

**Electrical Engineering Graduate Program
Electric Energy Systems (EES) Concentration
Degree Plan**

12-7-2016

Name: _____ Student number: _____

An EE graduate student interested in a Master Degree EES concentration must submit this EES concentration degree program plan, to the ECE office, according to the deadlines and course requirements listed on the information page on the back of this form. Your academic advisor must approve and sign this form prior to submission. See the information page on the back for a discussion on establishing your academic advisor. Changes to your degree plan can be made by submitting an updated form, approved by your academic advisor.

Below, list Area, Breadth and Independent Study & Thesis courses in the order in which you plan to take them, making note of prerequisites. See the course lists on the back of this form.

ECE office fax: 610-519-4436. ECE office phone: 610-519-4970.

Semester	Year	Course	Name	Prerequisite	C	MA	A	B	IT
1. F S M	_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. F S M	_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. F S M	_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. F S M	_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. F S M	_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. F S M	_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. F S M	_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. F S M	_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. F S M	_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. F S M	_____	_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Total number of courses:

<input type="checkbox"/> Thesis option	3	0	4	0	3
<input type="checkbox"/> Non thesis w/independent study	3	0	6	0	1
<input type="checkbox"/> Non thesis w/o independent study	3	0	7	0	0

Academic Adviser Signature: _____ Date: _____

Abbreviations:

F	Fall Semester	MA	Math Course Requirement
S	Spring Semester	A	Area Course Electives
M	Summer Semester	B	Breadth Course Electives
C	Core Course Requirements	IT	Independent Study & Thesis

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Information page:

Core Course Requirements: ECE 7805 Electric Machinery, ECE 7810 Power System Modeling and ECE 8320 Control Systems Engineering

Area Courses: ECE 7000 Renewable Energy Policy, ECE 7500 Fund. Solid State Electronics, ECE 7580 Intro to Power Electronics, ECE 7800 Renewable Energy Systems, ECE 7830 Intro to Electric Drives, EGR 7850 Electro Chemical Power Sources, EGR 8302 Digital Control, ECE 8580 Power Electronics, ECE 8805 Advanced Electric Machinery, ECE 8815 Smart Energy Systems, ECE 8820 Power System Dynamics, ECE 8830 Advanced Electric Drives.

Approved Electives: ECE 7428 Computer Communication Networks, ECE 7525 Electrical Measurements and Conversion, EGR 7800 Solar Thermal Energy Conversion, ECE 8476 Cryptography & Network Security

Academic Advisor: Each student who selected the EES concentration must work with his/her academic advisor (for a research assistants his/her research advisor) to prepare and submit an approved degree plan. The academic advisor must be a full time faculty member who teaches course in the EES area. Dr. Pritpal Singh is the assigned Academic Advisor for the EES concentration. Any student interested in the EES concentration is encouraged to meet with him until he/she has established a permanent academic advisor.

Full time ECE faculty who regularly serve as academic advisors for the SPC concentration are:

<u>Name</u>	<u>Telephone</u>	<u>E-mail</u>	<u>Office</u>
Pritpal Singh	7378	pritspal.singh@villanova.edu	T411B
Nisha Kondrath	8143	nisha.kondrath@villanova.edu	T405A
Stephen Konyk	4983	stephen.konyk@villanova.edu	T440

Concentration Requirements: the degree plan must meet general departmental requirements for graduation, and the specific EES concentration requirements detailed above and on the EES concentration page.

The following are deadlines for the EES concentration degree plan submissions: full and part time MSEE student – by midterm of his/her first semester; 5 year BS/MS Students_ before registering for any course to be counted towards the MSEE degree.