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 207: Graphics I
- Engr 208: Graphics II
- Engr 296: Special Topics in Engineering Science
- Engr 297: Special Topics in Engineering Science
- Engr 301: Environmental Engineering Lab I
- Engr 302: Fluid Mechanics Laboratory
- Engr 307: Technical Communications
- Engr 309: Statics
- Engr 310: Engineering Analysis I
- Engr 311: Intermediate Mechanics
- Engr 312: Mechanics of Materials
- 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 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 401: Environmental Engineering Lab II
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 420: Engineering Analysis III
Engr 450: Product Design and Development
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 519: Acoustics
Engr 537: Environmental Engineering II
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 571: Service Learning in Water Treatment
Engr 572: Advanced Sanitary Analysis
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: Television Systems II
Engr 630: Unit Process & Oper in Env Eng I
Engr 631: Unit Process & Oper in Env Eng II
Engr 632: Sludge Treatment and Disposal
Engr 633: Process Dynamics and Control I
Engr 634: Treatment & Disposal of Industrial Waste
Engr 635: Optimization
Engr 636: Groundwater Mechanics
Engr 637: Groundwater Modeling
Engr 638: Hazardous Waste Management
Engr 639: Environmental Systems Engineering
Engr 640: Stream and Estuarine Analysis
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 647: Pavement Management Systems
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 655: Information Systems Principles
Engr 656: Operating Systems Design Concepts
Engr 657: Time Sharing Computer Systems
Engr 658: Advanced Information Retrieval
Engr 660: Software Engineering 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: Viscoplasticity
Engr 673: Plasticity
Engr 674: Fracture Mechanics
Engr 677: Plates and Shells
Engr 678: Elastic Stability
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 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 250: Standardized Work/Takt Time
Manf 251: Manufacturing Product/Process Design
Manf 253: Accounting & Financial Mgmt for Manf
Manf 255: Lean II: Continuous Flow/Layout
Manf 256: Special Topics in Manufacturing
Manf 257: 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 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 313: Physiology for Biomedical Engineering
BME 314: Biomedical Measurement
BME 320: Bioseparations
BME 333: Biological Transport
BME 350: Immunengineering
BME 413: Biomedical Signal Processing
BME 444: Biomedical Controls
BME 461: Biomedical Engineering Senior Design I
BME 462: Biomedical Engineering Senior Design II

Chemical Engineering
Ch E 101: Introduction to Chemical Engineering
Ch E 103: Introduction to Chemical Engineering I
Ch E 104: Introduction to Chemical Engineering II
Ch E 251: Programming for Chemical Engineering
Ch E 307: Chemical Process Principles I
Ch E 308: Chemical Process Principles II
Ch E 309: Intro to Chemical Engineering Design
Ch E 313: Modeling and Simulation I
Ch E 314: Modeling and Simulation II
Ch E 317: Process Fluid Dynamics and Heat Transfer
Ch E 330: Chemical Eng. R & D Experience
Ch E 345: Engineering Economy
Ch E 407: Chemical Engineering Projects I
Ch E 408: Chemical Engineering Projects II
Ch E 411: Chemical Engineering Seminar
Ch E 412: Process Control and Safety
Ch E 413: Chemical Process Safety
Ch E 417: Separation Processes
Ch E 421: Chemical Engineering Thermodynamics
Ch E 423: Chemical Reactor Analysis and Design
Ch E 431: CHE Mass and Energy Balance Lab
Ch E 432: CHE Unit Operations Lab
The University of Mississippi is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award certificates and baccalaureate, master’s, specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, call 404-679-4500, or visit online at www.sacscoc.org for questions about the accreditation.

https://catalog.olemiss.edu/2021/fall/undergraduate/engineering/courses
• 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 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 Engineering
• Cp E 431: Computer Architecture
• El E 100: Introduction to Electrical Engineering
• El E 101: Survey of the Electrotechnology
• El E 235: Principles of Digital Systems
• El E 301: Applied Electronics
• El E 302: Applied Communication Systems
• El E 330: Linear Systems
• El E 337: Digital Systems Laboratory II
• El E 340: Electrical Engineering Analysis I
• El E 341: Theory of Fields
• El E 354: PC-Based Instrumentation Laboratory
• El E 357: Electrical Engineering Problems I
• El E 358: Electrical Engineering Problems II
• 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: Random Signals
• El E 414: Biomedical Electronics
• 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 434: Fiber Optics Laboratory
• El E 436: Systems 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 449: Analog Communications Laboratory
El E 450: Digital Communications Laboratory
El E 451: Electrical Energy Conversion
El E 452: Electric Power Transformer Laboratory
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 561: Microwave Circuit Design
El E 586: Digital Signal Processing

