School of Engineering

Overview
Academics & Admissions
Departments
Programs
Minors
Courses
Faculty
Awards

Courses

School of Engineering

- COP 201: CO-OP Work Experience
- COP 202: CO-OP Work Experience
- COP 300: Cooperative Education
- COP 301: CO-OP Work Experience
- COP 302: CO-OP Work Experience
- COP 401: CO-OP Work Experience
- COP 402: CO-OP Work Experience
- COP 501: CO-OP Work Experience
- COP 502: CO-OP Work Experience
- COP 503: CO-OP Work Experience
- Engr 100: Introduction to Engineering
- Engr 106: Special Topics in Engineering Science
- Engr 107: 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 624: Active Microwave Circuits
- Engr 625: Adv. Topics in Computational Mechanics
- Engr 626: Numerical Methods in Electromagnetics
- Engr 627: Ray Methods in Electromagnetics
- Engr 628: 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 654: Information Systems Principles
- Engr 655: Operating Systems Design Concepts
- Engr 656: Timesharing Computer Systems
- Engr 657: 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: 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 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 726: Adv Numerical Methods in Electromagnetic
Engr 728: 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
GE 681: Applications in Geophysics
Manf 150: Intro to Engineering / Manufacturing
Manf 152: Intro to Engineering & Manufacturing II
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/2019/spring/undergraduate/engineering/courses
• 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 561: 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 332: Systems of Programming
• 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 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 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 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
BME 200: Introduction to Biomedical Engineering
BME 301: Bioinstrumentation
BME 320: Bioseparations
BME 322: Biomaterials
BME 333: Biological Transport
- BME 350: Immunotherapy
- BME 444: Biomedical Controls
- BME 461: Biomedical Engineering Senior Design I
- BME 462: Biomedical Engineering Senior Design II
- El E 100: Introduction to Electrical Engineering
- El E 101: Survey of the Electrotechnology
- El E 235: Principles of Digital Systems
- El E 236: Digital Systems Laboratory I
- El E 237: Electrical Engineering Tools and Toys
- El E 301: Applied Electronics
- El E 302: Applied Communication Systems
- El E 313: Physiology for Biomedical Engineering
- El E 314: Biomedical Measurement
- El E 331: Linear 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 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 413: Biomedical Signal Processing
- 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
- 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 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
• 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
ME 526: Experimental Methods
ME 527: Materials Processing
ME 528: Polymer Processing
ME 529: Aerodynamics
ME 530: Physical Metallurgy
ME 531: Mechanical Behavior of Engr Materials
ME 532: Glass and Ceramics
ME 533: Electronic Properties of Materials
ME 534: Properties and Selection of Materials
ME 535: Experimental Stress Analysis
ME 537: Mechatronic Systems Engineering
ME 538: Exprl Character of Polymer Composites
ME 540: Failure Analysis
ME 541: Theory and Use of CAD and Solid Modeling
ME 543: Linear Systems and Controls
ME 555: Heating Ventilation and Air-Conditioning

Telecommunications
TC 201: Introduction to Telecommunications
TC 210: Voice Telecommunications
TC 220: Wireless Communications
TC 330: Internship in Telecommunications
TC 403: Telecommunications Networks
TC 405: Telecommunications Management
TC 409: Current Issues in Telecommunications
TC 431: Satellite Telecommunications
TC 433: Optical Fiber Telecommunications
TC 491: Special Topics in Telecommunications
TC 501: Foundations of Communications
TC 529: Televisions Systems I
TC 531: Advanced Satellite Communications
TC 533: Advanced Optical Communications Systems
TC 585: Multimedia Technologies I