

## West Lafayette Master's Degree in Electrical Engineering

### MASTER'S DEGREE DESIGNATION FOR ENGINEERING GRADUATE STUDENTS WITH NON-ENGINEERING BACCALAUREATE DEGREES

#### POLICY

A student who holds a bachelor's degree in a non-engineering field and wishes to pursue advanced studies in a CEE master's program will, upon successful completion of an approved program of study, be awarded the Master of Science (MS) degree.

Exception: A student with a non-engineering bachelor's degree who wishes to pursue advanced studies in the field of electrical engineering may be awarded the Master of Science in Engineering (MSE) degree provided he/she meets the following requirements:

1. Graduating grade point average of at least 3.00 (on a scale of 4.00) or equivalent from a baccalaureate degree program with a strong emphasis in engineering, mathematics or the physical sciences.

2. Completion of engineering calculus sequence:

MATH 163 & 164	Plane Geometry and Calculus I & II – 10 credits
MATH 261	Multivariate Calculus – 4 credits
MATH 264	Differential Equations – 3 credits
MATH 265	Linear Algebra – 3 credits

*two senior-level  
ECET can  
count.*

3. Complete the following undergraduate EE courses or equivalent (equivalence of courses is to be determined by the Graduate Coordinator).

EE 201	Linear Circuit Analysis I - 3 credits
EE 301	Signals and Systems – 3 credits
EE 302	Probabilistic Methods in Electrical Engineering – 3 credits

One of the following two courses:

EE 275	Semiconductor Devices – 3 credits
EE 311	Electric and Magnetic Fields – 3 credits

Two of the following four courses:

EE 321	Principles of Electromechanical Energy Conversion – 3 credits
EE 335	Introduction to Electronics Analysis and Design – 3 credits
EE 370	Digital Logic Design – 3 credits
EE 382	Feedback System Analysis and Design – 3 credits

One of the following five courses:

EE 330	Digital Systems Software – 3 credits
EE 371	Microprocessor Systems – 3 credits
EE 448	Introduction to Communication Theory – 3 credits
EE 464	Design Digital Computers – 3 credits
EE 468	Design of Computer Systems Programs – 3 credits

One undergraduate EE lab.

4. The student must achieve a cumulative grade point average of 3.00/4.00 or above in the courses listed in items 2 and 3.