

Courses offerings subject to change. Check the OSU Online Schedule of Classes each term when registering.							
Questions about whether a specific class meets the requirements for a Technical Elective? Please email cee.advising@oregonstate.edu							
Courses offered through OSU Ecampus do not meet the requirements for Technical Electives in the CE major.							
Students using Federal Financial Aid will receive an email from Financial Aid about any graduate courses they register for. Forward to cee.advising@oregonstate.edu							
Note: Undergraduate students taking graduate courses (500-level) are charged graduate tuition for that course/those courses.							
Courses in land surveying and mapping - minimum 16 credits of PLS classes to sit for initial Land Surveying licensing exam, inc a course in survey law.							
Civil Engineering 2017-2018 Technical Elective Class List							
Course	Title	Pre-requisite or *Co-requisite Class(es)	Credits	Su2017	F2017	W2018	S2018
CCE 422/522	Green Building Materials	CCE 321, ECON 201 & ST 314	3		Ideker (e-campus)	Ideker	
CCE 520 (Service Life Modeling)	Special Topics: Service Life Modeling	Graduate Standing or Instructor Consent	4				Isgor
CCE 520 (Corrosion)	Selected Topics: Corrosion	Graduate Standing or Instructor Consent	4			Isgor	
CCE 520 (Adv. Pavement)	Selected Topics: Advanced Pavement Materials	Graduate Standing or Instructor Consent	4				Coleri
CCE 520 (Concrete Fundamentals)	Selected Topics: Concrete Fundamentals	Graduate Standing or Instructor Consent	3		TBD		
CCE 520 (Adv. Concrete Construction)	Special Topics: Advanced Concrete Construction	Graduate Standing or Instructor Consent	3				Trejo
CCE 523	Concrete Durability	CCE 321 or CCE 421	4		Ideker/Isgor		
CCE 525	Construction Site Systems Engineering	Graduate Standing or Instructor Consent	3				Gambatese
CCE 526	Design for Safety	Graduate Standing or Instructor Consent	3		Gambatese		
CCE 529	Lean Construction	Graduate Standing or Instructor Consent	3			Pestana	
CE 424/524	Contracts and Specifications	Phase II of Registration with Instructor Consent	4			Pestana	Turkan
CE 427/527	Temporary Construction Structures	CE 383, CE 372, & CCE 321, in Phase II of Registration with Instructor Consent	4			Gambatese	
CEM 341	Construction Estimating I	CE 102 & CCE 201, in Phase II of Registration with Instructor Consent	4				Fradella
CEM 441	Heavy Civil Construction Management	FE 315 or CE 372, in Phase II of Registration with Instructor Consent	4			Louis	Pestana
CEM 442	Building Construction Management	Phase II of Registration with Instructor Consent	4		TBD		
CEM 471	Electrical Facilities	Phase II of Registration with Instructor Consent	4		Fradella		
CEM 472	Mechanical Facilities	Phase II of Registration with Instructor Consent	3			Fradella	
CE 365	Highway Location & Design	CE 361	3			Schultz	
CE 461/561	Photogrammetry	CE 361 or CEM 263 or FE 308 (PLS class)	3		Schultz		
CE 463/563	Control Surveying	CE 361 or CEM 263 or FE 308 (PLS class)	4				Schultz
CE 465/565	Oregon Land Survey Law	CE 361 or CEM 263 or FE 308 (PLS class)	3			Schultz	
CE 469/569	Property Surveys	CE 361 or CEM 263 or FE 308 (PLS class)	3				Schultz
CE 471	Foundations for Structures	CE 373 or FE 316	3			Evans	
CE 482/582	Masonry Design	CE 481 or equivalent	3			Wallace	
CE 484/584	Wood Design	CE 383 or CE 481 & senior standing	4			Martin	
CE 486/586	Prestressed Concrete	CE 481	3			Kaufman	
CE 492/592	Pavement Structures	CE 392	3				Coleri
CE 407 (Water Resources)	Seminar: Water Resources Issues		1		Santelmann		
CE 413/513	GIS in Water Resources	Senior Standing & CE 202 or other GIS course	3	Arras			
CE 540 (Optimization)	Selected Topics: Optimization in Water Resources	Graduate Standing or Instructor Consent	4		Babbar-Sebens		
CE 540 (Storm Water Design & Management)	Selected Topics: Storm Water Design & Management	Graduate Standing or Instructor Consent	4		Babbar-Sebens		
CE 547	Water Resources Engineering I: Principles of Fluid Mechanics	Graduate Standing or Instructor Consent	4		Istok		
CE 560 (GNSS & Geodesy)	ST: GNSS & Geometric Geodesy	Graduate Standing or Instructor Consent	4		Park		
CE 560 (Adv. Virtual Design & Construction)	ST: Adv. Virtual Design & Construction	Graduate Standing or Instructor Consent	3		Turkan		
CE 560 (Coastal Remote Sensing)	ST: Coastal Remote Sensing	Graduate Standing or Instructor Consent	4			Parrish	
CE 560 (Adv. Geospatial Information)	ST: Adv. Geospatial Information	Graduate Standing or Instructor Consent	4			Arras	
CE 560 (Fundamentals of Geodesy)	ST: Fundamentals of Geodesy	Graduate Standing or Instructor Consent	4				Park
CE 560 (Kinematic Positioning & Surveying)	ST: Kinematic Positioning & Surveying	Graduate Standing or Instructor Consent	4			Parrish	
CE 566 (3D Laser)	3D Laser Scanning & Imaging	Graduate Standing or Instructor Consent	4		Olsen		
CE 570 (Unstaturated Soil Mechanics)	ST: Unstaturated Soil Mechanics	Instructor Consent	3			Evans	

