RFID INFOSEC for Nation-Wide Engineering Education

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http://rfidsecurity.uark.edu
Problem

- Radio frequency identification (RFID) information systems security (INFOSEC) education is rare
- Students experience only narrowly focused layers of a RFID system

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Goal

- Improve quality of education nation-wide in RFID INFOSEC

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Objectives

- Understand layers in a RFID system
- Know security threats
- Understand techniques for mitigating threats
- Perform risk analysis
- Configure and use RFID system
- Understand privacy concerns

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RFID System Layers

- Application layer
- Middleware layer
- Network layer
- Reader layer
- Air interface layer
- Tag layer
Activities

- Develop lecture notes, example problems, field experiences and laboratory experiments to introduce tag, air interface, reader, network, middleware, and application layers in a RFID system.
- Develop lecture notes and example problems to explain threats and mitigation techniques to a RFID system.
- Develop lecture notes and example problems to explain how to perform a risk analysis on a RFID system.
- Develop a project website. ([http://rfidsecurity.uark.edu](http://rfidsecurity.uark.edu))
- Assess the developed materials using an external evaluator from the College of Education and Health Professions.
- Request feedback by having the developed materials reviewed externally by RFID experts.
- Disseminate the developed materials nation-wide to faculty members at other institutions through journal articles, conference proceedings, presentations, and list servers.
- Showcase the materials at the UA RFID Research Center ([http://itri.uark.edu/RFID/](http://itri.uark.edu/RFID/)).
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