SCIENCE TECH ENGINEERING MATH (STEM)

STEM 1505 Safety Principles in the STEM College 1 s.h.
Topics pertaining to safety in STEM College laboratories with applications to industry, including chemical safety, electrical safety, planning for emergencies, etc.

STEM 1520 STEM First Year Orientation 2 s.h.
The course is designed to enhance the transition and adjustment of first-year students in the College of Science, Technology, Engineering, and Mathematics by exploring key concepts and issues that support student motivation and academic persistence.

STEM 1530 Sustainable Design in Practice 3 s.h.
Introduction to the visual and organizational components of two and three dimensional design, development of ideas and creative critical thinking as applied to tangible form. The course leads to an understanding of design as a verb and encourages inventiveness and collaboration to generate ideas.
Cross-Listed:as ART 1530.
Gen Ed: Environ Sustain 2024, Social and Pers Awareness 2024.

STEM 1530H Honors Sustainable Design in Practice 3 s.h.
Introduction to the visual and organizational components of two and three dimensional design, development of ideas and creative critical thinking as applied to tangible form. The course leads to an understanding of design as a verb and encourages inventiveness and collaboration to generate ideas.
Cross-Listed:as ART 1530.
Gen Ed: Environ Sustain 2024, Social and Pers Awareness 2024.

STEM 1551 Introduction to STEM Career Planning 1 s.h.
The purpose of this course is to provide STEM freshman and sophomore students with instruction in the career planning process directly related to the selection of a STEM college major and ultimately the world of work. Topics include a skills assessment, identification of professional/personal identification which include ethics, values, career interests, work and learning styles, and discussion of internships and co-ops related to majors and academic success. As the course progresses, STEM students will begin to develop areas of interests related to college majors and future career paths. Each student will complete a project to investigate college majors or occupations that are of interest to them. The student will begin to use the information to evaluate to what extent their career interests realistically match their skills and qualities. Each student as part of their course project will develop their career plan. One-hour lecture per week. Grading is ABC/NC.
Prereq.: Freshman/Sophomore standing.

STEM 2625 Natural Gas and Water Resources Seminar 1 s.h.
Guest lecture forum course designed to provide students with exposure to a broad range of topics and current research relevant to the petroleum industry and water resource issues. Course may be repeated.
Prereq.: GEOL 2620 (or concurrent).

STEM 3751 STEM Professional Career Planning 1 s.h.
The purpose of this course is to provide STEM junior and senior students with an opportunity to reflect on both academic and internship/co-op experiences in the context of planning for their future career. As the course progresses, the course will discuss and prepare the student for the transition from academia to the world of work. Topics include updating career documents (resume, cover letter, reference page, and thank you notes), building a transition plan, creating a financial plan/budget, and other items as they relate to the students' professional career planning. Each STEM student will complete a professional job-search plan which will allow them to be competitive in today's job market. Students will set goals, daily/weekly tasks and deadlines. The student will begin to use the information to evaluate their personal goals and to what extent their career interests realistically match their skills and qualities. One-hour lecture per week. Grading is ABC/NC.
Prereq.: Junior or Senior Standing.

STEM 3789 STEM Professional Practice 1-4 s.h.
Apply theory in professional practice experience overseen by appropriate working professional for employment at approved employer. Students see faculty advisor, submit professional practice proposal for approval and write final project paper. May be repeated for a maximum of 8 s.h.
Prereq.: at least sophomore standing, 2.00 GPA in STEM program, and special approval of the STEM Professional Practice Director in consultation with student's department chair.

STEM 3790 STEM Internship Experience 1-4 s.h.
Apply theory in professional practice experience overseen by working professional and STEM mentor for part-time assignment at approved employer. Internships offer the opportunity to "try out" a career while gaining relevant experience and professional connections. Students meet with a STEM Career, Internship & Co-op professional staff members and either a Department Chair/ Program Coordinator/designated faculty internship advisor, and receive professional practice training, submit assignment proposal for approval, file weekly work logs for faculty mentor review, make public presentation, and write final project paper.
Prereq.: Freshman or Sophomore standing, 2.00 GPA in STEM program, and approval by STEM Career's Internship & Co-op professional staff in consultation with student's Department Chair/ Program Coordinator/ designated faculty internship advisor; May be repeated up to two semesters.

