



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY

**Computer Science Program****برنامج علوم الحاسب****I. Big Data Analytics****أ. تحليل البيانات الضخمة****Study Plan****الخطة الدراسية**

Semester	Code	Course Name	LCT	LAB	TUT	OTH	CNTCT	CH	SWL	ECTS
1	MAT111	Mathematics I	3	0	1	0	4	3	150	6
	PHY211	Physics II	2	2	0	0	4	3	150	6
	CSE014	Structured Programming	2	3	0	0	5	3	180	6
	UC1	University Requirement (1)	2	0	0	0	2	2	90	4
	UC2	University Requirement (2)	2	0	0	0	2	2	90	4
	UE1	Elective University (1)	2	0	0	0	2	2	90	4
							19	15	750	30
2	MAT112	Mathematics II	3	0	1	0	4	3	150	6
	MAT131	Probability & Statistics I	2	1	2	0	5	3	195	6
	CSE015	Object Oriented Programming	2	3	0	0	5	3	180	6
	CSE315	Discrete Mathematics	2	0	2	0	4	3	150	6
	UC3	University Requirement (3)	2	0	0	0	2	2	90	4
	UE2	Elective University (2)	2	0	0	0	2	2	90	4
							22	16	855	32



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY



Semester	Code	Course Name	LCT	LAB	TUT	OTH	CNTCT	CH	SWL	ECTS
3	MAT212	Linear Algebra	2	2	0	0	4	3	150	6
	MAT231	Probability & Statistics II	2	2	1	0	5	3	195	6
	CSE111	Data Structures	2	3	0	0	5	3	180	6
	CSE131	Logic Design	2	2	2	0	6	3	195	6
	AIE111	Artificial Intelligence	2	2	1	0	5	3	180	6
	UC4	University Requirement (4)	2	0	0	0	2	2	90	4
							27	17	990	34
4	MAT312	Differential Equations	2	0	2	0	4	3	150	6
	CSE132	Computer Architecture & Organization	2	2	1	0	5	3	165	6
	CSE211	Web Programming	2	2	1	0	5	3	165	6
	CSE221	Database Systems	2	2	1	0	5	3	180	6
	CSE191	Field Training 1 in Computer Science	2	0	0	0	2	2	60	4
	CSE251	Software Engineering	2	2	1	0	5	3	180	6
							26	17	900	34
5	CSE233	Operating Systems	2	2	1	0	5	3	165	6
	E1	Elective Course (1)	2	2	1	0	5	3	180	6
	CSE261	Computer Networks	2	2	1	0	5	3	165	6
	AIE121	Machine Learning	2	2	1	0	5	3	180	6
	CSE352	Systems Analysis & Design	2	2	1	0	5	3	165	6
	UC5	University Requirement (5)	2	0	0	0	2	2	90	4
							27	17	945	34
	CSE112	Design & Analysis of Algorithms	3	0	3	0	6	4	195	8



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY



Semester	Code	Course Name	LCT	LAB	TUT	OTH	CNTCT	CH	SWL	ECTS
6	E2	Elective Course (2)	2	2	1	0	5	3	180	6
	CSE363	Cloud Computing	2	2	1	0	5	3	180	6
	CSE373	Parallel Programming	2	2	1	0	5	3	180	6
	CSE292	Field Training 2 in Computer Science	2	0	0	0	2	2	60	4
	UC6	University Requirement (6)	2	0	0	0	2	2	90	4
							25	17	885	34
7	CSE271	Introduction to Parallel Computing	2	2	1	0	5	3	180	6
	CSE322	Big Data Analytics 1	2	2	1	0	5	3	180	6
	AIE323	Data Mining	2	2	1	0	5	3	180	6
	CSE493	Graduation Project 1	2	3	0	0	5	3	180	6
	E3	Elective Course (3)	2	2	1	0	5	3	180	6
	UC7	University Requirement (7)	2	0	0	0	2	2	90	4
							27	17	990	34
8	CSE411	Theory of Computation & Compilers	2	2	1	0	5	3	180	6
	CSE427	Selected Topics in Big Data	2	2	1	0	5	3	180	6
	CSE494	Graduation Project 2	2	3	0	0	5	3	180	6
	E4	Elective Course (4)	2	2	1	0	5	3	180	6
	E5	Elective Course (5)	2	2	1	0	5	3	180	6
	UE3	Elective University (3)	2	0	0	0	2	2	90	4
							27	17	990	34
							200	133	7305	266



