

List of Technical Elective Courses (Construction Engineering & Management)

- CE 3301 - Engineering Geomatics (3)
- CE 4020 - Civil Engineering Internship (2): Only Summer
- CE 4031 - Sustainable Buildings and Infrastructure (3)
- CE 4131 - Construction Risk Management (3)
- CE 4161 - Underground Construction and Trenchless Technology (3)
- CE 4171 - Virtual Design Construction and Management - BIM (2)
- CE 4171L - Virtual Design Construction and Management - BIM Laboratory (1)
- CE 4181 - Temporary Construction Structures (3)
- CE 4191 - Construction Project Delivery Methods (3)
- CE 4301 - Digital Mapping (2)
- CE 4301L - Digital Mapping Laboratory (1)
- CE 4321 - Subdivision Engineering and Land Survey Descriptions (3)
- CE 4321L - Subdivision Engineering and Land Survey Descriptions Laboratory (1)
- CE 4331 - GIS Applications in Engineering and Remote Sensing (2)
- CE 4331L - GIS Applications in Engineering and Remote Sensing Laboratory (1)
- CE 4400 - Foundation and Retaining Wall Design (3)
- CE 4451 - Pavement Design and Construction (3)
- CE 4470 - Slope Stability and Earth Dams (3)
- CE 4560 - Structural Design - Steel (3)
- CE 4571 - Introduction to Earthquake Engineering (3)
- CE 4640 - Transportation Planning and Management (3)
- CE 4640L - Transportation Planning and Management Laboratory (1)
- EGR 3321 - CA Boundary Law and Public Lands (3) (D4)
- EGR 3321A - CA Boundary Law and Public Lands Activity (1)

List of Technical Elective Courses (General Option)

CE 3101 - Construction Engineering (2)
CE 3101L - Construction Engineering Laboratory (1)
CE 3121 - Building Systems (2)
CE 3140 - Construction Estimating (3)
CE 3140L - Construction Estimating Laboratory (1)
CE 3150 - Construction Equipment and Safety (3)
CE 3201 - Environmental Engineering (3)
CE 3201L - Environmental Engineering Laboratory (1)
CE 3301 - Engineering Geomatics (3)
CE 3510 - Structural Analysis II (3)
CE 3510L - Structural Testing Laboratory (1)
CE 4020 - Civil Engineering Internship (2): Only Summer
CE 4031 - Sustainable Buildings and Infrastructure (3)
CE 4120 - Construction Scheduling (2)
CE 4120L - Construction Scheduling Laboratory (1)
CE 4130 - Construction Contracts (3)
CE 4131 - Construction Risk Management (3)
CE 4140 - Construction Project Management and Accounting (3)
CE 4151 - Project Life Cycle and Sustainability (3)
CE 4161 - Underground Construction and Trenchless Technology (3)
CE 4171 - Virtual Design Construction and Management - BIM (2)
CE 4171L - Virtual Design Construction and Management - BIM Laboratory (1)
CE 4181 - Temporary Construction Structures (3)
CE 4191 - Construction Project Delivery Methods (3)
CE 4201 - Water and Wastewater Engineering (3)
CE 4201L - Water and Wastewater Engineering Laboratory (1)
CE 4211 - Applied Hydrology (3)
CE 4220 - Solid and Hazardous Waste Engineering (3)
CE 4231 - Water Reclamation and Desalination (3)
CE 4241 - Environmental Remediation (3)
CE 4271 - Unit Operations and Processes in Environmental Engineering (2)
CE 4281 - River Mechanics (3)
CE 4301 - Digital Mapping (2)
CE 4301L - Digital Mapping Laboratory (1)
CE 4321 - Subdivision Engineering and Land Survey Descriptions (3)
CE 4321L - Subdivision Engineering and Land Survey Descriptions Laboratory (1)
CE 4331 - GIS Applications in Engineering and Remote Sensing (2)
CE 4331L - GIS Applications in Engineering and Remote Sensing Laboratory (1)
CE 4341 - Satellite Surveying in Engineering (2)
CE 4341L - Satellite Surveying in Engineering Laboratory (1)

