Kafrelsheigh University Faculty of Artificial Intelligence

Student Guide

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The Faculty of Artificial Intelligence at Kafrelsheikh University seeks to issue a student's guide in order to educate the student and guide him on the steps he must follow when joining the faculty, including everything related to him since his nomination to the faculty and his enrollment, until obtaining a bachelor's degree. It also includes a statement of the study plan during the four academic years, as well as the number of theoretical and practical credit hours.

We hope that God will guide us to what is always good for the benefit of the student, the college, the surrounding environment, and our beloved Egypt.

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Speech of the Prof. Dr. / President of the University



My sons and daughters students,

Happy New Year on the start of the new school year, which I pray to God Almighty to make it a successful school year for all of you.

My sons and daughters, I welcome you all to the Faculty of Artificial Intelligence at Kafr El-Sheikh University, at the beginning of the academic year, and I invite you to make the most of the sources of science and knowledge in the faculty because it gives you the opportunity to study at university as an important and effective link in building your personality. Before you are the sources of science and knowledge available and many faculty members Evacuations from our prestigious universities, assistant teachers and teaching assistants who endowed their knowledge and efforts to serve you all, and an administrative apparatus at the highest level to serve you, and stadiums and laboratories equipped with the latest scientific equipment, all in order to provide the best scientific services in addition to other activities (sports, cultural and social), so use them as much as you can . I also invite you, my dear sons, to arm yourself at that stage with the weapon of faith and trust, faith in God and his messengers and his books, and trust in your professors who made themselves beacons that light the way for you. Your country is waiting for your efforts and your race to realize its hopes for Egypt.

I wish you success and a bright future, God willing





Speech of Mr. Prof. Dr. Tamer Medhat Ibrahim, Vice Dean for Education and Student Affairs



Kafrelsheikh University always strives to provide educational service in a classy manner that competes with international and European universities, in order to promote economic growth and improve the lives of Egyptians, in order to support the innovation sector in Egypt, especially in the field of artificial intelligence and help startups to grow. Therefore, the education and student affairs sector It is the basic foundation for the continuation, modernization and development of the educational system in the college by achieving continuous communication between students and faculty members, and then we are working at a strong and confident pace to bring about more harmony and interaction between the different departments of the college to produce an educational output enjoys quality competition locally and that and And internationally. seek. we with its departments, departments, and units, to participate effectively in the implementation of the strategic plan of the College Artificial Intelligence and to follow up the achievement of academic accreditation standards through the development of programs, study plans, educational and pedagogical methods, and cultural, sports and social youth activities, thus





contributing to more The sophistication of our distinguished university and the elevation and elevation of our beloved country, the great Egypt.





Firstly

Faculty Start





Faculty Start

The Prime Minister issued Resolution No. (871) of 2019 on 4/8/2019 establishing the Faculty of Artificial Intelligence, Kafr El-Sheikh University.

- The study began at the faculty in the first year in the academic year 2019/2020.
- **Students** are accepted into the college through the Universities Admission Coordination Office.
- The duration of study at the college is four academic years, and whoever successfully passes it is awarded a bachelor's degree in artificial intelligence sciences, and it is approved by the President of the university.







(Vision)

The Faculty of Artificial Intelligence at Kafrelsheikh University seeks to support excellence in Egypt and provide state institutions with the knowledge to promote economic growth and improve the lives of Egyptians.

(Mission)

- Support the country's efforts to build and maintain Al-based innovation, growth, and productivity in Egypt by focusing on transformation efforts to deep learning and machine learning.
- 2. Supporting the industrial and business sectors in Egypt with human cadres with artificial intelligence skills.
- 3. Supporting the innovation sector in Egypt in the field of artificial intelligence and helping emerging companies to grow into Egyptian companies capable of global excellence.

