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 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 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 515: 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: Televisions 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 656: Operating Systems Design Concepts  
Engr 657: Timesharing Computer Systems  
Engr 659: Advanced Information Retrieval  
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 699: 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 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 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 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: Immunoengineering
- 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
- Ch E 433: CHE Design Lab
Ch E 445: Chemical Engineering Lab I
Ch E 446: Chemical Engineering Lab II
Ch E 449: Process Design
Ch E 450: Process Optimization
Ch E 451: Plant Design I
Ch E 452: Plant Design II
Ch E 460: Product Design I: Development, Evaluation
Ch E 461: Product Design II: Product Realization
Ch E 470: Principles of Lean Six Sigma
Ch E 511: Process Dynamics and Control
Ch E 513: Special Topics in Chemical Engineering
Ch E 515: Research Seminar
Ch E 520: Biochemical Engineering
Ch E 530: Coal Utilization and Pollutants Control
Ch E 535: Experimental Methods in Engineering
Ch E 540: Coating Materials Process & Applications
Ch E 541: Appl of Chemical Instrumentation I
Ch E 542: Appl of Chemical Instrumentation II
Ch E 543: Introduction to Polymer Science
Ch E 544: Colloid and Surface Science
Ch E 547: Surfactant Science and Applications
Ch E 550: Membrane Science and Engineering
Ch E 555: Advanced Transport Phenomena I
Ch E 561: Advanced Transport Phenomena II
Ch E 593: Graduate Projects in Chemical Eng
Ch E 540: Environmental Organic Transport Phenomena

Civil Engineering

C E 101: Introduction to Civil Engineering I
C E 102: Introduction to Civil Engineering II
C E 205: Civil Engineering Laboratory I
C E 207: Surveying
C E 208: Civil Engineering Graphics I
C E 305: Civil Engineering Laboratory II
C E 310: Introduction to Structural Mechanics
C E 311: Structural Analysis
C E 315: Civil Engineering Materials
C E 325: Intermediate Dynamics
C E 401: Civil Engineering Fundamentals
C E 405: Civil Engineering Laboratory III
C E 412: Design of Concrete Structures
C E 413: Steel Design
C E 414: Advanced Concrete Design
C E 416: Bridge Engineering
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 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 511: Structural Dynamics
C E 514: Pre-Stressed Concrete Design
C E 521: Advanced Mechanics of Materials
C E 531: Soil Mechanics II
C E 541: Flow in Open Channels
C E 542: Flow in Porous Media
C E 543: Sediment Transport
C E 551: Civil Engineering Systems
C E 570: Infrastructure Management
C E 572: Stormwater Engineering and Management
C E 581: Transportation Engineering II
C E 585: Highway Pavements
C E 590: Airport Planning and Design

Computer & Information Science
Csci 103: Survey of Computing
Csci 111: Computer Science I
Csci 112: Computer Science II
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 323: Systems of Programming
Csci 325: Foundations of Computer Security
Csci 333: Digital Design and 3-D 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: Fundamentals of Computer 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
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/2020/spring/undergraduate/engineering/courses

Wednesday, February 5, 2020 at 12:33:10 am CST
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
G E 577: Geophysics I
G E 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 Petrology
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 Crys 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
M E 101: Introduction to Mechanical Engineering
M E 201: Engineering Graphics Fundamentals
M E 324: Introduction to Mechanical Design
M E 325: Intermediate Dynamics

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Wednesday, February 5, 2020 at 12:33:10 am CST
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 406: Alternative Energy Systems
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