

Architecture Program Report

Institution

Gerald D. Hines College of
Architecture and Design

University of Houston

Date 07 September 2021

NAAB

National
Architectural
Accrediting
Board, Inc.



Architecture Program Report (APR)

2020 Conditions for Accreditation

2020 Procedures for Accreditation

Institution	University of Houston
Name of Academic Unit	Gerald D Hines College of Architecture and Design
Degree(s) <i>(check all that apply)</i> Track(s) <i>(Please include all tracks offered by the program under the respective degree, including total number of credits. Examples: 150 semester undergraduate credit hours Undergraduate degree with architecture major + 60 graduate semester credit hours Undergraduate degree with non-architecture major + 90 graduate semester credit hours)</i>	<input checked="" type="checkbox"/> <u>Bachelor of Architecture</u> Track: 160 semester undergraduate credit hours <input checked="" type="checkbox"/> <u>Master of Architecture</u> Track I: Undergraduate degree with architecture major + 60 graduate semester credit hours Track II: Undergraduate degree with non-architecture major + 99 graduate semester credit hours <input type="checkbox"/> <u>Doctor of Architecture</u> Track: Track:
Application for Accreditation	Continuing Accreditation
Year of Previous Visit	2014
Current Term of Accreditation <i>(refer to most recent decision letter)</i>	Continuing Accreditation (Eight-Year Term)
Program Administrator	Dietmar Froehlich
Chief Administrator for the academic unit in which the program is located <i>(e.g., dean or department chair)</i>	Patricia Belton Oliver
Chief Academic Officer of the Institution	Paula Myrick Short
President of the Institution	Renu Khator
Individual submitting the APR	Dietmar Froehlich
Name and email address of individual to whom questions should be directed	Dietmar Froehlich dfroehlich@uh.edu



Submission Requirements:

The APR must be submitted as one PDF document, with supporting materials
The APR must not exceed 20 MB and 150 pages
The APR template document shall not be reformatted



INTRODUCTION

Progress since the Previous Visit (limit 5 pages)

In this Introduction to the APR, the program must document all actions taken since the previous visit to address Conditions Not Met and Causes of Concern cited in the most recent VTR.

The APR must include the exact text quoted from the previous VTR, as well as the summary of activities.

Program Response:

VTR 2014_

2. *Conditions Not Met:*
- B.3.Sustainability – B.Arch.*
 - B.4.Site Design – B.Arch.*
 - B.7.Financial Considerations – B.Arch., M.Arch.*
 - C.1.Collaboration – B.Arch.*

B.3. B.Arch.:

Design Studios: ARCH 2500, 2501, 3500, 3501, 4510; and Technology Courses: 2327, 2328, 3327, 3328, 4327, 4373 include Sustainable principles in different aspects and instruction formats.

ARCH 2500 – Design Studio III introduces Sustainability issues through initial discussions about passive systems, orientation and form. This studio course aligns with ARCH 2327 -Technology I, where a comprehensive review of building technology introduces the role of technology on achieving sustainable design principles. Lectures/discussions of Sustainable Principles are delivered in ARCH 2500 -Design Studio III, in addition to the studios' incorporation of passive strategies into the design work and precedent analysis in ARCH 2327 Technology I.

ARCH 2501- Design Studio IV, elaborates 1 lecture of Ecological Knowledge and Responsibility in addition to and Studio labs discussions and project restrictions.

ARCH 3500- Design Studio V bases the Project Problem in sustainable principles (Fall20 and Fall 21- program Recycling Plant) and the ethics of material recycle and architecture. In addition, there is scheduled a dedicated lecture and discussion of Ecological Knowledge and Responsibility that extends the semester topic into theoretical lines of investigation. (See ARCH 3500 Syllabus)

ARCH 3501- Design Studio VI provides 1 lecture – of Ecological Knowledge and Responsibility in addition to Sustainable principles that are expected as base response since courses accumulate previous courses learning outcomes.

B.4. B.Arch.:

Site Design is integrated into more courses, including ARCH 2500, 2501, 3500, 3501, and 4510. Working with various topographies, access is emphasized, sustainability topics were added, and the problems of vegetation and drainage have been better emphasized. Particularly ARCH 3500 – Design Studio V dedicate 4 weeks of the semester to develop

a site analysis and representation in depth and midterm reviews assess the relationship between input and impact into the design response.

B.7. B.Arch.:

Introduction of financial consideration sections into ARCH 4510, Integrated Architectural Solutions.

Special attention has been paid since the last accreditation visit to make sure students have a better understanding of the fundamentals of building costs and financing practices.

In the Bachelor of Architecture program, a Financial Considerations Workshop has been incorporated into ARCH 4510: Integrated Architectural Solutions Studio as one of the presentations and accompanying exercises required for every student in the course (and thereby required of every student receiving this degree). The Financial Considerations presentation provides an overview of the factors that influence a project's cost, including land value, development (soft) costs such as professional fees, financing, testing, permitting, and hard costs associated with materials, procurement, and labor. The students, using their 4510 studio project as subject, are assigned two types of financial consideration exercises: one that estimates the project cost on a per/sq ft basis using two different methods, and another exercise that estimates the cost of the building envelope based on the costs of labor and materials that make up the envelope components. For the second exercise, the students are performing this estimate using two different assemblies for comparison.

B.7. M.Arch.:

Introduction of financial consideration sections into ARCH 6393, Master's Project Preparation.

Since the last accreditation visit, special attention has been paid to ensure students have a better understanding of the fundamentals of building costs and financing practices.

In the Master of Architecture program, Financial Considerations Workshops have been incorporated into two courses required of every student receiving this degree—ARCH 6604: Architecture Design Studio IV and 6393: Master Project Preparation.

All students enrolled in ARCH 6393 must complete an estimate for both the land acquisition costs and preliminary construction costs of their self-selected Master Project. This costing exercise is a required part of their Master Project prospectus. ARCH 6603 also includes exercises that cover financial aspects.



ARCH 6604 RL
Financial Consideratic

C.1. B.Arch.:

Integrated into ARCH 4510, with teams of students working on projects; additionally, in the Technology classes and the Professional Practice course, ARCH 4328.

A redistribution of SCs has been implemented. The SCs are now spread more broadly across courses.

The reorganization of the Technology courses has been initiated and is in progress.

3. Causes of Concern

a) Site Accessibility:

While the Team found that the program has made great strides within the physical building in resolving the Accessibility "Not Met" criterion from their 2008 accreditation visit, evidence of the ability to resolve site accessibility remains weak. The majority of studio projects were situated on flat sites, essentially devoid of topographical considerations. The Team had great difficulty determining if students were able to resolve the difficulties of ramping and other accessibility issues associated with site design. During discussions, students acknowledged they had little experience dealing with site accessibility concerns. This applies to both the B. Arch. and M. Arch. programs.

Site accessibility issues were addressed in several courses—ARCH 2500, 2501, 3500, 3501, 4510—by providing more varied topographical locations for the projects and by emphasizing the importance, among other issues, of barrier-free access, vehicular access, and connections to frontage roads at the specific sites.

b) Applied Research:

Research skills were evident in student work. Nevertheless, the level of understanding reached regarding information culled from research was not always evident. With immediate access to information on the internet, students easily cut and paste information, pictures, and graphs that are appropriate to their research, but do not show evidence they understand how the information correlates to their specific tasks or informs their design decisions. The Team is also concerned that information accessed from the internet was not appropriately credited and cited, making it difficult for the Team to differentiate original student research and design from data pulled from online reference sources.

Emphasis was given to the importance of correct citing and referencing of sources and to the appropriate selection of precedents and sources. Application of research was expanded for Tech classes—ARCH 2327, 2328, 3327, 3328, 4327, 4373—and ARCH 4510 and ARCH 6393. Research methods and their applications were introduced to students in history courses. Research methodology and application of research results were also introduced to technology courses and design studios.

c) Requirements of IDP:

There was little evidence that students were broadly aware of the requirements of IDP. Even less evidence was found within the faculty. The requirements of IDP have changed significantly in recent years. When questioned, only the leadership of the various student organizations seemed to be aware of these changes. All

students need to be made aware of IDP, its significance to licensing, and how they can begin to earn their credits while in school.

Another faculty member, Professor Patrick Peters, has taken over the role of NCARB/IDP/APX/ARE coordinator and is integrating these topics into ARCH 4510 and ARCH 6604. Students are informed about NCARB/ARE at the beginning of each semester, during all college meetings, and in studio. Information about APX is also related in the Professional Practice courses ARCH 4328: Technology 6 / Practice of Architecture for Undergraduates, as well as in ARCH 6360: Practice of Architecture for Graduates.

d) *Studio Culture Policy:*

When questioned, students responded with vague knowledge of their Studio Culture Policy. Students are made aware of the Studio Culture Policy at the beginning of each year, and this appears to be the extent of their knowledge and/or involvement with the policy. Faculty had even less knowledge of the Studio Culture Policy history, or the content of their specific policy. The Studio Culture Policy is intended as a living document, modified by the student body and faculty as appropriate to the learning environment within the college.

A new College Culture document was created with input from faculty, students, and staff. It also contains paragraphs about Studio Culture. It is posted on the CoAD website and is intended as a living document that will be reviewed and updated annually and is part of the syllabus language. Each student acknowledges the document and its contents with his/her signature at the beginning of the fall semester.

e) *Program Recognition:*

Some students expressed frustration that they felt they had not had enough opportunities to participate in design competitions and/or other types of occasions that would give appropriate credit to the high-caliber student work emerging from the College of Architecture. The Team found it refreshing that the students were proud of their architectural education and thought it equal to other programs, especially within the State of Texas. The faculty and program administration are encouraged to embrace the students' enthusiasm and make every effort to elevate the College of Architecture at the University of Houston. When mentioned to the Senior Vice Chancellor during the exit interview, she indicated the university administration was solidly behind the students' desires and would support their viable endeavors.

The program is experiencing increased national and international recognition through lectures, reviews, exhibits, and competition participation—all with student involvement. The work of the CDRC, studio, and study abroad with its publications are enhancing the program's reputation.

For example, three UH collaborative teams led by CoAD architecture faculty and students competed in the 2021 ULI Hines student competition with one of the three teams premiated as one of four finalists. Further, CoAD students have



been premiated in the AIA Houston and AIA Fort Worth design awards programs, including an award to the collaborative team of Caleb Matheson and Darci McGee (Emily Moore, 4510 faculty) in 2020.

Program Changes

Further, if the Accreditation Conditions have changed since the previous visit, the APR must include a brief description of changes made to the program as a result of changes in the Conditions.

This section is limited to 5 pages, total.

Program Response:

Since the new 2020 Conditions and Procedures were published on 10 February 2020, and our last NAAB visit was in spring of 2014, the coronavirus pandemic has necessitated changes to the program. Shortly after the new regulations had been published, the pandemic compelled us to rethink not only how the program needs to be adjusted to fulfill the new NAAB requirements, but also forced us to pivot to online instruction within a very short time frame. As of the filing date of this report, we are still almost exclusively teaching Hy/flex and Online Synchronous. It was a very demanding task to adjust the programs to the new NAAB guidelines while rapidly developing online teaching methods.

The 2020 changes implemented by NAAB and outlined in their Conditions and Procedures, released on 10 February 2020, reduced the previously required criteria from 26 students. Performance Criteria was divided in four realms, with eight Program Criteria plus six Student Criteria:

- PC-1 Career Paths
- PC-2 Design
- PC-3 Ecological Knowledge and Responsibility
- PC-4 History and Theory
- PC-5 Research and Innovation
- PC-6 Leadership and Collaboration
- PC-7 Learning and Teaching Culture
- PC-8 Social Equity and Inclusion

- SC-1 Health, Safety, and Welfare in the Built Environment
- SC-2 Professional Practice
- SC-3 Regulatory Context
- SC-4 Technical Knowledge
- SC-5 Design Synthesis
- SC-6 Building Integration

The Program Criteria (PCs) needed to be evaluated holistically relative to curricular and extracurricular offerings and how students experience these offerings.

The Abilities have been drastically reduced to only two: SC-5 and SC-6. In the Fall 2020 semester, we accomplished a translational SPC criteria expectation and assignment of course responsibility from the previous detailed lists to the new expectations.



For SC-5 and SC-6, the work of every student enrolled in classes selected as evidence of criteria fulfillment must be submitted, and the NAAB Visiting Team will make a random selection of projects to be evaluated.

A list of shared values is to be highlighted and demonstrated throughout the program:

- Design
- Environmental Stewardship & Professional Responsibility
- Equity, Diversity & Inclusion
- Knowledge & Innovation
- Leadership, Collaboration & Community Engagement
- Lifelong Learning

The architecture programs of the CoAD had to set strategic priorities to be able to address the necessary changes:

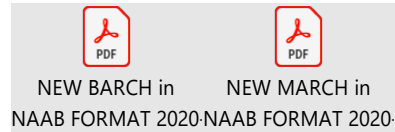
1. Address failed criteria from the last accreditation visit:
 - M.Arch.: Financial Considerations
 - B.Arch.: Sustainability, Site Design, Collaboration & Financial Considerations
2. Prioritize implementation of a digital collection and storage system for relevant student work.
3. Identify the best combination of classes/studios required of all students in each degree program to clearly demonstrate the fulfillment of the new Program and Student Criteria. Under each criterion, classes were selected for both the B.Arch. and M.Arch. For the B.Arch The combination Criteria/Courses is as follows: PC1-2, PC2-6, PC3-11, PC4-4, PC5-10, PC6-4, Pc7-20, PC8-6, SC1-5, SC2-3, SC3-4, SC4-10, SC5-4, SC6-3
4. We capitalized on opportunities for joint presentations (to both undergraduate and graduate students) of relevant presentations by consultants and faculty experts.

One of the first steps was to analyze the previous NAAB requirements and how they were originally distributed across the required courses for the Undergraduate and Graduate Programs. Then the programs looked at the new requirements and to what degree they matched aspects of the old requirements. We undertook a redistribution of the new requirements, and the NAAB SC_PC matrices for both the Undergraduate Program and Graduate Program were developed. As part of this process, we decided to have the new requirements distributed across the courses and years.

All of the requirements [PC.1-8, SC.1-6] have been split up into components that could be accommodated in courses that are taught consecutively over more than one semester such as SC-4: ARCH 2500, 2327, 2501, 2328, 3500, 3327, 3501, 3328, 4510, and 4327. The splitting up into components also allows for better content delivery and content development in the future. It provides for synthetic introduction of technical knowledge alongside the design studio sequence, so that complexity builds as students move through the curriculum. It also allows for easier and more focused benchmarking if necessary. For example, SC.5 and SC.6 for the B.Arch Program have been distributed over 4 and 3 individual courses, respectively ARCH 2501, Arch 3500, Arch 3501 and ARCH 4510, and ARCH 3500, ARCH 3501, and ARCH 4510. These are design studio courses coordinated by a sequence of learning outcomes that permits the criteria to be fully accomplished at the upper level of each sequence.



As another example, the components of SC-6, Building Integration for the Graduate Programs, have been distributed over six individual courses: ARCH 6A48, ARCH 6A50, ARCH 6603, ARCH 6A49, RCH 6A51, ARCH 6604, and ARCH 6361. These courses are lecture classes as well as studio courses. The same SC-6 has been distributed across three courses over two years in the Undergraduate Program: ARCH 3500, ARCH 3501, and ARCH 4510.



As the new Program Criteria and Student Criteria in the 2020 Conditions have changed significantly compared to the previous criteria, a redistribution and broader spreading across the programs' courses was necessary. The inclusion and demonstration of having incorporated Shared Values into the course roster could be accomplished by the reorganization of the component alignment and complementing of spread-out course content.



M ARCH
2020-2021

Shared Values

- Design
- Env. Stewardship & Professional Respon.
- Equity, Diversity & Inclusion
- Knowledge & Innovation
- Leadership, Collab. & Community Engmt.
- Lifelong Learning

Program Criteria

- PC.1 Career Paths
- PC.2 Design
- PC.3 Ecological Know. & Respon.
- PC.4 History & Theory
- PC.5 Research & Innovation
- PC.6 Leadership & Collaboration
- PC.7 Learning & Teaching Culture
- PC.8 Social Equity & Inclusion

Student Criteria

- SC.1 HSW in the Built Environ.
- SC.2 Professional Practice
- SC.3 Regulatory Context
- SC.4 Technical Knowledge
- SC.5 Design Synthesis
- SC.6 Building Integration

	Year 1								Year 2			Non-Curricular Activity								
	ARCH 6A48	ARCH 6A50	ARCH 6359	ARCH 6603	ARCH 6376	ARCH 6A49	ARCH 6A51	ARCH 6357	ARCH 6604	ARCH 6393	ARCH 6360	ARCH 6361	Lectures and Exhibitions	Study Abroad	Graduate Design Build Program	NCARB	ULHimes Competition	College Design Culture	CDRC	Activity Name
Design	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Env. Stewardship & Professional Respon.	X	X		X		X	X		X		X	X	X	X	X	X	X		X	
Equity, Diversity & Inclusion			X	X	X			X	X	X	X	X	X		X			X	X	
Knowledge & Innovation	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	
Leadership, Collab. & Community Engmt.				X					X		X	X	X	X	X	X	X		X	
Lifelong Learning			X	X	X			X	X	X	X	X	X	X	X		X	X	X	
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○ UNDERSTANDING
○ ABILITY

M.ARCH Matrix



One important step in aligning the content of the courses with the new NAAB requirements was the reorganization of the Technology courses. This reorganization had already been started about two years ago and is still in progress. All technology courses from Technology 1 to Technology 4 have been reviewed to be topic-focused and implemented in the upcoming academic year 2022/23. Under this new pedagogical mode: ARCH 2327 Technology 1 is focused on the introduction of technology, covering all architecture technology topics, ARCH 2328 Technology 2 is focused on structural systems and coordinated with studio ARCH 2501 Design Studio IV with combined requirements, ARCH 3327 Technology 3 is focused on materials, assemblies, and constructability and coordinated with ARCH 3500 Design Studio V with combined requirements, and ARCH 3328 Technology 4 is focused on Environmental Systems and Coordinated with ARCH 3501 Design Studio VI with combined requirements.

The formerly mixed content of these Undergraduate courses—structures, environmental, assemblies, etc.—is now being redeveloped to be presented in a more focused way. For example, structure is will be taught in one semester in the academic year 2022/23 and will be followed by materials, assemblies and constructability in Tech 3 and the environmental issues in the Tech 4. A similar approach had been implemented in the Graduate Program earlier, about five years ago, and had proven to be successful.

In the Undergraduate Technology sequence, benchmarks are being developed and have been set to document a progressive maturation beginning with preliminary explorations undertaken in Tech 1, and progressing to fully developed, near professional-level documentation of a building's envelope in the combined requirements for the Tech 5 / ARCH 4510 integrated design studios.



1—Context and Mission

To help the NAAB and the visiting team understand the specific circumstances of the school, the program must describe the following:

The institutional context and geographic setting (public or private, urban or rural, size, etc.), and how the program’s mission and culture influence its architecture pedagogy and impact its development. Programs that exist within a larger educational institution must also describe the mission of the college or university and how that shapes or influences the program.

Program must specify their delivery format (virtual/on-campus).

Program Response:

Established in 1927, the University of Houston (UH) empowers students in their pursuit of learning, discovery, leadership, and engagement. Located in a sprawling metropolis, our premier Tier One campus provides students with cutting-edge programs including undergraduate, graduate, doctoral, distance, and continuing education studies. Ranked among the best colleges in America, UH is home to award-winning faculty, innovative research centers, alumni who have become international leaders, and one of the most diverse student populations in the nation. The University currently supports 47,000+ students and 2,600+ faculty on 668 acres. There are 36 research centers and over 15 community programs, clinics, and community projects. The University of Houston System is a group of ten public institutions of higher learning in the Houston area that share common goals and are governed by a Board of Regents.

Houston, the country’s fourth-largest city with 2.3 million residents, is a vibrant, international community committed to cultural and commercial progress, with an extraordinary mix of world-class arts, affordable housing, excellent school districts, booming business, diverse population, and a time-honored spirit of enterprise. The University of Houston draws strength from its diversity to transform lives and communities through education, research, service and innovation in a real-world setting. UH is an engine for discovery, conversation and change that informs and leads local, state, national, and global partnerships.

The mission of the University of Houston is to offer nationally competitive and internationally recognized opportunities for learning, discovery, and engagement to a diverse population of students in a real-world setting. The University of Houston offers a full range of degree programs at the baccalaureate, master’s, doctoral, and professional levels and pursues a broad agenda of research and creative activities. As a knowledge resource to the public, the University builds partnerships with other educational institutions, community organizations, government agencies, and the private sector to serve the region and impact the world.

Gerald D. Hines College of Architecture and Design

OUR VISION:

“We teach with the idea that Houston is our laboratory, challenging students to push the boundaries of architecture and design in this complex and diverse metropolis, and therefore, make a difference in the world.”

Design at the University of Houston’s College of Architecture and Design reconciles conflicting visions and utilizes all available technologies to shape and sustain a better world. Houston’s hot, humid environment, low-lying Gulf Coast geography, and dispersed pattern of un-zoned metropolitan development presents designers with an extraordinary laboratory full of challenges



and opportunities. The proposals seeded in the vast urban sprawl of Houston are transmutable to cities around the globe. Faculty and students work together in a studio-centric curriculum, supported by a digital fabrication facility. Open studios seamlessly incorporate coursework into project-based learning through material investigations and applied research. *Making is not simply an action or a craft, but a form of critical thinking*, calling forth innovative solutions for contemporary conditions. Our programs foster an environment where ideas find form and where practices, socially equitable and fundamentally ecological, establish a model from which to develop Houston's future while informing and sharing global design strategies.

OUR GOALS:

- Build a local, national, and international value network.***
- Develop our local reputation into a national and global reputation.***
- Continue to explore ways in which we can integrate technology and other “support” courses into our studio base.***
- Develop long-term educational movements.***
- Grow and expand our graduate programs.***

Located in such a diverse and international city as Houston, the College offers International Programs: opportunities for graduate and undergraduate students to broaden academic and personal horizons. These are available through numerous types of international study options, including faculty-led summer programs in Europe, the Americas, and Asia; exchange programs between the college and institutions in Europe and South America, as well as internships. The pedagogy of the programs is defined by design innovation, environmental responsibility and sustainability, and openness. The diverse makeup of the student body mirrors the diversity of Houston. Emphasis is given to working on issues stemming from different cultural backgrounds while relating to Houston as a city of continuous growth, without zoning, which constantly confronts flooding and infrastructure issues. The programs are also open to architectural speculation spanning a wide variety of topics. The advantage of having an industrial design and interior architecture program in the same college is borne out by the interdisciplinary approach found in our studios and classes.

The prior largely in-person delivery format shifted during the coronavirus pandemic to an almost exclusively virtual format, with a few classes taught in Hyflex mode. As of this writing, the Fall 2021 semester will be largely taught in-person on campus, with a few online classes remaining.

The program's role in and relationship to its academic context and university community, including how the program benefits—and benefits from—its institutional setting and how the program as a unit and/or its individual faculty members participate in university-wide initiatives and the university's academic plan. Also describe how the program, as a unit, develops multidisciplinary relationships and leverages unique opportunities in the institution and the community.

Program Response:

The University Mission and the College Mission:

The University of Houston has developed a set of strategic initiatives that inform what we do as a college. In general terms, the principal initiative impacting our College falls into the broad category of Sustainable Communities for research, with overarching themes of Social Science, Business, Law, Public Policy, Arts and Letters. The college works to weave this strategic umbrella into our educational offerings. Sustainable Communities as a research focus allows us to concern ourselves with energy, materials, robotics, construction methods, sustainable



materials/composites, infrastructure, and any aspect of “smart cities.” We also strive to provide a stimulating and creative environment for a diverse student body to attain a high-quality, professional education in architecture and design. The College is firmly committed to design as the central, unifying activity in an architecture program. The College seeks to establish an environment that fosters resourcefulness, surrounds students with effective means for their work, and informs these activities with critical inquiry. Recognizing rapid changes in technology, the College seeks to prepare its students with appropriate skills and to balance those skills with more traditional fieldwork, hands-on construction experience, and cross-disciplinary inter-institutional collaboration.

The College benefits from its position in a cosmopolitan urban environment and devotes energy and resources to creating partnerships and collaborations with the city, its professional and civic communities, and its vast industry network. As a metropolitan hub, the College is also well positioned to maintain a global dialogue on architecture and urbanism with city, community, and industry partners around the world.

We cooperate with a variety of academic units, such as the Cullen College of Engineering (media design), Bauer College of Business (ULI competitions), Graphics Department (Design/Build), the Valenti School of Communication (architecture and film) and strive to reach beyond the traditional limits of architectural education. The commitment to the community, especially the Third Ward, a historic African-American neighborhood, is manifest in the Community Design Resource Center (CDRC), which initiates and fosters partnerships to address development and design in low-to-moderate-income communities in Houston. The College’s designLAB offers the University its expertise in the master planning of all of the University of Houston campuses. Faculty are engaged in the University’s committees through election, appointment, and volunteerism. Individual faculty members work through committees and task forces. The College’s Graduate Design Build Studio also provides direct involvement with our communities providing projects such as amphitheaters and outdoor classrooms for our local elementary schools and non-profit organizations. Our Summer Discovery Program offers studio classes to high school students in the Houston area. Our AIAS organization participates in Freedom by Design, Gulf Coast Green, and a host of other AIA activities, chapter meetings, and national conventions. We enjoy an active local AIA Chapter. They regularly engage our students with a “Back to School Bash,” exhibitions, and open forums and lectures. Houston has a significant architecture community. Firms such as Gensler have informed us that the largest percentage of employees in all their offices worldwide have been graduates of our college. Our programs committee administers the lecture series each term. We have a robust visiting critics program which brings jurors to “jury week” at the end of each term.

The ways in which the program encourages students and faculty to learn both inside and outside the classroom through individual and collective opportunities (e.g., field trips, participation in professional societies and organizations, honor societies, and other program-specific or campus-wide and community-wide activities).

Program Response:

The faculty and students are encouraged to participate in ACSA events and other architecture-related conferences. Every member of the college community is encouraged to attend lectures and events at UH, Rice University, Rice Design Alliance, Houston Mod, and other local design organizations.

Students and faculty participate in competitions in and outside of classroom instruction (e.g., ULI competition; ACCOR invited competition). Students are reminded to take advantage of attending



events by NOMAS, AIAS, and other affiliate programs. Engagement with the Third Ward Community and other neighborhoods via studio projects or via our CDRC or The Center for Sustainability and Resilience brings on-the-ground reality into the classroom and allows for acquiring new skills, such as working in neighborhoods and communicating effectively with clients. Our technology sequence is committed to engaging our vast construction industry to provide field trips for students. We encourage students to participate in a multitude of exchange programs, domestic study trips, and study abroad opportunities.

Summary Statement of 1 – Context and Mission

This paragraph will be included in the VTR; limit to maximum 250 words.

Program Response:

The Gerald D. Hines College of Architecture and Design offers its students a platform of integrated disciplines—Architecture, Interior Architecture, and Industrial Design—from which to negotiate the complexities of contemporary practice in a world that is grappling with diminishing economic and natural resources, the realities of post-disaster reconstruction, and, at the same time, continued rapid urbanization. Our programs foster an environment where ideas find form and where practices, socially equitable and fundamentally ecological, establish a model from which to develop Houston’s future and inform and share design strategies globally. *“We teach with the idea that Houston is our laboratory, challenging students to push the boundaries of architecture and design in this complex and diverse metropolis, and therefore, make a difference in the world.”* Design at the University of Houston’s College of Architecture and Design reconciles conflicting visions and utilizes all available technologies to shape and sustain a better world. Houston’s hot, humid environment, low-lying Gulf Coast geography, and dispersed pattern of unzoned metropolitan development presents designers with an extraordinary laboratory full of challenges and opportunities. The proposals seeded in the vast urban sprawl of Houston are transmutable to cities around the globe.

2—Shared Values of the Discipline and Profession

The program must report on how it responds to the following values, all of which affect the education and development of architects. The response to each value must also identify how the program will continue to address these values as part of its long-range planning. These values are foundational, not exhaustive.

Design: Architects design better, safer, more equitable, resilient, and sustainable built environments. Design thinking and integrated design solutions are hallmarks of architecture education, the discipline, and the profession.

Program Response:

College Culture

The Gerald D. Hines College of Architecture and Design strives to empower ethical and critical thinkers who understand the power of design to shape our physical and social environment, are skilled in their craft, and assume leadership roles within their chosen professions. The College provides an educative environment in which students negotiate the complexities of contemporary design practice and of sociopolitical issues.

Diversity, equity, and inclusion are core to our College’s mission. Each member shares responsibility in upholding these values. Students, faculty, and staff should demonstrate mutual respect, such as through compassion for others’ lived experiences and professionalism in communication, even in matters of conflict. An equitable environment cultivates a productive educative process. As such, our College and University seek diversity across all differences and support collective conversations towards social justice around race, class, gender, sexuality, ability, religion, ethnicity, and age.

The College prioritizes freedom of inquiry, teaching, and research. Informed differences in opinion allow for productive, multifaceted discourse. We celebrate the intellectual independence of faculty and students and value the complex conversations that our diverse academic community enables. We believe design inquiry is grounded in a pluralist culture that requires commitment to open exploration, collective dialogue, and integrative thinking on the part of all community members.

The College promotes design as a creative process. Design education is a process-oriented and open-ended inquiry yielding multiple responses and continually provoking questions. We acknowledge that the design disciplines are dynamic. Design is central to the way we engage our evolving world and has the power to produce a formal, material, and technological embodiment of that world’s sociocultural, ecological, and economic dimensions.

The College is an incubator for ideas. Studios, seminars, lectures, and all other educational environments serve as laboratories for design experimentation. All members of our community are encouraged to contribute to the vibrancy and intensity of the work and discussion. Success is measured by the quality of discourse and the design process as well as by the quality of work produced.

The College holds that constructive critique is a necessary means of engaging the world. Critique in good faith is an act of care and attention embedded with the implication that better is possible. Students are encouraged to engage with critique from their faculty and peers to further contribute to design discourse. Our College embraces students as full partners in their



education. We approach critique as a collaborative and constructive practice to create proactive, critical, and optimistic contributors to our design disciplines.

The College community encourages wellness. We counter the excesses of the demanding and competitive nature of design practice. In planning courses, curricula, and College activities, faculty and staff make efforts to hold space and time for students. We value healthy habits such as proper sleep, healthy eating, regular exercise, and social engagement in and outside of the College. The College connects students with the resources and support necessary to make intentional decisions about setting expectations, prioritizing tasks, and balancing time commitments with their physical and mental wellbeing.

This is a living document. Each spring, the Dean will convene a task force consisting of College leadership, students, faculty, and staff to review, obtain feedback, and update the culture statement with the intention of publishing the revised statement at the start of the new academic year. This College Culture Statement is not only an aspiration—it is an acknowledgement of the College’s commitment to uphold values and practices of respect, inclusion, and community among its members and their contributions.

Design reconciles conflicting visions and exploits all available technologies to shape and sustain a better world. Houston’s hot, humid environment, low-lying Gulf Coast geography, and dispersed pattern of un-zoned metropolitan development presents designers with an extraordinary laboratory full of challenges and opportunities. The proposals seeded in the vast urban sprawl of Houston are transmutable to cities around the globe.

The Gerald D. Hines College of Architecture and Design offers its students a platform of integrated disciplines—Architecture, Interior Architecture, and Industrial Design—from which to negotiate the complexities of contemporary practice in a world that is grappling with diminishing economic and natural resources, the realities of post-disaster reconstruction, and, at the same time, continued, rapid urbanization.

Faculty and students work together in a studio-centric curriculum, supported by a digital fabrication facility. Open studios seamlessly incorporate coursework into project-based learning through material investigations and applied research.

Making is not simply an action or a craft, but a form of critical thinking, calling forth innovative solutions for contemporary conditions.

Our programs foster an environment where ideas find form and where practices, socially equitable and fundamentally ecological, establish a model from which to develop Houston’s future and inform design strategies globally.

Gerald D. Hines College of Architecture and Design students possess curiosity, commitment, initiative, creativity, and a strong work ethic. These characteristics increase our students’ potential to become reflective practitioners and leaders in design. Our curriculum is designed to prepare our graduates for professional practice by equipping them with a comprehensive understanding of human needs and a command of technologies that enable them to shape their environments. Our focus on sustainable design has forged collaborative projects across disciplines.

The Programs (B.Arch.; M.Arch.) are committed to educating students in ways that offers multiple paths to professionalization. The interdisciplinary aspect and the holistic approach to design problems is emphasized throughout most of the courses and studios. Critical inquiry is a major component of the teaching philosophy. Learning outcomes are targeted with critical inquiry in

mind; the skills necessary to work effectively and innovatively in school and in practice are being taught across the various courses. Technical skills are being addressed in the technology and construction classes and applied in studio. Interdisciplinary experience stems from the opportunity to take courses in interior architecture alongside industrial design (both programs taught in our college), and the opportunity to take courses in other colleges. Teamwork within the programs, B.Arch. and M.Arch., and cooperation with students and professionals outside the college (such as in competitions and community-based projects), help students understand the importance of interdisciplinary teamwork and exposure to a variety of ideas.

Working through a project from precedent research to sketching first ideas, from developing those ideas while weighing the impact of economic, societal, and environmental limitations and challenges, to presenting a completed project to a diverse jury, explaining, and defending the solutions, is the process the programs apply to the tasks at hand. The consultation of faculty and professionals during the development of the project is a valid way to introduce the students to working in an architectural office.

