

TO: The Engineering Faculty
FROM: The Faculty of the Lyles School of Civil Engineering
RE: New graduate certificate from the College of Engineering

The Faculty of the Lyles School of Civil Engineering has approved the following new graduate certificate. This action is now submitted to the Engineering Faculty with a recommendation for approval.

TITLE:

Smart Transportation

Description: The 9-credit certificate in Smart Transportation offers a flexible, distance-based entry point for professional engineers, technologists and policy makers to obtain critical skills in data science techniques and methods as applied to transportation systems. It's expected that additional courses will be added as options for this certificate in the future. The student can take multiple courses to meet the certificate requirements.

CE56401 - Data Science for Smart Cities

CE56901 - Smart Logistics

CE56601 - Network Models for Connected and Autonomous Vehicles

RATIONALE:

Transportation systems have rapidly changed in the last 15 years with electrification, automation and connectivity. Investments in these technologies have reshaped the transportation industry leading to significant new job opportunities and trillions of dollars of investment from both the government and private sector. Many of these recent technologies require workforce to have a firm background in data science and AI. The graduate certificate program on Smart Transportation will offer a set of courses to provide multiple entry points for engineers, technologists and policy makers at the entry level or professional level to upgrade their expertise in Smart Transportation. The certificate program will offer a standalone, flexible and efficient path to obtain a formal graduate credential.

Head/Director of the Lyles School of Civil Engineering

Link to Curriculog entry: <https://purdue.curriculog.com/proposal:27516/form>