School of Engineering

Overview
Academics & Admissions
Departments
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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 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 209: Special Topics in Engineering Science
- Engr 207: 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 322: Thermodynamics
- Engr 323: Transport Phenomena
- Engr 322: Transport Phenomena
- Engr 323: Fluid Mechanics
- 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 360: Electric Circuit Laboratory
- Engr 360: Electric Circuit Laboratory
- Engr 363: Introductory Electric Circuit Laboratory
- Engr 363: Introductory Electric Circuit Laboratory

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https://catalog.olemiss.edu/2020/spring/undergraduate/engineering/courses
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https://catalog.olemiss.edu/2020/spring/undergraduate/engineering/courses
- 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 655: 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: Viscoplasticity
- 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 722: 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
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

https://catalog.olemiss.edu/2020/spring/undergraduate/engineering/courses
• 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: Immunoeengineering
• 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 519: 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 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
- Engr 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 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 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

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• 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 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 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 Eng
• 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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• ME 324: Introduction to Mechanical Design
• ME 325: Intermediate Dynamics
• ME 399: Thermodynamics II
• ME 401: Thermo-fluid Dynamics
• ME 402: Elements of Propulsion
• ME 404: Applied Fluid Mechanics
• ME 406: Alternative Energy Systems
• ME 416: Structures and Dynamics Laboratory
• ME 417: Projects
• ME 418: Projects
• ME 419: Energy and Fluids Laboratory
• ME 420: Experimental Mechanical Engineering II
• ME 421: Structural Analysis
• ME 422: Structural Design I
• ME 426: Kinematics: Analysis and Synthesis
• ME 427: Kinematic Analysis and Synthesis
• ME 428: Dynamics of Machinery
• ME 438: Mechanical Engineering Design
• ME 521: Projects
• ME 522: Projects
• ME 523: Special Topics in Mechanical Engineering
• ME 524: Special Topics in Mechanical Engineering
• ME 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