



## Engineering Career Center

### Guaranteed Paid Internship Program in Summer List of Required Courses – to be completed before placement

Major	Required program courses
Biomedical Engineering	<i>BME 310: Biological Systems Analysis</i> <i>BME 325: Biotransport</i> <i>BME 339: Biostatistics</i> <i>BME 430: Bioinstrumentation and Measurements I</i>
Chemical Engineering	<i>ChE 312: Transport Phenomena II</i> <i>ChE 313: Transport Phenomena III</i> <i>ChE 321: Chemical Reaction Engineering</i>
Civil Engineering	Three of the following: <i>CME 260: Properties of Materials</i> <i>CME 310: Design of Reinforced Concrete Structures</i> <i>CME 311: Water Resources Engineering</i> <i>CME 197: Introduction to Civil and Environmental Engineering</i> <i>CME 297: Civil and Environmental Engineering Drawing and Design</i> <i>CME 302: Transportation Engineering</i>
Computer Science and Computer Science + Design	<i>CS 341: Programming Language Design and Implementation</i> <i>CS 342: Software Design</i> <i>CS 361: Computer Systems</i> <i>CS 362: Computer Design</i>
Computer Engineering	<i>ECE 115: Introduction to Electrical and Computer Engineering</i> <i>ECE 225: Circuit Analysis:</i> <i>ECE 265: Introduction to Logic Design</i> <i>ECE 266: Introduction to Embedded Systems</i>
Data Science	CS 251: Data Structures STAT 385: Elementary Statistical Techniques for Machine Learning & Big Data IDS: 312: Business Project Management <b>Plus, one from the Concentration</b> Bioinformatics: BioE 240 Computer Science: CS 377 Data Processing, Science & Engineering (ECE): ECE 310 Industrial Engineering: IE 345
Electrical Engineering	<i>ECE 115: Introduction to Electrical and Computer Engineering</i> <i>ECE 225: Circuit Analysis</i> Two among the following: <i>ECE 265: Introduction to Logic Design</i>

*ECE 266: Introduction to Embedded Systems*  
*ECE 310: Discrete and Continuous Signals and Systems*  
*ECE 322: Introduction to Electromagnetics and Applications*  
*ECE 340: Electronics I*

Engineering Physics                    *ECE 115: Introduction to Electrical and Computer Engineering*  
*ECE 225: Circuit Analysis*

Engineering Management            *IE 446: Quality Control and Reliability*  
*FIN 300: Introduction to Finance*

Environmental Engineering        Three of the following:  
*CME 260: Properties of Materials*  
*CME 322: Environmental Engineering*  
*CME 311: Water Resources Engineering*  
*CME 197: Introduction to Civil and Environmental Engineering*  
*CME 297: Civil and Environmental Engineering Drawing and Design*  
*CME 211: Fluid Mechanics and Hydraulics*

Industrial Engineering              *IE 446: Quality Control and Reliability*  
*IE 472: Operations Research II*

Mechanical Engineering           *ME 308: Mechanical Vibrations*  
*ME 320: Mechanisms and Dynamics of Machinery*  
*ME 321: Heat Transfer*

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See <https://admissions.uic.edu/undergraduate/transfer-intent-enroll>