Graduate Certificate in RF Systems Engineering

The objective of the RF Systems Engineering graduate certificate program will be for students to understand the applications of signal processing for filtering, estimating, and detecting signals in a high-interference environment; the design and operation of microwave systems, including receiver and transmitter architecture, as well as antenna performance and function; the theory and application of transmitting digital information via electromagnetic propagation; understand the function of microwave components and transmission line theory; understand the propagation of both bounded and unbounded electromagnetic waves. The certificate program offers an opportunity for industrial practitioners to enhance RF Systems The objective of the certificate program will be for students to understand the applications of signal processing for filtering, estimating, and detecting signals in a high-interference environment; the design and operation of microwave systems, including receiver and transmitter architecture, as well as antenna performance and function; the theory and application of transmitting digital information via electromagnetic propagation; understand the function of microwave components and transmission line theory; understand the propagation of both bounded and unbounded electromagnetic waves. The certificate program offers an opportunity for industrial practitioners to enhance RF Systems Engineering skills without having to apply for and complete a Master's of Electrical Engineering degree.

Admission requirements:

BS degree in electrical engineering from an ABET accredited program with a GPA of 3.0 or higher.

Three letters of reference.

Applicants must complete an application to Graduate Studies (http://graduate.ku.edu/ku-graduate-application) for admission into the certificate program and submit an application fee along with the following materials:

- Copy of Official Transcripts
- Statement of Purpose
- Resume
- Three Letters of Recommendation

*Unless the applicant's native language is English or the applicant has received a baccalaureate degree or higher from an accredited U.S. institution of higher education, he or she must meet the department's standard for the Test of English as a Foreign Language (TOEFL).

To complete the program and obtain the certificate, four (4) of the following courses should be completed:

Required

EECS 622 Radio Transmission Systems (Fall)

EECS 721 Antennas (Spring)

EECS 723 Microwave Engineering (Spring)

Elective (choose one)

EECS 713 High-Speed Digital Circuit Design (Fall)

EECS 725 Intro to Radar

EECS 823 Microwave Remote Sensing

The completion requirements of the graduate certificate in RF systems engineering include: (a) students must have a GPA of 3.0 or better on the required courses; (b) the minimum grade for any course to be applied toward the certificate is a grade of C; and (c) no credits may be transferred from another institution for this certificate.

Note: The completion of the graduate certificate program does not lead to automatic admission to the MSEE program. However, for students who are able to gain admission to the MSEE program within five years of earning the certificate, all certificate course work completed with a grade B or higher will be recognized through a combination of the following methods. For students admitted to the MSEE program before completion of the certificate, all certificate course work may also be applied to the degree-granting program. For students admitted to the MSEE program after completing the certificate, departments will use a combination of transfer credit and degree requirement waivers to recognize the 12 hours earned through the certificate program. At the discretion of the degree-granting program and the Graduate Division, up to nine (9) credit hours may be transferred to the degree program. For the purposes of the MSEE program, completion of the graduate certificate in RF Systems Engineering within five years, with a grade of B or better, shall also be recognized as exceptional preparation which warrants the waiver of course work completed during the certificate program and not transferred. Please see the M.A. & M.S. Degrees and Graduate Credit policies for more information.