Environmental Stewardship and Professional Responsibility: Architects are responsible 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, we embrace these responsibilities and act ethically to accomplish them.

Program Response:

Students in both programs are continually made aware of their responsibility towards people, the environment, and our world as a whole—now and in the future—as students and as practicing architects. This happens through the projects undertaken in studios, in the tech and environmental science classes, and in the history and theory courses. Whereas the technical aspects of the work of an environmentally conscious architect are discussed in the respective courses, the ethical and societal aspects are part of all courses. Environmental stewardship is being taught but also practiced through recycling of model material, reduced printing output, and economical use of resources as part of our practical approach to stewardship.

Environmental stewardship and responsibility are interwoven into the project briefs and the course content in studio, tech, environmental classes, and in several HTC courses as well. It is seen as an integral part of the education of our students.

Equity, Diversity, and Inclusion: Architects commit to equity and inclusion in the environments we design, the policies we adopt, the words we speak, the actions we take, and the respectful learning, teaching, and working environments we create. Architects seek fairness, diversity, and social justice in the profession and in society and support a range of pathways for students seeking access to an architecture education.

Program Response:

Diversity, equity, and inclusion are core to our College's mission. Each member shares responsibility in upholding these values. Students, faculty, and staff should demonstrate mutual respect, such as through compassion for others' lived experiences and professionalism in communication, even in matters of conflict. An equitable environment cultivates a productive educative process. As such, our College and University seek diversity across all differences and support collective conversations towards social justice around race, class, gender, sexuality, ability, religion, ethnicity, and age.



The curriculum and the syllabi address these issues in various ways, and projects given in studio or class reflect the importance of mutual understanding and respect, while also speaking to the different barriers arising out of the reality of exclusion and inequity. The large representation of minorities in our student body is proof that diversity and inclusion is more than just a slogan. Our programs help students from disadvantaged backgrounds be successful on the road to becoming an architect. Work-life balance is encouraged by measures such as limited access to the building over weekends and after regular hours to discourage a 24-7 schedule. A Wellness Center is located on campus. Yoga classes and other healthful activities are also widely available to students. Faculty is mindful when assigning work not to overload the students, especially as many of them are also working outside the university.

The programs check the implementation and success of measures taken regarding improving equity and social justice by revising syllabi if necessary, and, with regards to diversity, reevaluating the composition of faculty and staff on an annual basis.

The University of Houston is one of the most diverse research institutions in the United States. In 2019, 42% of UHCoAD students identified as Hispanic or Latinx, 7% as Black or African American, 17% as Asian or Asian American, 23% as white, and 11% other. Following the death of George Floyd and its resonance around the world including calls of urgency within the Black Lives Matter movement and others, the Office of the Dean created the Diversity, Equity, and Inclusion Task Force (DEITF) in June 2020. The assessments and data outlined in the DEITF's final report were collected after the distribution of a Diversity, Equity, and Inclusion Survey that went to the College's faculty, staff, students, and alumni in September 2020. In addition to the quantitative and qualitative data collected from the survey, the DEITF also gathered information and perspectives from various college and community stakeholders through a series of focused meetings and dialogue sessions. The totality of the survey results and these conversations along with data from the UH Statistical Handbook, NAAB criteria, and other information shaped the report.

The DEITF looked at the entire program including the college, student experience and support, curriculum, faculty diversity, and surrounding community. Within each section, three subsections are included: "Context for Change," "Where We Stand," and "Goals and Recommendations." The "Context for Change" sections provide a broad overview. The "Where We Stand" sections provide important context and data points to facilitate a clearer understanding of associated issues that will allow the reader to better understand the DEITF's recommendations which include goals, action steps, and metrics to measure success going forward.

On May 2021, Dean Patricia Oliver appointed a Diversity, Equity & Inclusion (DEI) Action_Task Force charged with facilitating the implementation of as many of the recommendations included in the December 2020 DEI Task Force Report as possible, and as soon as possible. The Action Task Force, which includes faculty, staff, and students from all the programs in the college, worked during the Summer of 2021 to review all 45 recommendations from the original task force. A survey was sent to all faculty, staff, and students to prioritize the 45 recommendations.

One of the first recommendations to be implemented was the organizing of a Community Round Table focusing on the Third Ward with the goal of encouraging collaborations between neighboring community organizations and CoAD faculty and students. The event took place at the UH Architecture Building on 21 July 2021—all the College's faculty and students were invited. The program featured a presentation of the "Third Ward Complete Communities Action Plan" by Sasha Marshall of the City of Houston Department of Planning & Development.



Knowledge and Innovation: Architects create and disseminate knowledge focused on design and the built environment in response to ever-changing conditions. New knowledge advances architecture as a cultural force, drives innovation, and prompts the continuous improvement of the discipline.

Program Response:

We celebrate the intellectual independence of faculty and students and value the complex conversations that our diverse academic community enables. We believe design inquiry is grounded in a pluralist culture that requires commitment to open exploration, collective dialogue, and integrative thinking on the part of all community members.

Design education is a process-oriented and open-ended inquiry yielding multiple responses and continually provoking questions. We acknowledge that the design disciplines are dynamic. Design is central to the way we engage our evolving world and has the power to produce a formal, material, and technological embodiment of that world's sociocultural, ecological, and economic dimensions.

Studios, seminars, lectures, and all other educational environments serve as laboratories for design experimentation. All members of our community are encouraged to contribute to the vibrancy and intensity of the work and discussion. Success is measured by the quality of discourse and the design process as well as by the quality of work produced.

New advances in the field are communicated to the students through constant updates of the syllabi, through our lecture series, and through the work of guest professors and visiting scholars. Innovation and knowledge acquisition are encouraged throughout all the programs.

Linking research done in academia with the profession occurs primarily through participation in conferences and participating in competitions and exhibits. Research is directly generated from and applied to the profession through the work of CeSAR, the CDRC, and the designLAB.

Leadership, Collaboration, and Community Engagement: Architects practice design as a collaborative, inclusive, creative, and empathetic enterprise with other disciplines, the communities we serve, and the clients for whom we work.

Program Response:

Leadership, collaboration, and community engagement is practiced through the work of the CRDC, CeSAR, the Graduate Design/Build Studio, and engagement in studio projects that address underserved communities locally and nationally via studio projects. The Graduate Design/Build Studio develops permanent improvements through its projects for schools and other institutions. These opportunities help students learn how to enact change, utilizing responsibility and critical/design thinking to make change meaningful.

While every student is not required to participate in these projects, there is an ethos of community engagement that permeates the programs due to these activities.

Collaboration and collaborative design occur reliably at several points throughout the programs and elsewhere in the College. All B.Arch. students design their studio project for the Comprehensive Level ARCH 4510 as a member of a two- or three-person collaborative team. All MARCH students that enter the three-year program collaboratively design their studio project for ARCH 6601 and ARCH 6602 as members of the Graduate Design/Build Studio.



There is a robust level of student activity within the College among the 10 active student organizations. These organizations offer leadership opportunities, allowing students to govern their activities and celebrate their diversity.

Lifelong Learning: Architects value educational breadth and depth, including a thorough understanding of the discipline's body of knowledge, histories and theories, and architecture's role in cultural, social, environmental, economic, and built contexts. The practice of architecture demands lifelong learning, which is a shared responsibility between academic and practice settings.

Program Response:

The curricula of the architecture programs contain a wide variety of learning approaches that are inclusive and reflect the latest developments within the discipline. Within the College, Interior Architecture and Industrial Design Programs allow for cross-disciplinary experiences and learning from allied professions.

The faculty and students are encouraged to participate in ACSA events and other architecture related conferences. Every member of the college community is encouraged to attend lectures and events at UH, Rice University, Rice Design Alliance, Houston Mod, and other local design organizations.

Students and faculty participate in competitions in and outside of class.

Students are reminded through our listserv t

o take advantage of attending events by NOMAS, AIAS, etc.

Engagement with Houston's Third Ward brings reality into the classroom and allows for acquiring new skills such as communicating effectively with clients.

We encourage students to participate in exchange programs and study abroad so they can broaden their worldly experience and widen their horizons.

Offering credit to students for attending lectures, events, etc., outside college is another way we encourage learning outside the studio.

All these initiatives are geared towards instilling a desire for lifelong learning. They also help to further the integration of theory and practice.



LECTURES_CoAD.pdf



Programs Committee Guest List AY 19/20

WENDELL BURNETTE

Wendell Burnette Architects
SEPT 24 / Moderator: Gail Peter Borden

THOMAS ROBINSON

Lever
OCT 15

DONNA KACMAR / VICTOR LUNDY

OCT 30
@ Museum of Fine Arts Houston

JENNIFER NEWSOM & TOM CARRUTHERS

Dream the Combine
Nov 15

MICHAEL MEREDITH

MOS
NOV 12

Series: Futures of the Architectural Exhibition

ZÖE RYAN

The Art Institute of Chicago
AUG 30 / Moderators: Alison Weaver
@ Moody Center for the Arts, Rice University

MARIO BALLESTEROS

Archivo Arquitectura y Diseño
SEPT 6 / Moderators: Roberto Tejada

MARTINO STIERLI

The Museum of Modern Art
SEPT 27 / Moderators: Sandra Zalman
@ Glassell School, Museum of Fine Arts Houston

GIOVANNA BORASI

Canadian Centre for Architecture
OCT 4 / Moderators: Maria Nicanor
@ Rice University School of Architecture

Programs Committee Guest List AY 19/20

Series: MX/TX

ERSELA KRIPA

AGENCY
FEB 18 / Moderators: Michael Kubo & Jesse Hager



ISABEL ABASCAL & ALESSANDRO ARIENZO

LANZA Atelier

MAR 18 / Moderators: Michael Kubo & Jesse Hager

CÉSAR GUERRERO & ANA CECILIA GARZA

S-AR

MAR 25 / Moderators: Michael Kubo & Jesse Hager

WONNE ICKX

LANZA Atelier / Moderators: Michael Kubo & Jesse Hager

APR 1

TEXAS LIGHT: THE ART & ARCHITECTURE OF THE ROTHKO CHAPEL

Christopher Rothko, Rothko Chapel; George Sexton, GSA; Stephen Cassell, ARO

APR 8 / Moderator: Sandra Zalman

Series: ORIENTATIONS

BRIAN MACKAY-LYONS

Mackay-Lyons-Sweetapple

SEPT 16 / Moderator: Gail Peter Borden

ANA MARÍA LEÓN

University of Michigan

OCT 14 / Moderator: Michael Kubo

AARON FOREST & YASMIN VOBIS

Ultramoderne

OCT 21

ANA MILJACKI

MIT Critical Broadcasting Lab

NOV 04 / Moderator: Michael Kubo

LOLA SHEPPARD & MASON WHITE

Lateral Office

NOV 04

RIGHT-WING SPACES

With Goethe Institute Pop-Up Houston

Stefan Truby, Armen Avenassian, Fabiola Lopez-Duran, Stephen Fox, Michael Kubo

DEC 08

Series: BOOKS AND BITES

MICHAEL KUBO

Hines College of Architecture & Design Design

NOV 1 / Moderators: Catherine Essinger, Rafael B. Duran



DONNA KACMAR

Hines College of Architecture & Design
FEB 7 / Moderators: Catherine Essinger, Rafael B. Duran

Programs Committee Guest List AY 20/21

BROOKS + SCARPA

SEPT 21 / Moderator: Jesse Hager
Registered Audience: 235
Attendance: 150

ANDREW KUDLESS

MATSYS
OCT 19 / Moderator: Jeff Halstead
Registered Audience: 179
Attendance: 104

BETSY BARNHART

NOV 16 / Moderator: George Chow
Registered Audience: 107
Attendance: 65

AMALE ANDRAOS

WORKac
JAN 25 / Moderator: Rafael B Duran
Registered Audience: 283
Attendance: 173

ANUPAMA KUNDOO

Anupama Kundoo Architects
FEB 08 / Moderator: Alan Bruton
Registered Audience: 151
Attendance: 94

SALLY WALSH ROUNDTABLE

Eugene Aubry, Alan Bruton, Stephen Fox, Lois Farfel Stark
Special Guests: Gail Adler, Barbara Amelio, Marilyn Archer, Beverly Bentley,
Raymond Brochstein, Robert Burnette, Mary Burnette, Tony Frederick, Kathy
Heard, Paul Hester, Lannis Kirkland, Judy Kugle, James Thomas, Anna
Wingfield, and others who knew and worked with Sally Walsh
FEB 22

ASSEMBLE

Assemble Studio
MAR 01 / Moderator: Daniel Jacobs

OMER ARBEL

Omer Arbel Office
MAR 22

RAJA SCHAAR



Westphal College of Media Arts & Design
Drexel University
APR 5

Series: BOOKS AND BYTES

RETO GEISER

Rice University, MG&Co
SEPT 17 / Moderator: Michael Kubo

RONNIE SELF

Hines College of Architecture & Design
OCT 23 / Moderator: Sandra Zalman

GAIL PETER BORDEN

Hines College of Architecture & Design
NOV 13 / Moderator: Rafael B. Duran

NATILEE HARREN

College of the Arts, University of Houston
DEC 4 / Moderator: Bruce Webb

STEPHEN FOX

Rice University / Hines College of Architecture and Design
APR 13 / Moderator: Pete Gershon

FABIOLA LÓPEZ-DURAN

Rice University School of Humanities
APR 14 / Moderator: Michael Kubo

DIETMAR FROEHLICH

Hines College of Architecture and Design
APR 22 / Moderator: Maria Elena Soliño

Programs Committee Guest List AY 21/22

**MARIA CHARNECO, ALFREDO LÉRIDA, GUILLERMO LÓPEZ, ANNA
PUIGJANER**

MAIO
AUG 30

CHE-WEI WANG & TAYLOR LEVY

CW&T
SEPT 13

OLALEKAN JEYIFOUS

OCT 18

TANIA GUTIÉRREZ-MONROY

Emerging Scholar Fellow, Hines College of Architecture & Design
OCT 25



BETH O'NEILL & CHRIS MCVOY
O'Neill McVoy
NOV 1

Series: BOOKS AND BYTES

KELIY ANDERSON-STALEY
DATE TBD

JESUS VASSALLÓ
Rice University School of Architecture
DATE TBD

PETER ZWEIG, MATT JOHNSON, JASON LOGAN
Hines College of Architecture & Design
DATE TBD

Exhibitions List AY 18/19

2018 STUDY ABROAD
Mashburn Gallery
OCT 3–OCT 22

VICTOR LUNDY: ARTIST ARCHITECT
Mashburn Gallery
NOV 11–NOV 16

NON_PAVILION
Glassell Gallery, Museum of Fine Arts Houston
NOV 19–DEC 2

GILBERTO CARDENAS PRINTS COLLECTION
Mashburn Gallery
MAR 4–APR 14

**IN THE MAKING: SELECTIONS FROM THE COLLEGE OF ARCHITECTURE
& DESIGN MEDIA COLLECTION, 1986–2018**
Mashburn Gallery
JAN 14–FEB 20

Exhibitions List AY 19/20

SUMMER PROGRAMS
Mashburn Gallery, Atrium, Room 143
AUG 16–SEPT 17

DIGITAL-ANALOG
Mashburn Gallery
SEPT 30–NOV 29

M ARCH
2020-2021

	Year 1								Year 2			Non-Curricular Activity								
	ARCH 6A48	ARCH 6A50	ARCH 6359	ARCH 6603	ARCH 6376	ARCH 6A49	ARCH 6A51	ARCH 6357	ARCH 6604	ARCH 6393	ARCH 6360	ARCH 6361	Lectures and Exhibitions	Study Abroad	Graduate Design Build Program	NCARB	UI/Hines Competition	College Design Culture	CDRC	Activity Name
Shared Values																				
Design	X	X	X	X			X	X	X	X	X		X	X	X	X	X	X	X	
Env. Stewardship & Professional Respon.	X	X		X			X	X	X		X		X	X	X				X	
Equity, Diversity & Inclusion			X	X		X			X	X	X		X	X	X			X	X	
Knowledge & Innovation	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X	
Leadership, Collab. & Community Engmt.			X	X					X	X	X		X	X	X	X	X	X	X	
Lifelong Learning		X	X		X			X	X	X	X		X	X	X	X	X	X	X	
Program Criteria																				
PC.1 Career Paths																				
PC.2 Design																				
PC.3 Ecological Know. & Respon.																				
PC.4 History & Theory																				
PC.5 Research & Innovation																				
PC.6 Leadership & Collaboration																				
PC.7 Learning & Teaching Culture																				
PC.8 Social Equity & Inclusion																				
Student Criteria																				
SC.1 HSW in the Built Environ.																				
SC.2 Professional Practice																				
SC.3 Regulatory Context																				
SC.4 Technical Knowledge																				
SC.5 Design Synthesis																				
SC.6 Building Integration																				

PC.1 Career Paths—How the program ensures that students understand the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline’s skills and knowledge.

Program Response:

BARCH

ARCH 1358 – Introduction to Design Culture

ARCH 4328 – Technology 6

MARCH

ARCH 6360 – Professional Practice

Patrick Peters, Architect, NCARB, the faculty Architect Licensing Advisor, working in collaboration with Kim Saotonglang, student Licensing Advisor, provided two “path to licensure” workshops for all students within the programs—one in the early fall targeting entering and early year students, and one later in the fall targeting exiting students. Kim Saotonglang traveled to Miami to attend the NCARB 2021 Licensing Advisors Summit in person while Professor Peters followed it virtually.

Participation and performance on the Architect Registration Exam (ARE) are indicators of the College's success in encouraging students to pursue the path to licensure. The Office of the Dean and the Architect Licensing Advisor monitors the ARE success rate in Texas and sets a benchmark to match the statewide average pass rate in three years. This will be assessed with the release of the pass rates each fall.

The UH Architecture Alumni organize an annual Career Fair and hold it in the College's atrium each spring (pre-pandemic). Graduating students from both programs participate to gain experience interviewing and to secure professional employment. Participating firms include small and large architectural practices, but also non-architectural organizations as well, showcasing the range of employment options and career paths available. The Office of the Dean and Architecture Alumni set a benchmark to secure participation from 20 firms and post-graduation employment for 50% of the graduating students. This will be assessed in the fall of each year.

PC.2 Design—How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

Program Response:

BARCH

ARCH 1501 – Architecture Design Studio II
ARCH 2500 – Architecture Design Studio III
ARCH 2501 – Architecture Design Studio IV
ARCH 3500 – Architecture Design Studio V
ARCH 3501 – Architecture Design Studio VI
ARCH 4510 – Architecture Design Studio VII

MARCH

ARCH 6603 – Design Studio III
ARCH 6604 – Design Studio IV
ARCH 6393 – Master Project Prep
ARCH 6361 – Integrated Practice

Design is the primary driver in all curricula, program, and administrative decisions. It is championed by embedding critical thinking as the cornerstone of design practice. This overarching mission is segmented across curricula. It helps build a sequential and integrated ladder that builds from conceptual thinking, overlaying precedent, context, materiality, and assembly and tectonics toward the complexities of scale, program, site, and community to challenge the role of architecture in the built environment.

The Architecture Programs are uniquely invested in the processes of architectural understanding through methods of operation, streams of information and inquiry, and perhaps, most importantly, apprehending the control points and variables within the systems which allow for an insertion and a redirection. It is only from within that an operative can divert or direct the flow. Operating simultaneously at the scale of the territory, the scale of the city, at the scale of the building, and the scale of the tool, our Architecture programs synthetically professional and advanced research alike engages current global challenges at every scale.

BARCH and MARCH design-centered programs includes studio, seminar and lecture courses that provide a comprehensive foundation for design at all scales. Process and method continue architecture's fundamental dialectic to bridge technology and culture. Process and method must now be inclusive to equally engage the fundamental issues of light, space and form while rising to respond to the new essentialisms of performance, sustainability and social conscious. It is in this "process" that architecture can assert itself. It is in the "process" where architecture is perpetually reborn. It is in the "process" where one's voice can be found as a thinker, and more importantly as an active maker. Building on the College's long legacy and commitment to "thinking through making," the curriculum integrates design with advanced tools—computation and fabrication technologies, performative systems, history and critical theory, and urban agendas. It comprehensively weaves the conceptual with the pragmatic. It foregrounds design and critical thinking while including material and technical sophistication; sustainability; social and community engagement; design/build as an integrative pedagogy; and global studies.

The Undergraduate BARCH Program is dedicated to expand the idea that design is central to the way the world is being discussed today. All of BARCH undergraduates are educated to understand the responsibilities and powers of architecture. Consequently, architecture is acknowledged as a powerful tool that reconfigures and mobilizes the earth's crust. Undergraduate architecture BARCH program believes that architecture has a privileged voice in this moment of reinvention. Promotes the idea that the architectural work is the assemblage of the many layers of realities such as: ecological, political, social, formal, material, technological, environmental thought, manifest in ethical and aesthetical forms. Undergraduate Architecture students are educated on the idea that when all these layers come together in exemplary architectural works, they disseminate knowledge as becoming paradigms. In this new era of ecological consciousness, the BARCH program promotes the understanding of the architectural work as embassy of all these assembled layers. The BARCH program prepares students to design architectural works that will be paradigmatic assemblages of all the layers that the world is discussing today.

Design is central to architecture curriculum and pedagogy. Design studios are at the heart of the Undergraduate Architecture programs, acting as a hub and laboratory of experimentation, where all academic areas of Design Media, History, Theory and Criticism, and Technology are interacting and overlapping in their commitment to the global evolution. Every semester the Undergraduate BARCH program launch more than 61 studio problems that evolve in multiple directions before reporting back their results in juries, discussions, and exhibitions that cover the building walls or populate our digital archive with thousands of drawings, plans, sections, axonometric, emblematic images, and models that beyond training students how to design professionally display the state of knowledge of the collective intelligence that semester after semester assemble new ideas to reimagine the world. The biodiversity of students and faculty that have formed this body of work, this collective intelligence, represents a myriad of fields of inquiry and sensibility that goes from the most pragmatic professional to the most experimental designer, from the logics of the technique to the speculations of history, theory, and criticism, from the tactile craftsmen to the new design media robotics. The design work produced in the BARCH program is carefully archived and organized, discussed and

revisit. BARCH accumulated work is not just an archive of new assemblages. It lays forth a hint of what's is being discussed to prepare students in upcoming fields of architecture. At the Undergraduate BARCH Program, design evolves in a context of ecological consciousness and celebrates the diversity of designed ecologies.

Design pedagogy is orchestrated throughout a design sequence that goes from foundation to professional level. The design sequence drives the interaction with the academic areas of Design Media in the first year, History, Theory, and Criticism in the second year, and Technology in the third year and the first semester of the fourth year. This sequence expanded over the first three years. The first year teaches to equip students with representational tools, the second-year, to understand architecture disciplinary questions with a historical perspective and profoundness, and the third year to operate design realities with technological knowledge. After seven semesters of design education, three additional studio courses at a professional level are dedicated to different topics that open lines of design and exploration. The variety promotes the understanding of different possible career paths. Some studios and academic areas collaborate to develop studio prompts and coordinate mini-lectures series, discussions, juries, midterm and final reviews such as the Virtual Global Studio as a three-way collaboration between the director of BARCH and HTC program coordinator, an ARCH 5500 advanced design studio, and a master's research studio at the Escuela Técnica Superior de Arquitectura de Madrid (ETSAM), or the Design Media studio lead by Design Media Coordinator. Other lines of collaboration are in development between Studio and Technology to develop the future Tech-Studios pedagogy, that as design field, inversely will be led from the technology academic area.

BARCH Scale sequence

1501	2500	2501	3500	3501	4510
	<p>Multiple Scales - Site Plan and Section Built Environment representation</p> <p>1/32" All Plans 1/32" All Elevations 1/32" Sections (2 min) 1/16" Integrated + Exploded Axonometric 1/16" 1 Plan 1/16" 1 Section 1/16" 1 Elevation</p> <p>24x36 Emblematic Image /Materiality</p>	<p>Multiple Scales - Site Plan and Section Built Environment representation</p> <p>1/16" All Plans 1/16" All Elevations 1/16" Sections (2 min) 1/8" Integrated + Exploded Axonometric 1/8" 1 Plan 1/8" 1 Section 1/8" 1 Elevation</p> <p>24x36 Emblematic Image /Materiality</p>	<p>Multiple Scales - Site Plan and Section Built Environment Development</p> <p>1/16" All Plans 1/16" All Elevations 1/16" Sections (2 min) 1/8" Axonometric or 1/4" Section Perspective. 1/4" 1 Plan 1/4" 1 Section 1/4" 1 Elevation</p> <p>24x36 Emblematic Image</p>	<p>Multiple Scales - Site Plan and Section 1/16" Site Plan: accessible path to parking, transit, public sidewalk, built environment development</p> <p>1/8" All Plans 1/8" All Elevations 1/8" Sections (2 min) 1/8" Axonometric - Integration 1/4" 1 Plan 1/4" 1 Section 1/4" 1 Elevation 1 1/2" / Details (Wall, Joint, Roof) 24x36 Set Emblematic Images (2 min)</p>	<p>1/16" / Site Plan: accessible path to parking, transit, public sidewalk, landscape development</p> <p>1/16" / Site Plan / Massing Axonometric with quantitative solar orientation analysis</p> <p>1/4" / Building Plans (all) \$/sf quantitative analysis + alternative cost</p> <p>1/4" / Building Sections (2 min.)</p> <p>1/4" / Building Elevations (2 min.)</p> <p>1/4" / Integrated HVAC / MEP Plan or Axonometric</p> <p>1/4" / Integrated Structural Plan or Axonometric</p> <p>1 1/2" / Building Envelope Wall Section</p>

BARCH Programs Sequence

	<u>1501</u>	<u>2500</u>	<u>2501</u>	<u>3500</u>	<u>3501</u>	<u>4510</u>
GENERAL TOPIC	Pavilioned	Domesticity	Hybridity	Infrastructure	Made in Houston	Annexed
CONCEPTS	Precedent driven. Low performance.		Precedent driven. Spatial Topologies. Urban Context	Site driven. Contextual architecture. Environmental awareness	XXL/urban/territorial Scales (Bigness) vs M/architecture Scales	Equity/Social Justice
PROGRAM TYPE	Atrium Pavilion	AY 20/21 Multifamily + AY 21/22 House +	AY 20/21 Sports, Classrooms, Coffee Shop, Book Shop AY 21/22 Housing, +, parking.	AY 20/21 Recycling plant AY 21/22 Recycling plant	AY 20/21 Architecture of The Speedway AY 21/22 TBD	AY 20/21 DEI
SITE			Houston - Saint Thomas University - Signified with DEI bias	Houston - Brady's Island - Signified inequity by inappropriate combination of urban elements	Houston - Attached to Urban/Met Infrastructures - Signified with inequity by disruption over existing communities	National -
SF	1K sf	3-5K sf	20K sf	35K sf	25K sf	15K sf

More particularly focused, in the BARCH program, the Comprehensive Level studio, ARCH 4510 – Integrated Architectural Solutions is a cross-section of the state of knowledge of undergraduate architecture students. It serves as the essential bridge between the Intermediate/Professional Level studios' focus on developing architectural tools and concepts and the rich freedom for exploration available in the three semesters of the Professional Level studios. A chief goal for the Comprehensive Level studio is to allow students to confront the opportunities and explore the limits of building systems quite early in the semester to provide more time to work on the "how" of integrating systems and construction methods with the overall spatial idea as well as the integration among the various systems. Under this goal, ARCH 4510 studio intensively works in coordination with Technology to facilitate the work of students under the higher expectations of integration this studio champions.

Early in the design process, spatial qualities and architectural form must be informed by the selection of structural, environmental, material assembly systems, and the character of natural light. They must be influenced by context and site. Design determinants include egress and life safety, accessibility, and building regulations—all of which must be understood at the beginning of the design process.

The Graduate MARCH Program is dedicated to critical inquiry and the professional discipline of architecture. With a two-year (five semester) core studio sequence followed by a culminating year (two semesters) focused on cutting-edge research and experimentation, the curriculum boasts a focused and cumulative thematic sequence of

conceptualization, materialization, fabrication (summer design build), contextualization, synthetization, globalization (optional summer), individuation (topic studios), and assertion (master project). The Program begins its core studio sequence with integrated history and theory; technology of materials and assemblies; structures; environmental and sustainable systems; professional practice. The required course sequence is augmented by a large selection of topical studios, global studies, elective seminars, and a culminating yearlong master's project. This curricular flexibility allows for concentrations in Media + Fabrication, Sustainable Architecture, and Urban Systems.

To foster integrated thinking at every level, history, theory, criticism, and the cultural context of architectural practice along with building technology, construction, materiality, assemblies, systems, and sustainability are woven throughout the coursework. Standing on historical precedent, each systemically challenges students to undergird the legacy of the discipline and assess their own individuated thinking.

Assessment, Modification, and Innovation:

The Undergraduate BARCH Program

An Academic Program Assessment Report (APAR) assesses results every year at both BArch and MArch programs. APAR is based on the discussion feedback and formal assessment of a selected group of external reviewers representing different scale perspectives. These scales are covered with reviewers from Texas state institutions, (to compare results against standards in peer public institution in the State of Texas), from regional institutions, (to compare results against standards in peer institutions in the Gulf region, and national institutions, (to compare results against standards in institutions that are different in context but similar curricular inquiries). The external evaluators vary from year to year. For instance, the rating cycle APAR of 19/20 included: Professor of Architecture at the College of Architecture at Texas Tech University, Urs Peter Flueckiger, Favrot Associate Professor at Tulane School of Architecture, Kentaro Tsubaki and Assistant Professor of Architecture at Syracuse University, Marcos Parga. For the APAR 19/20 of the BArch Programs, this group of external evaluators reviewed every single of three different sections of fifth-year projects of ARCH 5500 (the culminating design project level for a UH architecture undergraduate student) following criteria: Design, Technology, Creativity, Appropriate to context, Craft and Precedent Proficiency. The Arch 5500 Projects are rated on the following scale: Exemplary = 10-9, Better = 8-9, Acceptable = 6-7, Developing = 4-6, Faulting = 3-4, Unacceptable = 0-3. The ratings given by the external reviewers are averaged together to create each student's performance rating in each criterion. Students who earn an average of "Acceptable" on their Design element demonstrate highly skilled abilities in their programmatic organization, contextual response, material form, and development of their Arch 5500 Project. The results were analyzed by the Undergraduate Director. Following the same protocols, MARCH develops its APAR. Results are projected over a bar table of 20 columns extrapolating the total number of 46 assessed projects to the number of 20. Within these methods of assessment, both programs of BARCH and MARCH observe design holistically, including multiple representational formats from the idea to the material form. Design is central to the way the students' works operate the solution and representation of comprehensive outcome that is displayed in the more detailed documentation. The assessment of the design item lies in the capacity of the project to combine all the intertwined elements from the synthesis of the project problem to the developed project information.



For ARCH 4510, assessment is accomplished at two stages of the work: at midterm with guest juror scoresheets and at final review with similar scoresheets. The scoresheets focus on the integration of environmental performance, site and building accessibility, structural and environmental control technology, material systems, and ecological design with the conceptual design approach. Professional consultants from within the faculty and from the community at large serve as the review panel and provide scored responses to the students' work. The benchmark for 4510 is that 75% of the class would receive at least a 60% at midterm review and at least an 80% at final review. The assessment tool is as follows:

Scoresheet for ARCH4510 Mid-Term Reviews					
TEAM	not met		adequate	exceptional	
(please score lowest to highest)	1	2	3	4	5
1/ Solar Orientation/Sustain notes	1	2	3	4	5
2/ Site Plan Accessibility notes	1	2	3	4	5
7/ Life Safety Plan notes	1	2	3	4	5
3/ Structure Integration notes	1	2	3	4	5
4/ Envelope Design notes	1	2	3	4	5
5/ MEP Integration notes	1	2	3	4	5
6/ Materials Selection notes	1	2	3	4	5
Other Notes:					
Design Synthesis/Response notes	1	2	3	4	5
Graphic Representation notes	1	2	3	4	5
Technical Understanding notes	1	2	3	4	5

The Graduate MARCH Program is intimate in scale and uses primarily team-taught studios in the core studio sequence. With an elite group of integrated faculty coordinating the topical layers of the curriculum (that are then laterally integrated with the lecture and seminar sequence), there are numerous meetings across the semester at each level in addition to the Graduate Committee. This aids collective and overarching conversations. In 2017-2018, a significant refreshing of the curriculum took place, facilitated by new hires, new directorial leadership, and a shuffling of coordinators and faculty. This reorganized the studio conceptual organization and layered in new history courses (ARCH 6357), visual studies sequence (ARCH 6301, ARCH 6302, ARCH 6303, ARCH 6304), and integrated practice and design development coursework (ARCH 6361)—in addition to modifications to the Master Project. In addition to faculty coordination



history, theory, and criticism to design media at national and international scales, consequently, programs have opened several ways of hiring visiting professors to bring more global design awareness.

