



Lab Card

Lab Number
ENP-S-03-B1-023

Laboratory Type	Robotics and Artificial Intelligence Lab		مختبر الروبوتات والذكاء الاصطناعي																																			
Building	South Building – 3 rd Floor																																					
Capacity	14 PC's & 1 DELL PC - 218.2 Area (m2)																																					
Equipment (Furniture – Appliances)	1	The laboratory is equipped with: ▪ Extron Control Touch Panel- for speaker & ceiling camera ▪ Projector & display curtain ▪ Digital ceiling Camera																																				
	2	▪ The laboratory is equipped with electricity sockets & network points connected to the internal network of Kuwait University. ▪ 14.HP Pc's equipped Operating System: Microsoft Windows 11 Enterprise version 10.0.22621 Processor: 13th Gen Intel® Core™ i7-13700 Memory: 32 GB ▪ One All-in-one DELL PC equipped with: Windows11																																				
	3	▪ Instructor Table & Chair. ▪ Wall Shelving. ▪ 21 Wooden Tables, 24 black tables & 20 Chairs. ▪ 23 Cabinets & 3 drawer . ▪ White board. <table><tr><th>Sensors Description</th><th>Quantity</th></tr><tr><td>• Compass Magnetic (CMPS03)</td><td>10</td></tr><tr><td>• Flame detector package - UVTron sensor</td><td>5</td></tr><tr><td>• HB-sensor (6 bumper sensor - 4 photocells - 2 IR sensors- 2 sensor connectors)</td><td>10</td></tr><tr><td>• IR ranging module analog - GP2D12</td><td>20</td></tr><tr><td>• IR Sensors analog (GPD2D12)</td><td>135</td></tr><tr><td>• IR Sensors digital (GPD2D02)</td><td>50</td></tr><tr><td>• LDR (light sensitive resistors)</td><td>20</td></tr><tr><td>• MOTION DETECTOR SENSOR (KC7783)</td><td>3</td></tr><tr><td>• Optical Interrupter switch (H21A1); Break beam opt sensor</td><td>75; 20</td></tr><tr><td>• PROXIMITY IR DETECTOR (SHARP IS471F)</td><td>10</td></tr><tr><td>• motion detector (Pyroelectric sensor package)</td><td>5</td></tr><tr><td>• Reflexive Sensor</td><td>30</td></tr><tr><td>• Thermal array sensor - TPA81</td><td>5</td></tr><tr><td>• Tilt sensor - mercury switch</td><td>5</td></tr><tr><td>• Touch sensor (Micro Switch)</td><td>100</td></tr><tr><td>• Ultrasonic Range Sensor (Sensor SRF08)</td><td>48</td></tr><tr><td>• Sensor/motor kit for cricket</td><td>1</td></tr></table>		Sensors Description	Quantity	• Compass Magnetic (CMPS03)	10	• Flame detector package - UVTron sensor	5	• HB-sensor (6 bumper sensor - 4 photocells - 2 IR sensors- 2 sensor connectors)	10	• IR ranging module analog - GP2D12	20	• IR Sensors analog (GPD2D12)	135	• IR Sensors digital (GPD2D02)	50	• LDR (light sensitive resistors)	20	• MOTION DETECTOR SENSOR (KC7783)	3	• Optical Interrupter switch (H21A1); Break beam opt sensor	75; 20	• PROXIMITY IR DETECTOR (SHARP IS471F)	10	• motion detector (Pyroelectric sensor package)	5	• Reflexive Sensor	30	• Thermal array sensor - TPA81	5	• Tilt sensor - mercury switch	5	• Touch sensor (Micro Switch)	100	• Ultrasonic Range Sensor (Sensor SRF08)	48	• Sensor/motor kit for cricket
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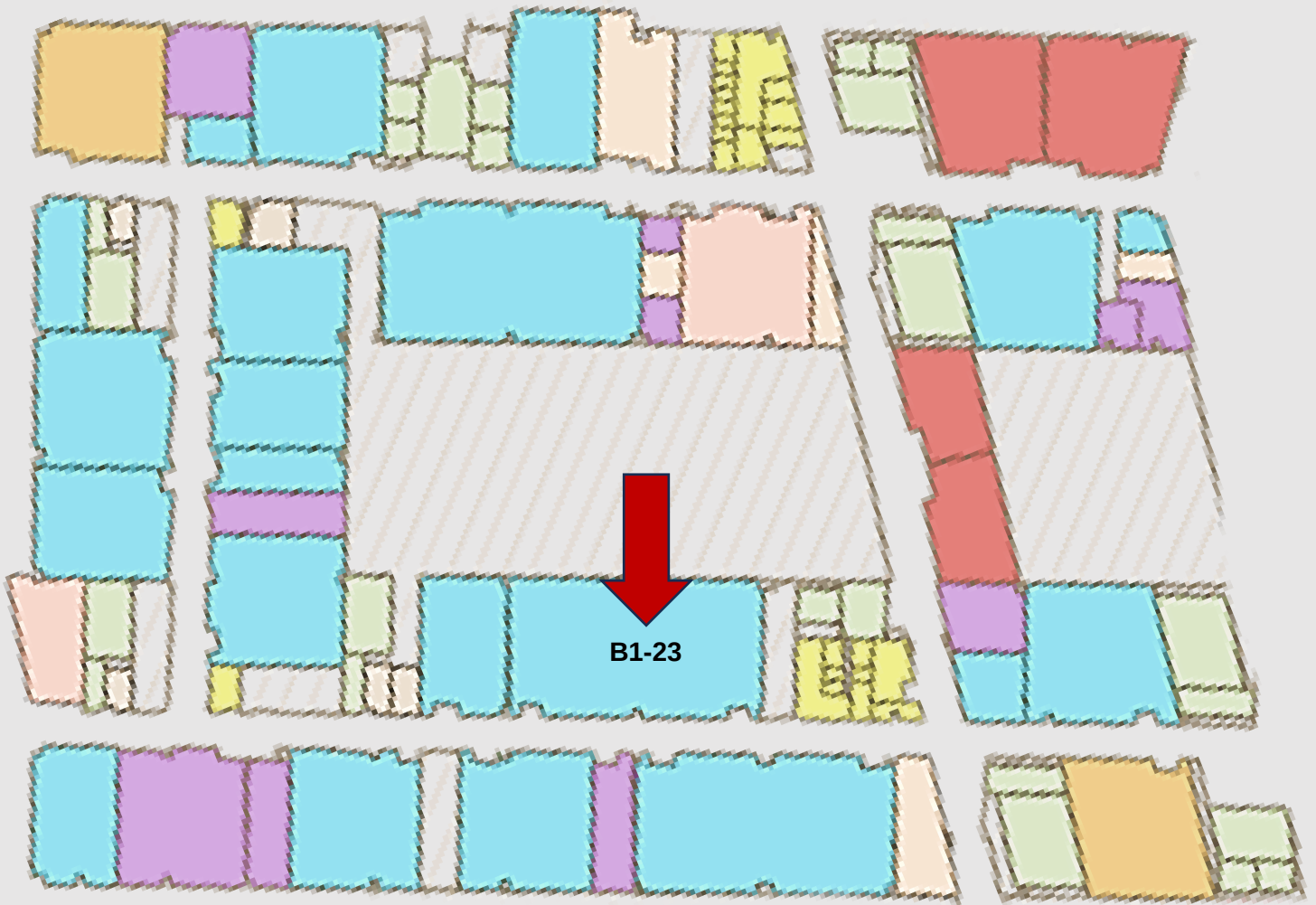
- The Safety & Security Dept. Emergency Line (ext. 3333, direct line 24893333) operates 24hours a day, including Fridays & public holidays.
- The Medical CpE Clinic -South Building, Ground Floor- operates for 12 hours daily- 24983455
- Call/WhatsApp Helpdesk: 24984444 to report an issue / malfunction.

