

Electrical Engineering Technology B.S. Course Sequence (typical)

Catalog - 2016/2017

Total undergraduate credits 124

Freshman (Fall)

- 3 ENGL103 - Composition I
- 3 COMS 100 - Fundamentals of Oral Communication
- 4 MATH 229 - Calculus I
- 4 PHYS 210 - General Physics
- 3 General Education Requirement 1

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Freshman (Spring)

- 3 CHEM 110 - Chem or CHEM 210 - General Chem I
- 1 CHEM 111 - Chem Lab or CHEM 212 - Gen Chem Lab I
- 3 ENGL 203 - Composition II
- 4 MATH 230 - Calculus II
- 3 TECH 175 - Electricity & Electronics Fundamentals
- 1 TECH 175A - Electricity & Electronics Fund Lab

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Sophomore (Fall)

- 3 TECH 211 - Computer-Aided Design
- 3 TECH 270 - Electrical Fund & Circuit Analysis I
- 1 TECH 270A - Electrical Fund & Circuit Analysis Lab I
- 3 TECH 277 - Digital Logic Design
- 1 TECH 277A - Digital Logic Design Lab
- 4 CSCI 240 - Computer Programming in C++
- 3 General Education Requirement 2

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Sophomore (Spring)

- 3 TECH 271 - Electrical Fund & Circuit Analysis II
- 1 TECH 271A - Electrical Fund & Circuit Analysis Lab II
- 3 TECH 276 - Electronics I
- 1 TECH 276A - Electronics I Lab
- 3 TECH 265 - Basic Manufacturing Processes
- 3 TECH 377 - Microprocessors and Interfacing
- 1 TECH 377A - Microprocessors and Interfacing Lab
- 3 EET Elective 1

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Junior (Fall)

- 3 TECH 376 - Electronics II
- 1 TECH 376A - Electronics II Lab
- 3 TECH 375 - Control Systems
- 3 EET Elective 2
- 3 STAT 208 - Basic Stats or STAT 301 - Elementary Stats
- 3 EET Elective 3

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Junior (Spring)

- 3 TECH 378 - Communication System Design I
- 1 TECH 378A - Communications System Design Lab
- 3 TECH 379 - Electric Machines and Transformers
- 1 TECH 379A - Electric Machines and Transformers Lab
- 3 EET Elective 4
- 3 Engl 308 - Tech Writing or Mgmt 346 - Business Comms

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Senior (Fall)

- 1 TECH 477 - Egr Tech Senior Design Project I
- 3 General Education Requirement 3
- 3 General Education Requirement 4
- 3 EET Elective 5
- 3 EET Elective 6

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Senior (Spring)

- 3 TECH 478 - Egr Tech Senior Design Project II
- 3 EET Elective 7
- 3 EET elective 8
- 3 General Education Requirement 5

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Electives (24 Total Hours Required)

Electives - Choose 6 hours from below

- TECH 295 - Mfg Comp Apps (3) or CSCI 215 - Visual Basic (4)
- TECH 409 - Internship (3)
- TECH 419 - Energy Auditing (3)
- TECH 425 - Programmable Electronic Controllers (3)
- TECH 445 - Ind Energy Utilization & Environmental Impacts (3)
- TECH 481 - Ergonomics

Electives - Choose 9 hours from below

- TECH 391 - Industrial Quality Control (3)
- TECH 393 - Structure and Properties of Materials (3)
- TECH 415 - Applied Industrial Experimental Analysis (3)
- TECH 417 - Design for Energy Efficiency & Green Materials (3)
- TECH 420 - Computer-Integrated Manufacturing (3)
- TECH 443 - Engineering Economy (3)
- TECH 444 - Production Control Systems

Electives - Choose 9 hours from below

- TECH 426 - Electronic Sys Apps for Alternative Energy (3)
- TECH 430 - Microcontrollers Interfacing & Applications (3)
- TECH 470 - Fiber Optics Communications (3)
- TECH 471 - Digital and Data Communication (3)
- TECH 473 - Advanced Digital Design (3)
- TECH 475 - Computer Simulation in Electronics (3)
- TECH 476 - Industrial Control Electronics (3)
- TECH 479 - Special Topics in Engineering Technology (3)