This expansion of design faculty and topic offers began in 2018-19 with the line of national/international design pedagogies driven by the Stern Visiting Position: every semester one upper level / vertical studio (ARCH/MARC) programs hire an architectural office with an international reputation to lead one studio in collaboration with an internal and rotational faculty. In previous years the position has been filled by the tandem of Bryan McKay Lyons and Jesse Hager and Brooks and Scarpa and Jesse Hager, and this academic year of 2020-21 Estudio MAIO and Daniel Jacobs. The expansion continues with two additional lines: first, the recently inaugurated line of work Mexico - Texas that began this Fall 21 with the hire of a Mexican architect in practice that, in collaboration with the internal studio faculty Rafael Longoria is teaching this Fall 21 a topic studio on explorations of urban interventions in the Hércules neighborhood of Queretaro, Mexico. Second: the research studios based on books or exhibitions projects develop as Design as Scholarship as is the Ksestudio wok on Micropolitan America, a bokks / exhibition in progress that has been operating between different institutions and over several semesters.

Evidence

The BARCH and MARCH offer various forms of evidence to the NAAB visiting team as illustrations of Design. For required undergraduate and graduate courses, we provide all course syllabi, and handouts together with the Design Studio and Technology Projects of courses related to this element.

Future developments

As mentioned before the two programs of BARCH and MARCH are committed to expanding design faculty in order to provide a broader array of design perspectives in different scales from the territory to the molecular scales, this line of work has continues with the establishment of the Hines Predoctoral Visiting Scholar position developed in collaboration with Escuela Tecnica Superior de Arquitectura de Madrid: every Spring semester, a PhD candidate of ETSAM will be invited to teach one studio related to his/her research work in combination with an elective. ETSAM and Hines collaborate to select a successful candidate that will bring an international and research design perspective.

PC.3 Ecological Knowledge and Responsibility—How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

Program Response:

BARCH

ARCH 2327 – Technology 1
ARCH 2328 – Technology 2
ARCH 3327 – Technology 3
ARCH 3328 – Technology 4
ARCH 2500 – Architecture Design Studio III
ARCH 2501 – Architecture Design Studio IV
ARCH 3500 – Architecture Design Studio V



ARCH 3501 – Architecture Design Studio VI
ARCH 4327 – Technology 5
ARCH 4373 – Urban Environments
ARCH 4510 – Architecture Design Studio VII

MARCH

ARCH 6A48 – Environmental Tech III
ARCH 6A50 – Construction Technology III
ARCH 6603 – Design Studio III
ARCH 6376 – Urban Determinants
ARCH 6A49 – Environmental Tech III
ARCH 6A51 – Construction Technology IV
ARCH 6357 – Contemporary Theory and Critical Practice
ARCH 6604 – Design Studio IV

Ecological Knowledge has become central to the ethos of UHCoAD. A fundamental goal of our programs is to instill in our students the values of ecology, equity, social responsibility, and stewardship. All of our projects and research consider questions of sustainability and resilience—with the idea that the built environment is central to the ongoing health and stewardship of our planet.

The drastic impacts of climate change are visible throughout the Gulf Coast region in which our College sits: rising temperatures, increasing storm frequency and volatility, more frequent and severe flooding events. These climatic effects occur in a region with intensive land development, petrochemical industry, and vast surfaces of asphalt and mobility infrastructure. Houston’s watersheds, air, and soil quality are impacted by the emissions from a sprawling industrial region called the Houston Ship Channel. These problematic overlaps and tensions between the natural and built environments become the frames through which we approach our studio and lecture courses—encompassing the social, economic, and material realms.

By exploring the relationships between the natural and built environments, the program recognizes the ecological tensions between Houston and the expanded territory of the Gulf Coast. This ecological tension is important as a focus of our architecture studios—how we address it through architectural thinking, and how our design decisions impact the natural environment. This stewardship includes values of equity and social responsibility that appear in the design problems we pose to our students in both studios and seminars. We also have several research entities engaged in these issues, such as the CDRC and CeSaR, which provide our students with opportunities to work with communities directly and pragmatically.

UHCoAD’s academic areas and studios have adopted these ecological tensions as productive pedagogical frameworks to help students to acquire Ecological Knowledge progressively—from first to fifth years in the B.Arch. program and from first to third years in the M.Arch. program.

Both the B.Arch. and M.Arch. Architecture programs recognize that Ecological Knowledge is holistic: its different aspects can be approached through diverse pedagogical formats such as lectures, seminars, elective courses, workshops, projects, and studios. We believe that Ecological Knowledge should be acquired throughout the curriculum, using multiple forms of learning at different speeds.

The undergraduate BARCH Program

From the use of abstract tools in the first semester of the first year, to material and constructed forms in the second semester of the third year, the B. Arch. Program educates students to understand the implications of design decisions in the context of materiality, as well as how this materiality is interwoven with the natural and built environments.

- **Foundation Level**

The first year, ARCH 1500 and ARCH 1501, focuses intensively on tools and materiality—opening a line of critical thinking to understand design choices in the context of material behavior. With materiality as the first ecological tool in design practice, this line of inquiry emphasizes the resonance between ideas and reality and the subject and its environment. Foundation Level concludes in the first semester of the second year with ARCH 2500, through exploring the relationships between building and site, where form responds to site as an ecological construct through the design of a small-scale building.

- **Intermediate Level**

Intermediate Level focuses on medium-scale buildings in the urban context of Houston, generating design ideas from the concrete environmental and contextual issues of the studio sites. Flooding, watershed, soil remediation, and air pollution are environmental issues included in the site conditions. The relationships of form, orientation, materiality, climate, and appropriate design responses are introduced in ARCH 2501 at the level of understanding, and in ARCH 3501 at a high level of resolution. From ARCH 2501 to ARCH 3501, projects include building performance, adaptation, and resiliency from introductory principles in the first semester, to high performance in the last semester in coordination with the technology curriculum. ARCH 3500 projects are intensively focused on the ecological relationships between site and building. This central semester of the level site analysis is developed in-depth at the social, economic, ecologic, physical, material, cultural, and infrastructure level to conclude with a project defined at construction scale where the ecological relationships between building and built and natural environments are demonstrated. The programmatic component of the semester is rooted in the relationships of urban context and ecological response. In Fall 2021, the semester program for all sections is a Recycling Facility for the recycling of different materials. Each faculty member determines the parameters of the project and its recycling type, including paper, plastic, glass, aluminum, steel, etc. Coordinated lectures on Ecological Knowledge are offered by faculty to all studio sections over the semester. Individual studio faculty determine the ecological approach for each section, as well as the modes of response by the students. Results are shared between sections in order to cross-pollinate ideas and approaches from studio to studio, so that students and faculty discuss together and learn from each other.

The third year is the sum of this progress, stressing site analysis, materiality, constructability, and building performance. The Intermediate Level projects celebrate architecture as a nexus of urban systems, a social and territorial condenser, becoming a venue for the consideration and resolution of ecological conflicts.

- **Comprehensive level / Building Integration**

As a cross-section of the state of knowledge within the College, the Comprehensive Level demonstrates the integration of all building systems in a small-scale building, incorporating advanced building performance into a site-specific solution. Energy efficiency, climate change mitigation, material optimization, and appropriateness to the territorial context are imperatives of this studio work. Highly coordinated with technology sequence, ARCH 4510 is the most advanced project in the curriculum in terms of building

performance. ARCH 4327: Technology 5 has six technology components organizing the sustainability content that underlies the course and are reflected in the technical requirements for the ARCH 4510 studio projects:

1. Owner's Program Requirements
2. Site Orientation and Climate (Sustainable Design Principles)
3. Structure
4. Envelope (Sustainable Design Principles)
5. Materials (Sustainable Design Principles)
6. Heating, Ventilation, AC (Sustainable Design Principles)

This assures that all students are instructed in sustainable design principles and are simultaneously applying those principles in the integrative studio. Our benchmark: 75% of the students will have all six aspects including their sustainable design principles illustrated in the comprehensive project book submitted at the end of the ARCH 4510 studio.

- **Professional Level**

As the last level of the studio sequence, the Professional Level expands studio offerings to a wider field of issues. Topics increasingly include ecological and environmental questions: soil contamination remediation, non-human/human alliances on Texas-specific flora and fauna, and Zero Net: Smart Green City.

The Graduate MARCH Program

Ecological Knowledge in the extracurricular activities for both BARCH and MARCH Programs:

Extracurricular activities are offered for both BARCH and MARCH programs simultaneously. Electives courses on environmental and ecological issues are offered through ARCH 3397 and ARCH 6397 courses. The Material Research Center (MRC), led by Ophelia Mantz, offers topics on material ecologies to map the relationships between material, matter, and territories. Daniel Jacobs offers a semester of experimental research seminar interrogating the reciprocal relationship between nature and its constructed image.

Assessment, Benchmarks, Modification, and Innovation:

BARCH uses a variety of methods to assess the efficacy of teaching and student outcomes across courses. Required undergraduate courses emphasize the development of ecological consciousness in critical discussions, documentaries, and arguments through a combination of written responses, essay assignments, quizzes, exams, projects, and class discussions and presentations that require active engagement. At the undergraduate level, assessments of ecology and environmental responsibility for ARCH 3500—Design Studio V consist primarily of project responses (input/impact) to a site and environmentally focus program: A recycling plant in Brady Island: flooding, heavily industrialized area combine with residences in the Southside of the Buffalo Bayou, Houston, TX, followed by responses on small exercises, QAs meetings after lectures or development of specific materials that could differ from section to section on recycling activities. Weekly discussion groups are used to assess students' coverage and understanding of the weekly course content, including lectures, readings, films, and/or podcasts. The ARCH 4510 - Integrated Architectural Solutions incorporates additional assessments of concrete responses of building systems that emphasize refinement of students' design building performance against the specific site and environmental conditions.

BARCH also sought to incorporate a broader range of outside assessments of student work in a growing number of ecology and environmentally focus electives, including informal review sessions at the end of the semester where students present and discuss their work with invited guests. The MRC (Material Research center, offers every semester ARCH 3397 - Material Theory and Practice is focussed on Material Ecologies, and ARCH 3397 - On Mediated Natures is focussed on ecological systems and representation. Both assess the capacity of students to respond to the growing complexities of environmental realities of the XXI Century. These courses serve as platforms to revisit curricular contents based on the feedback report of teaching faculty in discussions. Group work is emphasized where possible as a further tool for student learning and as a means of assessing student engagement and participation. Student and guest feedback is used for assessment and course correction throughout our required and elective courses, both among all academic areas and studio faculty and in discussions with the director program coordinator together with the coordinators.

Lastly, BARCH Programs always seek to understand the state of ecological knowledge and responsibility in curricula at other schools of architecture by tracing the curriculum of other undergraduate architecture programs and environmental design programs in order to better understand broader pedagogical trends in architectural, urban, and territorial scales and to identify content, teaching methods, and assessment criteria that programs can apply to courses. With the arrival of the new hire of the Director of Undergraduate Architecture and the new ideological scaffolding of NAAB new conditions, The undergraduate BARCH Program has revisited the curriculum to implement courses with higher ecological consciousness. Under this context, the undergraduate BARCH Program has stressed discussions, lecture topics, elective courses and exercises, and projects with an emphasis on Ecology, Environmental Responsibility, and Knowledge. Partial or full studio courses of ARCH 3500, 3501, and 4510, in addition, some topic studios at the professional level and technology courses of ARCH 2327, 2328, 3327, 3328, 4327, ARCH 4328, are dedicated to ecological knowledge and environmental responsibility. Assessment of ecological knowledge is performed in juries, midterm, and final reviews for studios and precedent analysis and projects in tech courses. Faculty and guest with expertise on the topic are invited to juries, and feedback is collected and reported to implement curricular development. Readings, lectures, and instructional materials on ecology, environmental responsibility, sustainability, material ecologies have been stated to populate courses' references.

Evidence

The BARCH and MARCH offer various forms of evidence to the NAAB visiting team as illustrations of our Ecological Knowledge and Responsibility teaching. For required undergraduate and graduate courses, we provide all course lectures, syllabi, and handouts together with the quizzes, exams, and Technology and Design Studio Projects of courses related to this element.

Future developments

In the third year, the undergraduate architecture programs offer students the possibility of option for the five-year program of Bachelor of Architecture or the four-year program of Bachelor of Science Environmental Design. Undergraduate architecture is committed to reviewing the BENVD curriculum to define a more robust program on ecological knowledge and environmental responsibility. Since 2019, the director of undergraduate

architecture has started a collection of data of other Environmental design programs in the nation to provide base information to faculty with expertise in this realm to develop curriculum review, define new lines of work and faculty profiles. (Evidence) This expansion of program offers also seeks to engage students to continue their education in this field at the MARCH program to complete a professional degree and master's degree in six years (four + two) program degree. We anticipate the growth of the ENVD program curriculum with faculty dynamics that teach in both programs of ENVD and MARCH at different levels to increase the consistency of sequences and themes.

The expansion of ENVD faculty with expertise in ecological knowledge and responsibility will increase awareness and focus of these areas at the BARCH and MARCH programs. In preparation for this development, new elective courses are producing content and seeding information.

Lastly, it is important to mention two lines of work and development:

1/ A task force has reviewed the undergraduate thesis program: Thesis Prep and Thesis Project, over the Spring 21 and Summer 21 to define new pedagogical goals and ambitions. One of the goals is to structure the program as a required final element for the ENVD program as the culmination of the degree. For this purpose, over the academic year of 2020-21 has produced the first case lead by an ENVD student with a successful project awarded by external jurors in the Super Jury of Spring 21.

2/ In 2021 the HTC program coordinator, Michael Kubo, and Master Studio coordinator Matthew Johnson were awarded the ACSA Course Development in Architecture, Climate Change, and Society for their proposal *GULF: Architecture, Ecology, and Precarity on the Gulf Coast*. This prize will support the future implementation of ecological knowledge and responsibility for both BARCH and ENVD undergraduate/graduate students.

PC.4 History and Theory—How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.

Program Response:

BARCH

ARCH 1358 – Introduction to Design Culture
ARCH 1210 – History and Theory of Design Media
ARCH 2350 – Survey of Architectural History I
ARCH 2351 – Survey of Architectural History II

MARCH

ARCH 6357 – Contemporary Theory and Critical Practice
ARCH 6359 – Modern Architecture and Urbanism
ARCH 6376 – Urban Determinants

Approach

The History, Theory, and Criticism (HTC) curriculum is structured to introduce students to the history of the human-impacted environment in its broadest sense and is intended to foster awareness of, and sensitivity to, the active value of history, theory, and criticism in the present. Working in concert with the design degree programs, this curriculum is designed to help students understand the intertwined aspects of history, culture, and the built environment across geography and time, and to convey the interconnectedness of design and culture in a global context. The HTC curriculum emphasizes an

understanding of architecture as a field of cultural production in which social, cultural, economic, and political forces—as well as professional practices, discourses, and modes of representation—have been crucial to the agency and disciplinary definition of the design fields. By deepening student engagement with histories and theories of design, the program cultivates our students' abilities to think, read, and write critically about the cultural and political implications of architecture and design at a global scale.

The undergraduate HTC curriculum is structured as a four-semester sequence of required courses, followed by a broad range of electives through which students can explore in greater depth specific and advanced topics in the history, theory, and criticism of architecture and the built environment. The required undergraduate sequence begins with a foundational course, ARCH 1358: Introduction to Design Culture, which is addressed to all four design degree programs at the College (Architecture, Environmental Design, Industrial Design, and Interior Architecture). This course is designed primarily for beginning undergraduates, many of whom have not previously taken design courses or historical surveys of design, and is conceived as a holistic entry point for students seeking to engage with global histories of architecture and urbanism and their social, political, economic, and cultural aspects. Lectures, course materials, and discussions provide a thematic introduction to major figures, events, and issues within the history of the design disciplines. This is achieved via weekly topics that address fundamental concerns connecting across the disciplines, from the everyday objects that surround us to urban and regional issues to global concerns at the planetary scale. These weekly topics currently include discussions of the professional cultures of design and their histories, critical access and disability in the built environment, race, class, and gender, wellness, industrial design and the impact of objects in the everyday landscape, maintenance and care, obsolescence and preservation, matter, labor, waste, domesticity from the detached house to multi-unit and collective dwelling, technologies of the conditioned interior environment and its urban expansions, and historical mechanisms of inclusion and exclusion in the urban environment. The course also introduces critical reading and writing as a means to explore the tools of observation, description, and reflection that underlay critical and historical thinking and practice in architecture and urbanism. Following this introductory course, Architecture and Environmental Design majors proceed to a second foundational course in History and Theory of Design Media, which introduces students to a critical history of tools, techniques, and theories of media and the architectural representation and visualization they will encounter in their studio practice. This course continues and builds upon the emphasis on reading key texts in the history and theory of architecture, which students first experience in ARCH 1358.

In year two of the required sequence, undergraduate students in Architecture and Environmental Design complete a dedicated two-semester survey in the history of architecture and urbanism, ARCH 2350: Survey of Architecture History I and ARCH 2351: Survey of Architecture History II. Graduate Architecture students are required to take this survey as well as ARCH 6340 and ARCH 6341, with a dedicated discussion section for graduate students led by the instructor. These courses emphasize broader connections across geography and time through the history of buildings, cities, events, texts, and practices that have shaped the designed environment. The survey curriculum has been fundamentally revised as of 2021-22 to stress the central idea that buildings, cities, and landscapes do not exist in isolation, but rather as part of global processes that include colonialism, imperialism, nationalism, industrialization, and urbanization. The course looks at how specific political, social, and economic contexts have defined works of architecture, landscape, and urbanism, and how these works have impacted their contexts in turn. It examines worldwide movements of commodities, labor, and capital

and their influences on our designed environments. Each semester is divided into thematic cuts that encourage an appreciation for the differences, similarities, and interdependencies across cultures, time, and space. The revised syllabus for ARCH 2350/6340, for example, is structured in four thematic modules dedicated to Empire, Urbanization, and Expansion; Colonialism, Commodities, and Trade; Faith, Philosophy, and Building; and Industrialization, Rationalization, and Nationalism. Crucially, the course content of this new survey curriculum moves away from entrenched nation-state constructions and historiographic categories in favor of a broader, more global perspectives. Course lectures, exams, writing assignments, and discussion sections convey the idea that buildings, landscapes, texts, and practices are all interconnected parts of the history of architecture urbanism.

The graduate HTC curriculum is also structured as a four-semester sequence of required courses which includes the two-semester Survey in Architectural History I/II (to be renamed History of the Designed Environment I/II beginning in 2022-23). Beyond the survey, all graduate students are required to take ARCH 6357: Contemporary Theory and Critical Practice, ARCH 6359: Modern Architecture and Urbanism, and ARCH 6376: Urban Determinants in their first two years. ARCH 6357 outlines a map of contemporary architectural practice and encourages students to develop tools for scrutinizing that map, through a critical understanding and speculation on the recent history of architectural thinking via a combination of texts and recent architectural and urban projects. Students in this course are asked to situate recent projects and architects within broader disciplinary and cultural contexts, and to develop their tools in the formal and cultural reading of buildings in conjunction with the reading of key historical and theoretical texts. ARCH 6359 examines the history of architecture and urbanism in the 20th and 21st centuries in relation to major social, cultural, political-economic, technological, environmental, aesthetic, and theoretical constructs and developments. The course is transnational in focus and explores how architecture has participated in the making of a global modernity. Rather than simply a chronological succession of styles or movements, the course is organized in sessions that trace the intersecting concepts of modernity, modernism, and modernization as these have manifested within the immense transformations wrought by processes of nationalism, internationalism, colonialism, and post-colonialism, as well as by industrial and post-industrial development. ARCH 6376 examines the ways in which the spaces of our cities reflect the larger complexities of our economic, political, and social values. The seminar develops the premise that an understanding of the political, economic, social, historical, and spatial foundations of urban processes in relation to the city is critical in understanding the development of our current urban patterns, the forces that impact these patterns, and in the future production of architecture and design in urban and suburban settings.

Following their respective required course sequences in history and theory, B.Arch and M.Arch students are able to choose among a wide array of elective courses that foster a deeper study of specialized topics in the history of architecture and urbanism.

Undergraduates are required to take two approved Architecture History electives within their degree plan. Typically, up to 20 history/theory electives per year have been on offer for our undergraduate and graduate students. These courses range in type from dedicated explorations of field-specific histories and discourses to integrated topics where students can create interdisciplinary connections and critically engage with histories of architecture and urbanism, connecting them to their studio and other professional concerns. Recent additions to our rotating elective topics over the last three years include courses focused on intersectionality and the built environment, design justice, race, gender, and labor in the built environment, domesticity and dwelling, Latin American architecture and urbanism, late modernity and late-modern architecture and

urbanism, contemporary curatorial and publishing practices, and the history of design education. These new offerings complement our existing electives to offer students the ability to develop their historical and theoretical interests across a wide variety of subject areas, including global territories and cultures; urban policy, equity, and environmental justice; design culture, theory, and criticism; interior architecture, dwelling, and collectivity; and the history of art, graphic design, and museums and exhibitions. Over the last two years we have also begun counting selected art history electives in the College of the Arts toward the fulfillment of our College's undergraduate history elective requirements, to further expand the range of subjects our students can explore in relation to the history of the built environment.

Throughout the HTC curriculum, emphasis is placed on expanding students' understanding of the cultural and political stakes of design, media, and technology in both global and local contexts. This pedagogical approach is intended to reflect and address the deep diversity of our students' backgrounds, cultures, and forms of knowledge, as well as the diversity of design disciplines and degree programs in our College. Wherever possible our history/theory courses aim to situate broader, global histories within local examples that can engage student interest and attention and make these concerns more tangible, as well as to include historical narratives that relate design examples to students' diverse social, economic, and political contexts.

The College's Emerging Scholar Fellowship, inaugurated in 2019-20, has allowed us to further expand our HTC course offerings by bringing compelling historical research and teaching agendas to the school, with a particular focus on increasing faculty diversity as well as the breadth of historical topics offered at UH. Beginning with our second Fellow in 2021-22, this Fellowship has specifically sought scholars whose work and teaching engages with historically marginalized communities and/or subjects that have been underrepresented or understudied in the scholarly discourse or design of the human-impacted environment.

Finally, we have also worked to expand the presence of history and theory beyond our courses across other platforms in the College, including our exhibition and lecture series, to increase the means through which students can engage with these subjects. In the last two years we have included invited multiple historians to speak in our public lecture series, and beginning in 2021-22 we will annually or bi-annually feature a public talk by the Emerging Scholar Fellow of their historical research and interests. In 2019-20, BARCH director program Rafael Beneytez-Duran and HTC coordinator Michael Kubo the Architecture, Design and Art Library coordinator promoted Books and Bites, a new series of public talks developed in conjunction with Catherine Essinger, coordinator of the Jenkins Art & Architecture Library, to invite scholars and historians to discuss their recently published books on the history of architecture and urbanism. This series is geared specifically toward students who seek to understand how to conduct research toward their own publications and writing.

Assessment and Benchmarks

B.Arch. and M.Arch programs use a variety of methods to assess the efficacy of teaching and student outcomes across our courses in history, theory, and criticism. Required undergraduate and graduate HTC courses emphasize developing skills in critical reading, writing, and argument through a combination of written responses, essay assignments, quizzes, exams, and class discussions and presentations that require active engagement. At the undergraduate level, assessments for ARCH 1358: Introduction to Design Culture consist primarily of weekly quizzes and three longer exams that

emphasize students' retention of the broader ideas and concepts under discussion, as well as the specific data (people, places, dates, and events) through which we understand the history of architecture and urbanism. Weekly written responses and active participation in weekly discussion groups are used to assess students' coverage and understanding of the weekly course content, which includes lectures, readings, films, and/or podcasts. The ARCH 2350/6340 and 2351/6341 survey sequence incorporates additional assessments that emphasize a refinement of students' writing and interpretive abilities, including three exams that require thoughtful written responses to prompts given in advance, and two longer "commentary" writing assignments given over the course of the semester. For graduate students, the required 6357 and 6359 courses are both conducted as a combination of lecture and seminar modes, relying on class discussion to assess students' engagement with the concepts and ideas presented through lectures and assigned readings. In both courses, students are required to give in-class presentations and are assigned responsibilities for leading weekly class sessions and discussions. This provides a means to assess their abilities to synthesize and communicate their understanding of the specific historical and theoretical phenomena that we study.

BARCH and MARCH Programs have also sought to incorporate a broader range of outside assessments of student work in a number of undergraduate and graduate history electives, including informal review sessions at the end of the semester where students present and discuss their work with invited guests. These final projects have ranged from the production of booklets and pamphlets encompassing students' historical and theoretical investigations, to analytical studies of buildings and urban spaces, to the creation of innovative hypothetical curricula for architecture schools of the students' design. Group work is emphasized where possible as a further tool for student learning and as a means of assessing student engagement and participation. Student and guest feedback are used for assessment and course correction throughout our required and elective HTC courses, both among the HTC faculty and in discussions with the HTC program coordinator together with the undergraduate and graduate architecture directors and coordinators. In addition, both the required 6357 and 6359 courses as well as a number of our recent electives now incorporate a "syllabus critique," conducted with students during the course, in which students are asked to assess the organization and content of the syllabus and give feedback on its strengths and weaknesses and/or potential areas of development. These comments are then incorporated into future iterations of these courses.

Lastly, BARCH and MARCH programs always seek to understand the state of history and theory curricula at other schools of architecture in order to better understand broader pedagogical trends in architectural and urban history and to identify content, teaching methods, and assessment criteria that we can apply to our own courses. For example, our most recent tenure-track hire in the HTC program, Dr. Deepa Ramaswamy, has spearheaded the evolution of our two-semester architecture history survey sequence based on an examination of survey courses and syllabi at a number of comparable architecture schools in North America.

Evidence

The College offers a variety of forms of evidence to the NAAB visiting team as illustrations of our teaching of the history and theory of architecture and urbanism. For required undergraduate and graduate courses, we provide all course lectures, required readings and media together with the quizzes, exams, and writing assignments based on these materials. For required graduate courses where students complete longer writing

assignments, we provide evidence of these students' writing as well. Syllabi, and course handouts are also provided for all of these courses.

Future Developments

The two-semester 2350/6340 and 2351/6341 Survey of Architectural History I/II that forms the core of our undergraduate and graduate sequences in HTC is currently undergoing a fundamental revision beginning in 2021-22, as the first year in an anticipated multi-year effort. The expansion of our tenure-track history/theory faculty beginning in 2021-22 has allowed the new instructor for this course, Dr. Deepa Ramaswamy, to undertake a comprehensive restructuring of the survey syllabus and scope, with a specific interest in decentering the previous European and North American focus of the survey curriculum in favor of a more global approach. In 2022-23 these courses will be retitled as History of the Designed Environment I/II to reflect their attention to broader histories of urbanism, landscape, and the human-impacted environment in addition to architecture. In January 2022, Dr. Ramaswamy will lead a grant-funded workshop supported by the Global Architecture History Teaching Collaborative (GAHTC) in which educators from a range of colleges and universities will gather to assess the state of the contemporary architecture history survey. The results of these discussions will be used to further develop the content of our own survey sequence in future years.

The College is committed to expanding HTC faculty in order to provide a broader array of courses in the history and theory of architecture and urbanism, and particularly to offer new course subjects that better reflect the multiculturalism of our students and their diverse social, cultural, and geographical experiences and knowledge worlds. This expansion of HTC faculty and required and elective HTC courses began in 2019-20 with the establishment of the biennial Emerging Scholar Fellowship, and has continued with the addition of a second tenure-track historian starting in 2021-22. We anticipate the growth of our history/theory curriculum to continue in future years with the addition of a third tenure-track HTC faculty member in 2023-24.

The expansion of our HTC faculty has allowed a significant increase in the number of required history/theory courses for undergraduate and graduate students since 2018, and we anticipate that we will be able to continue to add new required and elective courses with the arrival of additional faculty in the future. BARCH required undergraduate courses in Introduction to Design Culture and History and Theory of Design Media were created in 2018-19 following the hiring of a new HTC program coordinator and an inaugural Director of Design Media, followed by the creation of a required graduate course in Contemporary Theory and Critical Practice. Programs have also significantly expanded the diversity of topics that students can study through our HTC elective courses, particularly for undergraduate students who are required to take two approved HTC electives in their degree plans. The College is currently creating a new graduate course in Methods in History and Theory to be added to the University catalog in 2022-23. This course and future expansion of our graduate HTC curriculum are also anticipated to support the possible creation of a dedicated M.A. and/or PhD degree program in the History and Theory of Architecture in the future. Such a program will produce benefits throughout our HTC teaching, particularly through the training of graduate and/or doctoral students in history and theory to serve as Instructional Assistants for our required undergraduate and graduate courses 1358, 1210, 2350/6340, and 2351/6341.

Lastly, the architecture program directors have established the goal of significantly expanding the engagement of HTC with our undergraduate and graduate design studio sequences in the future, to enable students to develop connections between the history

of architecture and urbanism and design practices across scales. In 2020-21 the BARCH and MARCH Programs in discussion with HTC Coordinator established a Virtual Global Studio as a three-way collaboration between the director of BARCH and HTC program coordinator, an ARCH 5500 advanced design studio, and a master's research studio at the Escuela Técnica Superior de Arquitectura de Madrid (ETSAM). In 2021 the HTC program coordinator, Michael Kubo, and design faculty member Matthew Johnson were awarded the ACSA Course Development in Architecture, Climate Change, and Society for their proposal *GULF: Architecture, Ecology and Precarity on the Gulf Coast*. This prize will support the future creation of an undergraduate/graduate "superstudio" in 2022-23 combining seminar and research studio, focused on the history and speculative futures of petroculture's long century and its impacts on the communities of the Gulf. The future revision of our undergraduate Thesis Prep and Thesis curriculum beginning in 2021-22 is specifically intended to increase the engagement of HTC faculty with undergraduate thesis students as instructors and primary/secondary thesis readers.

PC.5 Research and Innovation—How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

Program Response:

BARCH

ARCH 1501 – Architecture Design Studio II
ARCH 2500 – Architecture Design Studio III
ARCH 2501 – Architecture Design Studio IV
ARCH 3230 – Programming & Building Regulations
ARCH 3500 – Architecture Design Studio V
ARCH 3501 – Architecture Design Studio VI
ARCH 4327 – Technology 5 – Rives/Diehl
ARCH 4373 – Urban Environments - Rifaat
ARCH 4510 – Architecture Design Studio VII
ARCH 5500 – Architecture Design Studio VIII, IX, X

MARCH

ARCH 6359 – Modern Architecture and Urbanism
ARCH 6603 – Design Studio III
ARCH 6376 – Urban Determinants
ARCH 6A49 – Environmental Tech III
ARCH 6A51 – Construction Technology IV
ARCH 6604 – Design Studio IV
ARCH 6393 – Master Project Prep

Approach

Research and innovation are a core part of all courses at the College. As a Tier One Research Institution, the university implemented a strategic plan in 2018 with four primary research areas to further refine and focus the University's goals of expanding research opportunities. One of these areas is central to the College's mission: Sustainable Communities and Infrastructure. The College has worked at all levels of its programs to prepare students to conduct research and to have working understandings of innovative processes and techniques within the discipline and profession.

Over the last five years, the College has developed several areas to strengthen its ability to conduct research. These include:

- Hiring of more tenured and tenure-track faculty with strong research experience and potential.
- Developing and expanding facilities for research and innovation.
- Integrating basic research skills into early curricula at both graduate and undergraduate levels.
- Implementing innovative technologies within our Technology sequence
- Refining the role of the upper-level studios to become more innovative and research-driven.
- In the Master of Architecture program, a Precedents & Research Methods Workshop and a Pre-Design Workshop have been incorporated into 6393: Master Project Preparation—a required class for every student receiving this degree.

Assessment

Research Focused Faculty

In 2011, the Carnegie Foundation for the Advancement of Teaching elevated the University of Houston to a Tier One Research Institution. As such, the University has supported the College in expanding its faculty through targeted hires in several critical research areas at both tenure-track and tenured levels. In 2016, the Colleges underwent an analysis of its teaching needs and implemented a multi-year plan to expand its faculty and leadership opportunities to support research as a core mission of the College and University. The College set out a goal to create new endowed professorships to further this goal of drawing top faculty to the College.

Research Facilities

The 2016 Strategic Plan also found that the College needed to expand its ability to conduct advanced research through facilities focused on innovative technologies and media such as robotics, digital fabrication, augmented reality, and additive manufacturing. The College put in place a structure to begin fundraising for a new Advanced Media Technology Lab.

Research Skill Foundations

The ability of students to conduct advanced research relies on multiple years spent developing basic research skills. That is, you cannot put students into advanced research studios or seminars and expect them to succeed unless they have spent years developing strong foundations in critical thinking, information gathering and analysis, and the ability to construct and test hypotheses. The College has been working throughout the foundation and intermediate levels in Studio, Technology, Design Media, and HTC to strengthen students' research capabilities. One of the primary ways this has been accomplished is through an increased use of case studies and precedent analysis across all curriculum coordination areas.

Innovative Media Technologies in Architectural Technology Curriculum

As discussed below in PC.6, the Technology curriculum stream has experimented with implementing innovative technologies such as augmented reality (AR) and virtual reality (VR) within courses. These technologies are rapidly changing the way architects, clients, and contractors are visualizing the built environment.

Research Studios and Thesis

Over the last few years, the College has focused on refining upper-level studios in both our undergraduate and graduate programs for advanced research driven by faculty

research areas. The goal is to make the advanced studios (ARCH 5500 and ARCH 7600) more experimental and focused on critical innovations within the discipline. While these studios have been known within the curriculum as the “Professional Level” studios, this may have created a false narrative where students feel they should be focused on designing as the profession exists currently instead of designing for the future of the profession. The College has worked to change this misconception among students and faculty and have made the studios more focused on experimental and innovative understandings of the discipline.

