

UMW-CEC/Mason Pre-Master's Program Operations Research, MS

Operations research applies advanced analytical methods to decision-making for complex systems. Operations researchers leverage the mathematical sciences to undertake optimization, queuing and network modeling, computer simulation and modeling, applied and computational probability, and supply chain management. The field intersects with many other disciplines, including operations management, industrial engineering, psychology and organizational science.

Benefits of enrolling:

The UMW-CEC/Mason Pre-Master's Program allows UMW students to earn up to nine credit hours of selected George Mason University (Mason) graduate courses for credit toward their UMW undergraduate degrees. UMW students subsequently admitted to the Mason MS in Operations Research program may then apply those same graduate credit hours toward their MS. Students are referred to the following CEC/Mason program links for full information: cec.gmu.edu and catalog.gmu.edu/colleges-schools/engineering-computing/.

Program Eligibility:

UMW students entering the UMW-CEC/Mason Pre-MS Program in Operations Research have completed 90 credit hours toward their UMW undergraduate degrees in math or science, with a cumulative GPA ≥ 3.30 in their major.

Getting started:

Students begin the application process through the UMW Assistant Dean of Arts and Sciences. Students are encouraged to meet with the Assistant Dean at the start of their junior year to plan their UMW curriculum for admission to the Pre-MS Program.

CEC/Mason courses:

The following UMW-CEC/Mason Pre-MS Program courses are eligible for undergraduate credit at UMW and for subsequent credit toward the CEC/Mason MS in Operations Research.

- OR 541 – Operations Research: Deterministic Models (3 credit hours)
 - Required UMW prerequisite: MATH 300 (grade of B or better)
- OR 542 – Operations Research: Stochastic Models (3 credit hours)
 - Required UMW prerequisite: STAT 381 (grade of B or better)
- SYST 573 – Decision and Risk Analysis (3 credit hours)
 - Required UMW prerequisite: STAT 381 (grade of B or better)

Typically, graduate courses are offered with a start time of either 4:30pm or 7:20 pm

For CEC graduate programs tuition and fees, visit: <https://studentaccounts.gmu.edu/tuition-fees/>