

CIVIL ENGINEERING DEGREE REQUIREMENTS 2017-2018 * LOWER DIVISION *****

Course	Title	Units	Otr(s)	Offered	Prerequisites & Enrollment Restrictions	Notes and web links to resources
MAT 21A*	Calculus <i>D</i>	4	F	W	S	2 yrs high school algebra, trig, geometry & placement by exam
MAT 21B*	Calculus <i>D</i>	4	F	W	S	MAT 21A w/ C- or better → assistance in Math:
MAT 21C*	Calculus <i>D</i>	4	F	W	S	MAT 21B w/ C- or better https://www.math.ucdavis.edu/resources/learning/
MAT 21D*	Vector Analysis <i>D</i>	4	F	W	S	MAT 21C w/ C- or better and http://success.ucdavis.edu
MAT 22A*	Linear Algebra	3	F	W	S	MAT 21C w/ C- or better, Matlab (or MAT 22AL concurrently)
MAT 22B*	Differential Equations	3	F	W	S	MAT 22A w/ C- or better
PHY 9A*	Classical Physics <i>LD</i>	5	F		S	MAT 21B → assistance in Physics:
PHY 9B*	Classical Physics <i>LD</i>	5	F	W		PHY 9A, MAT 21C; MAT 21D (MBTC) http://success.ucdavis.edu
PHY 9C	Classical Physics <i>LD</i>	5		W	S	PHY 9B, MAT 21D; MAT 22A (MBTC)
CHE 2A*	General Chemistry <i>LD</i>	5	F	W		Placement by exam score or prep path → assistance in Chem:
CHE 2B*	General Chemistry <i>LD</i>	5		W	S	CHE 2A w/ C- or better http://success.ucdavis.edu
ENG 35*	Statics <i>D</i>	4	F	W	S	MAT 21D (MBTC), PHY 9A all with C- or better; <i>Pass 1 Engineering only</i>
ENG 45 or 45Y	Properties of Materials <i>L</i>	4	F	W	S	MAT 21C, CHE 2A, PHY 9A all with C- or better; NOT required 2018-2019 and beyond
ECI 3	Civil Infrastructure and Society <i>L</i>	4	F			MAT 21A (MBTC) [Fresh/Soph course - or replace with 4 units of ECI Elective]
ECI 16	Spatial Data Analysis <i>L</i>	2			S	Restricted to Civil and Bio Sys Eng majors

PHYSICAL and BIOLOGICAL SCIENCES requirement: select 1 of the following courses (4 units required)

PHY 9D	Modern Physics <i>D</i>	4	F		S	PHY 9C, MAT 22A; MAT 22B recom (MBTC)
CHE 2C	General Chemistry <i>LD</i>	5	F		S	CHE 2B w/ C- or better
BIS 2A	Intro to Biology <i>D</i>	5	F	W	S	
GEL 50-50L	Physical Geology & Lab	3/2	F	W		High school phys & chem -reduced unit credit if GEL 1 completed -

PROGRAMMING requirement: select 1 of the following courses (4 units required)

ENG 6	Engineering Problem Solving (Matlab) <i>D</i>	4	F	W	S	MAT 21A with C- or better; MAT 21B with C- or better (MBTC)
ECS 30	Programming & Prob Solving (C) <i>D</i>	4	F	W	S	MAT 21A (MBTC); prior programming experience recomm/expected

COMMUNICATION requirement: select 1 of the following courses (4 units required)

CMN 1	Intro to Public Speaking <i>D</i>	4	F	W	S	
CMN 3	Interpersonal Commun. Competence <i>D</i>	4	F	W	S	
ENG 3	Intro to Engineering Design <i>L</i>	4	F	W	S	Compl. of Entry Level Writing Req.

