

Dual Master Degree
University of Rhode Island (URI) and Technische Universität Darmstadt (TUDa)

URI				TUDa		
Structural Engineering**						
Courses	Description	Credits	Status	Course Nr.	Course Title	Credits
CVE 422	Offshore Structure Design	3	yes		no equivalent course	6
CVE 453	Computer Analysis of Structures	3	yes		no equivalent course	6
CVE 460	Steel Structures	3	no		undergraduate course at TUDa	-
CVE 465	Analysis and Design of Concrete Structures	3	no		undergraduate course at TUDa	-
CVE 551 / MCE 561	Finite Element Analysis in Civil Eng. I	3	yes	13-E1-M001	Finite Elemente Methode I	6
CVE 552	Structural Timber Design	3	yes		no equivalent course	6
CVE 561	Advanced Steel Design	3	yes	13-I1-M002 / 13-	Stahlbau 3 bzw. 4	6
CVE 562	Management of Highway Bridges	3	yes		no equivalent course	6
CVE 563	Prestressed Concrete	3	yes	13-D2-M005	Spannbeton	6
CVE 564	Advanced Reinforced Concrete	3	yes		no equivalent course	6
CVE 565	Structural Dynamics	3	yes	13-M2-M004	Baudynamik I	6
CVE 568	Theory of Plates	3	yes	13-M2-M004	Statik IV	6
CVE 651 / 566	Design of Highway Bridges	3	yes		no equivalent course	6
CVE 652	Advanced Topics in Bridge Engineering	3	yes		no equivalent course	6
CVE 657	Structural Stability (prerequisite @TUDa: Statik III)	3	yes	13-I1-M002	Stahlbau 4	6
CVE 667	Structural Reliability	3	yes	13-D2-M011	Risiko und Sicherheit im konstruktiven Ingenieurbau	6

Geotechnical Engineering **						
Courses	Description	Credits	Status	Course Nr.	Course Title	Credits
CVE 482	Innovative Subsurface Remediation Tech.	3	yes		no equivalent course	6
CVE 483	Shallow Foundations	3	yes		no equivalent course	6
CVE 579	Advanced Soil Mechanics	3	yes	13-C0-M001	Geotechnik III	6
CVE 581	Experimental Geomechanics	3	yes	13-C0-M002	Geotechnik IV	6
CVE 582	Marine Geotechnics	3	yes		no equivalent course	6
CVE583	Deep Foundations	3	yes	13-C0-M014	Geotechnik im Hochhausbau	6
CVE 584	Designing with Geosynthetics	3	yes	13-C0-M012	Kunststoffe in der Geotechnik	6
CVE 586	Earth Retaining Structures	3	yes		no equivalent course	6
CVE 687	Geotechnical Earthquake Engineering	3	yes		no equivalent course	6
CVE 688	Marine Geomechanics	3	yes		no equivalent course	6

Environmental Engineering **						
Courses	Description	Credits	Status	Course Nr.	Course Title	Credits
CVE 470	Water and Wastewater Transport Systems	3	no		undergraduate course at TUDa	-
CVE 471	Water and Wastewater Treatment Systems	3	no		undergraduate course at TUDa	-
CVE 474	Water Quality Sampling and Analysis	3	yes	13-K5-M003	Grundwasserschutz	6
CVE 475	Water in the Environment	3	yes	13-L1-M002	Ingenieurhydrologie II	6
CVE 478	Haz. Waste Disposal and Solid Waste Management	3	yes	13-K1-M001	Abfalltechnik	6
CVE 484	Environmental Hydrogeology	3	no		undergraduate course at TUDa	-
CVE 519	Marine Environmental Organic Chemistry	3	yes		no equivalent course	6
CVE 570	Water Chemistry for Engineers	3	yes		no equivalent course	6
CVE 572	Biosystems in Sanitary Engineering	3	yes	13-K2-M007	Biologische Abwasserreinigung	6
CVE 573	Theory of Water Purification and Treatment	3	yes	13-K5-M002	Trinkwassergüte und Wasseraufbereitungstechnik	6
CVE 575	Open-Channel Hydraulics	3	no		undergraduate course at TUDa	-
CVE 577	Environmental Sustainability and Green Engineering	3	yes	13-K3-M003	Umweltwissenschaften an der TUDa	6
CVE 588	Groundwater Hydrology	3	yes	13-L1-M009	Ingenieurhydrologie III	6
CVE 672	Water Pollution Control & Treat. Of Wastewater	3	yes	13-K2-M005	Wassergütepraktikum	6
CVE 677	Stream and Estuarine Analysis	3	yes		no equivalent course	6

Transportation Engineering **						
Courses	Description	Credits	Status	Course Nr.	Course Title	Credits
CVE 442	Traffic Engineering	3	yes		no equivalent course	6
CVE 443	Intelligent Transportation Systems	3	yes	13-J3-M004	Modellierung der Verkehrsnachfrage und Moderne Verkehr	6
CVE 450	Simulation Based Design for Civil Engineers	3	yes		no equivalent course	6
CVE 540	Public Transportation Systems	3	yes	13-J3-M003	ÖPNV Planung/ ÖPNV Management / Wirtschaftspolitik	6
CVE 542	Traffic Systems Operations	3	yes	13-J3-M001	Verkehrsplanung und Verkehrstechnik (B)	6
CVE 445	Pavement Design	3	yes	13-J2-M006	Konstruktiver Straßenbau B	6
CVE 546	Urban and Rural Transportation	3	yes	13-K4-M007	Infrastrukturplanung	6
CVE 547	Geometric Design of Highways	3	yes		no equivalent course	6
CVE 548	Bituminous Transp. Materials and Mix-Design	3	yes		no equivalent course	6
CVE 549	Transportation Soils and Materials	3	yes	13-J2-M007	Tragverhalten von Verkehrsflächen (C)	6
CVE 641	Pavement Evaluation and Rehabilitation	3	yes		no equivalent course	6

Status

yes with no equivalent course : courses can be chosen without pre-notification

yes with equivalent course : courses can only be chosen when not already passed at TUDa

no: course cannot be chosen