

Chemical Engineering Combined Degree

To encourage undergraduate engineering students to extend their studies to include a graduate degree, the College of Engineering and Mines has a combined program that permits students to earn both a bachelor's and a master's degree in an engineering discipline. This program allows students to designate two three-credit graduate courses to count for both degrees. The selected courses must have graduate course standing and be designated when a student requests admission to the program.

Students may be admitted to the Chemical Engineering Combined Degree program after the completion of 95 credit hours toward the bachelor's degree with a GPA of at least 3.3 and before completion of the bachelor's degree. The student is admitted to the School of Graduate Studies on completion of 125 credit hours for the bachelor's degree.

Faculty and Areas of Expertise

- **Steve Benson**, Renewable and fossil fuel properties, Clean and efficient gasification and combustion systems, Fireside behavior of ash and slag, Carbon products, Carbon dioxide separation, capture, and sequestration, Materials analysis – electron microscopy and x-ray microanalysis
- **Frank Bowman**, Atmospheric aerosols, organic aerosol partitioning, mathematical modeling of multicomponent aerosols, air quality modeling, educational technology, assessment of student learning, educational air pollution models
- **Yun Ji**, Renewable and sustainable energy, chemicals and biofuels from biomass, enzymatic hydrolysis, integrated energy and environmental projects, process simulation
- **Edward Kolodka**, Polymer reaction engineering, synthesis, rheological, and mechanical properties of novel polymers, biopolymers, development of improved adhesives for wood laminates.
- **Gautham Krishnamoorthy**, Computational fluid dynamics, simulations of combustion reaction flows, carbon capture technologies, radiative heat transfer.
- **Michael Mann**, Performance issues in advanced energy systems firing coal and biomass, emission control, renewable energy systems, and the development of energy strategies based on thermodynamics and economics.
- **Wayne Seames**, Mitigation of the environmental impact of heavy metals, trace element partitioning from combustion and incineration, alternative fuels development, new products and improved processing of agriculture, biochemical unit operations, environmental impacts from wood and concrete contamination.
- **Brian Tande**, Phase behavior and rheology of polymeric and nanodisperse systems, block copolymer morphology, neutron scattering of polymers, novel materials for hydrogen storage, biopolymers and biocomposites.
- **Robert Wills**, Non-thermal drying of solids by chemical dehydration, vegetative oil extraction and product enhancement.

Contact Information

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Apply online: <http://graduateschool.und.edu>
Deadlines apply. See our website for more details.

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