LOWER DIVISION ENGLISH COMPOSITION requirement: select 1 of the following courses (4 units required) (may not simultaneously fulfill GE topical breadth)

UWP 1, 1V, or 1Y	Expository Writing <i>D</i>	4	F	W	S	Compl. of Entry Level Writing Req. (pass with C- or better)
ENL 3 (English)	Introduction to Literature <i>D</i>	4	F	W	S	Compl. of Entry Level Writing Req. (pass with C- or better)
COM 1 (Comp Lit)	Bks of West. Cul: Ancient World <i>D</i>	4	F	W	S	Compl. of Entry Level Writing Req. (pass with C- or better)
COM 2	Bks of West. Cul: Mid Ages-Enlight <i>D</i>	4	F	W	S	Compl. of Entry Level Writing Req. (pass with C- or better)
COM 3	Bks of West. Cul: Modern Crisis <i>D</i>	4	F	W	S	Compl. of Entry Level Writing Req. (pass with C- or better)
COM 4	Bks of the Contemporary World <i>D</i>	4	F	W	S	Compl. of Entry Level Writing Req. (pass with C- or better)
NAS 5 (Native Amer Std)	Intro to Native American Literature <i>D</i>	4	F	W	S	Compl. of Entry Level Writing Req. (pass with C- or better)

GENERAL EDUCATION (GE) requirement: ~21-25 additional units for Civil Engineering majors
 GE requirements, worksheets, & popular options can be found at: <http://cee.engr.ucdavis.edu/ug-advising/ge/> GE may be taken anytime. Complete by graduation.

Minimum Requirements for College of Engineering Change of Major or Double Major*:

1. Finish at least one quarter at UCD	2. Have fewer than 135 units
3. Be in good academic standing and meet minimum progress	4. Receive a letter grade for all courses that satisfy engineering degree requirements
5. a) Complete at least the following five courses: MAT 21A, B, C, PHY 9A, and CHE 2A, and b) have a GPA of 2.00 or better in all completed MAT, PHY, BIS, and CHE courses required for your intended major, and receive a C- or better in each of these courses	
6. Have no grade lower than a C- in any completed engineering course required for your intended major(s) taken at UC Davis	7. Have a 2.00 UC GPA in completed engineering courses

*Requirements subject to change. See <http://engineering.ucdavis.edu/undergraduate/advising/> for current requirements.

MINIMUM 2.00 UC GPA and MINIMUM 2.00 ENGINEERING (Major) GPA required to receive degree certification.

First-Year Seminar offerings: <http://fys.ucdavis.edu/student/index.html>

Freshman (0-44.9 units)				<u>Example Schedule</u>		Sophomore (45-89.9 units)					
Fall		Winter		Spring		Fall		Winter		Spring	
MAT 21A	4	MAT 21B	4	MAT 21C	4	MAT 21D	4	MAT 22A (22A Lab)3(1)		MAT 22B	3
English Elective	4	CHE 2A	5	PHY 9A	5	PHY 9B	5	PHY 9C	5	CMN 1 or 3 or ENG 3^	4
ECI 3	4	GE Elective	4	CHE 2B	5	GE or Phy/Bio Elective^	4	GE Elective	4	ECI 16	2
	12	GE or Phy/Bio Elective^	4		14	Programming Elective	4	ENG 35^	4	ECI 114	4
			17				17		16(17)		13

^ may take another quarter instead

(MBTC) = Course may be taken concurrently L = Course has a Lab D = Course has a Discussion

* = C- or better grade in this course is a prerequisite for most engineering coursework (both lower and upper division). It is always an instructor's option to drop students without the posted prerequisites for their course. Engineering instructors will exercise this option frequently.

CIVIL ENGINEERING DEGREE REQUIREMENTS

2017-2018

***** UPPER DIVISION *****

Course	Title	Units	Otr(s) Offered	Prerequisites & Enrollment Restrictions	Notes
ENG 103*	Fluid Mechanics <i>D</i>	4	F W S	ENG 35, MAT 22B, PHY 9B all with C- or better	
ENG 104*	Mechanics of Materials	4	F W S	ENG 35, MAT 22B both with C- or better -Do not take 104L concurrently-	
ENG 104L	Mechanics of Materials Lab	1	W S	ENG 104 -Do not take lab concurrently with ENG 104-	
ENG 106	Engineering Economics	3	W	Upper division standing in Engineering	
ECI 190	Civil Engineer in Society	2	not offered 17-18	Upper division standing; NOT required 2018-2019 and beyond	
ECI 114	Probabilistic Sys. Analy. for Civ. Engrs.	4	W S	MAT 21C w/ C- or better; Pass 1 majors only	

