequence the travel experience early in the curriculum as a pedagogical tool to learn from the local to territorial scales and and use the region as instructional material.

- Create a flexible online system for dialogue and commentary on UHCoAD (course structure, facilities, etc) Allow students to vote on proposals for courses and facilities.

- Choose projects that are urgent and relatable, and that incorporate collaboration between students and community partners as a core value.

- Create modular education systems within the CoAD building that can be rearranged and changed with student input—to support different education models and practices.

- Applicable design studios, rather than totally theoretical. More design/build or community and design service options should be offered, and maybe even made a requirement during the five years of UG education.

- A Pedagogy of Communion and Community: we should use both physical building and online tools to build community and social interaction, rather than creating isolation. Focus on historically disadvantaged groups with direct community engagement.

- More interdisciplinary offerings: between programs in the College, between different Colleges, and between other design and architecture programs worldwide.

- More engagement with craftspeople and makers (fabricators, furniture builders, contractors, sculptors) as a way of enhancing students' material approaches.

- More engagement with climate questions—less passive design activities, more action and activism.

- Define studio problems to explore broader geospatial topics (coastal conditions, habitats, landscapes) from design perspectives related to our college's location on the Gulf Coast.

- Support students traveling cost

1.4 Programs & Curriculums

Structure and Schedule

Prompt:

In a design school, education is dictated to a large extent by schedule: both the large-scale schedule of your entire curriculum and degree plan, and the small-scale schedule of class times, numbers of credits, and the breakdown of a semester of learning. The traditional strategy for design education has been to offer a single intensive studio surrounded by a constellation of seminars and lecture classes—sometimes derogatorily labelled as "support classes." How can the structure of the schedule be rethought to provide more flexible options for design education? How can the semester schedule be reconsidered? Does every class or studio need to be an entire semester long? Can either smaller half-semester courses, or longer year- or even multi-year courses be offered? How might that change the landscape of the CoAD design curriculum? What other creative organization, scheduling, and structural ideas can you imagine? How can our schedule (weekly, semesterly, yearly, and across the degree) become more flexible, open, or inventive? How could one or two credit courses help to support the larger vision and curriculum? How can we develop a schedule that supports a balance of work and life?

Recommendations:

• College should provide a more flexible schedule to students. Year round courses, evening studios. To accommodate jobs and work shifts.

• More open enrollment without caps on class sizes for popular classes.

• Release syllabi and topics the semester before a class—so students can plan ahead.

• Post syllabi in a public place so that all students can understand UHCoAD offerings.

• More opportunities for travel and study abroad.

• Coordinate schedule with the possibility of balancing academic task with outside work schedules on better time windows could be beneficial for the student's body from/and/on Intermediate Level students.

Key Student Quotes:

• "When I tell people what college I am in, they say how bad they feel because I have no time. I should be able to have more of a school, work, life balance."

• "We believe it would be beneficial to release the syllabus or topics each professor is planning to address in the following semester. When signing up for our Fall or Spring semester classes, we would be able to choose our professors by our interest in their topics."

• We also think it would be interesting to have opportunities to study abroad throughout a whole semester, instead of limiting it to just the summer. We believe this will allow us to connect and interact more with the buildings we study in the foundation years, as well as the opportunity to interact with different designers and contexts."

• Because studio is in the middle of the day it makes it really hard to maintain a job. The college should offer a more reasonable and flexible schedule to accommodate our jobs/other commitments. We believe that studio should be offered at different times- mornings and evenings.

2.1 Studio and Classroom Space

Learning Strategies

Prompt:

Everyone has developed a design process to one level or another. With modifications required due to the pandemic both physically, and with the use of additional online programs, electronically, evaluate visual learning as it relates to design. What strategies enriching design education would you recommend to support the realization of advanced outcomes? Are there advantages the online formats such as Conceptboard, Teams, Zoom, etc. provide for your development of a design process? How is physical modeling a tool of the design process? What are the physical attributes that should be available to enhance the use of physical modeling? Should there be studios with a greater focus on electronic modeling and others with an emphasis on physical modeling? How should these studios be designed?

Key Student Quotes:

- NA

Recommendations:

- NA

2.2 Studio and Classroom Space

The Furnished Studio

Prompt:

There is an opportunity to reimagine the studio from a standpoint of its furnishings in relation to learning and pedagogy. We have all adapted to online learning formats and may need to "re-envision" the physical nature of the studio. That can imply near term and longer-term applications. What are new teaching modes and the implications for the re-envisioning of a studio layout? Will there be days where some will be on campus and others online? What would best facilitate gathering and working? What is required to facilitate work at a future studio? Desks only? What size? What features? How many students should there be in a studio? Should only half a studio come on given days with the other half online? Does that allow for a different configuration of the studios with space available for other needs? How does the studio become a "home"? What is the value of a more open or more closed studio? What is the role of storage and how much is needed? How is work best shared? Monitors for online presentations? Pin up areas?

