



Program Description:

The Radio Frequency Identification (RFID) Certificate program is a 10-month certificate specifically designed for individuals with a technical background. The purpose of the program is to train specialists for employment in RFID. Many industries, such as retail, transportation, healthcare and government plan to use RFID in material management, and process and quality improvement. The program is ideal for individuals with a basic knowledge in technology and an interest in RFID or other wireless technology. Those completing the RFID Certificate will have a concentration of courses in technical skills and will be qualified to perform many RFID functions and/or continue studies in the Associate in Science degree program. Coursework addresses RFID technologies, computer and network security, computer interfacing, networking, and RFID systems. Employability skills required in industry, and crucial to job placement and career success, are emphasized throughout the program. Hands-on training will be provided in a modern RFID laboratory on campus. The program features an RFID practicum in which students will apply classroom knowledge in a hands-on environment and gain real-world experience.

Career and Transfer Outlook:

Graduates of the program will combine their IT knowledge with RFID expertise for employment in research and development, field equipment installation and maintenance, and computer customer-support positions. Graduates can anticipate working in computer-, software- and networking-related industries or other industries deploying RFID technology. Some examples of positions that MCC graduates from other related programs have held in the past include electronics, software, network, test and customer-service technicians. The RFID Certificate will expand potential opportunities for graduates into a new and growing field. The certificate program is appropriate for incumbent workers interested in improving their skills, as well as displaced workers.

Program Outcomes:

Graduates of the RFID Certificate program are prepared to:

- Test reader and tag positioning and evaluate the effects of RF interference, reflection and absorption on performance;
- Perform a site survey and analyze the pertinent characteristics that impact a RFID system installation;
- Design a RFID system: configure equipment and middleware, program tags and a database to address system functional requirements, site characteristics and information security;
- Apply ethical principles to analyze business cases that illustrate issues involving RFID;
- Work effectively in teams;
- Communicate effectively, both verbally and in writing.

RADIO FREQUENCY IDENTIFICATION (RFID) • Certificate

BEDFORD CAMPUS AND LOWELL CAMPUS - DAY AND EVENING

✓	COURSE #	COURSE TITLE	CREDITS	PREREQUISITES
—	NST 171	Computer Interfacing	3	NST 101, NST 121, and completion of or current enrollment in NST 165
—	NST 241	Digital Communications	3	NST 101, NST 111, and completion of TMA 096 with a grade of C or better
—	NST 281	Computer Network Security	3	NST 181 or permission of instructor
—	RFD 151	Introduction to RFID	3	NST 101, NST 111, NST 121 or equivalent experience with permission of instructor
—	RFD 161	RFID Systems Programming	4	Completion or concurrent enrollment in RFD 151, completion of NST 101, NST 111, NST 121 or equivalent experiential knowledge and permission of instructor. Enrollment in or completion of NST 181 or equivalent experiential knowledge and permission of instructor.
—	RFD 201	RFID Systems	3	RFD 151, RFD 161.
—	RFD 211	RFID Standards & Certification	3	RFD 151, RFD 161. Corequisite RFD 201
—	RFD 250	RFID Practicum	3	Permission of program coordinator
—	PHY 110	Physics for Networking Systems	<u>3</u>	Grade of C or better in NST 101, NST 111 and TMA 096
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Helpful Hints:

Applicants for the RFID Certificate program must have a solid background in computer, electronic or information technologies. The ideal candidate must have one to three years of work experience in a technical environment where the candidate performed computer systems, computer networking and/or other computer technology-related tasks. A+ and Network+ certification are desirable.

Admission Prerequisites and Information

- NST 101 Principles of Electric Circuits 4
- NST 111 Digital Systems Fundamentals 3
- NST 121 Computer System Fundamentals (or A+ Certification) 3
- NST 181 Networking I (or Network+ Certification) 3

Applicants who have not completed the above prerequisites will be considered for admission provided they have one to three years of experience in a technical field and basic knowledge of digital and analog circuits, computer systems and computer networking. A+ and Network+ certification demonstrates the required skill level for acceptance. Students who attended technical programs must submit transcripts reflecting the required technical skill level. In addition, applicants must complete the Middlesex college placement test and earn minimum test scores of ENG 071, MAT 080 and a reading test score of 68.

Those applying to the RFID certificate program without completion of the prerequisite courses must submit a resume detailing one to three years of work experience in a technical field and official proof of training certificates earned. Program readiness for applicants in this category is determined by the Middlesex Admission Office, in consultation with the Department Chairperson.

Note: It is essential for students to work closely with their academic advisor for proper course sequencing.

Individual RFID courses may be taken based on the student's career needs.