School of Engineering

Overview
Academics & Admissions
Departments
Programs
Minors
Courses
Faculty
Awards

Courses

School of Engineering

- C OP 201: CO-OP Work Experience
- C OP 202: CO-OP Work Experience
- C OP 300: Cooperative Education
- C OP 301: CO-OP Work Experience
- C OP 302: CO-OP Work Experience
- C OP 401: CO-OP Work Experience
- C OP 402: CO-OP Work Experience
- C OP 501: CO-OP Work Experience
- C OP 502: CO-OP Work Experience
- C OP 503: CO-OP Work Experience
- Engr 100: Introduction to Engineering
- Engr 102: Principles of Engineering
- Engr 196: Special Topics in Engineering Science
- Engr 197: Special Topics in Engineering Science
- Engr 201: Computer Aided Design for Engineering
- Engr 207: Graphics I
- Engr 296: Special Topics in Engineering Science
- Engr 297: Special Topics in Engineering Science
- Engr 307: Technical Communications
- Engr 309: Statics
- Engr 310: Engineering Analysis I
- Engr 310: Engineering Analysis I
- Engr 311: Intermediate Mechanics
- Engr 312: Mechanics of Materials
- Engr 312: Mechanics of Materials
- Engr 313: Introduction to Materials Science
- Engr 313: Introduction to Materials Science
- Engr 314: Materials Science Laboratory
- Engr 314: Materials Science Laboratory
- Engr 321: Thermodynamics
- Engr 321: Thermodynamics
- Engr 322: Transport Phenomena
- Engr 322: Transport Phenomena
- Engr 323: Fluid Mechanics
- Engr 323: Fluid Mechanics
- Engr 330: Engineering Systems Analysis and Design
- Engr 330: Engineering Systems Analysis and Design
- Engr 340: Engineering Geology
- Engr 340: Engineering Geology
- Engr 351: Socio-Technology I
- Engr 352: Socio-Technology II
- Engr 360: Electric Circuit Theory
- Engr 360: Electric Circuit Theory
- Engr 361: Electric Circuit Laboratory
- Engr 361: Electric Circuit Laboratory
- Engr 363: Introductory Electric Circuit Laboratory
- Engr 363: Introductory Electric Circuit Laboratory
- Engr 390: Professional Communication for Engineers
- Engr 396: Special Topics in Engineering Science
- Engr 397: Special Topics in Engineering Science
- Engr 400: Leadership & Professionalism in Engineer
- Engr 402: Engineering Fundamentals
- Engr 407: Legal and Moral Aspects of Engineering
- Engr 410: Engineering Analysis II
- Engr 410: Engineering Analysis II
- Engr 415: Engineering Acoustics I
- Engr 420: Engineering Analysis III
- Engr 431: Fundamentals of Systems Engineering
- Engr 450: Product Design and Development
- Engr 450: Product Design and Development
- Engr 451: General Engineering Senior Design I
- Engr 452: General Engineering Senior Design II
- 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
- Engr 502: Software Systems
- Engr 515: Acoustics
- Engr 551: Engineering Thermodynamics
- Engr 553: Heat Transfer
- Engr 555: Field Testing & Insr. in Geotech, Engr.
- Engr 558: Vibration Analysis
- Engr 559: Elements of Robotics
- Engr 559: Elements of Robotics
- Engr 571: Service Learning in Water Treatment
- Engr 573: Environmental Remediation
- Engr 577: Geophysics I
- Engr 579: Geophysics II
- Engr 582: Interdisciplinary Field Projects
- Engr 585: Mechanics of Composite Materials I
- Engr 590: Finite Element Analysis I
- Engr 591: Engineering Analysis I
- Engr 592: Engineering Analysis II
- Engr 593: Approximate Methods of Engr Analysis I
- Engr 594: Approximate Methods of Engr Analysis II
- Engr 596: Special Projects in Engineering Science
- Engr 597: Special Projects in Engineering Science
- Engr 598: Special Projects in Engineering Science
- Engr 600: Advanced Geochemistry
- 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: Televsions 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
- Engr 644: Carbonate Petrology
- Engr 645: Contaminant Transport
- Engr 646: Advanced Stratigraphy
- Engr 648: Numerical Modeling in Geoscience & Engr
- Engr 649: Advanced Foundation Engineering
- Engr 650: Radar Remote Sensing
- Engr 652: Advanced Compiler Design
- Engr 653: Computer Structures
- Engr 654: Information Systems Principles
- Engr 654: Information Systems Principles
- Engr 656: Operating Systems Design Concepts
- Engr 657: Timesharing Computer Systems
- 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
- Engr 694: Research Topics in Eng. Science II
- Engr 695: Seminar
- Engr 696: Seminar in Environmental Engineering
- Engr 697: Thesis
- Engr 698: Special Topics in Engineering Science
- Engr 702: Finite Element Analysis of Fluid Flows
- 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 722: Passive Microwave Circuits
- Engr 725: Antennas
- Engr 726: 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
- Engrs 501: Geospatial Primer
- Engrs 504: Remote Sensing Fundamentals
- Engrs 523: Sensors and Platforms
- Engrs 603: Analysis of Algorithms
- Engrs 606: Computer Networks
- Engrs 610: Telecommunication Network Engineering
- Engrs 611: Geospatial Science Primer
- Engrs 612: Remote Sensing Fundamentals
- Engrs 613: Introduction to Remote Sensing Systems
- Engrs 614: Remote Sensing and Digital Images
- Engrs 620: Geospatial Information Technology
- Engrs 621: Orbital Mechanics
- Engrs 624: Introduction to Digital Image Processing
- Engrs 626: Community Growth
- Engrs 627: Applied Probability Modeling
- Engrs 633: Microwave Filters
- Engrs 671: Digital Topographic Mapping
- Engrs 672: Remote Sensing and the Environment
- Engrs 673: Advanced Digital Image Processing
- Engrs 674: Geospatial Data Synthesis and Modeling
- Engrs 675: Microwave Data
- Engrs 681: Advanced Sensor Systems Data Collection
- Engrs 682: Remote Sensing to Ecological Modeling
- Engrs 683: Land Use and Land Cover Applications
- Engrs 684: Agricultural Applications Remote Sensing
- Engrs 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 350: Standardized Work/Takt Time
• Manf 351: Manufacturing Product/Process Design
• Manf 353: Accounting & Financial Mgmt for Manf
• Manf 355: Lean II: Continuous Flow/Layout
• Manf 396: Special Topics in Manufacturing
• Manf 397: Special Topics in Manufacturing
• Manf 450: Practical Problem Solving in Manf
• Manf 451: Manf Design-Product Realization
• Manf 452: Manf Design-Product Realization, II
• Manf 455: Lean III: Practical Problem Solving
• Manf 460: Introduction to Project Management
• Manf 465: Applications in Ops & Supply Chain Mgmt
• Manf 470: Principles of Lean Six Sigma
• Manf 496: Special Topics in Manufacturing
• Manf 497: Special Topics in Manufacturing

