

**UTSA** Academic Affairs

**Integrated Design Initiative – Phase II**

Integrated Design Task Force

# TASK FORCE MEMBERS

## Advisory Task Force Chair

JoAnn Browning	Dean, College of Engineering; Interim Dean, College of Architecture, Construction & Planning; Professor, Civil Engineering
----------------	--

## Advisory Task Force

Taylor Adkins	Executive Director of Development, College of Engineering
Ibukun Awolusi	Assistant Professor, Construction Science
Saadet Beeson	Associate Professor, Architecture
Janis Bush	Associate Dean for Graduate Studies, College of Sciences; Professor and Chair, Environmental Science & Ecology
Ian Caine	Associate Professor, Architecture; Director, Center for Urban and Regional Planning Research; College of Architecture, Construction & Planning Faculty Senator
Krystal Castillo	Associate Professor, Mechanical Engineering; Director, Texas Sustainable Energy Research Institute
Debaditya Chakraborty	Assistant Professor, Construction Science
Sedef Doganer	Associate Dean for Design, Inclusion, and Engaged Scholarship, College of Architecture, Construction & Planning; Chair, Architecture
Bill Dupont	Professor, Architecture; Director, Center for Cultural Sustainability
Roger Enriquez	Associate Professor, Criminal Justice and Criminology; Director, Center for Policy Studies; Executive Director, Westside Community Partnership; Representing Faculty Senate
Curtis Fish	Interim Program Co-Coordinator, Interior Design Lecturer, Architecture
Marcio Giacomoni	Associate Professor, Civil and Environmental Engineering
Bailey Greene	Student, College of Engineering, Representing Student Government Association
Albert Han	Assistant Professor, Urban and Regional Planning
Sean Kelly	Dean, Honors College; Interim Dean, College of Liberal and Fine Arts; Professor, Philosophy

# TASK FORCE MEMBERS

Dhiresha Kudithipudi	Professor and Endowed Chair, Electrical and Computer Engineering; Director, AI Consortium
Elvira Leal	Asst. Vice President, Strategic Initiatives, Community Relations
Mark Leung	Chair and Associate Professor, Management Science & Statistics
Arturo Montoya	Associate Professor, Civil and Environmental Engineering
John Murphy	Associate Vice Provost for Global Initiatives; Exec. Director, International Study Center Urbino; Interim Chair and Professor, Construction Science; Former Dean, College of Architecture, Construction & Planning
Jianwei Niu	Associate Dean, University College; Professor, Computer Science; Interim Director, School of Data Science
Neda Norouzi	Assistant Professor, Architecture
Nathan Richardson	Chair, Modern Languages and Literatures; Representing Department Chairs Council
Humberto Saenz	Assistant Professor, Art & Art History
Fidel Santamaria	Professor, Biology
Can Saygin	Senior Associate Vice President for Research; Professor, Mechanical Engineering
Hatim Sharif	Professor, Civil and Environmental Engineering
Corey Sparks	Associate Professor, Demography
Rebecca Weston	Associate Dean, Graduate School; Associate Professor, Psychology
Steve Wilkerson	Associate Vice Provost and Chief Analytic Officer, Institutional Research

# BACKGROUND

- The [Integrated Design Initiative Task Force](#) has concluded the second phase of its process. The following seven notional organizational models were developed in Phase II by three “design subcommittees” of the Task Force, based on [Phase I findings](#). Comments following each model were developed by the subcommittee that submitted the model, with additional input from the full Task Force.
- In reviewing these models, please focus on the college structures rather than potential names, which will be discussed in the final phase of the initiative (Phase III).
- Provost Kimberly Andrews Espy and Dean JoAnn Browning will now seek input on the models in meetings and forums. Questions or input on the Initiative can be sent to [IntegratedDesign@utsa.edu](mailto:IntegratedDesign@utsa.edu).
- <https://www.utsa.edu/strategicplan/initiatives/academic/integrated-design/index.html>

