

School of Engineering

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- [Engr 340: Engineering Geology](#)
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- [Engr 345: Engineering Economy](#)
- [Engr 351: Socio-Technology I](#)
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- [Engr 361: Electric Circuit Laboratory](#)
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- [Engr 363: Introductory Electric Circuit Laboratory](#)
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- [Engr 396: Special Topics in Engineering Science](#)
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- [Engr 402: Engineering Fundamentals](#)
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- [Engr 410: Engineering Analysis II](#)
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- [Engr 415: Engineering Acoustics I](#)
- [Engr 420: Engineering Analysis III](#)
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- [Engr 431: Fundamentals of Systems Engineering](#)
- [Engr 450: Product Design and Development](#)
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- [Engr 451: General Engineering Senior Design I](#)
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- [Engr 453: Prob and Stat Analyses in Engr Design](#)
- [Engr 496: Special Topics in Engineering Science](#)
- [Engr 497: Special Topics in Engineering Science](#)
- [Engr 501: Fundamentals of Computer Science](#)
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- [Engr 601: Compressible Flow](#)
- [Engr 602: Lithostratigraphy](#)
- [Engr 603: Fluid Mechanics I](#)
- [Engr 604: Fluid Dynamics II](#)
- [Engr 605: Convective Heat and Mass Transfer](#)
- [Engr 606: Numerical Heat Transfer and Fluid Flow](#)
- [Engr 607: Statistical Thermodynamics](#)
- [Engr 608: Physical Gas Dynamics](#)
- [Engr 609: Time Series Analysis](#)



- [Engr 610: Data Communications Protocols](#)
- [Engr 611: Aeroacoustics](#)
- [Engr 612: Aeroelasticity](#)
- [Engr 613: Exp Method in Aerodynamics/Aeroacoustics](#)
- [Engr 614: Geometrics](#)
- [Engr 615: Analytical Petroleum Geology](#)
- [Engr 616: Isotope Hydrogeology](#)
- [Engr 617: Continuum Mechanics](#)
- [Engr 618: Vadose Zone Hydrology](#)
- [Engr 620: Advanced Remote Sensing](#)
- [Engr 622: Advanced Electromagnetic Theory](#)
- [Engr 624: Active Microwave Circuits](#)
- [Engr 625: Adv. Topics in Computational Mechanics](#)
- [Engr 626: Numerical Methods in Electromagnetics](#)
- [Engr 627: Ray Methods in Electromagnetics](#)
- [Engr 629: Televisions Systems II](#)
- [Engr 633: Process Dynamics and Control I](#)
- [Engr 635: Optimization](#)
- [Engr 636: Groundwater Mechanics](#)
- [Engr 637: Groundwater Modeling](#)
- [Engr 641: Clay Petrology](#)
- [Engr 642: X-Ray Diffraction Analysis](#)
- [Engr 643: Advanced Geomorphology](#)
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- [Engr 646: Advanced Stratigraphy](#)
- [Engr 648: Numerical Modeling in Geoscience & Engr](#)
- [Engr 649: Advanced Foundation Engineering](#)
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- [Engr 652: Advanced Compiler Design](#)
- [Engr 653: Computer Structures](#)
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- [Engr 659: Advanced Information Retrieval](#)
- [Engr 660: Software Engineering II](#)
- [Engr 660: Software Engineering II](#)
- [Engr 661: Computer Networks II](#)
- [Engr 661: Computer Networks II](#)
- [Engr 662: Advanced Artificial Intelligence](#)
- [Engr 663: Advanced Rate and Equilibrium Processes](#)
- [Engr 664: Theory of Concurrent Programming](#)
- [Engr 665: Thermodynamics of Chemical Systems](#)
- [Engr 666: Fault Tolerant Computing](#)
- [Engr 667: Mass Transfer I](#)
- [Engr 669: Chemical Reaction and Reactor Analysis I](#)
- [Engr 670: Chemical Reaction & Reactor Analysis II](#)
- [Engr 671: Elasticity](#)
- [Engr 672: Viscoelasticity](#)
- [Engr 673: Plasticity](#)
- [Engr 674: Fracture Mechanics](#)
- [Engr 677: Plates and Shells](#)
- [Engr 678: Elasticstability](#)
- [Engr 679: Wave Propagation](#)
- [Engr 680: Advanced Acoustics](#)
- [Engr 683: Advanced Physical Metallurgy](#)
- [Engr 684: Advanced Mechanical Metallurgy](#)
- [Engr 685: Mechanics of Composite Materials II](#)



