



The University's build new buildings to sustainable standards

University : Assiut
 Country : Egypt
 Web Address : <https://www.aun.edu.eg/main/ar/home>
<https://www.aun.edu.eg/AUIRO/en/node/27713>

Does your university as a body build new buildings to sustainable standards? (If "yes", are you following a national standard or body, e.g., the World Green Building Council, that certifies it? Please

indicate.) <https://www.aun.edu.eg/AUIRO/en/node/27713>

Yes, the Faculty of Engineering at Assiut University proudly integrates principles of sustainable design across its buildings, serving as a practical model for green architecture. This is exemplified in both the historic structure on the Old Campus and the modern facility on the New Campus. These buildings are equipped with fundamental passive and active green systems, including self-ventilation systems to promote natural airflow, strategic daylighting to maximize the use of sunlight, and energy-efficient LED lighting throughout. Beyond these core features, the buildings employ advanced technologies for superior energy management. This includes a periodic monitoring system for energy consumption to optimize efficiency, inverter-based air conditioners, and water heaters that significantly reduce electricity use.

*Min. at least five requirements for each building

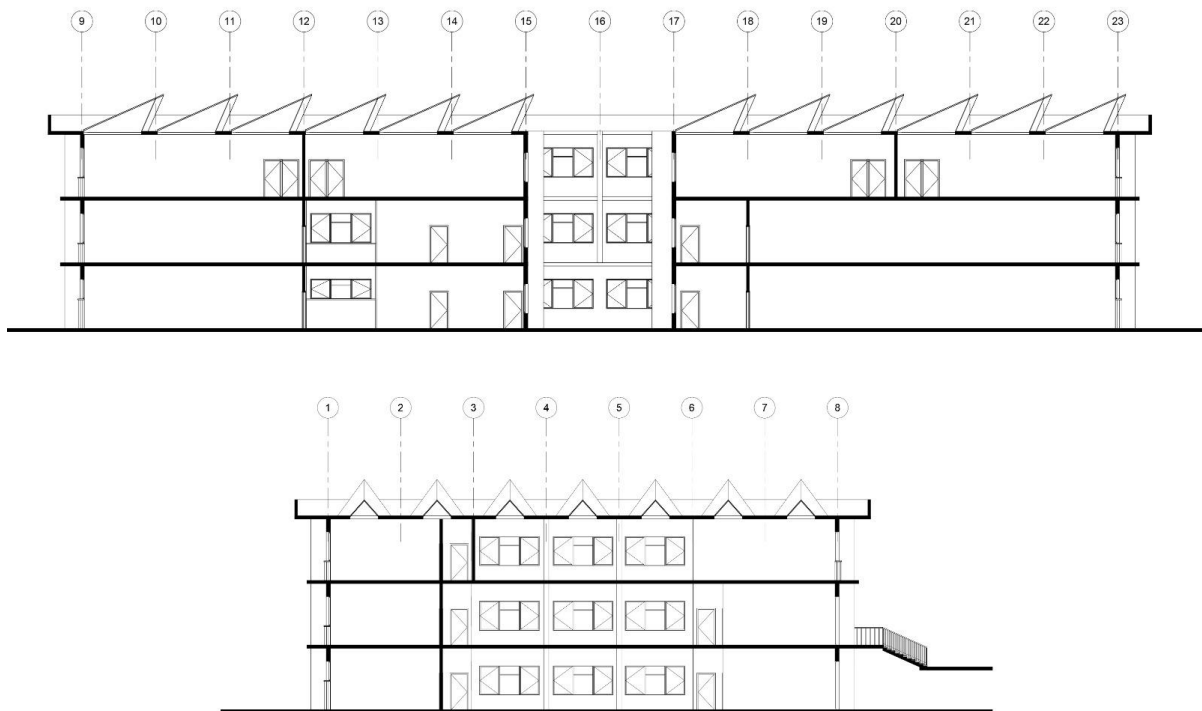
No.	Name	Place	automation		safety				energy		water		Indoor environment				lighting				Building Area (m ²)
			B1	B2	S1	S2	S3	S4	E1	E2	A1	A2	I1	I2	I3	I4	L1	L2	L3	L4	
	University X; Building A	City, Country				x	x	x				x				x	x	x		x	7860
	University X; Building B	City, Country				x			x	x		x				x	x			x	3590
	Total																				11450

Smart building implementation

$$\frac{\text{total smart building area}}{\text{total building area}} \times 100\%$$

*Total Building Area: 11,450 m²

$$\frac{11,450 \text{ m}^2}{807,093 \text{ m}^2} \times 100\% = 1.4\%$$



Green Building Implementation - Overview Green Technologies implemented at the Environmental



GBI Non-Residential Existing Building	Building (1)- old Campus	Building (2) -Ne
Element 1. Energy Efficiency	X	X
Design G Performance		
Minimum EE Performance		
Lighting Zoning		
Electrical Sub-metering	X	X
Renewable Energy	X	X
Advanced or Improved EE Performance - BEI		
Commissioning		
Enhanced or Re-commissioning	X	X
On-going Post Occupancy Commissioning		
Monitoring, Improvement & Maintenance		
EE Monitoring & Improvement		
Sustainable Maintenance	X	X
Element 2. Indoor Environmental Quality		
Air Quality		
Minimum IAQ Performance		
Environmental Tobacco Smoke (ETS) Control		
Carbon Dioxide Monitoring and Control	X	X
Indoor Air Pollutants		
Mould Prevention		
Thermal Comfort		
Thermal Comfort: Controllability of Systems	X	X



Air Change Effectiveness		
Lighting, Visual & Acoustic Comfort		
Daylighting	X	X
Daylight Glare Control	X	X
Electric Lighting Levels	X	X
High Frequency Ballasts		
External Views	X	X
Internal Noise Levels		
Verification		
IAQ Before/During Occupancy		
Occupancy Comfort Survey: Verification		
Element 3. Sustainable Site Planning & Management		X
Facility Management		
GBI Rated Design & Construction		
Building Exterior Management	X	X
Integrated Pest Management, Erosion Control & Landscape Management		
Transportation		
Green Vehicle Priority - Low Emitting & Fuel Efficient Vehicles		
Parking Capacity		
Reduce Heat Island Effect		
Greenery & Roof		X
Building User Manual		X
Element 4. Materials & Resources	X	X
Reused & Recycled Materials	X	X



Materials Reuse and Selection		
Recycled Content Materials		
Sustainable Materials G Resources and Policy		
Sustainable Timber		
Sustainable Purchasing Policy		
Waste Management		
Storage, Collection & Disposal of Recyclables	V	V
Green Products		
Refrigerants & Clean Agents		
Element 5. Water Efficiency	X	X
Water Harvesting G Recycling		
Rainwater Harvesting	X	X
Water Recycling	X	X
Increased Efficiency		
Water Efficient - Irrigation/Landscaping	X	X
Water Efficient Fittings		
Metering & Leak Detection System		
Element 6. Innovation	X	X
Innovation & Environmental Initiatives	X	X
Green Building Index Facilitator		