

FUEL SCIENCE (FSC)

FSC 503: Analytical Methods in Fuel Science

3 Credits

Analytical and characterization methods used in fuel science and applied to fuel processing, combustion, and conversion are emphasized. F SC 503 Analytical Methods in Fuel Science (3)The course will focus on the analytical methods that are used in fuel science for the characterization of fuels and their products during combustion, conversion, processing, and utilization. Students will be exposed to the theory and practical applications of such analytical methods as chromatography and spectrometry. Methods for the analysis of the data obtained with these analytical techniques will be discussed. In particular, the potential for interference and confounding results and techniques for establishing reproducibility and error bars in the experimental data and results will be explored.

Prerequisite: EGEE 430 , F SC 431 or equivalent

FSC 504: Problems in Fuels Engineering

3 Credits

A problem-based, active learning course on the utilization of fossil fuels and renewable energy.

Prerequisite: EGEE 430 and F SC 431

FSC 506: Carbon Reactions

3 Credits

Current approaches to heterogeneous reactions in combustion and gasification of carbonaceous solids, including those derived from coal and petroleum sources.

Prerequisite: CHEM 452

FSC 596: Individual Studies

1-9 Credits/Maximum of 9

Creative projects, including nonthesis research, which are supervised on an individual basis and which fall outside the scope of formal courses.

FSC 600: Thesis Research

1-15 Credits/Maximum of 999

No description.

FSC 601: Ph.D. Dissertation Full-Time

0 Credits/Maximum of 999

No description.