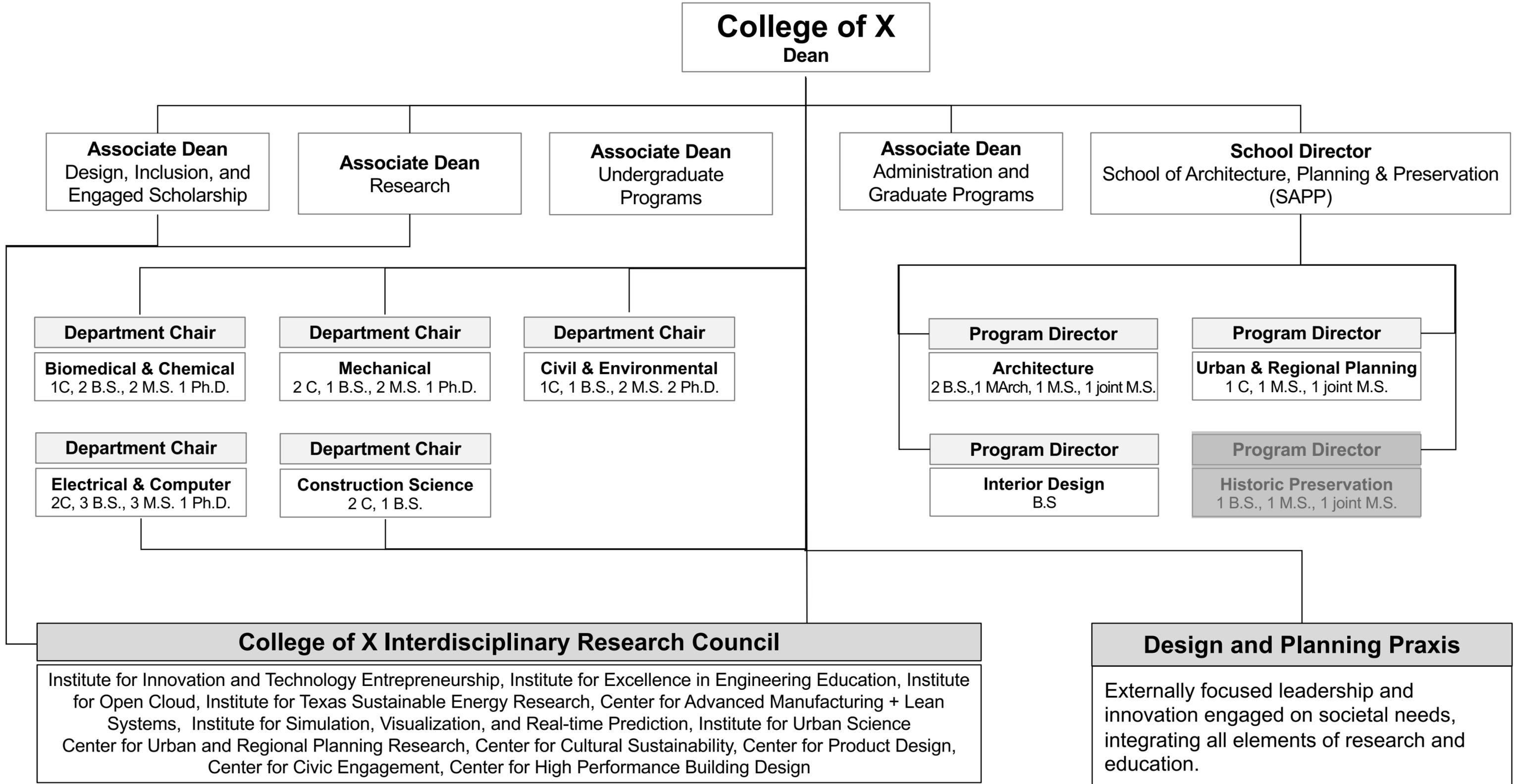
# DESIGN A

---

## Model A Description

- Model A maintains the existing Departmental structure for all Engineering disciplines, adding the Department of Construction Science.
- Model A then consolidates the remaining CACP programs into The School of Architecture, Planning, and Preservation (SAPP). The SAPP is led by an endowed Director, who becomes the public face of the School and reports directly to the Dean. The SAPP Director sits alongside the Associate Deans within the College structure. The SAPP replaces the departmental structure with 4 programs: Architecture, Historic Preservation, Interior Design, and Urban and Regional Planning. Each of the programs is administered by a Director, who reports to the SAPP Director.
- Model A adds an Interdisciplinary Research Council, which functions as a platform to enhance interdisciplinary collaboration within the new College.
- Model A creates a Design and Planning Praxis Institute, modeled after Penn Praxis at the University of Pennsylvania.

# Model A Diagram



## Model A Details

- This model provides minimal disruption to the program structure of both Colleges.
- This model assumes that the College Dean will come from one of the Engineering disciplines. The administrative structure of Engineering disciplines will remain largely unchanged.
- This model assumes that the SAPP Director will come from one of the school disciplines (e.g., architecture, preservation, interior design, urban planning). The SAPP must be supported with an endowed position and merits a high-profile, international search. The successful SAPP Director will add an intellectual leader to the School, bring an extensive international network, and be responsible for maintaining a strong relationship in local professional communities.
- The SAPP Director will be assisted by Program Directors in Architecture, Historic Preservation, Interior Design, and Urban and Regional Planning. Although UTSA does not offer Degrees in Historic Preservation, San Antonio's rich history coupled with UTSA's faculty resources suggest the potential to do so in the future.
- The Interdisciplinary Research Council will consist of Directors from the existing Centers and Institutes. The Council will report to the Associate Dean of Research, and Associate Dean of Design, Inclusion, and Engaged Scholarship.
- The Design and Planning Praxis Institute, modeled after Penn Praxis at the University of Pennsylvania, will address societal needs related to the built environment, while capitalizing on opportunities for research and community outreach with external industry and professionals.