Recommendations:

- Configurability and flexibility of spaces (Space for making, Space for working, Space for gathering).

- Studio spaces used as recruiting tool.

Key Student Quotes:

- Comfort

- Model photography space equipment (collapsible light box)

- Plug in at desk, More outlets

- New Desks and Chairs (no stools) light weight, adjustable, ergonomic

- Flexible layout

- Flexible privacy

- Digital pinup wall

- Sound mitigation / partition (multipurpose), Curtin between studios

- Material native to Texas

- Built in storage

- Coffee station

- Lounge Space

- Workspace

- Make Space

- Desk with pin up boards

2.3 Studio and Classroom Space

The Digital-Smart Studio

Prompt:

How can we reimagine the design studio, classroom, and presentation space from the perspective of new technologies? The traditional studio and pinup spaces—with close rows of drafting tables and long pinup walls—may need to be rethought given the full integration of digital communication with pedagogy. But one new challenge we have faced during the pandemic is burnout due to exclusively online education and interaction. How might new hybrid modes utilize the best of both models (digital and physical) to create a better design and collaboration environment? How can physical teaching environments be rethought in terms of the integration of display screens, smart wall surfaces, and new forms of collaborative workspace? Classrooms have traditionally been enclosed for privacy, while studio and pinup spaces are often public. How might the relationship of public-private change? How might we create new environments for the merging of physical and digital collaboration? What should the relationship be between a design studio, a workshop, a classroom, and a presentation space? Should they all be distinct, or are there new strategies for combining and hybridizing these modes of design pedagogy?

What technologies and equipment might be integrated into the learning environment—and how would these be integrated? How might we use these technologies for collective thinking and the creation of collective intelligence? What temporary digital-physical environments could be made (and where)? What permanent environments? What long-term and evolving environments (and how might they evolve)?

Recommendations:

*   AR & VR Rooms - Designated room or space for VR and AR.

Key Student Quotes:

*   Portable projectors
*   Smart walls / Digital whiteboard / Screen Panel and partition wall
*   AR & VR rooms
*   NFT display
*   ID don't have enough desk or space need bigger desks?
*   Smart blinds
*   QR codes
*   Hybrid Studio

2.4 Studio and Classroom Space

The Culture of the Studio

Prompt:

What makes a good studio culture? Is it shared space, dialogue, agreement, constructive disagreement, openness? What else? Design schools and their studios are always experiments in collective making and learning. This collective can either be supported by, or undermined by, so-called studio culture. Like many other schools, CoAD has had a long tradition of an active and vital student and faculty presence. Fifteen or more years ago, the College was filled with couches, seating spaces, temporary shelters-as-workspaces. The constant presence of people in the college, as well as the ability to "customize" your studio space, increased a sense of belonging and the collective. Because of changes to university policy, and now the pandemic, we are having to reinvent the meaning of studio culture. What is vital to the making of a student culture and a culture of the studio? What physical elements could be created in the school to enhance a sense of connection, openness, dialogue, and engagement? What virtual or pedagogical elements could be created for the same purpose? How might those physical and virtual elements be integrated? Illustrate your ideas for how to create a deliberate and energized studio culture within the college.

Recommendations:

- Social and Gathering space / events.
- Utilization of outdoor adjacencies for social gathering, lounging, and eating.

Key Student Quotes:

- Biophilic design in studio space
- Outdoor space for socializing
- Tutorials and resources, Space for workshops and tutoring
- Individuality in the studio space
- Lack of physical comfort (replace stools), Replace wood stools
- Enjoyable environment
- Socials for different majors
- College wide competition
- Student lounge space / Community space / Common space
- Game room in 435
- Need fresh air / Need natural lighting
- Breakroom
- Elevated social space, second floor bump out
- Remote and in Person switching
- Peer-Reviews
- Space to accommodate long hours
- Mixing years and programs
- Healthy vending

3.1 Studio Reviews and Exhibitions

Prompt:

The studio review is the culmination of months of work and a chance to show your work off to your peers, professors, and the public. But too often the review passes in a blink of an eye. How can we better celebrate the work of students and give both our internal community and the public a longer opportunity to see and appreciate the work? How can we use the reviews to learn from each other and build connective networks of student work from term to term? Some schools of design and architecture such as SCI-Arc, Ohio State, and the Architectural Association have instituted end of year exhibitions that display the work of all students throughout their buildings and invite the public in. This helps not only with increased peer-to-peer learning as students have more opportunities to see each other's work, but it results in increased recruitment of students into the college as well as employers coming to the exhibitions to review and recruit the best students. The Hines College of Architecture and Design is one of the largest buildings in North America devoted to architecture and design. How might we curate and design a final review that is also an exhibition of all student work? Based on the current student enrollment and the number of studio sections (about 50), how might you divide up the wall real estate to produce an inclusive and exciting celebration of student work? How are studio levels and programs assigned different areas of the building? Are studio sections clustered together or apart? How might the curation of which studios get which walls or spaces rotated from year to year?

Common Themes Observed:

Current review spaces are either not conducive to gathering and discussion or too secluded and removed from visible areas. Provide innovative solutions that make the reviews visible as they happen and introduce new forms of technology.

Key Student Responses and Possible Strategies:

- Response: Studio Furniture that converts from work/storage to display/exhibit

- Strategy: Multifunctional modular furniture that allows studio space to be flexible

- Response: Exhibition space on platforms that span the atrium

- Strategy: Find ways to hold reviews and exhibitions in spaces more visible and conducive to gathering

- Response: Presentation materials on immersive digital screens

- Strategy: Consider how digital technology can open up new ways of sharing, presenting, and exhibiting work. Introduce electrical outlets to support digital screens.

- Response: Atrium and gallery as interactive exhibition space.

- Strategy: Increase programming for exhibitions in the atrium and introduce new technology for sharing work

- Response: Map of existing available pin-up space

- Strategy: Consider placing furniture so that existing wall space is liberated for sharing work

3.2 The Atrium as Public Space

Prompt:

The current design of the Atrium is grand (some might say grandiose), yet it is almost unusable for day-to-day activity. Passed through by many non-CoAD students and faculty to get from the parking lots to the rest of campus, the space is the primary interface between the College and the rest of the UH community. How might we use this space to better communicate the importance of design to our public as well as make the atrium more functional for our students? What types of interventions could be made to support the atrium's diverse uses throughout the term (graduation, reviews, and other events) while inventing new uses such as a lounge, meeting room, and simply a place to daydream? Develop a conceptual design for the atrium that could be built by students with an expected lifespan of 2 years. At the end of 2 years, another group of students would design and build a new version of the atrium intervention. These structures would reflect the current design interests of the college and offer students the opportunity to be designers, clients, and builders.

Common Themes Observed:

The interior of the building lacks comfortable spaces and amenities for gathering that foster a sense of community.

Key Student Responses and Possible Strategies

- Response: Coffee Bar/Food and Rest/Lounge Spaces in the Atrium

- Strategy: Consider how social spaces can be added in the building

- Response: Modular Furniture or Containers that allows the atrium to adapt from lounge to exhibition to display to study/meditation spaces

- Strategy: Design and build adaptable module that could be deployed

- Response: Introduction of plants/vegetables into the atrium

- Strategy: Explore logistics of adding and maintaining plant life within the atrium

- Response: Occupy the vertical space in the atrium with occupiable space and/or video screens to create connections between studios

- Strategy: Explore logistics of additional floor plates and technology within the atrium.

- Response: Create display cases of student work that engage those who use the building as a gateway into the campus

- Strategy: Design displays cases and consider programming for exhibitions

3.3 The Design School and its Physical Surroundings

Prompt:

The CoAD building is centrally situated on the UH campus, both a part of a primary axis and surrounded by a series of public landscapes, environments, and buildings. But those surrounding environments and access points aren't necessarily well integrated with the building itself. How can we reimagine the CoAD building's surroundings to create usable public spaces, landscapes, and amenities? How can we activate the connection to the Keeland Center, the new Advanced Fabrication Center, the Grotto, the School of Art, and the larger campus? What kinds of amenities might become useful or vital to these spaces—from shade structures to benches to outdoor meeting/activity/performance areas to kiosks or spaces for temporary food trucks and other uses. How could these new spaces become a form of connection for the greater UH community, and a way to communicate the importance of design? Develop a conceptual design and site plan for the building and its surroundings that could be implemented over time (maybe even consider the "phasing" of these interventions).

What temporary environments could be made (and where)? What permanent environments? What long-term and evolving environments (and how might they evolve)?

Common Themes Observed:

- The exterior of the building lacks comfortable spaces and amenities for gathering that foster a sense of community.

