

UTSA Academic Affairs

Campus Forum



AI, Cyber, Computing and Data Science Planning Advisory Task Force

April 25, 2024



ACADEMIC AFFAIRS

UTSA to launch new college planning process

Themes: artificial intelligence (AI), computing, cybersecurity, data science and related disciplines

- » A new AI, Computing, Cyber and Data Science Planning Advisory Task Force will lead the planning exercise.
 - Initiative website with details and updates: utsa.edu/strategicplan/initiatives/academic/ai-cyber-computing-data-science/



Opportunities & Benefits



Support
innovation &
academic excellence



Redefine AI,
computing,
cybersecurity,
& data science
landscape



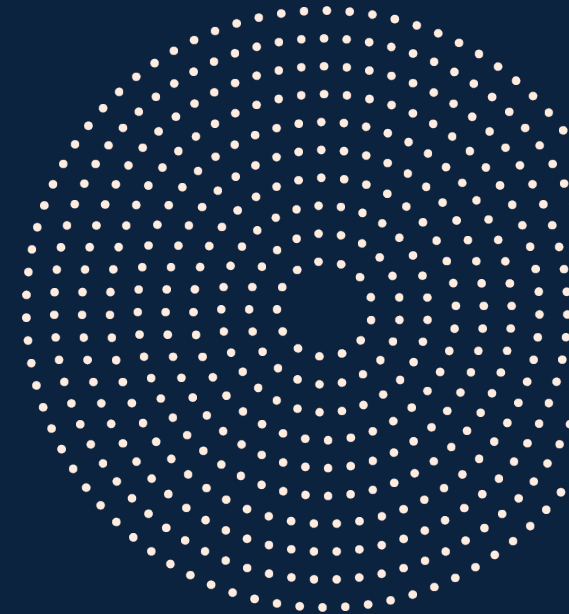
Solidify UTSA &
San Antonio's status
as the largest
information security
hub outside of
Washington, D.C.



Feed demand for
technically advanced
professionals in
emerging fields

Task Force Charge

1. Consider the landscape of UTSA student interests, regional workforce needs and partnering opportunities, and multidisciplinary research opportunities related to AI, data science, computing and cybersecurity—from science to policy.
2. Recommend a college organizational structure that aligns AI, data science and computing related programs to enhance student success, career readiness and partnering opportunities, transdisciplinary research and funding competitiveness.