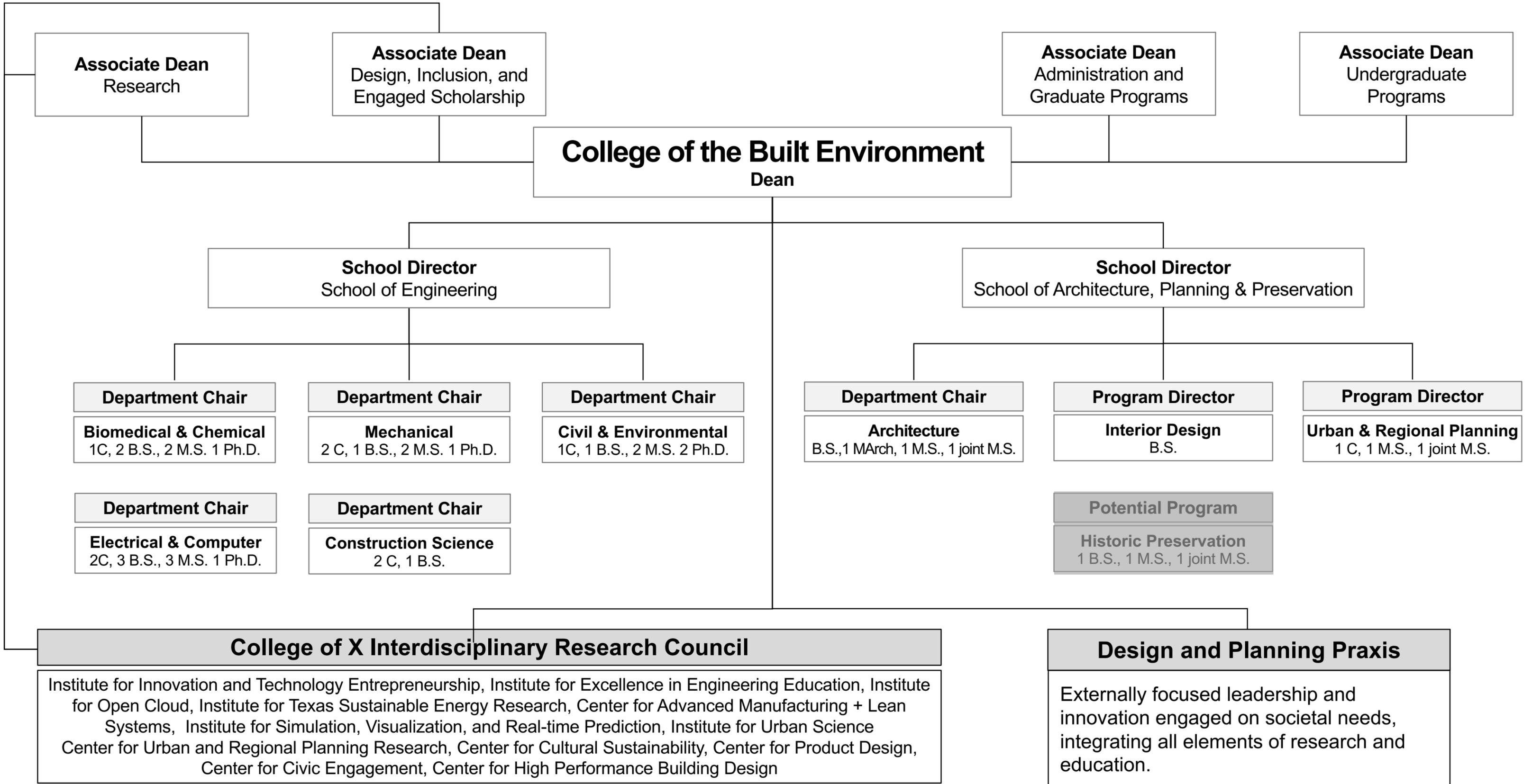
**DESIGN B**

---

## Model B Description

- Model B creates a **College of the Built Environment** with two schools: **The School of Engineering** and **The School of Architecture, Planning, and Preservation**. Each School has a Director who reports to the Dean. Chairs and Program Directors in the Schools report to their respective School Directors. One of the School Directors can also serve as Dean, depending on disciplinary alignment and available budget.
- Each of the Schools is led by an endowed Director, who becomes the public face of the School and sits alongside the Associate Deans within the College structure.
- Model B locates the Department of Construction Science in the School of Engineering.
- Model B adds an Interdisciplinary Research Council, which functions as a platform to enhance interdisciplinary collaboration within the new College.
- Model B creates a Design and Planning Praxis Institute, modeled after Penn Praxis at the University of Pennsylvania.

# Model B Diagram



## Model B Details

- Model B assumes that each of the School Directors will be supported with an endowed position. The Directors will provide intellectual leadership for the respective Schools, maintain an extensive international network, and be responsible for maintaining a strong relationship with local professional communities.
- Model B maintains the Departmental structure of the College. Within the SAPP, the Chair of Architecture and Program Directors in Interior Design and Urban and Regional Planning will report to the Director. In the future, each of the Programs can grow into Departments.
- Although UTSA does not offer Degrees in Historic Preservation, San Antonio's rich history coupled with UTSA's faculty resources suggest the potential to do so in the future.
- The Interdisciplinary Research Council will consist of Directors from the existing Centers and Institutes. The Council will report to the Associate Dean of Research, Associate Dean of Design, Inclusion, and Engaged Scholarship.
- The Design and Planning Praxis Institute, modeled after Penn Praxis at the University of Pennsylvania, will address societal needs related to the built environment, while capitalizing on opportunities for research and community outreach with external industry and professionals.

