



## UNIVERSITY OF ANBAR COLLEGE SETTING AND INFRASTRUCTURE POLICY



*University of Anbar is located in an urban area in the center of Ramadi In the center of Anbar governorate. It is the largest governorate in Iraq in terms of area and is located in western Iraq. University of Anbar in 1987 was established in to expand Iraq's higher education. The University's objective is to provide educational opportunities for the population, enable them to play meaningful roles in society, prepare future generations, and ensure their sustainable livelihoods. And Creating an enabling environment for various student activities and initiatives.*

*The University comprises a total of 18 colleges encompassing various academic disciplines and departments. Additionally, it is affiliated with six (6) research and scientific centers .At its founding, the University included two colleges: the College of Education for Women and the College of Education for Humanities, to the increasing requirements of the development the province imposed on University of Anbar in terms of students numbers and their scientific staff and extending the scope of its scientific activity to the districts and cities of the province of Al-Anbar. It has created nine colleges (College of Engineering, College of Administration and Economics, the College of Computing and Information Technology, in addition to College of Arts, College of Physical Education and Sport Science, College of Islamic Sciences, and College of Education for Pure Sciences, in addition to the medical colleges such as College of Medicine, College of Pharmacy, and College of Dentistry) which are located near the Ramadi Teaching Hospital in Ramadi City, as well as College of Agriculture in the center of Ramadi City. Also College of Education in Al Qaim, College of Basic Education in Haditha and College of Applied Sciences in Hit city to disseminate knowledge throughout the province to be 18 colleges with various scientific disciplines, and the number of scientific departments in the university colleges were (62) scientific departments and the number of scientific and research centers at University of Anbar are six centers.*

**Total area: 15001546 m<sup>2</sup>**

*The total area is divided into 14 university sites and campuses*

1- *The main campus of the University of Anbar is located at Al-Ramadi city and encompasses the University headquarters and its Divisions and research centers. service and scientific centers, the central library, the clinic, two big mosques, a primary school, intermediate school, a kindergarten, accommodation for academic's families, accommodation for single staffs and a complex for services comprising a clinic, supermarket, Al-Rasheed Bank branch and an orchard, and Ten colleges, namely: the College of Engineering, College of Science, College of Economics and Administration, College of Law and Political Science, College of Computer and Information Technology, College of Arts, College of Physical Education and Sport Science, College of Islamic Science, College of education for humanities, and College of Education for Pure Science.*

2- *In addition, at Al-Ramadi city, university of Anbar has separated campuses in different locations namely*

*a- College of Education for Women*

*b- College of Medicine*

*c- College of Dentistry,*

*d- College of Pharmacy ,*

*e- College of agriculture*

3- *University of Anbar has colleges and sites located outside Al-Ramadi city namely:*

*a- College of Education in Qaim*

*b- College of Basic Education in Haditha*

*c- College of Applied Science in Heet*

*d- Al Buaita Agricultural Research Station*

*e- Alhamidia Agricultural Research Station*

*f- Hasiba Agricultural Research Station*

### *Public access to buildings*

*University of Anbar ensures open public access to all its buildings, monuments, and natural heritage landscapes for students, teaching staff, and visitors.*

### *Constructing smart buildings*

*University of Anbar aspires to become one of the fourth-generation universities. As part of this vision, the university aims to completely transform its buildings into smart management systems. The university is working towards this goal gradually, with various measures already implemented under the guidance and supervision of the university presidency. These efforts signify significant progress toward developing smart buildings at the University of Anbar.*

### *Smart system*

*University of Anbar applied a smart system in some university buildings that includes sensors for movement and light. This advanced system automatically turns off the lights in areas where no movement is detected, thereby improving energy consumption and extending the life of the lamps. Furthermore, campus buildings are designed with an abundance of glass windows along the hallways, allowing natural sunlight to illuminate indoor spaces. Taking advantage of this feature, sensors detect the presence of sunlight and intelligently disrupt the lights, enhancing energy efficiency. Conversely, during evening hours and study periods, the use of smart cameras detects in the intelligent system human movement in the corridors and automatically activates the lights to provide appropriate lighting.*

### *Green Building*

*University of Anbar, our approach to constructing facilities and centers involves incorporating large windows that facilitate ample sunlight penetration into rooms, corridors, and halls on campus. This design choice not only maximizes natural lighting but also ensures optimal ventilation throughout the buildings.*

## *Using Energy saving devices*

*We employ energy-saving devices such as lights, fans, and cooling systems that utilize a charging mechanism during periods of non-use. This allows us to store energy for later use, particularly during power outages.*

## *LED Lightings*

*To further optimize energy consumption, we have replaced conventional room and laboratory lamps across all University of Anbar buildings with energy-efficient alternatives, including LED lamps.*

