Presentation to Board of Trustees
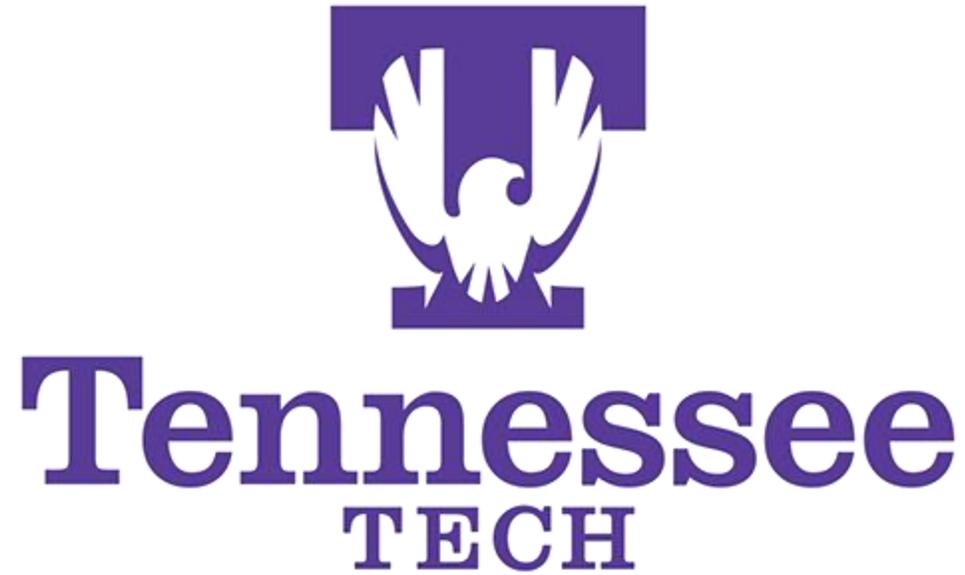
April 30, 2025

BS in Interdisciplinary Computing (IC)

Presentation to Academic & Student Affairs Committee
Board of Trustees

April 30, 2025

Overview & Features of Program

- The BS in Interdisciplinary Computing (IC) will prepare students to apply the knowledge of computing, artificial intelligence, and data sciences to their chosen discipline.

- IC provides students with the expertise to "live" in the intersection of emerging industries and computer science.

- The National Science Foundation has long promoted the concept of *CS + X* with the *X* denoting a cognate area (a secondary field of specialization, such as agri-business, biology, journalism, etc).

- Graduates in this degree will lead organizations to discover new innovations in an ever-dynamic world.

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Degree Requirements of Program

Degree requirements

- 41 credit hours of General Education Core

- 30 credit hours of Computing Core

- 18 credit hours of Intersectional Core (Teamwork, Communication, Conflict Resolution, Innovation, Entrepreneurship)

- 25 credit hours of Cognate area, including 10 credit hours of formal experiential learning

- 6 hours of elective courses

Potential Cognate Areas:

- Agri-Business

- Biology

- Criminal Justice

- Environmental Sciences

- Journalism

- Project Management

Each cognate area will have at least one faculty "Champion" to build support and courses for the program.

Need for Program

- The IC program addresses the need identified by the state's Higher Education Master Plan (entitled Enabling the Competitive Edge) which cites a need to *increase computer science and data analytics offerings.*

- The IC program creates a pathway for adult learners identified through Tennessee Reconnect to pursue computing degrees while also relying on knowledge gained from careers or past military service.

- The IC program addresses Governor Lee's Future Workforce Initiative to provide a direct response to the emerging technology industry making sure our students are first in line.

- The IC program addresses workforce initiatives by creating partnerships that engage industry leaders, workplace managers, and business executives.

External Support

"We believe the IC proposal has a clear intent to create new and strong pathways into computer science while broadening the availability of graduates to serve a wide variety of industries." *Don Viar, EPION*

"SAIC is interested in how the graduates can support our other business lines outside of Engineering, in particular healthcare." *Jill Moffit, SAIC*

"This is the right program at the right time, and TTU is the right school for it." *Glenn Platt, THEC's External Program Reviewer*

Targeted Student Population

Primary Audiences

- Traditional students seeking to integrate computing knowledge within a cognate discipline.

- Adult learners in the workforce and military veterans wanting to pursue computing degrees relying on knowledge gained from past service or workforce experience.

- Transfer students from community colleges who want to focus on the practical application of computing within a cognate discipline.

Enrollment Projections

	Year 1	Year 2	Year 3	Year 4	Year 5
Enrollment (# of FTE Students)	10	15	20	30	40
Student Attrition	2	3	5	7	3
# of Graduates	-	-	0	7	12

Instructional Cost & Revenue Projections

- A Director/Coordinator will be hired to guide, recruit, and promote the program.
- Funding will be provided to hire and train cognate area Champions.
- 10 new courses will be developed for this program.
- Expenses shown below include faculty salary, benefits, and instructional support.