- [Engr 686: Multimedia Technologies II](#)
- [Engr 687: Special Functions for Applications](#)
- [Engr 688: Current Issues in Telecommunications](#)
- [Engr 689: Control of Robotics Manipulators](#)
- [Engr 690: Finite Element Analysis II](#)
- [Engr 691: Special Topics in Engineering Science I](#)
- [Engr 692: Special Topics in Engineering Science II](#)
- [Engr 693: Research Topics in Engineering Science I](#)
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- [Engr 695: Seminar](#)
- [Engr 696: Seminar in Environmental Engineering](#)
- [Engr 697: Thesis](#)
- [Engr 699: Special Topics in Engineering Science](#)
- [Engr 702: Finite Element Analysis of Fluid Flows](#)
- [Engr 706: Adv Waste Treat Proc in Sanitary Eng](#)
- [Engr 711: Turbulence](#)
- [Engr 712: Statistical Theory Turbulent Diffusion](#)
- [Engr 713: Hydrodynamic Stability](#)
- [Engr 714: Coastal Hydrodynamics](#)
- [Engr 715: Applied Hydro- and Aeromechanics I](#)
- [Engr 716: Applied Hydro- and Aeromechanics II](#)
- [Engr 717: Special Topics in Thermal Science](#)
- [Engr 718: Coding for Error Code](#)
- [Engr 719: Advanced Microwave Measurements](#)
- [Engr 720: Advanced Turbulence](#)
- [Engr 721: Advanced Electrodynamics](#)
- [Engr 723: Passive Microwave Circuits](#)
- [Engr 725: Antennas](#)
- [Engr 728: Adv Numerical Methods in Electromagnetic](#)
- [Engr 729: Special Topics in Electromagnetic Theory](#)
- [Engr 749: Special Topics in Soil Science](#)
- [Engr 779: Special Topics in Solid Mechanics](#)
- [Engr 797: Dissertation](#)
- [Engs 501: Geospatial Primer](#)
- [Engs 504: Remote Sensing Fundamentals](#)
- [Engs 523: Sensors and Platforms](#)
- [Engs 603: Analysis of Algorithms](#)
- [Engs 606: Computer Networks](#)
- [Engs 610: Telecommunication Network Engineering](#)
- [Engs 611: Geospatial Science Primer](#)
- [Engs 612: Remote Sensing Fundamentals](#)
- [Engs 613: Introduction to Remote Sensing Systems](#)
- [Engs 614: Remote Sensing and Digital Images](#)
- [Engs 620: Geospatial Information Technology](#)
- [Engs 621: Orbital Mechanics](#)
- [Engs 624: Introduction to Digital Image Processing](#)
- [Engs 626: Community Growth](#)
- [Engs 627: Applied Probability Modeling](#)
- [Engs 633: Microwave Filters](#)
- [Engs 671: Digital Topographic Mapping](#)
- [Engs 672: Remote Sensing and the Environment](#)
- [Engs 673: Advanced Digital Image Processing](#)
- [Engs 674: Geospatial Data Synthesis and Modeling](#)
- [Engs 675: Microwave Data](#)
- [Engs 681: Advanced Sensor Systems Data Collection](#)
- [Engs 682: Remote Sensing to Ecological Modeling](#)
- [Engs 683: Land Use and Land Cover Applications](#)
- [Engs 684: Agricultural Applications Remote Sensing](#)
- [Engs 685: Business Geographics](#)