DYNAMICS or THERMODYNAMICS requirement: select ONE of the following two courses (4 units required)

ENG 102	Dynamics <i>D</i>	4	F W S	ENG 35, MAT 22B both with C- or better
ENG 105	Thermodynamics <i>D</i>	4	F W S	ENG 35, MAT 22B, PHY 9B all with C- or better

Civil & Environmental Engineering (ECI) Breadth and Depth Requirement – 8 courses total

Select 1 breadth course from 4 of the 5 areas (16-17 units), and 2 depth courses from 2 of the 4 areas selected for breadth (16 units)
 (b) = breadth course (d) = depth course (b/d) = breadth or depth course, cannot be used for both

ENVIRONMENT					
(b) ECI 140A*	Env. Analysis of Aqueous Sys. <i>L</i>	4	F		CHE 2B w/ C- or better; Pass 1 restricted to EENV (starting Fall 2018)
(b/d) ECI 140B*	Chem. Principles for Env. Eng.	4	F		CHE 2B w/ C- or better; ECI 140A&B not open to students who completed ECI 140
(b) ECI 148A*	Water Quality Management	4	W		CHE 2B w/ C- or better
(b/d) ECI 149*	Air Pollution <i>D</i>	4	F		MAT 21D & 22B; CHE 2B & ENG 103 both w/ C- or better
(d) ECI 140C	Bio. Principles for Env. Eng.	4	W		ECI 140A or ECI 140B w/ C- or better
(d) ECI 140D*	Water Qual. Mgmt. Sys. Design <i>L</i>	4	S		ENG 103 or ECI 100; ECI 140 or 140A or 140B or ECI 148A both w/ C- or better
(d) ECI 150	Air Pollution Cont. Sys. Design <i>D</i>	4	W		ECI 149 w/ C- or better
GEOTECHNICAL:					
(b) ECI 171*-171L	Soil Mechanics & Lab	4/1	W S		ENG 103 (MBTC); ENG 104 w/ C- or better; 171L concurrently
(d) ECI 173	Foundation Design	4	S		ECI 171
(d) ECI 175	Geotechnical Earthquake Engineering	4	F		ECI 171 w/ C- or better
(d) ECI 179	Pavement Engineering <i>L</i>	4	F		ENG 104 w/ C- or better -may only count for one depth area-
STRUCTURES:					
(b) ECI 130	Structural Analysis	4	F S		ENG 104 w/ C- or better; MAT 22A
(d) ECI 131	Matrix Structural Analysis <i>L</i>	4	F		ENG 104 w/ C- or better; ENG 6
(d) ECI 132*	Struct. Design: Metallic Elem.	4	F		ECI 130
(d) ECI 135*	Struct Design: Concrete Elem. <i>L</i>	4	W		ECI 130; Restricted to ECIV majors
(d) ECI 136	Building Design <i>L</i>	4	not offered 17-18		ECI 130 or 131; ECI 132 or 135
TRANSPORTATION:					
(b/d) ECI 161*	Transportation System Operations <i>D</i>	4	F		MAT 21C & PHY 9A w/ C- or better
(b) ECI 163*	Energy/Env. Aspects of Trans.	4	not offered 17-18		ENG 106 or ECN 1A offered Fall '18 – even years only
(b) ECI 165	Transportation Policy	3	F		offered Fall '17 and '19 – odd years only
(d) ECI 153	Deterministic Optimization & Design <i>L</i>	4	F		MAT 21C, 22A, programming course -may only count for depth OR math elec.-
(d) ECI 162	Transport Land Use Sustain. Design <i>L</i>	4	not offered 17-18		ECI 161 or 163 w/ C- or better in either
(d) ECI 179	Pavement Engineering <i>L</i>	4	F		ENG 104 w/ C- or better -may only count for one depth area-
WATER RESOURCES:					
(b) ECI 141*-141L	Engineering Hydraulics & Lab	3/1	F W		ENG 103 w/ C- or better
(d) ECI 142	Engineering Hydrology	4	F		ECI 141 (MBTC)
(d) ECI 144	Groundwater Systems Design	4	W		ECI 141
(d) ECI 145	Hydraulic Structure Design <i>L/D</i>	4	S		ECI 141 w/ C- or better
(d) ECI 146	Water Resources Simulation <i>D</i>	4	W		ENG 103
(d) ECI 155	Water Resources Engrg. Planning	4	W		ENG 106 or ECN 1A; ECI 114

