

**Civil, Environmental, and Construction  
Engineering Tentative Five Year Course  
Planner**

This spreadsheet contains a tentative five-year course offering plan for Civil, Environmental, and Construction Engineering programs, 2025-2030

Key:	●	is equal to "Offered"
	□	is equal to "as resources permit"
	-	is equal to "not applicable or available"

Course	Course Title	CREDIT	Summer 2025	Fall 2025	Spring 2026	Summer 2026	Fall 2026	Spring 2027	Summer 2027	Fall 2027	Spring 2028	Summer 2028	Fall 2028	Spring 2029	Summer 2029	Fall 2029	Spring 2030	Course Coordinator
CCE 4003	INTRO TO CONST IND	3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Oloufa
CCE 4004	CONSTRUCTION METHODS	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Oloufa
CCE 4034	CONS EST & SCHEDULE	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Oloufa
CCE 4402	CONSTR EQUIPMT & PROD	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Oloufa
CCE 4810C	CONSTR ENGR DESIGN	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Oloufa
CCE 4813	MECH & ELECT SYS BLDGS	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Oloufa
CCE 5006	INFRASTRUCTURE SYS MGMT	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Oloufa
CCE 6036	ADV CONS PLAN + CONTROL	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Oloufa
CEG 4011C	GEOTECH ENGR I	3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Chen
CEG 4012	GEOTECH ENGR II	3	-	●	●	-	●	●	-	●	●	-	●	●	-	●	●	Arboleda
CEG 4203	GEOTECH METHODS CASE STUDIES	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Zhan
CEG 4801C	GEOTECH DESIGN	3	●	-	●	●	-	●	●	-	●	●	-	●	●	-	●	Arboleda
CEG 5405	SEEPAGE IN SOILS	3	-	●	-	-	-	●	-	-	-	-	●	-	-	-	●	Chen
CEG 5700	GEO-ENVIRONMENTAL ENGINEERING	3	-	-	-	-	●	-	-	-	-	-	●	-	-	-	-	Chen
CEG 6065	SOIL DYNAMICS	3	-	-	●	-	-	-	-	-	●	-	-	-	-	-	●	Zhan
CEG 5115	FOUNDATION ENGR	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Arboleda/Zhan
CEG 6317	ADV GEOTECH ENGR	3	-	●	-	-	-	-	-	●	-	-	-	-	-	●	-	Arboleda
CEG 6515	RETAIN STRUCT SLOPE STABILITY	3	-	-	-	-	●	-	-	-	-	-	●	-	-	-	-	Arboleda
CEG 6610	SMART UNDERGROUND STRUC	3	-	-	-	-	-	-	-	●	-	-	-	-	-	●	-	Arboleda
CES 4100C	STRUCT ANALYSIS I	4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Mackie
CES 4205	STRUCTURAL MECHANICS	3	-	●	-	-	●	●	-	●	-	-	●	-	-	●	-	Mackie
CES 4605	STEEL STRUCTURES	3	-	●	●	-	●	●	-	●	●	-	●	●	-	●	●	Zaurin
CES 4702	REINF CONC STRUCTURES	3	-	●	●	-	●	●	-	●	●	-	●	●	-	●	●	Fascetti
CES 4743C	STRUCTURAL DESIGN	3	-	●	●	-	●	●	-	●	●	-	●	●	-	●	●	Mackie
CES 5144	MATRIX METH STRUCT ANALYSIS	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Catbas
CES 5230	ADV STRUC MECHANICS	3	-	●	-	-	□	-	-	●	-	-	□	-	-	●	-	Yun
CES 5325	BRIDGE ENGINEERING	3	-	-	●	-	-	-	-	-	●	-	-	-	-	-	●	Catbas
CES 5606	ADV STEEL STRUCTURES	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Zaurin
CES 5706	ADV REINF CONCRETE	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Yun
