Engineering Projects in Community Service

EPCS 2100 Engineering Project in Community Service (1 semester credit hour) This is a design course in which multidisciplinary teams will solve engineering-based problems for the local community. Students will learn the complete design process, awareness of the customer in engineering design, active use of rapid prototyping tools, leadership and project management skills, communication skills, and more. This course will include lectures and instruction in UTDesign Studio. (1-1) S

<u>EPCS 2200</u> Engineering Projects in Community Service (2 semester credit hours) This is a design course in which multidisciplinary teams solve engineering/computing-based problems for the local community. Students will learn the complete design process, awareness of the customer in engineering design, active use of rapid prototyping tools, leadership, communication skills, and more. (1-2) S

EPCS 3100 Engineering Project in Community Service II (1 semester credit hour) Design course in which multidisciplinary teams solve engineering-based problems benefiting service organizations and the local community. Students will refine the skills and knowledge gained in ECSC 2100, by continue working on projects from previous semesters, and lecture topics will focus on leadership and project management skills, communication skills, and more. This course will include lectures and instruction in UTDesign Studio. May be repeated for credit (3 semester credit hours maximum). Lab fee of \$30 required. Prerequisite: EPCS 2100. (1-1) S

EPCS 3105 Engineering Projects in Community Service Abroad (1 semester credit hour) This is a study-abroad course in which students from multiple disciplines will learn human-centered design, understand customers' needs, understand how engineering design thinking can be used in combination with their disciplines to impact customers, and learn about the culture of the people/place they will travel to. The student's skills from their discipline and understanding of the people will be applied in a 2-week study abroad trip. (1-0) R

EPCS 3200 Engineering Projects in Community Service II (2 semester credit hours) Design course in which multidisciplinary teams solve engineering-based problems benefiting service organizations and the local community. Students will refine the skills and knowledge gained in ECSC 2200, by continuing to work on projects from previous semesters, and lecture topics will focus on leadership and project management skills, communication skills, and more. This course will include lectures and instruction in the UTDesign Studio. May be repeated for credit (6 semester credit hours maximum). Prerequisite: EPCS 2100 or EPCS 2200. (1-2) S