CIVIL ENGINEERING: TECHNICAL ELECTIVES

Technical Electives List 1

Code	Title	Units
CIVL 430	Reinforced Concrete Design	4.00
CIVL 442	Geotechnical Design	4.00
CIVL 450	Municipal Hydraulics	4.00
CIVL 451	Lake, Reservoir and Coastal	4.00
CIVL 472	Water Treatment	4.00
CIVL 473	Water Resources Systems	4.00
CIVL 431	Infrastructure Rehabilitation	4.00
CIVL 436	Prestressed Concrete	4.00
CIVL 443	Geoenvironmental Design	4.00
CIVL 455	River Engineering	4.00
CIVL 471	Subsurface Contamination	4.00
CIVL 490	Selected Topics in Civil Engineering	4.00
CIVL 491	Selected Topics in Civil Engineering	4.00
CIVL 500	Civil Engineering Thesis	4.00

Technical Electives List 2

Code	Title	Units
APSC 250	Biology Through an Engineering Lens	3.50
APSC 381	Advanced Design and Skills for Innovation	3.50
APSC 480	Multi-disciplinary Industry	9.00
CHEE 330	Heat And Mass Transfer	3.50
CHEE 342	Environmental Biotechnology	3.50
CHEE 371	Mitigation of Industrial Pollution	3.50
CHEE 380	Biochemical Engineering	3.50
CHEE 484	Bioremediation	3.50
GEOE 313	Geomechanics and Engineering Geology	4.00
GEOE 333	Terrain Evaluation	4.00
GEOE 414	Foundations of the Oil and Gas Industry	3.50
MECH 230	Applied Thermodynamics I	3.50
MECH 341	Fluid Mechanics II	3.50
MECH 346	Heat Transfer	3.50
MECH 371	Fracture Mech & Dislocation	3.50
MECH 394	Frontiers in Biomechanical Engineering	3.50
MECH 424	Sustainable Product Design	3.50
MECH 444	Computational Fluid Dynamics	3.50
MECH 465	Computer Aided Design	3.50
MECH 495	Ergonomics And Design	3.50
MINE 201	Introduction to Mining and Mineral Processing	4.00
MINE 272	Applied Data Science	4.50
MINE 321	Drilling & Blasting	4.50
MINE 324	Hydraulics/Mining Applications	3.50
MINE 339	Mine Ventilation	4.50
MINE 422	Mining And Sustainability	4.00
MINE 459	Risk and Reliability Analysis for Industrial Asset Management, Health & Safety	4.00
MINE 472	Mining Systems, Automation, and Robotics	3.50
MNTC P07	Surveying Principles	3.00
MNTC 314	Drilling and Blasting	4.00
MNTC 408	Mine Health and Safety	3.00
MNTC 418	Sustainability and the Environment	3.00
MNTC 423	Geomatics	3.00
SURP 855	Environ. Planning & Management	3.00
SURP 853	Environmental Services	3.00