CES 5821	MASONRY/TIMBER	3	-	●	-	-	-	-	-	□	-	-	-	-	-	□	-	Catbas/Mackie
CES 6010	STRUCTURAL RELIABILITY	3	-	-	-	-	-	□	-	-	-	-	-	□	-	-	-	Mackie/Fascetti
CES 6116	FINITE ELEMENT STRUC ANALY	3	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	Catbas
CES 6209	DYNAMICS OF STRUC	3	-	-	-	-	●	-	-	-	-	-	●	-	-	-	-	Catbas
CES 6220	WIND/EARTHQUAKE ENGR	3	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	Apostolakis/Sun
CES 6527	NONLINEAR STRUCTURAL ANALYSIS	3	-	-	□	-	-	-	-	-	□	-	-	-	-	-	□	Mackie/Apostolakis
CES 6715	PRESTRESSED CONCRETE	3	-	-	●	-	-	-	-	-	●	-	-	-	-	-	●	Yun
CES 6876	SMART CITY BUILT INFRASTRUCTURE	3	-	-	-	-	●	-	-	-	-	-	●	-	-	-	-	Sun
CGN 3090	ENGR REPORTS & LIABILITY	2	□	●	●	□	●	●	□	●	●	□	●	●	□	●	●	Filler/Apostolakis
CGN 3405	APPL NUM METHODS FOR CIVIL ENG	3	□	●	●	□	●	●	□	●	●	□	●	●	□	●	●	Agarwal
CGN 3501C	CIVIL ENGINEERING MATLS	3	□	●	●	□	●	●	□	●	●	□	●	●	□	●	●	Nosouhian/Filler
CGN 3700C	CE MEASUREMENTS	2	□	●	●	□	●	●	□	●	●	□	●	●	□	●	●	Dozier
CGN 4120	FORENSIC INV FOR ENG	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Filler
CGN 4808C	CIVIL ENGINEERING CAPSTONE	3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Zaurin
CGN 4309	INTRO TO SMART CITIES	3	-	-	-	-	●	-	-	●	-	-	●	-	-	●	-	Liao
CGN 5340	IOT: APPLICATIONS IN SMART CITIES	3	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	Agarwal
CGN 5341	INTERDISC INTRO TO SMART CITIES	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Agarwal
CGN 6342	MODELING HUMAN BEHAVIOR WITH EMERGING DATA	3	-	-	●	-	-	-	-	-	●	-	-	-	-	-	●	Hasan
CGN 6343	CYBER-PHYSICAL SYSTEMS AND SMART CITIES	3	-	●	-	-	-	-	-	●	-	-	-	-	-	●	-	Liao
CGN 6***	AI TECHNIQUES FOR SMART CITIES	3	-	-	-	-	●	-	-	-	-	-	●	-	-	-	-	X Chen
CGN ****	REMOTE SENSING FOR RESILIENT CITIES	3	-	-	-	-	-	-	-	-	-	-	-	●	-	-	-	Zhan
CWR 3201	ENGINEERING FLUID MECH	3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Kibler
CWR 4120	HYDROLOGY	3	□	●	●	□	●	●	□	●	●	□	●	●	□	●	●	Wahl
CWR 4124	HYDROGEOLOGY	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Singh/Wang
CWR 4202C	HYDRAULICS	3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Emmanouil/Singh
CWR 4812C	WATER RESOURCES DESIGN	3	●	●	□	●	●	□	●	●	□	●	●	□	●	●	□	Adjunct/Chair
CWR 5102	ADVANCED HYDROLOGY	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Singh/Emmanouil
CWR 5125	GROUNDWATER HYDROLOGY	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Wang
CWR 5205	HYDRAULIC ENGINEERING	3	-	□	-	-	-	-	-	●	-	-	-	-	-	●	-	Singh/Emmanouil
CWR 5634	WAT RES CHANGING ENV	3	-	-	●	-	-	-	-	-	●	-	-	-	-	-	●	Wang
CWR 5999	COASTAL SYSTEMS ANALYSIS	3	-	-	-	-	●	-	-	-	-	-	●	-	-	-	-	Wahl
CWR 5***	WATER RESOURCES SEMINAR	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Water Resources Faculty
CWR 6007	ECOHYDRAULICS	3	-	-	●	-	-	-	-	-	●	-	-	-	-	-	●	Kibler
CWR 6126	GROUNDWATER MODELING	3	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	Wang

