

**CIVIL ENGINEERING 2022 / 2023**

**FALL TERM**

Check frequently for updates.  
August 11, 2022

5 Year Model

Monday	Tuesday	Wednesday	Thursday	Friday
8:30 CIVL 4300 CIVL 4500 T02 MATH 2130 MATH 2132	8:30 CIVL 3710 CIVL 3730 MATH 2130 A02	8:30 CIVL 4300 CIVL 4500 T02 MATH 2130 MATH 2132	8:30 CIVL 3710 CIVL 3730 MATH 2130 A02 STAT 2220	8:30 CIVL 4300 CIVL 4500 T02 MATH 2130 MATH 2132
9:30 CIVL 2800 CIVL 3790 CIVL 4220	10:00 CIVL 3760 CIVL 4400	9:30 CIVL 2800 CIVL 3790 CIVL 4220	10:00 CIVL 3710 CIVL 3730	9:30 CIVL 2800 CIVL 3790 CIVL 4220
10:30 CIVL 3750 CIVL 4390		10:30 CIVL 3750 CIVL 4390		10:30 CIVL 3750 CIVL 4390
11:30 ENG 1440 A01/03 CIVL 4380 STAT 2220 GEOL 1340	11:30 ENG 1440 A02 CIVL 2840 CIVL 4180 CIVL 4420	11:30 ENG 1440 A01/03 CIVL 4380 STAT 2220 GEOL 1340	11:30 ENG 1440 A02 CIVL 4180 CIVL 4420 MATH 2130 MATH 2132	11:30 ENG 1440 A01/03 CIVL 4380 STAT 2220 GEOL 1340
12:30 ENG 3020 ENG 3000 A02	MATH 2130 A02 1:00 CHEM 1110 CIVL 3690 ENG 3000 A01 PHIL 2750	12:30 ENG 2040 A02 1:00 ENG 3020 ENG 3000 A02	MATH 2132 1:00 CHEM 1110 CIVL 3690 ENG 3000 A01 PHIL 2750	12:30 ENG 2040 A01 1:00 ENG 3020 ENG 3000 A02
1:30 CIVL 3760 CIVL 4400		1:30 CIVL 3760 CIVL 4400		1:30 CIVL 3760 CIVL 4400
2:30 CHEM 1126 A01 CIVL 3790 CIVL 4220 ENG 2040 A02	2:30 CIVL 2830 A01 CIVL 2840 B01 CIVL 3690 B01 CIVL 4380 GEOL 1340 B01	2:30 ENG 2040 A01 CIVL 3750 CIVL 4390 GEOL 1340 B02	2:30 ENG 1440 A02 CIVL 2830 A02 CIVL 2840 B02 CIVL 3690 B02 CIVL 4180 CIVL 4420 GEOL 1340 B03	2:30 ENG 1440 A01/03 CIVL 2800 CIVL 4300 CIVL 4500 T02
3:30 CHEM 1126 A01 CIVL 3790 CIVL 4220 ENG 2040 A02	4:00 CIVL 2830 A01 CIVL 2840 B01 CIVL 3690 B01 GEOL 1340 B01	3:30 ENG 2040 A01 CIVL 3750 CIVL 4390 GEOL 1340 B02	4:00 CIVL 2830 A02 CIVL 2840 B02 CIVL 3690 B02	3:30 ENG 1440 A01/03 CIVL 2800 CIVL 4300 CIVL 4500 T02
4:30 CHEM 1126 A01 ENG 2040 A02		4:30 ENG 2040 A01 CIVL 3750 GEOL 1340 B02	4:30 GEOL 1340 B03 ENG 1440 A02	4:30 CIVL 2800 ENG 1440 A01/03
	5:30 - 6:45	5:30 - 6:45	5:30 - 6:45	

Colour Codes:  
2nd year 3rd year 4th year 5th year Tech Elective Course  
offered fall & winter Sections in other depts.