Biomedical Engineering
• BME 200: Introduction to Biomedical Engineering
• BME 222: Biomaterials
• 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 333: Biological Transport
• BME 350: Immunoeengineering
• BME 353: Biodevices Design & Development
• BME 370: Intro to Bioinformatics & Biostatistics
• 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: Immunoeengineering
• 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 307: Chemical Process Principles I
• Ch E 308: Chemical Process Principles II
• Ch E 316: Chemical Engineering Fluid Mechanics
• Ch E 317: Process Fluid Dynamics and Heat Transfer
• Ch E 318: Chem Engineering Heat and Mass Transfer
• Ch E 330: Chemical Eng. R & D Experience
• Ch E 345: Engineering Economy
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https://catalog.olemiss.edu/2025/fall/undergraduate/engineering/courses
- C E 413: Steel Design
- C E 414: Advanced Concrete Design
- C E 417: Construction Engineering and Management
- C E 421: Matrix Analysis of Structures
- C E 431: Soil Mechanics I
- C E 433: Foundation Engineering
- C E 435: Advanced Geotechnical Engineering
- C E 452: Civil Engineering Analysis
- C E 454: Engineering Design I
- 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 333: Digital Design and 3D Printing
- 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
- Csci 191: Office Applications
- 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 322: 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
Electrical and Computer Engineering
- 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
- El E 100: Introduction to Electrical Engineering
- El E 235: Principles of Digital Systems
- El E 236: Digital Systems Laboratory I
- El E 237: Electrical Engineering Tools and Toys
- El E 322: Electric Circuit II
- El E 331: Signals and Systems
- El E 337: Digital Systems Laboratory II
- El E 340: Electrical Engineering Analysis I
- El E 341: Theory of Fields
- El E 351: Electronics Circuits I
- El E 352: Electronics Circuits II
- El E 353: Electronics Laboratory
- El E 357: Electrical Engineering Problems I
- El E 367: Computer-Aided Design in Electrical Engr
- El E 385: Advanced Digital Systems
- El E 386: Advanced Digital Systems Laboratory
- El E 391: Probability and Random Signals
- El E 415: Telecommunications Laboratory
- El E 425: Local Area Networks
- El E 431: Theory of Control Systems
- El E 432: Robotics Laboratory
- El E 433: High Frequency and Microwave Laboratory
- El E 441: Electromagnetic Theory I
- El E 442: Electromagnetic Theory II
- El E 443: Network Analysis and Synthesis
- El E 447: Modulation, Noise, and Communications
- El E 451: Electrical Energy Conversion
- El E 453: Solid State Devices
- El E 461: Sr. Design in Electrical Engineering I
- El E 462: Sr. Design in Electrical Engineering II
- El E 481: Fund. Low Power Dig. VLSI Design
- El E 482: Digital CMOS VLSI Design
- El E 485: Microprocessor Systems Engineering
- El E 486: Microprocessor Systems Engr Lab
- El E 487: Digital Signal Processing Laboratory
- El E 521: Electrical Engineering Projects I
- El E 522: Electrical Engineering Projects II
- El E 523: Microwave Engineering
- El E 525: Introduction to Antennas
- El E 533: Electronic Properties of Materials
- El E 534: Wireless Mobile Communications
- El E 535: Digital Communications
- El E 536: Introduction to Quantum Computing
- El E 561: Microwave Circuit Design
- El E 586: Digital Signal Processing

