National Authority for Quality Assurance and Accreditation of Education

Guidelines for the standards
Areas, Human Resources, systems, and general specifications for higher education Institutions

Norms Guidelines

Index

Introduction

The National Authority for Quality Assurance and Accreditation of Education (NAQAAE) is one of the pillars of the implementation of the national plan for reform. The Authority is responsible for the development of national standards to meet international standards to improve the quality of education institutions performance and to develop their outputs in a way that serves the purposes of sustainable development in Egypt. Considering this, the Authority seeks continuous development of education and quality assurance in accordance with a set of principles and values that emphasize transparency, objectivity, justice and keenness to help educational institutions enhance and improve their overall performance to be qualified and accredited.

The Educational Institution, with its physical and human resources and equipment, is an essential part of the educational system. The National Authority for Quality Assurance and Accreditation of Education has given special attention to the Norms. Norms are defined as descriptive standards that define the minimum conditions that must be met in the university buildings and their accessories, as well as the required equipment, needed to judge the extent to which university buildings and their facilities conform to internationally agreed-on standards to achieve quality assurance, safety, and the satisfaction of students and employees.

Identifying Norms helps in:

1. Monitoring the quality standards of higher education institutions and Al-Azhar University.
2. Ensuring safety standards for university buildings.
3. Standardizing of physical, human and institutional resources and equipment for HEIs in Egypt.
4. Granting higher education institutions the necessary licenses to carry out their activities, provided that physical and human resources are available and the safety and security specifications for buildings and university facilities necessary for the education quality are met.
5. Assisting reviewers to evaluate the institutions of HEIs during accreditation visits.

Targeted Sectors

1 - Higher education institutions wishing to obtain the necessary licenses to begin conducting its academic activities.
2 - Higher education institutions wishing to enter the accreditation processes or those wishing to develop their facilities and resources to meet the standards applied in international universities.
3. Reviewers to determine the appropriateness of educational physical and human resources and equipment required to achieve educational objectives.

This guide contains the following parts:

1- The land areas to be available for students in various university facilities.
2 - Human resources that constitute faculty elements, members of the supporting body and lab technicians, libraries ... etc.
3 - Physical equipment and facilitations necessary for higher education institutions and Al-Azhar University to practice activities and meet the requirements of the educational process.
4 - General conditions to be met in buildings to achieve security and safety for students, members of the body of the teaching staff, and employees in higher education institutions and Al-Azhar University.
5. Review of physical facilitations, equipment, and conditions in buildings for the safety and security of the disabled to meet the requirements of teaching and learning.

Method of Work

1- A total of 36 sites -accredited by international bodies- from international and Arab accreditation bodies have been reviewed, they represent different cultures and economic potentials regionally and globally.
2 - A review of the manual on the standards, equipment and specifications of buildings and spaces developed by the Supreme Council of Private Universities in Egypt.
3 - The Egyptian, Suadi, and Yemeni Code of Buildings of people with disabilities were reviewed.
4- The Code of the Civil Defense Commission of the Arab Republic of Egypt was reviewed (Requirements for the protection of buildings against fires- emergency and disaster response requirements.)

First: Planning and Areas for Universities and Colleges

1- Universities

Title	Minimum Requirement
Universities	
Floor space allocated to each student	10 m2
Green spaces and corridors	15%
Central Library:	
Capacity	8% Of beneficiaries
Areas for reading for each student	1.5 m2
Playing fields	
Basketball	26*14 m
Volleyball	18*9 m
Tennis	24*11 m
Handball	40*20 m
Football	105*70 m
Swimming	24*12 with a slope from 0.5 m to 5.4 m
Sports court	1500 m2, 7 m height
Cafeteria	
Capacity	20% of enrolled students
Space for preparing food and service	1m 2
Theaters	
Space for each student	1m 2
Number	1 (at least)
Clinic	
Overall space of the health unit (clinic,	100 m2

emergency room, checkups room, waiting room, pharmacy, bathroom)	
Museums and exhibitions	
Capacity/ all area	100 m2
Space for each student	1m 2
Parking/ Teaching Staff/ Administrative	
No. of parking : no. of cars	1:5
Student Hostel	
Overall area	25% of university's area
Sleeping space for each residing student	8 m2
Space for eating for each residing student	1 m2
Space in the rest or study room for each student	2 m2