		Prerequisites	
ENG 1440 A01	Statics	Fiorillo	
ENG 1440 A02	Statics	Khallid	
ENG 1440 A03	Statics	El-Gendy	
<b>2nd Year</b>			
MATH 2130	Math Analysis 1		MATH 1710/1700,1210
CIVL 2830	Graphics	Laing	c CIVL 2840
CIVL 2840	CE Geomatics	Mahmoud	p or c MATH 1210 c CIVL 2830
complete all first year courses			
<b>3rd Year</b>			
CHEM 1110	Interaction, React. & Chem prop		CHEM 1100 or CHEM 1300 (replaced 1310)
CHEM 1126	Intro to Chem Techniques		CHEM 1122 (replaced CHEM 1310)
STAT 2220	Eng Statistics		MATH 1710/1700
CIVL 2800	Solid Mech 1	Khalid	MATH 1710/1700, ENG 1440
CIVL 3750	Hydrology	Mantilla	p or c STAT 2220
ENG 3000	Eng Economics		(replaced CIVL 4050)
*Indigenous Knowledge Crs OR Comp Studies Crs OR PHIL 2750 (Enviro Opt ONLY)			
<b>4th Year</b>			
CIVL 3690	Enviro Eng Analysis	Wang	CHEM 1110+1126 or 1310, ENG 2030/40, STAT 2220
CIVL 3730	Geo Mat Analysis	Alfaro	CIVL 2800,2770 GEOL 1340
CIVL 3760	Structural Analysis	Khalid	CIVL 2800
CIVL 3790	Transp Eng 1	Mehran	CIVL 2770,2780,2840 STAT 2220
<b>1 tech elective</b>			
<b>5th Year</b>			
CIVL 4220	Geotech Design	Bartz	CIVL 3730
CIVL 4380	Infrastructure	Guven Isin	ENG 3000
CIVL 4390	Reinforced Conc Str	El-Salakawy	CIVL 2770, 3760
CIVL 4400	Trans Eng 2	Regehr	CIVL 3790
<b>1 tech elective</b>			
ENG 3020	Tech Soc		Written English Course (replaced CIVL 4460)
<b>Technical Electives All Tech electives qualify for Civil program.</b>			
<b>(Take 5 in total) e = Course also qualifies for environmental option.</b>			
<b>Tech Electives - GROUP A (Take 5 elective courses in total)</b>			
CIVL 3710 e	Finite Elem	Cha	CIVL 2790, 2800, 3590
CIVL 4180 e	Environmental Sys	Yuan	CIVL 2780,3690, 3750
CIVL 4300 e	Urban Water	Dow	CIVL 2790, p or c CIVL 3750
CIVL 4420	Highway Pavement	Shalaby	p or c CIVL 3790
CIVL 4500 T02 e	Sustainable Cons	Quaigrain	CIVL 2780, ENG 3000

Technical electives vary from year to year. See website for complete list.

\* Students admitted into the program in Fall 2021 or later require an **Indigenous Knowledge Course**. NATV subject code revised to **INDG** Fall 2022. Students admitted prior to Fall 2021 require a complementary studies course. PHIL 2750 is the required course for Enviro Option ONLY. This requirement is in addition to the complementary studies course included in the first year.

**CIVIL ENGINEERING 2022 / 2023**

**WINTER TERM**

Check frequently for updates.  
August 11, 2022

**5 Year Model**

Prerequisites

Monday	Tuesday	Wednesday	Thursday	Friday
8:30 CIVL 3740 MATH 2130 MATH 2132	8:30 GEOL 1340 BIOE 4560 CIVL 4360	8:30 CIVL 3740 MATH 2130 MATH 2132	8:30 GEOL 1340 BIOE 4560 CIVL 4360	8:30 CIVL 3740 MATH 2130 MATH 2132
9:30 CIVL 2780 CIVL 4032 CIVL 4500 T05	10:00 CIVL 2790 ENG 3000 A02 CIVL 3700	9:30 CIVL 2780 CIVL 4032 CIVL 4500 T05	10:00 CIVL 2790 ENG 3000 A02 CIVL 3700	9:30 CIVL 2780 CIVL 4032 CIVL 4500 T05
10:30 ENG 1440 A01 CIVL 3590 CIVL 4232	11:30 ENG 1440 A02 MATH 2132 CIVL 3740 CIVL 4032 CIVL 4500 T05	10:30 ENG 1440 A01 CIVL 3590 CIVL 4232	11:30 ENG 1440 A02 CIVL 2780 CIVL 3700 MATH 2130	10:30 ENG 1440 A01 CIVL 3590 CIVL 4232
11:30 CIVL 2770 CIVL 3770 ENG 3020 A01	12:30 CIVL 4000	11:30 CIVL 2770 CIVL 3770 ENG 3020 A01	12:30 ENG 2040 A02 CIVL 4000	11:30 CIVL 2770 CIVL 3770 ENG 3020 A01
12:30 CIVL 4000	1:00 ENG 3000 A01 CIVL 3770	12:30 ENG 2040 A02 CIVL 4000	1:00 ENG 3000 A01 STAT 2220 CIVL 4232	12:30 ENG 2040 A01 CIVL 4000
1:30 CIVL 4120 CIVL 4500 T04 ENG 3020 A02 STAT 2220	2:30 ENG 2040 A02 CIVL 2770 B01 BIOE 4560 CIVL 4360	1:30 CIVL 4120 CIVL 4500 T04 ENG 3020 A02 STAT 2220	2:30 CIVL 2790 CIVL 4590 ENG 1440 A02	1:30 CIVL 4120 CIVL 4500 T04 ENG 3020 A02 STAT 2220
2:30 ENG 2040 A02 CIVL 2770 B01 BIOE 4560 CIVL 4360	3:30 ENG 2040 A02 CIVL 2770 B01 BIOE 4560 CIVL 4360	2:30 ENG 2040 A01 CIVL 2770 B02 CIVL 4120 CIVL 4500 T04	3:30 ENG 1440 A01 GEOL 1340 B04 CIVL 4000	2:30 ENG 1440 A01 GEOL 1340 B04 CIVL 4000
3:30 ENG 2040 A02 CIVL 2770 B01 BIOE 4560 CIVL 4360	4:00 CIVL 3590 CIVL 4590	3:30 ENG 2040 A01 CIVL 2770 B02 CIVL 4120 CIVL 4500 T04	4:00 CIVL 2790 CIVL 4590 ENG 1440 A02	3:30 ENG 1440 A01 GEOL 1340 B04 CIVL 4000
4:30 ENG 2040 A02 CIVL 2770 B01 BIOE 4560	5:30 - 6:45 CIVL 4590	4:30 ENG 2040 A01 CIVL 2770 B02	5:30 - 6:45 CIVL 4590	4:30 GEOL 1340 B04 ENG 1440 A01
5:30 - 6:45		5:30 - 6:45		