Master Project in Master of Architecture Curriculum

The Precedents & Research Methods Workshop places scientific research and precedents research in historical perspective, provides definitions and examples of diverse types of architectural research, and provides exercises to better understand the concept of applied research. The Pre-Design Workshop discusses in greater depth the many facts that must be gathered before starting the design phase of a project and introduces the importance of systematic stakeholder input. The lessons learned by the students in these workshops are assessed as part of the Master Project External Evaluation process. Question number six of the assessment rubric covers the research and precedents aspects of each student’s Master Project.

Evidence

Expanded Research Faculty

The College has hired four tenure-track and two tenured faculty in the last five years. These hires include talented researchers in all three of our major curriculum streams of HTC, Technology, and Design Media who have demonstrated research experience in practice and in academia. In addition, the College has hired new directors of the undergraduate and graduate programs with strong research experience across both practice and academia. This has helped to establish research as a primary focus across all curricular areas. Finally, the College was able to raise \$1.1 million for its first endowed professor of architecture in the Bill Kendell Memorial Endowed Professor in Design Technologies.

Establishment of the Advanced Media Technology Lab

The college is in the process of constructing what will be one of the most advanced innovation labs in North America. Construction began on the Advanced Media Technology Lab (AMTL) in Fall 2019. The exterior of the building was completed in the summer of 2020 and, after an unexpected delay due to the pandemic, we are currently finalizing funding for the interior buildout and equipment installation. The College anticipates the AMTL will open to students and faculty in 2022.

The mission of the Advanced Media Technology Lab supports the Hines College of Architecture and Design in pursuing innovative research in design and fabrication technologies. We value critical engagement with the role of technology in contemporary design and architecture and look for ways that innovative technologies can augment the way we design, build, and live.

The way that objects, spaces, and buildings are designed and made is undergoing a rapid transformation. It is imperative we find ways to make the built environment less carbon-intensive while simultaneously making it more resilient to climactic change. In addition, innovative technologies such as artificial intelligence and automation create new opportunities as well as challenges to the ways we currently operate. Like the waves of innovation that occurred during the mid-20th century, we are currently experiencing the

beginning of the next industrial revolution. The roles of architects and designers as well as the related industries of manufacturing and construction are rapidly changing and being challenged to be more sustainable and productive.

The Lab will contain several areas to enable advanced research across all programs at the College. These areas include:

- Construction Robotics Lab
- Earth Printing Lab
- Interaction and Collaboration Studio
- Advanced Wood Fabrication Lab
- Digital Textiles Lab
- Circular Materials Lab
- Additive Manufacturing Lab

Evidence of Increased Research Skill Foundations

Beginning in Fall 2020, the foundation level and intermediate studios in the B.Arch. program and the introductory courses in the HTC and Design Media sequences have been revamped to provide stronger skills in research through increased use and training in the library, increased use of case studies, and precedent analysis. The evidence for this can be seen in Intermediate Design Studios.

Increased Focus on Research at Professional Level Studios

Over the last two years, the diversity of new faculty teaching innovative studios rooted in their research has increased in the ARCH 5500 and 7600 level. Eleven new faculty with research-focused practices have joined the faculty in these studios, conducting design research exploring new forms of architectural visualization, architecture for nonhumans, sustainable urbanism, housing for social capital, and design build among multiple other topics.

Master Project in Master of Architecture Program

As discussed in PC.2, the graduate program has an established yearlong Master Project in the final year of the program focused on developing innovative design research projects rooted in our students' own research and design interests. The goal of the three-credit-hour Master Project Preparation class (ARCH 6393) is to learn how to effectively construct and communicate a cohesive architectural position alongside acquiring essential skills in the pre-design phase of architecture projects. The class includes workshops in architectural programming and effective communication of both analysis and synthesis. The study of precedents and research methods is an important component of the class. Projects developed during the Master Project Preparation class are then completed in a subsequent six-credit-hour Master Project Studio (ARCH 7601) where ideas can be developed in considerable depth.

Every year a group of three distinguished architects from outside the College is invited to anonymously evaluate the work of every student receiving a master's degree in architecture. They assess the Master Project using a rubric discussed in PC.2 that helps to establish high standards for student research and identifies graduation awards. All projects are evaluated for the following six criteria: 1. Concept; 2. Design; 3. Graphics/Craft; 4. Technology; 5. Responsiveness; and 6. Position/Precedent.

For our performance standard we expect that 90% of our students will earn an average rating of "Acceptable" or better on the Design element of the Master Project. In 2019-

2020, 100% of the students who produced a Master Project (N = 20) earned an average of “Acceptable” or better on their Design element. The standard was met.

Despite this success, there remains a persistent need to challenge the conceptual and critical design thinking of each student. In Fall 2019, a restructuring of the Master Project curriculum was implemented to better coordinate faculty in the prep and studio sequence to directly address this issue.

Historical data:

Year:	N	Design
2019-2020 Percentage of students earning a rating of “acceptable” or better	20	100%
2018-2019 Percentage of students earning a rating of “acceptable” or better	25	100%
2017-2018 Percentage of students earning a rating of “acceptable” or better	36	100%
2016-2017 Percentage of students earning a rating of “acceptable” or better	23	96%
2015-2016 Percentage of students earning a rating of “acceptable” or better	28	43%

Increased Number of Thesis Students in the B.Arch. Program

The changes made in previous years are already paying off. Although optional within the B.Arch. program, there has been a dramatic increase in the number of students choosing to do an undergraduate thesis. This indicates that students feel greater confidence in preparing and conducting an independent research-based thesis in their final year. The average number of students in the optional Thesis Program from 2015 – 2020 was six. In Fall 2021, the number of thesis students increased to 19. In summer 2021, a new Thesis Subcommittee was formed to strengthen this program. A new Thesis Coordinator was brought on board in Fall 2021.

Future Developments

The College is working in multiple capacities to further the overall University goal of increasing research and innovation. In addition to the Advanced Media Technology Lab opening in 2022, the College has submitted several proposals related to new endowed research professors and other TT hires, new research grants, and a reorganization of elective structures that will expand their capacity for interdisciplinary research and innovation.

PRECEDENTS & RESEARCH METHODS WORKSHOP

PRECEDENTS

1. TRADITION & MODERNITY
2. PRIMARY SOURCES / SECONDARY SOURCES
3. TYPOLOGIES / ARCHETYPES / PROTOTYPES
4. DOCUMENTING & DIAGRAMING LESSONS LEARNED
5. PROPER CREDIT / PLAGIARISM
6. MLA / CHICAGO STYLE (Humanities: Notes & Bibliography / Sciences: Author-

Date)

RESEARCH METHODS

1. DEFINITIONS (*The systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.*)
2. ORIGINAL RESEARCH / SCHOLARSHIP / CREATIVE ACTIVITIES
3. SCIENTIFIC METHOD: Hypothesis, Data Gathering/Observation, Analysis, Conclusions
4. QUALITATIVE RESEARCH / QUANTITATIVE RESEARCH (Measurements/Statistics)
5. ANALYSIS / SYNTHESIS

PRE-DESIGN WORKSHOP

CONTEXT

1. Natural Context: Ecology, Climate, Sun, Winds, Precipitation, Vegetation, Topography, Soil
2. Urban Context: Local Patterns, Flows, Urban Space, Site Survey, Views, Region, Transit
3. Political Context: Regulations, Zoning, Building Codes, Comprehensive Plan, Jurisdiction
4. Historical Context: Past, Present, Future, Precedents, Typologies, Historical Maps/Photos

CONTENT

1. Goals / Needs / Desires / Facts
2. Programing / Space Allocations / Relationships
3. Accessibility / Connectivity
4. Schedule / Phasing
5. Meaning / Image / Branding

CONSTRUCTION

1. Financial Considerations
2. Budget (Land Appraisal, Soft Costs, Construction Estimates)
3. Appropriate Building Systems / Soil Test
4. Integrated Technologies / Sustainability
5. Life-Cycle Costing

PC.6 Leadership and Collaboration—How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.

Program Response:

BARCH

ARCH 3328 – Technology 4
ARCH 4327 – Technology 5
ARCH 4328 – Technology 6



ARCH 4510 – Architecture Design Studio VII

MARCH

ARCH 6603 – Design Studio III

ARCH 6604 – Design Studio IV

ARCH 6360 – Professional Practice

Approach

The UHCoAD Architecture Program regards interdisciplinary collaboration and leadership as the core of our design work. We understand that a successful practicing architect must be capable of collaboration with diverse stakeholders and clients. Hence, we build opportunities for listening, for sharing, and for direct engagement into our curriculum. Architects rely on clients to set the parameters for projects and give design feedback; they rely on engineers and consultants to provide depth and specialization, which designers then synthesize into working products, buildings, or environments; they rely on city departments to provide regulatory context, codes, and life safety evaluations. As the design professions change and expand, we see a need for new forms of collaboration with an increasingly diverse set of specializations. For example, a growing interest in landscape urbanism and ecology leads to productive collaborations with ecologists, horticulturalists, infrastructural engineers, and others. In industrial design, the ubiquity of digital products results in partnerships with software and electrical engineers. These are just a few of the diverse collaborations necessary in design.

Our programs constantly seek to expand our direct engagement with other disciplines already at the University. Collaborations take the form of interdisciplinary, grant-based research, speculative projects, and community projects. We also seek to increase our collaboration with other institutions and disciplines outside of the University.

Additionally, we are interested in the possibilities for experimental pedagogies and new forms of collaboration. The shift toward virtual learning has provided UHCoAD with an ideal proving ground for disbursed collaboration and interaction. Using digital tools such as Miro, Conceptboard, VR/AR, analytical tools, and computational software, we are expanding the range of our offerings and abilities. The design professions have a long history of testing highly speculative, experimental ideas. Our goal at UHCoAD is to provide a framework in which experimentation is not only possible but encouraged. Our students form the core of this milieu of experimentation and innovation.

We also recognize the importance of collaboration within the University and the broader Houston community. With the aim of engaging with urgent issues, we promote direct engagement with the community immediately surrounding UH, as well as communities across Houston and the Gulf Coast. Investigations in the College are broad and interdisciplinary. Among other topics, we participate in industrial design projects in conjunction with the Houston Medical Center (the world's largest), community development initiatives in disadvantaged neighborhoods, and large-scale speculative projects for evolving global cities using Houston as a case study.

Several centers within the College currently act as direct interfaces with the broader Houston community. The Community Design Resource Center (CDRC) run by Susan Rogers works with local communities to plan and implement new urban strategies for creating vital, sustainable neighborhoods. They have developed master plans and community design through roundtables and community meetings, with the goal of amplifying the numbers and voices of stakeholders and ensuring greater equity in the process. The Center for Sustainability and Resilience (CeSaR) run by Bruce Race

dedicates itself to developing more resilient communities through a collaborative and data-driven approach. The Center works with communities to examine energy use, material flows, good urban design, and resiliency.

As a change for 2020, students created their work for the B.Arch. 4510 studio as two-student collaborative design teams, thereby forming a partnership as a sounding board to share technical expertise and insights, and to individually explore design requirements while collaborating on deliverables.

In the Graduate curriculum, beginning in the first semester of the first year M.Arch. I degree (what we call Level I), students engage in a constant process of working with each other to develop project goals and deliverables. Our instructors call on students to become leaders, initiating their own collaborative approaches to projects. This ethos continues into the second semester of the M.Arch. I degree, as students engage in the early design phase of our Graduate Design-Build Studio (GDBS), which is typically fabricated and installed over the following summer. This project is highly collaborative: the result of teamwork with the entire Level I student body and faculty, along with community members and representatives. Students engage in the entire continuum of the design process, from early concepts and client presentations to construction documents, fabrication, and installation.

This ethos of collaboration and leadership can be seen in the 2020 Graduate Design-Build Studio: a memorial at a local Houston high school that suffered a school shooting several years ago. Community representatives from the high school approached our program to ask for assistance in the design of the memorial. With faculty help, students engaged with the community in a collective design effort, resulting in a poignant memorial that is currently under construction.

In our Level II curriculum, students progressing through M.Arch. I join with incoming M.Arch. II-level students. Our program regards this confluence point as an integral moment within the College. The first projects of the fall semester are always collaborative, asking students to work in teams to develop precedent-based designs. In 2019, this project was titled Sample/Remix/Mashup. Individually, students thoroughly analyzed public building precedents. Once complete, they partnered in order to create a new hybrid—a “sample, remix, or mashup” of their two designs—drawing on programming, tectonic strategies, site, space, and social engagement.

For the main semester project in Fall 2019 and again in 2021, students worked with organizations in Baton Rouge and New Orleans to develop projects along the Mississippi River. They examined the fragile and evolving ecologies of the watershed, in consultation with the LSU Center for River Studios and Scape Studio New Orleans alongside other entities. Their projects were arrayed along a 30-mile stretch of the Mississippi River between Baton Rouge and New Orleans, for which they collectively built a 40-foot model.

Assessment and Benchmarks

As a part of our assessment of Collaboration and Leadership, we build collaborative projects into many of our courses. In collaborative studio projects, students are evaluated not only on the completion and success of their projects, but on their ability to work together. As a part of both grades and rubrics, we consider participation a central goal, which includes not only participation in the studio but engagement in collaborative activities.

Future Developments

The UHCoAD Architecture program is always looking to expand its engagement with diverse stakeholders within the larger university and the broader community. Moving forward, we anticipate a greater number of interdisciplinary offerings both in the College and through partnering with other disciplines at UH. We would also like to work more directly with local communities on their most pressing needs.

The technology curriculum in Tech 4 and 5 is organized to emphasize leadership roles the architect plays in the integrative design process to deliver high-performance, sustainable projects. This is organized through lectures that engage faculty and visiting professionals from various disciplines and multiple site visits to projects under construction. Through reading and class discussion, we emphasize the leadership role architects play as coordinators of processes ranging from the owner's program requirements to the realization of operations. We also discuss leadership extensively in the operation applications where design decisions support the integrated design process and focus on life-cycle performance. We review key performance indicators of design and operations that enhance both the community and facility users' well-being. These are documented in end of semester dossier deliverables.

We discuss collective team design and delivery accountability as well as the means through which energy, water, and site design measure success. Additionally, we review the contractual design partnerships the architect has with the client and the partnership the design professional has with the contractors. These curricular topics are documented in exams.

Future tech sequences under consideration include an increased focus on the architect's role in community advocacy and leadership, with guest speakers from appropriate professional disciplines providing specific insights. Additionally, understanding the evolution and integration of community input and the implications of community representation in the design process is part of future content envisioned in the methods / Tech 5 class.

Specific hallmarks of Tech 4 and 5 classes include:

Collaboration and leadership are distinct attributes of the technology sequence with students working in teams for project delivery at the end of the semester. In Tech 4, student teams are organized to evaluate building systems over the course of a semester. In Tech 5, integrated with 4510 studio-based teams, students focus on project delivery, the ecological footprint of construction and materials, and investigations employing group problem solving.

PC.7 Learning and Teaching Culture—How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

Program Response:

BARCH

ARCH 1210 – History and Theory of Design Media
ARCH 1358 – Introduction to Design Culture
ARCH 1500 – Architecture Design Studio I
ARCH 1501 – Architecture Design Studio II
ARCH 2351 – Survey of Architectural History II



ARCH 2327 – Technology 1
ARCH 2328 – Technology 2
ARCH 2350 – Survey of Architectural History I
ARCH 2500 – Architecture Design Studio III
ARCH 2501 – Architecture Design Studio IV
ARCH 3230 – Programming & Building Regulations
ARCH 3327 – Technology 3
ARCH 3328 – Technology 4
ARCH 3500 – Architecture Design Studio V
ARCH 3501 – Architecture Design Studio VI
ARCH 4327 – Technology 5
ARCH 4328 – Technology 6
ARCH 4373 – Urban Environments
ARCH 4510 – Architecture Design Studio VII
ARCH 5500 – Architecture Design Studio VIII, IX, X

MARCH

ARCH 6A48 – Environmental Tech III
ARCH 6A50 – Construction Technology III
ARCH 6359 – Modern Architecture and Urbanism
ARCH 6603 – Design Studio III
ARCH 6376 – Urban Determinants
ARCH 6A49 – Environmental Tech III
ARCH 6A51 – Construction Technology IV
ARCH 6357 – Contemporary Theory and Critical Practice
ARCH 6604 – Design Studio IV
ARCH 6393 – Master Project Prep
ARCH 6360 – Professional Practice
ARCH 6361 – Integrated Practice

Stated in our College Culture document, the Gerald D. Hines College of Architecture and Design strives to empower ethical and critical thinkers who understand the power of design to shape our physical and social environment, are skilled at their craft, and assume leadership roles within their chosen professions. The College provides an educative environment in which students negotiate the complexities of contemporary design practice and of sociopolitical issues. Each member of the College shares responsibility in upholding these values. In College-wide meetings, and daily in studio and in class, one is reminded through word and action that demonstrating mutual respect—such as through compassion for others' lived experiences and professionalism in communication, even in matters of conflict—is integral to fostering a positive and powerful learning environment. All members of our community are encouraged to contribute to the vibrancy and intensity of the work and discussion. Success is measured by the quality of discourse and the design process, as well as by the quality of work produced. Students are encouraged to engage with critique from their faculty and peers to further contribute to design discourse. Our College embraces students as full partners in their education. We approach critique as a collaborative and constructive practice to create proactive, critical, and optimistic contributors to our design disciplines.

In faculty meetings (at least one each semester), and student townhalls (as needed during each semester), we gather feedback from faculty and students on the status of our teaching and learning culture. These critiques are assessed, and changes are implemented if necessary.



In committee meetings (Undergraduate, Graduate) and taskforce meetings (DEI, College Culture), issues pertaining to teaching and learning are looked at in detail. Changes and improvement measures are discussed and implemented after all aspects of the issue at hand have been taken into consideration.

Student evaluations, collected at the end of each semester, are an additional valuable source of information.

Staff members will voice their concerns and proposals during staff meetings each semester, and they are also encouraged to approach their supervisor directly. Our College Culture Statement addresses staff as part of the larger community.

The doors to the Dean's office are always open and dialogue is encouraged. The faculty is approachable during and after class to hear suggestions from students.

PC.8 Social Equity and Inclusion—How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

Program Response:

BARCH

ARCH 1358 – Introduction into Design Culture
ARCH 2350 – Survey of Architectural History I
ARCH 2351 – Survey of Architectural History II
ARCH 3230 – Programing & Building Regulations
ARCH 4373 – Urban Environments
ARCH 4510 – Architecture Design Studio VII

MARCH

ARCH 6359 – Modern Architecture and Urbanism
ARCH 6603 – Design Studio III
ARCH 6376 – Urban Determinants
ARCH 6357 – Contemporary Theory and Critical Practice
ARCH 6604 – Design Studio IV

The University of Houston is one of the most diverse research institutions in the United States. In 2019, 42% of UHCoAD students identified as Hispanic or Latinx, 7% as Black or African American, 17% as Asian or Asian American, 23% as white, and 11% other. Following the Black Lives Matter movement, the Office of the Dean created the Diversity, Equity and Inclusion Task Force (DEITF) in June 2020. The assessments and data outlined in the task force final report were collected after the distribution of a Diversity, Equity, and Inclusion Survey that went to the College's faculty, staff, students, and alumni in September 2020. In addition to the quantitative and qualitative data collected from the survey, the DEITF also gathered information and perspectives from various College and community stakeholders through a series of focused meetings and dialogue sessions. The totality of the survey results and these conversations along with data from the UH Statistical Handbook, NAAB criteria, and other information shaped the report.

The taskforce looked at the entirety of the program, including the College, student experience and support, curriculum, faculty diversity, and surrounding community. Within

each section, three subsections are included: “Context for Change,” “Where We Stand,” and “Goals and Recommendations.” The “Context for Change” sections provide a broad overview and the “Where We Stand” sections provide important context and data points to facilitate a clearer understanding of associated issues that will allow the reader to better understand the DEITF’s recommendations which include goals, action steps, and metrics to measure success going forward.

On May 2021, Dean Patricia Oliver appointed a Diversity, Equity & Inclusion (DEI) Action Task Force charged with facilitating the implementation of as many of the recommendations included in the December 2020 DEI Task Force Report as possible, and as soon as possible. The Action Task Force, which includes faculty, staff, and students from all the programs in the College, worked during the Summer of 2021 to review all 45 recommendations from the original task force. A survey was sent to all faculty, staff, and students to prioritize the 45 recommendations.

One of the first recommendations to be implemented was the organizing of a Community Round Table focusing on the Third Ward with the goal of encouraging collaborations between neighboring community organizations and CoAD faculty and students. The event took place at the UH Architecture Building on 21 July 2021—all of the College’s faculty and students were invited. The program featured a presentation of the “Third Ward Complete Communities Action Plan” by Sasha Marshall of the City of Houston Department of Planning & Development.

3.2 Student Criteria (SC): Student Learning Objectives and Outcomes

A program must demonstrate how it addresses the following criteria through program curricula and other experiences, with an emphasis on the articulation of learning objectives and assessment.

SC.1 Health, Safety and Welfare in the Built Environment—How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

Program Response:

BARCH

ARCH 3230 – Programing & Building Regulations
ARCH 3328 – Technology 4
ARCH 4327 – Technology 5
ARCH 4328 – Technology 6 I
ARCH 4510 – Architecture Design Studio VII

MARCH

ARCH 6A48 – Environmental Tech III
ARCH 6603 – Design Studio III – Johnson
ARCH 6A49 – Environmental Tech III
ARCH 6604 – Design Studio IV
ARCH 6360 – Professional Practice

Approach

Central to UHCoAD’s architectural teaching is a concern for the health and safety of the built environment. This concern manifests in several ways: from an interest in climate to

good urban space to healthy buildings to life safety. We ask our students to assess their own design processes through a series of questions: How does your project manage its environmental impact? How does it create an equitable environment that is open and supportive of people from all demographics and with many different needs? How does it integrate with its surroundings in a way that is conducive to human health? How does it create a safe environment that conforms to local codes and regulations?

These questions are threaded through both our Graduate studio and Tech courses and our Undergraduate studio and tech courses. Specifically, Level II graduate studios (ARCH 6603 and ARCH 6604) and several upper-level Undergraduate studios (ARCH 4510 and ARCH 5500) examine broad questions of human health and welfare. Early in each semester, we discuss human comfort and wellness as a dimension of architecture. We examine clear approaches to daylighting, ventilation, and the use of healthy materials as properties of architecture that can improve health and safety. Even our discussions of space, proportion, and light touch on wellness and comfort, as we discuss the human body's relationship to its surroundings. As design projects develop, specific technical questions regarding thermal comfort, daylighting, and air changes are addressed. This is especially true of ARCH 4510 and ARCH 6604—our Integrated Architectural Solutions—where students must directly engage environmental systems, from facades and energy modeling to solar gain and material selection.

These questions are also addressed from a technical and computational perspective in our Technology sequence, through the undergraduate courses ARCH 3328/4327/4328 (Technology 4-6) and the graduate courses ARCH 6A48/6A49 (Environmental Tech III). Our Tech courses are developed in coordination with Studio in order to allow for cross-fertilization of concepts. For instance, discussions of the experiential effects of good daylighting in Studio run parallel to both daylighting and energy modeling in Tech. At several points during the semester, Tech and Studio faculty attend each other's classes and reviews in order to bring human health, safety, and welfare concepts directly to bear on student projects. Upper-level studios often examine these questions directly. In past years, studios have engaged directly with passive solar design, daylighting, and human health. We offer a diversity of electives on issues related to human health, safety, and welfare.

Assessment and Benchmarks

In order to assess students' engagement with questions of health, safety, and welfare, we rely both on our core faculty as well as invited design professionals to review work. We use design juries, pinups, desk crits, and presentations to give comprehensive feedback to our students. That feedback is recorded and submitted back to the students as a written narrative—they hear the information once in a spoken review, and then receive written notes afterward reinforcing the review comments. We also ask our reviewers to provide written notes after the review as a third point of learning. This feedback is incorporated into our grading rubric.

Additionally, we have weekly or biweekly pinups in which our core faculty comment on student work in progress. These are typically sketch sessions—drawings and designs are seen as formative and evolving, not fixed elements, but ideas meant to change and improve. The sketching process allows for a direct feedback loop between student and instructor. We also frequently invite specialists and experts in a variety of domains to both instruct and assess student work. We integrate environmental and mechanical engineers, code specialists, local architects, and community stakeholders into our design process at

every stage. These guests help us to assess our students' work, and provide much needed depth and breadth to their understanding.

We also frequently visit both built works and works under construction. In the Fall 2020, we had the opportunity to tour both the Glassell School and the Kinder Museum of Fine Arts Houston by Steven Holl with the project architect Olaf Schmidt. He discussed questions of regulation in depth, describing the various ways in which the projects achieved goals of daylighting, thermal performance, health, safety, and atmosphere.

In order to measure our progress and understand how we might want to implement changes to our programs, we use a couple of feedback strategies. We compare student performance in a given semester to similar work performed in previous years. Through numerous meetings with the studio faculty and coordinators we discuss the integration of parallel sections as a singular team-taught unit as well as conversations with the Director of Graduate Studies and the Graduate Committee. The curriculum is systemically reevaluated through the feedback loop of the micro and macro expectations. We actively seek student feedback on project types, workload, learning goals, and our own instruction. We also use industry standards as a continuous set of benchmarks—provided by both our instructors and our invited guests. Lastly, we examine the general state of discourse at other architecture schools to understand the pedagogical direction of the profession as well as the criteria and benchmarks used both nationally and internationally. We engage in assessment and course correction based on both guest and student feedback every semester.

Evidence

We provide extensive student work, syllabi, and teaching materials to the NAAB visiting team as evidence. Many of our student projects are comprehensive, and address human health, safety, and welfare explicitly, as a part of the project concept. Others engage these questions more implicitly in their technical aspects such as envelope design, interior daylighting, and approaches to regulations and codes. Our goal is always to ensure that the complexities of any technical aspect of a project are presented clearly and completely. We also provide complete lectures and presentations by both UHCoAD instructors and guests. All course materials, including syllabi, handouts, and our required course reader, are also available to the visiting team.

Future Developments

As with the profession in general, our College's concern for human health and welfare is increasingly central to our pedagogy. Many of our studios address climate change as an urgent matter and one that directly impacts human health. In the future, we would like to increase our engagement with human health—as a College, we have proposed running more studios in collaboration with the Texas Medical Center as well as local entities working on questions of the health of the built and natural environment. We appreciate insights from other programs as well as alternate approaches. Our faculty frequently visit other schools and studios to understand how diverse pedagogical methods work in the context of Building Integration.

Our instructors are always evaluating new tools and making use of existing and new resources within the College: the new Advanced Fabrication Lab, the Materials Resource Center, the Keeland Center for Fabrication, and our own Computer Lab.

Currently, we have close ties to the community. Many of its architect-members participate in design reviews and presentations. However, we would like to establish stronger

connections to the Texas Medical Center and to various organizations that deal with human health and the health of the built environment.

SC.2 Professional Practice—How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.

Program Response:**BARCH**

ARCH 3328 – Technology 4 I

ARCH 4327 – Technology 5 I

ARCH 4328 – Technology 6

MARCH

ARCH 6A50 – Construction Technology III

ARCH 6360 – Professional Practice

ARCH 6361 – Integrated Practice

Approach

The program is built around the notion that Professional Practice requires an understanding of 1) leadership, management, business, and legal context; 2) collaborative and communication practices that use design thinking as both the medium and process for achieving results; 3) contemporary issues of diversity, equity, inclusion, and access to the discipline as well as environmental, technological, and labor ethics and politics in the practice of architecture. To that end, the course is built to create immersive experiences for students using case studies, panels of subject matter experts, visits to offices and a job site, and discussions with people advancing the field of architecture. Class sessions and assignments will include critical readings and other media to support a theoretical, historical, and contemporary understanding of the profession, incorporating individual reflections and group projects to give students ample opportunities for collaboration, discussion, and feedback with experts in the field to project a path for their own professional practice.

Assessment and Benchmarks

The course is taught by a team and uses four primary methods of delivery and assessment: 1) individual assessment of the content through participation in the discussions, case studies, and site and firm visits; 2) group assessment of team efforts to deliver the case study evaluations and analysis of presented material; 3) summaries of texts and in-class discussion with panels of subject matter experts including a verbal report to the class; 4) final project assessment including student proposal for research methodology and project execution outline.

Short-term benchmarks (embedded in the course structure) include exposure to a variety of media to ensure the students are immersed in the professional practice topic from several angles to provide diversity of perspectives and thoroughness of topic discussions. Through reading and class discussions, assignments, research, case studies, development, and regular questionnaires, student progress and course feedback will be remapped onto the curricular content to assess for deficiencies and make adjustments accordingly.



Long-term benchmarks include tracking of students seeking licensure, registration exam outcomes, and student responses to satisfaction surveys done by the development office that remain in the field of design practices years after graduation (as seen when they return for milestone years to the school). Additionally, a prototype for a feedback process to relate content in professional practice to design and studio methodology will be implemented.

Evidence

The class assessments are geared to promote understanding of the topics and to serve as a record of the students' progress and mastery of the subject matter. Organization and templating of student group projects, case studies, reading responses, sample exams, and discussion questions will serve as a way to assess learning objectives and ongoing development of the course.

Future Developments

Yearly assessment of course content and methodology will incorporate both student and faculty feedback in order to make changes to the course to maintain and update material to reflect contemporary issues in architectural practice. Curation of guest speakers, course material, site visits, and projects will take place to reflect these changing conditions of practice. Ongoing comparative analysis of professional practice curricula at other institutions will also provide material for assessment. Example: a recent assessment determined an insufficient coverage of contemporary critical discourses around DEI, accessibility, ethics of technology, and environmental justice in professional practice. The course was changed to include additional content, readings, and guest speakers to address these areas while also reflecting a diversity of voices and perspectives.

CLASS MODULE (not in order taught)	CLASS TOPICS	MAIN CLASS ASSESSMENT (readings, lectures, outside visits, other media)	SC	PC
HISTORY OF THE PROFESSION	Role and structure of profession in historical context. Local, regional, and international contexts of professionalization. Changing structure of the profession from craft to apprenticeship, atelier to corporation.	Summary of panel of experts/ group discussion about experiences and expectations for different practices	-paths to becoming licensed as an architect in the United States -the range of available career opportunities	PC.1 CAREER PATHS
ORGANIZATION & RELATIONSHIPS PROJECT DELIVERY CONSTRUCTION ADMINISTRATION ALTERNATIVE STRUCTURES	Analysis of firm structures, client structures (from private developers to municipalities), overview of project delivery. Team structure, roles and responsibilities. Basic project delivery methods. Stages of project from programming to construction and post occupancy. Owner, Contractor and Architect responsibilities, ASI, RFI's, Construction Change Orders, Submittals, Shop Drawings, Field Reports and project close out. Alternatives to client/developer driven practice and economics. Community organizations, Architect-as-developer, non-profit development, pro bono work, grassroots spatial practice, etc.	Report on Community, municipal, or regional public meeting. Timeline aligning studio project to phases of design – as project manager with Program/ SD/ DD/ CD/ Construction/ POE Fieldtrip to job site – notes and discussion Case study – Getting to the Yes – Group presentation Workshop with developer as client – report and decision-making discussion	- approaches to leadership in multidisciplinary teams -diverse stakeholder constituents - dynamic physical and social contexts -effective collaboration skills to solve complex problems	PC.6 LEADERSHIP AND COLLABORATION
DECISION-MAKING COMMUNICATION FRAMEWORKS TECHNOLOGY & DATA	Organizational dynamics and culture in architectural practice, management principles in creative environments, decision-making and governing bodies, inclusion and diversity. Types of meetings for engagement and decision-making Changing impacts of technology on the profession. New modes of representation, drawing, communication, and impact on project delivery and intellectual property. Discussion and demonstration of agency and exploitability of data.	Discussion w a Design Director & Project Manager: managing creativity. Report on office politics, internship expectations, labor negotiation, and role playing exercise. Guest lecture on Data Analytics for Decision Making – report and group discussion Guest lecturers on AI, Augmentation and robotics in construction Design – report and group discussion	- a positive and respectful environment - optimism, respect, sharing, engagement, positive critique, and innovation	PC.7 LEARNING AND TEACHING CULTURE
LICENSURE &	Overview of NCARB/AXP,	In class sample	-impact of the built	SC.1 HEALTH,

<p>GOVERNANCE</p> <p>ACCESSIBILITY, DIVERSITY, EQUITY & INCLUSION</p> <p>ECOLOGY & THE ENVIRONMENT</p>	<p>NAAB, ACSA, AIA, State Office of the Professions, and alternative groups. International context and comparison.</p> <p>The relationship between architectural practice and the politics of the body, including mental health, history and future of accessibility and ADA, and issues of Equity and Diversity in the profession.</p> <p>Critical analysis of "sustainability" in the profession: fees, cost, markets, changing incentives and regulations, and issues of environmental justice.</p>	<p>licensure exam. Case study project and firm with framework. Discussion & summary of NCARB, AIA, NOMAS, and other documents on DEI. ADA workshop and exercise. Class lecture – workshop applying practices and politics of environmental incentives, ethics, and regulation to proposed project.</p>	<p>environment on human health, safety -welfare at multiple scales, from buildings, to cities, to planet.</p>	<p>SAFETY, AND WELFARE IN THE BUILT</p>
<p>BUSINESS PRACTICES & VALUE OF DESIGN</p>	<p>Running a firm, understanding marketing & business development, generating a business plan to ensure a path to good design.</p> <p>Contemporary issues surrounding contracts, liability, Intellectual property, real estate, property, fee structures, antitrust laws.</p>	<p>Summary of guest speaker panel on how to get projects built—notes & discussion Case study - Discussion about balancing innovation with cost estimating, and codes/laws Economic analysis of case-study for starting a project and a firm.</p>	<p>-professional ethics -regulatory requirements - fundamental business processes -forces influencing change</p>	<p>SC.2 PROFESSIONAL PRACTICE</p>
<p>POLICY FUTURES</p> <p>LABOR & COLLECTIVITY</p>	<p>Architecture's relationship to governance and policy. Power mapping, housing policy, alternative RFP processes, grant funding, building code, landmarks Issues with architectural labor practices/ alternative ownership models: cooperative networks, unionization efforts, international context.</p>	<p>Visit from City office planner and Urban Policy maker Visit to atelier, large firm – notes and discussion on the impact of regulations on both. Law expert lecture – regulatory dreams and nightmares</p>	<p>-principles of life safety, zoning, land use -current laws and regulatory context - evaluative process architects use to comply with those laws and regulations</p>	<p>SC.3 REGULATORY CONTEXT</p>

SC.3 Regulatory Context—How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.

