

Coatings and Polymeric Materials

Department Information

- **Department Web Site:**
www.ndsu.edu/cpm/ (<http://www.ndsu.edu/cpm/>)
- **Credential Offered:**
Minor
- **Official Program Curriculum:**
catalog.ndsu.edu/undergraduate/program-curriculum/coatings-polymeric-materials/ (<http://catalog.ndsu.edu/undergraduate/program-curriculum/coatings-polymeric-materials/>)

Everybody uses products that are painted or coated in everyday life, but often take coatings for granted. However, a \$100 billion industry exists to supply paints and coatings worldwide that decorate, protect and provide function to automobiles, building, furniture, aircraft, ships, appliances, bridges, medical devices, electronic devices and countless other objects. The performance of these coatings depends critically on specially tailored polymers, which form coating films. Thus, coatings scientists must also be good polymer scientists. Other scientific disciplines are also important to the coatings scientist, such as organic chemistry, electrochemistry, rheology, surface chemistry, chemical analysis, photochemistry, mathematics, physics and several branches of engineering and materials science.

North Dakota State University started offering polymer and coatings chemistry courses in 1905. Of the few universities offering training that focuses on the technology of paints and coatings, NDSU has the longest and most extensive experience. Over the decades, the Department of Coatings and Polymeric Materials has established a worldwide reputation for education and research. Today, there is a high demand for coatings and polymer scientists at all degree levels, providing coatings and polymer materials graduates with abundant job opportunities. NDSU graduates are especially sought after by companies in the paint, coatings, and polymer industries. Graduates of the program are employed by major paint, coatings, polymer, and chemical companies with many graduates attaining upper management positions. At the undergraduate level, Bachelor of Science degrees in science and engineering with a coatings and polymeric materials minor are offered. Master's and doctoral degrees are available at the graduate level.