

Grainger College of Engineering IT Governance Research Working Group

Final Recommendations and Report on Activities during the 2025-2026 Academic Year

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Executive Summary

This academic year, the Research Governance Working Group had limited opportunities to meet as a group. Jinhui and Mark met for 1:1 discussions to help ensure the specifics of the charge letter were being addressed, but as a group scheduling meetings was challenging. In spite of that, progress has been made on each of the charge letter's points in addition to developments in regulated research. Our discussions resulted in several recommendations for the next Research Governance Working Group to consider.

Recommendations for AY26-27

The AY25-26 Research Governance Working Group makes the following recommendations for further consideration:

- Continue efforts to emphasize key distinctions between data storage locations (both cloud and conventional), and continue to advise staff, faculty, and students on locations and strategies to both store and preserve their data long-term.
- Continue ongoing efforts to increase the awareness of resources for GCOE researchers both on campus and nationally and evaluate the effectiveness of those efforts.
- Continue working with Illinois Computes to advocate on behalf of GCOE to develop and evolve services that address the evolving needs of GCOE researchers.
- Continue to monitor the development of AI tools, services, and policies and look for opportunities and solutions that make sense for investment on behalf of GCOE faculty.
- It is recommended that an investment in the GCOE Campus Cluster allocation be considered and implemented prior to the expected end of service date for the existing nodes in June 2027.
- An investment aimed at refreshing the supplemental/test GPU system should be considered in order to ensure Engineering IT's ability to support newer models of GPUs.
 - This system is used not only for testing and developmental purposes, but also as a resource for research teams whose equipment is unavailable due to maintenance and repair.

Charges for AY25-26

***Review the expectations GCOE has in expanding its footprint in and around Chicago and make recommendations as to what role Engineering IT or other IT service providers are expected to have in regards to research support at DPI, IQMP, or other locations outside of the main Urbana-Champaign campus area.**

In April 2026, Engineering IT sent a contingent to Chicago to tour and discuss the current and future DPI environments. Their shared analysis produced a list of recommendations that were shared in a report with Dean Bashir and Gene Robinson. They included recommendations for:

- Dedicated IT staff
- Infrastructure integrations and upgrades
- Leveraging datacenter partnerships when and where possible
- Leveraging existing subject matter expertise and available services to meet specific needs
- Exploring critical investments based on either long-term or short-term criteria

Additionally, an MOU has been drafted jointly by Engineering IT and Technology Services outlining both current and future support considerations for DPI and the role various IT support groups (Engineering IT, Technology Services, UIC, and NCSA) will have in ensuring DPI's technical needs are met.

***Review and advise on the development of NPCF as a shared datacenter for advanced GPU systems based on a [proposal delivered to Dean Bashir in March, 2025](#).**

NCSA and Technology Services have continued to partner with us to house advanced GPU systems at NPCF. Although a memorandum of understanding for the use of NPCF as a shared campus datacenter is currently being developed (June, 2026), several GCOE researchers from a number of departments are already housing systems at the NPCF facility with several other researchers' systems in various stages of the ordering process expected to be housed there as well.

Researchers with systems currently at NPCF

- Bill King (MechSE)
- Nishil Talati (CS)
- Tal August (CS)
- Alec Aksimentiev (Physics)
- Mijia Zhang (CS)
- Sumit Tokkar (DPI)

***Continue exploration - through departmental stakeholder engagement - of the value a dedicated software specialist would add to the college with an expectation of proposing the creation of this position in the next year.**

In Spring of 2026, with the pressing issues of Title II compliance and the additional complexities of getting non-standard software licenses such as GenAI tools purchased on campus, Engineering IT created a job description for a software specialist to focus on making the process more uniform in its execution. This job description has been approved by HR and an individual within Engineering IT will transition to this new role during Summer 2026.

***Review the need to renew previously recurring investments in research computing GCOE has made on behalf of our researchers.**

-and-

***Review any proposed investments or service enhancements in research computing originating from campus and provide input on how they may be best directed and utilized by GCOE faculty.**

In the last year, ongoing service developments within Illinois Computes, alongside the evolving availability of national computing resources via ACCESS and NAIRR has continued to benefit GCOE researchers. Additionally the GCOE investment which currently provides 40 A10 GPUs continues to fill a critical need for researchers as it allows them to operate without limits on their usage in terms of hours and it affords Engineering IT the flexibility of policy where technical representatives are able to make real-time adjustments to the investment in ways that meet the specific needs of researchers more rapidly. Continuing to invest at the college level will also help to ensure we remain capable of addressing instructional computing needs as well.

Usage Statistics for GCOE's Cluster Investment - 4/2025 to 5/2026

- Number of Users 45 PIs, 92 unique users
- Number of Jobs: 76,200 total (73.0% completed)
- GPU-hours used: 134,627 of 380,160 available
- Average GPU utilization: 35.4% (recent monthly peak: 70%)

The usage of Illinois Computes resources continues to increase. In Spring of 2024, there were 19 research groups using Illinois Computes' queue on Campus Cluster. As of today, there are 68 research groups using it up from 42 in 2025. More broadly, there are 125 faculty across all GCOE departments using one or more Illinois Computes' services, up from 117 last year. With the upward trend in the usage of Illinois Computes' resources, the wait times for them will increase, further reinforcing the value of the more flexible scheduling available via GCOE's investment in Campus Cluster.

Adoption of Illinois Computes' Resources

- **Research Groups**
 - 2024 - 19
 - 2025 - 42
 - 2026 - 68
- **Individual Faculty**
 - 2024 - 93
 - 2025 - 117
 - 2026 - 125

***Additional Topic: Developments in Regulated Research and the formal CMMC assessment process for several research environments**

Campus administration has formally approved a comprehensive initiative to assess and certify regulated research environments in alignment with Cybersecurity Maturity Model Certification (CMMC) Level 2 requirements. This effort includes gap analysis identification pre-assessments, mock audits, and full certification audits across four key environments: the Azure-based Regulated Research Enclave (RRE) managed by Technology Services, the Nightingale computational environment at the National Center for Supercomputing Applications (NCSA), the PESST Testbed within the Information Trust Institute (ITI), and the Plasmatron X Facility at the Center for Hypersonics and Entry Systems Studies (CHESS). Notably, the Plasmatron X Facility will serve as a model for future projects involving specialized data collection environments or processes. SteelToad has been engaged to conduct the initial pre-assessments, while CoalFire will lead the official certification audits; both organizations are recognized Certified Third Party

Audit Organizations (C3PAOs). The overarching objective is to achieve formal certification for three of these identified environments by November 2026 with ITI postponing their certification effort until early 2027 due to scheduling constraints.

UPDATE: In July of 2026 the Dept. of Defense stated that they were pausing the CMMC requirements for 60 days pending further review. In spite of that announcement, campus has made the decision to push forward with the efforts to ensure the RRE and for Nightingale are fully ready for certification while refraining from scheduling the formal certification audit itself until the DoD re-establishes the criteria and timelines after their review. Certification of other environments will be addressed at a later time.