CE 572	Advanced Geotechnical Laboratory	CE 373 and CE 471 or Instructor Consent	4		Evans		
CE 575	Earth Retention & Support	CE 373	4				Stuedlein
CE 576	Soil and Site Improvement	CE 572 & CE 577 or Instructor Consent	3				
CE 577	Static & Dynamic Soil Behavior	CE 372 & CE 373	3		Mason		
CE 579	Slope Embankment	CE 373 or FE 316	3				Leschinsky
CE 533	Structural Stability	CE 383 & Instructor Consent	3				Miller
CE 534	Structural Dynamics	CE 382 & Instructor Consent	4			Barbosa	
CE 537	NonLinear Structural Analysis	CE 585 or Instructor Consent	4				Scott
CE 580 (Advanced Steel Design)	Advance Steel Design	Graduate Standing or Instructor Consent	3			Liu	
CE 580 (Seismic Design Steel Building)	Selected Topics: Sesimic Design Steel Building	Graduate Standing or Instructor Consent	3				Liu
CE 583	Bridge Design	CE 481	3				Higgins
CE 585	Matrix Structural Analysis	CE 382	4		Scott		
CE 589	Seismic Design	CE 383 or CE 481, and Instructor Consent	4		Miller		
CE 590	Selected Topics: Engineerng Education	Graduate Standing or Instructor Consent	3			Brown	
CE 553	Railroad Engineering	CE 392	3		Hunter-Zaworski		
CE 554	Driving Simulation	CE 595 recommended but not required	3			Hurwitz	
CE 590	Selected Topics: Safety Analysis	CE 392	3				Hernandez
CE 590	Selected Topics: Transportation Demo & Supply Modeling	CE 392	3		Hernandez		
CE 591	Transportation System Analysis, Planning, & Policy	Graduate Standing or Instructor Consent	3				Wang
CE 593	Traffic Flow Analysis	Graduate Standing or Instructor Consent	4			Wang	
CE 594	Transportation Facility Design	CE 392	4			Hunter-Zaworski	
CE 598	Airport Planning and Design	Graduate Standing or Instructor Consent	3				Hunter-Zaworski

Courses offerings subject to change. Check the OSU Online Schedule of Classes each term when registering.

Questions about whether a specific class meets the requirements for a Technical Elective? Please email cee.advising@oregonstate.edu

Courses offered through OSU Ecampus do not meet the requirements for Technical Electives in the CE major.

Students using Federal Financial Aid will receive an email from Financial Aid about any graduate courses they register for. Forward to cee.advising@oregonstate.edu

Note: Undergraduate students taking graduate courses (500-level) are charged graduate tuition for that course/those courses.

Courses in land surveying and mapping - minimum 16 credits of PLS classes to sit for initial Land Surveying licensing exam, inc a course in survey law.