Program Response:

BARCH

- ARCH 3230 – Programing & Building Regulations
- ARCH 3501 – Architecture Design Studio VI
- ARCH 4328 – Technology 6
- ARCH 4510 – Architecture Design Studio VII

MARCH

ARCH 6603 – Design Studio III
ARCH 6604 – Design Studio IV
ARCH 6360 – Professional Practice

Approach

Many of UHCoAD's core architecture classes address questions of life safety, land use, and laws and regulations as both an implicit and explicit element in our syllabi. Both the Level II graduate studios (ARCH 6603 and ARCH 6604) and several upper-level Undergraduate studios (ARCH 4510 and ARCH 5500) examine broad questions of land development at the early stages of design, incorporating local building codes, zoning, and other land use regulations. As design projects develop, specific code questions regarding ADA, life safety, and legal questions move to the fore. This is especially true of ARCH 4510 and ARCH 6604—our Integrated Architectural Solutions—where students must directly engage use and occupancy types, construction types, zoning and lot development regulations, accessibility, fire, and other life safety codes.

These questions are also addressed from a professional and legal perspective in our Technology sequence, through the undergraduate courses ARCH 3230 (Programming and Building Regulations) and ARCH 4328 (Technology 6) and the graduate course ARCH 6360 (Professional Practice). Our Tech courses are developed in coordination with Studio in order to allow for cross-fertilization of concepts. At several points during the semester, Tech and Studio faculty attend each other's classes and reviews in order to bring life safety, technical, and regulatory concepts directly to bear on student projects. Upper-level studios often examine questions of land use in depth, such as ARCH 7602 with urban planner Bruce Race or ARCH 7601 with Rafael Longoria at the Graduate level. We offer a diversity of electives on questions related to urban planning, land use, and safety.

Assessment and Benchmarks

In order to assess students' engagement with questions of regulatory context, we rely both on our core faculty as well as invited design professionals to review work. We use design juries, pinups, desk crits, and presentations to give comprehensive feedback to our students. That feedback is recorded and submitted back to the students as a written narrative—they hear the information once in a spoken review, and then receive written notes afterward reinforcing the review comments. We also ask our reviewers to provide written notes after the review as a third point of learning. This feedback is incorporated into our grading rubric.

Faculty also frequently visit both built works and works under construction. In the Fall of 2020, some groups had the opportunity to tour both the Glassell School and the Kinder Museum of Fine Arts Houston by Steven Holl with the project architect Olaf Schmidt. Holl discussed questions of regulation in depth, describing the various ways in which the projects were obligated to meet life safety, code, and legal requirements.

Evidence

UHCoAD provides a number of elements to the NAAB visiting team as evidence. The most comprehensive evidence we provide is complete student projects and designs. Our goal is always to ensure that the complexities of the regulatory context are presented clearly and completely. We also provide complete lectures and presentations by both UHCoAD instructors and guests. All course materials, including syllabi, handouts, and our required course reader, are also available to the visiting team.

Future Developments

As with all our courses and programs, we strive to expand our teaching of regulatory context. In the future, we would like to run studios that use regulatory and land use questions as a jumping-off point. We appreciate insights from other programs as well as alternate approaches. Our faculty frequently visit other schools and studios to understand how diverse pedagogical methods work in the context of Building Integration. Locally, we have been in conversation with both Rice University and Texas A&M University regarding their own efforts.

We are working to update and strengthen our approaches to regulation, codes, and life safety—both from the perspective of assessment and design. Our instructors are always evaluating new tools and making use of existing and new resources within the College: the new Advanced Fabrication Lab, the Materials Resource Center, the Keeland Center for Fabrication, and our own Computer Lab.

Moving forward, we would also like to better integrate our Tech and Studio offerings. Though they currently work closely together, they can ideally be refashioned as a seamlessly integrated set of parallel approaches, resonating off one another.

Lastly, we are strengthening our connections to the local Houston community. We currently have close ties to the community and many of its architect-members participate in design reviews and presentations. Nevertheless, we could have stronger connections with the planning department of the City of Houston, the Public Works Department, and local planners and developers. We would also like a more robust approach to client relations, field work, and examination of both built works and works under construction.

SC.4 Technical Knowledge—How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

Program Response:

BARCH

ARCH 2327 – Technology 1
ARCH 2328 – Technology 2
ARCH 2500 – Architecture Design Studio III
ARCH 2501 – Architecture Design Studio IV
ARCH 3327 – Technology 3
ARCH 3328 – Technology 4
ARCH 3500 – Architecture Design Studio V
ARCH 3501 – Architecture Design Studio VI
ARCH 4327 – Technology 5
ARCH 4510 – Architecture Design Studio VII

MARCH

ARCH 6A48 – Environmental Tech III
ARCH 6A50 – Construction Technology III
ARCH 6603 – Design Studio III
ARCH 6A49 – Environmental Tech III
ARCH 6A51 – Construction Technology IV
ARCH 6604 – Design Studio IV
ARCH 6361 – Integrated Practice

Introduction

The technology curriculum in both the Graduate and Undergraduate programs at the Gerald D. Hines College of Architecture and Design is invested in architectural design both in informing the practice of architecture and in applying the skills and information-based attributes underlying both programs. As such, technical knowledge of structures, environmental systems, materials, assemblies, and building construction are essential across the curriculum. Students are guided through the complexity of buildings as systems and their applications in real life scenarios. Technical knowledge can be understood through three interconnected and at times overlapping silos: 1) issues and principles; 2) tools and techniques; 3) applications and case studies. Our program constantly seeks to cover these pillars in an organic and by no means segregated way. Knowing the fundamental issues and principles of building technology serves as the foundation to analyze and critically study precedents and recent case studies, while state-of-the-art methods and tools assist with analytic and creative activities relative to design.

There are five technology courses in the undergraduate program. Initial introductory course content seeks to integrate and instill an understanding of information and performance-based facets, including issues such as sustainability, building systems, and material considerations in both structural and building envelope applications, linking this information with idea-based themes underlying studio investigations. Our intent is to provide students with a balanced and inclusive perspective of the need for an integrative understanding of both domains.

Following the introduction of broad technological and performance-based subject matter, the prime objective of subsequent course content pursues practices intended to deepen the comprehension and application of these factors, developing an understanding of their impact on building design. This is achieved through a process of repeating fundamental aspects of primary course content and introducing new subject matter as students matriculate through the technology sequence. The process is further enhanced using both academic and professional faculty. Academic faculty provide the students access and understanding to the broad and integrative nature of performance-based architectural positions while professional engineers provide more focused and in-depth application to structural and mechanical considerations.

An attribute of the technology sequence that continues to gain additional integration links studio design issues with performance-related considerations. The lab component of the five technology classes increasingly incorporates the use of studio projects as conduits for exploring principles underlying the technology curriculum. Student perception of performance factors as a development of design themes is provided in laboratory assignments. These assignments help students understand outcomes and solutions through incorporating them into their design approaches. The overarching goal is to mend the split that often occurs between these two principal components of architectural curriculums.

In the graduate program, Technology classes are delivered separately for Environmental Technology (four 1.5 credit classes) and for Structural Technology (four 1.5 credit classes). Environmental and Structural Technology classes start in the fall semester of the first year (Level I) and go through the spring semester of the second year (Level II)—a total of four semesters. Fall semesters involve learning the theory of fundamentals through familiarization with specialized tools, and spring semesters are aimed at application and integration with studio. Design studios act as the vehicle of application

and creation, while the mandatory four-semester Technology sequence provides focused support in parallel mode during fall semesters and in a semi-integrated mode during spring semesters.

Understanding and defining knowledge in the technical component of the curriculum is multi-tiered, starting with an emphasis on understanding the role of performance-related information in support of conceptual ideation. This plays a vital role in underpinning a great deal of the technology curriculum at the Gerald D. Hines College of Architecture and Design. Five courses are comprised of these performance-related criteria. Each course has distinct evaluative criteria, ranging from documenting the understanding of key structural and environmental system considerations via analytical assignments and tests to providing drawn documentation of the assembled and performance-based nature of building envelopes through wall sections, assembly drawings, and in dossier submissions.

In the undergraduate program the introductory course, Tech 1, focuses on introducing students to the broad range of performance-based topics necessary to an integrative design process. These include human factors, material understandings in both structural and architectural applications, and sustainability and building envelope considerations. Primary assessment criteria for this course, beyond mid-term and final exams, includes drawing wall sections of building precedents assigned in the design studio followed by a more informed wall section documenting the design of the studio project. The initial wall section documentation occurs before mid-semester, with the latter occurring towards the end of the semester. Both sections are drawn at $\frac{3}{4}''=1'-0''$ and are paired with an elevation, also drawn at $\frac{3}{4}''=1'-0''$.

For the past six years, Tech 1 has been followed by the Tech 2 and Tech 3 courses in which a format combining structural and environmental system integration into the design process is incorporated into the curricular content of both courses. Beyond fundamental structural and environmental system design applications, a primary goal underlying this format is to provide students with insights as to the integrative nature of the design process as both semesters focus on structural and building systems applications. From this exposure students gain not only the requisite technical and performance-related criteria, but they also further understand the multiple voices constituting the entirety of the design team. While evolving, and to be discussed below, the primary evaluative tools of both the Tech 2 and 3 courses have multiple calculation and performance-based submissions along with mid-term and final exams.

The Tech 4 course, which utilizes a case study format for much of the lecture content, returns to a more architecturally based curriculum featuring further discussion of integrated building systems with an added emphasis on perspectives relating to sustainable solutions. These systems include site and climatic responses, program application, structural and environmental considerations, envelope assemblies, and materiality. The labs integrate with the 3501 studio projects and build upon the studio-project-focused relationship occurring in Tech 1. Pinups occurring during the labs focus on research and application with the research documenting how various system precedents address issues being presented and discussed in the lectures. The application feature of the pinups document similar issues and their relationship to the requirements of the studio project. The pinups and a required dossier submission at the midpoint and end of the semester represent the prime evaluative tools incorporated into the Tech 4 class.

Additional activities during the Tech 4 class addressing collaboration include visits to construction sites. These are planned and organized by students who visit in teams of four to five. Construction sites are visited every other week over a 12 to 14-week period to observe various construction activities over an extended period. Recently, virtual reality and augmented reality software applications have been added to the lab component of the course to provide a form of “design-build” integration. This is achieved through modeling virtual assemblies and employing an “exploded” format to create and document—and make students visually aware of in three dimensions—the multiple parts comprising building envelopes.

Tech 5 also utilizes a case study format and incorporates numerous guest lecturers from allied disciplines. The curricular focus is on materials and methods and continues an evaluative format that requires dossier submissions, including an analysis of how design and delivery methodologies are measured. In addition, understanding the role of professional practice is addressed in relation to exposing the students to specifications and contractor relationships. Beginning in Fall 2020, changes to Tech 5 are making inroads further linking the class to the ARCH 4510 studio.

Assessment, Benchmarks, Modifications, and Innovation

Assessments occurring during the last five years have led us to create a more balanced, “architecturally-centric” approach. This includes the creation of co-coordinator roles—both coordinators are faculty who are registered architects. This led to the implementation of the semester dossier requirements in Tech 4 and 5, enhanced integration with studio projects, and the virtual reality and augmented reality assembly components mentioned above. In addition, further integration with studio projects is now occurring in the Tech 2 and 3 courses with required framing and mechanical system layouts documented in 2D plan overlays and 3D models.

Ongoing assessments and adjustments to the technology curriculum have been established. Building on the recent incorporation of studio projects into the requirements of the technology labs, new planned adjustments to the technology curriculum include expanding the labs from two hours to three hours and instilling the principle that the laboratories are the “leader” of the various technology classes. Their integration with studio-like thinking will be heightened through further assimilation—via precedents and additional integration with studio projects—of the exploration of relevant technology performance-based themes. Ongoing modifications we are considering include: 1) adding a new course strictly focused on materials and assemblies; 2) exploring additional content adjustments to facilitate further integration of components of the Technology curriculum to meet the needs of the Interior Architecture program.

Benchmarks that run through the technology curriculum relate to confirming student understanding of core technology-based considerations with an additional focus on the building’s envelope and the multiple functions required of it. Broad technology-based attributes are evaluated and benchmarked in Tech 1, 2, and 3 through standard mid-term and final exams. Grades on these exams represent the primary benchmark tool in which the average of each semester’s exams provide documentation of the efficacy of both teaching and retention. Additional evaluative tools are provided through assignments that integrate with the studio projects. These document the application and understanding of content relating to technological and studio themes providing diverse evaluative tools to mark progress in both content and application realms. An additional benchmark relating

to issues affecting the design of the building's envelope occurs in Tech 1, 4, and 5 through wall section and assembly drawings. These exercises provide evidence of a progressive maturation beginning with preliminary explorations undertaken in Tech 1 and progress to fully developed, near professional-level documentation of a building's envelope through a combined requirement for the Tech 5 / 4510 integrated design studios.

As mentioned in item SC.2 Other lines of collaboration are in development between Studio and Technology to develop the future Tech-Studios pedagogy, that as design field, inversely will be led from the technology academic area. All technology courses from Technology 1 to Technology 4 have been reviewed to be topic-focused and implemented in the upcoming academic year 2022/23. Under this new pedagogical mode: ARCH 2327 Technology 1 is focused on the introduction of technology, covering all architecture technology topics, ARCH 2328 Technology 2 is focused on structural systems and coordinated with studio ARCH 2501 Design Studio IV with combined requirements, ARCH 3327 Technology 3 is focused on materials, assemblies, and constructability and coordinated with ARCH 3500 Design Studio V with combined requirements, and ARCH 3328 Technology 4 is focused on Environmental Systems and Coordinated with ARCH 3501 Design Studio VI with combined requirements

Evidence

Evidence provided to the team demonstrating how the attributes comprising the core technology-based curricula in Tech 1, 2, and 3 learning objectives are achieved are documented through the syllabi, class schedules / required submissions, and mid-term and final exams required in those courses. Documentation of the outcomes of the various building envelope assemblies that are a part of the Tech 1, 4, and 5 courses are also provided via graded evaluations of the wall section and assembly drawing submissions mentioned above.

Future Developments

Modifications of the curriculum content that comprise the technology component of our curriculum is ongoing. Stemming from a request in the past for a more calculation-based and "engineered" approach, the technology courses have taken advantage of the College's proximity within the fourth-largest city in the country to incorporate a large pool of engineers from multiple disciplines. This not only provides students with the required awareness and understanding of these aspects of design, it also broadens perspectives regarding design issues of great importance to their respective disciplines.

Graduate Program

In the first semester, Level I students engage in the process of developing concepts and establishing goals. Students are introduced to the cultural, spatial, geopolitical, and material contextualization of design. Parallel to the studio, structural and environmental technology classes introduce students to fundamental building concepts that relate to the profession at large. Through historical examples and building physics fundamentals, students at the CoAD are challenged with modern technological and computational advances—this allows them, from the beginning of their studies, to position themselves in the contemporary discourses of the profession.

This process continues into the second semester of the M.Arch. Level I, as students engage in the early design phase of our Graduate Design-Build Studio (GDBS), which is typically fabricated and installed over the following summer. Although technology classes maintain their curricular independence from studios, continuous faculty coordination,

cross-reference of materials, and faculty cross-attendance at student presentations enable a preliminary integration plan. The GDBS 2021 started with experimenting with a building system using wood, which progressed to the design of a single-family house during the second half of the semester. The students were able to demonstrate competent designs and support their arguments with the use of theoretical/conceptual as well as practical methods and tools—for example, using THERM software for detailing and thermal bridging assessment.

The Level II fall semester studio project advances scale and complexity. Structural and Environmental Technology classes move from introductory concepts to in-depth knowledge of architectural, structural, and mechanical systems. The students get into the process of possessing the tools to support their design decisions through programming, tectonic and ecological strategies, site, space, and social engagement. The parallel mandatory technology classes take place mainly in a lecture-based environment that prioritizes theoretical background. Classes remain interactive and dynamic, however, engaging student participation and hands-on manual and computational applications.

Closing the sequence of a complex and dynamic process of understanding design at all levels, the Level II spring Building Integration Studio requires the design of a complete and well-developed building. Clear architectural and technical solutions are emerging from conceptual ideas, social and cultural aims, through the integration of complex technical elements including structure, envelope, plumbing, mechanical, and electrical systems. Architecture is seen as both abstract and specific at once, integrating high levels of technical information while also plugging into diverse cultures and contexts. Again, continuous faculty coordination of schedules and synchronization of topics, integral cross-reference of materials, and faculty cross-attendance of student presentations, enable a coherent integration plan where students assess their designs against regulatory, economic and performance objectives discussed in technology classes.

Environmental and Structural Technology classes use several benchmarks to assess students' competence. Short technical recorded videos are disseminated to give way to active discussions during class. Live lectures are complemented with real life case studies, short quizzes, and short computational applications, where theory converts to practical representations of the built and simulated world. Invited lecturers from industry and academia reinforce a diversity of voices, contributing to the understanding of design as a multidisciplinary, collaborative effort. During fall semesters, the main assessment methods are class attendance and participation, periodic (usually bi-weekly) assignments that demonstrate analytic skills, composition of a final dossier with revised assignments that demonstrates the impact of constructive feedback, and test exams that validate theoretical knowledge. Spring semesters are primarily lab-based with class-long computational workshops and student presentations of case studies (e.g., built COTE Top Ten awarded projects). These semesters have a project-like structure in parallel with the studio. Assessment criteria include class attendance and participation, periodic (usually bi-weekly) assignments, research paper authorship (Level I), student case study presentations, "simulation game," and studio integration presentations (Level II).

Instructors for the technology sequence are experts in the taught subject; their work lies between application and research. As a result, their directional input constitutes both the trends in the professional world as well as the state-of-the-art methodologies experimentally introduced through recent research.

Assessment, Benchmarks, Modifications, and Innovation

Assessment and adjustments occur on an ongoing basis for all technology sequence classes. These are driven by multiple formal or informal processes, with the most important ones being student feedback and the understanding of trends within the profession. Student feedback acts as the best way of evaluating the teaching mode's effectiveness, the teaching methods and tools, and the achieved level of integration with design studio. State-of-the-art technological advancements as well as active environmental and structural considerations at the AEC community act as the primary content drivers, which is gradually adjusted to meet those developments.

Some of the recent changes in delivering the content were driven by the demands of the current pandemic and the need to include more interactive techniques. There has been an underlying need to actively engage students and more effectively mix theory with practice. This was achieved with more interactive classes, which often make the students co-creators of the content. Students participate actively through presentations and quizzes, there is more time allocated to questions and open conversations, and students can choose their area of focus and take leadership on the course of their projects. These changes have delivered positive results thus far. The program will continue investing in their implementation beyond the restrictions of the pandemic.

In parallel, technology sequence classes strive to follow the most recent advances that have become central in architectural discourse. During massive computational and technological advancements in the field of design, as we face the most pressing climatic crisis as a species, and as the conversations around equity and inclusion grow, this program is reacting to these dialogues by incorporating content and practical representations in the curricula. Those can take the face of diverse invited lecturers at a local and national level, or state-of-the-art resources and information that derive from the latest events and research initiatives. Students are able to identify themselves as active members of the community that are ready to actively contribute to these discourses.

SC.5 Design Synthesis—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

Program Response:**BARCH**

ARCH 2501 – Architecture Design Studio IV
ARCH 3500 – Architecture Design Studio V
ARCH 3501 – Architecture Design. Studio VI
ARCH 4510 – Architecture Design Studio VII

MARCH

ARCH 6603 – Design Studio III
ARCH 6604 – Design Studio IV
ARCH 6361 – Integrated Practice

Approach

The design disciplines have often been described as “generalist,” which entails the synthesis of many different variables into a single design solution and often at multiple

scales simultaneously—from the city to the building to the object. Architectural design problems simultaneously engage with sociology, economics, politics, finances, ecology, environment, technology, materiality, territory, and form. The architecture curriculum at UHCoAD reinforces this synthesis while also offering depth in certain sub-specialties.

As a part of UHCoAD's approach to architectural education, we believe in a strong disciplinary core that asserts the centrality of design thinking. The elements of our curriculum reflect the values and ideas at the core of our College—while also reinforcing integration and congruities that synthesize the many aspects of a given architectural problem. These elements together help us as a College to identify our core values.

- Design Thinking grounds our understanding of studio and the built environment.
- Media unifies our way of thinking through visualization, representation, and the use of both software and physical tools.
- Building Systems expands our thinking about building technologies and their layered integration.
- History, Theory, and Criticism enhances our thinking about design culture as a critical and thoughtful domain.
- Urban Systems integrates thinking about cities and urbanism.
- Ecological Thinking expands our concepts of sustainability and stewardship.

The classes and specific bodies of knowledge offered at UHCoAD fit into the disciplinary areas listed above. These disciplinary areas, taken together, help shape students with both broad and deep knowledge—as well as the possibility for specialization within the context of the curriculum. Our goal is to produce capable designers at every scale, who care about stewardship of our shared resources.

Design Synthesis is essential to our teaching process at UHCoAD. It is integrated across both our undergraduate and graduate programs, as a core emphasis of every course offering: seminars, lectures, studios, community events (lectures and exhibitions), and faculty research; as well as through their collective aggregation. Our studio courses progress in an integrated ladder with increasing levels of complexity, expectations, and layers of synthetic thinking. In early design studios focused on the fundamentals, we introduce primary concepts of light, space, and material as well as questions of perception, the body, order, structure, and environment as a context of operation. These core conceptual lessons establish architecture as a medium in which the social and the material come together. Building upon this, the curriculum integrates deeper concepts of culture, context, history, spatial/site relationships, and building tectonics and performance. By the fifth semester of the BARCH and the third semester of the MARCH, students are able to design highly integrated buildings that further include consideration of sustainable principles, user needs, social context and program, primary urban concerns, environmental control systems, accessibility, primary and secondary structural systems, and formal and material detailing for conceptual and performative articulation in addition to other advanced issues. All of these items are expected to resonate with questions of site, urban context, the social realm, and the responsibilities of the built environment. Simultaneously, we synthetically integrate media to train students in the use of a variety of representational tools and media, from handicraft to digital, 2D to 3D, physical and virtual. These media are synthesized into the design curriculum in appropriate steps.

BARCH Program

At the base of the Undergraduate Architecture BArch Program, Foundation level educates students in the use of analog and digital tools to operate design in multiple capacities. In the first year of the degree plan, the academic area of Design Media and Studio works in dialogue to define, term by term, an evolving curriculum that updates the state of students and college knowledge in the path of new tools arrivals. Design Synthesis is emphasized in every step of the learning outcomes of ARCH 1500, and ARCH 1501 throughout exercises that condense the critical thinking and material forms in graphic and material representations from diagrams and schemes to models, from technical/constructed drawings to imaginaries that represent ideas and concrete solutions. In the second year, design is stressed thought out disciplinary knowledge. The academic area of History, Theory, and Criticism, in dialogue with Studios ARCH 2500 (last Foundation Level studio) and Arch 2501 (first Intermediate Level studio), have reformulated a curriculum emphasizing the critical capacity of the discipline. Students are educated to acknowledge the values of architecture works of different historical periods and develop a constructed discussion of what theory has acknowledged as architecture paradigms. Exercises of precedent develop deep analysis while exploring paradigmatic architectural works at the level of diagram, schemes, plans, sections, and elevations at multiple scale resolutions (1:1/16" – 1:1/4" scales), axonometric, renderings and imaginaries. Based on the precedent analysis, students are invited to develop a new project formulating the relationship between input and impact of the precedent analysis and program and site new conditions. Design Synthesis becomes a key as the way of translating the precedent learning outcomes into new and reformulated solutions against different environmental and program constraints. In the third year, educated students in the knowledge of representation and theory acquire the capacity of translating abstract ideas into material realities with the support of experienced design and technology faculty. The Technology curriculum is evolving towards technology studios. In coordination with Intermediate Level studios of ARCH 3500 and ARCH 3501, the technology curriculum has recalibrated its syllabi to develop a set of projects related to studio projects. Students work in both at once at the end of the semester to project all learning outcomes of technology into the studio project. In this progression, design synthesis becomes key to articulate the complexities of the final resolution. Accessibility, building systems, regulatory context, user requirements, site conditions, and measurable environmental impacts are particularly focused independently and holistically. Diagrams and schemes are combined with higher resolutions and details in the process of back and forth to ensure a clear understanding of the element and the whole. ARCH 3500 emphasizes site analysis dedicating half of the semester to explore site conditions against project program and course premise to assess in the midterm reviews the actual relationship between environmental inputs and project resolution. At the first term of the fourth year in the Comprehensive Studio Level, the program reinforces the state of knowledge of the past three years of education in design Synthesis and areas of Design Media, History, Theory and Criticism, and Technology. ARCH 4510 Integrated Architectural Solutions is a condensed course where coordination of all building technology actors, site analysis, environmental conditions, and cultural topics are resolved into a holistic understanding and representation of architecture. This semester culminates with a project that is an actual cross-section of all the accumulated knowledge that students have gained over the past years. In the second term of the fourth year, undergraduate architecture students are already autonomous, emancipated critical thinkers and prepared to design their interests and career paths. In the last semester of the fourth year and fifth and last year, a series of topic studios are curated to be offered vertically for both graduate and undergraduate students. Elaborated options are selected

term by term, under continuous discussion between faculty's evolving research agendas and external opportunities, to bring to the front internal and external expertise through topical studio courses that invigorate curricular contents and upgrade the curriculum state of knowledge.

MARCH Program

In the Graduate Program, our Fall Level III 6603 studio has systemically engaged the complexities of urban and architectural development along the Gulf Coast as a conscious process within our ecologically precarious region, challenged by diverse development pressures. Students develop the ability to examine the broad forces and contexts in which architecture operates. The following studio, Spring Level III 6604, presents students with the layered aspects of a complete integrated building design (this studio has been titled “Synthetization” for several years). For instance, in Spring 2021, students designed a multipurpose pool house and recreation center for Barton Springs in Austin, Texas. The building engaged with a diversity of constituents, in keeping with our College's inclusive mission. In Spring 2022, graduate students will design a live-work housing development for the historically Black Third Ward neighborhood in which the University of Houston sits. Other projects have included Mass Timber housing in New York City and a public museum on Seattle's waterfront. Increasingly, we are integrating seminars and studios together so that both academic and design content is mutually reinforcing.

Assessment, Benchmarks, Modification, and Innovation

Design Synthesis assessment is performed in different formats at the B.Arch and M.Arch programs. Midterm and final reviews, juries, and discussions are primary methods of assessment. Design juries are organized with guests from both the profession and academia. Guests provide critique and commentary on student projects comprehensively. Over these events, faculty record feedback and report back to students. At the last jury invited external guests to fulfill rubrics that are used in a variety of ways.

In a more particular focus, for instance, the M.Arch program ARCH 6603 and ARCH 6604 studios use three criteria (Intellectual Clarity, Craft, and Completion) to assess student work through a rubric that allows evaluating student success in these areas. That feedback is recorded and submitted back to the students as a written narrative—Students receive the feedback information once in a spoken review and second in written notes afterward, reinforcing the review comments. MArch Program asks reviewers to provide written notes after the review as the third point of learning. This feedback is incorporated into the “Three C” criteria.

In addition to reviews, BArch and MArch studios have weekly or biweekly pinups in which core faculty comment on student work in progress. These are typically sketch sessions—where drawings and designs are seen as formative and evolving, not fixed elements, but ideas meant to change and improve. The sketching process allows for a direct feedback loop between student and instructor. (The online format during the pandemic has actually refined this process, with instructors providing feedback notes and sketches on student work even outside of the context of class, using digital pinup and sketch tools such as Conceptboard or Miro). BArch's upper-level studios and MArch at all levels frequently invite specialists and experts in a variety of domains to both instruct and assess student work. Both programs integrate structural and mechanical engineers, local architects, and

community stakeholders into the design process at every stage. These guests help faculty to assess students' work and provide much-needed depth and breadth to their understanding.

Faculty compare student performance in each semester to similar work performed in previous years and actively seek student feedback on project types, workload, learning goals, and our own instruction. All studio faculty of the B.Arch. program meet at the end of each semester to present to the rest of her/his studio-level what she/he considers as low, average, and high-level projects before grading. These semester meetings permit the faculty to better understand the outcome and, consequently, level the group's evaluation in contrast with all other groups. These meetings are recorded and accessible at any moment to reconsider and share comments. This process is the most productive benchmark the program uses to compare results group by group, term by term, and year to year.

Both the B.Arch. and M.Arch. programs use industry standards as a continuous set of benchmarks—provided by both instructors and invited guests. Lastly, the programs examine the general state of discourse at other architecture schools to understand the pedagogical direction of the profession as well as the criteria and benchmarks used both nationally and internationally. Faculty discussions engage in assessment and course correction based on both guest and student feedback every semester. These comments are similarly integrated into coordinator meetings, meeting with the Director of Undergraduate and Graduate Programs, and feedback into the cyclical evaluation and re-evaluation of courses and their sequence. For instance, in the Fall ARCH 6603 course, two short preliminary projects that were regarded as inessential have been removed in favor of a longer preliminary project that is more integrative and synthesizing.

Evidence

UHCAD provides a number of elements to the NAAB visiting team as evidence of Design Synthesis. The most comprehensive evidence programs provide complete student projects, in addition to course materials, including syllabi, handouts, course reader of M.Arch. for all levels, and B.Arch. for Foundation Level. The B.Arch. and M.Arch. goal is always to ensure that the complexities of an integrated building project are presented clearly. Recorded faculty discussions on design, lectures, and presentations of instructors and guests are provided through our digital archive.

Future Developments

Design Synthesis is a core value of UHCAD. As such, B.Arch. and M.Arch. programs are continuously evaluating students' ability to incorporate complex information at core and high levels. As programs move forward, a discussed goal is refining how evaluative feedback loops work, so that faculty can help students to clarify the many dimensions of their projects. Programs are also working to include a more significant number of voices and perspectives from outside the College—as critics, as lecturers, and as mentors. The B.Arch. and M.Arch. programs' goal is to plug into the local, national, and international architecture discourse so that what the faculty teach in both programs shows awareness of what is broadly relevant and contemporary.

SC.6 Building Integration—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

Program Response:

BARCH

ARCH 3500 – Architecture Design Studio V
ARCH 3501 – Architecture Design Studio VI
ARCH 4510 – Architecture Design Studio VII

MARCH

ARCH 6A48 – Environmental Tech III
ARCH 6A50 – Construction Technology III
ARCH 6603 – Design Studio III
ARCH 6A49 – Environmental Tech III
ARCH 6A51 – Construction Technology IV
ARCH 6604 – Design Studio IV
ARCH 6361 – Integrated Practice

Approach

Building Integration is threaded through our entire ladder of design studios and technical coursework at UH with particular attention in ARCH 4510 in the BARCH program and 6604 in the MARCH, in partnership with their parallel technology seminars ARCH 6A48, ARCH 6A49, ARCH 6A50, ARCH 6A51 and ARCH 6361. In addition to social and cultural aims, architecture requires the integration of complex technical systems in order to work, including structure, material systems and assemblies, envelope, sustainability, environmental control, and life safety. The ability to wield these “technical” performative instruments—while still addressing issues of context, culture, form and space, etc.—is the hallmark of good architecture. In this sense, Architecture must be both abstract and specific at once, integrating high levels of technical information while also plugging into diverse communities and contexts, programs and performative criteria.

BARCH and MARCH curricula introduces the technical aspects of architecture and building performance in layering stages. In the earliest semesters, students consider the fundamental principles of structure, space, material, geometry and proportion as central elements in their designs. Design Studios and Tech courses are closely integrated with synchronized curricula that share project contents as a vehicle for overlapping and integrated learning. Programs try to create an environment in which Tech and Studio instructors work in concert as a collaborative team: decisions about program organization, materiality, or atmosphere are never far from questions of structure, shading, airflow, or embodied energy. Programs raise these synergies early, and emphasize them at every step embodying the principles of the curriculum delivery as a principle of practice. As the semesters progress, the integration of the technical with the architectural becomes more complex, nuanced and sophisticated.