- [G E 681: Applications in Geophysics](#)
- [Manf 150: Intro to Engineering / Manufacturing](#)
- [Manf 152: Intro to Engineering & Manufacturing II](#)
- [Manf 250: Graphics/Solid Modeling](#)
- [Manf 251: Manufacturing Processes](#)
- [Manf 252: Product Realization Laboratory](#)
- [Manf 253: Strategic Planning](#)
- [Manf 254: Continuous Flow/Layout](#)
- [Manf 255: Lean I: Standardized Work & Takt Time](#)
- [Manf 325: Principles of Ops & Supply Chain Mgmt](#)
- [Manf 350: Standardized Work/Takt Time](#)
- [Manf 351: Manufacturing Product/Process Design](#)
- [Manf 353: Accounting & Financial Mgmt for Manf](#)
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- [Manf 396: Special Topics in Manufacturing](#)
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- [Manf 470: Principles of Lean Six Sigma](#)
- [Manf 475: Applications in Advanced Manufacturing](#)
- [Manf 496: Special Topics in Manufacturing](#)
- [Manf 497: Special Topics in Manufacturing](#)

Biomedical Engineering

- [BME 200: Introduction to Biomedical Engineering](#)
- [BME 222: Biomaterials](#)
- [BME 256: Programming for Biomedical Engineering](#)
- [BME 301: Bioinstrumentation](#)
- [BME 305: Bioengineering Thermodynamics & Kinetics](#)
- [BME 311: Biomechanics](#)
- [BME 313: Physiology for Biomedical Engineering](#)
- [BME 314: Biomedical Measurement](#)
- [BME 315: Physiology for Biomedical Engineering II](#)
- [BME 320: Bioseparations](#)
- [BME 322: Sensors and Nanodevices in BME](#)
- [BME 333: Biological Transport](#)
- [BME 350: Immunoengineering](#)
- [BME 353: Biodevices Design & Development](#)
- [BME 370: Intro to Bioinformatics & Biostatistics](#)
- [BME 400: Biomedical Engineering Seminar](#)
- [BME 411: Tissue Mechanics](#)
- [BME 413: Biomedical Signal Processing](#)
- [BME 444: Biomedical Systems and Controls](#)
- [BME 461: Biomedical Engineering Senior Design I](#)
- [BME 462: Biomedical Engineering Senior Design II](#)
- [BME 501: Computational and Systems Biomedicine](#)
- [BME 510: Drug and Gene Delivery](#)
- [BME 511: Computational Biomechanics](#)
- [BME 520: Biochemical Process Engineering](#)
- [BME 522: Immunoengineering](#)
- [BME 523: Molecular and Cellular Biophysics](#)
- [BME 524: Microscopy for Engineers](#)
- [BME 600: Graduate Professional Development](#)
- [BME 601: Biomedical Engineering Seminar](#)



