

Renewable Electric Energy Systems (Certificate)

The Graduate Certificate in Renewable Electric Energy Systems provides graduate students with the opportunity to develop expertise in renewable electric energy systems and advanced electric power grid technology in addition to their major area of graduate study.

Admissions

Applicants with appropriate background must meet one of the three following requirements:

- be a graduate of an accredited four-year college or university, and have a GPA of at least 3.0 on a 4-point scale in their last 60 credit hours of undergraduate study;
- be a degree student in good standing in an NC State University graduate program; or
- have a Master's degree in a related field of study.

A student may obtain more than one graduate certificate in a different field. Each certificate must have at least nine (9) credit hours that are unique to it.

Requirements

The Graduate Certificate in Renewable Electric Energy Systems requires a minimum of 12 hours, including one 3-hour core course and 9 credit hours of electives to be selected from a list that contains relevant courses for the certificate. Students must maintain a minimum overall GPA of B (3.0).

Plan Requirements

| Code | Title | Hours | Counts towards |
|-------------------------------|---|-------|----------------|
| Required Courses | | | |
| ECE 552 | Renewable Electric Energy Systems | 3 | |
| Select three of the following | | 9 | |
| Advanced Courses: | | | |
| ECE 550 | Power System Operation and Control | | |
| ECE 581 | Electric Power System Protection | | |
| ECE 534 | Power Electronics | | |
| ECE 551 | Smart Electric Power Distribution Systems | | |
| ECE 535 | Design of Electromechanical Systems | | |

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| ECE 585 | The Business of the Electric Utility Industry |
| ECE 589 | Solid State Solar and Thermal Energy Harvesting |
| ECE 736 | Power System Stability and Control |

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| Total Hours | 12 |
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