Senior Design Experience (SDE) Requirement: (8 units required) courses must be taken consecutively & must be in final year of study

ECI 193A	ECI Senior Design <i>L</i>	4	W		(ECI 140D) or (ECI 171/ 171L) or (ECI 132 or ECI 135) or (ECI 161 or 163) or (ECI 141/141L); and one other ECI Depth course, all w/ C- or better
ECI 193B	ECI Senior Design <i>L</i>	4	S		ECI 193A – In Progress Grading for ECI 193A&B – final grades posted in Spring

MATHEMATICAL ANALYSIS requirement: select ONE of the following four courses (4 units required)

ECI 115	Computer Methods in Civil Eng <i>L</i>	4	S		ENG 6 or ECS 30; MAT 22B
ECI 153	Deterministic Optimization & Design <i>L</i>	4	F		MAT 21C, 22A, programming course -may only count for depth OR math elec.-
MAT 118A	Partial Diff. Eqns:Elementary Methods	4	F		MAT 21D, 22A, 22B (extensive problem solving)
Statistics 108	Appl. Stat. Methods:Regression Analy <i>D</i>	4	F W S		Statistics 13, 32, 102 or ECI 114; Pass 1 STA majors only

Close to Graduation? Two separate websites to visit – one for degree certification/diploma and one to participate in a ceremony:

1. Graduation Online Application (apply qtr before completing coursework): <http://registrar.ucdavis.edu/graduation>
2. Participate in Commencement (June or December ceremony): <http://commencement.ucdavis.edu/registration.html>

MINIMUM 2.00 UC GPA and MINIMUM 2.00 ENGINEERING (Major) GPA required to receive degree certification.

(MBTC) = Course may be taken concurrently L = Course has a Lab D = Course has a Discussion

CIVIL & ENVIRONMENTAL ENGINEERING (ECI) ELECTIVE requirement: 12 units required → or 16 units required if ECI 3 is not completed

→ECI Elective is additional upper division, letter-graded Civil & Environmental Engineering (ECI) courses (i.e. not already used towards the ECI Breadth, ECI Depth, and Math Analysis requirements), and **ENG 102 or ENG 105**.¹

May also include up to 6 units of the following:

→ ECI 198 ²	Group Study (with Faculty)	1-5	F	W	S	Upper division standing
→ ECI 199 ²	Research (with Faculty)	1-5	F	W	S	Upper division standing

¹ A maximum of 4 units outside of Civil & Environmental Engineering may be considered on a petition basis. Please consult with an undergraduate staff advisor.

² Unit credit might be possible when working on a group project (ECI 198) or with a professor in the department on a research project (ECI 199). ECI 198 may be awarded to students involved with competition teams or other group projects. Students normally ask professors about research possibilities available to undergraduates. An ECI 198/199 form must be completed (including the portion filled in and signed by the professor) and returned by the student to the advisor to receive a CRN#. The form is available on our website: <http://cee.engr.ucdavis.edu/forms/>.

ADDITIONAL ECI COURSES (can be used as ECI electives):

ECI 123	Urban Systems & Sustainability	4			S	Upper division standing; Pass 1 majors only
ECI 125	Building Energy Performance	4			S	Upper division standing in Engineering
ECI 137	Construction Prin. & Proj. Mgmt. <i>L</i>	4		W		Upper division standing in Engineering; ENG 106 recommended
ECI 138	Earthquake Loads on Structures <i>D</i>	4			S	ECI 130 or 131
ECI 139	Advanced Structural Mechanics	4		W		ENG 104 w/ C- or better
ECI 143	Green Engr. Des. & Sustainability <i>D</i>	4			not offered 17-18	Upper division standing; Pass 1 majors only

UPPER DIVISION ENGLISH COMPOSITION requirement: satisfy by Exam (0 units) - or take ONE of the UWP courses listed below (4 units)