Chemical Engineering

- [Ch E 101: Introduction to Chemical Engineering](#)
- [Ch E 251: Programming for Chemical Engineering](#)
- [Ch E 252: Fundamentals of Chem Eng Problem Solving](#)
- [Ch E 307: Chemical Process Principles I](#)
- [Ch E 308: Chemical Process Principles II](#)
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- [Ch E 317: Process Fluid Dynamics and Heat Transfer](#)
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- [Ch E 345: Engineering Economy](#)
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- [Ch E 421: Chemical Engineering Thermodynamics](#)
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- [Ch E 470: Principles of Lean Six Sigma](#)
- [Ch E 511: Process Dynamics and Control](#)
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- [Ch E 520: Biochemical Engineering](#)
- [Ch E 521: Drug and Gene Delivery](#)
- [Ch E 522: Immunoengineering](#)
- [Ch E 523: Molecular and Cellular Biophysics](#)
- [Ch E 524: Microscopy for Engineers](#)
- [Ch E 528: Polymer Processing](#)
- [Ch E 535: Experimental Methods in Engineering](#)
- [Ch E 540: Coating Materials Process & Applications](#)
- [Ch E 543: Introduction to Polymer Science](#)
- [Ch E 545: Colloid and Surface Science](#)
- [Ch E 547: Surfactant Science and Applications](#)
- [Ch E 550: Membrane Science and Engineering](#)
- [Ch E 560: Advanced Transport Phenomena I](#)
- [Ch E 561: Advanced Transport Phenomena II](#)
- [Ch E 593: Graduate Projects in Chemical Engr](#)
- [Ch E 660: Advanced Transport Phenomena I](#)
- [Ch E 661: Advanced Transport Phenomena II](#)
- [Engr 540: Environmental Organic Transport Phenomen](#)
- [Engr 542: Molecular Modeling of Nano Materials](#)
- [Engr 544: Synth and Fab of Nano Materials](#)
- [Engr 545: Polymer Nanocomposites](#)

Civil Engineering

- [C E 101: Introduction to Civil Engineering I](#)
- [C E 102: Introduction to Civil Engineering II](#)
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- [C E 205: Civil Engineering Laboratory I](#)
- [C E 206: Introduction to Surveying](#)
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- [C E 208: Civil Engineering Graphics I](#)
- [C E 301: Environmental and Water Resources Lab](#)
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- [C E 452: Civil Engineering Analysis](#)
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- [C E 455: Civil Engineering Design I](#)
- [C E 456: Civil Engineering Design II](#)
- [C E 471: Environmental Engineering I](#)
- [C E 472: Water Resources Engineering](#)
- [C E 481: Transportation Engineering I](#)
- [C E 495: Geospatial Analysis for Engr & Vis Apps](#)
- [C E 497: Civil Engineering Projects](#)
- [C E 500: Geographic Information Systems Engr Sci](#)
- [C E 511: Structural Dynamics](#)
- [C E 513: Advanced Steel Design](#)
- [C E 514: Pre-Stressed Concrete Design](#)
- [C E 516: Bridge Engineering](#)
- [C E 521: Advanced Mechanics of Materials](#)
- [C E 531: Soil Mechanics II](#)
- [C E 536: Designing with Geosynthetics](#)
- [C E 541: Flow in Open Channels](#)
- [C E 542: Flow in Porous Media](#)
- [C E 543: Sediment Transport](#)
- [C E 561: Civil Engineering Systems](#)
- [C E 570: Infrastructure Management](#)
- [C E 572: Stormwater Engineering and Management](#)
- [C E 574: Wastewater Engineering](#)
- [C E 575: Drinking Water Engineering](#)
- [C E 578: Agricultural Conservation for Eng & Sci](#)
- [C E 581: Transportation Engineering II](#)
- [C E 585: Highway Pavements](#)
- [C E 590: Airport Planning and Design](#)
- [Engr 541: Foundations of Nano Engineering and Sci](#)
- [Engr 547: Characterization Methods for Nanomaterials](#)

Computer & Information Science

- [CIS 111: Computer Science I](#)
- [CIS 112: Computer Science II](#)
- [CIS 113: Honors Computer Science I](#)
- [CIS 211: Computer Science III](#)
- [CIS 251: Programming for Engineering and Sciences](#)



