

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING

Curriculum Structure

The PhD Program (Total 36 Cr Hrs)

Curriculum Components	Total Courses	Total Cr Hrs
Core Courses	3	9
Elective Courses	5	15
Thesis	1	12
Total	10	36

Thesis Requirements

Thesis course	
Course ID	Course Title
ELEC 699	Master Thesis

Major Core Courses

Core courses	
Course ID	Course Title
GENG 602	Applied Research Methodology
GENG 606	Graduate Seminar
Core Supporting Requirements sub-package	
GENG 603	Advanced Numerical Analysis
GENG 604	Project Management
GENG 605	Applied Statistics Analysis
GENG 607	Optimization Methods

Major Elective Courses

Elective courses	
Course ID	Course Title
ELEC 601	Advanced Topics in Electrical Engineering
ELEC 602	Advanced Energy Distribution Systems
ELEC 603	Advanced Topics in Electric Power System Engineering
ELEC 604	Advanced Wireless Communication
ELEC 605	Bioinstrumentation
ELEC 653	Advanced Topics in Power Electronics
ELEC 654	Advanced Topics in Machines and Drives
ELEC 655	Advanced Topics in Control System Theory
ELEC 656	Advanced Digital Communication
ELEC 657	Biomedical Signal Processing & Diagnostics
ELEC 658	Medical Imaging
ELEC 659	Communication and Information Theory
ELEC 661	Power System Dynamics & Control
ELEC 665	Statistical Signal Processing
ELEC 662	Advanced Digital Signal Processing

Study Plan

First Year

First Semester (9 Cr Hrs)			
Term	Course #	Course Title	Cr Hrs
Fall	GENG 602	Applied Research Methodology	3
	GENG XXX	Major Core Course I	3
	ELEC XXX	Technical Elective	3
Total			9
Second Semester (9 Cr Hrs)			
Term	Course #	Course Title	Cr Hrs
Spring	GENG XXX	Major Core Course II	3
	GENG 606	Graduate Seminar	0
	ELEC XXX	Technical Elective II	3
	ELEC XXX	Technical Elective III	3
Total			9

Second Year

Third Semester (9 Cr Hrs)			
Term	Course #	Course Title	Cr Hrs
Fall	ELEC XXX	Technical Elective IV	3
	ELEC 699	Master Thesis	6
Total			9
Fourth Semester (9 Cr Hrs)			
Term	Course #	Course Title	Cr Hrs
Spring	ELEC XXX	Technical Elective V	3
	ELEC 699	Master Thesis	6
Total			9