STEM 3791 STEM Cooperative Education Experience 0 s.h.
A structured method of combining classroom-based learning with practical work experience which offers the student an opportunity to "test-drive" their major while gaining relevant experience and professional connections. The student will be supervised by a working professional and a STEM mentor for full-time assignment at an approved employer. Students meet with a STEM Career, Internship & Co-op professional staff members and either a Department Chair/ Program Coordinator/designated faculty co-op advisor, and submit assignment proposal for approval, file weekly work logs for faculty mentor review. Additionally, for the student to receive credit for the course, they must also complete an academic component consisting of research and reflection in the form of a written paper and presentation.
Prereq.: Freshman or Sophomore standing, 2.00 GPA in STEM program, and approval by STEM Career's Internship & Co-op professional staff in consultation with student's Department Chair/ Program Coordinator/ designated faculty internship advisor; May be repeated multiple semesters.

STEM 4890 STEM Internship 1-6 s.h.
Integrate theory and practice jointly supervised by working professional and STEM mentor for part-time assignment at approved employer. This academic experience encourages examination about and beyond daily professional related work, in order to broaden students' horizons intellectually, professionally and personally. Students meet with a STEM Career, Internship & Co-op professional staff member and either a Department Chair/ Program Coordinator/designated faculty internship advisor, submit assignment proposal for approval, and file weekly work logs for faculty mentor review. In order for the student to receive academic credit the student must also complete an academic component consisting of research and reflection in the form of a written paper and presentation. May be repeated up to two semesters.
Prereq.: Junior or Senior standing, 3.00 GPA in STEM program, 2.75 GPA overall, and approval by STEM Career, Internship & Co-op professional staff in consultation with student's Department Chair/ Program Coordinator/ designated faculty internship advisor.

STEM 4891 STEM Cooperative Education 0 s.h.
Integrating the student's academic curriculum with on-the-job experiences so that they can obtain a comprehensive education based on real-world experiences. The experiential experience is jointly supervised by working professionals and a STEM mentor for a full-time assignment at approved employer. Students meet with a STEM Career, Internship & Co-op professional staff member and either a Department Chair/ Program Coordinator/designated faculty co-op advisor, and submit assignment proposal for approval, file weekly work logs for faculty mentor review. Additionally, for the student to receive credit for the course, they must also complete an academic component consisting of research and reflection in the form of a written paper and presentation.
Prereq.: Junior or Senior standing, 3.00 GPA in a STEM program, 2.75 GPA overall, and approval by STEM Career's Internship & Co-op professional staff in consultation with student's Department Chair/ Program Coordinator/ designated faculty internship advisor; May be repeated multiple semesters.

STEM 4895 Senior Thesis 1-3 s.h.
Faculty-directed research for students pursuing practical research experience in a STEM-related discipline. May be repeated for up to 3 s.h.
Prereq.: Junior status; submission of an approved thesis proposal; permission of the STEM dean.

STEM 5890 STEM Graduate Internships 1-3 s.h.
The Graduate STEM Internship provides the student with a professional work experience or research experience in an organizational environment. The internship is an extension of the curriculum and provides meaningful experience related to the student's area of concentration. This academic experience encourages examination about and beyond daily professional related work, in order to broaden students' horizons intellectually, professionally and personally. Students will work with the STEM Careers, Internships & Co-op office and their designated Program Coordinator or Faculty Intern Advisor. The internship course is for credit and can be used to fulfill degree requirements and is charged at the regular tuition rate.
Prereq.: A student should at least be accepted into their Graduate program, a 3.0 overall GPA, and approval by the STEM Careers, Internships & Co-op office in consultation with the student's designated Department Chair/Program Coordinator/Faculty Intern Advisor.

STEM 6990 STEM Graduate Internships 1-4 s.h.
The Graduate STEM Internship provides the student with a professional work experience or research experience in an organizational environment. The internship is an extension of the curriculum and provides meaningful experience related to the student's area of concentration. This academic experience encourages examination about and beyond daily professional related work, in order to broaden students' horizons intellectually, professionally and personally. Students will work with the STEM Careers, Internships & Co-op office and their designated Program Coordinator or Faculty Intern Advisor. The internship course is for credit and can be used to fulfill degree requirements and is charged at the regular tuition rate.
Prereq.: A student should at least be accepted into their Graduate program, a 3.0 overall GPA, and approval by the STEM Careers, Internships & Co-op office in consultation with the student's designated Department Chair/Program Coordinator/Faculty Intern Advisor.