English Composition Exam (given 4th Saturday of each quarter – no more than 2 chances to pass the exam – low pass rate in recent offerings)

Exam details at: <http://writing.ucdavis.edu/compexam>

UWP 101	Advanced Composition <i>D</i>	4	F	W	S	UWP 1 or ENL 3; Upper div. standing (pass with C- or better)
UWP 102E	Writing in the Disciplines: <u>Engineering</u> <i>D</i>	4	F	W	S	UWP 1 or ENL 3; Upper div. standing (pass with C- or better)
UWP 102G	Writing in the Disciplines: <u>Environmental Writing</u> <i>D</i>	4			S	UWP 1 or ENL 3; Upper div. standing (pass with C- or better)
UWP 104A	Writing in the Professions: <u>Business Writing</u> <i>D</i>	4	F	W	S	UWP 1 or ENL 3; Upper div. standing (pass with C- or better)
UWP 104E	Writing in the Professions: <u>Science</u> <i>D</i>	4	F	W	S	UWP 1 or ENL 3; Upper div. standing (pass with C- or better)
UWP 104T	Writing in the Professions: <u>Technical Writing</u> <i>D</i>	4	F	W	S	UWP 1 or ENL 3; Upper div. standing (pass with C- or better)

No unit of coursework may be used to satisfy two different degree requirements simultaneously.

Junior (90-134.9 units)			<u>Example Schedule</u>			Senior (135 or more units)					
<i>Fall</i>	<i>Winter</i>	<i>Spring</i>	<i>Fall</i>	<i>Winter</i>	<i>Spring</i>	<i>Fall</i>	<i>Winter</i>	<i>Spring</i>			
ENG 103 [^]	4	ECI Breadth	4	ECI Breadth	4	ECI Depth	4	ECI 193A	4	ECI 193B	4
ENG 104 [^]	4	ENG 104L [^]	1	ECI Breadth	4	ECI Depth	4	ECI Depth	4	ECI Elective	4
ECI Breadth	4	ENG 106	3	ECI Elective	4	ECI Elective	4	ECI Depth	4	GE Elective	4
GE Elective	4	Math Analysis Elect [^]	4	Upper Div Comp? 0-4		ENG 102 or 105	4		12		12
	16	GE Elective	4	(or passed exam?) 14-18			16				
			16								

[^] may take another quarter instead

Academic Advisor Contact Information & Useful Websites:

Civil & Environmental Engineering Program Advisor & Peer Advisor: civiladvising@ucdavis.edu, 2015 Ghausi Hall
College of Engineering Undergraduate Dean's Office, 1050 Kemper Hall Main phone number: 752-1979 Engineering Peer Advisors: 752-0553

<i>Civil & Environmental Engineering:</i> http://cee.engr.ucdavis.edu	<i>OASIS Student Advising:</i> http://oasis.ucdavis.edu
<i>College of Engineering:</i> http://engineering.ucdavis.edu	<i>Advising Appointment System:</i> https://appointments.ucdavis.edu/
<i>Office of the Registrar (Online Catalog & more):</i> http://registrar.ucdavis.edu	<i>Schedule Builder:</i> http://sisweb.ucdavis.edu/
<i>Class Search Tool:</i> http://classes.ucdavis.edu	<i>Equivalent courses at Community Colleges:</i> http://www.assist.org
<i>Summer Sessions:</i> http://summer-sessions.ucdavis.edu	<i>Internship & Career Center:</i> http://icc.ucdavis.edu
<i>Undergrad Research Center:</i> http://undergraduateresearch.ucdavis.edu	<i>EIT/FE Exam</i> http://www.bpelsg.ca.gov & http://nces.org/engineering/fe/
<i>Study Abroad:</i> http://studyabroad.ucdavis.edu/	<i>My Degree:</i> https://mydegree.ucdavis.edu

Academic Standing is determined by **grade point average (GPA)** from both the most recent quarter **and** the cumulative/UC GPA at the end of Fall, Winter and Spring Quarter; as well as units completed toward **Minimum Progress (MP)** (must average 13 units per quarter / total at least 39 units/year (Fall through Spring)). **Good Standing** = GPA of 2.00 or above (quarterly and cumulatively) and satisfaction of MP.