## *Automation*

*University of Anbar considers the development of an internal intranet system as an important step in advancing the process of internal digital transformation toward electronic governance. To facilitate the exchange of official documents among different university departments, the university has successfully installed multiple internal servers. These initiatives are crucial in promoting efficient communication and enhancing overall operational effectiveness within the University of Anbar.*

## *Fire system*

*University of Anbar has taken proactive measures to enhance fire safety within its buildings. Many of the university's buildings are equipped with smart fire systems. These systems utilize sensors to detect any fluctuations in temperature. Whenever an abnormal situation is detected, the system promptly sends email notifications and initiates phone calls to notify the responsible authorities. In the event of a fire outbreak, the smart fire system is designed to automatically activate and take appropriate actions to extinguish the fire. This implementation significantly contributes to the overall fire safety measures at the University of Anbar.*

### ***Moving Detection Sensor***

*Specific individuals are granted access to significant locations through the utilization of motion-detection sensors, while the operation of these devices can be managed either remotely or via mobile phones.*

### ***Solar panels***

*University of Anbar is characterized by the diverse scientific and literary disciplines, which has to build an integrated and clean energy system that has been used to supply the college and its laboratories with clean energy.*

### ***Biodiesel***

*University of Anbar has undertaken clean energy production projects, including the utilization of biodiesel and bioethanol as alternative biofuels to petroleum. These initiatives have enabled the University to generate electrical energy through the use of bioethanol, contributing to the university's efforts in sustainable energy production.*

### ***Smart Control of Natural resources***

*University of Anbar has implemented a strategy to gradually shift towards intelligent management of its natural resources. As part of this initiative, several colleges have embraced the installation of autonomous faucets in order to promote water conservation and minimize physical contact with faucets in laboratories, particularly during the ongoing pandemic.*

### ***Air Purity***

*In order to maintain clean air quality within university buildings, the University of Anbar has implemented the use of devices to preserve air purity. As a part of this effort, air purifiers have been installed in corridors, and the university is actively working towards equipping all buildings with automated air purification systems.*

## *Lighting Sensors*

*University of Anbar has implemented a policy to modernize the lighting systems across the campus with smart lighting technology. This initiative aims to optimize electricity consumption by utilizing light and motion sensors to regulate the activation and deactivation of lights. This approach proves highly effective, especially considering that many buildings on the campus feature large windows that provide ample natural daylight during the day, rendering artificial lighting unnecessary. Therefore, the lights are programmed to turn on in the evening when evening study sessions commence. Additionally, in unoccupied rooms, the lights are automatically turned off or activated based on motion detection.*

## *Electricity Consumption*

*University of Anbar is implementing a strategy to enhance its lighting systems by adopting smart lighting technology. This approach aims to optimize electricity usage by gradually incorporating sun sensors (lighting sensors) and solar cells. The intention is to utilize these technologies for illuminating streets and corridors on campus during evening hours. This initiative plays a crucial role in the university's efforts to conserve energy and promote efficient electricity consumption.*

## *Housing for employees*

### *Affordable housing for employs*

*During the period of 2020-2021, the Anbar governorate implemented a housing program aimed at providing residences to teaching staff and employees. This initiative resulted in the provision of numerous new houses to employees, with a particular focus on those who were married and had larger families. The effort aimed to address the housing needs of these individuals and contribute to their overall well-being.*

## *Residential complex*

*University of Anbar provides affordable Housing for the teaching staff. A residential complex is attached to each University campus.*

## *Housing for students*

*Provide affordable housing for students*

*The University of Anbar offers cost-effective housing solutions for students residing in their dormitories. These accommodations and services include the following:*

*All the residential units within the complexes are fully furnished, including beds, lockers, and mattresses. In addition, each room is equipped with both a refrigerator and air conditioning to enhance the comfort of the students.*

*The complexes are well-provisioned with an ample number of freezers and electric washing machines. The kitchens are also adequately equipped with a sufficient number of cooks to cater to the residents' needs.*

*The bathrooms have a continuous and uninterrupted supply of hot water. Generators are in place to ensure a consistent power supply, and there is a plentiful provision of free cooking gas available for all the complexes.*

*A team of supervisors is on hand for morning, evening, and night shifts, conducting regular visits to the deans of the Colleges and their administrative and academic assistants.*

*A dedicated service team is responsible for the upkeep of cleanliness, plumbing, and waste disposal, ensuring a clean and well-maintained environment for all residents.*

*Maintenance staff is readily available 24/7 to attend to any sanitary and electrical fixtures that require attention.*

*Beautiful gardens and green spaces are thoughtfully provided, with an agricultural team tasked with maintaining these areas in their pristine condition.*

*University guards are stationed within the complexes to ensure security and maintain a safe and secure environment.*

*An ambulance is easily accessible for any emergencies, and there is a dedicated team for educational supervision in place.*