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جامعة الجوف
Jouf University

وكالة الدراسات العليا والبحث العلمي
عمادة الدراسات العليا

VISION رؤية 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

وزارة التعليم
Ministry of Education

Master of Science in Artificial Intelligence

College of Computer and Information Sciences

Department of Computer Science

Vision and mission of the program:

Vision:

Leadership in education and scientific research and being nationally ranked among the best colleges of computer and information sciences.

Mission:

Preparation of qualified scientific cadres in the field of artificial intelligence through innovative education and scientific research.

Program Objectives:

1. Enable students to master the basic principles of Artificial Intelligence toward inference, perception, knowledge representation, learning, and solving artificial intelligence related problem.
2. Provide the necessary knowledge to understand the processes used to create computer program that learns to make decisions and reasoning.
3. Provide the sufficient knowledge in methods and tools based on artificial intelligence and robotics systems, which enable students to solve problems.
4. Provide students with the experience in designing systems and algorithms to enable computers understand human communications.
5. Provide the knowledge required to explore the current scope, potential, limitations, and implications of intelligent systems.
6. Enable students to use machine learning methods and data visualization to provide data analysis services for use in organizations.

Target groups:

This program mainly target students who have a Bachelor degree in the field of Computer and Information Sciences or in other related fields.

Admission requirements:

In addition to the conditions stipulated in Part 4 of the Unified Regulations for Graduate Studies and its executive rules, the Department requires the following:

1. The applicant must be Saudi, Non-Saudi Must, be on official Scholarships for graduate studies.
2. The applicant must have a bachelor's degree with a minimum GPA of “good” in Computer and Information Sciences or related disciplines.
3. The applicant must have a score of (450) or more in the English language test (TOEFL) or what is equivalent in the other approved tests, or have a bachelor's degree from an institution which uses English as a medium of instructions.
4. Student acceptance/ admission is based on a combined metric that is calculated as follows: 60% is based on the student bachelor CGPA and 40% on the University ability test (placement test). The department has the right to add any additional requirements.
5. The applicant must successfully pass a personal interview.
6. The department can add other requirements or change existing ones.

Program Requirements:

The graduate studies' unified regulations of Saudi universities and its executive rules will be applied at Jouf University with regard to admission requirements, graduation rules, obtaining a degree, as well as the additional criteria for the program.

Program Components:

•It is an academic program aims to provide graduate cadres capable of competing in the labor market in the field of Artificial Intelligence through the identification and development of modern tools in the field in order to contribute to the knowledge based economic growth of the Saudi community. The program consists of a group of courses distributed as follows:

Compulsory (specialization)	Elective (specialization/college)	Compulsory (College)	Research project
24	6	0	6

Study Plan:

The Credits of the Master of Science in Artificial Intelligence program are distributed into four levels as follows:

Level 1:

S.	Course Code	Course Title	Credit Hours
1	AI 611	Research Methods in Computer Science	3
1	AI 612	Algorithms and Intelligent Systems	3
2	AI 613	Advanced Probability and Statistics	3
3	AI 614	Machine Learning	3
Total credits			12

Level 2:

S.	Course Code	Course Title	Credit Hours
1	AI 615	Computer Vision	3
2	AI 616	Knowledge Representation and Reasoning	3
3	AI 617	Deep Learning	3
Total credits			9

Level 3:

S.	Course Code	Course Title	Credit Hours
1	AI 618	Robotics	3
2	------	Elective Course	3
3	------	Elective Course	3
Total credits			9

Level 4:

S.	Course Code	Course Title	Credit Hours
1	AI 698	Research Project	6
Total credits			6

Elective Courses:

S.	Course Code	Course Title	Credit Hours
1	AI 621	Advanced Data Mining	3
2	AI 622	Advanced Digital Image Processing	3
3	AI 623	Selected Topics in Artificial Intelligence	3
4	AI 624	Natural Language Processing	3
5	AI 625	Pattern Recognition	3
6	AI 626	Multi Agent Systems	3