**DESIGN C**

---

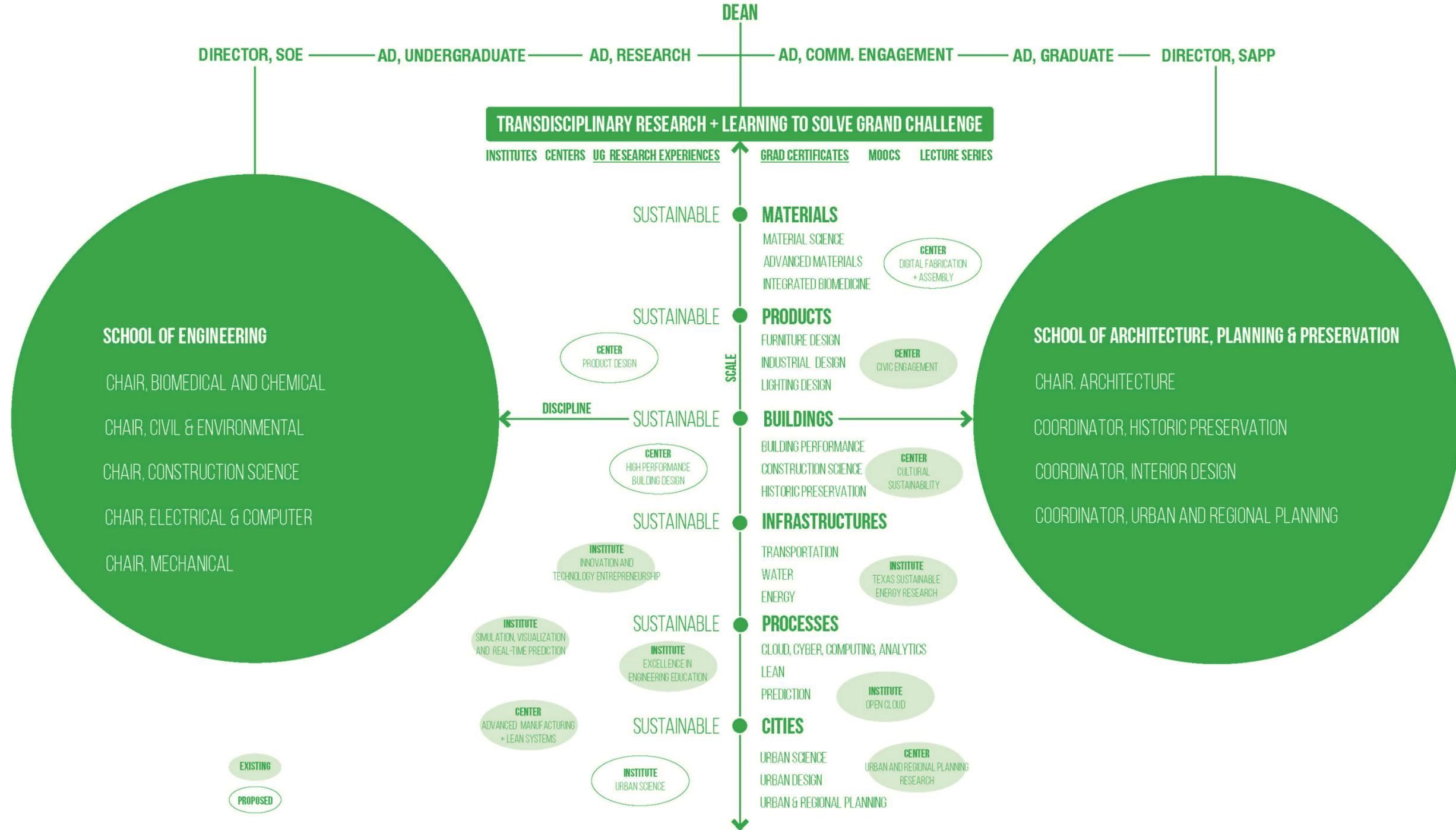
## Model C Description

- Model C creates a **College for Sustainable Environments** which concentrates the University's intellectual resources on the Grand Challenge of Environmental Sustainability.
- The College maintains separate schools for the engineering and design disciplines, but establishes a series of transdisciplinary topics, representing the shared interests of faculty and providing a framework for Transdisciplinary Research and Experiential Learning. The transdisciplinary culture manifests itself in Undergraduate Research Experiences, Graduate Certificates, Massive Online Open Courses, Lecture Series, Research Centers, and Research Institutes. Each of these platforms acts as a cross-pollinator, seeding the conversation about the Grand Challenge of Environmental Sustainability.
- **College of the Built Environment** has two schools: **The School of Engineering** and **The School of Architecture, Planning, and Preservation**. Each School has an endowed Director who reports to the Dean. Chairs and Program Directors in the Schools report to their respective School Directors. One of the School Directors can also serve as Dean, depending on disciplinary alignment and available budget. The School Directors will be seated equally alongside the Associate Deans.
- Model C locates the Department of Construction Science in the School of Engineering.
- Model C adds four Research Centers and Institutes: Urban Science Institute, Center for High-Performance Building Design, Center of Digital Fabrication and Assembly, Center for Product Design.

# Model C Diagram

## COLLEGE FOR SUSTAINABLE ENVIRONMENTS

ECONOMIC ENVIRONMENTAL SOCIAL



## Model C Details

- Model C addresses the Grand Challenge of Environmental Sustainability. This is a Big idea can attract significant capital support.
- Model C offers **The School of Architecture, Planning, and Preservation** and the **School of Engineering** significant opportunity for individual branding, identity, and fundraising.
- The College offers Transdisciplinary Graduate Certificates and Undergraduate Research Opportunities, drawing students from across UTSA and deepening student connections to Research Centers, Institutes.
- Freshman from all disciplines take a MOOC called **Critical Discussions in Sustainability**, which provide different UTSA faculty members an opportunity to address contemporary issues related to sustainability. UTSA markets the MOOC internationally, creating large-scale exposure for new College.
- Model C assumes that each of the School Directors will be supported with an endowed position. The Directors will provide intellectual leadership for the Schools, maintain an extensive international network and high profile in local professional communities.
- Model C maintains the Departmental structure of the College. Within the SAPP, the Chair of Architecture and Program Directors in Interior Design and Urban and Regional Planning will report to the Director. In the future, each of the Programs can grow into a Department.
- Although UTSA does not offer Degrees in Historic Preservation, San Antonio's rich history couple with UTSA's faculty resources suggest the potential to add HP Degrees in the future.

**DESIGN D**

---

# College Structure – Model D

- We are proposing four departments and one school.
- The chairs of four engineering departments and a chair of a School of Design will report to the dean.
- There will be four associate deans reporting to the dean.
- There will be a director of centers who will report to the associate dean for research.

# Model D

Dean  
College of X

Sr Admin Dean

Assoc Dean for Research

Assoc Dean for Undergraduate

Associate Dean of Design, Inclusion  
and Engaged Scholarship

Dept. of Biomedical and Chemical  
Engineering  
Chair and Support Staff

Dept. of Electrical, Computer, and AI  
Engineering  
Chair and Support Staff

Dept. of Mechanical and Manufacturing  
Engineering  
Chair and Support Staff

Dept of Civil, Environmental, and  
Construction  
Chair and Support Staff

School of Design  
Chair and Support Staff

**Degree Programs**

Grad Cert MDCE  
BS Biomed Engineering (252)  
BS in Chemical Engineering (110)  
MS Biomed Engineering (26)  
MS Biomed Tech Commercial. (new, 6  
in 2020)  
PhD Biomed Engineering (32)  
1,548; 115, 16.3, 7.1

**Degree Programs**

Cert in AI  
Cert in Data Center Design  
Grad. Cert in Cloud Computing  
BS in Computer Eng.(307)  
BS in Electrical Eng. (414)  
MS in Electrical Eng. (59)  
MS in Computer Eng.(24)  
MS in Advanced Materials Eng. (10)  
PhD in Electrical Eng. (102)  
*ME AI*  
6,376; 465, 32.7, 14.2

**Degree Programs**

Cert. in Aerospace Engineering  
Cert. in Ind. and Manufact. Engineering  
Cert. in Oil/Gas  
BS Mechanical Engineering (1,047)  
MS in Adv. Manuf. and Enter. Eng.(19)  
MS of Science in Mechanical Eng.(42)  
PhD in Mechanical Eng. (47)  
6,590; 457.1; 28.3; 16.2

