

**Guidelines for the Bachelor's Degree
in Water Resources and Environmental Management**

First Academic Year					
First Semester			Second Semester		
Course No.	Course Title	Credit hour	Course No.	Course Title	Credit hour
AAL101	Applied Arabic Language	3	IEC101	Innovation, Entrepreneurship, and Creativity	2
AEL101	Applied English Language (1)	3	AEL102	Applied English Language (2)	3
CS101	Computer Skills and E-Learning	1	30202101	Calculus 1	3
30203101	General Biology 1	3	-	University Elective Course (UEC)	3
30203111	General Biology Lab	1	30206103	General Chemistry 2	3
30206101	General Chemistry 1	3	30201105	General Physics for Agricultural Students	3
30206102	General Chemistry Lab 1	1	-	-	-
Total		15	Total		17

Second Academic Year					
First Semester			Second Semester		
Course No.	Course Title	Credit hour	Course No.	Course Title	Credit hour
NE101	National Education and University Behavior	3	WRE222	Meteorology and Air Pollution	3
WRE221	Applied Environmental Geology	3	WRE212	Principles of Irrigation and Drainage	3
WRE211	Hydraulics	3	WRE213	Drinking water quality	3
30206104	General Chemistry Lab 2	1	WRE223	Environmental Soil Physics	3
30403211	Principles of Plant Production	3	-	Specialization Elective Course (SEC)	3

-	University Elective Course (UEC)	3	a30601222	Project Management (College of Business)	3
Total		16	Total		18

Third Academic Year					
First Semester			Second Semester		
Course No.	Course Title	Credit hour	Course No.	Course Title	Credit hour
WRE314	Surface Water Hydrology	3	WRE315	Groundwater Hydrology	3
WRE316	Design of smart irrigation system	3	WRE327	Soil Fertility and Fertilizers	3
WRE325	Environmental Soil Chemistry	3	WRE324	Climate change and sustainable development	3
WRE326	Wastewater Treatment and Reuse	3	WRE342	Environmental remote sensing and GIS Lab	1
WRE341	Environmental remote sensing and GIS	3	WRE331	Environmental Impact Assessment	3
-	Specialization Elective Course (SEC)	3	-	Specialization Elective Course (SEC)	3
			CIE0215	Surveying Lab	1
Total		18	Total		17

Fourth Academic Year					
First Semester			Second Semester		
Course No.	Course Title	Credit hour	Course No.	Course Title	Credit hour
WRE433	Water harvesting systems	3	WRE417	Integrated Water Resources Management	3
WRE443	Environmental Monitoring and Early Warning Systems	3	WRE432	Integrated Solid Waste Management	3
30403473	Statistics and Design of Agricultural Experiments	3	WRE434	Water and Environmental Economics	3
WRE401	Field Training	6	WRE402	Seminar	1
-	UCC	3	WRE403	Graduation Project	3
Total		18	Total		13

Note: Seminar, Field Training and Graduation Project can be proposed for the first &/or second semesters of the fourth academic year. Seminar &/or Field Training can also be proposed for the summer semester.