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Faculty Goals

- 1) Preparing and qualifying human cadres in the various sectors of the state on artificial intelligence technology.
- Developing academic programs at the university related to the sciences of artificial intelligence techniques.
- 3) Promote areas of excellence in artificial intelligence research.
- 4) Encouraging and supporting scientific research in the fields of artificial intelligence.
- 5) Spreading scientific awareness of research techniques in the field of artificial intelligence.
- 6) Building strategic partnerships with international institutes and universities in the field of artificial intelligence.
- Advance the national knowledge economy through the outputs of artificial intelligence research.
- 8) Investing in the latest artificial intelligence techniques and tools and applying them in various fields of work with high-level efficiency.
- Investing all energies optimally, and exploiting the available human and material resources and capabilities in a creative manner.
- 10) Providing scientific and technical advice and assistance to bodies and entities that use artificial intelligence technology and are interested in decision-making and support.
- 11) Spreading and deepening awareness in society with the aim of using artificial intelligence technology in the various sectors and institutions of the state, and raising the efficiency of its use.





12) Organizing conferences and holding scientific meetings with the aim of raising the educational level and deepening the scientific concept among specialized cadres.

Values

In building its study plan and formulating its objectives, the Faculty of Artificial Intelligence relies on a number of lofty values, including:

- 1) Emphasis on human respect.
- 2) Perfection and quality.
- 3) Teamwork.
- 4) Originality and modernity.
- 5) fairness and integrity.
- 6) Intellectual freedom
- 7) Encouraging collaborative learning and teamwork.
- 8) Encouraging and developing manual labor skills.
- 9) Develop critical thinking skills and enhance problem-solving skills.
- 10) Achieving integration between sciences.
- 11) Time management and organization.
- 12) Link learning to practical life.





- 13) Achieving the concept of enjoyable learning.
- 14) Achieving a plurality of activities and events.
- 15) Initiative and training on invention and innovation.

4 Basic Departments

- 1. Machine learning and information retrieval
- 2. The Robotics and Intelligent Machines
- 3. Embedded Network Systems Technology
- 4. Data Sciences

Some courses in mathematics necessary for all fields of informatics will be used from some departments of the faculties of science and engineering at the university. In addition to the basics of programming, computer security, operating systems and computer networks from the College of Computers and Information at the university.





Scientific Degrees

Kafrelsheikh University, based on the recommendation of the Faculty of Artificial Intelligence Council, grants a bachelor's degree in Artificial Intelligence Sciences.

College admission requirements

The Faculty of Artificial Intelligence accepts students who have obtained a secondery school, the Scientific Division, through the rules governing the coordination of admission to Egyptian universities, which are set by the Supreme Council of Universities and applied by the Office for the Coordination of University Admission to students who have obtained a high school certificate and equivalent certificates.





نظام الدراسة

- 1) The study in the faculty depends on the credit hour system, and the credit hour is a unit of study to determine the weight of the course.
- 2) Obtaining a bachelor's degree in any of the disciplines stipulated in Article (3) of these regulations requires the student to successfully pass 144 credit hours over at least eight semesters, divided into four levels of study. If the student chooses a minor in addition to the major, he must successfully pass an additional 15 credit hours of the requirements for the minor.





studying Language

English and Arabic related to each subject.

Study and graduation dates

The academic year is divided into two semesters as follows:

- The first semester (the fall semester) lasts for 15 weeks and begins on a date determined by the University Council.
- The second semester (spring semester) lasts 15 weeks and begins on a date determined by the University Council.
- There may be a summer semester, according to the nature of the study in the college, for a period of 8 weeks, and it begins on a date determined by the University Council. Each semester is followed by a two-week period of final exams.





Graduation is at the end of each semester and therefore the graduation roles will be:

- Graduation at the end of the first semester (January round).
- Graduation at the end of the second semester (June round).
- Graduation at the end of the summer semester (September round).

Registration, deletion and addition

• The student registers the courses he chooses at the beginning of each semester through the college's website or the registration request form provided by the college at the times determined by the college administration before the start of regular study.