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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 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
- G E 513: Economic Geology
- G E 525: Engineering Seismology
- G E 530: Advanced Geomechanics
- G E 540: Rock Mechanics
- G E 555: Introduction to Geophysical Engineering
- G E 577: Geophysics I
- G E 591: Special Topics
- G E 635: Advanced Rock Mechanics

Geol 101: Physical Geology
- Geol 102: Historical Geology
- Geol 103: Earth Dynamics
- Geol 104: Environmental Geology - Hazards
- Geol 105: Environmental Geology - Resources
- Geol 106: Earth History
- Geol 107: Introduction to Oceanography
- Geol 111: Physical Geology Laboratory
- Geol 112: Historical Geology Laboratory
- Geol 114: Environmental Geology-Hazards Laboratory
- Geol 115: Environmental Geology - Resources Lab
- Geol 120: Dinosaurs
- Geol 203: Earth Dynamics Laboratory Content
- Geol 221: Mineralogy
- Geol 222: Elementary Petrology
- Geol 225: Mineralogy & Elementary Petrology
- Geol 303: Structural and Tectonic Geology
- Geol 305: Geomorphology
- Geol 309: Invertebrate Paleontology
- Geol 314: Sedimentology and Stratigraphy
- Geol 410: Coastal and Reef Dynamics
- Geol 420: Optical Mineralogy
- Geol 500: Intro. to Geographic Information Systems
- Geol 505: Hydrogeology
- Geol 517: Global Tectonics
- Geol 518: Quantitative Methods in Geo. & Geo Eng
- Geol 520: Advanced Igneous and Metamorphic Petrology
- Geol 530: Geology Field Studies
- Geol 535: Geochemistry
- Geol 610: Earth Science Projects
- Geol 614: Advanced Geographic Information Systems
- Geol 615: Geostatistics
- Geol 630: Coastal Plain Geology

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