



## Engineering Career Center

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

Major	Required program courses
Biomedical	<i>BioE 310: Biological Systems Analysis</i> <i>BioE 325: Biotransport</i> <i>BioE 339: Biostatistics</i> <i>BioE 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 and Materials Engineering	<i>CME 260: Properties of Materials</i> <i>CME 310: Design of Reinforced Concrete Structures</i> <i>CME 311: Water Resources Engineering</i>
Computer Science	<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> <i>Two among the following:</i> <i>ECE 265: Introduction to Logic Design</i> <i>ECE 266: Introduction to Embedded Systems</i> <i>ECE 310: Discrete and Continuous Signals and Systems</i> <i>ECE 322: Introduction to Electromagnetics and Applications</i> <i>ECE 340: Electronics I</i>

Engineering Physics	<i>ECE 115: Introduction to Electrical and Computer Engineering</i> <i>ECE 225: Circuit Analysis</i>
Engineering Management	<i>IE 446: Quality Control and Reliability</i> <i>FIN 300: Introduction to Finance</i>
Industrial Engineering	<i>IE 446: Quality Control and Reliability</i> <i>IE 472: Operations Research II</i>
Mechanical Engineering	<i>ME 308: Mechanical Vibrations</i> <i>ME 320: Mechanisms and Dynamics of Machinery</i> <i>ME 321: Heat Transfer</i>

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