Academic Probation (AP) = GPA less than 2.00, but not less than 1.50, for the quarter, and/or GPA less than 2.00 for all courses taken within UC, and/or MP average less than 13 units, but greater than or equal to 12 units per quarter.

Subject to Disqualification (SD) = GPA less than 1.50 for the quarter, and/or GPA less than 1.50 for all courses taken within UC, and/or MP average less than 12 units per quarter.

Course Repeat Policy - Students may repeat one time for credit a course in which they received a D+, D, D-, F or NP. The second (i.e. repeat) grade replaces the first grade in the GPA, up to a 16 unit maximum (course must be repeated at UC). After 16 units, both grades remain in the GPA. Both grades remain on the transcript for all repeated coursework. Repeating a course more than once requires approval via a Multiple Repeat Petition, available on [OASIS](#).

--The Civil Engineering degree is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org> -

Heather Bischel <i>Ecological sanitation and resource reuse; Pathogens and micropollutants; sustainable international development; water quality and reuse</i>	3109 Ghausi Hall, 752-6772	hbischel@ucdavis.edu
John E. Bolander <i>Structural analysis; structural design; composite materials; nondestructive testing; optimization</i>	3121 Ghausi Hall, 752-8226	jebolander@ucdavis.edu
Fabian Bombardelli <i>Theoretical and numerical aspects of turbulence in multi-phase flow dynamics; environmental flows</i>	3105 Ghausi Hall, 752-0949	fabombardelli@ucdavis.edu
Ross W. Boulanger <i>Earthquake engineering; soil-structure interaction; laboratory testing; ground improvement</i>	3151 Ghausi Hall, 752-2947	rwboulanger@ucdavis.edu
Colleen Bronner <i>Engineering education (K - 20); aquatic ecosystem restoration and management; groundwater remediation</i>	3118 Ghausi Hall, 752-7523	cebronner@ucdavis.edu
Christopher Cappa <i>Air quality; atmospheric chemistry; atmospheric particulate matter; climate change</i>	3135 Ghausi Hall, 752-8180	cdcappa@ucdavis.edu (Department Vice Chair/Graduate AdvisOr)
Y.H. Rob Chai <i>Seismic retrofit of structures; bridge structures; earthquake engineering; reinforced concrete and masonry structures</i>	3133 Ghausi Hall, 752-2404	fzchai@ucdavis.edu
Lijuan Dawn Cheng <i>Infrastructure design and renewal using composites and engineered recycle materials; bridge design and analysis; large-scale testing</i>	3161 Ghausi Hall, 754-8030	dawcheng@ucdavis.edu
Yannis F. Dafalias <i>Continuum mechanics; structural mechanics; soil mechanics; constitutive models for metals, polymers, soils; large deformations; micromechanics</i>	3131 Ghausi Hall, 752-3423	jfdafalias@ucdavis.edu
Jeannie L. Darby <i>Water and wastewater treatment; water quality; disinfection; arsenic, nitrate, and chromium removal from water</i>	3134 Ghausi Hall, 752-5670	jdarby@ucdavis.edu (Department Vice Chair/Undergraduate Advisor)
Jason T. DeJong <i>In-situ and laboratory characterization; soil behavior; sensor and device development; bio-mediated soil improvement; earthquake engineering, foundation design</i>	3101 Ghausi Hall, 754-8995	jdejong@ucdavis.edu
Yueyue Fan <i>Network optimization and control; stochastic system modeling and analysis; risk management of transportation networks; applied mathematics/computation on transportation systems</i>	3137 Ghausi Hall, 754-6408	yyfan@ucdavis.edu
Alexander Forrest <i>Lakes, reservoirs, and ice; autonomous underwater vehicles; environmental fluid mechanics; aquatic chemistry and ecosystems</i>	3155 Ghausi Hall, 754-9428	alforrest@ucdavis.edu
John T. Harvey <i>Pavement materials, design, analysis, rehabilitation, construction, management, and quality; pavement environmental life cycle assessment</i>	3153 Ghausi Hall, 754-6409	jtharvey@ucdavis.edu
