Civil Engineering MAJOR MAP

NDSU NORTH DAKOTA STATE UNIVERSITY

B.S.C.E.	Curriculum Guide				
	1 ST YEAR	2 ND YEAR	3 RD YEAR	4 TH OR FINAL YEAR	
Navigate coursework	Courses: Math, Chemistry, English, Engineering Mechanics, Skills for Success, Intro to Civil Engineering, Communication, and Humanities/Fine Art Elective. Understand the CEE curriculum and develop a long term plan.	Courses: Math, Physics, Surveying, Graphics, Engineering Mechanics, Mechanics of Materials, Evaluating Engineering Data, Geology, and Wellness Elective Explore double degree and minor opportunities.	Courses: Fluid Mechanics, Soil Mechanics, Thermodynamics, Engineering Ethics, Technical Writing Materials, History of Tech, Structural Analysis, Environmental, Water Resource, and Transportation. Prepare for the Fundamentals of Engineering (FE) exam.	· · · · · · · · · · · · · · · · · · ·	Where could I go after graduation? Our graduates design solutions for civil infrastructure. Engineering areas and typical applications include: • Environmental (treating and margine provide realid waster
DEVELOP SKILLS THROUGH EXPERIENCE	Visit the <u>Career Center</u> to learn about careers and write a <u>resume</u> , <u>cover letters</u> , and <u>thank you notes</u> . Join a <u>student organization</u> to develop professional and personal interests (see <u>NDSU Clubs</u> <u>Directory</u> for ideas).	Gain field experience through summer <u>internship</u> at agencies or companies. Consider an <u>on- or off-</u> <u>campus job</u> to expand experience.		Participate in regional and national student design competitions. Assess experiences you are lacking and fill in gaps with <u>volunteering, clubs, internships</u> –visit Career Center for help.	 managing water, solid waste, industrial & hazardous waste) Geotechnical (foundations, earthen and gravity dams) Structural (buildings, bridges and other structures) Transportation (highways, roads and railways, airports, pipelines)
SEEK OUT CONNECTIONS	Attend the <u>Career Fair</u> and learn what employers seek in students. Make friends with peers and develop study groups. Join a <u>CEE student organization.</u> Keep your <u>references</u> up-to-date about your job applications.	Participate in the student chapter of a professional association and regularly participate (consider AISES, ASCE, AWWA/WEF, EWB, ITE, MRS, and SWE). Developing networks and <u>networking skills.</u>	Consider a leadership position in a professional association/ club/ organization (e.g., concrete canoe, EWB, steel bridge, WEF). Participate in company and site visits organized by the department and the college.	Find a job by networking with professional mentors through NDSU Career Center and student chapters of professional organizations. Build strong bonds with peer students and <u>alumni</u> for long- term networking and friendships.	 Water Resources (water management and planning, municipal water supply) Traditional career paths involve: Planning, design, operations, project management and construction.
Understand Broader Perspectives	Explore and participate in social and community activities, and non-academic activities such as athletic and music programs. Visit professors during office hours, and ask about their research. Learn about the	Participate in campus and/ or college <u>volunteer</u> groups. Explore <u>study abroad</u> and faculty lead international travel programs. Attend seminars in different	Volunteer to work on K-12 education programs as mentors. Participate in <u>Engineers</u> <u>Without Borders</u> and other volunteer activities Participate in <u>study abroad</u> or	Pursue <u>career opportunities</u> that fulfill your professional and personal goals. If interested, apply to <u>graduate</u> <u>schools</u> for advanced degrees.	 Other careers include: Sales, research, teaching, architecture and law. Most graduates work in consulting and government agencies, industry and military. Many pursue advanced degrees.
GO! BUILD YOUR FUTURE	Struggling with career or program decisions? Go to orientation sessions, visit with <u>Academic Advising</u> , visit with the <u>Career Fairs</u> during the year.	departments and colleges. Create a <u>LinkedIn</u> profile, build out LinkedIn connections, develop 10-15 second <u>elevator pitch</u> on who you are, conduct <u>internship/job search</u> , develop a <u>list of references</u>	other international programs. Begin to streamline your career focus area. <u>Research</u> <u>education and experience</u> <u>requirements</u> for careers of interest. If needed, prepare to take a <u>graduate school</u> <u>entrance</u> examinations.	Apply for jobs, graduate school, or additional training. Get help from the Career Center with job searching, <u>resumes, letters,</u> interviews, grad school apps, etc.	Graduates become prepared for professional licensure after achieving required work experiences and passing liscensing/boards. *Some careers may require additional training Last Updated: 9/28/2018