Key Student Responses and Possible Strategies

- Response: Temporary design/build installation that provides shade and connection between the College's buildings

- Strategy: Create physical connections between buildings that serve as gathering spaces Program temporary design events/installations in the outdoor zones between the ARC buildings to connect them

- Response: Create a planted landscape at the Keeland Court

- Strategy: Provide shaded outdoor gathering spaces on the grounds of the College. Use the southern lawn/park as display areas

- Response: Bring food trucks to the Keeland Court

- Strategy: Increase food options in and around the College

3.4 Connecting Communities

Prompt:

Any design school such as CoAD exists within a much wider web and network of community users, community organizations, and neighborhoods. It's important to consider how our school fosters both connections and stewardship of our surroundings. Currently, we have many modes for connecting the College to the community—the Community Design Resource Center (CDRC), Design/Build, student and alumni associations, a diverse faculty. But our presence in the city, as well as our responsiveness and support of its urban development and needs, could play a more central role in the College. How can we support and extend CoAD's long history of thinking+making through outreach to communities? How can we make our approaches to design more accessible—both in the way we approach design, and in its products? Start with the neighborhoods immediately surrounding the College and the University. What new forms of outreach and connection could we create? How could an expanded design/build program productively engage the community? How could public and community-focused initiatives such as the CDRC's projects be broadened to a wider group of courses and extracurricular initiatives? How could both students and faculty support the community through design initiatives?

What temporary connections and physical environments could be made with communities (and where)? What permanent environments? What long-term and evolving environments (and how might they evolve)?

Common Themes Observed:

Student needs within the campus community are varied. Further communication is needed to better understand these specific needs and how the College can play a role within these communities.

Key Student Responses and Possible Strategies:

- Response: Create connections with other departments across campus

- Strategy: Explore how curriculum and college can be more interdisciplinary

- Response: Teach digital tools earlier

- Strategy: Expand on media sessions that take place in current foundation studios

- Response: Organize recycled materials

- Strategy: Consider how salvaged materials can be organized to optimize re-use

- Response: Provide mental health support in conjunction with medical school and UH Central

- Strategy: Contact other programs to see what best practices are for providing students with mental health support

- Response: Support student organizations financially and otherwise

- Strategy: Connect with student organizations to better understand the type of support they require

4.0 Sustainability & Technology
HUMAN AND ENVIRONMENTAL ECOLOGY FOUNDATION

BOLD COMMITMENT: Human and Environmental Ecology Foundation

CoAD students are equipped to design better, safer, more equitable, resilient, and sustainable built environments. Their design thinking and integrated design solutions are hallmarks of architecture, industrial design, and environmental stewardship. As future professionals, they accept the responsibility for the impact of their work on the natural world and on public health, safety, and welfare. As professionals and designers of the built environment, our students embrace these responsibilities and act ethically to accomplish them (NAAB, 2020).

4.1 Sustainability & Technology

ECOLOGY IN THE CURRICULUM

BOLD COMMITMENT: Technical analysis of every design + every building demonstrably net zero or fail

To meet this bold commitment, the CoAD curriculum will integrate the theoretical and technical foundation for delivering high performance environments, buildings, and products. An updated curriculum will reflect the interdisciplinary necessity for solving humanities greatest challenge; integrate technology into studio projects at all levels; and result in installations, exhibits, and partnerships that demonstrate our commitment to a healthy and prosperous future.

The following notes reflect feedback from the CoAD community of the charrette week ideas developed by students and faculty regarding curriculum:

Charette Recommendations:

- Education – passive, active systems– Integrated Tech and Studio with integrated projects and speakers

- Consultants – integrated rovers – diversified juries – always evaluated from all aspects

- Take tech earlier

- Model making and testing course

- True environmental and Site analysis course

- Ecological Case Studies / History of Ecological Architecture Course or overlay

- Ecology Integrated Design: Awareness Education / Solution education / Design Application

- More site visits – seeing construction

- Minor in sustainability / Ecological Architecture Certificate

- Super studio on technology

- Design build expansion

- Biomimicry course

- Construction documentation course – integrating construction and performance

- Energy Institute and Architecture and Energy in Houston with Oil and Gas – what does this mean?

- Hurricanes city/ Flood city/ Bayou city etc.

- Indigenous architecture and its response to climate

- Landscape Urbanism and Houston

- "After Comfort"

- Pollution into Materials (vs new materials)

- Adaptive reuse (vs Building new) Reassembling /Reversible design

- Legislative Action

- Do (stop drawing but do) – Required action thesis

4.2 Sustainability & Technology

TECHNOLOGY INTEGRATION

BOLD COMMITMENT: Students with the self-confidence to explore, define, and create buildings' and products' delivery

To meet the technology integration commitment, our students must have a holistic understanding of technological innovation that can reflect the dynamic relationships between built and natural environments. As future architects and designers, they can mitigate climate change responsibly by leveraging advanced technologies to better meet contemporary environmental challenges. This includes the curiosity and ability to demonstrate how integrated technologies can improve building and product performance, adaptation, and resilience (NAAB, 2020).