2- Colleges

Items	**Minimum requirement**
Space for each student according to college	
Faculties of medicine, dentistry, veterinary medicine, environmental sciences	14 m2
Faculties of engineering and technology and industry institutions	12 m2
Faculties of applied arts, fine arts, architecture, pharmacy, physiotherapy, tourism, physical education, media, tourism and agriculture	8m 2
Faculties of science, education (applied majors), and agriculture	8m 2
Faculties of computers and statistics institutions	4m 2
Faculties and institutions of nursing	3m 2

Faculties of economy, business admin., law	2m 2
Faculties of arts, education (theoretical majors), Arabic language	2m 2
General lectures theaters	
Space allocated for each student	1.5 m2
Teaching halls	
Teaching hall capacity	40% Of faculty's students
Space for each student	2m w
Laboratories	
Undergraduate Labs	
Capacity	Max. 20 students
Applied majors	6 m2
Theoretical majors	1 m2

Item	Minimum Requirement
Labs for post-grad studies	
Area for each researcher	5m 2
Computer labs	
Area per student	2m 2
Languages and statistics labs	
Area per student	2m 2
Psychology labs	
Area for each student	3m 2
Technology and media labs	
Capacity	4% of registered students
Area for each student	1m 2
Labs for applied researches for applied-studies faculties	
Area per student according to college	
Health (medicine, physiotherapy, dentistry)	9m 2
Engineering faculties	10m 2
Agriculture, nursing, pharmacy faculties	4m 2
Applied/fine arts faculties	10m 2
Science and education (applied majors) faculties	10m 2
Heavy Engines Machines lab	
Area for each student	6m 2
Electric machines lab	
Area for each students	4m 2
Studio/drawing hall (architecture, sculpting, design) undergraduate and postgraduate students	

Capacity	3% of the registered
For each student	3.5 m2
Forums hall	
Capacity	150m 2
For each student	2m 2
Workshops	
For each student	3m 2
Capacity	1%
Library	
Capacity	8% of beneficiaries
For each student	1.5 m2
Researchers, postgrads (each)	2 m2
Youth Care building	
For each student	.5 - .8 m2
Bathrooms	
For each student	2.5 m2

Second: Human Resources

Item	Minimum requirement
Teaching staff: undergraduate students	1: 50 1: 25
Teaching: postgraduate students	Diploma 1:25 PhD and Master's 1:10
Supporting staff	
Employees numbers	1 Operational supervisor 1 Operational technician 2 Assistants 2 Extra assistants
Employees: Students	1: 40
Studios and drawing halls	
Employees numbers	1 Supervisor 1 Technician 1 Assistant 1 Extra assistant
Employees: Students	1 supervisor : 40 students 1 technician : 25 students
Museums and exhibitions	
Employees: Students	1: 40
Library	
Employees	1 librarian 1 assistant librarian 4 administrative aides 1 technician per hall (according to size)
Librarians: Students	1: 300
Playing fields	
Coaches: Students	1 specialized coach 1 assistant Extra assistants 1: 1000 students
Health units	

Doctors : Students	1: 3000
Nurses: health unit	1 per each
Teaching halls	
Hall officer	1 for every 4 halls

Third: Preparations for buildings and facilities generally and for people with disabilities

Item	Minimum Suggested Standards
Library equipment	1. At least 1 seat for every 8 students. 2. There must be at least two copies of each title. 3. At least 20 computers, 1 screen per 250 students to be used as e-indices. 4. The halls of the library must tables, cabinets, shelves and offices for its workers. 5. Must be equipped with 3 heavy photocopying machines and a quick pull machine. 6. One open shelf for every 25 references. 7. The number of references should not be less than 30 references for each college-specialized subject. 8. The reference materials should not be less than 5% of the library's total holdings (Dictionaries), knowledge (encyclopaedias), dictionary and translation dictionaries, manuals and secondary books, atlases, bibliographies, etc. (in Arabic and foreign languages). 9. Must be subscribed to at least 5 titles of periodicals for each specialty in any of its different forms (paper - the thumbnails - Movies, CDs, etc.). 10. Internet connection service. 11. Good ventilation and lighting.
Library equipment for people with disabilities	**Visual impairment** 1. Audiobooks on magnetic or cassette tapes. 2. Books written in Braille 3. Large, clear pages should be available with large letters written in bold ink, and the spaces between the lines are large for the weak-sighted. 4. Availability of audio-visual circuits 5. Optacon reading machines. **Persons with hearing disabilities** 1. There must be visual media that uses of image as well as video, written, photocopied, or translated materials in sign language. 2. The library can videotape the various parts and halls and activities with a translation in sign language and play this film

