

**Department: Chemical and Natural Gas Engineering**  
**Program: BSc Natural Gas Engineering**

<b>Skill Set</b>	<b>Professional Application</b>	<b>Delivery of Skill Set</b> Courses, extracurricular activities, etc. in which the skill set is introduced (I), reinforced (R), or mastered (M)
Core Skill: Verbal, written, and presentation Communications	All jobs require being Proficient in oral, written, and presentation communication skills. In any company usually there are many ideas for improvements and /or expansions. Engineers have to write proposals and defend them in order for the company to fund a given project among the many proposals.	Communication skills are developed in various courses through oral and written communications, especially in design and the many laboratories, which require technical formal reports for each experiment. Capstone design has also great emphasis on oral and written skills.
Core Skill: Team Player	In today's world no body works alone. In any project engineers have to work with others to achieve their outcomes. Most projects are multidisciplinary, which requires engineers from different disciplines work closely together.	In many courses assignments are given that require teamwork. This is especially true in the many laboratories that students take, and in capstone design. In these courses teams of up to four have to work together to get the project done.
Discipline-based Skill: Computer and Digital Technology	Many oil and gas operations such drilling rigs, and production operations have been equipped with smart instrumentations which are monitored and controlled remotely. All designs are using sophisticated software, which use fast and powerful computers. Engineers have to be able to work with these technologies.	Computer based assignments are given in many courses. Advanced simulation software are introduced and used in some classes. These software packages are taught and used in projects, especially in capstone design projects.
Discipline-based Skill: Oil and gas operations, field processing and design	Oil and gas production, field processing and design are the responsibility of natural gas and petroleum engineers. Supervising drilling rigs, monitoring, and production of oil and gas are examples of the responsibilities.	Major courses in junior and senior years cover all aspects of the oil and gas industry production and operations. Capstone design sequence courses bring nearly all learned major subject together. They have to design a major project in a team