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY



Elective (E1)

CSE234	Embedded Systems
CSE281	Image Processing
CSE312	Advanced Web Programming
CSE313	Mobile Programming
CSE323	Advanced Database Systems

Elective (E2)

CSE446	Information & Computer Networks Security
CSE454	Advanced Software Engineering
CSE464	Internet of things
AIE231	Neural Networks

Elective (E3)

CSE383	Computer Vision
AIE241	Natural Language Processing
AIE322	Advanced Machine Learning
BMD311	Introduction to Bioinformatics
BMD312	Clinical Informatics

Elective (E4)

CSE424	Data Warehousing
AIE343	Machine Learning for Text Mining
AIE424	Intelligent Decision Support Systems
AIE425	Intelligent Recommender Systems
AIE314	AI-Based Programming

Elective (E5)

CSE425	Big Data Analytics 2
CSE426	Selected Topics in Data Science
CSE474	Distributed Information Systems
CSE475	High Performance Computing
AIE342	Advanced Methods for Data Analysis
AIE332	Deep Learning



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY

**Computer Science Program****برنامج علوم الحاسب****II. Computer Vision****II. الرؤية بالحاسب****Study Plan****الخطة الدراسية**

Semester	Code	Course Name	LCT	LAB	TUT	OTH	CNTCT	CH	SWL	ECTS
1	MAT111	Mathematics I	3	0	1	0	4	3	150	6
	PHY211	Physics II	2	2	0	0	4	3	150	6
	CSE014	Structured Programming	2	3	0	0	5	3	180	6
	UC1	University Requirement (1)	2	0	0	0	2	2	90	4
	UC2	University Requirement (2)	2	0	0	0	2	2	90	4
	UE1	Elective University (1)	2	0	0	0	2	2	90	4
							19	15	750	30
2	MAT112	Mathematics II	3	0	1	0	4	3	150	6
	MAT131	Probability & Statistics I	2	1	2	0	5	3	195	6
	CSE015	Object Oriented Programming	2	3	0	0	5	3	180	6
	CSE315	Discrete Mathematics	2	0	2	0	4	3	150	6
	UC3	University Requirement (3)	2	0	0	0	2	2	90	4
	UE2	Elective University (2)	2	0	0	0	2	2	90	4
							22	16	855	32



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY



Semester	Code	Course Name	LCT	LAB	TUT	OTH	CNTCT	CH	SWL	ECTS
3	MAT212	Linear Algebra	2	2	0	0	4	3	150	6
	MAT231	Probability & Statistics II	2	2	1	0	5	3	195	6
	CSE111	Data Structures	2	3	0	0	5	3	180	6
	CSE131	Logic Design	2	2	2	0	6	3	195	6
	AIE111	Artificial Intelligence	2	2	1	0	5	3	180	6
	UC4	University Requirement (4)	2	0	0	0	2	2	90	4
							27	17	990	34
4	MAT312	Differential Equations	2	0	2	0	4	3	150	6
	CSE132	Computer Architecture & Organization	2	2	1	0	5	3	165	6
	CSE211	Web Programming	2	2	1	0	5	3	165	6
	CSE221	Database Systems	2	2	1	0	5	3	180	6
	CSE191	Field Training 1 in Computer Science	2	0	0	0	2	2	60	4
	CSE251	Software Engineering	2	2	1	0	5	3	180	6
							26	17	900	34
5	CSE233	Operating Systems	2	2	1	0	5	3	165	6
	E1	Elective Course (1)	2	2	1	0	5	3	180	6
	CSE261	Computer Networks	2	2	1	0	5	3	165	6
	CSE281	Image Processing	2	2	1	0	5	3	180	6
	AIE121	Machine Learning	2	2	1	0	5	3	180	6
	UC5	University Requirement (5)	2	0	0	0	2	2	90	4
							27	17	960	34
	CSE112	Design & Analysis of Algorithms	3	0	3	0	6	4	195	8