By roughly the halfway point in both BARCH and MARCH degree programs, curricula of both programs offer a specific Integration/Synthesization studio (ARCH 4510 in the BARCH and ARCH 6604 in the MARCH), a deep and comprehensive building design project. These Integration/Synthesization studios specifically address the complexities involved in the making of architecture: building envelope and assemblies, structural

systems, environmental control systems, life safety systems, building performance, accessibility and codes and regulations—as well as questions of site integration, complex programming, and sustainable and passive solar strategies. Programs introduce students to the many layers and valences of a complete architectural project. This semester's studio progresses in measured steps, with many points of feedback and iteration. Faculty invite expert guests for both presentations and for reviews, in order to benefit from the broad knowledge available in the Houston design and engineering community. MARCH Synthesization studios, which always occur in the Spring of Level III, have engaged with numerous types of projects. Programs goal is always to couple an urgent cultural or social question with the design of a “total” building. For example, in Spring of 2019, students designed a mass timber housing project on the East River in Queens, NY using an ACSA competition brief. Studio faculty engaged a variety of experts working with mass timber for presentations, pinups, and reviews, including Thomas Robinson/Lever Architects (US expert on mass timber buildings), John Hand/Arup Houston (engineering expert on mass timber) among other technologists, practitioners, visitors and guests.

In Spring 2020, students designed a new Museum of Natural History in Seattle, at the base of Pike Place Market. Local architects were kind enough to introduce us to their work and provide student crits, including Olson Kundig (office visit+pinup) and Robert Hutchison (office visit).

The Spring 2021 MARCH Synthesization studio project was closer to home, in part due to travel restrictions during the pandemic. Students designed a new multi-use pool and recreation facility for Barton Springs in Austin, a complex hybrid building intended for use by Austin's diverse communities. Guests for presentations and crits included Matt Bunza (MIT), John Hand/Arup (Structural+_Mass Timber), Sofia Fonseca (Problem Seeking + Programming), Lisa Osborne (Environmental Engineer), Christine Ten Eyck (Landscape Architecture).

Beyond the Synthesization courses, all of our design studios and tech courses promote ideas of building integration. The Fall Level III course, intended to be broad-based and contextual, nonetheless folds in core ideas of structure and systems. In the Fall 2021 6603 studio, for instance, students grappled with flood infrastructure as a part of their projects in New Orleans' Bywater district—working with fundamental ideas about civil engineering, cut and fill, retention/detention, and water resistant structures.

Assessment, Benchmarks, Modification, and Innovation:

As with all of the graduate studios, M.Arch. programs use three criteria for evaluation: Intellectual Clarity, Craft, and Completion. Each have several sub-categories for assessment. For project assessment and information, we engage with design professionals to provide well-rounded feedback from numerous perspectives. We use design juries, pinups, desk crits, and presentations to give comprehensive feedback to our students. Feedback is recorded and submitted back to the students as a written narrative. Students hear the information once in a spoken review, and then receive written notes afterward reinforcing the review comments. We also ask our reviewers to provide written notes after the review as a third point of learning. This feedback is incorporated into our “Three C” criteria and into our grading rubric.

In addition to reviews, we have weekly or biweekly pinups in which our core faculty comment on student work in progress. These are typically sketch sessions—drawings

and designs are seen as formative and evolving, not fixed elements but ideas meant to change and improve. The sketching process allows for a direct feedback loop between student and instructor. (The online format during the pandemic has actually refined this process, with instructors providing feedback notes and sketches on student work even outside of the context of class, using digital pinup and sketch tools such as Conceptboard or Miro). We also frequently invite specialists and experts in a variety of domains to both instruct and assess student work. We integrate structural and mechanical engineers, local architects, and community stakeholders into our design process at every stage. These guests help us to assess our students' work, and provide much needed depth and breadth to their understanding.

We compare student performance in a given semester to similar work performed in previous years. Through numerous semesterly meetings with the studio faculty and coordinator discussing the integration of parallel sections as a singular team-taught unit—as well as conversations with the Director of Graduate Studies and the Graduate Committee—the curriculum is systemically reevaluated through the feedback loop of the micro and macro expectations. We actively seek student feedback on project types, workload, learning goals, and our own instruction. We also use industry standards as a continuous set of benchmarks—provided by both our instructors and our invited guests. Lastly, we examine the general state of discourse at other architecture schools to understand the pedagogical direction of the profession as well as the criteria and benchmarks used both nationally and internationally. We engage in assessment and course correction based on both guest and student feedback every semester. For instance, in the fall 6603 course, we have removed two preliminary short projects that were regarded as inessential, in favor of a longer preliminary project that is more integrative and synthesizing.

Evidence

UHCoAD provides a number of elements to the NAAB visiting team as evidence. The most comprehensive evidence we provide is complete student projects and designs. Our goal is always to ensure that the complexities of an integrated building project are presented clearly and completely. We also provide complete lectures and presentations by both UHCoAD instructors and guests. All course materials including syllabi, handouts, and our required course reader, are also available to the visiting team.

Future Developments

As with all of our courses and programs, we will continue to evolve our Building Integration efforts. We appreciate insights from other programs as well as alternate approaches. Our faculty frequently visit other schools and studios to understand how diverse pedagogical methods work in the context of Building Integration. Locally, we have been in conversation with both Rice University and Texas A&M University regarding their own integration efforts.

We are working to update and strengthen our approaches to building performance—both from the perspective of assessment and design. Our instructors are always evaluating new tools and making use of existing and new resources within the College: the new Advanced Fabrication Lab, the Materials Resource Center, the Keeland Center for Fabrication, and our own Computer Lab.

Moving forward, we would like to better integrate our Tech and Studio offerings. Though they currently work closely together, they would ideally be a seamlessly integrated set of parallel approaches, resonating off one another.



Lastly, we are strengthening our connections to the local Houston community. Currently, we have close ties to the community and many of its architect-members participate in design reviews and presentations. We would also like a more robust approach to client relations, field work, and examination of both built works and works under construction.

Our College undergoes a constant process of self-examination. Even that is evolving: moving forward, we would like to refine our mechanisms of feedback for the programs themselves.

4—Curricular Framework

This condition addresses the institution's regional accreditation and the program's degree nomenclature, credit-hour and curricular requirements, and the process used to evaluate student preparatory work.

4.1 Institutional Accreditation

The APR must include a copy of the most recent letter from the regional accrediting commission/agency regarding the institution's term of accreditation.

Program Response:



SACSCOC University Accreditation

The University of Houston is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate, master's, professional and doctoral degrees. Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of the University of Houston.

In addition, the University is a member of the Council of Graduate Schools in the United States, the Conference of Southern Graduate Schools, the National Commission on Accrediting, the Association of Texas Colleges and Universities, the American Council on Education, the Association of American State Colleges and Universities, the Association of American Colleges, the Association of Urban Universities, and the National Association of State Universities and Land Grant Colleges. UH colleges, programs and professional associations also hold memberships and accreditations by additional agencies.

4.2 Professional Degrees and Curriculum

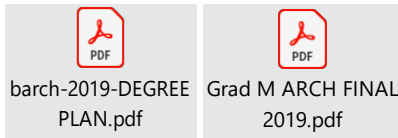
The NAAB accredits professional degree programs with the following titles: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D. Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and optional studies.

4.2.1 Professional Studies. Courses with architectural content required of all students in the NAAB-accredited program are the core of a professional degree program that leads to licensure. Knowledge from these courses is used to satisfy Condition 3—Program and Student Criteria. The degree program has the flexibility to add additional professional studies courses to address its mission or institutional context. In its documentation, the program must clearly indicate which professional courses are required for all students.

Programs must include a link to the documentation that contains professional courses are required for all students.

Program Response:

The required courses are listed in the degree plans for both the B. Arch. and the M. Arch. programs. This information can also be found on the CoAD website. Additional professional study courses are marked as “Electives” in the degree plans.



<https://www.uh.edu/architecture/programs/graduate-programs/architecture-level1/>

<https://www.uh.edu/architecture/programs/graduate-programs/architecture-level2/>

4.2.2 General Studies. An important component of architecture education, general studies provide basic knowledge and methodologies of the humanities, fine arts, mathematics, natural sciences, and social sciences. Programs must document how students earning an accredited degree achieve a broad, interdisciplinary understanding of human knowledge.

In most cases, the general studies requirement can be satisfied by the general education program of an institution's baccalaureate degree. Graduate programs must describe and document the criteria and process used to evaluate applicants' prior academic experience relative to this requirement. Programs accepting transfers from other institutions must document the criteria and process used to ensure that the general education requirement was covered at another institution.

Programs must state the minimum number of credits for general education required by their institution and the minimum number of credits for general education required by their institutional regional accreditor.

Program Response:

Core Curriculum

<http://publications.uh.edu/content.php?catoid=31&navoid=11780>

The minimum number of credits required by the institutional creditor is 42.

B.Arch.

http://publications.uh.edu/preview_program.php?catoid=31&poid=11455&hl=%22architecture%22&returnto=search

In the Graduate Program, students generally come from accredited institutions.

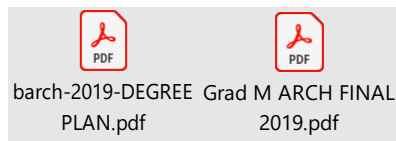
Both undergraduate and graduate transfer students and/or international students follow this evaluation process:

The student has to provide the catalog descriptions and syllabi of the courses taken at the previous institution. A transcript must be submitted. This applies to architectural courses taken. If a studio credit needs to be transferred, a portfolio must be submitted. The submitted courses and studio classes are then evaluated for content by the respective directors and faculty. The CoAD allows content transfer, but not credit transfer.

4.2.3 Optional Studies. All professional degree programs must provide sufficient flexibility in the curriculum to allow students to develop additional expertise, either by taking additional courses offered in other academic units or departments, or by taking courses offered within the department offering the accredited program but outside the required professional studies curriculum. These courses may be configured in a variety of curricular structures, including elective offerings, concentrations, certificate programs, and minors.

The program must describe what options they provide to students to pursue optional studies both within and outside of the Department of Architecture.

Program Response:



<https://www.uh.edu/architecture/programs/graduate-programs/architecture-level1/>

<https://www.uh.edu/architecture/programs/graduate-programs/architecture-level2/>

The Graduate Program offers international studies in the form of faculty-led summer abroad semesters and studies and exchange programs. The Undergraduate Program I offers a Thesis option besides the international programs.

Undergraduate students have the opportunity to develop an Honors Thesis with the Honors College.

Integration projects for undergraduates afford the opportunity to take courses at other colleges.

NAAB-accredited professional degree programs have the exclusive right to use the B. Arch., M. Arch., and/or D. Arch. titles, which are recognized by the public as accredited degrees and therefore may not be used by non-accredited programs.

Programs must list all degree programs, if any, offered in the same administrative unit as the accredited architecture degree program, especially pre-professional degrees in architecture and post-professional degrees.

Program Response:

Bachelor of Architecture	160 CRH
Bachelor of Science in Interior Architecture	132
Bachelor of Science in Industrial Design	132
Bachelor of Science in Environmental Design	128

Minor in Architecture
Minor in World Cities

Master of Architecture (MARCH +3)	99
Master of Architecture (MARCH +2)	60
Master of Arts in Architectural Studies	30
Master of Science in Architecture	36
Master of Science in Industrial Design	36

The number of credit hours for each degree is outlined below. All accredited programs must conform to minimum credit-hour requirements established by the institution's regional accreditor. Programs must provide accredited degree titles, including separate tracks.

4.2.4 Bachelor of Architecture. The B. Arch. degree consists of a minimum of 150 semester credit hours, or the quarter-hour equivalent, in academic coursework in general studies, professional studies, and optional studies, all of which are delivered or accounted for (either by transfer or articulation) by the institution that will grant the degree. Programs must document the required professional studies courses (course numbers, titles, and credits), the elective professional studies courses (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for the degree.

Program Response:

<https://www.uh.edu/architecture/programs/undergraduate-programs/architecture/barch-2019-.pdf>



BARCH table.pdf

Master of Architecture +3					
<i>Undergraduate courses if preparatory</i>					
<i>Required Prof Courses</i>		<i>Elective Prof courses</i>		<i>General Studies</i>	
<i>Course #s & titles</i>	<i>crds</i>	<i>Course #s & titles</i>	<i>crds</i>	<i>Course #s & titles</i>	<i>crds</i>
NA		NA			
Required Prof Courses					
Course #s & titles	crds	Course #s & titles	crds	Course #s & titles	crds
ARCH 6600 Design Studio I	6	ARCH elective	3		
ARCH 6601 Design Studio II	6	ARCH elective	3		
ARCH 6602 GDBP Workshop	6	ARCH elective	3		
ARCH 6603 Design Studio III	6				
ARCH 6604 Design Studio IV	6				
ARCH 7600 Design Studio V	6				
ARCH 6393 Master Project Research and Prep	3				
ARCH 7601 Master Project	6				
ARCH 6301 Visual Studies I	3				
ARCH 6302 Visual Studies II	3				
ARCH 6303 Visual Studies III	3				
ARCH 6304 Visual Studies IV	3				
ARCH 6A20 Environmental Technology I	1.5				
ARCH 6A21 Environmental Technology II	1.5				
ARCH 6A48 Environmental Technology III	1.5				
ARCH 6A49 Environmental Technology IV	1.5				
ARCH 6A22 Construction Technology I	1.5				
ARCH 6A23 Construction Technology II	1.5				
ARCH 6A50 Construction Technology III	1.5				
ARCH 6A51 Construction Technology IV	1.5				
ARCH 6340 Survey of Architectural History I	3				
ARCH 6341 Survey of Architectural History II	3				
ARCH 6357 Contemporary Theory and Criticism	3				
ARCH 6359 Modern Architecture and Urbanism	3				
ARCH 6376 Urban Determinants	3				
ARCH 6360 Professional Practice	3				
ARCH 6361 Integrated Practice	3				
Total req prof	90	Total elec prof	9	Total gen stud	Total Opti st
Total # of degree credits - 99					
Master of Architecture +2					
<i>Undergraduate courses if preparatory</i>					
<i>Required Prof Courses</i>		<i>Elective Prof courses</i>		<i>General Studies</i>	
<i>Course #s & titles</i>	<i>crds</i>	<i>Course #s & titles</i>	<i>crds</i>	<i>Course #s & titles</i>	<i>crds</i>
Architectural History Survey I	3	NA			
Architectural History Survey II	3				
Advanced Studio I	6				
Advanced Studio II	6				
Environmental Technology	3				
Construction Technology	3				
Required Prof Courses					
Course #s & titles	crds	Course #s & titles	crds	Course #s & titles	crds
ARCH 6603 Design Studio III	6	ARCH elective	3		
ARCH 6604 Design Studio IV	6	ARCH elective	3		
ARCH 7600 Design Studio V	6				
ARCH 6393 Master Project Research and Prep	3				
ARCH 7601 Master Project	6				
ARCH 6301 Visual Studies I	3				
ARCH 6304 Visual Studies IV	3				
ARCH 6A48 Environmental Technology III	1.5				
ARCH 6A49 Environmental Technology IV	1.5				
ARCH 6A50 Construction Technology III	1.5				
ARCH 6A51 Construction Technology IV	1.5				
ARCH 6357 Contemporary Theory and Criticism	3				
ARCH 6359 Modern Architecture and Urbanism	3				
ARCH 6376 Urban Determinants	3				
ARCH 6360 Professional Practice	3				
ARCH 6361 Integrated Practice	3				
Total req prof	54	Total elec prof	6	Total gen stud	Total Opti st
Total # of degree credits - 60					

4.2.6 Doctor of Architecture. The D. Arch. degree consists of a minimum of 210 credits, or the quarter-hour equivalent, of combined undergraduate and graduate coursework. The D. Arch. requires a minimum of 90 graduate-level semester credit hours, or the graduate-level 135 quarter-hour equivalent, in academic coursework in professional studies and optional studies. Programs must document, for both undergraduate and graduate degrees, the required professional studies classes (course numbers, titles, and credits), the elective professional studies classes (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for the degree.

Program Response:

The CoAD does not offer a Doctor of Architecture degree.

4.3 Evaluation of Preparatory Education

The NAAB recognizes that students transferring to an undergraduate accredited program or entering a graduate accredited program come from different types of programs and have different needs, aptitudes, and knowledge bases. In this condition, a program must demonstrate that it utilizes a thorough and equitable process to evaluate incoming students and that it documents the accreditation criteria it expects students to have met in their education experiences in non-accredited programs.

4.3.1 A program must document its process for evaluating a student's prior academic coursework related to satisfying NAAB accreditation criteria when it admits a student to the professional degree program.

See also Condition 6.5

Program Response:

In the Graduate Program the students generally come from accredited institutions. Graduate Program: all NAAB-related courses start in Level II, so all M.Arch. students will take the courses at the College.

Undergraduate Program: all courses related to NAAB are taken here at the College.

Transfer students and/or international students, both undergraduate and graduate, follow this evaluation process:

The student must provide the catalog descriptions and syllabi of the courses taken at the previous institution. A transcript must be submitted. This applies to architectural courses taken. If a studio credit needs to be transferred, a portfolio must be submitted. The submitted courses and studio classes are then evaluated for content by the respective directors and faculty. The CoAD allows content transfer, but not credit transfer.

The Field of Study program allows students to transfer into the Undergraduate Program.

<https://www.highered.texas.gov/institutional-resources-programs/public-universities-health-related-institutions/transfer-resources/texas-transfer-framework/>

<https://reportcenter.highered.texas.gov/agency-publication/miscellaneous/architecture-field-of-study-curriculum/>

4.3.2 In the event a program relies on the preparatory education experience to ensure that admitted students have met certain accreditation criteria, the program must demonstrate it has established standards for ensuring these accreditation criteria are met and for determining whether any gaps exist.

Program Response:

In the Graduate Program the students generally come from accredited institutions. Graduate Program: all NAAB-related courses start in Level II, so all M.Arch. students will take the courses at the College.

Undergraduate Program: all courses related to NAAB are taken here at the College,

For transfer students and/or international students, both Undergraduate and Graduate, we use the following evaluation process:

The students must provide catalog descriptions and syllabi of the courses taken at the previous institution. A transcript must be submitted. This applies to architectural courses taken; if a studio credit has to be transferred, a portfolio must be submitted. The submitted courses and studio classes are then evaluated for content by the respective directors and faculty.

The CoAD allows content transfer, but not credit transfer.

4.3.3 A program must demonstrate that it has clearly articulated the evaluation of baccalaureate-degree or associate-degree content in the admissions process, and that a candidate understands the evaluation process and its implications for the length of a professional degree program before accepting an offer of admission.

Program Response:

New graduate and undergraduate students are informed about the evaluation process at various points during the admission process. Prior to acceptance, applicants are informed about the admissions review process during meetings with a graduate or undergraduate advisor and Information Sessions. After admission is granted, students are again informed during new student orientations about the transfer credit review process.

The applicant has to provide the catalog descriptions and syllabi of the courses taken at the previous institution. A transcript must be submitted. This applies to architectural courses taken; if a studio credit has to be transferred, a portfolio must be submitted. The submitted courses and studio classes are then evaluated for content by the respective directors and faculty.

<https://www.uh.edu/architecture/future-students/graduate/domestic/>

<https://www.uh.edu/architecture/future-students/graduate/international/>

<https://www.uh.edu/architecture/future-students/undergraduate/admissions/>

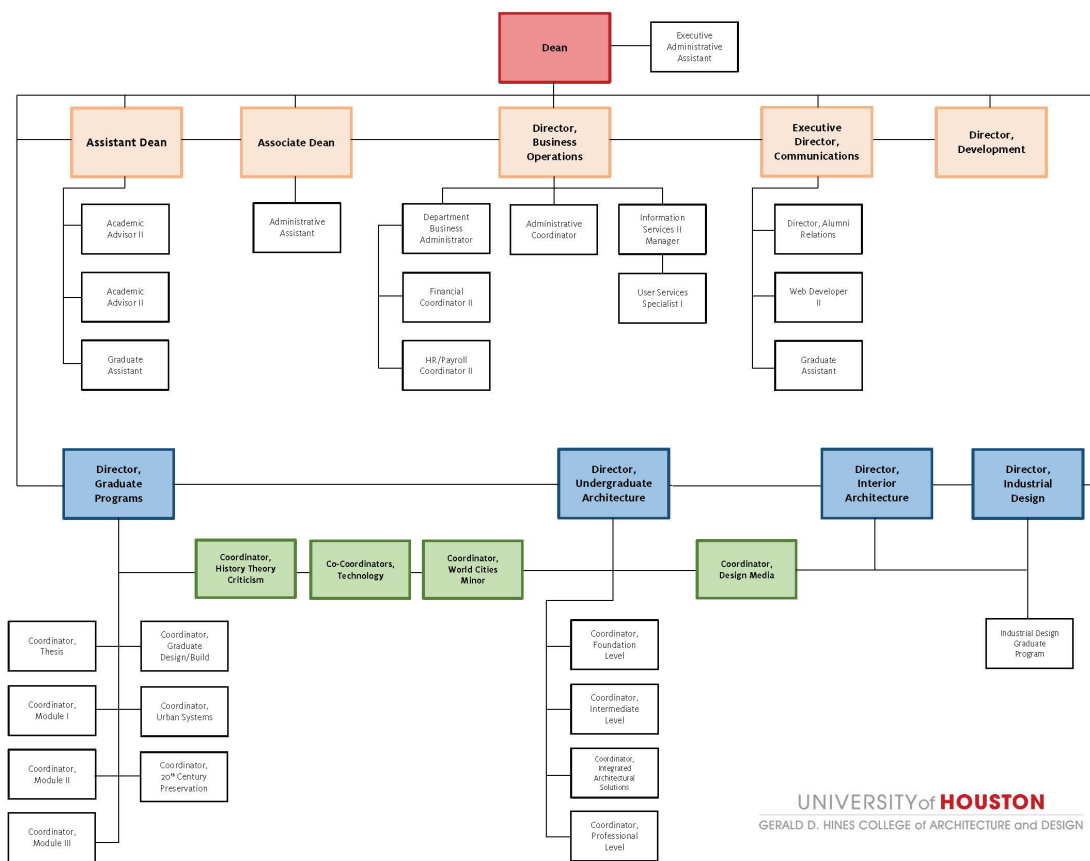
5—Resources

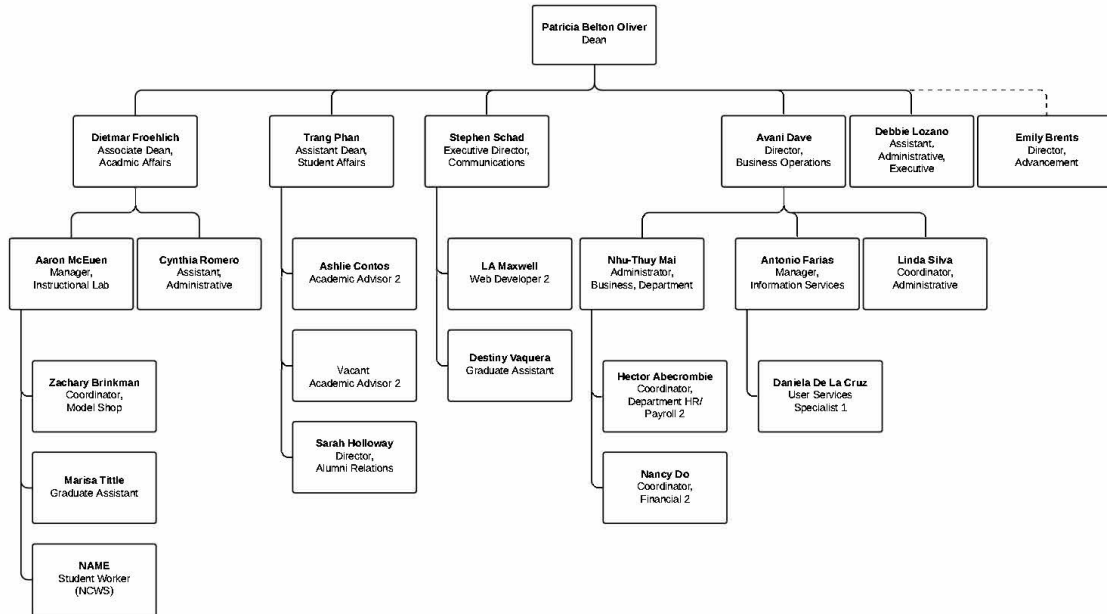
5.1 Structure and Governance

The program must describe the administrative and governance processes that provide for organizational continuity, clarity, and fairness and allow for improvement and change.

5.1.1 Administrative Structure: Describe the administrative structure and identify key personnel in the program and school, college, and institution.

Program Response:





Updated 07-07-21



UHCOAD Org Chart -
Chart[2]_College Struc STAFF [1].pdf

University of Houston

<https://uh.edu/about/leadership/>

Leadership

The University of Houston (UH) is the largest and only Ph.D.-granting university in the UH System, which includes UH-Clear Lake, UH-Downtown, and UH-Victoria, with instructional sites in UH Sugar Land, Pearland, Katy and Northwest Houston. The UH System is governed by a 10-member Board of Regents.

Renu Khator*

Chancellor, UH System
President, UH



President's Cabinet

Raymond S. Bartlett*

Senior Vice Chancellor for Administration and Finance, UH System
Senior Vice President for Administration and Finance, UH

Eloise Brice*

Chancellor for University Advancement, UH System
Vice President for University Advancement, UH

Dona Hamilton Cornell*

Chancellor for Legal Affairs and General Counsel, UH System
Vice President for Legal Affairs and General Counsel, UH

Amr Elnashai*

Vice Chancellor for Research and Technology Transfer, UH System
Vice President for Research and Technology Transfer, UH

Lisa Holdeman*

Vice Chancellor for Marketing and Communications, UH System
Vice President for Marketing and Communications, UH

Michael Johnson*

Chief of Staff, UH System, Chief of Staff, UH

Ramanan Krishnamoorti*

Chief Energy Officer, UH

Elwyn C. Lee

President for Neighborhood and Strategic Initiatives, UH

Michael Pede

Associate Vice President for Alumni Relations

Chris Pezman*

Vice President for Intercollegiate Athletics and Athletics Director, UH

Jeronimo Cortina

President, UH Faculty Senate

Paula Myrick Short*

Chancellor for Academic Affairs, UH System
Senior Vice President for Academic Affairs and Provost, UH

Jason Smith*

Vice Chancellor for Governmental Relations, UH System
Vice President for Governmental Relations, UH

Stephen J. Spann*

Vice President for Medical Affairs and Founding Dean of the College of Medicine,
UH



J. Richard Walker*

Chancellor for Student Affairs and Enrollment Services, UH System
Vice President for Student Affairs and Enrollment Services, UH

** Also a member of the Operations Group*

GD Hines College of Architecture and Design:

Administration

Patricia Belton Oliver, FAIA, ACSA Distinguished Professor
Dean | Director, designLAB | Professor

Dietmar Froehlich, Ph.D., RA
Associate Dean | Professor

Trang Phan
Assistant Dean
Admissions and Academic Advising Services | Director of Student Affairs and Development

Avani Dave
Director of College Business Operations

Stephen Schad
Executive Director of Communications

LA Maxwell
Web Developer II & Graphic Designer

Sarah Holloway
Director of Alumni Relations

Emily Brents
Director of Advancement

Debbie Lozano
Executive Administrative Assistant to the Dean

Cynthia Romero
Administrative Assistant to the Associate Dean

Academic Directors and Coordinators

Graduate Architecture

Gail Peter Borden FAIA
Director, Graduate Studies | Professor

Jason Logan
Graduate Coordinator, Module I | Instructor



Patrick Peters

Coordinator, Graduate Design Build Module II | Associate Director designLAB;
Professor

Matthew Johnson, AIA

Graduate Coordinator, Module III | Associate Professor

Rafael Longoria, ACSA Distinguished Professor

Graduate Coordinator, Module IV | Director Atrium Press | Professor

Undergraduate Architecture

Rafael Beneytez-Duran, Ph.D.

Director, Undergraduate Architecture | Associate Professor
Coordinator, Undergraduate Architecture Intermediate Level

Jason Logan

Coordinator, Undergraduate Architecture Foundation Level | Instructor

Patrick Peters, RA, LEED AP

Coordinator, Integrated Architectural Solutions | Associate Director designLAB;
Professor

Gail Peter Borden, FAIA

Director, Graduate Studies | Professor
Coordinator, Undergraduate Architecture Professional Level

Tom Diehl, AIA

Co-Coordinator, Undergraduate Technology Sequence | Associate Professor

Rives Taylor, FAIA

Co-Coordinator, Undergraduate Technology Sequence | Adjunct Associate
Professor

Andrew Kudless

William D. Kendall Professor of Design Technologies
Director, Advanced Media Technology Lab | Coordinator, Design Media

Michael Kubo, Ph.D.

Undergraduate Coordinator, History and Theory of Architecture and Design |
Assistant Professor

Vera Adams

Undergraduate Coordinator, World Cities Minor | Adjunct Associate Professor

Geoffrey Brune, FAIA

Coordinator, 20th Century Preservation | Professor



Industrial Design

EunSook Kwon, Ph.D.
Director, Industrial Design | Professor
(until July 2021)

Interior Architecture

Alan Bruton, RA CID
Director, Interior Architecture | Associate Professor

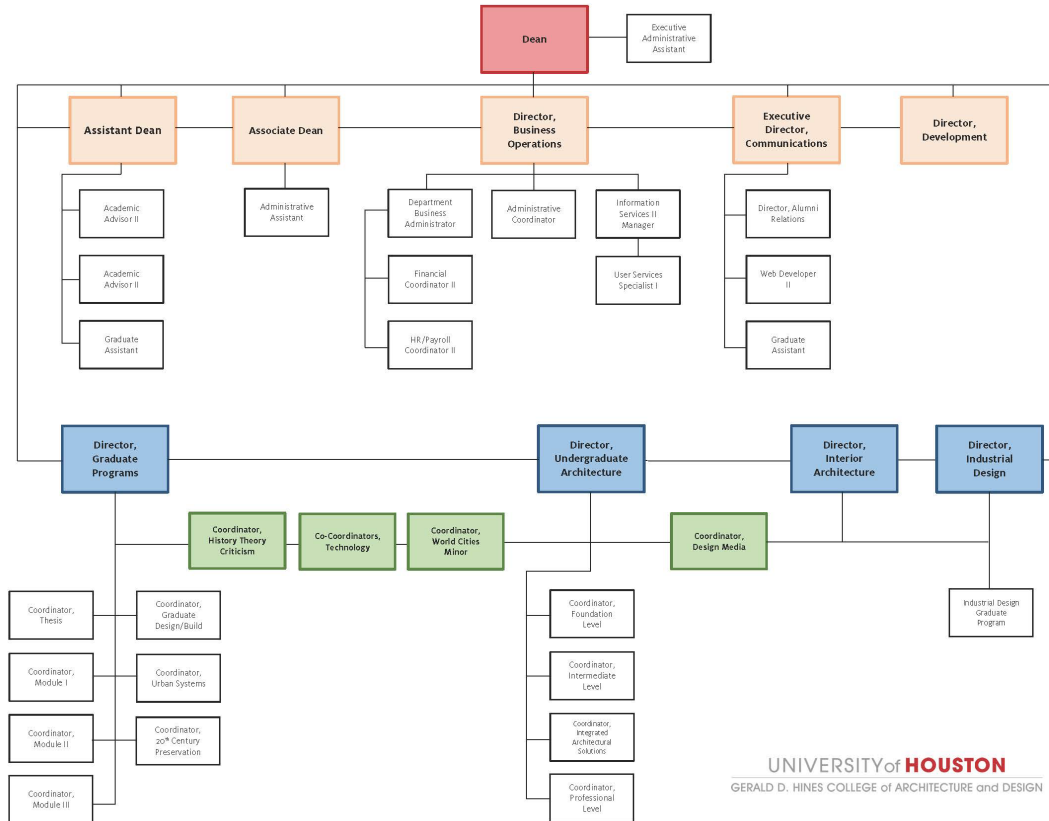
Programs

Bruce Race, Ph.D., FAIA, FAICP
Director, Sustainability and Resilience | Professor

Susan Rogers
Director, Community Design Resource Center | Associate Professor

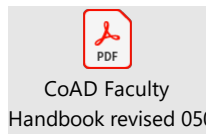
5.1.2 Governance: Describe the role of faculty, staff, and students in both program and institutional governance structures and how these structures relate to the governance structures of the academic unit and the institution.

Program Response:



The governance structures of the College of Architecture and Design and the B.Arch. and M.Arch. programs within the College are described in the bylaws of the College. The current version of the bylaws was adopted in May 2017. A major revision is being conducted this academic year, guided by the Office of Faculty Affairs.

The bylaws are the basis for self-governance within the College and its programs. They are consistent with, and subordinate to, the latest published university policies, as well as with the policies, rules, and laws of the Texas Higher Education Coordinating Board (THECB) and the State of Texas.



All tenured and tenure-track faculty and other benefits-eligible faculty who have taught for the past two consecutive years in one of the College’s programs have the right to vote in the general meetings of the faculty. The dean, associate dean, and retired, tenured faculty from this college who have returned to teach shall also have the right to vote in the general meetings of the faculty.

The faculty, together with the elected student representatives, through the Graduate and Undergraduate Committees, provide recommendations to the dean for policies on

curriculum, courses, admissions, graduation, scholastic probation, dismissal, and new student recruitment.

Similarly, the faculty, together with the elected student representatives, through the Steering Committee and its ad-hoc and subcommittees, provide recommendations to the dean on all matters concerning the administrative and general academic policies of the college.

Staff is represented in various task forces such as the DEI task force or the College Culture Task Force. Further inclusion of staff in governance / structures will be a point of discussion in the near future.