	Year 1	Year 2	Year 3	Year 4	Year 5
Expenses	$241,350	$247,526	$255,842	$261,801	$274,118
Tuition/Fees	$113,760	$175,759	$241,376	$372,925	$512,151
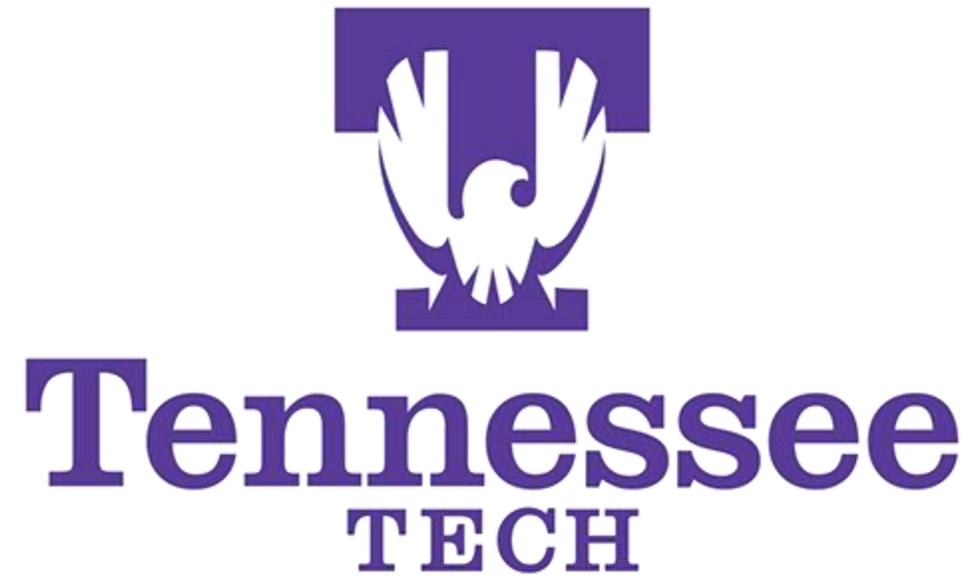
Maintenance (Tuition) and Mandatory Fees

Maintenance (Tuition) and Mandatory Fees Increase

- Mandatory factors to consider (T.C.A. 49-7-1603)

  - Level of state support

  - Total cost of attendance

  - Efforts to mitigate the financial effect on students

Maintenance (Tuition) and Mandatory Fees Increase

- Additional factors adopted by BOT to consider:
  - THEC mandatory tuition and fee ranges
    - 0% to 6.5% for FY 2025-2026
  - Comparison to peer institutions, competitor institutions, other LGIs
    - Other Tennessee schools have acted on or are considering between 2.5% and 5.5% increases
  - Higher Education Price Index
    - 3.4% for fiscal year July 2023-June 2024 (latest data)*

      *Commonfund 2024 HEPI Data Released, December 2024
  - Consumer Price Index
    - 2.8% 12-month percent change, March 2025 (latest data)*

      *U.S. Bureau of Labor Statistics

Comparison to Other Tennessee Schools

- Other LGIs
  - APSU voted 5% increase
  - ETSU proposed 4.98% increase
  - MTSU proposed 5.5% increase
  - UoM proposed 4-5% increase
  - TSU potential 6.5%
- TBR Community Colleges
  - Proposed 3.5% increase
- UT Campuses
  - Proposed UTK 0%, UTC & UTM 3% and UT Southern 2.5% increase

Proposed Maintenance and Mandatory Fee Increases

Proposed Increase in UG Maintenance (Tuition) and Mandatory Fees	4.83%
Maintenance Fees	4.80%
Mandatory Fees increase	5.05%

Proposed Increase in GR Maintenance (Tuition) and Mandatory Fees	5.01%
Maintenance Fees increase	5.00%
Mandatory Fees increase	5.05%

Impact on Full Time Students on Proposed Increases

UG Tuition Increase Comparison Full Time			
Fee Type	Current Amount	Increase per semester	New Amount
Undergraduate	$4,995.00	$240.00	$5,235.00

GR Tuition Increase Comparison Full Time			
Fee Type	Current Amount	Increase	New Amount
Graduate	$5,720.00	$286.00	$6,006.00

Program Service Fee Increase Comparison			
Fee Type	Current Amount	Increase	New Amount
Program Services Fee	$693.00	$35.00	$728.00

Proposed Mandatory Fee Increase

- Program Services Fee proposed to increase from $693 per semester to $728 per semester.
  - Increase of 5.05% with a max of $35 per semester
  - Facilities fee component proposed to increase from $103 a semester to $118 a semester
  - Fee will be used to help fund development of student-centric spaces
  - Student Activity fee component proposed to increase from $48 a semester to $68 a semester
  - Fee will be used for operational costs and renewal and replacement of equipment