CE 4350 - Photogrammetry (2)
CE 4350L - Photogrammetry Laboratory (1)
CE 4451 - Pavement Design and Construction (3)
CE 4470 - Slope Stability and Earth Dams (3)
CE 4530 - Structural Design - Timber (2)
CE 4530L - Structural Design-Timber Laboratory (1)
CE 4560 - Structural Design - Steel (3)
CE 4571 - Introduction to Earthquake Engineering (3)
CE 4580 - Architectural Engineering Interdisciplinary Design -Timber (1)
CE 4580L - Architectural Engineering Interdisciplinary Design-Timber Laboratory (2)
CE 4631 - Transportation Systems Design and Operation (3)
CE 4640 - Transportation Planning and Management (3)
CE 4640L - Transportation Planning and Management Laboratory (1)
CE 4671 - Intelligent Transportation Systems (3)
CE 4681 - Multimodal Traffic Analysis (3)
CE 4690 - Traffic Engineering (3)
CE 4690L - Traffic Engineering Laboratory (1)
CE 4811 - Design of Transportation Facilities (3)
CE 4811L - Design of Transportation Facilities Laboratory (1)
EGR 3321 - CA Boundary Law and Public Lands (3) (D4)
EGR 3321A - CA Boundary Law and Public Lands Activity (1)

List of Technical Elective Courses (Environmental Water Resources Option)

CE 3121 - Building Systems (2)
CE 3140 - Construction Estimating (3)
CE 3140L - Construction Estimating Laboratory (1)
CE 3150 - Construction Equipment and Safety (3)
CE 3510 - Structural Analysis II (3)
CE 3510L - Structural Testing Laboratory (1)
CE 4020 - Civil Engineering Internship (2): Only Summer
CE 4031 - Sustainable Buildings and Infrastructure (3)
CE 4120 - Construction Scheduling (2)
CE 4120L - Construction Scheduling Laboratory (1)
CE 4130 - Construction Contracts (3)
CE 4131 - Construction Risk Management (3)
CE 4140 - Construction Project Management and Accounting (3)
CE 4151 – Project Life Cycle and Sustainability (3)
CE 4161 – Underground Construction and Trenchless Technology (3)
CE 4171 - Virtual Design Construction and Management - BIM (2)
CE 4171L - Virtual Design Construction and Management - BIM Laboratory (1)
CE 4181 – Temporary Construction Structures (3)
CE 4191 - Construction Project Delivery Methods (3)
CE 4220 - Solid and Hazardous Waste Engineering (3)
CE 4231 - Water Reclamation and Desalination (3)
CE 4271 - Unit Operations and Processes in Environmental Engineering (2)
CE 4281 - River Mechanics (3)
CE 4301 - Digital Mapping (2)
CE 4301L - Digital Mapping Laboratory (1)
CE 4321 - Subdivision Engineering and Land Survey Descriptions (3)
CE 4321L - Subdivision Engineering and Land Survey Descriptions Laboratory (1)
CE 4331 - GIS Applications in Engineering and Remote Sensing (2)
CE 4331L - GIS Applications in Engineering and Remote Sensing Laboratory (1)
CE 4341 - Satellite Surveying in Engineering (2)
CE 4341L - Satellite Surveying in Engineering Laboratory (1)
CE 4350 - Photogrammetry (2)
CE 4350L - Photogrammetry Laboratory (1)
CE 4400 - Foundation and Retaining Wall Design (3)
CE 4451 - Pavement Design and Construction (3)

