



**Space Utilization Pilot – College of Engineering**

**Phase I – Feasibility Study**

**Charter Document**

v13 08-27-13 approved

**August 27, 2013**

<b>Team Name</b>	<b>Space Utilization Pilot – College of Engineering</b>
<b>Executive Sponsors</b>	Provost – Paul De Luca Vice Chancellor for Finance and Administration – Darrell Bazzell College of Engineering Dean – Ian Robertson
<b>Steering Committee (Core Team)</b>	College of Engineering – Steven Cramer, John Booske Office of Sustainability – Craig Benson, Angela Pakes Ahlman Facility Planning and Management – Bill Elvey, Doug Rose Administrative Excellence – Alice Gustafson, Tim Wiora Education Innovation – Chris Olsen Office of the Registrar – Scott Owczarek, Beth Warner
<b>Participants (Working Team)</b>	*Office of Sustainability – Angela Pakes Ahlman, Amy Duwell Brockdorf *Administrative Excellence – Tim Wiora College of Engineering Faculty – Jeffrey Linderoth, James Luedtke College of Engineering Graduate Student - TBD Office of Space Management – Doug Rose Office of the Registrar – Ed McGlinn, Michelle Young  <i>*also serve as liaison to core team</i>
<b>Background</b>	<p>The AE Instructional Space Utilization team confirmed that, in general, we underutilize our instructional space. The next step toward space optimization requires an understanding and a rebalancing of competing priorities such as class scheduling, energy efficiency, effective use of custodial staff in cleaning, and student and faculty preferences for location and class time. A feasibility study on classroom space optimization is being proposed within the College of Engineering (CoE). Students and faculty will create a systems engineering model to evaluate the variables related to instructional space decisions and assist in determining an optimum strategy for instructional space usage within the College of Engineering.</p> <p>Current Campus Data:</p> <ol style="list-style-type: none"><li>1. About 6% of campus space is assigned as instructional space (includes classroom and class labs)</li><li>2. 967 rooms are classified as instructional space (357 as General Assignment and 610 as Departmental). Almost 100 non-instructional rooms are used for instruction</li><li>3. In Engineering, there are roughly 95 classrooms and class labs used for instruction</li><li>4. Utilization is targeted at 67% by university policy; actual use for General Assignment averages 53.5% and Departmental use averages 31.7%</li></ol>



<b>Goals</b>	<p>This feasibility study will bring a variety of perspectives together to better understand space utilization within one school, the College of Engineering (CoE). The goal is to understand the level of optimization that could be accomplished in CoE and to develop strategies that could be implemented to achieve greater optimization.</p> <p>Specific goals include:</p> <ul style="list-style-type: none"><li>• Using a graduate student project, develop a systems engineered optimization model that can be used to determine optimal strategies for deploying academic space usage in CoE</li><li>• Evaluate the optimization in terms of metrics related to our campus sustainability, such as cost per student credit hour (SCH), energy use per SCH, emissions per SCH, sq. footage per SCH)</li><li>• Identify data, policies, or procedures needed to enable optimal space utilization within the desired educational outcome</li><li>• Develop recommendations for a pilot program</li></ul>
<b>Scope</b>	<p>Within Scope: Developing model and conducting space optimization simulations. No actual space will be scheduled or repurposed within this feasibility study.</p> <p>Out of scope: Research space and activity within the College of Engineering Design of instructional scheduling software or solutions Deployable software development Methods to keep real time utilization data in view of faculty and students Measurement and tracking of success in more optimal instructional space use</p> <p>NOTE: Work efforts related to this initiative will not preclude the use of the instructional space data by other individuals on campus</p>
<b>Critical Assumptions</b>	<ol style="list-style-type: none"><li>1. Faculty and graduate student(s) will develop code and conduct necessary optimization simulations</li><li>2. Refined scope may be needed for each deliverable as more information is known</li><li>3. The pilot will include space within the current footprint of the College of Engineering including Wendt Commons</li><li>4. Optimization will only consider re-purpose or re-use of current footprint and will not include new construction as a viable solution</li></ol>
<b>Timeline</b>	<p>Summer 2013 Development of the expectations/parameters for the fall pilot Approvals from Dean Robertson, VCFA Bazzell and Provost DeLuca Academic alignment activities within CoE Communication materials for CoE and campus</p> <p>Fall 2013 Feasibility Study Begins – Development of optimization simulations Progress Report – End of Fall semester Final Report – End of Spring semester</p>



<b>Pilot Deliverables</b>	<ol style="list-style-type: none"><li>1. Systems engineered model</li><li>2. Progress Report</li><li>3. Final report including pilot recommendations</li></ol>
<b>Approvals</b>	Provost DeLuca and Vice Chancellor Bazzell approved the charter 8.27.13