Task Force Members

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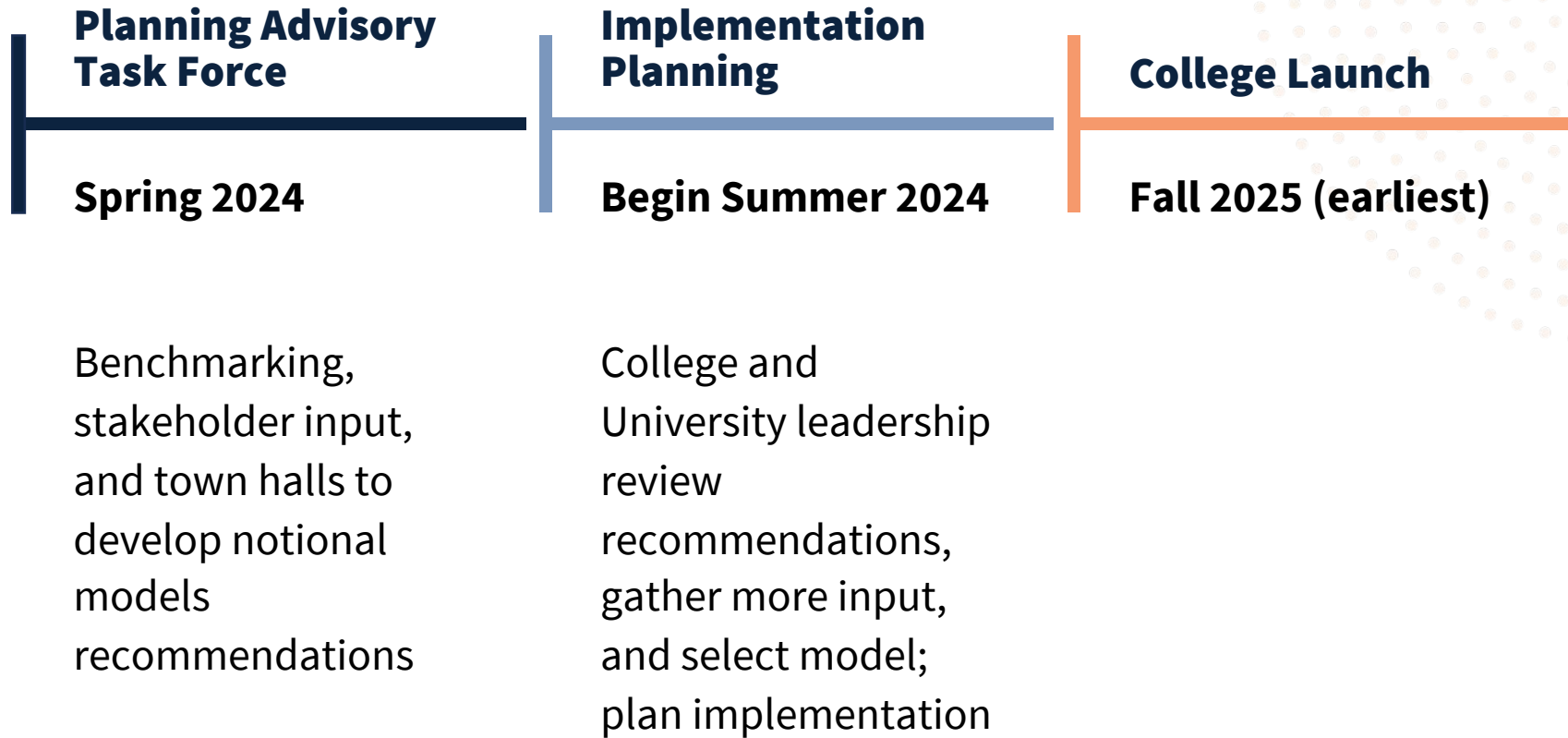
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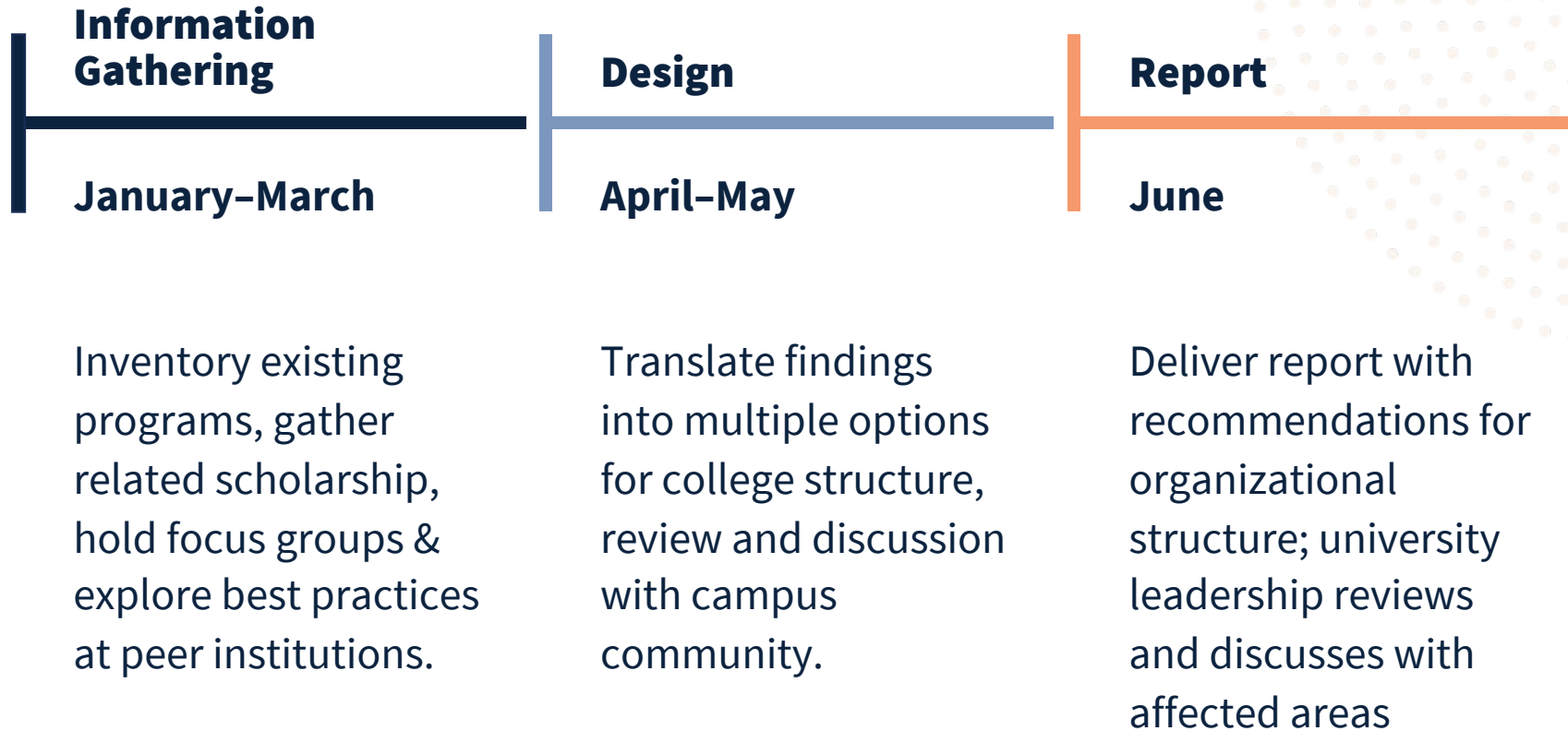
Katie Meersman

