

Pavement Materials — Graduate Certificate

This graduate certificate prepares individuals to advance an engineer's knowledge and skills in the rapidly changing field of pavement materials. Engineers in the pavement materials area are responsible for roadway design, construction, maintenance, and rehabilitation of pavements. Pavements, a primary component of transportation infrastructure, are engineered with a strong understanding of materials behavior, mechanistic principles, and construction details.

The certificate requires two required and two elective graduate courses (12 credit hours) from the following:

Code	Title	Hours
Required (6 hours)		
CIVL 6820	Design and Production of Asphalt Paving Mixtures (Required)	3
CIVL 7870	Advanced Characterization of Pavement Materials (Required - prerequisite CIVL 6820)	3
Electives (6 hours)		
CIVL 6810	Pavement Design and Construction	3
CIVL 7820	Advanced Pavement Design and Rehabilitation (Prerequisite CIVL 6810)	3
CIVL 7840	Pavement Management and Rehabilitation	3
CIVL 7860	Pavement Construction	3
CIVL 6630	Advanced Concrete Materials	3
CIVL 6970	Civil Engineering Special Topics (e.g., Asphalt Binders)	3
CIVL 7970	Special Topics in Civil Engineering	3
Total Hours		12