- [CIS 256: Programming in Python](#)
- [CIS 333: Digital Design and 3D Printing](#)
- [CIS 356: Data Structures in Python](#)
- [CIS 427: Network Security](#)
- [CIS 447: Immersive Media](#)
- [Csci 103: Survey of Computing](#)
- [Csci 111: Computer Science I](#)
- [Csci 112: Computer Science II](#)
- [Csci 113: Honors Computer Science I](#)
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- [Csci 192: Computing Applications](#)
- [Csci 193: Personal Computer Systems](#)
- [Csci 203: Introduction to Computational Media](#)
- [Csci 211: Computer Science III](#)
- [Csci 223: Computer Org. & Assembly Language](#)
- [Csci 251: Programming for Engineering and Sciences](#)
- [Csci 256: Programming in Python](#)
- [Csci 259: Programming in C++](#)
- [Csci 300: Social Responsibility in Comp. Science](#)
- [Csci 305: Software for Global Use](#)
- [Csci 311: Models of Computation](#)
- [Csci 323: Systems of Programming](#)
- [Csci 325: Foundations of Computer Security](#)
- [Csci 333: Digital Design and 3D Printing](#)
- [Csci 343: Fundamentals of Data Science](#)
- [Csci 345: Information Storage and Retrieval](#)
- [Csci 353: Introduction to Numerical Methods](#)
- [Csci 354: Web Programming](#)
- [Csci 356: Data Structures in Python](#)
- [Csci 361: Introduction to Computer Networks](#)
- [Csci 387: Software Design and Development](#)
- [Csci 390: Special Topics in Programming](#)
- [Csci 391: Computer Graphics](#)
- [Csci 405: Computer Simulation](#)
- [Csci 423: Introduction to Operating Systems](#)
- [Csci 425: Code Generation and Optimization](#)
- [Csci 426: System Security](#)
- [Csci 427: Network Security](#)
- [Csci 431: Robotics Programming](#)
- [Csci 433: Algorithm and Data Structure Analysis](#)
- [Csci 443: Advanced Data Science](#)
- [Csci 444: Information Visualization](#)
- [Csci 447: Immersive Media](#)
- [Csci 450: Organization of Programming Languages](#)
- [Csci 458: Mobile Application Development](#)
- [Csci 475: Introduction to Database Systems](#)
- [Csci 487: Senior Project](#)
- [Csci 490: Special Topics](#)
- [Csci 491: Special Topics in Computer Security](#)
- [Csci 492: Special Topics in Data Science](#)
- [Csci 500: Fundamental Concepts in Computing](#)
- [Csci 501: Fundamental Concepts in Systems](#)
- [Csci 502: Fundamental Concepts in Algorithms](#)
- [Csci 503: Fundamental Concepts in Languages](#)
- [Csci 517: Natural Language Processing](#)
- [Csci 520: Formal Theory of Computer Languages](#)
- [Csci 521: Computer Systems Engineering](#)
- [Csci 523: Operating Systems](#)
- [Csci 524: Distributed Operating System Design](#)



- [Csci 525: Compiler Construction](#)
- [Csci 526: Parallel Computing](#)
- [Csci 530: Computer Architecture and Design](#)
- [Csci 531: Artificial Intelligence](#)
- [Csci 533: Analysis of Algorithms](#)
- [Csci 541: Expert Systems and Logic Programming](#)
- [Csci 543: Data Mining](#)
- [Csci 547: Digital Image Processing](#)
- [Csci 550: Program Semantics and Derivation](#)
- [Csci 551: Computer System Performance Analysis](#)
- [Csci 554: Web Architecture and Programming](#)
- [Csci 555: Functional Programming](#)
- [Csci 556: Multiparadigm Programming](#)
- [Csci 557: GPU Computing](#)
- [Csci 561: Computer Networks](#)
- [Csci 562: Software Engineering I](#)
- [Csci 575: Database Systems](#)
- [Csci 581: Special Topics in Computer Science I](#)
- [Csci 582: Special Topics in Computer Science II](#)
- [Csci 632: Machine Learning](#)
- [Csci 658: Software Language Engineering](#)
- [Csci 663: Software Families](#)
- [Csci 665: Wireless and Sensor Networks](#)