Steve Wilkerson

New College Timeline



Detailed Task Force Timeline



No programs going away

- » While some of the models on the following slides show *example* programs, it is important to reiterate that no academic programs will go away when the new college is created
- » Omissions in a diagram of similar programs taught by the same faculty are for simplicity and accessibility of the drawing – not to imply that such programs would be left out



A. Continuity Model

**Information
Systems and
Cyber Security**

**Electrical and
Computer
Engineering**

*(ABET and physical
labs noted as
challenges to
consider)*

**Statistics and
Data Science**

*(All non-business
focused programs
currently housed in
MSS)*

**Computer
Science**

School of Data Science: Incubator and Connector

Research Institutes



B. Cross-Cutting Schools Model

Schools, Institutes, Hubs

	Academic Departments			
	Computer Science <i>Ex. BA, BS, MS, PhD Computer Science</i>	Computer Eng. <i>Ex. BS, MS Computer Engineering</i>	Information Sys. <i>Ex. BBA Information Systems; MS, PhD Information Tech</i>	Statistics <i>Ex. PhD Applied Statistics; BS, MS Statistics and Data Science</i>
Community Hub				
School of Artificial Intelligence	<i>Ex. MS Artificial Intelligence</i>			
School of Cyber Security	<i>Ex. BBA Cyber Security, MS Cybersecurity Science, BS Applied Cyber Analytics</i>			
School of Data Science	<i>Ex. BS Data Science, MS Data Analytics</i>			
School of Cyber Ethics	<i>Ex. create new program in Cyber Ethics</i>			
New Program Incubation	<i>Ex. create new program in Quantum Engineering, create new program in Cyber Security Engineering</i>			
<i>Ex. MATRIX</i>				
<i>Ex. Open Cloud Institute</i>				
<i>Ex. Institute of Cyber Security</i>				
....				

Note: Some degrees may need adjusting over time with move to the new college, while ensuring no disruption to current students



C. Future Frontiers Model

Intelligence

Artificial Intelligence
BS-MDST, MS

Stats. & Data Science
BS, MS

Data Analytics
BBA, MS

Data Science
BS-MDST

Actuarial Science
BBA

Applied Statistics
PhD

Artificial Intelligence

Intelligence Studies

Data Science

Data Engineering
(pending approval)

AI Integration

Machine Learning

*Human-Centric AI
Stewardship*

*Human and Brain
Inspired Intelligence*

Autonomy

*AI for Education/
Education for AI*

Computational Frontiers

Computer Science
BS, MS, PhD

Game Design
BS (under development)

Software
Engineering
BS (pending approval)

Cloud Computing

AR/VR

*Human-Machine
Interactions*

Secure Futures

Cyber Security
BBA

Applied Cyber
Analytics
BS

Cyber Intelligence
BS

Cybersecurity
Science
MS

Cyber Operations

Digital Forensics

Cybersecurity

Enterprise Technology

Information Systems
BBA

Information
Technology
MS, PhD

Network & Data
Center Mgmt.