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Course	Course Title	CREDIT	2025			2026			2027			2028			2029			Course Coordinator
			Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring				
CWR 6235	OPEN CHANNEL HYDRAULICS	3	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	Kibler
CWR 6236	RIVER ENGRG & SED TRNSPT	3	-	●	-	-	-	-	-	●	-	-	-	-	-	●	-	Singh
CWR 6606	STOCHASTIC RIVER NETWORK	3	-	-	-	-	●	-	-	-	-	-	●	-	-	-	-	Singh
CWR 6660	WAT POLICY, PLNG & GOVERN	3	-	-	-	-	□	-	-	-	-	-	□	-	-	-	-	Kibler
EES 4111C	BIOL PROCESS CONTROL	4	-	-	●	-	-	●	-	-	-	-	-	●	-	-	●	Lee
EES 4202C	CHEM PROCESS CONTROL	4	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Sadmani
EES 4421	FATE/TRANSPORT CONTAMINANTS IN ENV	2	-	-	●	-	-	●	-	-	-	-	●	-	-	-	●	Chang
EES 5318	INDUSTRIAL ECOLOGY	3	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	Chang
EGN 3310	ENGR ANALYSIS-STATICS	3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Mackie
EGN 3310H	ENGR ANALYSIS-STATICS (HONORS)	3	-	●	●	-	●	●	-	●	●	-	●	●	-	●	●	Mackie
EGN 3331C	MECHANICS OF MATLS	3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Sun
EGN 3613	ENGR ECON ANALY	2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Younes
EGN 4941	INTERNSHIP FOR CREDITS	3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Apostolakis
ENV 3001	ENVIRONMENTAL ENGINEERING	3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Randall
ENV 4120	AIR POLL & HAZ WASTE CONTROL	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Yu
ENV 4122C	AIR POLL CTRL DESIGN	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Yu
ENV 4341	SUSTAINABLE RESOURCE MGMT	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Chang
ENV 4433C	ENV ENGR WASTEWATER DESIGN	3	●	-	-	●	-	-	●	-	-	●	-	-	●	-	-	Randall
ENV 4531	ENV ENGR OPS & PROCESSES	3	□	●	●	□	●	●	□	●	●	□	●	●	□	●	●	Sadmani
ENV 4561	ADV ENV ENGR OPS & PROCESSES	3	□	-	●	□	-	●	□	-	●	□	-	●	□	-	●	Lee
ENV 4562C	ENV ENGR WATER TRTMT DESIGN	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Duranceau
ENV 5128	SMART AIR QUALITY MON AIR POLL CONTROL	3	-	-	-	-	●	-	-	-	-	-	●	-	-	-	-	Yu
ENV 5410	WATER TRTMT	3	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	Sadmani
ENV 5505	SLUDGE MGMT OPS	3	-	●	-	-	-	-	-	●	-	-	-	-	-	●	-	Randall
ENV 5517	CHEM & BIO PROCESSES	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Randall
ENV 5560	NATURE SOLUTIONS FOR POLL CONTROL	3	-	-	-	-	●	-	-	●	-	-	●	-	-	●	-	Hu
ENV 5636	ENV & WATER RESOURCES	3	-	●	-	-	-	-	-	●	-	-	-	-	-	●	-	Chang
ENV 6015	PHYS/CHEM TRTMT SYS	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Duranceau
ENV 6016	BIOL TRTMT SYS	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Randall
ENV 6030	ENV BIOTECHNOLOGY	3	-	●	-	-	-	-	-	●	-	-	-	-	-	●	-	Lee
ENV 6046	MEMBRANE MASS TRANSFER	3	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	Duranceau
ENV 6047	ENV INFORMATICS	3	-	-	-	-	-	-	-	-	-	●	-	-	-	-	●	Chang
ENV 6106	ATMOS DISPERSION MDLG	3	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	Yu
ENV 6126	DES AIR POLLUTION CONTROLS	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENV 6347	HAZ WASTE INCINERATION	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENV 6519	AQUATIC CHEM PROCESSES	3	-	-	●	-	-	-	-	-	●	-	-	-	-	-	●	Duranceau
ENV 6533	SMART WATER WASTEWATER MGMT	3	-	-	●	-	-	-	-	-	●	-	-	-	-	-	●	Lee
ENV 6558	INDUSTRIAL WASTE TRTMT	3	-	-	-	-	●	-	-	-	-	-	●	-	-	-	-	Sadmani
ENV 6616	ECOLOG ENGR RCVG WATER IMPAC	3	-	-	-	-	●	-	-	-	-	-	●	-	-	-	-	Chang
TTE 3810	HIGHWAY ENGINEERING	3	-	●	●	-	●	●	-	●	●	-	●	●	-	●	●	Al-Deek
TTE 4274	TRANSPORTATION ENGRG SYS	3	-	●	●	-	●	●	-	●	●	-	●	●	-	●	●	Hasan/ Abou-Senna
TTE 4300	TRANSPORTATION ANALYTICS	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Eluru
TTE 4601C	URBAN SYSTEMS DESIGN	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Mackie/Abou-Senna
TTE 3810	HIGHWAY ENGINEERING	3	-	●	●	-	●	●	-	●	●	-	●	●	-	●	●	Al-Deek
TTE 4274	TRANSPORTATION ENGRG SYS	3	-	●	●	-	●	●	-	●	●	-	●	●	-	●	●	Hasan/ Abou-Senna
TTE 4300	TRANSPORTATION ANALYTICS	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Eluru
TTE 4601C	URBAN SYSTEMS DESIGN	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Mackie/Abou-Senna
TTE 5204	TRAFFIC ENGINEERING	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Abou-Senna
TTE 6205	HIGHWAY CAPACITY	3	-	-	●	-	-	-	-	-	●	-	-	-	-	-	●	Al-Deek
TTE 6256	TRAFFIC OPERATIONS	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Al-Deek
TTE 6270	INTELLIGENT TRANS SYS	3	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	Al-Deek
TTE 6275	CONNECTED AND AUTONOMOUS VEHICLES	3	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	Agarwal
TTE 6533	MOBILITY IN SMART CITIES	3	-	-	●	-	-	-	-	-	●	-	-	-	-	-	●	Liao
TTE 6608	ALGORITHMS AND MODELS FOR SMART CITIES	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Hasan
TTE 6625	MASS TRANSPORTATION SYS	3	-	-	□	-	-	□	-	-	□	-	-	□	-	-	□	Mackie/Abou-Senna
TTE 6667	DISCRETE CHOICE MODELING	3	-	●	-	-	●	-	-	●	-	-	●	-	-	●	-	Eluru
TTE 6910	CAPSTONE COURSE MS TTA	3	-	-	●	-	-	●	-	-	●	-	-	●	-	-	●	Eluru
TTE 6938	TRANSPORTATION NETWORK MODELING	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Hasan