

Department of Civil and Environmental, Graduate Course Offerings

Course	Number	2011	2012	2012	2012	2013	2013	2013	2014	2014	2014	2015	2015	Instructor
		Fall	Spr	Sum	Fall	Spr	Sum	Fall	Spr	Sum	Fall	Spr	Sum	
Structural Engineering														
Prestress Concrete	CES 5715C		*			*			*			*		Sen
Advanced Concrete Design	CES 6706	*			*			*			*			Sen
Design of Masonry Structures	CGN 6933					*						*		Sen
Rehab and Restoration of Structures	CGN 6933		*					*						Sen
Design Structures to Resist Natural Hazards	CES 6586				*						*			Stroh
Advanced Steel Design	CES 6609	*						*						Adjunct
Experimental Stress Analysis	CES 6103					*						*		Mullins
Design of Concrete Bridges	CES 6326					*						*		Zendegui
Advanced Structural Mechanics	CGN 6933	*						*						Simkins
Advanced Structural Analysis	CGN 6933		*					*						Simkins
Structural Dynamics	CES 5209				*						*			Simkins
Geotechnical Engineering														
Foundation Engineering	CEG 5115	*						*						Gunaratne
Soil Dynamics	CEG 6065				*						*			Gunaratne
Seepage and Subsurface Drainage	CEG 6415		*					*						Gunaratne
Engineering Mechanics														
Applied Elasticity	EML 6653		*			*			*			*		ME
Advanced Computational Solid Mechanics	CGN 6933	*						*						Simkins
Applied Finite Element Method	CES 6118		G			S			G			S		Guldiken, Simkins
Advanced Fluid Mechanics	EML 6713	*			*			*			*			ME Staff
Advanced Computational Fluid Mechanics	CGN 6933		*					*						Tejada
Continuum Mechanics	CGN 6933				*						*			Tejada
Laminated Composite Materials	EML 6232	*			*			*			*			ME Staff
Advanced Transport Phenomena	ECH 6285	*						*						Gupta
Biotransport Phenomena	BME 6634	*						*						Gilbert
Process Analysis and Modeling	ECH 6412	*						*						Gilbert
Applied Mathematics														
Advanced Engineering Mathematics I	EML 6069		*			*			*			*		ME Staff
Advanced Engineering Mathematics II	CGN 6933	ME			S			ME			S			ME Staff, Simkins
Mathematical Methods	ECH 6840	*						*						Sunoi
Materials														
Electrochemical Diagnostic Techniques	CGN 6720				*						*			Sagues
Structural Life Prediction	CGN 6933	*						*						Sagues
Corrosion Control	EMA 5326					*						*		Sagues
Material Infrastructure Durability	CGN 6933		*					*						Zayed
Environmental Engineering														
Physical / Chemical Processes in Env Eng	ENV 6519		*			*			*			*		Cunningham
Air Quality for Env & Trans Engineers	CGN 6933					*						*		Ergas
Water Resources/Environmental Design	ENV 6564		*			*			*			*		Ergas
Biological Principles of Environmental Engineering	ENV 6511	*			*			*			*			Ergas
Physical & Chemical Principles in Env Eng	ENV 6002	*			*			*			*			Jane Zhang
Green Engineering for Sustainability	CGN 6933		*		*			*			*			Jane Zhang
Sustainable Development Engineering	CGN 6933		*		*			*			*			Mihelcic
Air Pollution	ENV 6105	*			*			*			*			Stuart
Environmental Modeling	CGN 6933		*					*						Stuart
Aquatic Chemistry	ENV 6666				*			*			*			Trotz (T)
Environmental Inter. Res. Colloquium	CGN 6933	*			*			*			*			Stuart
Environmental Biotechnology	ENV 6667		*		*			*			*			Yeh
Green Infrastructure for Sustainable Communities	CGN 6933	*			*			*			*			Yeh
EWRE seminar	CGN 6933	T	R		JZ	Stu		T	R		JZ	Stu		Staff
Water Resource Engineering														
Coastal and Estuary Modeling	CWR 6534	*						*						Ross
Wave and Beach Protection	CWR 6239		*						*					Ross
Coastal Waves and Structures	CWR 6820					*					*			Ross
Hydrologic Models	CWR 6535				*						*			Ross
Advanced Hydrologic Models	CWR 6538				*						*			Ross
Urban Hydrology	CWR 6305				*						*			Nachabe
Free Surface Flow	CWR 6235	*						*						Nachabe
Vadose Zone Hydrology	CGN 6933	*						*						Nachabe
Groundwater Hydraulics	CGN 6933				*						*			Nachabe
Transportation Engineering														
Advanced Geometric Design of Highways	CGN 6933			*						*				Behzadi
Transportation and Society	TTE 4006		CUTR	CUTR			CUTR	CUTR		CUTR	CUTR		CUTR	CUTR
Access Management	CGN 6933		CUTR						CUTR					CUTR
GIS in Transportation	CGN 6933	CUTR						CUTR						CUTR Lee
Public Transportation	TTE 6651					CUTR						CUTR		CUTR Polzin
Transportation and Land Use	TTE 6655		CUTR						CUTR					CUTR Polzin
Intelligent Transportation Systems	TTE 6270	*						*						Lu
Transportation Safety	TTE 6315		*			*			*			*		Lu
Computer Applications in Traffic Engineering	CGN 6933				*		*				*		*	Lu
Traffic Flow Theory	CGN 6933										*			Lu
Traffic Systems Engineering	TTE 5205	*			CUTR			*			CUTR			Lu/CUTR
Airport Management	CEG 6933			*						*				Michael Audino
Discrete Choice Models of Behavior	TTE 6505					*						*		Pinjari
Travel Demand Modeling	TTE 6507	*			*			*			*			Pinjari
Transportation Data Collection and Analysis	CGN 6933		*						*					Pinjari
Pavement Design	TTE 6835				*						*			Qing Lu
Asphalt and Asphalt Mixes	CGN 6933		*					*						Qing Lu
Infrastructure Systems Management	CGN 6933	*			*			*			*			Qing Lu
Pavement Management Systems	TTE 6837										*		*	Qing Lu
Graduate Transportation Seminar	TTE 6930	YZ	Lu		YZ	P		YZ	Lu		YZ	P		Staff
Trans Planning and Economics	TTE 5501	*			*			*			*			Yu Zhang
Transportation Network Analysis	CGN 6933				*						*			Yu Zhang
Air Transportation	TTE 5620		*					*						Yu Zhang

* indicates that the course will be given to a live audience and simultaneously it will be recorded using Elluminate.