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY



Semester	Code	Course Name	LCT	LAB	TUT	OTH	CNTCT	CH	SWL	ECTS
6	CSE352	Systems Analysis & Design	2	2	1	0	5	3	165	6
	CSE382	Computer Graphics	2	2	1	0	5	3	180	6
	E2	Elective Course (2)	2	2	1	0	5	3	180	6
	CSE292	Field Training 2 in Computer Science	2	0	0	0	2	2	60	4
	UC6	University Requirement (6)	2	0	0	0	2	2	90	4
							25	17	870	34
7	CSE363	Cloud Computing	2	2	1	0	5	3	180	6
	CSE383	Computer Vision	2	2	1	0	5	3	180	6
	AIE323	Data Mining	2	2	1	0	5	3	180	6
	CSE493	Graduation Project 1	2	3	0	0	5	3	180	6
	UC7	University Requirement (7)	2	0	0	0	2	2	90	4
	E3	Elective Course (3)	2	2	1	0	5	3	180	6
							27	17	990	34
8	CSE411	Theory of Computation & Compilers	2	2	1	0	5	3	180	6
	CSE484	Interactive Multimedia	2	2	1	0	5	3	180	6
	CSE494	Graduation Project 2	2	3	0	0	5	3	180	6
	E4	Elective Course (4)	2	2	1	0	5	3	180	6
	E5	Elective Course (5)	2	2	1	0	5	3	180	6
	UE3	Elective University (3)	2	0	0	0	2	2	90	4
							27	17	990	34
							200	133	7305	266



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY



Elective (E1)

CSE234	Embedded Systems
CSE271	Introduction to Parallel Computing
CSE313	Mobile Programming
CSE373	Parallel Programming

Elective (E2)

CSE446	Information & Computer Networks Security
CSE464	Internet of things
AIE212	Knowledge-Based Systems
AIE314	AI-Based Programming

Elective (E3)

AIE231	Neural Networks
AIE241	Natural Language Processing
AIE322	Advanced Machine Learning
BMD431	Medical Image Informatics

Elective (E4)

CSE322	Big Data Analytics 1
CSE474	Distributed Information Systems
CSE475	High Performance Computing
CSE485	Computer Games Theory
AIE332	Deep Learning

Elective (E5)

CSE486	Selected Topics in Computer Vision
CSE272	Parallel & Distributed Systems
CSE487	Mixed & Augmented Reality
AIE342	Advanced Methods for Data Analysis
AIE343	Machine Learning for Text Mining



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY

**Computer Science Program****برنامج علوم الحاسب****III. Software Engineering****III. هندسة البرمجيات****Study Plan****الخطة الدراسية**

Semester	Code	Course Name	LCT	LAB	TUT	OTH	CNTCT	CH	SWL	ECTS
1	MAT111	Mathematics I	3	0	1	0	4	3	150	6
	PHY211	Physics II	2	2	0	0	4	3	150	6
	CSE014	Structured Programming	2	3	0	0	5	3	180	6
	UC1	University Requirement (1)	2	0	0	0	2	2	90	4
	UC2	University Requirement (2)	2	0	0	0	2	2	90	4
	UE1	Elective University (1)	2	0	0	0	2	2	90	4
							19	15	750	30
2	MAT112	Mathematics II	3	0	1	0	4	3	150	6
	MAT131	Probability & Statistics I	2	1	2	0	5	3	195	6
	CSE015	Object Oriented Programming	2	3	0	0	5	3	180	6
	CSE315	Discrete Mathematics	2	0	2	0	4	3	150	6
	UC3	University Requirement (3)	2	0	0	0	2	2	90	4
	UE2	Elective University (2)	2	0	0	0	2	2	90	4
							22	16	855	32



