# Guaranteed Paid Internship Program in Summer

List of Required Courses – to be completed before placement

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

Updated December 2022

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