

# HUMAN-CENTERED TRANSPORTATION GRADUATE CERTIFICATE

[engineering.ucdenver.edu/civil-engineering/research-specialty-areas/geomatics-gis/](http://engineering.ucdenver.edu/civil-engineering/research-specialty-areas/geomatics-gis/)).

For general information contact the Department of Civil Engineering at [civilengineering@ucdenver.edu](mailto:civilengineering@ucdenver.edu).

## Introduction

Human-Centered Transportation engineering and planning is a multidisciplinary field that prioritizes the well-being and diverse needs of individuals and communities in the planning, design, and management of transportation systems. Professionals in this discipline strive to create safe, accessible, and efficient transportation networks that enhance all modes of transportation while also improving quality of life. They consciously integrate and promote elements such as accessibility, inclusivity, environmental sustainability, social equity, and human factors in their designs and decision-making processes. By focusing on the human experience, human-centered transportation engineering and planning seek to create resilient and adaptive systems that address the challenges of urbanization, technology integration, aging infrastructure, as well as diverse requirements and evolving societal expectations in the realm of transportation.

The Human-Centered Transportation graduate certificate is designed for CU Denver graduate students in engineering, architecture—or any other discipline—who want to explore the broad field of transportation as a possible career while also gaining knowledge and skills that will be useful in any walk of life. The curriculum spans across multiple disciplines and departments (civil engineering, urban & regional planning) and can be used as a stepping stone for entry into the transportation industry.

Contact the Department of Civil Engineering (<http://catalog.ucdenver.edu/cu-denver/graduate/schools-colleges-departments/college-engineering-design-computing/civil-engineering/>) for more information.

## Certificate Requirements

1. All courses need to be taken in residence CU Denver (no transfer hours).
2. A minimum 3.0 GPA is required for courses applied to this graduate certificate with no individual course grade below B- (2.7).

Code	Title	Hours
<b>Complete both of the following:</b>		
CVEN 5633	Sustainable Transportation Systems	3
URPL 6555	Transportation, Land Use, and the Environment	3
<b>Select two of the following:</b>		
CVEN 5611	Transportation Engineering Statistics	6
CVEN 5631	Transport Modeling and Big Data	
CVEN 5641	Transit System Planning and Design	
CVEN 5662	Transportation System Safety	
URPL 6565	Pedestrian & Bicycle Planning	
URPL 6299	Introduction to Smart Cities	
URPL 6600	Regional Growth and Equity	
<b>Total Hours</b>		<b>12</b>

For more information about geomatics and geographic information systems at CU Denver, visit our research page (<https://>