**Degree Programs**

BS in Civil Engineering (510)  
BS in Construction Science (250)  
MS in Civil Engineering (42)  
PhD in Civil Engineering (27)  
PhD in Env Sci and Engineering (19)  
*BS in Environmental Engineering*  
*MS Facilities Management?*  
*MS in Sustainable Engineering and  
Built Environment?*  
*Cert. in Construction*  
3,384; 240; 20, 12.1

**Degree Programs**

BS in Architecture (399)  
BS in Interior Design (106)  
Cert in Historic Preservation  
Cert in High Performance Design  
MArch 2 (86)  
MArch 3  
MS in Architecture (4)  
*Masters of Healthcare Design*  
MS in Urban and Regional Planning (15)  
*BS Sustainable Design*  
**Arch**  
5,611; 389; 36; 10.7

Number at bottom of departments:

SCH  
Student FTE  
Faculty FTE  
Student:Faculty Ratio

Director of Centers: Center for  
Interdisciplinary research

## **We Recommend for Model D:**

- The Department of Construction Science be moved under the Department of Civil, Environmental, and Construction.
- Renaming Department of Electrical and Computer Engineering to Electrical, Computer, and AI Engineering.
- The current Department of Architecture function as a department, but be named a School, to help with identity and recognition.
- A Director of Centers for all research and outreach centers to:
  - Provide technical leadership
  - Foster collaboration among faculty members
  - Create synergy
  - Create partnerships (internal and external)

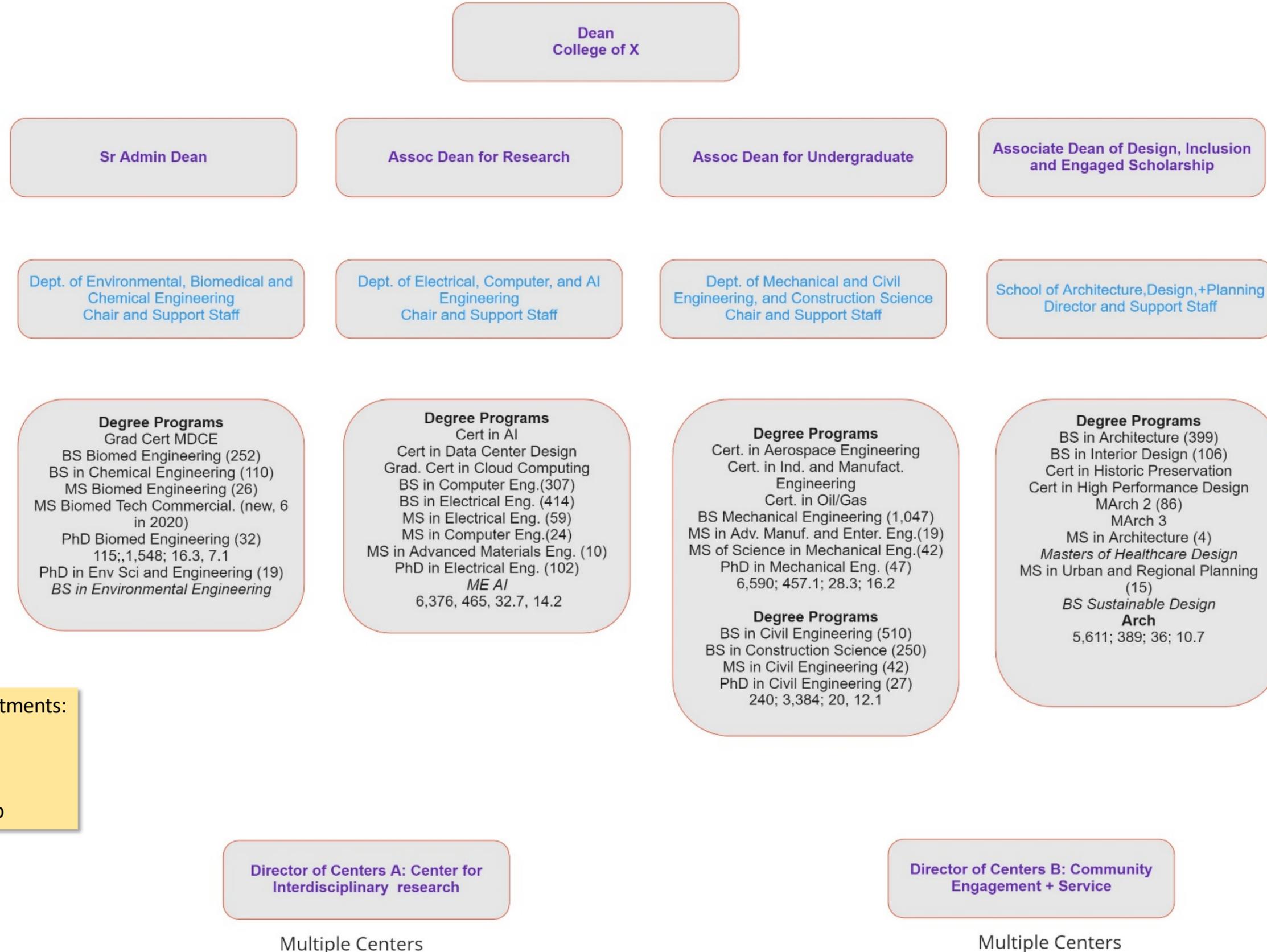
**DESIGN E**

---

# College Structure – Model E

- We are proposing three departments and one school.
- The chairs of three engineering departments and a director of a School of Architecture, Design, and Planning will report to the dean.
- There will be four associate deans reporting to the dean.
- There will be a director of interdisciplinary research centers who will report to the associate dean for research.
- There will be a director of community engagement and service who will report to the associate dean for design, inclusion, and engaged scholarship.

# Model E



Number at bottom of departments:  
SCH  
Student FTE  
Faculty FTE  
Student:Faculty Ratio

## **We Recommend for Model E:**

- Consolidating the Departments of Mechanical Engineering, Civil Engineering, and Construction Science.
- Renaming Department of Electrical and Computer Engineering to Electrical, Computer, and AI Engineering.
- Renaming the Department of Biomedical and Chemical Engineering to Department of Environmental, Biomedical, and Chemical Engineering.
  - The PhD in Environmental Engineering will be housed in this department.
- The current Department of Architecture function as a department, but be named a School, to help with identity and recognition.