2016/2017 NIU Undergraduate Bulletin
Electrical Engineering Technology
Credits Required for Graduation 126

Name _____
ZID# _____
Advisor _____

Note: Semester offering and prerequisites may change, the current bulletin and schedule should be consulted
 Legend - **p** - prerequisite **c**-corequisite **f** - fall semsetr **s** - spring semester

<input type="checkbox"/> Engl 103 RHETORIC AND COMPOSITION I - (f,s)	<input type="checkbox"/> Chem 110 (or Chem210T) GENERAL CHEMISTRY I - (f,s)	<input type="checkbox"/> Math 155 TRIGONOMETRY - (f,s) p:Math110 or placement test
<input type="checkbox"/> Engl 203 p:Engl 103 RHETORIC AND COMPOSITION II - (f,s)	<input type="checkbox"/> Chem 111 (or Chem212) GENERAL CHEMISTRY I LAB - (f,s)	<input type="checkbox"/> Math229 CALCULUS I - (f,s) p:Math155 or placement test
<input type="checkbox"/> Coms 100 FUNDAMENTALS OF ORAL COMM - (f,s)	<input type="checkbox"/> Stat 208 (or Stat 301) STATISTICS - (f,s)	<input type="checkbox"/> Math230 CALCULUS II - (f,s) p:Math229
<input type="checkbox"/> English 308 or Mgmt 346 p: Coms 100, Engl 203 TECHNICAL WRITING or BUSINESS COMMUNICATIONS - (f,s)	<input type="checkbox"/> Phys 210 - p:M155 or (Phys253 - c:M229) GENERAL PHYSICS - (f,s)	<input type="checkbox"/> CSCI 240 COMPUTER PROGRAMMING IN C - (f,s) p:Math110

Required Technology Courses

<input type="checkbox"/> Tech175 p:Math155, Phys210 ELECTRICITY AND ELECT FUND - (f,s)	<input type="checkbox"/> Tech 276 p:Tech 270, c:Math229, Tech 276 ELECTRONICS ELECTRONICS I - (s)	<input type="checkbox"/> Tech 377A c: TECH377 MICROPROCESSORS AND INTERFACING LAB - (s)
<input type="checkbox"/> Tech175a c:TECH175 ELECTRICITY AND ELECT FUND lab - (f,s)	<input type="checkbox"/> Tech 276A c:TECH 276 ELECTRONICS I LAB - (s)	<input type="checkbox"/> Tech 378 p:Math229, T276, c: T378A COMMUNICATION SYSTEMS DESIGN I - (s)
<input type="checkbox"/> Tech 211 CAD/COMP-AIDED MODELING- (f,s)	<input type="checkbox"/> Tech 277 p:Tech 175 c: Tech277A DIGITAL LOGIC DESIGN - (f)	<input type="checkbox"/> Tech 378A c:TECH 378 COMMUNICATION SYSTEMS DESIGN I - (s)
<input type="checkbox"/> Tech 265 p:Math155 BASIC MANUF PROCESSES - (f,s)	<input type="checkbox"/> Tech 277A c: TECH 277 DIGITAL LOGIC DESIGN LAB - (f)	<input type="checkbox"/> Tech 379 p: Math 229, T271, c: T379A ELECTRIC MACH AND TRANSFORMERS - (s)
<input type="checkbox"/> Tech 270 p:Tech 175; M155 c: Tech 270A ELECTRICAL FUND AND CIRCUIT ANAL I - (f)	<input type="checkbox"/> Tech 375 p:Math230, TECH271 CONTROL SYSTEMS - (f)	<input type="checkbox"/> Tech 379A c: TECH 379 ELECTRIC MACH AND TRANSFORMERS LAB - (s)
<input type="checkbox"/> Tech 270A c:TECH 270 ELECTRICAL FUND AND CIRC ANAL I LAB - (f)	<input type="checkbox"/> Tech 376 p:Math229, T276, c: T376A ELECTRONICS II - (f)	<input type="checkbox"/> Tech 477 p:T376, T377, T378, Engl308 ENG TECH SEN DESIGN PROJECT I - (f,s)
<input type="checkbox"/> Tech 271 p: Tech 270 c: Math 229, Tech 271A ELECTRICAL FUND AND CIR ANAL II - (s)	<input type="checkbox"/> Tech 376A c:TECH376 ELECTRONICS II LAB - (f)	<input type="checkbox"/> Tech 478 p: TECH477 ENG TECH SEN DESIGN PROJECT II - (f,s)
<input type="checkbox"/> Tech 271A c:TECH 271 ELECT FUND AND CIR ANAL II LAB - (s)	<input type="checkbox"/> Tech 377 p:TECH277, c: Tech 377A MICROPROC AND INTERFACING - (s)	

