Artificial Intelligence
الذكاء الاصطناعي

Course Description:

This course is designed to introduce learners to the concepts and terminology related to Artificial Intelligence. Which allows them to distinguish the modern and advanced technologies that work around us to innovate, enhance productivity, and save time and money.

Who should attend?

Non-technical professionals who want to build and understand Artificial Intelligence

Students who want to add general techniques and knowledge based on Artificial Intelligence in addition to their specialized studies

Those wishing to enroll in this course must have computer skills.

Number of Hours : 20 hours
Course Objectives:

1. Define Artificial Intelligence and understand its basic stages of development
2. Understand how AI works
3. Define the concepts of machine learning and neural networks
4. Identify the importance of Artificial Intelligence and review examples of its support in the fields of data mining
5. Identify the most prominent platforms used in the application of Artificial Intelligence.

وصف الدورة:

صممت هذه الدورة لتعريف الدارسين على المفاهيم و المصطلحات التي تتعلق باذكاء الاصطناعي. والتي تسمح بفهم و تمييز التقنيات الحديثة و المتطورة التي تعمل من حولنامن أجل الابتكار و تعزيز الانتاجية و توفير الوقت و المال.

الفئات المستهدفة:

المهنيين غير التقننين الذين يرغبون في بناء و فهم الذكاء الاصطناعي

الطلاب الذين يرغبون في إضافة معرفة تقنيات عامة تعتمد على الذكاء الاصطناعي بالاضافة إلى دراساتهم التخصصية

الراغبين بالالتحاق في هذه الدورة يجب أن يتوفر لديهم مهارات استخدام جهاز الحاسوب.

عدد الساعات : 20 ساعة
أهداف الدورة:

1. تعريف الذكاء الاصطناعي و فهم مراحل تطوره الاساسية
2. استيعاب كيفية عمل الذكاء الاصطناعي
3. تعريف مفاهيم التعلم الآلي و الشبكات العصبية
4. تحديد أهمية الذكاء الاصطناعي و استعراض أمثلة على دعمه في مجالات التنقيب عن البيانات
5. التعرف على أبرز المنصات المستخدمة في تطبيق الذكاء الاصطناعي.

Course Outline:

1. **What is Artificial Intelligence (AI)**

   1.1. **Define the term Artificial Intelligence.**

   1.2. **Recognize three stages of AI: narrow, general, super.**

   1.3. **Recognize key milestones in the development of AI**

2. **How does AI Work**

   2.1. **Identify key principles underpinning artificial intelligence: algorithms, complexity, heuristics.**

   2.2. **Define the term machine learning, and identify its key characteristics.**

   2.3. **Define the term neural network, and identify its key characteristics.**

   2.4. **Define the term deep learning, and identify its key characteristics.**

3. **Common AI Examples**

   3.1. **Identify the need for artificial intelligence in organizations and society.**

   3.2. **Recognize common examples of how artificial intelligence supports data mining.**

   3.3. **Recognize common examples of how artificial intelligence supports image recognition.**

   3.4. **Recognize common examples of how artificial intelligence supports natural language processing.**

   3.5. **Recognize common examples of how artificial intelligence supports decision making.**

4. **AI Adoption: Challenges and Potential**

   4.1. **Recognize limits to artificial intelligence.**

   4.2. **Recognize ethical guidelines that should inform the operation of artificial intelligence: clarity and desirability of purpose, transparency, competence in operations.**

   4.3. **Recognize the social and economic impact of artificial intelligence.**

   4.4. **Consider the potential and implications of artificial intelligence for different sectors like: healthcare, law, journalism, finance.**

   4.5. **Consider the implications of adopting artificial intelligence in a given scenario.**