

The Minor in Systems Science & Engineering

This minor consists of fundamental courses in control systems and operations research. In the area of control systems, students will be introduced to design techniques for controlling engineering and socioeconomic systems such as airplanes, automobiles, nuclear reactors, ecological systems, communication networks, the nation's economy and biological systems. In the area of operations research, students are introduced to techniques for optimally managing business resources and controlling business networks such as supply chains.

Units required: 15

| Code | Title | Units |
|------------------------|--|----------|
| ESE 217 | Differential Equations and Dynamical Systems Modeling in Engineering | 3 |
| ESE 4031 or ESE 415 | Optimization for Engineered Planning, Decisions and Operations Optimization | 3 |
| ESE 441 | Control Systems | 3 |
| Total Units | | 9 |

In addition, students must take 6 units from the following list: ESE 105, ESE 205, ESE 2180, ESE 2190, ESE 2971, ESE 351, ESE 4031, ESE 415, ESE 400 through 428, ESE 437, ESE 440 through 459, ESE 470 through 499, ESE 502 through 529, ESE 540 through 559

For more information, contact the director for the minor, Shen Zeng.