This course is intended to introduce engineering to pre-college teachers in order to help them acquire tools for integrating engineering into their science classrooms under the framework of the new Michigan Science Standards. ENG5100 provides teachers with a meaningful experience about the process and methods that engineers use to solve problems. The engineering process will be outlined, as will some of the "non-technical" aspects of engineering. Students will explore how the course objectives are related to the NGSS (and the new Michigan Science Standards). Students will be required to complete a design project that meets design criteria culminating in testing of the project and analysis of the results. This course is a required, cornerstone course for our Master’s degree program in Applied Science Education. **Deadline to apply is June 1, 2018.**

**Course Details:**
4 credits, Graduate  
Instructor: Dr. John Irwin  
- Michigan Tech Campus  
- $950 (includes course materials)  
- Optional room and board available for an additional cost

*This course may be applied to Michigan Tech’s M.S. in Applied Science Education.*

**For course registration, please contact:**  
Rachelle Gariepy, Teacher Professional Development Coordinator - [teacherpd@mtu.edu](mailto:teacherpd@mtu.edu) - (906) 487-2460

If you are not currently enrolled at Michigan Tech, you will need to apply for non-degree seeking graduate student status by June 1, 2018. Instructions can be found at: [www.mtu.edu/cls/education/development/institutes](http://www.mtu.edu/cls/education/development/institutes)

*Cost has been reduced through the generous support of the Department of Cognitive and Learning Sciences to lower official Michigan Tech tuition for teachers with proof of current certification (2017/18 Official Applied Science Education Graduate Resident and Non-Resident is $637 per credit).*