	on wide screens as a guidance service 3. The existence of bulletins containing the most important topics, books and periodicals received by the library and distributed to this category in their place or placed on each table so that any beneficiary can obtain them. **Persons with motor disabilities** 1. Provide the necessary furniture. 2. Provide special corridors. 3. Provide elevators for ease of movement 4. Shelves should me accessible to their hands and the librarian should assist them if necessary.
Preparations of general lectures halls	1. Interactive whiteboard in every hall with accessories 2. At least one wood board 1.5*2 m 3. Good ventilation 4. Access to electricity always with KVA 10 and 5 generators 5. A 2.5*1*1 table for the teacher 6. Equipped with systems such as Data Show and a projector 7. Transparent displays, 1 for every hall 8. Connection to the World Wide Web
Preparations of general lectures halls for the handicapped	**Motor disability** 1. Provide the necessary spaces that allow the disabled movement and vision clearly. 2. Selection of suitable places for the disabled to be on the outskirts of the corridors, classrooms, level spaces, and close to services and emergency doors. 3. Provide appropriate audio and visual equipment. 4. Provide tables for people with motor disabilities is a preferred. **People with hearing disabilities** 1. Provide appropriate visual means such as digital screen for non-talking movies. 2. Provide illustrations, maps, models and other designated paintings, pictures, educational films, and visual television programs. **People with visual disabilities** 1. Provide appropriate audio tools. 2. Availability of 3D models, maps and samples.

Laboratories	1. 2-5 Work tables in each lab, 0.1*0.9*1.25 m 2. Shelves to store samples, 2:4 per lab 3. Necessary tools and equipment to demonstrate curriculums experiments
Computer labs	1. For computer majors and branches, a computer for every 4 students. 2. For all other disciplines a computer for every 25 students. 3. A printer for every 100 students.
Computer labs for the handicapped	1. It is preferable to have a sufficient number of mobile computer cabins, a unit that includes a computer, a printer and a scanner with wheels that can move. 2. Same equipment of the average student in terms of the number of devices, but in the case of the visually impaired, keyboard is equipped with protrusions to allow the visually impaired to use them.
Language labs	1. No less than 20 units
Language labs for the handicapped	2. Special seats for the motor-impaired
Workshops	1. Availability of crafts tool, carpentry, electronics, etc...
Conference hall	1. Long tables 2. Seats with arms
Conference hall for the handicapped	1. Special table for the motor-impaired 2. Seats must suit the motor-impaired
Seminar hall (for the handicapped)	1. Accommodates at least 35 students. 2. Seats for 10 teaching staff members 3. A table 4. Has systems such as Data Show and Projector 5. Internet connection
Technology labs	1. One computer for every 12 students 2. 1 to 2 Multimedia projectors with screen 3. 4 Over Head Projectors 4. CDs and DVDs 5. Digital cameras 6. DVD projectors 7. 2 color TVs, 29 inches 8. 2 Display screens 9. 3 b&w laser printers 10. 1 color printer

	11. 1 server 12. Internet connection
Technology labs for people with disabilities	**Hearing impairment** 1. 1 digital display and screen for non-talking movies. 2. Availability of audio television circuits **People with visual disabilities.** 1. Availability of audio TV circuits. **Persons with motor disabilities** 1. A speaking board should be available. 2. An adequate number of moving computer cabins based on number of students.
Sectors equipment	1 - Machines for photocopying papers in academic departments, one machine per 400 students. 2 - Personal computers for administrative use in the departments and other units in the college (2 computer / department or unit).
Forums hall	1- Theater with entrance and an independent exit with special emergency exit 2- The theater is equipped with audio and video equipment and lighting.
Health units	1. Availability of a bathroom with a laundry for staff and another for female employees and the area (4) m2 2. Bathroom with laundry for students and another for students and the area of 4 m2 3. Ambulance equipped with medical equipment and necessary driver and a medic.
Sports fields (Universities / Colleges)	1. Year-round working swimming pool on a world scale 12 × 24 m in depth, gradient First depth of swimming pool (half meter) up to four and a half meters with swimming and shower rooms, the swimming pool has a diving platform. 2. The college must have at least one outdoor playground for students and one playground at least for the following games: (Basketball - Volleyball - Handball - Tennis) 3. If the number of students in the college surpasses 3000 students the college must provide a court with the following facilities