CE 4470 - Slope Stability and Earth Dams (3)
CE 4510 - Structural Design - Reinforced Concrete (3)
CE 4530 - Structural Design - Timber (2)
CE 4530L - Structural Design-Timber Laboratory (1)
CE 4560 - Structural Design - Steel (3)
CE 4571 - Introduction to Earthquake Engineering (3)
CE 4580 - Architectural Engineering Interdisciplinary Design -Timber (1)
CE 4580L - Architectural Engineering Interdisciplinary Design-Timber Laboratory (2)
CE 4811 - Design of Transportation Facilities (3)
CE 4811L - Design of Transportation Facilities Laboratory (1)
CE 4631 - Transportation Systems Design and Operation (3)
CE 4640 - Transportation Planning and Management (3)
CE 4640L - Transportation Planning and Management Laboratory (1)
CE 4671 - Intelligent Transportation Systems (3)
CE 4681 - Multimodal Traffic Analysis (3)
CE 4690 - Traffic Engineering (3)
CE 4690L - Traffic Engineering Laboratory (1)
EGR 3321 - CA Boundary Law and Public Lands (3) (D4)
EGR 3321A - CA Boundary Law and Public Lands Activity (1)

List of Technical Elective Courses (Geospatial Option)

CE 3121 - Building Systems (2)
CE 3140 - Construction Estimating (3)
CE 3140L - Construction Estimating Laboratory (1)
CE 3150 - Construction Equipment and Safety (3)
CE 3510 - Structural Analysis II (3)
CE 3510L - Structural Testing Laboratory (1)
CE 4020 - Civil Engineering Internship (2): Only summer
CE 4031 - Sustainable Buildings and Infrastructure (3)
CE 4120 - Construction Scheduling (2)
CE 4120L - Construction Scheduling Laboratory (1)
CE 4130 - Construction Contracts (3)
CE 4131 - Construction Risk Management (3)
CE 4140 - Construction Project Management and Accounting (3)
CE 4151 – Project Life Cycle and Sustainability (3)
CE 4161 – Underground Construction and Trenchless Technology (3)
CE 4171 - Virtual Design Construction and Management - BIM (2)
CE 4171L - Virtual Design Construction and Management - BIM Laboratory (1)
CE 4181 – Temporary Construction Structures (3)
CE 4191 - Construction Project Delivery Methods (3)
CE 4201 - Water and Wastewater Engineering (3)
CE 4201L - Water and Wastewater Engineering Laboratory (1)
CE 4211 - Applied Hydrology (3)
CE 4220 - Solid and Hazardous Waste Engineering (3)
CE 4231 - Water Reclamation and Desalination (3)
CE 4241 - Environmental Remediation (3)
CE 4271 - Unit Operations and Processes in Environmental Engineering (2)
CE 4281 - River Mechanics (3)
CE 4400 - Foundation and Retaining Wall Design (3)
CE 4451 - Pavement Design and Construction (3)
CE 4470 - Slope Stability and Earth Dams (3)

CE 4510 - Structural Design - Reinforced Concrete (3)
CE 4530 - Structural Design - Timber (2)
CE 4530L - Structural Design-Timber Laboratory (1)
CE 4560 - Structural Design - Steel (3)
CE 4571 - Introduction to Earthquake Engineering (3)
CE 4580 - Architectural Engineering Interdisciplinary Design -Timber (1)
CE 4580L - Architectural Engineering Interdisciplinary Design-Timber Laboratory (2)
CE 4811 - Design of Transportation Facilities (3)
CE 4811L - Design of Transportation Facilities Laboratory (1)
CE 4631 - Transportation Systems Design and Operation (3)
CE 4640 - Transportation Planning and Management (3)
CE 4640L - Transportation Planning and Management Laboratory (1)
CE 4671 - Intelligent Transportation Systems (3)
CE 4681 - Multimodal Traffic Analysis (3)
CE 4690 - Traffic Engineering (3)
CE 4690L - Traffic Engineering Laboratory (1)
EGR 4050 - Role of Design Professionals In Society (3) (D4)