





Course objectives Contact **\$** 98765392 In today's rapidly evolving workplace, harnessing the power of **\$** 24983523 artificial intelligence (AI) is no longer a choice but a necessity for individuals and organizations aiming to enhance productivity, 24983524 efficiency, and innovation. The "AI for Productivity" professional ▼ tpd.occd@eng.ku.edu.kw course is designed to equip participants with the knowledge and skills needed to leverage AI technologies for significant improvements in the modern work environment. In this course we will learn about the various AI tools and applications that are transforming the workplace. Explore AIpowered solutions for data analysis, automation, decision support, and customer interaction. This course will have practical hands-on projects where we apply what you've learned through hands-on projects and case studies. We will gain practical experience in implementing AI solutions to real-world work scenarios. **Training course Course outline :** duration: Day one topics: Three Days AI Tools and Applications and Ethical Responsibility Day two topics: **Timing:** Implementing Automation, Data Analysis, and Decision making 8 a.m. - 2 p.m. Daily Day three topics: Using Natural Language Processing to enhance productivity



COE001- AI for productivity



Fees: <u>250 KD</u>

Instructor:

Prof. Ayed A. Salman computer Engineering College of Engineering & petroleum Kuwait University





COE002- Data Science for Programmers

Course objectives Contact **\$** 98765392 This course takes an applied approach to the process of Data **\$** 24983523 Science: starting from data wrangling where data is acquired, aggregated, cleaned, and presented to modeling. It reaches out 24983524 then to data exploration and modeling: building patterns and models using machine learning algorithms: Deep Learning, decision ▼ tpd.occd@eng.ku.edu.kw trees, random forest, linear regression, PCA, SVM, reinforcement learning, etc. The course will introduce the field of data visualization to enhance communicating the conclusion. **Training course Course outline :** duration: Day one topics: Three Days Python Programming Day two topics: **Timing:** Panda and NumPy <u>8 a.m. - 2 p.m. Daily</u> Day three topics: Data Manipulation and visualization **Day four topics:** Machine Learning - Part 1

OFFICE OF CONSULTATION & TRAINING College of Engineering and Petroleum	Kuwait University- College of Engineering & Petroleum - Computer Engineering – OCT COE002- Data Science for Programmers	עריין איזעע איז איזעע איזע אטאעאדיזעע איזעע איזע
	Day five topics: Machine Learning - Part 2	
Fees: 250 KD	Instructor: Prof. Ayed A. Salman computer Engineering College of Engineering & petroleum Kuwait University	



COE003- Data Science & AI



Contact Course objectives 98765392 This course will introduce attendee to Data Science or and the second s	
✓ 98765392 This source will introduce attendees to Data Gainers or	
	ad Al Tha
 24983523 Course will take practical approach to Data science and 	d machine
Learning. The course will have exercises in Python and Libraries like Panda Keras TensorFlow	Machine
≥ tpd.occd@eng.ku.edu.kw	
Training course duration: Course outline :	
Day one topics:	
Five Days Python Programming	
Timing:	
Data Engineering Process	
<u>8 a.m 2 p.m. Daily</u>	
Day three topics:	
Data Visualization	



COE003- Data Science & AI



	Day Four topics: Data Modeling - Supervised Learning Day Five topics: Data Modeling - Unsupervised Learning
Fees:	Instructor:
<u>250 KD</u>	Prof. Ayed Salman Computer Engineering College of Engineering & petroleum Kuwait University







Contact	Course objectives
\$ 98765392	
\$ 24983523	pathways of Deep Learning in different domains
L 24983524	
▼ tpd.occd@eng.ku.edu.kw	
Training course duration:	Course outline :
	Day one topics:
Five Days	Module 1: Fundamentals of Machine learning and Artificial
Timing	Intelligence Module 2: Introduction to Neural Networks and Deep Learning
Timing:	Day two tonics.
<u>8 a.m 2 p.m. Daily</u>	Duy two topics.
	Module 3: Get deep into Deep Learning Module 4: Formulate Machine Learning Projects
	Module 3: Get deep into Deep Learning Module 4: Formulate Machine Learning Projects Day three topics:
	Module 3: Get deep into Deep Learning Module 4: Formulate Machine Learning Projects Day three topics: Module 5: Introduction to Convolutional Neural Networks





