Sample Program of Study for the Tongji-Georgia Tech 3+2 Program in Environmental Engineering

	Graduation Credit Hrs	Total Credit Hrs	No. of Courses	Recommended Courses
1st Year – Fall:	12	6 (4000 level)	2	CEE 3340 EnvE Lab CEE 4210 Hydrology CEE 4300 EnvE Systems CEE 4310 Water Quality CEE 4330 Air Pollution Engr CEE 4795 Groundwater Hydrology
		6 (6000 level)	2	CEE 6310 Process Principles CEE 6311 Microbial Principles CEE 6312 Chemical Principles
1st Year – Spring:	12	9 (4000 level)	3	CEE 3340 EnvE Lab CEE 4300 EnvE Systems CEE 4340 EnvE Modeling & Health CEE 4395 Env Sys Design CEE 4803A Num Sim EnvE Sciences CEE 4803B Env Biotech CEE 4803C Env Tech Developing World
		3 (4000 level)	1	CEE 4699 Undergrad Research
2nd Year – Fall:	12	12 (6000+ level)	4	CEE 6310 Process Principles CEE 6311 Microbial Principles CEE 6312 Chemical Principles CEE 6271 Flow-Porous Media I CEE 6345 Sustainable Engineering CEE 6790 Air Pollution: Phys&Chem CEE 6343 Membrane Processes CEE 6351 Biotransformation CEE 6361 Model & Sim Biosys CEE 8813# Global Water & Sanitation
		0*	0*	CEE 7000 Master Thesis CEE 8956 Master's Research Problem
		0	1	CEE 8094 EnvE Seminar
2nd Year – Spring:	12	12 (6000+ level)	4	CEE 6313 Fate of Contaminants CEE 6314 EnvE Modeling CEE 6330 Physicochemical Processes CEE 6331 Biological Processes CEE 6390 Air Pollution: Form&Ctrl CEE 6332 Separation Process CEE 6350 Adv Env Chem CEE 6720 Env Microbial Genomics
		0*	0*	CEE 7000 Master Thesis CEE 8956 Master's Research Problem
		0	1	CEE 8095 EnvE Seminar

Total	**48**	**18 (4000 level)** **30 (≥6000 level)**

- **Total credit hours in two years = 48**
- **Credit hours per semester = 12**
- **Total undergraduate credit hours = 18. These credit hours will be transferred to Tongji University as part of fulfillment toward Tongji B.S. degree.**
- **Total graduate credit hours = 30. These credit hours are to fulfill the Georgia Tech M.S. degree**
- *** Students may have the option in the second year of study to elect to conduct a Special Research Project (CEE 8956, 3 credit hours) or a M.S. Thesis (CEE 7000, 6 credit hours), under supervision of a CEE faculty advisor, as part of fulfillment toward the Georgia Tech M.S. degree.**

Recommended Courses

Undergraduate-level courses:

Course	Credit hrs	Fall	Spring	1st-yr Credit hours
CEE 3340 Environmental Engineering Lab	3.0	Yes	Yes	15
CEE 4210 Hydrology	3.0	Yes		
CEE 4300 Environmental Engineering Systems	3.0	Yes	Yes	
CEE 4310 Water Quality	3.0	Yes		
CEE 4330 Air Pollution Engineering	3.0	Yes		
CEE 4340 Environmental Eng Modeling & Health	3.0		Yes	
CEE 4395 Environmental System Design	3.0		Yes	
CEE 4795 Groundwater Hydrology	3.0	Yes		
CEE 4803A Numerical Simulation in Environ Engr Sciences	3.0		Yes	
CEE 4803B Environmental Engineering Biotechnology	3.0		Yes	
CEE 4803C Environmental Technology in Developing Countries	3.0		Yes	
CEE 4699 Undergraduate Research	3.0	Yes	Yes	3*

* Under supervision by a CEE faculty advisor.

Graduate-level courses:

Course	Credit hrs	Fall	Spring	1st-yr Credit hours	2nd-yr Credit hours
CEE 6310 Processes Principles in Environmental Eng	3.0	Yes		6	3
CEE 6311 Microbial Principles in Environmental Eng	3.0	Yes			
CEE 6312 Chemical Principles in Environmental Eng	3.0	Yes			
CEE 6271 Flow in Porous Media I	3.0	Yes			21*
CEE 6345 Sustainable Engineering	3.0	Yes			
CEE 6790 Air Pollution: Physics & Chemistry	3.0	Yes			
CEE 8813 Global Water & Sanitation	3.0	Yes			
CEE 6343 Membrane Processes (even)	3.0	Yes			
CEE 6351 Biotransformation (even)	3.0	Yes			
CEE 6361 Modeling & Simulation of Biosystems (even)	3.0	Yes			
CEE 6313 Fate of Contaminants in Subsurface	3.0		Yes		
CEE 6314 Environmental Modeling	3.0		Yes		
CEE 6330 Physicochemical Processes	3.0		Yes		
CEE 6331 Biological Processes	3.0		Yes		
CEE 6390 Air Pollution: Formation & Control	3.0		Yes		
CEE 6332 Separation Processes (odd)	3.0		Yes		
CEE 6350 Advanced Environmental Chemistry (odd)	3.0		Yes		
CEE 6720 Environmental Microbial Genomics (odd)	3.0		Yes		
CEE 8094 Seminar	-	Yes			
CEE 8095 Seminar	-		Yes		

* May choose the option of Special Research Project (CEE 8956, 3 credit hours) or a M.S. Thesis (CEE 7000, 6 credit hours), under supervision of a CEE faculty advisor.