The following notes reflect feedback from the CoAD community of the charrette week ideas developed by students and faculty regarding technology integration:

Charette Recommendations:

- Identify or create a place to visit to see tech/ sustainability integration first hand.

- An outdoor classroom or making the pond more sustainable and performance oriented be a start, solar panels on the roof of the COAD, greening the atrium.

- Have more discussion in Tech classes regarding material impact on the environment

- Increase the number of topics that can be integrated between the technology classes and studios

- Outside guests, professors from other departments could visit studios and / or tech classes, another option to provide shared knowledge.

- Create a new course on ecology, have it in an outdoor classroom (passive pod, shade structure).

- Have guest engineers visiting studios, create more connection points between tech and studios.

- Have engineers on mid-term reviews, have the studios include more technical aspects, assign more structural and environmental aspects in the studios.

4.3 Sustainability & Technology

DESIGN-BUILD

BOLD COMMITMENT: Provide a hands-on, project-based learning opportunity for _ALL_ students to build their designs

The CoAD provides opportunities for student to experience the process of building and making. This ensures that students understand the established and emerging systems, technologies, and assemblies of products and buildings; methods and criteria used to assess those technologies against the design, economics, and performance objectives of projects (NAAB, 2020); and collaborative, interdisciplinary nature of building.

The following notes reflect feedback from the CoAD community of the charrette week ideas developed by students and faculty regarding design build:

Charette Recommendations:

- Design-build expansion to include UG

- Fab Lab Design Build space /studio

- Larger Projects

- Longer timelines

- Identifiable commitment to in the College

4.4 Sustainability & Technology

NET ZERO: WATSE, ENERGY, WATER, ETC.

BOLD COMMITMENT: Zero-waste will express the ethos of the College - - a new "lifestyle choice" and part of the learning experience

Our students will learn and practice, through the design process, a zero-waste ethos. The will understand how the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials is essential to a sustainable future. In addition, they will be better prepared to connect their actions on "the commons" - - land, water, and air quality that threatens the environment or human health (Zero Waste International Alliance, 2018).

The following notes reflect feedback from the CoAD community of the charrette week ideas developed by students and faculty regarding zero waste:

Charette Recommendations:

- The zero-waste college

- Create a culture of zero-waste - - help foundation students familiarize themselves with common terms and practice

- Research and studio projects that demonstrate - - precious plastics as an example

- Studio practices that reduce waste and cost for students

- Create housekeeping for studio space - - studio carts and upkeep days

- Scrap and materials storage supporting each academic program and level

- Collect and track (data/evidence) of progress

4.5 Sustainability & Technology

FACILITIES

BOLD COMMITMENT: The CoAD learning environment is a "LAB" of technological innovation and experimentation

The CoAD will provide the facilities and resources that demonstrate our commitment to sustainability. This includes studio-based learning; support spaces - - lecture spaces, labs, shops, equipment, suitable storage for materials and equipment; and how we learn - - meeting the needs of a variety of teaching pedagogies. The teaching and learning process for technology integration and sustainability will be expressed in the CoAD physical plant, hybrid learning and teaching modes, and off-site (community and travel) learning experiences.

The following notes reflect feedback from the CoAD community of the charrette week ideas developed by students and faculty regarding facilities:

Charette Recommendations:

- Recycling and Repurposing in College – class to focus, space for action/donation
- Outdoor workspace / native ecology / outdoor classroom
- Pond as demonstration landscape experimental garden and construction space
- Studio as labs – tools for making and assessment in the studio

4.6 OTHER

OTHER GENERAL NEEDS AND TOPICS DISCUSSED:

The following are topics that surfaced in the Sustainability and Technology charrette feedback that represents broader or more cross-cutting solutions:

Charette Recommendations:

- Online education / Digital Learning and Teaching / Hybrid Learning

- Curricular education – lecture explaining the curriculum? Book?

- Internships/externship

- Masterclass /technical workshops: tools, software, materials

- College as EVENT

- Studio mixer

- Mobile display

- Smart presentation

- Expeditions/travel – Road Trip – Travel Study – Study Abroad – Virtual University

- Tutor system (for technology in particular)

- Mental Health care

- Flexible schedule (nonlinear curriculum? Asynchronous learning?