

# MASTERS OF SCIENCE IN ELECTRICAL ENGINEERING DEPARTMENT OF ELECTRICAL ENGINEERING PRAIRIE VIEW A&M UNIVERSITY



# MASTERS OF SCIENCE DEGREE IN ELECTRICAL ENGINEERING

The Department of Electrical Engineering at Prairie View A&M University offers graduate courses leading to a Master of Science Degree in Electrical Engineering (MSEE)

The primary objectives of the Master of Science Degree in Electrical Engineering are:

- To produce graduate students who have advanced training in one of the following areas of Electrical Engineering: Microelectronics, Computer Engineering, Telecommunications & Signal Processing.
- To produce a significant number of graduates with experience in research.
- To prepare outstanding students to pursue doctoral degrees.
- To produce post-graduates who have the technical, cognitive and interpersonal skills that will allow them to secure employment within the State of Texas and the Nation.
- To enhance the students' skills in specialized areas and provide opportunities for students to pursue careers in private industry, governmental research laboratories and design facilities.

#### ADMISSION REQUIREMENTS

- Submission of a completed application for admission to the Graduate School.
- An undergraduate engineering degree from and ABET (or equivalent) accredited program.
- An official transcript of all college work(undergraduate and graduate) from the registrar of each college previously attended.
- A minimum undergraduate cumulative grade point average(GPA) of 3.0 on a 4.0 scale for regular graduate degree status.
- A minimum of a 2.75 GPA on a 4.0 scale for provisional graduate student status.
- Three letters of recommendation from persons in the field of the applicants' academic major or area of concentration.
- Have GRE verbal and quantitative scores in the higher percentiles.

Recommendation for admission by the Department Head of Electrical Engineering, and formal acceptance by the Dean of the College of Engineering.

#### **DEGREE REQUIREMENTS**

The MSEE program has a thesis and a non-thesis option. The MSEE program requires the completion of 30 hours with a thesis option, or the completion 33 hours under a non-thesis option with a project.

## Credit Hours for Thesis and Non-Thesis option

		Thesis	Non-Thesis
•	College Core Courses	6	6
•	EE required courses	6	9
•	Designated Electives	12	15
	(Two must be in EE)		
•	Thesis/Project	6	3
	Total	30	33

## **College of Engineering Core Courses**

GNEG 5033 Probability and Statistics

GNEG 5063 Engineering Analysis I

GNEG 5073 Engineering Analysis II

GNEG 5133 Numerical Analysis

(Two courses from the College core are required)

#### **ELECTRICAL ENGINEERING COURSES**

# **Computer Engineering Track**

ELEG 6103 Advanced Computer Systems Design

ELEG 6113 Computer Architecture & Advanced Logic Design

ELEG 6123 The Internet: Design and Implementation

ELEG 6133 Fault Tolerant Computing

ELEG 6143 Modeling and Perf. of Computer Arch.

ELEG 6153 Information Networks

#### **Microelectronics Track**

ELEG 6403 Solid State Devices

ELEG 6413 Integrated Circuits Fabrication

ELEG 6423 VLSI and ULSI Design

ELEG 6433 Semiconductor Devices

ELEG 6543 Advanced Solid State

ELEG 6553 Advanced Mixed Signal

# Communications/ and Signal Processing Track

ELEG 6203 Wireless Networks

ELEG 6213 Digital Communications

ELEG 6223 Network Management

ELEG 6243 Advanced Broadband Communications Systems

ELEG 6323 DSP Hardware Systems Design

ELEG 6333 Wavelets and Their Applications

ELEG 6353 Advanced Digital Signal Processing

#### **Other Courses**

ELEG 5913 Engineering Project

ELEG 5966 Research

ELEG 5996 Thesis

For an application contact

Graduate Admissions
P. O. Box 2355

Prairie View, Texas 77446

Phone: Electrical Engineering (936) 857-3923 Fax: Electrical Engineering (936) 857-4780

e-mail: ee grad@pvamu.edu

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For information on Program

Dept. of Electrical Engineering

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