**BS Engineering – Industrial Engineering (ISE) Concentration – 2022**

- **Concentration-specific courses** are only offered in the semester shown on this sheet.

- **Diversity**: At least one elective course must be designated as GD (Global Diversity) and at least one elective course must be designated as DD (Domestic Diversity).

- **Humanities/Fine Arts**: Must complete at least one course in the humanities and one course in fine arts.

- **Social Sciences**: Must complete courses in at least two different subject areas.

- Students may take **BIOL 1100/1101** Principles of Biology I/Lab in lieu of **BIOL 1050/1051** General Biology I/Lab.

- Students may use **MATH 2154** Engineering Linear Algebra and Differential Equations as a prerequisite in lieu of **ENGR 2001** Linear Algebra Lab 1 or **MATH 4331** Introduction to Ordinary Differential Equations.

- Approved technical electives for the **Industrial Engineering Concentration** (as of Fall 2021)
  - Any 3000, 4000, or 5000 level engineering class not required for the ISE concentration will count as a technical elective
  - **MATH 4100**: Mathematics of Risk Analysis
  - **MATH 4101**: Advanced Calculus I
  - **MATH 4110**: Elementary Complex Variables
  - **MATH 4201**: Introduction to Stochastic Processes
  - **MATH 4332**: The Calculus of Finite Differences
  - **MATH 5132**: Probabilistic Methods in Operations Research
  - **MATH 5774/CSCI 5774**: Programming for Research

*Note: This chart is for planning purposes only. It is the student’s responsibility to ensure that requirements as detailed in the Undergraduate Catalog are met.*