- The College Council determines the minimum number of students to be enrolled in a course and the conditions under which this course can be opened.
- A regular student may register in courses with a maximum of 21 credit hours and a minimum of 12 credit hours. As for students who are under observation, they are not allowed to register for more than 15 credit hours.
- After completing the registration procedures, the student may delete or add one or more courses during a period determined by the college for the addition and deletion, and this is done in coordination with the student's academic advisor and through a specific form provided by the college.





 The student is allowed to study various courses and register at higher levels based on his selection of the required courses as requirements for the higher courses. The student is not registered in a higher course unless he succeeds in its requirements. Based on the approval of the relevant department council, this condition may be waived if the student had previously registered in the course requirement and did not pass it, or was registered in the course and its previous requirement at the same time.

Withdrawal from the scheduled

•After registering the courses he chose, the student may withdraw from one or more courses during a specific period announced by the





college administration so that the number of hours registered for the student is not less than the minimum registration for one semester (12 credit hours). In this case, the student is not considered a failure in the courses that He withdrew from it and only "withdrawn" grade will be given to him.

If a student withdraws from one or more courses after the specified period for that without a compelling excuse accepted by the College Council, a "fail" grade in the courses from which he withdrew is calculated. But if he submits at least one month before the exam with a compelling excuse accepted by the college council, a "withdrawal" grade is calculated for him.





Rights and duties of the student

Student's duties	Student rights							
1 Seeing and complying with	1-Creating the appropriate							
university rules, regulations	environment for teaching and							
and decisions	learning.							
2-Performing all required	2 -Get the timetables							
academic procedures	3-Holding lectures on their							
according to the dates	scheduled dates.							
established by the university	4-Scientific inquiry and							
3-Regularly studying,	discussion.							
respecting the rules related to	5-Maintaining the confidentiality of							
the conduct of lectures, and	the student's personal and academic							
not being absent from them.	information.							
Excuses are acceptable in	6-People with special needs have							
accordance with university	access to facilities that enable them							
rules and regulations.	to obtain educational attainment.							
4-Being scientifically honest	7-Providing possible health care in							
and adhering to the rules	the medical facilities of the							
5-Avoid academic violations	university							
6-Observe the etiquette of	&- A benefit from the aid and social							
benefiting from lectures and	care provided by the university in							
maintaining their time	accordance with the regulations and							
7 Follow up on academic	instructions regulating this							
announcements on the	9-To run for student training							
university website and on the	courses and programs and							
official bulletin boards inside	participate in cultural activities in a							
the university	way that does not conflict with							
8- Respecting the examination	academic duties.							
regulations and not cheating	10-Grievance against any decision							
or assisting in committing it in	issued against the student in							
any way whatsoever	accordance with the grievance rules							
	and procedures							





Attendance and absence

- Studying at the Faculty of Artificial Intelligence is regular and affiliation is not permitted. The followup process for students' attendance is subject to conditions and regulations set by the college administration.
 - chieving an attendance rate of not less than 75% of the lectures, practical and theoretical exercises in each course, except for the open lab exercises (see Article 23), where attendance is not required. If the student's absence without an acceptable excuse in a course exceeds 25%, the College Council may deprive him of entering the final exam after being warned. It gives a score of "zero" in the final exam for the course. If the student submits an excuse acceptable to the college council, a "withdrawal" grade is calculated for the course for which the excuse was presented.
- A student who misses the final exam for any course without an acceptable excuse is given a score of "zero" in that exam, and the grades of the semester work he obtained are calculated for him.
- If the student presents a compelling excuse accepted by the College Council for not attending the final exam for any course within two days of taking the exam, an "incomplete" grade is calculated for him in this course, provided that he has obtained at





- least 60% of the semester work grades, otherwise he will be denied from entering the final exams.
- In this case, the student with an "incomplete" grade is given the opportunity to take the final exam in the next semester or on the date set by the College Council. The student's final grade is calculated on the basis of the grade obtained in the final exam in addition to the grade previously obtained in the semester work.

