



Faculty:EngineeringTechnology

Department: civilEngineering

Program:B.Sc.162 Credit Hours

Course Plan

First: Vision of the Program

Excellence in civil engineering (EE) education and research to become recognized locally and internationally as a leader in its field of specialty.

Second: Mission of the Program

To provide high quality educational opportunity for students by delivering a well-established civil engineering program in conjunction with a thorough foundation in theory and practice fostered with tools and skills required to fulfill society and market needs.

Third: Aims of the Program

With a few years of graduation, graduates of EE Department are expected to meet high professional, ethical, and social goals as demonstrated by:

- EEP1:Success in chosen profession or career as exhibited by career satisfaction promotion, distinguished technical positions, management leadership positions, professional responsibilities, leading-edge and consulting activities.
- EEP2:Success in post-graduate studies as exhibited by advanced degrees earned and satisfaction with the decision to pursue their higher education, publications, presentations, patents, inventions and awards.
- EEP3:Contribution to local society as exhibited by public and / or volunteer services, leadership roles, outreach activities.

Fourth: Learning Outcomes of the Program

<i>Number</i>	Learning Outcomes of the Program
Knowledge	
K1	Ability to apply knowledge of mathematics, science, and engineering
K2	Ability to design a physical system, component, or process in either thermal or mechanical fields to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
K3	Understanding of professional and ethical responsibility
K4	The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
K5	Knowledge of contemporary issues.
Skills	
S1	Ability to design and conduct experiments, as well as to analyze and interpret data
S2	Ability to identify, formulate, and solve mechanical engineering problems
S3	Recognition of the need for, and an ability to engage in life-long learning
S4	Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
Competences	
C1	Ability to function on multidisciplinary teams
C2	Ability to communicate effectively

