

Sample Programs of Study for a Civil Engineering Sub-discipline Focus

Typical coursework for the first two years of study is provided in the General Program of Studies. Sample programs for an optional focus in a Civil Engineering sub-discipline are provided below. Students should work with a faculty advisor to finalize their selection of technical electives. A design technical elective must be substituted for one of the courses marked with a + and an analysis technical elective must be substituted for one of the courses marked with a *.

CONSTRUCTION ENGINEERING AND MANAGEMENT FOCUS			
JUNIOR	CENG 121A - GEOTECH (3/1) CENG 145 - TRANS ENGR DES CENG 148 - STR SYSTEMS (4/1) CENG 118 - CONST ENGR (3)	AMTH 112 - RISK IN CIVIL ENG CENG 121B - GEOTECH (2) CENG 125 - MUNICIPAL ENG (3/1) CENG 141 - FLUIDS/HYD (4/1) CENG 184 - CONST ADMIN (3) +	CENG 128 - ENGR ECON (3) CENG 140 - WATER RES (4/1) CENG 143 - ENVIRON ENG (3/1) CENG 192A - CE PROJ DEVL (1) CENG 119 - DES SUST CONST
SENIOR	CENG 192B - CE PRACTICE (2) CENG 192C - CE PROF DEVL (1) CENG 186 - CONST PLANNING + ELEN 49 - POWER SYS or RTC 1 UNIV CORE REQUIREMENT	CENG 193 - PROJECT DESIGN (4) FLEX COURSE UNIV CORE REQUIREMENT UNIV CORE REQUIREMENT	CENG 194 - CE PROJ COMM CENG 187 - CONST OPERATIONS + UNIV CORE REQUIREMENT FLEX COURSE

THE 2 FLEX COURSES MUST BE A COMPUTER APPLICATIONS COURSE (CENG 169 OR 182) AND A UNIVERSITY CORE REQ.

GEOTECHNICAL ENGINEERING FOCUS			
JUNIOR	CENG 121A - GEOTECH (3/1) CENG 145 - TRANS ENG CENG 148 - STR SYSTEMS (4/1) ELEN 49 - POWER SYS or RTC 1	AMTH 112 - RISK IN CIVIL ENG CENG 121B - GEOTECH (2) CENG 125 - MUNICIPAL ENG (3/1) CENG 141 - FLUIDS/HYD (4/1) CENG 135 - CONC DES (4/1)	CENG 128 - ENGR ECON (3) CENG 140 - WATER RES (4/1) CENG 143 - ENVIRON ENG (3/1) CENG 192A - CE PROJ DEVL (1) CENG 138 - GEOT DES (4/1)
SENIOR	CENG 192B - CE PRACTICE (2) CENG 192C - CE PROF DEVL (1) UNIV CORE REQUIREMENT UNIV CORE REQUIREMENT CENG TECH ELECTIVE	CENG 160 - GIS (3) CENG 193 - PROJECT DESIGN (4) CENG 137 - EQ ENG UNIV CORE REQUIREMENT	CENG 182 - BIM (3) CENG 194 - CE PROJ COMM (1) UNIV CORE REQUIREMENT UNIV CORE REQUIREMENT

STRUCTURAL ENGINEERING FOCUS			
JUNIOR	CENG 121A - GEOTECH LL (3/1) CENG 145 - TRANS ENG CENG 148 - STR SYSTEMS (4/1) ELEN 49 - POWER SYS or RTC 1	AMTH 112 - RISK IN CIVIL ENG CENG 121B - GEOTECH (2) CENG 125 - MUNICIPAL ENG (3/1) CENG 141 - FLUIDS/HYD (4/1) CENG 135 - CONC DES (4/1) *	CENG 128 - ENGR ECON (3) CENG 140 - WATER RES (4/1) CENG 143 - ENVIRON ENG (3/1) CENG 192A - CE PROJ DEVL (1) CENG 133 - TIMBER DES *
SENIOR	CENG 192B - CE PRACTICE (2) CENG 192C - CE PROF DEVL (1) CENG 134 - STEEL DES * UNIV CORE REQUIREMENT UNIV CORE REQUIREMENT	CENG 193 - PROJECT DESIGN (4) CENG 137 - EQ ENG DES * UNIV CORE REQUIREMENT UNIV CORE REQUIREMENT	CENG 182 - BIM (3) CENG 194 - CE PROJ COMM (1) CENG 138 - GEOT DES * (4/1) UNIV CORE REQUIREMENT

TRANSPORTATION ENGINEERING FOCUS			
JUNIOR	CENG 121A - GEOTECH LL (3/1) CENG 145 - TRANS ENG CENG 148 - STR SYSTEMS (4/1) ELEN 49 - POWER SYS or RTC 1	AMTH 112 - RISK IN CIVIL ENG CENG 121B - GEOTECH (2) CENG 125 - MUNICIPAL ENG (3/1) CENG 141 - FLUIDS/HYD (4/1) CENG 150 - TRAFFIC DES	CENG 128 - ENGR ECON (3) CENG 140 - WATER RES (4/1) CENG 143 - ENVIRON ENG (3/1) CENG 192A - CE PROJ DEVL (1) CENG 151 - SPEC TOPICS TRAN +
SENIOR	CENG 192B - CE PRACTICE (2) CENG 192C - CE PROF DEVL (1) CENG 149 - CIVIL SYS ENG + UNIV CORE REQUIREMENT UNIV CORE REQUIREMENT	CENG 160 - GIS (3) CENG 193 - CE PROJ DESIGN (4) CENG TECH ELECTIVE UNIV CORE REQUIREMENT	CENG 194 - CE PROJ COMM (1) CENG 197 or 199 + UNIV CORE REQUIREMENT UNIV CORE REQUIREMENT

WATER RESOURCES / ENVIRONMENTAL ENGINEERING FOCUS			
JUNIOR	CENG 121A - GEOTECH (3/1) CENG 145 - TRANS ENG CENG 148 - STR SYSTEMS (4/1) ELEN 49 - POWER SYS or RTC 1	AMTH 112 - RISK IN CIVIL ENG CENG 121B - GEOTECH (2) CENG 125 - MUNICIPAL ENG (3/1) CENG 141 - FLUIDS/HYD (4/1) CENG 123L or CENG 144	CENG 128 - ENGR ECON (3) CENG 140 - WATER RES (4/1) CENG 143 - ENVIRON ENG (3/1) CENG 192A - CE PROJ DEVL (1) CENG 142 or CENG 162
SENIOR	CENG 192B - CE PRACTICE (2) CENG 192C - CE PROF DEVL (1) CENG 139 or CENG 161 UNIV CORE REQUIREMENT UNIV CORE REQUIREMENT	CENG 160 - GIS (3) CENG 193 - CE PROJ DESIGN (4) CENG 123 or CENG 144 UNIV CORE REQUIREMENT	CENG 194 - CE PROJ COMM (1) CENG 142, 162 or 124 UNIV CORE REQUIREMENT UNIV CORE REQUIREMENT

AT LEAST TWO DESIGN TECHNICAL ELECTIVES AND ONE ANALYSIS TECHNICAL ELECTIVE MUST BE SELECTED.