Typical Net Costs to Students

Gross UG Tuition & Mandatory Fees (Freshman/Sophomores)	$5,963
Presidential Scholarship	(2,000)
HOPE Scholarship	(2,250)
Full Pell Grant	(3,698)
Net Undergraduate Tuition & Mandatory Fees	$(1,985)

| Gross UG Tuition & Mandatory Fees (Juniors/Seniors)	$5,963
Presidential Scholarship	(2,000)
HOPE Scholarship	(2,850)
Full Pell Grant	(3,698)
Net Undergraduate Tuition & Mandatory Fees	$(2,585)

Impact on Students at Less Than Full Time

Undergraduate Tuition Impact Per Hour (Hours 1-11)	Mandatory Fee Impact Per Hour (Hours 1-6)
$17	$11

Graduate Tuition Impact Per Hour (Hours 1-10)	Tuition Impact Per Hour (Hours ≥ 11)	Mandatory Fee Impact Per Hour (Hours 1-6)
$27	$8	$11

Comparison of UG Maintenance (Tuition) & Mandatory Fees
Tennessee Public Universities
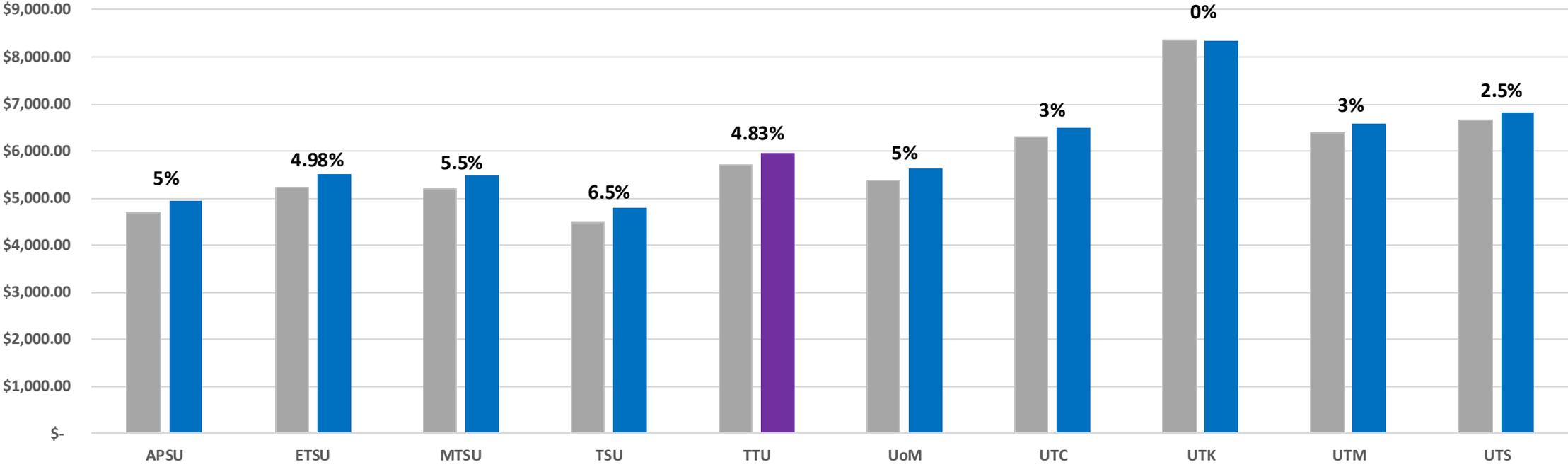
Legend: AY 24 - 25 UG Tuition and Mandatory Fees | AY 25 - 26 UG Proposed/Approved Tuition and Mandatory Fees

Chart data by university:
- APSU: 5%
- ETSU: 4.98%
- MTSU: 5.5%
- TSU: 6.5%
- TTU: 4.83%
- UoM: 5%
- UTC: 3%
- UTK: 0%
- UTM: 3%
- UTS: 2.5%

Revenue Increase Estimates
FY2025-26

Increase	UG Tuition	GR Tuition	Total
4.8%	3,784,638	-	3,784,638
5.0%	-	$497,352	$ 497,352
			$4,281,990

TN Tech Estimated Cost Increases
FY2025-26

Scholarships – State Mandated and Presidential Scholars Program	$1,741,695
2.6% Salary Pool w/ Fringe Benefits	2,721,036
Faculty Promotions	300,000
Group Health Increases	762,600
Other Inflationary Costs	2,098,300
Total estimated cost increases	**$7,623,631**
State Appropriation Increase for Operating Funding	$3,117,300
Addressed with tuition increases	**$4,281,990**
Balance to be addressed with other resources	**$224,341**