

Power Up: High Tech Online

Executive Summary

Florence-Darlington Technical College (FDTC) is developing and implementing an innovative educational and recruitment program, "*Power Up: High Tech Online*," to support the regional nuclear power industry. A collaborative planning process has resulted in a shared commitment to the creation of a Nuclear Engineering Technology (NET) program at FDTC. This project will begin transforming the way the curriculum will be delivered from the traditional lecture with a separate laboratory to a blended, project-based lecture/laboratory that is technologically enhanced and adapted for online delivery to better serve the needs of students and industry, thus helping ensure sustainability of the program.

Specific strategies for recruitment and retention of females will be integrated into the course. The FDTC "*Power Up: High Tech Online*" will make the NET program concentration more accessible and students more successful, thereby increasing the quantity, quality, and diversity of qualified candidates for nuclear energy plant positions.

Objectives include: 1) improving one physics course that is integral to the NET concentration by blending the content lectures and laboratory experiences into an integrated project-based learning experience; 2) developing exemplary teaching materials and classroom activities that provide real-world relevance and just-in-time learning experiences; 3) formatting the physics course for full online delivery, which will then allow the course to be delivered as a hybrid course as well; and 4) making available to public institutions and students nationally the developed online physics course for the NET concentration.

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