Utilities and Infrastructure Engineering Program Course Tree

Level 0

PHM012	3
Mathematics (1)	

PHM031	3
Statics	

PHM021	3
Vibration and Waves	

PHM041	3
Engineering Chemistry	

MDP011	3
Engineering Drawing	

CSE031	2
Computing in Engineering	

PHM013	3
Mathematics (2)	

PHM032	3
Dynamics	

PHM022	3
Electricity & Magnetism	

ENG011	2
Fundamentals of Engineering	

CEP011	3
Projection and Engineering Graphics	

MDP081	3
Production Engineering	

Level 1

CEI111	2
Fluid Mechanics	

CES151	2
Structures and Properties of Construction Materials	

CES111	4
Structural Mechanics (1)	

ASU112	3
Report Writing and Communication Skills	

ASU113	3
Professional Ethics and Legislations	

CEP111	2
Plane Surveying (1)	

PHM111	2
Propapility and Statistics	

PHM112	4
Differential Equations and Numerical Analysis	

CEI112	2
Hydraulics (1)	

CES112	4
Structural Mechanics (2)	

CES152	2
Properties and Testing of Materials	

CEI131	2
Civil Drawings	

CEP112	3
Plane Surveying (2)	

ASU Elective (1)	2

Level 2

CEI261	2
Engineering Economics and Management	

CEI211	2
Hydraulics (2)	

CES211	3
Structural Analysis (1)	

CES261	2
Geology and Geotechnical Engineering	

CES221	2
Concrete Design (1)	

CEP211	2
Topographic Surveying (1)	

CES251	3
Concrete Technology (1)	

CES223	1
Design Principles	

CEI221	4
Irrigation and Drainage Engineering	

CES212	3
Structural Analysis (2)	

CES262	2
Geotechnical Engineering (1)	

CES222	2
Concrete Design (2)	

CEP212	3
Engineering Surveying	

CES252	3
Concrete Technology (2)	

Level 3

ASU111	2
Human Rights	

CEP341	3
Railway Engineering (1)	

CES341	3
Design and Behavior of Steel Structure (1)	

CES361	2
Geotechnical Engineering (2)	

CES321	3
Design of Concrete Floors	

ASU114	2
Selected Topics in Contemporary Issues	

CEP331	3
Roads and Airport Engineering	

CEP351	3
Water and Waste Water Networks	

ASU Elective (2)	2

CES342	3
Design and Behavior of Steel Structure (2)	

CEP311	2
Topographic Surveying (2)	

CES322	3
Design of Concrete Halls	

CEP321	3
Transportation Planning	

Level 4

CES271	2
Project Management Essentials in Construction	

CEP451	3
Water and Waste Water Treatment	

Utilities and Infrastructure Elective Course (1)	2

CEP411	3
Geodetic Surveying	

CES425	3
Design of Civil Structures	

CEP421	3
Traffic Engineering	

Utilities and Infrastructure Elective Course (2)	2

Utilities and Infrastructure Elective Course (3)	2

Utilities and Infrastructure Elective Course (4)	2

CEP491	6
Graduation Project	

CES464	2
Foundation Engineering for Infrastructures	

CEP431	3
Highway Construction Technology	

Legend

- University Requirement (yellow)
- Faculty Requirement (cream)
- Discipline Requirements (orange)
- Program Requirements (green)
- ● → Course Should be Passed Successfuly