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Printer	Printer: Lexmark W850																																											
Accommodation for people of determination	▪Allocating seating places for the disabled on the edges of corridors and rows, on flat places, near services and emergency doors. ▪ The availability of the necessary spaces that allow the disabled to move and see clearly.																																											
Safety & Security	▪ Doors open outward with electronic card system (Key Card Access). ▪ Fire-fighting equipment inside the laboratory: Fire Extinguisher, Fire Blanket & First Aid Kit. ▪ Evacuation Plan: Presence of safety guidelines to evacuate the plant in the event of a fire. ▪ Wiring extensions are safe and do not pose a risk to students. ▪ Smoke Alarm																																											
Laboratory Uses	AI , Robotics Course, CpE-434 Course																																											
Officials	Eng. Tarik Abdul Aziz Al Melhem																																											
Awareness & Guidance	The presence of instructions for correct use & instructions to maintain laboratory equipment,																																											

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Artificial Intelligence Lab is a special computer laboratory that serves CpE-434 (Robotics) and all the students of the CpE department. They can use it to learn assembling and programming different kinds of robots that perform different functionalities. Moreover, this lab contains the equipment related to sensors, processors, and motors.

مختبر الذكاء الصناعي مختبر خاص يخدم طلبة مقرر CpE-434 (الروبوتات) وكذلك يستخدم من قبل طلبة هندسة الكمبيوتر، لتعلم تركيب وبرمجة أنواع مختلفة من الروبوتات التي تؤدي وظائف مختلفة. علاوة على ذلك، يحتوي هذا المختبر على المعدات المتعلقة بأجهزة الاستشعار والمعالجات والمحركات.



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