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY



Semester	Code	Course Name	LCT	LAB	TUT	OTH	CNTCT	CH	SWL	ECTS
3	MAT212	Linear Algebra	2	2	0	0	4	3	150	6
	MAT231	Probability & Statistics II	2	2	1	0	5	3	195	6
	CSE111	Data Structures	2	3	0	0	5	3	180	6
	CSE131	Logic Design	2	2	2	0	6	3	195	6
	AIE111	Artificial Intelligence	2	2	1	0	5	3	180	6
	UC4	University Requirement (4)	2	0	0	0	2	2	90	4
							27	17	990	34
4	MAT312	Differential Equations	2	0	2	0	4	3	150	6
	CSE132	Computer Architecture & Organization	2	2	1	0	5	3	165	6
	CSE211	Web Programming	2	2	1	0	5	3	165	6
	CSE221	Database Systems	2	2	1	0	5	3	180	6
	CSE191	Field Training 1 in Computer Science	2	0	0	0	2	2	60	4
	CSE251	Software Engineering	2	2	1	0	5	3	180	6
							26	17	900	34
5	CSE233	Operating Systems	2	2	1	0	5	3	165	6
	E1	Elective Course (1)	2	2	1	0	5	3	180	6
	CSE261	Computer Networks	2	2	1	0	5	3	165	6
	AIE121	Machine Learning	2	2	1	0	5	3	180	6
	CSE352	Systems Analysis & Design	2	2	1	0	5	3	165	6
	UC5	University Requirement (5)	2	0	0	0	2	2	90	4
							27	17	945	34
	CSE112	Design & Analysis of Algorithms	3	0	3	0	6	4	195	8



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY



Semester	Code	Course Name	LCT	LAB	TUT	OTH	CNTCT	CH	SWL	ECTS
6	CSE241	Security of Information Systems	2	2	1	0	5	3	150	6
	CSE323	Advanced Database Systems	2	2	1	0	5	3	180	6
	E2	Elective Course (2)	2	2	1	0	5	3	180	6
	CSE292	Field Training 2 in Computer Science	2	0	0	0	2	2	60	4
	UC6	University Requirement (6)	2	0	0	0	2	2	90	4
							25	17	855	34
7	CSE363	Cloud Computing	2	2	1	0	5	3	180	6
	CSE454	Advanced Software Engineering	2	2	1	0	5	3	180	6
	AIE323	Data Mining	2	2	1	0	5	3	180	6
	CSE493	Graduation Project 1	2	3	0	0	5	3	180	6
	UC7	University Requirement (7)	2	0	0	0	2	2	90	4
	E3	Elective Course (3)	2	2	1	0	5	3	180	6
							27	17	990	34
8	CSE411	Theory of Computation & Compilers	2	2	1	0	5	3	180	6
	CSE474	Distributed Information Systems	2	2	1	0	5	3	180	6
	CSE494	Graduation Project 2	2	3	0	0	5	3	180	6
	E4	Elective Course (4)	2	2	1	0	5	3	180	6
	E5	Elective Course (5)	2	2	1	0	5	3	180	6
	UE3	Elective University (3)	2	0	0	0	2	2	90	4
							27	17	990	34
							200	133	7305	266



EGYPTIAN NATIONAL UNIVERSITIES

مشروع إنشاء الجامعات المصرية الأهلية

جامعة العلمين الدولية

ALALAMEIN INTERNATIONAL UNIVERSITY



Elective (E1)

CSE234	Embedded Systems
CSE271	Introduction to Parallel Computing
CSE281	Image Processing
CSE313	Mobile Programming

Elective (E2)

CSE322	Big Data Analytics 1
AIE212	Knowledge-Based Systems
AIE231	Neural Networks
AIE241	Natural Language Processing

Elective (E3)

CSE312	Advanced Web Programming
CSE464	Internet of things
AIE343	Machine Learning for Text Mining
AIE424	Intelligent Decision Support Systems
AIE425	Intelligent Recommender Systems

Elective (E4)

CSE426	Selected Topics in Data Science
CSE424	Data Warehousing
CSE453	Building Information Systems
CSE455	Selected Topics in Software Engineering

Elective (E5)

AIE332	Deep Learning
AIE342	Advanced Methods for Data Analysis
AIE314	AI-Based Programming
AIE322	Advanced Machine Learning