

# PREDICTIVE SCIENCE AND ENGINEERING DESIGN

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Degree Type: Certificate

The Predictive Science and Engineering Design (PSED) Cluster (<http://psed.mccormick.northwestern.edu/>) brings together dynamic faculty and graduate students conducting research in a variety of disciplinary and interdisciplinary perspectives – including but not limited to: physical sciences, engineering, computer science and applied mathematics.

The program gives doctoral students training in core concepts of predictive science, verification & validation, and computational design of materials and products and the associated manufacturing processes, while guiding students to develop strong individual programs at the center of their interdisciplinary scholarship.

This program is particularly useful for students who are willing to work on their doctoral research with faculty advisors from at least two different disciplines. The program will provide a mechanism to strengthen the links between faculty and graduate students from different departments and disciplines who share the common interest in PSED. It facilitates research collaborations in modeling, simulation, and design of emerging complex engineering systems.

***Additional resources:***

- Certificate website (<http://psed.mccormick.northwestern.edu/>)

## Certificate Offered

- Predictive Science and Engineering Design Certificate (<https://catalogs.northwestern.edu/tgs/predictive-science-engineering-design/predictive-science-engineering-design-cert/>)

## Predictive Science and Engineering Design Courses

**PSED 510-1 Predictive Science & Engineering Design Cluster Seminar (0 Unit)**

**PSED 510-2 Predictive Science & Engineering Design Cluster Seminar (1 Unit)**