Technology Mgmt.

Cloud and Systems

Internet of Things

Ethics

KEY:

Departments

Degree Programs

Certificates

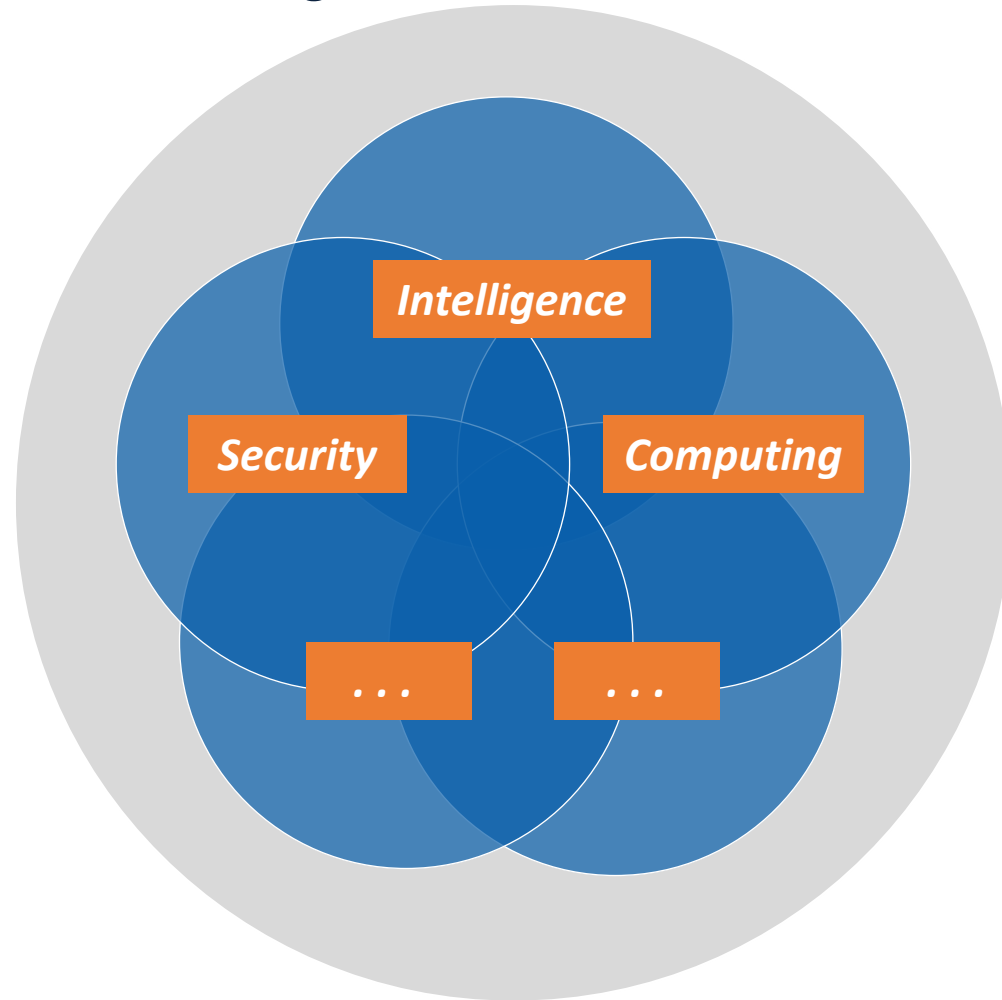
Minors

New program ideas



D. One College Model

Interest Areas within New College



Other Models Discussed by Design Subcommittees

- » Similar to the Future Frontiers Model (Model C), but expand the scope of the Department of Computational Frontiers into a School of Scientific Frontiers, to include relevant hardware, software and materials components.

Common Requirements

- » Downtown Infrastructure
- » Computing and Technical Infrastructure and Support
- » Student Success and External Relations Infrastructure
- » Tenure and Promotion Criteria
- » IRM/F&A Allocations
- » Joint Appointments

Next Steps

- » Your input is needed! Please provide feedback on specific model elements, as the final college could be a combination of multiple conceptual models.
- » We will be continuing to iterate these models
- » This is only the beginning!
- » Report in June showing what has been done so far

Questions & Ideas



Get latest initiative updates