The dean as the chief executive officer of the College has general administrative authority over college affairs in the areas of educational policy, budgets, personnel, hiring, and teaching assignments. Regular input from the faculty is to be provided in the form of written recommendations from the standing committees or ad hoc or sub-committees. The dean provides leadership regarding academic programs and their compliance with all university policies and procedures and is responsible for communicating the College's programs to the University and the community.

The dean is also responsible for the preparation of the annual budget with the counsel of the Steering Committee. The dean appoints and annually reviews the academic area coordinators, the director of graduate studies, the assistant and/or associate dean(s), the college business administrator, and the directors of college centers or institutes. The dean will periodically review all college programs.

The Promotion, Tenure, and Retention Committee reviews the performance of the dean every five years and submits a written report directly to the senior vice president for academic affairs prior to their review of the dean. The senior vice president will review the dean's performance every five years in accordance with university guidelines.

The governance in the College and the programs (B.Arch., M.Arch.) is modelled after the University's shared governance guidelines:

Committees and Task Forces

<https://www.uh.edu/architecture/about/college-committees-representatives-and-task-forces/>

Bylaws

<https://uh.edu/architecture/images/files/2020-02-02---faculty-handbook.pdf>

University of Houston - Shared Governance

The faculty governance structure provides the framework for an active partnership between faculty and administration in formulating recommendations and policies effecting the academic community. Composed of the Faculty Senate and standing committees, the faculty governance structure establishes forums for internal discussion, proposes policies related to faculty concerns, gathers and disseminates information of interest to the faculty, and provides a faculty voice to the external community. Staff support is provided to the Faculty Senate by the Provost and to the standing committees by the senior administrator to whom they report.

Faculty Senate

The members of the Faculty Senate are elected by the faculty members of their respective colleges according to their bylaws. The Faculty Senate operates under its own constitution. The Faculty Senate considers and makes recommendations to the President of the University of Houston and other senior administrators on matters of interest to the entire faculty. The Provost as the University's chief academic officer, or his/her designees, attends regular meetings of the Senate. For more information, including a copy of the Faculty Senate Constitution and bylaws, please visit the Faculty Senate website at <https://fs.uh.edu/>.



2019 Faculty Handbook.pdf

5.2 Planning and Assessment

The program must demonstrate that it has a planning process for continuous improvement that identifies:

5.2.1 The program's multiyear strategic objectives, including the requirement to meet the NAAB Conditions, as part of the larger institutional strategic planning and assessment efforts.

Program Response:

The programs' multiyear strategic objectives, including the requirement to meet the NAAB Conditions, are laid out in the Five-year Strategic Plan of the College as well as in the mandatory APRs that are submitted to the University on a yearly basis. Planning for improvements also takes place in the Undergraduate and Graduate Committees. These incremental changes take place each semester and academic year. They are assessed and discussed in the standing committees as well as in the faculty meetings. The Undergraduate Committee meets once a month and the Graduate Committee at least twice a semester. Task Forces such as the 3-D Program Committee comprised of representatives of the Architecture, Industrial Design, and Interior Architecture programs, look for possible synergies that can be utilized between the programs. Existing electives are evaluated, and new ones proposed. This summer, over one hundred new elective proposals were submitted to the University UG Committee for review. These new electives open up an interdisciplinary path for students within all three programs in the College. At the same time, they speak to the newly formulated NAAB Shared Values and other NAAB Conditions.

In this way, the strategic planning of the College is emulated by the programs (B.Arch., M.Arch.).

The current Strategic Plan covers years 2016 until 2021. The new Five-year Strategic Plan will be devised with faculty, staff, student, and external stakeholders input over ensuing months.



The College's and, with it, the Architecture Programs' strategic plan is aligned with the University's goals, especially with Goal 1) Student Success; Goal 2) Nationally Competitive Research; Goal 3) Social Responsibility; Goal 5) Competitive Funding.

<https://uh.edu/strategic-plan/>

5.2.2 Key performance indicators used by the unit and the institution

Program Response:

The data and information sources used to inform the development of the planning objectives and key performance indicators are used to evaluate the current state of the programs and determine progress. Key performance indicators are:

- Graduation rates
- ARE passing rates
- Evaluation matrices (e.g., master's project rubric)
- Grades
- Juries/reviews (e.g., rubrics filled in by the jurors)

The indicators are checked frequently to see if adjustments need to be made to approach the set goals and benchmarks. This happens during class time on an individual basis with professors, during coordinator meetings (several times during the semester), committee meetings (several times during the semester), and faculty retreats and meetings (at least once a semester).

Both programs and the University use similar indicators, so a comparison is possible. The Institutional Effectiveness Office supplies the college / programs with data they compile for each semester.

5.2.3 How well the program is progressing toward its mission and stated multiyear objectives.

Program Response:

The main points of the 2016 - 2021 Strategic Plan:

OUR VISION

We strive to become a premier college of architecture and design and to produce critical thinkers and global citizens who are skilled in their craft, capable of using advanced technology and methods of industrialized production, respect the environment, understand the power of design to shape many lives, and are equipped to take on leadership roles within their chosen professions.

OUR MISSION



The Gerald D. Hines College of Architecture and Design at the University of Houston remains focused on design as the fundamental activity of its studies since 1956. Building on that focus, the College positions itself to:

Explore solutions to society's myriad challenges through reflection and action with the prospect of advancing the human condition.
Practice with respect for the environment.
Foster innovation through collaboration.
Instill a global view of design and the arts and prepare students to serve as cultural leaders of the 21st century.
Advance our professions through scholarship and research.
Benefit Houston and the greater urban environment through service to the University, our communities, industry, government and the architecture and design professions.

GOALS

1. Build a local, national, and international value network.
2. Develop our local reputation into a national and global reputation.
3. Develop an integrative model for architectural education.
4. Grow and expand our graduate programs.
5. Attract and retain the best students.
6. Define media, digital fabrication, and digital vocabularies for the College.
Develop a robust research agenda for the College.

The College and its programs have moved forward as intended when crafting the Strategic Plan five years ago. Some tenets of the goals have become reality. Other goals are still being worked toward, while some goals had to be adjusted.

The College has been successful in expanding its network through exhibitions, lectures, and guest professors. Exchange programs were established. At the same time, the school's reputation grew due to faculty and student successes: winning competitions, publishing books, exhibiting internationally, and being awarded grants. Developing an integrative model of architectural education is a work in progress. We have taken great strides towards a better interdisciplinary education and course offerings have been expanded and diversified. The Graduate Program has added courses and concentrations to its offerings and recruiting and admission is on a rebound after a dip during the last few years. Attracting and retaining the best students remains a challenge. The Digital Media Program has been repositioned and expanded, a new Director of Digital Media has been hired, and the new Media and Robotics Lab has been built. Robust research agenda is being developed; cooperation with other colleges and universities increases our chances to attract funding.

The vision and goals established five years ago will be reexamined and redefined this coming year. A new Strategic Plan will be drafted together with faculty and in accordance with the University's vision and plans.

The new UH Strategic Plan, "Together, We Rise; Together, We Soar," has already launched two new initiatives:

Institute for Global Engagement: This new interdisciplinary institute aims to enhance students' international and cultural understanding by embedding learning and research experiences focused on globally relevant topics within all academic programs and

disciplines. The CoAD's exchange and study abroad programs will benefit from this new initiative and help to attract the best students, develop a strong international network, and add to the reputation of the CoAD's architecture programs.

The other UH initiative, *Population Health Complex*, is a new interdisciplinary program that will integrate health professions with other disciplines in the University—from engineering and education to the arts and social sciences. The CoAD programs are well situated to become part of this new undertaking, exposing students to complex issues of health care and their architectural implications. It will also help the students, as well as faculty and staff, learn how to achieve a healthy work-life balance.

5.2.4 Strengths, challenges, and opportunities faced by the program as it strives to continuously improve learning outcomes and opportunities.

Program Response:

The programs draw both their strengths and challenges from their unique location in one of the most diverse cities in the country. This allows them to benefit from the artistic and intellectual potential and resources of the City of Houston. This diversity transfers directly to our student body, as well as the faculty, and infuses the program with new ideas and energy.

The programs' drive to improve teaching and learning is aided by this diversity. At the same time, we are challenged by the need of many of our students to work, sometimes full-time, while in college. Many ambitious ideas for improvement are tempered by the social and economic realities and necessities of serving a student population that often has to put their economic needs ahead of the academic demands. The engaged faculty is working hard at bridging this gap. Despite these challenges, faculty, staff, and students are positively working toward rising to the next level. Student success in competitions, awards, and grants are proof that the programs are moving toward even more successful learning outcomes.

Opportunities within the programs are manifold: the Community Design Resource Center (CDRC) works with the immediate neighborhood of the Third Ward, the Keeland Design Center, and the newly established Advanced Media Technology Lab. These opportunities are great assets in expanding our Digital Fabrication and design possibilities, thus preparing students for the rapidly changing workplace demands of the digital age.

As always, the programs must overcome the reluctance, exhibited now and then by faculty and students, to go for something new. This is sometimes a bigger challenge than economic limitations.

Improving learning outcomes is sometimes connected to the need to hire new faculty. Hiring new personnel is a budgetary issue. At the moment, this is one of the CoAD's biggest economic challenges.

5.2.5 Ongoing outside input from others, including practitioners.

Program Response:

Ongoing outside input to the programs is primarily generated through reviews and juries of student work. Reviewers are architects and engineers from local architecture offices,

faculty from other universities, and members of the alumni organization. The use of virtual platforms such as Zoom allows for increased input from experts from other states and countries.

Many adjuncts work in local architecture firms and provide the latest updates from the field—either through teaching or committee work.

The program must also demonstrate that it regularly uses the results of self-assessments to advise and encourage changes and adjustments that promote student and faculty success.

Program Response:

Changes and adjustments that promote student and faculty success are discussed in Undergraduate and Graduate Committee meetings, as well as in faculty meetings. The frequently scheduled coordinators meetings are usually the first step in assessing and evaluating the learning outcomes.

The annual reports (APR reviews) to the University state the current results of the assessments and define next steps.

Generally, the assessment process is a multilayered one, starting at the coordinator level and moving to the UG (once a month), GR Committee (at least twice a semester), and the faculty meeting (at least once a semester).



19-20 APAR
Undergraduate Archit

Undergraduate Self-Assessment

In addition to the University's required Institutional Effectiveness plans, the Undergraduate Program continually reviews the curriculum, primarily through the Undergraduate Committee. A major portion of committee meetings are devoted to evaluating the programs, discussing ways to improve, sometimes forming ad hoc committees to investigate issues, and making changes to curricula. Currently an ad hoc committee is reviewing the successes and weaknesses of the latest curriculum changes.

One of the ways of assessing student work is through the Graduating Students Jury. Students submit one project from their final year for review by outside jurors invited from around the nation. Student work is reviewed by number, without names or studio identification revealed to jurors. We have asked for an evaluation and comments from each juror on each project. These are compiled and are reviewed by coordinators. Juror evaluations were one of the principal motivations for the last curriculum change. Additionally, we have asked new adjunct faculty teaching technology courses to review projects share their findings with the committee. This allows for the additional benefit of apprising the new faculty of the current state of graduating students' work.

Graduate Self-Assessment

Master Projects, required as the capstone project for every graduate student seeking a professional degree, have been designated as a key area for self-assessment as part of continuous improvement efforts in the graduate program.



A group of external evaluators review every single Master Project (the culminating design project for a UH Architecture graduate student) for the following criteria: Concept, Design, Graphics, Relevance to Discipline, and Technical Proficiency. The Master Projects are rated on the following scale: Excellent, Acceptable, Unacceptable, and Not Applicable

5.3 Curricular Development

The program must demonstrate a well-reasoned process for assessing its curriculum and making adjustments based on the outcome of the assessment.

Programs must also identify the frequency for assessing all or part of its curriculum.

Program Response:

The curricula of the Undergraduate Program and the Graduate Programs are assessed on a yearly basis. Partial assessment takes place each semester and on an ongoing schedule, i.e., in coordinators' meetings that occur roughly once a month. The student work is evaluated and the teaching outcomes and benchmarks are checked and adjusted if needed. This step-by-step approach allows for a faster adjustment, if necessary, whereas the annual review can work more holistically by looking at all the components of the curricula, including the parts that have been adjusted as a result of the coordinators' meetings.

The step-by-step reviews that take place in individual coordinator and director meetings make it possible to quickly adapt the curriculum when needed.

A continuous checking of the curricula is performed by the directors on a frequent basis. The annual main and overall assessment of the curricula is performed by the Undergraduate and the Graduate Committees (student representatives are part of these committees), where a comparison of the goals with the student learning outcomes, the reaching of the benchmarks, and the effectiveness of the instruction are discussed.

After the assessment by the UG and GR committees, major curriculum adjustments and proposals for changes are presented to the faculty during the yearly retreat—usually before the start of the fall semester. The discussion is followed by the implementation of the approved changes to the curricula.

5.3.1 The relationship between course assessment and curricular development, including NAAB program and student criteria.

Program Response:

The course assessment is carried out in several steps:

The individual instructors evaluate the courses and discuss their findings with the coordinators in the coordinators' meetings. The NAAB-related courses are scrutinized for fulfillment of required criteria. The program and student criteria covered by the courses are carefully reexamined to see if the learning outcomes match the expectations, and if the course content is corresponding to the NAAB criteria.

The semiannual course assessment leads to the comparison with the curricular goals. Adjustments to the content of the courses and instructional delivery are made if necessary, keeping in mind the curricular goals and compliance with NAAB. If necessary,

a redistribution of the NAAB criteria over the courses is initiated, and benchmarks may be reset.

5.3.2 The roles and responsibilities of the personnel and committees involved in setting curricular agendas and initiatives, including the curriculum committee, program coordinators, and department chairs or directors.

Program Response:

As stated in the CoAD bylaws, working through the graduate and undergraduate committees, the coordinator of each academic area will be responsible for establishing and maintaining academic standards, structuring curricula, and identifying specific courses for additions, changes, and deletions. Each coordinator shall work with the other coordinators to ensure the integration of all areas of the curriculum. Other requirements for coordinators shall be maintained by the graduate and undergraduate committees.

The Director of Undergraduate Architecture and the Director of Graduate Studies are working closely with the coordinators.

The academic areas of the College of Architecture and Design and corresponding coordinators/directors are:

- | | |
|-----|------------------------------------|
| 1. | Media Design |
| 2. | Level I Design |
| 3. | Level II Design |
| 4. | Level III Design |
| 5. | History / Theory |
| 6. | Industrial Design (director) |
| 7. | Technology |
| 8. | Foundation Design |
| 9. | Intermediate Design |
| 10. | Integrated Architectural Solutions |
| 11. | Professional Level Design |
| 12. | Interior Architecture (director) |

The Associate Dean and ultimately the Dean are also involved in the curricular development work. The major curricula developments are led by the directors, with the Associate Dean acting as a consultant and the Dean taking the lead in development. After the presentation to the faculty and the following discussion, amendments and edits to the proposals will be finalized.

5.4 Human Resources and Human Resource Development

The program must demonstrate that it has appropriate and adequately funded human resources to support student learning and achievement. Human resources include full- and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. The program must:

5.4.1 Demonstrate that it balances the workloads of all faculty in a way that promotes student and faculty achievement.

Program Response:



RESUMES_NAAB_co
mbined.pdf

<https://www.uh.edu/architecture/about/faculty/#!/search>

<https://www.uh.edu/architecture/about/administration-staff/>

Administration and Staff

Office of the Dean

Patricia Belton Oliver, FAIA, ACSA Distinguished Professor
Dean | Director, designLAB | Professor

Dietmar Froehlich, Ph.D., RA
Associate Dean | Professor

Trang Phan
Assistant Dean
Admissions and Academic Advising Services
Director of Student Affairs and Development

Stephen Schad
Executive Director of Communications

Avani Dave
Director of College Business Operations

Sarah Holloway
Director of Alumni Relations

Emily Brents
Director of Advancement

Debbie Lozano
Executive Administrative Assistant to the Dean

Cynthia Romero
Administrative Assistant to the Associate Dean

Business Office

Nhu-Thuy Mai
Department Business Administrator

Nancy Do
Financial Coordinator II



Hector Abercrombie
Coordinator, Department HR/Payroll II

Linda Silva
Administrative Coordinator

Student Services Office

Ashlie Contos
Academic Advisor II
[until August 2021]

Student Support Resources

Antonio Farias
Manger, College/Division Information Services II

Daniela De La Cruz
User Services Specialist I

Catherine Essinger
Library Coordinator and Associate Librarian
William R. Jenkins Architecture & Art Library

Aaron McEuen
Coordinator, Keeland Design Exploration Lab
[until August 2021]

Zachary Brinkman
Coordinator, Model Shop, Keeland Design Exploration Lab

Marketing and Communications

LA Maxwell
Web Developer II & Graphic Designer

Destiny Vaquera
Graduate Assistant for Communications

Academic Directors and Coordinators

Graduate Architecture

Gail Peter Borden, FAIA
Director, Graduate Studies | Professor



Jason Logan

Graduate Coordinator, Module I | Instructor

Patrick Peters

Coordinator, Graduate Design Build Module II | Associate Director designLAB;
Professor

Matthew Johnson, AIA

Graduate Coordinator, Module III | Associate Professor

Rafael Longoria, ACSA Distinguished Professor

Graduate Coordinator, Module IV | Director Atrium Press | Professor

Undergraduate Architecture

Rafael Beneytez-Duran, Ph.D.

Director, Undergraduate Architecture | Associate Professor
Coordinator, Undergraduate Architecture Intermediate Level

Jason Logan

Coordinator, Undergraduate Architecture Foundation Level | Instructor

Patrick Peters, RA, LEED AP

Coordinator, Integrated Architectural Solutions | Associate Director designLAB;
Professor

Gail Peter Borden, FAIA

Director, Graduate Studies | Professor
Coordinator, Undergraduate Architecture Professional Level

Tom Diehl, AIA

Co-Coordinator, Undergraduate Technology Sequence | Associate Professor

Rives Taylor, FAIA

Co-Coordinator, Undergraduate Technology Sequence | Adjunct Associate
Professor

Andrew Kudless

William D. Kendall Professor of Design Technologies
Director, Advanced Media Technology Lab
Coordinator, Design Media

Michael Kubo, Ph.D.

Undergraduate Coordinator, History and Theory of Architecture and Design |
Assistant Professor

Vera Adams

Undergraduate Coordinator, World Cities Minor | Adjunct Associate Professor

Geoffrey Brune, FAIA

Coordinator, 20th Century Preservation | Professor

Industrial Design

EunSook Kwon, Ph.D.
Director, Industrial Design | Professor
(until July 2021)

Interior Architecture

Alan Bruton, RA CID
Director, Interior Architecture | Associate Professor

Programs

Bruce Race, Ph.D., FAIA, FAICP
Director, Sustainability and Resilience | Professor

Susan Rogers
Director, Community Design Resource Center | Associate Professor

Workload balance for faculty is achieved by weighing course loads against administrative duties and research activities when assigning teaching loads.

The average teaching load is 15 credit hours. The amount of required instructional hours is adjusted when necessary. A course release will be granted for faculty with heavy administrative loads such as directors or coordinators. If a faculty member is engaged in intensive research activities, course release is also available.

Studios are taught on a two or three days-per-week schedule allowing faculty to engage in other academic or professional activities on the days they are not teaching. This system allows faculty to engage in activities benefiting their own as well as their students' success.

5.4.2 Demonstrate that it has an Architect Licensing Advisor who is actively performing the duties defined in the NCARB position description. These duties include attending the biannual NCARB Licensing Advisor Summit and/or other training opportunities to stay up-to-date on the requirements for licensure and ensure that students have resources to make informed decisions on their path to licensure.

Program Response:

Patrick Peters, Architect, Professor of Architecture
Licensed to Practice Architecture in the State of Texas since 2005
NCARB Certificate Holder since 2005
Has been appointed by Dean Oliver as the Architect Licensing Advisor of the UH GDH CoAD

Professor Peters has recently taken over the responsibilities of the Architect Licensing Advisor. He is also the coordinator of the Integrated Architectural Solutions studios, alongside leading the Design Build Program of the Graduate Program. This makes him well positioned to instruct and mentor the students in the AXP program. Prof. Peters, working in collaboration with student Licensing Advisor Kim Saotonglang, implemented a

program to provide two “path to licensure” workshops for all students within the programs—one in early fall targeting entering and early year students, and one in late fall targeting existing students. Kim Saotonglang traveled to Miami to attend the NCARB 2021 Licensing Advisors Summit in person while Prof. Peters followed it virtually in Houston.

5.4.3 Demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement

Program Response:

All faculty and staff have opportunities to attend:
ACSA conferences and AIA meetings
College Lecture series that offer CEUs for the TBAE and the AIA
The College’s cooperation with other universities and architectural firms offers additional venues for continuing education that benefits the programs.

There are a variety of resources available to faculty (and students):

- Computer Lab with around 40 stations equipped with the latest software

- Recording Studio for working on lectures or livestreaming

- Keeland Design Center with 3-D printing and CNC, metal and woodworking, laser cutting, etc.

- Material Resource Collection with reference materials and literature

- (Advanced Media Technology Lab when completed)

- CDRC with reference materials for community work

- Numerous mobile large screen TV/monitors for live conferences and video streaming

- The William Jenkins Art and Architecture Library in the building

The college usually reimburses expenses accrued through conference attendance when the faculty member has a paper presentation.

5.4.4 Describe the support services available to students in the program, including but not limited to academic and personal advising, mental well-being, career guidance, internship, and job placement.

Program Response:

The support services available to students in the programs are manifold:

The staff of the Advising Office and the Assistant Dean help the students in all matters of academic and personal advising.



The College of Architecture and Design (CoAD) and the University Career Services (UCS) office are focused on helping current CoAD students prepare for their future careers. UCS plays a key role by assisting students in various ways that include:

- [Get Resume Support](#)
- [Meet with a Counselor](#)
- [Career Resources](#)
- [Workshops](#)
- [Attend an Event](#)
- [Student Employment](#)
- [Cougar Pathway](#)
- [Alumni Career Services](#)

<https://www.uh.edu/architecture/current-students/career-resources/>

<https://www.uh.edu/architecture/current-students/financial-resources/scholarships/>

Career fairs at the college are held at least once a year.

The CoAD Alumni Organization is also actively involved in supporting the students:

<https://www.uhcoadconnexion.com/>

<https://www.uh.edu/architecture/alumni/resources/>

The College offers internships in Barcelona, Spain. An internship program with Austria is in the development phase in cooperation with the TU Graz:

<https://www.uh.edu/architecture/discover/>

The University offers wellness programs to all students:

<https://uh.edu/wellness/programs/mental-health/meditation/index>

5.5 Social Equity, Diversity, and Inclusion

The program must demonstrate its commitment to diversity and inclusion among current and prospective faculty, staff, and students. The program must:

5.5.1 Describe how this commitment is reflected in the distribution of its human, physical, and financial resources.

FACULTY LIST

2020-2021

Tenured/tenure-track/PE NTT faculty

Larry Bell, AIAA, ASCE	1978	Space Architecture	Professor
Rafael Beneytez-Duran, Ph.D, R.A.	2019	Architecture	Associate
Gail Peter Borden, FAIA, NCARB	2017	Architecture	Professor
Geoffrey Brune, FAIA	1986	Architecture/H Pres.	Professor
Alan Bruton, NCARB, NCIDQ	2016	Interior Architecture	Associate



George Chow	2016	Industrial Design	Assistant
Joe Colaco, Ph.D., ASCE	1983	Architecture	Professor
Tom Diehl, AIA	1987	Architecture	Associate
Jeffrey Feng, IDSA	2012	Industrial Design	Associate
Dietmar Froehlich, RA	1996	Architecture	Professor
Michael Gonzales, RA	2020	Architecture	Associate/PE
Meg Jackson	2020	Architecture	Associate/PE
Matt Johnson, AIA	2009	Architecture	Associate
Donna Kacmar, FAIA	2000	Architecture	Professor
Min Kang	2021	Industrial Design	Assistant
Mark Kimbrough,	2018	Industrial Design	Associate/PE
Michael Kubo, Ph.D.	2017	Architecture	Assistant
Andrew Kudless	2020	Architecture	Professor
Mili Kyropoulou	2020	Architecture	Assistant
Jason Logan	2020	Architecture	Associate/PE
Rafael Longoria, DPACSA, RA	1988	Architecture	Professor
Patrick Peters, RA	1987	Architecture	Professor
Ziad Qureshi	2015	Interior Architecture	Assistant
Bruce Race, Ph. D., FAIA, FAPA	2015	Architecture/Urban	Professor
Deepa Ramaswamy, Ph.D.	2021	Architecture	Assistant
Shafik Rifaat, FAIA	1974	Architecture	Professor
Marta Rodriguez, Ph.D.	2014	Architecture	Assistant
Susan Rogers	2004	Architecture	Associate
Ronnie Self, RA	1998	Architecture	Professor
Sheryl Tucker de Vasquez	2020	Architecture	Associate/PE
William Truitt, RA	2001	Architecture	Associate
Adam Wells	2020	Industrial Design	Associate/PE
Peter Zweig, FAIA	1980	Architecture	Professor

PROFESSORS: 13, ASSOCIATE: 7, ASSOCIATE PE/NTT: 6, ASSISTANT: 7
RA/FAIA/AIA 15

adjunct faculty

Vera Adams	Architecture	Full time
Kevin Barden, AIA	Architecture	Part time
Robert Burrow	Architecture	Part time
Sharon Chapman	Architecture	Full time
David Chlebus	Architecture	Part time
Curtis Davis, RA	Architecture	Part time
Amanda Dean , PE	Architecture	Part time
Peter Dean, PE	Architecture	Part time
Karim Fakhry	Architecture	Part time
Joseph Fong	Architecture	Part time
Sofia Fonseca	Architectre/IA	Part time
Stephen Fox	Architecture	Part time
Victoria Goldstein, AIA	Architecture	Part time
Tania Gutierrez Monroy, Ph.D.	Architecture/Scholar	Full time
Jesse Hager	Architecture	Part time
Dijana Handanovic, Assoc. AIA	Architecture	Full time
Daniel Jacobs, RA	Architecture	Full time
Sofia Krimizi, RA	Architecture	Part time



Kyriakou Kyriakos, RA	Architecture	Part time
Brandie Lockett	Architecture	Part time
MAIO	Architecture	Part time
Ophelia Mantz	Interior Architecture	Part time
Amna Ansari Martinez, AIA	Architecture	Part time
Elliott Martinez	Industrial Design	Part time
Marcus Martinez, Assoc. AIA	Architecture	Part time
Kelly McCormick	Industrial Design	Part time
Aaron McEuen	Industrial Design	Part time
Emily Moore, RA	Architecture	Full time
Jack Murphy	Architecture	Part time
Cara Murray	Architecture	Part time
Peter Noldt	Architecture	Part time
Asmaa Oiwi	Architecture	Part time
Luisa Orto	Industrial Design	Part time
Roya Plauche	Architecture/Int. Arch.	Full time
Paul Rivers	Architecture	Part time
Joshua Smith	Architecture	Part time
Kevin Story, AIA	Architecture	Full time
Don Sutajit	Industrial Design	Part time
Rives Taylor, FAIA	Architecture	Part time
James Thomas, FAIA	Architecture	Part time
Drexel Turner	Architecture	Full time
Steven Umbach, IDSA	Industrial Design	Part time
Josh Vanlandingham, PE	Architecture	Part time
Mario Medina Vilela, RA	Architecture	Full time
Gordon Vos, Ph.D.	Industrial Design/Int. Arch.	Part time
Ross Wienert	Architecture	Full time
Celeste Williams, RA, ASID	Industrial Design	Part time
Celeste Ponce Woodfill, AIA	Architecture	Part time
Marissa Yu, AIA, LEED AP	Interior Architecture	Part time

ADJUNCT FULL TIME: 11 PART TIME: 38

AIA/RA/FAIA: 17

emeritus faculty

Betty Bollinger	Architecture
Robert Griffin	Architecture
Joe Mashburn	Architecture
Bruce Webb	Architecture

Program Response:

The great diversity of the student body is not yet fully reflected in the makeup of the faculty body. Increased efforts are in place to diversify the faculty, so faculty members more closely reflect the student body. When hiring new faculty in the future, tenure track and adjuncts, achieving diversity will be an important part of the evaluation process.



This year we could hire two new TT faculty members who will improve the diversity of our TT faculty body. The adjunct faculty better reflects the composition of the student body after we had the opportunity to add more BIPAC faculty.

All physical and financial resources are always available for all members of the faculty, staff, and student body.

Demographics Charts provided by Institutional Effectiveness Office of the University

2. Total undergraduate/graduate architecture enrollment in NAAB-accredited program by race/ethnicity (B.Arch. and M.Arch. degree plans):

B. Architecture Total Enrollment:

	Male		Female		Total		Grand Total
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	32	16	45	16	77	32	109
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
Black or African American	12	7	14	7	26	14	40
Hispanic/Latino	101	76	117	58	218	134	352
White	34	24	54	16	88	40	128
Two or more races	6	2	4	2	10	4	14
Nonresident alien	14	6	16	3	30	9	39
Race and ethnicity unknown	3	4	6	0	9	4	13
TOTAL	202	135	256	102	458	241	695

M. Architecture Total Enrollment:

	Male		Female		Total		Grand Total
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	1	1	2	0	3	1	4
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0

Black or African American	2	0	3	0	5	0	5
Hispanic/Latino	6	0	14	1	20	1	21
White	4	0	6	0	10	0	10
Two or more races	0	0	1	0	1	0	1
Nonresident alien	1	0	3	0	4	0	4
Race and ethnicity unknown	0	0	0	0	0	0	0
TOTAL	14	1	29	1	43	2	45

a. Full-time Instructional Faculty

Those members of the instructional/research staff who are employed full time and whose major assignment is instruction, including those with release time for research. Includes full-time faculty for whom it is not possible to differentiate between teaching, research, and public service because each of these functions is an integral component of his/her regular assignment.

Professor

	Tenured		Tenure-Track		Non-Tenure Track		TOTAL		Grand Total
	Male	Female	Male	Female	Male	Female	Male	Female	
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	1	0	0	0	0	0	1	0	1
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	10	1	0	0	0	0	10	1	11
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	11	1	0	0	0	0	11	1	12



Associate Professor

	Tenured		Tenure-Track		Non-Tenure Track		TOTAL		Grand Total
	Male	Female	Male	Female	Male	Female	Male	Female	
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	1	0	0	0	0	0	1	1
White	3	1	0	0	0	0	3	1	4
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	1	0	0	0	0	0	1	0	1
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	4	2	0	0	0	0	4	2	6

Assistant Professor

	Tenured		Tenure-Track		Non-Tenure Track		TOTAL		Grand Total
	Male	Female	Male	Female	Male	Female	Male	Female	
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	1	1	0	0	1	1	2
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0

Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	1	1	0	0	1	1	2

b. Part-Time Instructional Faculty

Professor

	Tenured		Tenure-Track		Non-Tenure Track		TOTAL		Grand Total
	Male	Female	Male	Female	Male	Female	Male	Female	
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

Associate Professor

	Tenured		Tenure-Track		Non-Tenure Track		TOTAL		Grand Total
	Male	Female	Male	Female	Male	Female	Male	Female	
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0



White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

Assistant Professor

	Tenured		Tenure-Track		Non-Tenure Track		TOTAL		Grand Total
	Male	Female	Male	Female	Male	Female	Male	Female	
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

c. Adjunct Faculty

Non-tenure track faculty service in a temporary or auxiliary capacity to teach specific courses on a course-by-course basis. Includes both faculty who are hired to teach an academic degree-credit course and those hired to teach a remedial, developmental or ESL course; whether the later three categories earn college credit is immaterial. Excludes regular part-time faculty, graduate assistants, full-time professional staff who may teach individual courses (such as the dean or academic advisor) and appointees who teach non-credit courses exclusively).

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers and do not include dollar signs (\$) or commas. A person can only be counted in one group.

	TOTAL		
	Male	Female	Grand Total
American Indian or Alaska Native	0	0	0
Asian	2	0	2
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	1	1
Hispanic/Latino	3	2	5
White	18	7	25
Two or more races	0	1	1
Nonresident alien	0	2	2
Race and ethnicity unknown	0	0	0
TOTAL	23	13	36

5.5.2 Describe its plan for maintaining or increasing the diversity of its faculty and staff since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program’s faculty and staff demographics with that of the program’s students and other benchmarks the program deems relevant.

Program Response:

The College has been successful in increasing the diversity of the faculty since the last accreditation cycle.

The College views faculty diversity as requisite to building a strong design school and is committed to improving the ethnic and gender diversity of its faculty. Aggressive, focused faculty hires have resulted in our increasing the number of minority tenure track/tenured faculty members existing in the college, as well as more female faculty members. The three new tenure track appointments made in Architecture across the last seven years have included two women, both of minority classification. The College, when conducting another search, will seek to continue to increase the number of minority members of its faculty body.

To ensure exposure to a diverse audience, the College advertises for faculty positions in ACSA Web listings, Archinect, NOMA web ad, Dezeen Jobs, Academic Keys, Association of Women in Architecture, Architizer, and Coroflot. In addition to these ad locations, the College sends notifications to all deans/department heads of ACSA member schools to inform them of the posting.

The great diversity of the student body is not fully reflected in the makeup of the faculty body yet. Increased efforts are in place to diversify the faculty, so it more closely reflects the student body. When hiring new faculty in the future, tenure track and adjuncts, achieving diversity will be an important part of the evaluation process.

