The Systems Engineering and Operations Research (SEOR) Department offers a bachelor's degree in systems engineering, a minor in systems engineering, a master's degree in systems engineering, a master's degree in operations research, and a doctoral degree in systems engineering and operations research. The department also offers a concentration in predictive analytics and a concentration in financial engineering within the school-wide master's degree in data analytics engineering. In addition, the department offers four systems engineering certificates at the master's level: architecture-based systems integration, C4I and cyber (command, control, communications, computing, intelligence, and cyber), engineering resilient enterprise systems, and financial systems; the department offers three operations research certificates: computational modeling, military operations research, and predictive data analytics. The department also offers a dual master's degree in operations research and master's degree in statistical science jointly with the Statistics Department.

There is much overlap between systems engineering and operations research. The department encourages students of either discipline to elect courses in the other. For more information, go to the department's website (http://seor.gmu.edu).

School-wide concentrations in data analytics engineering include:

- Architecture-based systems integration
- C4I and cyber (command, control, communications, computing, intelligence, and cyber)
- Engineering resilient enterprise systems
- Financial systems

Facility

### Faculty

**Professors**
Adelman, Brouse, Chang, Chen, Hoffman, Laskey, Nash, Pyster, Shortle(chair), Sofer, Zaidi

**Associate Professors**
Baldo, Clemons, Costa, Ganesan, Huang, Jones, Loerch, Sherry, Xu

**Assistant Professors**
El-Amine, Ji, Sokolov

**Research and Affiliate Professors**
Miller-Hooks, Wagner, Wolman

**Adjunct Professors**
Bailey, Barry, Burke, Charbonneau, Comer, Dam, Edson, Ferreiro, Guharay, Killam, Laveson, Maxwell, Morris, Mulhearn, Nicholas, Rothwell, Stimpson, Vermillion, Wieland, Woodaman, Xie

**Emeritus Faculty**
Donohue, Palmer

### Programs

- Aviation Flight Training and Management Minor
- Operations Research and Engineering Graduate Certificate
- Operations Research, MS
- Systems Engineering Graduate Certificate (SEOR)
- Systems Engineering Minor
- Systems Engineering and Operations Research, PhD
- Systems Engineering, BS
- Systems Engineering, MS