## **We Recommend for Model E:**

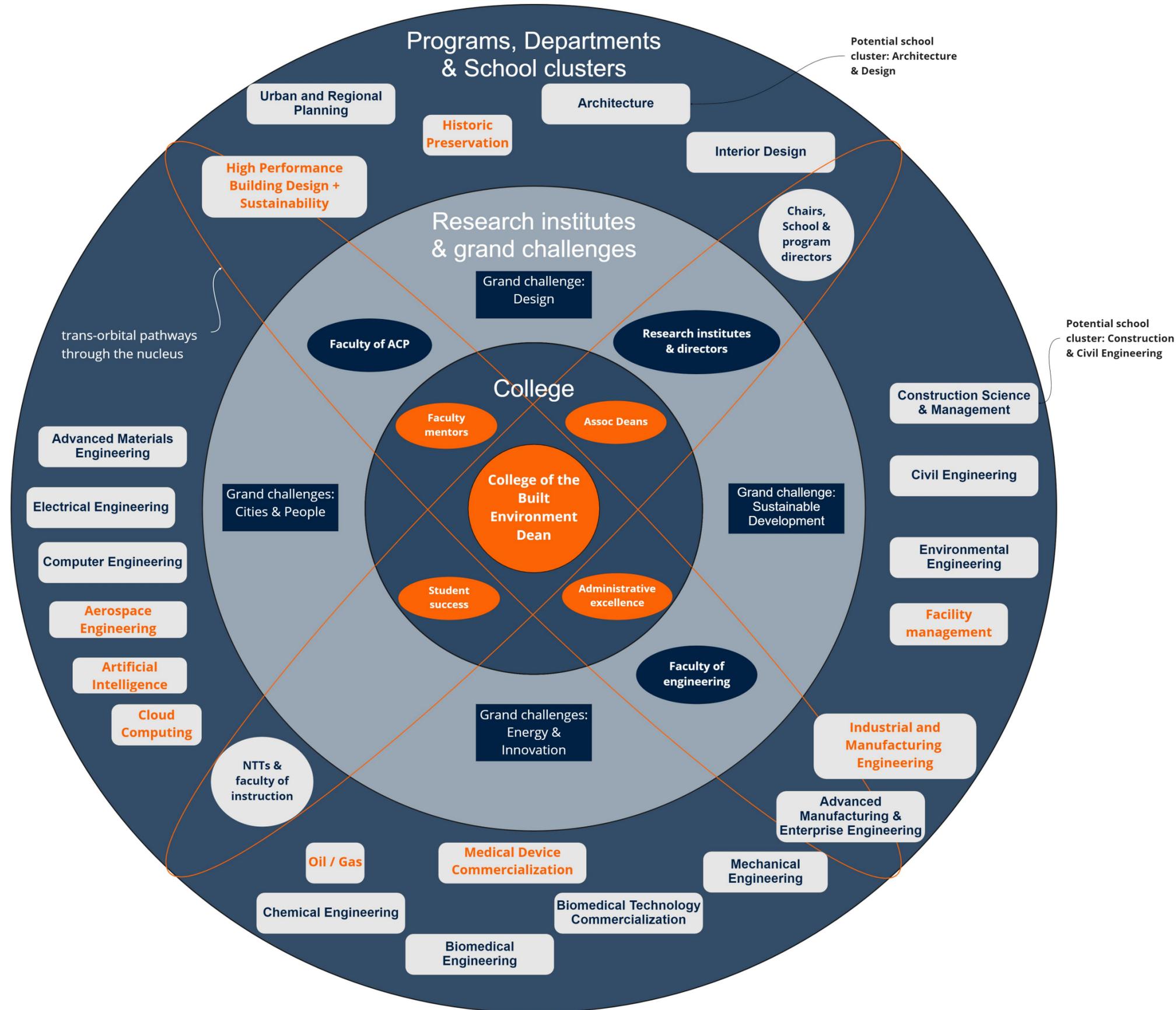
- A Director of Research Centers for all research centers to:
  - Provide technical leadership
  - Foster collaboration among faculty members
  - Create synergy
- A Director of Community Engagement and Service to oversee college's outreach mission
  - Create partnerships with industry and local governments
  - Build K – 12 relationships
  - Promote Service learning and engaged scholarship