Dropout •

- •The student is considered to have dropped out if
 he did not register in a semester or withdrew
 from all semester courses without an acceptable
 excuse.
- •A student may drop out with an acceptable excuse for two consecutive semesters or three non-consecutive semesters with a maximum. He is dismissed from the college if he stops studying for a longer period without an excuse





accepted by the College Council and approved by the University Council.

•The student may submit a request to suspend enrollment in the college according to the terms and conditions set by the university.

Exam system •

- a . The maximum mark for each course is 100 and is distributed as follows:
- •60 marks for the end-of-semester exam.
- •20 marks for the mid-semester exam.
- •10 degrees for practical applications
- •10 marks for oral exams
- B. The University Council sets the dates for midsemester exams and final exams, and they are announced to students before the exam at an appropriate time.





- C. As for cultural and humanities courses and university requirements, the scores of practical and oral tests are added to the end-of-semester exam to become 80 degrees.
- Dr. The time for the end-of-semester exam for any course is two hours at most.
- e. The student is warned academically if his cumulative average in any semester is less than 2.0. If he is unable to raise his cumulative average in the next two semesters, a second warning will be given to him. The College Council may grant the student an exceptional and final opportunity to raise his cumulative average. The cumulative average is calculated in accordance with Article No.)14(.

The college follows the credit hour system, which depends on the basic unit being the academic course





and not the academic year. The assessment system is based on the assessment in each course with a points system, which is determined according to the following table:

Grade	points	grade	percent
	4	A+	90 % نافتر
	3.7	A	- %85
Excellent			smaller
			than % 90
Vacad	3.3	В+	- smaller%80 %than 85
V.good	3	В	- smaller%75 %than 80
Card	2.7	C+	- smaller%70 %than 75
Good	2.4	С	- smaller%65 than 70%
Doza	2	D+	- smaller%60 than 65%
Pass	1.7	D	- smaller%50 %than 60
Fail	هي ڏور	F	smaller than %50





Grade	Symbolic Grade	المؤثل الذرالهمي
Excellent	A +	4.0
	A	smaller than 3.7 4.0
V.Good	\mathbf{B}^{+}	smaller than 3.3 3.7
	В	smaller than 3.0 3.3
Cood	C +	smaller than 2.7 3.0
Good	C	smaller than 2.3 2.7
Dogg	\mathbf{D}^{+}	smaller than 2.0 2.3
Pass	D	smaller than 1.7 2.0
Fail	F	smaller than 1.7

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Code	Course name		Credit	Teaching hours		Course	Semester
Code	English	Prerequisites	hours	L	T	Status	
CS101	Computer Fundamentals		3	2	2	Core	First
MATH101	Introduction to Linear Algebra		3	3	-		
HUM101	English Language		3	3	-		
MATH102	Statistics		3	2	2		
MATH103	Differential and Integral Calculus		3	2	2		
CS102	Mathematics for Computer Science		3	3	-	Elective	
MATH104	Theory of Knowledge		3	3	-	(2 courses)	
Al101	Introduction to artificial & Knowledge representation		3	3	-		
AI102	Concepts in Artificial Intelligence		3	3	-		
AI103	Learning From Data		3	3	-		
HUM102	Scientific Thinking		3	3	-	Core	
HUM102	Human Rights and anti- Corruption		3	3	-		
CS103	Logic computer Science		3	3	-		Second
CS104	Fundamental of Computer Graphics		3	2	2	Elective (2 courses)	
NANO101	The Fundamental Science of Nanotechnology		3	3	-		
CS105	Databases		3	2	2		
	Total credit hours		36				