	available: **A)** Transformable fields including basketball, handball, volleyball, tennis, jet feathers, and squash courts (2 at least). **B)** Halls for the exercise of self-defense games (Godo - Karate - Taekwondo) Boxing, Table Tennis, Gymnastics, Iron Room and Fitness **C)** Separate clothing sections for boys and girls containing three bathrooms at least have sanitary facilities, bathrooms have hot and cold water 4. 12 metal discs for students.
Playing fields for people with disabilities	1. Abide by international and Egyptian standards for equipment
Cafeterias/Restaurants	1. Health Certificates for workers 2. Refrigerators to store foods for student's food security 3. An oven supervised by the head of food services along with 12-6 chefs
Student dorms	1. Single rooms with bed and bathroom, double rooms with two beds and a bathroom 2. A computer lab is attached to the dorm and connected to the internet 3. Entertainment hall
Dorms for people with disabilities	1. One big room for each disability
Bathrooms	1. One toilet for every 40 students 2. One toilet for every 20 teachers
Bathrooms for the handicapped	1. Foreign toilets 2. One toilet on each floor 3. One for males, one for females 4. Signs in Braille as well as normal signs

Fourth: General specifications of university's buildings and facilities

Item	Minimum Suggested standards
Buildings height	• 6 m2 for good ventilation
Temperature inside buildings	• 22-24 C • Ventilation system approved by the civil defence agency according to international standards
Windows	• 15% of land area • Easily opened
Emergency doors and stairs, requirements of safety	• Emergency exits are available on all floors to lead to emergency stairs. • Emergency exit doors must be opened from the inside out. • Provide emergency exit doors that automatically shutdown using hydraulics • Be fire resistant. • There should be guides to determine the direction of the emergency exit • Availability of an emergency lighting network (corridors, corridors, emergency exits) • There must be at least 2 doors for each hall (Lectures halls - Teaching halls - activity halls - Laboratories- studios and workshops) • Curtains are treated with anti-ignition material. • Emergency stairways for all floors. • Fire escape stairs must be separated by fire resistant doors. • Escalators must be at the ends of the building in an open space • The final exit of the stairs must connect the ground floor to the street or to an open area connected to a street or a road. The interval between any point and the nearest emergency stairs is about (30 m).
Doors of halls, labs, workshops, etc...	• Two moving parts, each 1-1.2 m wide • Open to outside
Anti-fire equipment	1 - Presence of hand extinguishers on all floors 2 - Existence of fixed structures such as: • Rubber hoses for all floors. • External nozzle network according to the size of the building. • Sound and optical alarm equipment. • Manual alarm network on all floors. • Automatic alarm network in classrooms, laboratories and

	corridors. • Smoke and detectors
Security system	• Quality certificate of safety against fire, especially with equipment in lectures and teaching halls and laboratories. • Officers responsible for crisis management during an emergency. • A documented and automated system to test the efficiency of dealing with crises. • A system to test the safety of fire extinguishers. • An environmental file for each building with its health status details. • Training courses for employees in educational institutions that include firefighting tools - how to test their safety - defects to be avoided - development and modernization plans - tasks for for crisis management during emergencies - confronting these crises - safety monitoring of buildings facilities.
Maps	• Maps for every hall inside it and outside it with emergency exits.
Bathroom	• Non-slip ceramics

Fifth: General specifications of university's buildings and facilities for people with disabilities

Item	Suggested standards
Slopes	1. Made from jagged materials to prevent slipping. 2. Degree of inclination to a maximum of 1: 12 not less than 1: 8 in the entrances to buildings, emergency exits, pavements and corridors and different levels that change their levels according to the following controls: • Min. width of a one-way slope (90 cm) • Two directions (185 cm). • Install a balustrade not less than (85) cm and not more than 100 cm on either side of the ramp with the two sides raised to form a barrier with a simple height of at least (8 cm) from the slope surface to provide protection and risk reduction. • The slope shall not exceed the limits of the sidewalk or pedestrian passage and shall be immersed therein - Not prominent - and referred to with distinctive guiding boards and is within pedestrian crossing area. 3. The maximum length of the slope (9 m) and in the case of two 4. to connect to the height of the separation between them with a flat surface not less than 1.80 m.
Stairs	1. To be properly designed not to impede movement so as not to increase dimensions The stairs are of the following dimensions: • Up is 15 cm high • Down is 30 cm wide and stairs are covered with rough materials to prevent slipping Provide the nose of the stairs with angles or rubber strips to prevent slipping or any other materials that perform the same purpose. • Add a slope with an appropriate tilt beside the stairs, whether indoor or outdoor to facilitate the mobility of each disabled person as per their condition. • The stairs are equipped with a handrail on both sides with a height of at least 85 cm more than (100) cm long • Provide multi-floor buildings with emergency stairs and exits, taking into consideration the space and dimensions of these elements

