



<b>Faculty:EngineeringTechnology</b>
<b>Department: civilEngineering</b> <b>Program:B.Sc.162 Credit Hours</b>

## 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

Number	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 specialization Requirement			100 Hours	
<b>A. Mandatory University Requirement</b>				<b>18 hours</b>	0300131	General Chemistry 1	3	Blended	
0200104	National Education	3	-		0300133	General Chemistry Laboratory1	1	Face-to-Face	0300131
0200105	Communication Skills (Arabic 1)	3		0200150,0201001	0902209	Surveying	3	Face-to-Face	0300101
0200106	Communication Skills (English 1)	3		0200151,0202001	0902210	Surveying Lab	1	Face-to-Face	0902209
0200110	Military Science	3			0902221	Statics	3	Face-to-Face	0300121
0200111	Islamic culture and Contemporary Issues	3			0902231	Concrete Technology	3	Face-to-Face	0902221
0200115	Society development and Volunteer Work	0			0902233	Concrete Technology lab	1	Face-to-Face	0902231
0200153	Life Skills	1			0902262	Engineering Geology	3	Face-to-Face	0300121
0200154	Leadership and social Responsibility	1			0902300	Drawing with AutoCAD	1	Face-to-Face	0905103
0400202	Pioneering and Innovation	1			0902305	Engineering Statistics	3	Blended	0300102
<b>B. Optional University Requirement</b>				<b>9 Hours</b>	0902332	Building Construction	3	Face-to-Face	0902221
0200113	History of Jordan and Palestine	3			0902343	Structural analysis 1	3	Blended	0905213
0200114	Jerusalem History and Civilization	3			0902345	Structural analysis 2	3	Face-to-Face	0902343
0200116	Communication Skills ( Arabic 2)	3		0200105	0902348	Reinforced concrete 1	3	Face-to-Face	0902343
0200122	Principles of Education	3			0902364	Geotechnical engineering	3	Blended	0902262,0905213
0200125	Principles of Law	3			0902365	Geotechnical engineering lab	1	Face-to-Face	0902364
0200127	University Code of Conduct	3			0902400	Practical Training for Civil Engineering	3	Face-to-Face	115 cr.hr
0200130	Crimes of Terrorism	3			0902405	Engineering Drawing	1	Face-to-Face	0902300
0200156	Development and Environment	3			0902442	Reinforced Concrete 2	3	Face-to-Face	0902348
0300123	Principles of Astronomy	3			0902444	Steel Structure	3	Face-to-Face	0902343
0300124	Scientific Culture	3			0902451	Hydrology and Hydraulics	3	Blended	0905343
0300152	Computer Skills	3		0300151,0306001	0902453	Hydrology and Hydraulics lab	1	Face-to-Face	*0905343
0300157	Digital Education	3			0902455	Waste Water and Sanitary Engineering	3	Face-to-Face	0902451
0300161	First Aid	3			0902471	Highway Engineering	3	Blended	0902209
<b>Second: Faculty Requirement</b>				<b>26 Hours</b>	0902474	Pavement Design	3	Face-to-Face	0902471
0300101	Calculus 1	3	Face-to-Face		0902476	Highway Material and asphalt lab	1	Face-to-Face	0902474
0300102	Calculus 2	3	Face-to-Face	0300101	0902477	Traffic Engineering	3	Face-to-Face	0902471
0300121	General Physics 1	3	Face-to-Face		0902501	Project Management	3	Face-to-Face	0902332
0300122	General Physics 2	3	Face-to-Face	0300121	0902505	Quantities, Contracts and Specifications	3	Face-to-Face	0902348
0302111	General Physics Lab 1	1	Face-to-Face	0300121	0902555	Water Supply Engineering	3	Face-to-Face	0905343
0302112	General Physics Lab 2	1	Face-to-Face	*0300122	0902562	Foundation Engineering	3	Blended	0902348,0902364
0902100	Introduction to Engineering and Professional Ethics	1	Blended		0902545	Earthquake Engineering	3	Blended	0902442
0904306	Technical Writing and Communication Skills	2	Blended	0200106	0902582	Graduation Project (1)For Civil Engineering	1	Blended	115 cr.hr
0905100	Engineering Workshops (1)	1	Blended		0902589	Graduation project (2) For Civil Engineering	3	Blended	0902582,0902400
0905103	Engineering Drawing	2	Blended		0904304	Numerical Analysis	3	Blended	0905201
0906402	Engineering Economics and Management	3	Blended	90 cr.hr	0905201	Advanced Engineering Mathematics	3	Face-to-Face	0300102
0909999	Research seminar		Face-to-Face		0905213	Mechanics of Materials	3	Face-to-Face	0902221
1501119	Programming For Engineers	3	Blended		0905214	Mechanics of Materials Lab	1	Face-to-Face	0905213
					0905311	Dynamics	3	Face-to-Face	0902221
					0905343	Fluid Mechanics for Civil Engineering	3	Face-to-Face	0902221

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

