

Department: EECS**Program: BS EE**

Skill Set	Professional Application	Delivery of Skill Set Courses, extracurricular activities, etc. in which the skill set is introduced (I), reinforced (R), or mastered (M)
An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics	Engineering design	(I) CSEN 2304, EEEN 2323, 2340 (R) EEEN 3212, 3321, 3324, 3325, 3333, 3334, 3449, 4342 (M) EEEN 4329, 4354, 4355, 4422
An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors	Engineering design	(I) GEEN 1201 (R) EEEN 4224 (M) EEEN 4252
An ability to communicate effectively with a range of audiences	Technical and non-technical presentations, and interactions with non-engineers	(I) communication elective (R) EEEN 4224 (M) EEEN 4252
An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts	Engineering design	(I) GEEN 1201 (R) EEEN 4224 (M) EEEN 4252
An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives	The majority of engineering projects are team-based	(I) GEEN 1201 (R) EEEN 4224 (M) EEEN 4252
An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions	Part of engineering design process	(I) EEEN 3212 (R) EEEN 4354, 4422 (M) EEEN 4252
An ability to acquire and apply new knowledge as needed, using appropriate learning strategies	Engineering technology changes rapidly, so life-long learning is needed to keep pace	(I) GEEN 1201 (R) EEEN 4224 (M) EEEN 4252