Master of Science Degree in Modeling, Simulation and Visualization
(purduecal.edu/techgrad/master-of-science-in-modeling-simulation-and-visualization)

Before committing to a costly investment of an uncertain solution to increase productivity or solve a problem, business and industry may want to seek expertise from graduates of a new and innovative degree program at Purdue University Calumet (PUC).

A 30-credit hour interdisciplinary master’s degree program in the College of Technology, the novel Master of Science degree in Modeling, Simulation and Visualization (MSV) degree, equips graduates with skills essential to visualization designers, engineers, technologists, business intelligence developers, software consultants and computer scientists, as well as professionals in transportation, education, marketing and healthcare. Students with undergraduate education in science, technology, computer science, engineering, medical/healthcare, and management may be interested in the degree. Students in the program will have the opportunity to work with the Center for Innovation through Visualization & Simulation (CIVS) at PUC.

30 Credit hours Plan of Study

18 hours required core courses (6 courses)
Unified Modeling Languages
Simulation Techniques
Visualization Techniques
High Performance Computing
Software Project Management
Design and Analysis of Simulation Experiments

9 credit hours of electives (3 courses)
A number of grad level courses are available for use as electives; electives are approved by the student’s graduate committee for inclusion in the plan of study.

3 credit hours of directed project
(1 course taken in two phases)
Directed MS Project
Phase One - 1 credit hour—proposal
Phase Two - 2 credit hours—final report

Basic Requirements

- Bachelor’s degree from an accredited four-year college or university in any Science, Technology, Engineering or Mathematics (STEM) related areas. GPA of 3.0 or greater based on a 4.0 scale. If necessary, students may be required to make-up deficiencies.
- If necessary, students may be required to take leveling courses after admission to meet pre-requisites.
  1 Semester Object Oriented Programming (Sophomore level or above)
  1 Semester Statistics/Probability (Sophomore level or above)
  2 Semesters Calculus (Differential and Integral), or 1 Semester discrete mathematics or numerical methods (Sophomore level or above)

- TOEFL iBT: 77 (Reading 19, Listening 14, Speaking 18, Writing 18)
  IELTS and Pearson scores are also accepted.

Application Deadlines

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<th>Fall</th>
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<th>Summer</th>
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Please contact Jody Kidd, Graduate Coordinator for more information. (219-989-2966, tech@purduecal.edu)

www.purduecal.edu/gradschool www.purduecal.edu/techgrad www.purduecal.edu/civs