<b>ENG 1440 A01</b>	Eng Statics	Khalid	
<b>ENG 1440 A02</b>	Eng Statics	Khalid	
<b>2nd Year</b>			
<b>CIVL 2790</b>	Fluid Mech	Clark	ENG 1440, MATH 1710/1700
<b>ENG 2040</b>	Engineering Comm		Written English, ENG 1430
<b>GEOL 1340 - B04</b>	Dynamic Earth		
<b>MATH 2132</b>	Math Analysis 2		MATH 1710/1700, MATH 1210
<b>3rd Year</b>			
<b>CIVL 2770</b>	CE Materials	Bassuoni	ENG 1440; CIVL 2800
<b>CIVL 2780</b>	CE Systems	TBD	MATH 1710/1700
<b>CIVL 3590</b>	Num Methods	Shalaby	COMP 1012, p or c MATH 2132
<b>CIVL 3740</b>	Hydraulics	Mantilla	CIVL 2790
<b>ENG 3000</b>	Eng Economics		(replaced CIVL 4050)
<b>4th Year</b>			
<b>CIVL 3700</b>	Enviro Eng Des	Yuan	CIVL 3690
<b>CIVL 3770</b>	Des of Steel Struc	Cha	CIVL 2770, 3760
	1 or 2 tech electives		
<b>5th Year</b>			
<b>ENG 3020 A01</b>	Tech Soc		Written English Course (replaced CIVL 4460)
<b>CIVL 4590</b>	Design Project	El-Salakawy	ENG 2030/40, CIVL 2840, 3690, 3730
	1 or 2 tech electives		CIVL 3740, 3750, 3770, 3790

**Technical Electives** All Tech electives qualify for Civil program.  
(Take 5 in total) e = Course also qualifies for environmental option.

**Technical Electives - GROUP A** (all five tech elects can be from group A)

<b>CIVL 4032</b>	Bridge Engineering	Fiorillo	CIVL 3760
<b>CIVL 4120 e</b>	Water Treat Plnt	Gorczyca	CIVL 3690
<b>CIVL 4232</b>	Geo Earthquake Eng	Alfaro	CIVL 3730
<b>CIVL 4360 e</b>	Water Res Plan & Mgt	Asadzadeh	CIVL 2780, 3590, p or co 3750
<b>CIVL 4500 T04</b>	Bldg Info Model	Guven Isin	ENG 3000
<b>CIVL 4500 T05 e</b>	Chem React in Water Treatmnt	Wang	CIVL 3690

**Technical Electives - GROUP B** (Max 2 courses from Group B - only 1 non CIVL)

<b>BIOE 4560</b>	Wood Design		pre or co CIVL 3770
<b>CIVL 4000 e</b>	Uncertainty Analysis	Mehran	CIVL 3590, MATH 2130, STAT 2220
<b>CIVL 4332 e</b>	Thesis Project		120 credit hours, ENG 2010/30/40

Technical electives vary from year to year. See website for complete list.

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