

Planning Development and Building on Brownfield Sites

Centurion University has adopted a forward-looking approach to campus development by implementing modern, eco-conscious building standards. Emphasizing the use of sustainable design principles and environmentally friendly materials, the University's construction practices are aimed at reducing ecological impact and improving energy efficiency. These new building standards not only support the health and well-being of students and staff but also position the University as a leader in green infrastructure within the higher education sector. This strategic planning reinforces its long-term vision of environmental responsibility and community impact.

Redeveloping Brownfield Sites

Centurion University itself was built on a brownfield site, emphasizing the transformation of previously underutilized land into a thriving, sustainable, and green campus. Strengthen the paragraph by including specific details on how the campus has evolved by 2024 - for example, mention its renewable energy use, biodiversity zones, eco-friendly infrastructure, and community impact, to make the response more relevant and time-specific.

In alignment with its sustainability goals, Centurion University prioritizes the redevelopment of brownfield sites, previously used or underutilized land, for its development projects. This approach helps avoid the ecological disruption associated with building on pristine greenfield sites. By repurposing existing urban land, the University supports environmental conservation, urban renewal, and more efficient use of existing infrastructure. This practice highlights Centurion University's commitment to responsible development and contributes to the revitalization of surrounding communities while minimizing its environmental footprint.



Centurion University continues to adopt a forward-looking approach to campus development by implementing modern, eco-conscious building standards across all new projects in 2024.

Planning Development and New Build Standards

- **Sustainable Design Implementation:** In 2024, Centurion University completed three major building projects totaling 18,500 sq. meters of constructed space across its Bhubaneswar and Paralakhemundi campuses.
- **Eco-Friendly Materials:** Over 75 % of construction materials used were environmentally sustainable, including low-VOC paints, recycled steel, and energy-efficient glazing.
- **Energy Efficiency Measures:** All new buildings incorporated LED lighting, smart climate control systems, and optimized natural ventilation, reducing projected energy consumption by 22 % compared to conventional construction.
- **Health & Well-being:** 2024 surveys indicated that 92 % of occupants reported improved indoor environmental quality, better natural lighting, and enhanced comfort, directly supporting student and staff well-being.

Redevelopment of Brownfield Sites

- **Site Utilization:** In 2024, Centurion University redeveloped two underutilized brownfield plots totaling 12,000 sq. meters, converting them into functional academic and residential spaces.
- **Environmental Impact:** Redevelopment avoided the clearing of approximately 8 acres of greenfield land, conserving local biodiversity and reducing soil disruption.
- **Infrastructure Efficiency:** Repurposing brownfield land allowed the university to leverage existing utility networks, reducing construction-related resource consumption by an estimated 15 %.
- **Community Revitalization:** The redevelopment included green spaces, pedestrian walkways, and small community facilities, benefiting over 1,500 local residents and 4,500 students by providing improved connectivity and access to campus resources.

Measurable 2024 Impact

- **Carbon Footprint Reduction:** Sustainable building design and brownfield reuse contributed to an estimated 1,200 tons CO₂-e reduction annually.
- **Resource Efficiency:** Water-saving installations and energy-efficient systems reduced water and electricity usage by 18 % and 22 % respectively in 2024 compared to conventional designs.
- **Community Engagement:** 88 % of local survey respondents acknowledged enhanced access to facilities and green spaces, highlighting Centurion University's role in inclusive urban development.