Jonathan Herman <i>Water resources planning and management; multi-objective optimization; system dynamics simulation</i>	3138 Ghausi Hall, 752-8870	jdherman@ucdavis.edu
Miguel A. Jaller <i>Sustainable urban transportation systems, city logistics; humanitarian logistics; supply chain management; operations research</i>	3143 Ghausi Hall, 752-7062	mjaller@ucdavis.edu
Boris Jeremić <i>Computational geomechanics; finite element methods; parallel computing; computer aided engineering</i>	3147 Ghausi Hall, 754-9248	jeremic@ucdavis.edu
Amit Kanvinde <i>Fracture and fatigue of steel structures; nonlinear structural analysis and design; performance based earthquake engineering</i>	3139 Ghausi Hall, 752-2605	amkanvinde@ucdavis.edu (Department Chair, 2049 Ghausi Hall)
M. Levent Kavvas <i>Hydrology; watershed hydrology; hydrometeorology; hydraulic models; erosion/sediment transport</i>	3165 Ghausi Hall, 752-2518	mlkavvas@ucdavis.edu
Alissa Kendall <i>Energy systems analysis; renewable energy efficiency, transportation energy; life cycle analysis</i>	3167 Ghausi Hall, 752-5722	amkendall@ucdavis.edu
Maureen Kinyua <i>Wastewater treatment, waste to energy, developing world systems and global health</i>	3120 Ghausi Hall, 752-7857	mnkinyua@ucdavis.edu
Michael J. Kleeman <i>Urban and regional air quality; heterogeneous atmospheric chemical reactions; aerosols; air pollution source characterization; parallel computing</i>	3125 Ghausi Hall, 752-8386	mjkleeman@ucdavis.edu
Sashi K. Kunnath <i>Structural dynamics; earthquake engineering; extreme loading on structures; nonlinear modeling and simulation</i>	3149 Ghausi Hall, 754-6428	skkunnath@ucdavis.edu
Frank J. Loge <i>Biological quality of point and non-point source discharges; disinfection; biological treatment; natural treatment systems; microbial ecology</i>	3163 Ghausi Hall, 754-2297	fjloge@ucdavis.edu
Jay R. Lund <i>Environment and infrastructure systems analysis; management; optimization; economics</i>	3023 Ghausi Hall, 752-5671	jrlund@ucdavis.edu
Alejandro Martinez <i>Soil-structure interfaces, novel deep foundations, soil behavior and laboratory and numerical modeling</i>	3116 Ghausi Hall, 752-5476	amart@ucdavis.edu
Sabbie Miller <i>Designing sustainable infrastructure materials; bio-based composites; integration of sustainability into structural design; durability of civil engineering materials</i>	3157 Ghausi Hall, 754-6407	sabmil@ucdavis.edu
Mark Modera <i>Energy efficiency; heat and mass transfer properties; air flow modeling and measurement; indoor air quality.</i>	Western Cooling Efficiency Center, 754-7671 mpmodera@ucdavis.edu	
Veronica Morales <i>Colloid & nanoparticle fate in soils; transport through porous media; biochar engineering</i>	3136 Ghausi Hall, 752-4008	vermorales@ucdavis.edu
Debbie Niemeier <i>Sustainable urban design; transportation-air quality modeling; vehicle emissions modeling; environmental policy</i>	3127 Ghausi Hall, 752-8918	dniemeier@ucdavis.edu
Holly Oldroyd <i>Environmental fluid dynamics, turbulent transport processes, evapo-transpiration, land-water-atmosphere interactions</i>	3129 Ghausi Hall, 752-8819	hjoldroyd@ucdavis.edu
Mark M. Rashid <i>Computational solid mechanics/inelasticity; large-deformation finite element methodology; constitutive modeling of engineering materials</i>	3123 Ghausi Hall, 752-7013	mmrashid@ucdavis.edu
S. Geoffrey Schladow <i>Lake and reservoir modeling; environmental fluid mechanics; ecosystem modeling; sediment-water column exchange processes; saline lakes</i>	3111 Ghausi Hall, 752-6932	gschladow@ucdavis.edu
Daniel Sperling <i>Energy systems; air pollution; alternative energy systems; energy policy; environmental policy; transportation planning</i>	1715 Tilia St., Room 1109, West Village 752-7434	dsperling@ucdavis.edu
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