**ISE Requirements and Prerequisite Map**

### Misc Required Courses
- Engl 1
- Engl 2
- Eco 1
- Acct 108 Sp
- ENGR 5
- ENGR 10
- ISE 112 Fa
- CSE 3 or 7
- Physics 11/12
- Physics 21/22
- Math 21
- Math 22
- Math 23
- Math 205
- Chem 30

### Choose One Path (Required)
- Mat 33
- ISE 215/216 Fa
- CSE 4 or 7
- ISE 172 Sp
- ISE 364 Fa
- ISE 224 Fa/Sp

### ISE 100 – Industrial Employment
- An internship experience that must be completed for zero credits

### Engineering Elective Requirements:
At least 3 courses of 3 or more credits associated with a departmental program from BIOE, CHE, CEE, CSE, ECE, MAT, ME, or MECH may be selected, with exceptions listed at https://ise.lehigh.edu/content/courses

### Minimum 130 Credits are Required to graduate

### Technical Electives
Choose at least 4, at least 2 must be ISE 3xx (Highlighted)
Examples:
Math 230, CSE 2xx except 241/252, CSE 3xx, BIS 3xx, Math 251

### Dashed lines are co-requisites,
Light Blue arrows indicate other Prerequisites

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ISE 1xx and 2xx are Required
ISE 3XX are Electives (except 305 – Required)
HSS Requirements:
A minimum of four multi-credit courses and a minimum of 13 credits in courses designated as HU (humanities) or SS (social science), with the following restrictions:
1. Depth: At least eight credits must be in a common discipline and from the same department or program. At least three of these credits must be at the 100-level or above, or at the intermediate level or above for a single modern foreign language.
2. Breadth: At least three credits in a discipline different from, and not cross-listed with, the discipline employed to satisfy the depth requirement.
3. At least three credits must be designated as HU.
4. None of the courses used for HSS can be taken Pass/Fail.
5. None of the course can be one-credit courses.

Note on Engineering Electives:
If ISE 172 is taken, CSE 4 or CSE 7 is Required and no longer count as an Eng’g Elective.
Similarly, if ISE 215/216 is taken, Mat 33 is Required and no longer count as an Eng’g Elective.
Both courses are otherwise acceptable Engineering electives.

List of courses excluded from consideration as an Engineering Elective:

CHE 171 (CEE 171, EMC 171, ES 171) Fundamentals of Environmental Technology 4 Credits
CEE 010 (ARCH 010) Engineering/Architectural Graphics and Design 3 Credits
CEE 202 CEE Planning and Engineering Economics 3 Credits
CEE 012 Survey of Computer Science 0-3 Credits
CSE 042 (EMC 042) Game Design 3 Credits
CSE 252 (EMC 252, GCP 252, STS 252) Computers, the Internet, and Society 3 Credits
CSE 241 Database Systems and Applications 3 Credits
CSE 379 Senior Project 3 credits
MAT 020 Computational Methods in Materials Science 3 Credits
MAT 221 (STS 221) Materials in the Development of Man 3 Credits
ME 010 Graphics for Engineering Design 3 Credits
ME 240 Manufacturing 3 Credits

A student may take one of the courses in the following course sets for use as an Engineering Elective:
CEE 003 Engineering Statics or MECH 2 Elementary Engineering Mechanics or MECH 3 Fundamentals of Engineering Mechanics 3 Credits
CEE 059 Strength of Materials or MECH 12 Strength of Materials 3 Credits