Electrical and Computer Engineering

- [Cp E 421: Embedded Systems Design](#)
- [Cp E 431: Computer Architecture](#)
- [Cp E 432: Testing of Computing Systems](#)
- [Cp E 461: Senior Design in Computer Engineering I](#)
- [Cp E 462: Senior Design in Computer Engineering II](#)
- [ECE 361: Design and Design Tools in ECE](#)
- [EI E 100: Introduction to Electrical Engineering](#)
- [EI E 235: Principles of Digital Systems](#)
- [EI E 236: Digital Systems Laboratory I](#)
- [EI E 237: Electrical Engineering Tools and Toys](#)
- [EI E 322: Electric Circuit II](#)
- [EI E 331: Signals and Systems](#)
- [EI E 337: Digital Systems Laboratory II](#)
- [EI E 340: Electrical Engineering Analysis I](#)
- [EI E 341: Theory of Fields](#)
- [EI E 351: Electronics Circuits I](#)
- [EI E 352: Electronics Circuits II](#)
- [EI E 353: Electronics Laboratory](#)
- [EI E 357: Electrical Engineering Problems I](#)
- [EI E 367: Computer-Aided Design in Electrical Engr](#)
- [EI E 385: Advanced Digital Systems](#)
- [EI E 386: Advanced Digital Systems Laboratory](#)
- [EI E 391: Probability and Random Signals](#)
- [EI E 415: Telecommunications Laboratory](#)
- [EI E 425: Local Area Networks](#)
- [EI E 431: Theory of Control Systems](#)
- [EI E 432: Robotics Laboratory](#)
- [EI E 433: High Frequency and Microwave Laboratory](#)
- [EI E 441: Electromagnetic Theory I](#)
- [EI E 442: Electromagnetic Theory II](#)
- [EI E 443: Network Analysis and Synthesis](#)
- [EI E 447: Modulation, Noise, and Communications](#)
- [EI E 451: Electrical Energy Conversion](#)
- [EI E 453: Solid State Devices](#)



- [EI E 461: Sr. Design in Electrical Engineering I](#)
- [EI E 462: Sr. Design in Electrical Engineering II](#)
- [EI E 481: Fund. Low Power Dig. VLSI Design](#)
- [EI E 482: Digital CMOS VLSI Design](#)
- [EI E 485: Microprocessor Systems Engineering](#)
- [EI E 486: Microprocessor Systems Engr Lab](#)
- [EI E 487: Digital Signal Processing Laboratory](#)
- [EI E 521: Electrical Engineering Projects I](#)
- [EI E 522: Electrical Engineering Projects II](#)
- [EI E 523: Microwave Engineering](#)
- [EI E 525: Introduction to Antennas](#)
- [EI E 533: Electronic Properties of Materials](#)
- [EI E 534: Wireless Mobile Communications](#)
- [EI E 535: Digital Communications](#)
- [EI E 536: Introduction to Quantum Computing](#)
- [EI E 561: Microwave Circuit Design](#)
- [EI E 586: Digital Signal Processing](#)

Geology & Geological Engineering

- [G E 301: Geological Eng. Design Field Camp 1](#)
- [G E 305: Geomechanics](#)
- [G E 401: Geological Eng. Design Field Camp 2](#)
- [G E 405: Engineering Geophysics](#)
- [G E 413: Prob. & Stat. Analyses in Eng. Design](#)
- [G E 415: Petroleum Geology](#)
- [G E 420: Subsurface Site Characterization](#)
- [G E 421: Geological Engineering Design](#)
- [G E 430: Geological Field Studies I](#)
- [G E 436: Field Camp G E Design](#)
- [G E 450: Hydrogeology](#)
- [G E 470: Intro. to Geographic Information System](#)
- [G E 490: Directed Studies and Projects](#)
- [G E 503: Environmental Geochemistry](#)
- [G E 507: Regional Geological Engineering](#)
- [G E 510: Remote Sensing](#)
- [G E 511: Spatial Analysis](#)
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