COE004-Expert in Deep Learning

Day four topics:

Module 7: Introduction to Sequence Models Module 8: Emerging Machine Learning Models

Day five topics:

Module 9: Practice to DL Systems Module 10: Future Directions in DL & Applications

Fees: 250 KD

Instructor:

Prof. Fawaz Al-Anzi Prof. Ayed Salman Computer Engineering College of Engineering & petroleum Kuwait University





COE005- Value Engineering Training Workshop

Contact	Course objectives
\$ 98765392	
L 24983523	live project during the course.
L 24983524	
▼ tpd.occd@eng.ku.edu.kw	
Training course	
duration:	Course outline :
Fine Dans	Day one topics:
Title Duys	- Introduction and History of Quality and Value
Timing.	- Value and Quality concept. - Reasons for unnecessary cost.
Thing.	- Define Quality and value
<u>8 a.m 2 p.m. Daily</u>	- Information Gathering and scope defining.
	- Workshop (Information phase)





COE005- Value Engineering Training Workshop

Day two topics:

- Function Analysis
- Workshop (Function Analysis)
- FAST Diagramming
- Workshop (FAST)

Day three topics:

- Creativity, innovation and speculation.
- Team building.
- Road block to Creative & Positive thinking
- Brainstorming
- Workshop (Idea Generation)
- Selection Criteria & Idea evaluation
- Workshop (Evaluation)

Day four topics:

- Weighted Evaluation Matrix
- Workshop (WEM)
- Development Phase
- Workshop (Development Phase)
- Total Cost concept, Life Cycle Costing (LCC)
- Workshop (LCC)

Day five topics:

- Presentation skills
- Workshop (Presentation preparation)
- Team Presentation
- Implementing VE proposal
- VE vs. Cost Reduction
- Certification in Value Engineering
- How to integrate VE into your organizational process.
- General discussion and closing remarks





COE005- Value Engineering Training Workshop

Fees: 250 KD

Instructor:

Prof. Fawaz Al-Anzi Prof. Ayed Salman Computer Engineering College of Engineering & petroleum Kuwait University







Course objectives Contact **\$** 98765392 The program aims to introduce concepts of cybersecurity and digital 24983523 forensics to policymakers, law enforcement personnel, prosecutors, and judges. The goal is to provide legal and practical knowledge for 24983524 parties involved in processing cybercrime cases so that they may understand the proper procedures for collecting, processing, ▼ tpd.occd@eng.ku.edu.kw analyzing, evaluating, and reporting digital evidence, which is crucial when conducting sound criminal investigation involving electronic data. Topics covered include internet, cybersecurity, and networking fundamentals, digital forensics (including malware identification, data acquisition, and data analysis), cyber-warfare, privacy and surveillance, laws and principles (focused on Kuwait law), data governance, and cybercrime actors. Material will be delivered through lectures, hands-on labs, and reallife case studies. **Training course Course outline :** duration: Day one topics: Five Days Computing security concepts and problems: data confidentiality, integrity, availability, authenticity, etc. Networking: protocols and topologies **Timing:** Cryptography: encryption and digital signatures <u>8 a.m. - 2 p.m. Daily</u> Lab 1 - Network Discovery Day two topics: Internet infrastructure System administration Intrusion detection and prevention systems





COE006- Judicial Training on Cybercrime and Digital Forensics

Lab 2 - IPS and IDS case study

Day three topics:

Digital forensics fundamentals Malware identification and extraction Linux/Unix file system, data acquisition, and forensic analysis Windows file system, data acquisition, and forensic analysis

Lab 3 - Forensics experiment

Day four topics:

Cybercrime laws and national security (Part 1: from Kuwait's perspective) Data governance policies Cyberwarfare, surveillance, and privacy Unauthorized access and data leaks

Case study 1

Day five topics:

Cybercrime principles and laws (Part 2: from an international perspective) Types of malicious actors and their motivations Treaties and confidence-building measures Interpersonal and diplomatic relations

Case study 2



COE006- Judicial Training on Cybercrime and Digital Forensics



Fees: 250 KD

Instructor:

Ameer Mohammed Ahmad Alattar Computer Engineering College of Engineering & petroleum Kuwait University