Study Plan (10) Civil Engineering

Study Plan						
First: University Requirement					Third: Requirements for Specialization	
Course No.	Course Name	Credit hours	Teaching method	Prerequisite		
A. Mandatory University Requirement				18 hours	A. Mandatory specialization Requirement	
0200104	National Education	3	-		0300131	General Chemistry 1
0200105	Communication Skills (Arabic 1)	3		0200150,0201001	3	Blended
0200106	Communication Skills (English 1)	3		0200151,0202001	0300133	General Chemistry Laboratory1
0200110	Military Science	3			3	Face-to-Face
0200111	Islamic culture and Contemporary Issues	3			0902209	Surveying
0200115	Society development and Volunteer Work	0			3	Face-to-Face
0200153	Life Skills	1			0902210	Surveying Lab
0200154	Leadership and social Responsibility	1			1	Face-to-Face
0400202	Pioneering and Innovation	1			3	Face-to-Face
B. Optional University Requirement				9 Hours	100 Hours	
0200113	History of Jordan and Palestine	3			0902221	Statics
0200114	Jerusalem History and Civilization	3			3	Face-to-Face
0200116	Communication Skills (Arabic 2)	3		0200105	0902231	Concrete Technology
0200122	Principles of Education	3			1	Face-to-Face
0200125	Principles of Law	3			3	Face-to-Face
0200127	University Code of Conduct	3			0902233	Concrete Technology lab
0200130	Crimes of Terrorism	3			3	Face-to-Face
0200156	Development and Environment	3			0902262	Engineering Geology
0300123	Principles of Astronomy	3			1	Face-to-Face
0300124	Scientific Culture	3			0902300	Drawing with AutoCAD
0300152	Computer Skills	3		0300151,0306001	3	Blended
0300157	Digital Education	3			0902305	Engineering Statistics
0300161	First Aid	3			3	Blended
Second: Faculty Requirement				26 Hours	0902332	
0300101	Calculus 1	3	Face-to-Face		3	Face-to-Face
0300102	Calculus 2	3	Face-to-Face	0300101	0902343	Structural analysis 1
0300121	General Physics 1	3	Face-to-Face		3	Face-to-Face
0300122	General Physics 2	3	Face-to-Face	0300121	0902345	Structural analysis 2
0302111	General Physics Lab 1	1	Face-to-Face	0300121	3	Face-to-Face
0302112	General Physics Lab 2	1	Face-to-Face	*0300122	0902348	Reinforced concrete 1
0902100	Introduction to Engineering and Professional Ethics	1	Blended		3	Blended
0904306	Technical Writing and Communication Skills	2	Blended	0200106	0902364	Geotechnical engineering
0905100	Engineering Workshops (1)	1	Blended		1	Face-to-Face
0905103	Engineering Drawing	2	Blended		3	Face-to-Face
0906402	Engineering Economics and Management	3	Blended	90 cr.hr	0902365	Geotechnical engineering lab
0909999	Research seminar		Face-to-Face		0902400	Practical Training for Civil Engineering
1501119	Programming For Engineers	3	Blended		3	Face-to-Face
					0902405	Engineering Drawing
					3	Face-to-Face
					0902442	Reinforced Concrete 2
					3	Face-to-Face
					0902444	Steel Structure
					3	Face-to-Face
					0902451	Hydrology and Hydraulics
					3	Blended
					0902453	Hydrology and Hydraulics lab
					1	Face-to-Face
					0902455	Waste Water and Sanitary Engineering
					3	Face-to-Face
					0902471	Highway Engineering
					3	Blended
					0902474	Pavement Design
					3	Face-to-Face
					0902476	Highway Material and asphalt lab
					1	Face-to-Face
					0902477	Traffic Engineering
					3	Face-to-Face
					0902501	Project Management
					3	Face-to-Face
					0902505	Quantities, Contracts and Specifications
					3	Face-to-Face
					0902555	Water Supply Engineering
					3	Face-to-Face
					0902562	Foundation Engineering
					3	Blended
					0902545	Earthquake Engineering
					3	Blended
					0902582	Graduation Project (1)For Civil Engineering
					1	Blended
					0902589	Graduation project (2) For Civil Engineering
					3	Blended
					0904304	Numerical Analysis
					3	Blended
					0905201	Advanced Engineering Mathematics
					3	Face-to-Face
					0905213	Mechanics of Materials
					3	Face-to-Face
					0905214	Mechanics of Materials Lab
					1	Face-to-Face
					0905311	Dynamics
					3	Face-to-Face
					0905343	Fluid Mechanics for Civil Engineering
					3	Face-to-Face



B. Optional Specialization Requirement				9 hours
0902457	Introduction to Environmental Engineering	3	Blended	*0902455
0902504	Project Planning and Scheduling	3	Blended	0902501
0902506	Construction methods	3	Blended	0902501
0902507	Computer Applications in Civil Engineering	3	Blended	0902442,1501119
0902508	Construction Management	3	Blended	0902501
0902510	Remote Sensing	3	Blended	0902209
0902512	Advanced Surveying	3	Blended	0902471
0902514	Geographic Information Systems GIS	3	Blended	0902510
0902542	Prestressed and Precast Concrete	3	Blended	0902348
0902544	Bridge Engineering	3	Blended	0902442
0902574	Airport and Railways Engineering	3	Blended	0902474
0902553	Water Resources Engineering	3	Blended	0902451
0902563	Advanced Geotechnical Engineering	3	Blended	0902364
0902565	Geo-environmental Engineering	3	Blended	0902364
0902566	Advanced Foundations Engineering	3	Blended	0902562
0902572	Traffic Safety	3	Blended	0902477
0902575	Railways Technology for Civil Engineering	3	Blended	*0902574
0902576	Urban Transportation planning and Engineering	3	Blended	0902471,0906402
0902578	Public Transportation Engineering	3	Blended	0902471
0902579	Highway Maintenance and Rehabilitation	3	Blended	0902474
0902587	Special Topics in Civil Engineering	3	Blended	100 Cr. Hrs.

*:Co-requisite

