# Graduate Student Mentoring Plan – Template (customize as needed)

*Instructions: NSF discourages boilerplate language. Use this document as a starting point and edit to describe unique or additional mentoring for your specific program or research team. Limit one page.*

South Dakota School of Mines and Technology offers mentoring to graduate students at several levels including the Graduate School, the department, and the major professor.

**Orientation.** All graduate students complete an online orientation prior to enrolling, which covers logistics and resources available as well as expectations and tips for success when holding teaching or research assistantships. Departments have additional introductory and educational meetings with new students and compile important information into graduate handbooks.

**Career counseling.** The major professor is the primary source of career counseling for graduate students, with assistance provided by the student’s department head and/or graduate research committee. The Career Services Office at South Dakota Mines (SDM) provides additional services including twice-annual career fairs, CV preparation, and other professional skills. The Office of Innovation and Entrepreneurship has multiple programs to foster entrepreneurial skills, including workshops, business competitions, NSF I-CORPS teams, entrepreneurs-in-residence, and patent application support. The Graduate Student Society is an organization run by graduate students that hosts social events, seminars, talks, and other sessions regarding graduate student professional development.

**Preparation of Grant Proposals.** Major professors incorporate graduate students in the grant writing process and may encourage students to complete applications for student research grants. All graduate programs include seminar courses that focus on literature review and presentation/writing skills. The Graduate School requires all thesis MS and PhD students to write and defend a thesis/dissertation research proposal enroute to the degree.

**Publications and Presentations.** Major professors coach graduate students in preparing presentations and writing papers. The Graduate School offers workshops each semester on thesis/dissertation writing. Students may submit a dissertation composed of journal manuscripts, prepared or submitted, in order to facilitate publication of their results. SDM hosts a research symposium each April for graduate students to present oral or poster presentations on their research. Departments offer travel support for students to present papers at conferences.

**Teaching and Mentoring Skills.** Students typically work in research groups to receive and offer mentoring in research through regular meetings, sharing of problems/solutions, and meeting of common goals. Professors work one on one with their teaching assistants to provide expectations and advice on lab teaching, grading, and support of undergraduates. Professional development sessions hosted by the Office of Faculty Development are normally open to graduate students.

**Instruction in Responsible Professional Practices.** All thesis MS and PhD students are required to complete the CITI Responsible Conduct of Research training before establishing their research committee and program of study. Students who work in laboratories must complete a basic lab safety course offered by the Environmental Health and Safety office, as well as additional training pertinent to the facilities being used. Major professors and lab technicians offer mentorship or training in proper use of specific equipment and research practices.

**Effective Collaboration Skills.** Major professors lead research workgroups that collaborate on research at multiple levels in the department, in multidisciplinary program, and often with multi-institutional research teams in South Dakota and other states.