**DESIGN F**

---

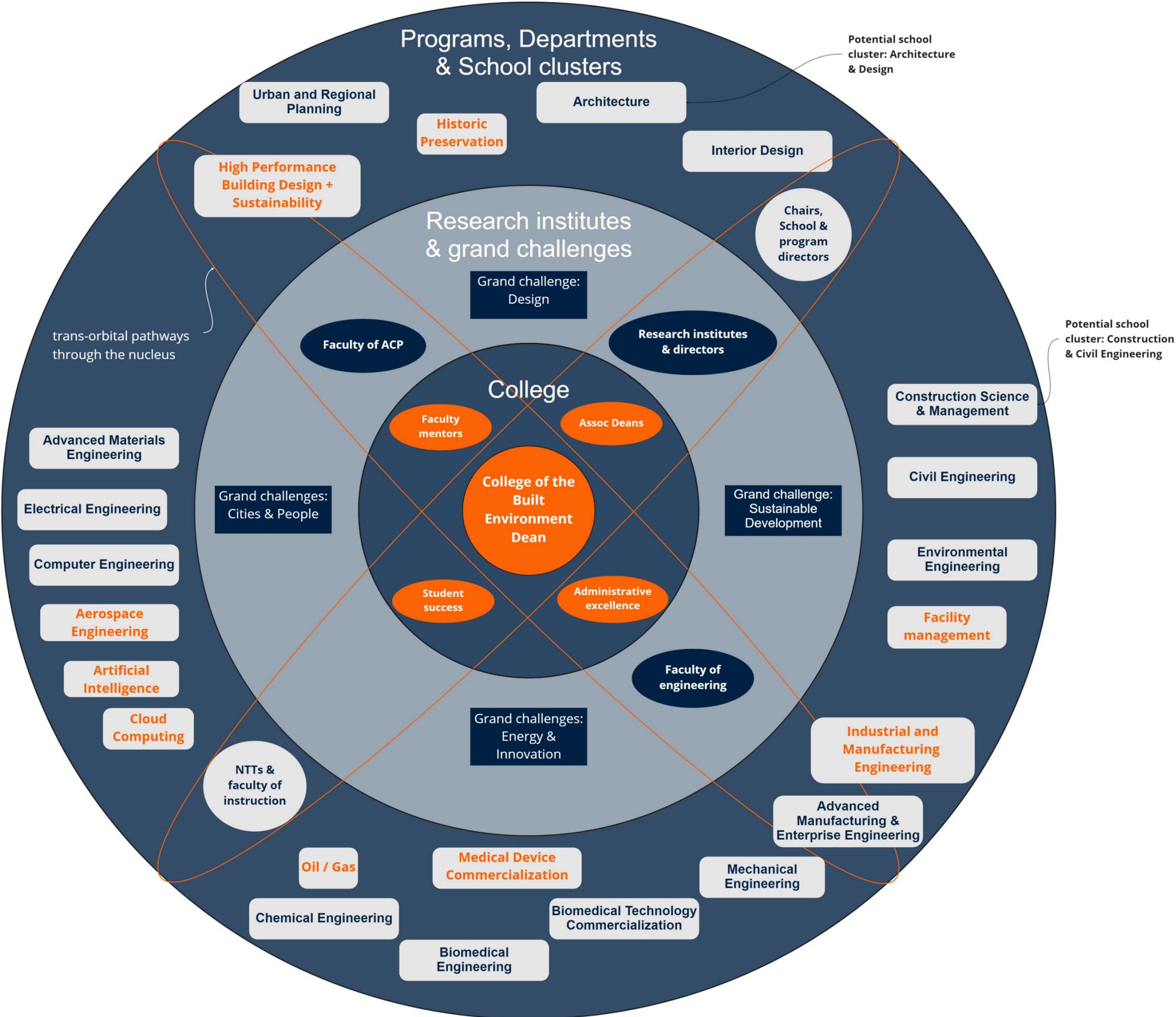
# Model F: "Orbital" model

- The college is a horizontal organizational structure that allows programs to cluster into schools.
- There are three schools: School of Design & Architecture, School of Construction & Civil Engineering and School of Engineering.
  - Each School has a Director that reports to the Dean.
  - Each program has a program coordinator that reports to the Director.
  - Each Department has a chair that reports to the Director.
- School of Design and Arch: Arch, Interior Design, Planning
- School of Construction & Civil: construction, civil engineering, environmental engineering
- School of "Y" Engineering:
  - Dept BME & CME
  - Dept ME
  - Dept ECE



# Model F: "Orbital" model

- Three orbits: Center, Intermediate, Perimeter
- Horizontal structure retains individual identity with curricular themes while encouraging interdisciplinary collaboration between programs by breaking down silos between domains
- Schools facilitate the creation of new programs & certificates.
- Trans-orbital pathways establish navigation routes for faculty and students belonging to the perimeter domains to find research collaborations through the intermediary orbit.
- Faculty will identify opportunities to engage in disciplines outside their traditional appointment domains by finding linkages to grand challenges through the intermediary orbit.
- The nucleus contains the associate deans, student success, administrative excellence (business services and HR), and faculty mentors providing leadership and direction for the rest of the system.