Geology & Geological Engineering
G E 234: Intro. to Geol. Engr. Field Methods
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 431: Geological Field Studies II
G E 436: Field Camp G E Design
G E 437: Geological Engineering Design Field Camp
G E 450: Hydrogeology
G E 460: Fundamentals of Waste Management
G E 470: Intro. to Geographic Information System
G E 490: Directed Studies and Projects
G E 500: Introduction to Geochemistry I
G E 502: Construction Geological Engineering
G E 503: Environmental Geochemistry
G E 504: Envi. Geochemistry Lab & Field Methods
G E 506: Geomechanics for Geologists
G E 507: Regional Geological Engineering
G E 510: Remote Sensing
G E 511: Spatial Analysis
G E 513: Economic Geology
G E 520: Geol. & G.E. Computer Applications
G E 525: Engineering Seismology
G E 530: Advanced Geomechanics
G E 540: Rock Mechanics
G E 560: Waste Disposal I
G E 561: Design of Waste Repositories

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- GE 577: Geophysics I
- GE 591: Special Topics
- GE 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 406: Petrology
- Geol 410: Coastal and Reef Dynamics
- Geol 420: Optical Mineralogy
- Geol 500: Intro. to Geographic Information Systems
- Geol 505: Hydrogeology
- Geol 506: Advanced Petrology
- Geol 515: Directed Studies
- Geol 517: Global Tectonics
- Geol 518: Quantitative Methods in Geo. & Geo Eng
- Geol 520: Advanced Igneous and Metamorphic Petrolo
- Geol 530: Geology Field Studies
- Geol 535: Geochemistry
- Geol 550: Oceanography and Marine Geology
- Geol 555: Geology and Geol. Engineering Seminar
- Geol 603: Earth Sciences I
- Geol 604: Earth Sciences II
- Geol 609: Earth Science Projects
- Geol 610: Earth Science Projects
- Geol 611: Advanced Studies in Geology
- Geol 613: Instrumental and Analytical Procedure
- Geol 614: Advanced Geographic Information Systems
- Geol 615: Geostatistics
- Geol 630: Coastal Plain Geology
- Geol 641: Clay Petrology
- Geol 642: X-Ray Diff Analysis Inorg Crvs Materials
- Geol 643: Advanced Geomorphology
- Geol 644: Advanced Paleontology
- Geol 645: Advanced Sedimentation
- Geol 646: Advanced Stratigraphy
- Geol 647: Sedimentary Petrology
- Geol 648: Metamorphic Petrology
- Geol 690: Scientific Writing Seminar
- Geol 697: Thesis

Mechanical Engineering
- ME 101: Introduction to Mechanical Engineering
- ME 201: Engineering Graphics Fundamentals
- M E 324: Introduction to Mechanical Design
- M E 325: Intermediate Dynamics
- M E 399: Thermodynamics II
- M E 401: Thermo-fluid Dynamics
- M E 402: Elements of Propulsion
- M E 404: Applied Fluid Mechanics
- M E 416: Structures and Dynamics Laboratory
- M E 417: Projects
- M E 418: Projects
- M E 419: Energy and Fluids Laboratory
- M E 420: Experimental Mechanical Engineering II
- M E 421: Structural Analysis
- M E 422: Structural Design I
- M E 426: Kinematics: Analysis and Synthesis
- M E 427: Kinematic Analysis and Synthesis
- M E 428: Dynamics of Machinery
- M E 438: Mechanical Engineering Design
- M E 521: Projects
- M E 522: Projects
- M E 523: Special Topics in Mechanical Engineering
- M E 524: Special Topics in Mechanical Engineering
- M E 525: Advanced Dynamics
- M E 526: Experimental Methods
- M E 527: Materials Processing
- M E 528: Polymer Processing
- M E 529: Aerodynamics
- M E 530: Physical Metallurgy
- M E 531: Mechanical Behavior of Engr Materials
- M E 532: Glass and Ceramics
- M E 533: Electronic Properties of Materials
- M E 534: Properties and Selection of Materials
- M E 535: Experimental Stress Analysis
- M E 537: Mechatronic Systems Engineering
- M E 538: Exprl Character of Polymer Composites
- M E 540: Failure Analysis
- M E 541: Theory and Use of CAD and Solid Modeling
- M E 543: Linear Systems and Controls
- M E 555: Heating Ventilation and Air-Conditioning