Electrical Engineering Technology Electives - Electives may change each semester

Choose 6 semester hours

<input type="checkbox"/> Tech 295 p: Math155, Tech.265 Manufacturing Computer Applications
or <input type="checkbox"/> Csci 215 p: Math 110 Visual Basic
<input type="checkbox"/> Tech 409 p: Junior Standing Internship
<input type="checkbox"/> Tech 419 p: Math 155 Energy Auditing
<input type="checkbox"/> Tech 425 p: M155; T175/A; T265; T295 or CSCI240 Programmable Electronic Controllers - (f)
<input type="checkbox"/> Tech 445 p: Math 155, Chem 110 or 210 Ind Energy Utilization & Environmental Impacts
<input type="checkbox"/> Tech 481 p: Math 155, Tech 434, Phys 210 Ergonomics (f)

Choose 9 semester hours

<input type="checkbox"/> Tech 391 p: Math 155 & STAT 208 Industrial Quality Control - (f, s)
<input type="checkbox"/> Tech 393 p: Tech 265, Chem110/210 Structure and Properties of Mat'l's - (f)
<input type="checkbox"/> Tech 415 p: Math 155, Stat 208 Applied Industrial Experimental Analysis - (f)
<input type="checkbox"/> Tech 417 p: Math 155; Phy 210 Design for Energy Efficiency & Green Materials
<input type="checkbox"/> Tech 420 p: T175/175A; T211; T265 Computer-Integrated Manufacturing - (f)
<input type="checkbox"/> Tech 443 p: Math 155 Engineering Economy - (s)
<input type="checkbox"/> Tech 444 p: Math155, Tech.265 Production Control Systems (s)
<input type="checkbox"/> Tech 492 p: Math 155, Stat 208, T265 Manufacturing Distribution Applications (s)

Choose 9 semester hours

<input type="checkbox"/> Tech 426 p: M155; Tech175 or Phys211 Electronic Systems Apps for Alternative Energy
<input type="checkbox"/> Tech 430 p:TECH 377; Csci 240
<input type="checkbox"/> Tech 470 p:TECH 378 Fiber Optics Communications
<input type="checkbox"/> Tech 471 p:TECH 378 Digital and Data Communication
<input type="checkbox"/> Tech 473 p:TECH 277/A; CSCI 240 Advanced Digital Design
<input type="checkbox"/> Tech 475 p: TECH 271, TECH 276 Computer Simulation in Electronics
<input type="checkbox"/> Tech 476 p:TECH 376, TECH 379 Industrial Control Electronics
<input type="checkbox"/> Tech 479 p: see instructor Special Topics in Engineering Technology

General Education Knowledge Domain Courses - See CEET website or online Undergraduate Catalog

Creativity & Critical Analysis - 2 courses

<input type="checkbox"/> _____ (3)
<input type="checkbox"/> _____ (3)

Society & Culture - 2 courses

<input type="checkbox"/> _____ (3)
<input type="checkbox"/> _____ (3)

From any of the Knowledge Domain Areas

<input type="checkbox"/> _____ (3)