This year we could hire two new TT faculty members, both minorities, one of them female, who will increase the diversity of our TT faculty body. The adjunct faculty better reflects the composition of the student body after we had the opportunity to add more BIPAC faculty.



NAAB_ARS_Part_1_UniversityofHouston_20

The staff of the College is already very diverse (Hispanic, Asian, White, African American), with a female majority.

5.5.3 Describe its plan for maintaining or increasing the diversity of its students since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program's student demographics with that of *the institution and other benchmarks the program deems relevant*.

Program Response:

The student undergraduate student population has grown dramatically since the last accreditation cycle: from 438 to 695, with Hispanic/Latino growing from 204 to 352. The graduate student population has declined from around 65 to 45 but is on the rebound this fall semester with an enrollment of about 70.



NAAB_ARS_Part_1_UniversityofHouston_20

The diverse composition of the student body has been maintained. The number of UG African American students could be increased from around 13 to about 40.

Maintaining and even increasing the diversity of the undergraduate student body is well on its way with the City of Houston, the main pool we draw from, being a guarantor of diversity.

The graduate student body has seen an increase in Hispanic/Latino student, and a slight decrease of white students. The number of African American students is on the rise as well. Recruiting efforts among the various minorities will have to be intensified in order to keep diversifying the graduate student body.

The programs' student body as a whole more closely mirrors the University's.

5.5.4 Document what institutional, college, or program policies are in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA), as well as any other social equity, diversity, and inclusion initiatives at the program, college, or institutional level.

Program Response:

Both the University and the CoAD have initiated and created DEI Task Forces that produced reports and action items over the last year. At the CoAD, the DEI Task Force is



now working on the implementation of the 45 points that were the result of their investigation and documented in their report.

The new College Culture Statement also addresses diversity, equality, and inclusion.

The hiring process of new faculty is guided by the EEO/AA rules. Each member of the search team has to undergo EEO/AA training provided by the University.

<https://uh.edu/diversity-equity-inclusion/>

University of Houston Diversity and Inclusion Statement

The University of Houston embraces diversity and recognizes our responsibility to foster an open, welcoming environment where students, faculty and staff of all backgrounds can collaboratively learn, work, and serve. We value the academic, social, and broader community benefits that arise from a diverse campus and are committed to equity, inclusion, and accountability. Diversity enriches our University community and is a driving force instrumental to our institutional success and fulfillment of the University's mission. We commit to engaging in an ongoing dialogue to thoughtfully respond to the changing realities of our increasingly interconnected world. We will continually strive to work together to address the challenges of the future in a way that removes barriers to success and promotes a culture of inclusivity, compassion, and mutual respect. The competencies gained through diverse experiences across campus prepare all of our students, staff, and faculty to thrive personally and professionally in a global society.

Together, the University community decided we want to serve as an exemplar for equitable and inclusive community engagement. As part of the UH Strategic Plan's social responsibility goal, we identified five key strategies to help us foster equity and inclusion in our community:

- Achieving Health Equity
- Strengthening Community Partnership
- Creating a Culture of Volunteerism
- Seeking Social Justice and Racial Equity
- Supporting Freedom of Expression

<https://www.uh.edu/equal-opportunity/>

<https://www.uh.edu/architecture/about/diversity-equity-and-inclusion/dei-action-task-force/>

DEI Action Task Force

The DEI Action Task Force was created by Dean Oliver in spring 2021 and is currently active. The purpose of the task force is to monitor and address all 45 recommendations from the [DEI report](#). Membership consists of students, faculty, and staff in positions with the ability to enact change in areas surrounding the recommendations:

Rafael Longoria, Chair
Rafael Beneytez-Durán
Gail Borden
George Chow
Drake Flood
Dietmar Froehlich
Javier Guerrero



*Sarah Holloway
Michael Kubo
Andrew Kudless
Estelle Lee
Patricia Oliver
Trang Phan
Ziad Qureshi
Cynthia Sac
Stephen Schad
Sheryl Tucker de Vazquez
Sarah White*

<https://www.uh.edu/architecture/about/diversity-equity-and-inclusion/events-and-statements/>

<https://www.uh.edu/architecture/culture/>

5.5.5 Describe the resources and procedures in place to provide adaptive environments and effective strategies to support faculty, staff, and students with different physical and/or mental abilities

Program Response:

The University has a set of policies in place to ensure adaptive environments and strategies to support faculty, staff, and students with different physical and/or mental abilities. The College and the programs follow these guidelines.

The College is wheelchair accessible, there are ramps toward the entry doors, elevators to each floor, and ADA-compliant restrooms.

Studio space is open and easily accessible. The classrooms and the theater have specific spaces for wheelchair-bound persons.

If needed, a sign language interpreter is available.

504 accommodation is available for all.

The development of recordings of lectures that are adapted for the hearing-impaired is in its infant stages.

“Quiet” spaces with comfortable seating have been created to allow for a relaxed break from classes.

<https://www.uh.edu/equal-opportunity/ada/index.php>

ADA Policies: Student & Employee

Academic Accommodations for Students

In accordance with the University of Houston System (UHS) [Student Academic Adjustments/Auxiliary Aids Policy](#), it is the policy of the UHS that all students who have a disability are afforded equal academic opportunities in compliance with federal and state laws.

If you are a student and would like to request an academic accommodation, please contact the [Center for Students with Disabilities \(CSD\)](#) at 713-743-5396.

Workplace Accommodations for Employees

In accordance with the University of Houston System (UHS) [Reasonable Workplace Accommodations for Employees with Disabilities Policy](#), the ADA Coordinator in the Office for Equal Opportunity Services is responsible for coordinating reasonable accommodation request(s) for job applicants, faculty, staff, and student employees with disabilities. EOS works with employees and their supervisor(s) to identify appropriate and reasonable accommodations that enable employees with disabilities to perform the essential functions of their job. To request a workplace accommodation, please contact the ADA Coordinator at 713-743-8835 or via e-mail at eos@uh.edu.

<https://www.uh.edu/equal-opportunity/ada/policies/policy-students/>

<https://www.uh.edu/equal-opportunity/ada/policies/policy-employees/>

ADA Resources

Reasonable Workplace Accommodations

When an employee makes a request for a reasonable accommodation which involves job performance, EOS works with the employee and the employee's supervisor to ensure that an appropriate accommodation is provided, which meets the individual's disability-related needs and enables the individual to perform the essential functions of their position. In addition to consulting with their medical provider, an employee may find the [Job Accommodation Network \(JAN\)](#) a helpful resource for learning more about the Americans with Disability Act (ADA) and exploring accommodation options. The [U.S. Department of Labor \(DOL\)](#) is another excellent resource for seeking more information about workplace accommodations.

Web Accessibility

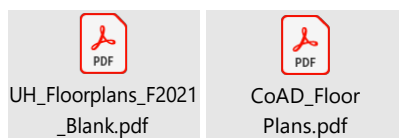
The University of Houston is committed to ensuring that web and electronic communications on www.uh.edu and official university websites are accessible to individuals with disabilities. UH uses the guidelines and standards for web presence under Section 508 of the Rehabilitation Act and the WCAG 2.0 AA Standards. If you encounter a general error or issue with accessing information on UH webpages, please contact the [EIR Coordinator](#) by phone at 713-743-8835 or by email at eos@uh.edu. We will make reasonable efforts to address the issue as soon as possible.

5.6 Physical Resources

The program must describe its physical resources and demonstrate how they safely and equitably support the program's pedagogical approach and student and faculty achievement. Physical resources include but are not limited to the following:

5.6.1 Space to support and encourage studio-based learning.

Program Response:



The studio-based learning takes place on three floors of the building. The second floor is mainly dedicated to freshman and sophomore studios (ARCH 1500, 1501, 2500, 2501).

The third floor serves as the space for mid-level undergraduate and graduate Architecture studios. The south floor accommodates UG studios mixed with Interior Architecture and Industrial Design sections. This facilitates easier cross-disciplinary interaction and cooperation. The north part of the floor is home to the Architecture graduate studios. These may take the form of vertical studios (ARCH 7600/5500), with undergraduate and graduate students experiencing advanced studio work and often working in teams. The fourth floor host mid-level and upper-level studio spaces. All three floors have an open office layout allowing for discussion and communication across the various program levels. The fourth floor has an additional separate space for upper-level undergraduate architecture students. That contained and lockable space faces a wide corridor used for pinups. There is a similar space for GR Industrial Design students opposite the architecture studio room.

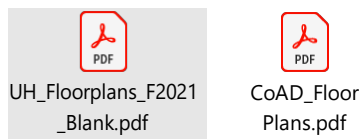
Numerous metal lockers, about 2.5-feet wide and 7.5-feet tall, used to divide the individual studio sections for many years. This limited the transparency of the original studio floors. Fortunately, the antiquated and obstructive lockers were removed this summer, freeing up about 2,000-square feet of floor space—much needed as the student population is growing at a fast rate. The locker removal enables the college to seat more students, but also allows the students and faculty to re-imagine their environment. Beginning in Fall 2021, we will be involving the students in design challenges regarding their new studio environment.

Each student has a desk and a newly purchased personal file cabinet.

WiFi is available in the whole building with boosters installed on every floor.

5.6.2 Space to support and encourage didactic and interactive learning, including lecture halls, seminar spaces, small group study rooms, labs, shops, and equipment.

Program Response:



In addition to the studio space distributed over three floors, the Architecture building houses an array of seminar rooms and smaller spaces equipped for lecturing. A large auditorium that seats an audience of 222 is utilized for lectures delivered to large student groups. Most of the seminar rooms are equipped with electronic devices that allow for synchronous online delivery. The building is home to five General Purpose Classrooms that host other colleges as well. The CoAD has first dibs on these rooms.

The building has a gallery space on the first floor that can also be used for juries and student exhibit. A separate enclosed jury space is located on the third floor. A large space on the first floor can be used as lecture room or jury space if needed. This space, room 143, has an adjoining lockable storage area. Room 143 is also accessible from the

loading dock of the building. Additional jury spaces and pinup areas are distributed on the atrium-facing periphery of all the studios.

The Computer Lab on the third floor allows students to work on desktops that are equipped with all the software needed in studio or courses. The Architecture Computer Lab offers a variety of programs on the Windows platform allowing students to create drawings, BIM models, parametric models, and solid models. There are over 40 computers, 11x17 scanners, a large-format scanner, two printers, and five plotters to allow students to conceptualize and realize their creative designs. Wireless connections are available for all students, faculty, and guest throughout the Architecture Building. Students also have Wi-Fi throughout the campus. Additionally, there are several areas where users have access to wired connections. There are 50 Windows PCs available for general student use with the software packages including, among others, Adobe Creative Suite, Autodesk Educational Suite, Microsoft Office, Rhino w/vray, Solidworks, Sketchup, and various other minor packages.

Output available to students: five up to 42" plotters, two up to 11x17 printers, PC scanners, and one large-format scanner. Also, there are 10 PCs in the Keeland Design Center that allow use of two Roland Routers, a MultiCAM router, 3D printer, and two laser cutters all for prefab and fabrication projects.

The computer lab is also used as a teaching lab for media courses. A recording studio for online content is located on the fourth floor. On the same floor, part of the 3D printer farm is currently housed. Once the printer farm moves back into the Keeland Building, the room will revert to its function as a seminar space. Two smaller spaces on the fourth floor are utilized as VR/AI labs.

The first floor (the atrium floor) hosts the Jenkins Art and Architecture Library, a branch of the University MD Anderson Library which includes a rare book collection, reading areas, book scanning stations, and computers.

The Joe Mashburn Gallery houses exhibits and serves as a jury space. The theater and the large auditorium are also located on this level. The Community Design Research Center (CDRC) has its offices and exhibit space adjacent to the library.

The Student Advisory Offices and the Dean's Office are also located on the atrium floor. The Student Services Office, located in Suite 151, is open to students needing assistance with advising, academic concerns, and student affairs. The college supports two full-time advisors who report to the Assistant Dean.

The Allen Rudge Media Room is accessed from the first floor. This room is an original design by Ant Farm and was donated to the College. It serves as a media/film presentation space.

Access to the loading dock is through the corridor on the east side of the building.

The Keeland Design Center is housed in its own building some 100 feet to the northeast of the main building. The building's resources and equipment are all available to the students. The staff will assist the students if needed.

The Keeland Center houses The Graduate Design/Build Studio and the latest equipment to accommodate digital fabrication projects for architecture, industrial design, and interior

architecture students. The facility provides traditional “shop” equipment and tools and its digital fabrication equipment allows students to produce objects and prototypes designed and generated on computers using 3D software. CNC machines and rapid prototyping equipment conserve time and encourage exploration of new methods for manufacturing. A spray booth is part of this “making” facility as well.

The Keeland Design Center is crucial for developing the Graduate Program’s Design Build program’s projects

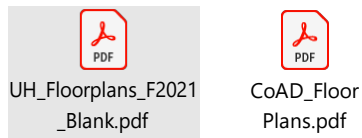
The new Advanced Media Technology Lab, housed in the office and classroom part of the new garage to the North of the Architecture Building, will be another state-of-the-art resource and learning center once it is fully equipped with robots and 3D printers amongst other high-tech manufacturing devices. The Advanced Media Technology Lab (AMTL) supports the Gerald D. Hines College of Architecture and Design in pursuing innovative research in design and fabrication technologies. We value the critical engagement of technology in contemporary design and architecture and look for ways new technologies can augment how we design, build, and live.

The materials collection of the Materials Research Collaborative is located on the second floor and serves as a teaching space as well.

The Materials Research Collaborative (MRC) at the CoAD serves as a materials resource for material discovery, innovation, instruction, and research for the 970 students at the Gerald D. Hines College of Architecture and Design as well as area professionals. The MRC has developed a web-based database that catalogs the physical materials in its collection. Ongoing work of the MRC includes uncovering new and innovative materials, cataloging the physical samples, and researching and inputting data regarding the specific extrinsic and intrinsic properties of these materials. The MRC is also engaged in specific material research projects such as a database of local materials and carbon analysis of an office building currently under construction. This work is funded by our Founding Partners: Page Southerland Page, Kendall/Heaton, and Gensler and our supporters: Architecture Center Houston Foundation, the University of Houston Green Building Components program, Skanska USA, the University of Houston Gerald D. Hines College of Architecture, and the University of Houston Faculty Development Department.

5.6.3 Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.

Program Response:



All Tenure/Tenure Track faculty have their own office in the Architecture Building. Every TT faculty member has been equipped with laptop, software, and various peripherals such as printers or scanners.

PNTT and adjunct faculty have shared office space. The offices are mainly on the third and second floor on the east and west wings of the building immediately after the studio areas.

Preparation for the classes take place either in the individual offices or the shared offices. Most adjunct faculty will also work on the class preparations at home. Research is conducted in various ways and from various locations: either in an assigned individual office or a shared office, from the library, or from off-campus locations. The small seminar rooms are used as bases for conducting research and exchanging ideas.

The newly created recording studio on the fourth floor allows for preparing online lectures and live broadcast to students.

The Computer Lab is open to faculty and students.

The Jenkins Art and Architecture Library (and all the other library locations on campus) provide space and resources for preparing lectures and conducting research. The library staff assists when needed.

The Keeland Design Center is open for faculty as well, offering tools, space, and staff assistance if needed.

Mentoring students takes on many forms and is done in studio after the class is over, in the faculty office, or other rooms available at the time.

Student advising by the advisor is conducted in the advising offices on the first floor or online.

The conference room in the Office of the Dean serves as meeting space for committees and task forces.

The IT staff is always available to assist with software and computer issues.

5.6.4 Resources to support all learning formats and pedagogies in use by the program.

Program Response:

The college provides open studio space on three floors, seminar rooms, a large lecture theater, and computer labs to allow for different forms of learning formats and pedagogies.

Seminar rooms and lecture theater are equipped to allow for live and synchronous online presentations.

The Keeland Design Center offers woodworking and steel working tools and workstations, 3D printing facilities, a spray booth, and other manufacturing equipment.

The Computer Lab has all the relevant design software installed on its machines.

The MRC allows for a place to explore materials.



The CDRC is engaging communities outside the academic environment and helps students learn how to foster client relationships.

Study abroad programs and exchange agreements offer opportunities to experience different cultures. These opportunities are being expanded continuously.

If the program's pedagogy does not require some or all of the above physical resources, the program must describe the effect (if any) that online, off-site, or hybrid formats have on digital and physical resources.

Program Response:

Prompted by the COVID-19 pandemic and the pivot toward online instruction, an upgrade of the computers in the college was initiated and is still underway.

General Purpose Classrooms (150, 209,215,219,402) and other seminar rooms have been equipped with cameras and microphones for the PCs installed at the lecterns by the University so they could and can be utilized for HYflex instruction. Projectors have been upgraded in the GP rooms as well.

A recording studio for livestreaming classes and pre-recording of instructional material has been installed in a fourth-floor seminar room and is available to all faculty to prepare online lectures or livestream classes. IT staff are available to assist all faculty.

5.7 Financial Resources

The program must demonstrate that it has the appropriate institutional support and financial resources to support student learning and achievement during the next term of accreditation.

Program Response:

In 2016 when we produced our Five-year College Strategic Plan, we included a section on Human Resources explaining the need for growth in faculty and in staff within the College. Over the last 12 years, we have held steady at 23-25 tenured/tenure-track faculty for all programs. Our student enrollment has grown from 767 to 987, and yet our faculty remains at 25. We were able to add an Alumni Affairs Director, a Director of Marketing and Communications, and a Web Designer/Videographer, but we have not added advisors, etc. The Provost is aware of our need, but has not been able to help us as much as she would like. The pandemic did not help this situation, creating a 5.7% budget cut and an end-of-year 25% sweep of funds.

The situation with our staff is equally dire. We have just lost two advisors, placing the full load of advising on our Assistant Dean. While we will fill those positions, we are short of our true need in this area. The Appendix A.1.1 of our Strategic Plan draws comparisons with our College and other University of Houston Colleges of similar size. In 2021, this situation has not improved. In a recent meeting with the Provost, I pointed out these inconsistencies once again.

Allocation of resources is a many-stage process. The by-laws state that the Dean must present the annual budget to the Steering Committee. This gives opportunity for the members of the Steering Committee to confer with their peers and make requests through their directors or coordinators. The Dean holds monthly meetings both individually and collectively with the program directors. The directors may make proposal or requests at any point in the year. If the request is something that the Dean can fund from the discretionary account, that is not tied to a



specific deadline. If the request is for a new position, that request can only be made when the Provost has the ability to fund faculty lines. When lines are available, the Dean will make a budget request and will supply a budget narrative to support the request. This usually occurs in late spring. If we are in a legislative year, the budgeting process can be as late as July or August.

Long-term funding priorities are established through our strategic planning process. We set certain goals and then all efforts of fundraising and budget adjustment are channeled to fund those goals. An example would be our Advanced Media Technology Laboratory. It was a priority in our 2016 strategic plan. We raised money to build it in 2017. Phase I was built, but the pandemic caused us to lose our partner for Phase II. Nevertheless, we managed to raise \$1 million dollars to endow the William Kendall Professorship for the new director of the lab. Fundraising efforts are ongoing. Through our 75th Anniversary Gala, we have been able to raise over \$330,000 to date this year to support the new lab.

There are many grant funds available for new faculty through the University and through the Department of Research. There is also encouragement by the University for the support of Undergraduate Research, with annual awards programs and exhibitions. The College is continually raising money for scholarships. Currently, there are 28 scholarships in the College of Architecture and Design.

Our enrollment in the College has steadily increased over the years. We are right at the point where we will not be able to increase our enrollment going forward unless there additional space is made available. The Dean is currently working with the leadership at the University of Houston at Sugar Land to acquire 8,000-square-foot of lab space when the new Technology building is constructed on that campus. The building was not funded in this legislative year, so we are hopeful for 2023.

The University is working to recover from the impact of the pandemic. The College experienced a 5.7% budget reduction in 2020-2021, which was very painful. That cut was accompanied by a 25% sweep of funds at the end of the year. This will likely be an annual phenomenon. This occurred on the heels of the University's largest fundraising effort in history with a successful \$1.2-billion-dollar campaign.

Despite this, there was a call for proposals for two programs: the "Frontier Faculty" Initiative and the "Key Initiatives" program. The Frontier Faculty Initiative was funded at \$22 million. Our College put three proposals forward, one in collaboration with the College of Engineering, the Law Center, the Hobby School for Public Affairs, and the Bauer College of Business. For the Key Initiatives call, we also submitted three proposals. If we are successful with any one of our proposals, a functioning staff position is a component of the proposal.

In addition to the two capital projects mentioned above, the Advanced Media Technology Lab and the additional studio space at UH Sugar Land, we have begun to lay groundwork for a new building. We would like very much to expand our program offerings with the addition of an Urban Design program, possibly a Landscape Architecture program, a program in 20th Century Preservation, and a program in Advanced Media Technology. We also have interest in expanding our Industrial Design program to include a more robust program in Health Product, furniture design, and possibly transportation design.

The 75th Anniversary Gala on 9 October 2021 is a fundraiser event that will contribute financially to the various goals of the College.



The William Kendall Memorial Endowed Professorship is the first endowed professorship at the Hines College.

The College benefits from the William F. Stern Visiting Professor Endowment. In 2019, Gerald D. Hines pledged \$1 million to fund our Advanced International Studio at \$100,000/year to allow us to help faculty and students travel, produce an exhibition, and a book for each three-year studio.

The Sally Walsh Endowed Professorship is being developed.

Revenue Expense Summary_FY21

Description	FY 2021		Notes
	Revenue	Expenses	
State Education & General	\$ 3,814,726.78	\$ 3,582,741.63	All Fund one excluding Faculty Startup (Row 8)
Designated Tuition & Other Fees	\$ 3,836,286.03	\$ 2,936,352.50	2064, 2063 and 2170
Sales & Services - E & G	\$ 783,711.73	\$ 213,614.74	2078
Private Gifts	\$ 629,557.97	\$ 149,287.68	all 4041 Gifts
Endowment Income Distribution	\$ 291,255.00	\$ 171,747.94	
Faculty Grants	\$ 70,105.49	\$ 38,411.12	Internal UH Grants only
Faculty Research Grants	\$ 87,263.60	\$ 30,069.18	Fund 5 excluding residual funds
Others	\$ 38,048.58	\$ 4,096.42	All other misc funds including IDC
Total			

Endowments_F21

Fund	Revenue	Expense
4028	\$ 19,245.00	\$ 18,162.00
4042	\$ 272,010.00	\$153,585.94
Total	\$ 291,255.00	\$171,747.94

Scholarships_FY21

Fund	Revenue	Expense
4027	\$ 30,200.00	\$ 98,150.00
4028	\$ 19,245.00	\$ 18,162.00
4042 (Hines Endowment)		\$ 3,000.00
Total	\$ 49,445.00	\$ 119,312.00

There are no planned increases or reductions in enrollment other than the long-range goal of increasing graduate students, with a corresponding reduction in undergraduates. The goal is to increase graduate enrollment to approximately 100 students.

5.8 Information Resources

The program must demonstrate that all students, faculty, and staff have convenient and equitable access to architecture literature and information, as well as appropriate visual and digital resources that support professional education in architecture.

Program Response:

The students, faculty, and staff of the Gerald D. Hines College of Architecture and Design benefit from an on-site library dedicated to research in architecture, design, and the visual arts. The library contains a sizeable collection of nearly 100,000 monographs, current and historical journals, circulating design supplies, visual and digital resources, and access to databases, electronic resources, and streaming media. The library facility also houses the Kenneth Franzheim II Rare Books Room, which provides access to rare and primary materials, such as 18th century texts by Piranesi and first editions by modern masters like Gropius, Corbusier, and Mendelsohn. The staff of three specialists offers a robust suite of support services, including interlibrary loans, course reserves, citation management assistance, and technology/software access. Library services are embedded into the curriculum, which gives the staff ample opportunities to contribute to student success. Embedded instruction is delivered in classroom lectures, librarian-led consultations, and library tours/workshops. Library circulation and usage is relatively high. LibQual survey data from the past fifteen years indicate near-universal satisfaction with library services. Both students and instructors were typically more satisfied with library staff than those in any other academic program at the University of Houston. The collection budget is supported by endowments totaling nearly \$20,000. Faculty and students may also request new materials, which are always acquired if available.

While the library faces no significant problems, space limitations must be alleviated with periodic weeding. Materials with minimal or no usage are transferred to the central library, the M.D. Anderson Library, where patrons may continue to access them.

Opening Hours:

8-8 Mon/Tues/Wed/Thurs

8-5 Fri

1-5 Sat/Sun

Further, the program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resource professionals who provide discipline-relevant information services that support teaching and research.

Program Response:

Students, faculty, and staff have access to our architecture librarians and visual resource professionals who provide discipline-relevant information services that support teaching and research. The opening hours of the in-house Jenkins Art and Architecture Library (see above) allow for continuous access to the physical and technical resources such as computers and scanners, as well as the staff of the library and their expertise.



6—Public Information

The NAAB expects accredited degree programs to provide information to the public about accreditation activities and the relationship between the program and the NAAB, admissions and advising, and career information, as well as accurate public information about accredited and non-accredited architecture programs. The NAAB expects programs to be transparent and accountable in the information provided to students, faculty, and the public. As a result, all NAAB-accredited programs are required to ensure that the following information is posted online and is easily available to the public.

6.1 Statement on NAAB-Accredited Degrees

All institutions offering a NAAB-accredited degree program or any candidacy program must include the exact language found in the NAAB Conditions for Accreditation, 2020 Edition, Appendix 2, in catalogs and promotional media, including the program's website.

Program Response:

The information regarding NAAB accreditation is available on the CoAD website.

<https://www.uh.edu/architecture/about/accreditation/>

Accreditation

The College of Architecture and Design is a member of the [Association of Collegiate Schools of Architecture](#) (ACSA) and is accredited by the [National Architectural Accrediting Board](#) (NAAB).

As Noted by the NAAB:

In the United States, most registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit professional degree programs in architecture offered by institutions with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year term, an eight-year term with conditions, or a two-year term of continuing accreditation, or a three-year term of initial accreditation, depending on the extent of its conformance with established education standards. Doctor of Architecture and Master of Architecture degree programs may require a non-accredited undergraduate degree in architecture for admission. However, the non-accredited degree is not, by itself, recognized as an accredited degree.

The Gerald D. Hines College of Architecture and Design at the University of Houston offers the following NAAB-accredited degree program(s):

Bachelor of Architecture

Track: 160 undergraduate semester credit hours.



Master of Architecture

Track I: Undergraduate degree with architecture major + 60 graduate semester credit hours.

Track II: Undergraduate degree with non-architecture major + 99 graduate semester credit hours.

Next visit for all three accredited programs: Spring 2022.

6.2 Access to NAAB Conditions and Procedures

The program must make the following documents available to all students, faculty, and the public, via the program's website:

- a) Conditions for Accreditation, 2020 Edition
- b) Conditions for Accreditation in effect at the time of the last visit (2009 or 2014, depending on the date of the last visit)
- c) Procedures for Accreditation, 2020 Edition
- d) Procedures for Accreditation in effect at the time of the last visit (2012 or 2015, depending on the date of the last visit)

Program Response:

Access to the following documents is provided via the CoAD website:

<https://www.uh.edu/architecture/about/accreditation/>

- a) Conditions for Accreditation, 2020 Edition
- b) Conditions for Accreditation in effect at the time of the last visit (2009) – last visit was in Spring 2014
- c) Procedures for Accreditation, 2020 Edition
- d) Procedures for Accreditation in effect at the time of the last visit (2012) – last visit was in Spring 2014

6.3 Access to Career Development Information

The program must demonstrate that students and graduates have access to career development and placement services that help them develop, evaluate, and implement career, education, and employment plans.

Program Response:

Students and graduates have access to career development and placement services via the University and CoAD websites:

<https://uh.edu/ucs/students/career-resources/>

<https://www.uh.edu/architecture/alumni/resources/>

<https://www.uh.edu/architecture/current-students/career-resources/>



Career & Internship Resources

The College of Architecture and Design (CoAD) and the University Career Services (UCS) office are focused on helping current CoAD students prepare for their future careers. UCS plays a key role by assisting students in various ways that include:

- [Get Resume Support](#)
- [Meet with a Counselor](#)
- [Career Resources](#)
- [Workshops](#)
- [Attend an Event](#)
- [Student Employment](#)
- [Cougar Pathway](#)
- [Alumni Career Services](#)

6.4 Public Access to Accreditation Reports and Related Documents

To promote transparency in the process of accreditation in architecture education, the program must make the following documents available to all students, faculty, and the public, via the program's website:

- a) All Interim Progress Reports and narratives of Program Annual Reports submitted since the last team visit
- b) All NAAB responses to any Plan to Correct and any NAAB responses to the Program Annual Reports since the last team visit
- c) The most recent decision letter from the NAAB
- d) The Architecture Program Report submitted for the last visit
- e) The final edition of the most recent Visiting Team Report, including attachments and addenda
- f) The program's optional response to the Visiting Team Report
- g) Plan to Correct (if applicable)
- h) NCARB ARE pass rates
- i) Statements and/or policies on learning and teaching culture
- j) Statements and/or policies on diversity, equity, and inclusion

Program Response:

All the required documents are available on the CoAD website.

<https://www.uh.edu/architecture/about/accreditation/>

- a) All Interim Progress Reports and narratives of Program Annual Reports submitted since the last team visit
- b) All NAAB responses to any Plan to Correct and any NAAB responses to the Program Annual Reports since the last team visit
- c) The most recent decision letter from the NAAB
- d) The Architecture Program Report submitted for the last visit
- e) The final edition of the most recent Visiting Team Report, including attachments and addendums

- f) The program’s optional response to the Visiting Team Report
- h) [NCARB ARE pass rates](#)
- i) Statements and/or policies on learning and teaching culture
<https://www.uh.edu/architecture/culture/>
- j) Statements and/or policies on diversity, equity, and inclusion
<https://www.uh.edu/architecture/about/diversity-equity-and-inclusion/>

6.5 Admissions and Advising

The program must publicly document all policies and procedures that govern the evaluation of applicants for admission to the accredited program. These procedures must include first-time, first-year students as well as transfers from within and outside the institution. This documentation must include the following:

- a) Application forms and instructions
- b) Admissions requirements; admissions-
decisions procedures, including policies and processes for evaluation of
transcripts and portfolios (when required); and decisions regarding remediation
and advanced standing
- c) Forms and a description of the process for
evaluating the content of a non-accredited degrees
- d) Requirements and forms for applying for
financial aid and scholarships
- e) Explanation of how student diversity goals
affect admission procedures

Program Response:

- a) The forms and instructions are available on the CoAD website:
<https://www.uh.edu/architecture/future-students/undergraduate/information-sessions/>
<https://www.uh.edu/architecture/future-students/undergraduate/orientation/>
<https://www.uh.edu/architecture/future-students/undergraduate/admissions/>
<https://www.uh.edu/architecture/future-students/graduate/domestic/>
<https://www.uh.edu/architecture/future-students/graduate/international/>
- b) The directors of the programs together with faculty members evaluate the submitted material.

The applicants provide the required material as described on the CoAD website.

The directors evaluate the submitted material including SAT scores (when applicable; minimum of 1170) letter of intent, essay and portfolio if submitted (not required). The evaluation meetings have taken place via MS TEAMS during the pandemic and will

- very likely stay online as it allows for a faster and more convenient evaluation process.
- c) The CoAD does not allow credit transfer. The content of courses taken outside the college is evaluated for content by the directors and faculty.
- Graduate Students coming from a non-accredited program will have to go through the 3+ path.
- d) Students at the University of Houston have various opportunities to receive financial assistance, financial aid, and scholarship opportunities. Eligibility for some aid depends on the student's classification, residency (U.S. citizen or permanent resident versus visa holders), and financial need.
- See [Scholarships](#) page for more information.
- <https://www.uh.edu/architecture/future-students/undergraduate/links/>
- <https://uh.edu/financial/undergraduate/types-aid/scholarships/index>
- e) The pool of applicants to the undergraduate program is very diversified, no adjustment to the goals is needed at this time. It can be expected to stay at this level or even increase.
- The pool of graduate program applicants is less diversified. Recruitment efforts are used to increase the diversity of this applicant pool.

6. 6 Student Financial Information

6.6.1 The program must demonstrate that students have access to current resources and advice for making decisions about financial aid.

Program Response:

Information is provided via the College and University websites. The advisers are also a source of information for the students.

<https://uh.edu/financial/undergraduate/>

<https://uh.edu/financial/undergraduate/types-aid/scholarships/index>

<https://uh.edu/financial/undergraduate/forms/>

<https://www.uh.edu/architecture/current-students/financial-resources/> b

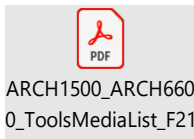
<https://uh.edu/financial/graduate/>

6.6.2 The program must demonstrate that students have access to an initial estimate for all tuition, fees, books, general supplies, and specialized materials that may be required during the full course of study for completing the NAAB-accredited degree program.

Program Response:

Students are provided with a supply list that breaks down into required and recommended supplies including laptop specifications.

Supply list:



The students have access to a Tuition Estimator and other resource guidance on the UH Website.

<https://www.uh.edu/architecture/current-students/financial-resources/>

<https://uh.edu/financial/net-price-calculator/>

<https://www.uh.edu/architecture/future-students/undergraduate/links/>

<https://uh.edu/financial/graduate/tuition-fees/>