Code					ng hours	Course	Semester
	English	Prerequisites	hours	L	T	Status	
Al201	Introduction to Machine Learning	Concepts in Artificial Intelligence	3	2	2		
Al202	Introduction to Vision and Robotics		3	2	2		
MATH201	Introduction to Algorithms and Data Structures		2	2	-	Core	
AI203	Introduction to Natural Language Processing	Concepts in Artificial Intelligence	2	2	-		
HUM201	Cognitive Psychology		2	2	-		First
Al204	Introduction to Programming with Python		3	2	2		
CS202	Computer Security	Mathematics for Computer Science	3	2	2	Elective (2 courses)	
CS203	Computer Communications and Networks		3	2	2	(Louise)	
CS204	Information Retrieval and Web Search		3	2	2		
CS205	Problem Solving and Programming in C	Mathematics for Computer Science	3	2	2		
AI205	Fundamental of Computational Intelligence		2	1	2		
CS206	Object Oriented Programming		3	2	2	Core	
HUM202	Human Memory		2	2	-		
Al206	Advanced artificial & Knowledge representation	Introduction to artificial & Knowledge representation	2	1	2		Second
Al207	Introduction to Multi Agent Systems Design		3	2	2		
NANO201	Introduction to Nanoscale Engineering Design and Manufacturing		3	3	•	Elective (2 courses)	
CS207	Bioinformatics		3	2	2		
CS208	Advanced Computer Graphics	Fundamental of Computer Graphics	3	2	2		
	Total credit hours						

Code	Course name		Credit	Teaching hours		Course	Semester
	English	Prerequisites	hours	L	T	Status	
Al301	Computational Vision	Introduction to Vision and Robotics	3	2	2	Core	First
Al302	Fundamental of Deep Learning for computer vision		3	2	2		
AI303	Advanced Machine Learning	Introduction to Machine Learning	3	2	2		
Al304	Advanced Computational Intelligence	Fundamental of Computational Intelligence	3	2	2		
Al305	Software Development for Mobile Devices		3	2	2		
AI306	Advanced Natural Language Processing	Introduction to Natural Language Processing	3	2	2	Elective	
AI307	Advanced Vision and Robotics	Introduction to Vision and Robotics	3	2	2	(2 courses)	
NANO301		The Fundamental Science of Nanotechnology	3	3	-		
AI308	Fundamental of Cognitive Interaction with Robots		3	2	2		
Al309	Advanced Design for Artificial Intelligence	Concepts in Artificial Intelligence	3	2	2	Core	
Al310	Big Data Analysis	Fundamental of Artificial Intelligence	3	2	2		
Al311	AI for leaders		3	2	2		
Al312	Cloud Computing Concepts		3	2	2		Second
Al313	Introduction to Artificial Intelligence in Games		3	2	2	Elective (2 courses)	
Al314	Data Integration and Exchange		3	2	2		
Al315	Advanced Topics in Artificial Intelligence for Intelligent Systems	Concepts in Artificial Intelligence	3	2	2		
	Total credit hours						

Code	Course name				ng hours	Course	Semester
	English	Prerequisites	hours	L	T	Status	
AI401	Internet of Things		2	2	-	Core	
A1402	Data Mining and Big Data Analysis	Introduction to Linear Algebra Introduction to Programming with Python	3	2	2		First
A1403	Intelligent Decision Support Systems		2	1	2		
A1404	Artificial Vision and Pattern Recognition		3	2	2		
AI405	Intelligent System Project 1		4	-	8]	
A1406	Advanced Cognitive Interaction with Robots	Fundamental of Cognitive Interaction with Robots	3	2	2		
AI407	Quantitative Reasoning & Statistical Methods for Planners		3	2	2	Elective (2 courses)	
A1408	The Computing Technology Inside Your Smartphone		3	2	2		
AI409	Reasoning and agents		3	2	2	1	
AI410	Intelligent System Project 2		4	-	8		
AI411	Professional Practice in Artificial Systems		3	2	2	Core	
NANO401	Nanotechnology and Artificial Intelligence		3	3	-		
AI412	Deep learning for Self Driving Cars		3	2	2		Second
AI413	Genetic Algorithms & Neural Networks		3	2	2	Elective (2 courses)	
AI414	Fundamentals of Artificial Intelligence in Smart Cities		3	2	2		
AI415	Software Testing		3	2	2		
	Total credit hours						

The physical structure of the college **photo** archive











































































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Kafr Elsheikh UNIVERSITY