Doors	• Minimum door opening should be (100 cm) and doors have a piece of wood or rubber (30 cm) high to push it by leg or wheelchair. • Full-glass doors with signs with clear colors to distinguish them and avoid colliding them. • Solid doors should be fitted with glass openings and with appropriate spaces enabling clear vision. • Knobs and hooks must be installed with a height of 76 cm and not more than (137) cm from the surface of the earth and take into account simplicity, ease of use and appropriate format. • Handles of all types must be easy to use and appropriately designed. • Emergency doors open outside with the necessary slopes.
Windows	• Easy to open and clear vision while providing adequate industrial lighting • Large glass surfaces should be marked with clear colored marks to avoid collision. • Windows should be of the types that the disabled person can open sitting on a chair • The window handles should be mounted at a height of at least 76 cm • 137 cm above ground level. • The height of the window's lower board shall not exceed 80 cm above the ground.
Elevators	• The elevators are suitable for size, load and quality, and to the needs of users with disabilities, equipped with lighting and adequate ventilation. • There is sufficient space for the door of the elevator not less than 150 x 150 cm in each floof and the location of the elevator must be near the main entrances and easily accessed. • Minimum area of cabin that accommodates wheelchairs (1.88) m2, dimensions (137 × 137 cm) The minimum width of the elevator door opening is 82 cm. • The floor of the elevator is of rough materials • Cabins have handles, rails and the necessary optical and audio signals. • Caller panel (elevator request) at a height not less than (76) Cm and not more than (137 cm) above the ground level of the elevator away from the side wall by 40 cm and the panel is illuminated.

	• Emergency buttons or cabin intercom at no height less than (76) cm and not more than (137) cm. • Floor numbers are placed on the Call Pad in a prominent way to help the visually impaired.
Precautions against fires and requirements of general safety	1. Fire extinguishers have dry chemical powder in lecture halls and technical workshops. 2. Distinguishing the exits with signs and arrows that are clear and lit in prominent places to show various exit routes and access to safe places 3. Emergency exits must reach a park or safe area and not a street. 4. Special ramos for people with motor disabilities are available as emergency outlets 5. Certain symbols and colors showing emergency exits 6. The switches are designed to suit the type of disability 7. The interior of the doors shall be protected by plastic parts 8. An extra electricity source for the building. 9. Emergency lighting network (corridors - corridors - emergency exits) 10. Illuminated signs and sound in all the corridors and emergency exits 11. Presence of fire doors operated automatically according to precautions is preferable in engineering fields. 12. Provide medical center and ambulance equipped for people with disabilities. 13. All construction materials should be non-flammable for a period of at least 2 hours. 14. The availability of alarms for the type of disability is as follows: **People with hearing disabilities** • Availability of telephones for people with hearing disabilities that emit light **People with visual disabilities** • Audio alarms
Routes and corridors	• To be equipped with all necessary services such as handles • Adequate lighting and clear vision. • No obstacles of any kind in routes and corridors • Floors should be coated with non-slippery rough materials. • The width of the corridor should not be less than 137 cm. • A special office capable of dealing with people with different disabilities.

Control knobs and switches	• The lighting switches and sockets must be at least (40 cm) away from the room's corner and be clear and distinctive.
Bathroom equipment	• Provide adequate spaces and capabilities to help the disabled move easily inside and outside the toilet. • The doors of the disabled bathrooms open to the outside and the door width is not less than (82) cm and is above the surface by (20 cm). • Docks, controls and accessories such as towels and the paper holder and the like, mounted at a height not less than (76) cm and not more than (137 cm). • A western toilet with a height not less than 36 cm. • Floors are not slippery • At least 2.20 m2 • Accommodates wheelchairs
Balustrades and barriers	• The height of the balustrade should not be less than 85 cm and not more than 100 cm from the Earth's surface. • Easy to hold onto and use • The section of the handrail should be circular or oval (4 cm) and distinguished from the wall for easy identification.
Parking for people with disabilities	• Not be less than 5.5 m. • The width should be 6.3 m. • Places for disabled persons to be located in easy-to-move places. • Close to the main entrances to the buildings on the shortest distance between the disabled's vehicle and destination. • Be as near as possible to the elevator. • Allocate parking spaces for disabled people only. • Provide sidewalks adjoining parking spaces for disabled people with slopes to facilitate the movement of disabled persons to and from their vehicles.
Signs and panels	• Easily seen and read. • The color of text should be different from the sign's and if they are lit they will not cause light reflections that impair vision and reading. • The use of Braille next to normal means. • The existence of an internal communications network intercom with devices in different places

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