

**WILMINGTON UNIVERSITY
COLLEGE OF TECHNOLOGY
MASTERS OF SCIENCE - INFORMATION SYSTEMS TECHNOLOGIES
BASIC COURSE INFORMATION**

COURSE TITLE: Security issues concerning RFID (Radio Frequency Identification System) Technology Applications

COURSE NUMBER: SEC 6020

All courses are open to students from all divisions. Only where a course is preceded by an introduction course is there a need to observe a prerequisite. However, students might benefit from prior knowledge on some of the courses, and this is given as the content found in your course catalogue by course code.

I. RATIONALE

The course is designed to focus on how RFID can be integrated into business processes to solve common problems in the business community.

II. MAJOR INSTRUCTIONAL GOALS

GOAL A: Learn the fundamentals of RFID technology including which tools should be used for a specific application and why

Learning Outcomes: The student will be able to:

- A-1 Describe the essential components of an RFID system
- A-2 Identify the differences between Active and Passive tags
- A-3 Demonstrate knowledge of underlying physical principles and frequency of operations of various RFID systems

GOAL B: Gain an understanding of recent advances in RFID technology

Learning Outcome: The students will be able to:

- B-1 Describe common RFID hardware and associated frequency ranges along with current security practices in place at the hardware level
- B-2 Identify advances in RFID tag design and security practices
- B-3 Describe software necessary for data capture and/or process automation along with current security practices

GOAL C: Understand the business case for RFID

Learning Outcomes: The student will be able to:

- C-1 Estimate costs, benefits and savings from the deployment of an RFID project
- C-2 Use financial metrics such as ROI to detail the expectations of an RFID project

GOAL D: Become familiar with industry standards associated with RFID

Learning Outcomes: The student will be able to:

- D-1 Recognize and define standards in use within the RFID community
- D-2 Develop an understanding of how organization mandates can influence standards
- D-3 Define interrelationships among standards bodies involved with RFID

Goal E: Understand the role of RFID in reaching business objectives

Learning Outcomes: The student will be able to:

- E-1 Describe the significance of using RFID to achieve alignment with external partners, business units, and customers
- E-2 Differentiate between effective business RFID strategies based on a company's vision, strategic direction, and mission statements

Goal F: Become familiar with information retrieval and research methods

Learning Outcomes: The student will be able to:

- F-1 Access and retrieve information from a variety of electronic databases and other reliable information resources on the World Wide Web (WWW)
- F-2 Construct documented support for group projects and individual research using the retrieved information from the WWW
- F-3 Use library resources to support group projects and individual research

III. METHODOLOGY

Teaching method will include a combination of discussions, readings, and individual research papers. A cooperative and participative learning strategy will be deployed with every expectation that the student will contribute heavily, in a self-directed action-learning mode, to this educational experience. Students should anticipate that assignments and this syllabus will be adjusted to match the pace of the course, the class size, and to meet the needs of individual students.

This is a "Blackboard-Enhanced" course. Students will be enrolled in Blackboard-enabled online activities that accompany the service, and will be expected to regularly participate in assigned activities, which may be moderated by the instructor.

IV. CLASS PARTICIPATION

Students are expected to attend class and participate actively and in a positive way. Questions and relevant observations are encouraged and enrich the experience of the entire class.

Computers in the classrooms are intended to be used as tools to enhance the students' learning experience. Instant messaging, gaming, emailing, and surfing the web are distractions to the student, the surrounding students, and the instructor and constitute

inappropriate behavior. Students are ethically obliged to avoid these and similar practices.

V. EVALUATION AND ASSIGNMENTS

Both group research activities and the research paper will be graded by rubrics; which are located in Blackboard (BB). Late assignments will be lowered one rubric level. Rubric scores will be converted (conversion table is also located in BB) to a numeric equivalent and assigned a grade.

Note: A cooperative and participative learning strategy will be deployed with every expectation that the student will contribute heavily, in a self-directed action-learning mode, to this educational experience. Students should anticipate that assignments, and this syllabus, will be adjusted to match the pace of the course, the class size, and to meet the needs of individual students.