**DESIGN G**

---

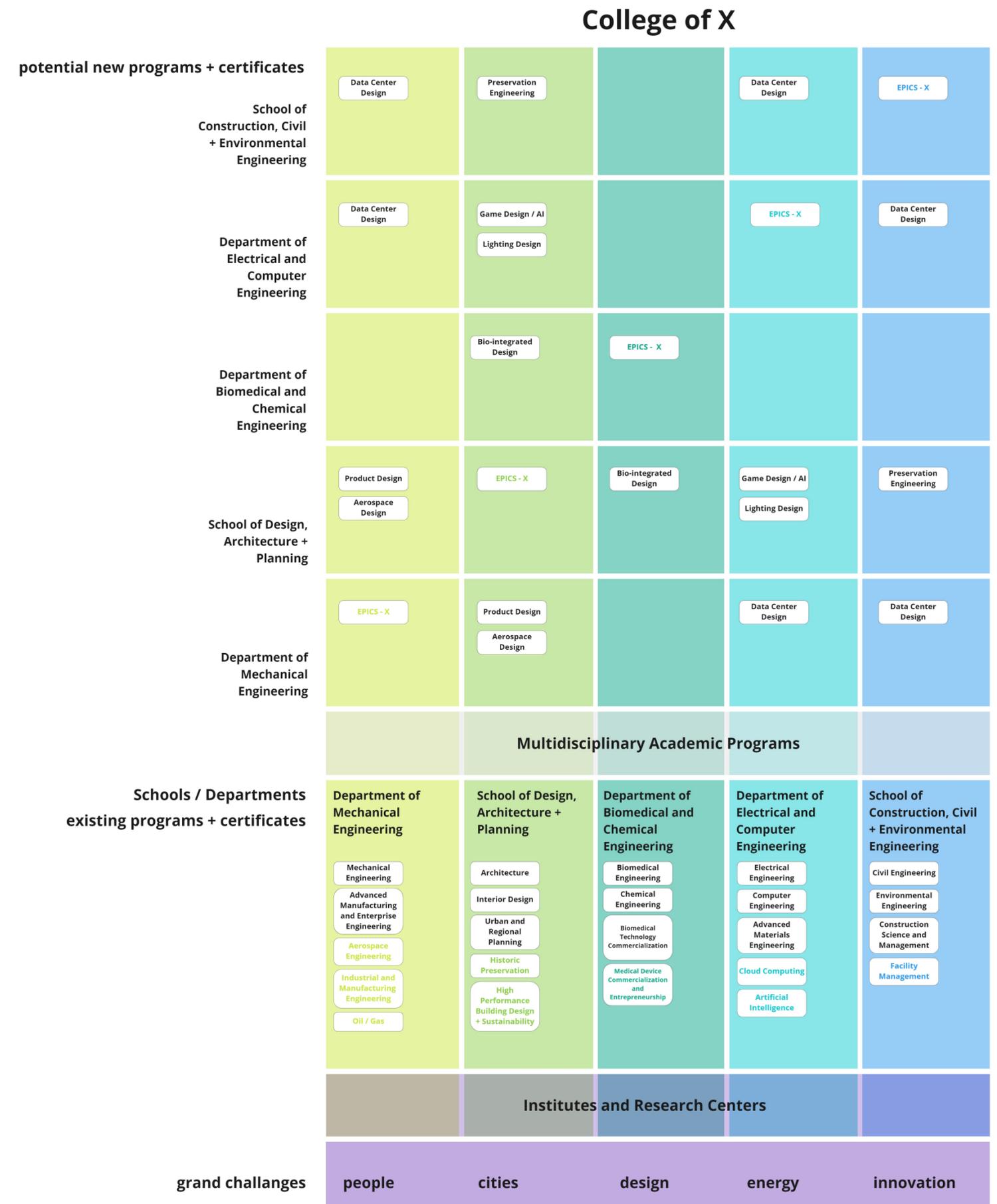
# Model G Matrix

This model addresses grand challenges with institutes that will be developed around the grand challenges and connect in an interdisciplinary way to the departments and schools.

Large engineering programs are maintained as they currently exist.

Schools cluster synergistic programs in a way that equalizes the size and resources for students and faculty in those programs.

Schools facilitate the creation of new programming within that synergistic body.

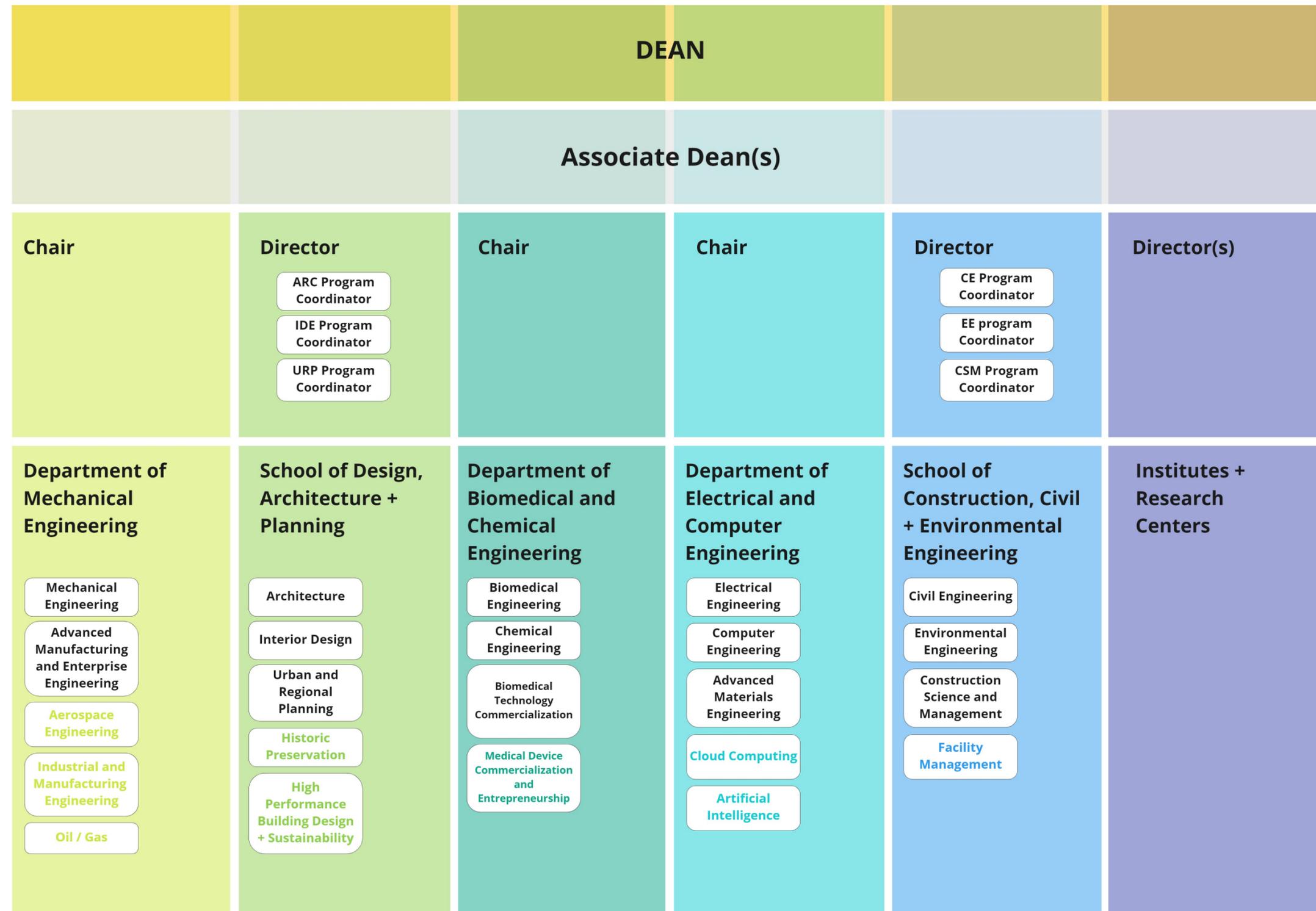


# Model G Org chart

The college contains two schools: the School of Civil and Environmental Engineering and Construction and the School of Design, Architecture, and Planning.

The two school directors as well as the chairs of the departments of Biomedical and Chemical Engineering, Electrical and Computer Engineering, and Mechanical Engineering report to the Dean.

Program coordinators in the schools report to the school directors.



**UTSA**<sup>®</sup>

[utsa.edu](https://utsa.edu)

---