Appendix F: Sample Program of Studies for the Different Tr	acks

F-1

# Sample study plan for a student entering with a BS to the Control Systems Track

Courses INEL 6001 INEL 6078 INEL 5505 INEL 8998	First Semester Feedback Control Systems Estimation, Detection, and Stochastic Processes Linear Systems Analysis Doctoral Seminar	Credit	3 3 3 0 9
Courses INEL 6000 INEL 6059 MATE 6025 INEL 8998	Second Semester Nonlinear Control Systems Intelligent Systems and Control Numerical Optimization Doctoral Seminar	Credit	s 3 3 0 9
Courses INEL 6048 INEL 8595 MATE 6025 INEL 8998	Third Semester Digital Control Systems Advanced Topics in Control Systems Numerical Linear Algebra Doctoral Seminar	Credit:	s 3 3 0 6
Courses INEL 8595  INEL 8998	Fourth Semester Advanced Topics in Control Systems Elective Course Elective Course Doctoral Seminar	Credit	s 3 3 0 9
Qualifying Exam			
Courses INEL 8999 INEL 8998	Fifth Semester Doctoral Dissertation Doctoral Seminar	Credit	s 3 0 3
Courses INEL 8999 INEL 8998	Sixth Semester Doctoral Dissertation Doctoral Seminar	Credit	s 3 0 3
Courses INEL 8999 INEL 8998	Seventh Semester Doctoral Dissertation Doctoral Seminar	Credits Total	s 3 0 3
Courses INEL 8999 INEL 8998	Eight Semester Doctoral Dissertation Doctoral Seminar	Credits Total	s 3 1 4

#### Sample study plan for a student entering with a BS to the Electronics Track

Courses INEL 6055 INEL 6080 INEL 6009 INEL 8998	First Semester Solid State Electronics VLSI Systems Design Computer Architecture Doctoral Seminar	Credit	3 3 3 0 9
Courses INEL 6075 INEL 6005 MATE 6026 INEL 8998	Second Semester Integrated Circuits Fabrication Anaylsis, Design and Parasitic Effects of Integrated Circuits Numerical Optimization Doctoral Seminar	Credit:	s 3 3 3 0 9
Courses INEL 6048 INEL 8295 MATE 6025 INEL 8998	Third Semester Advanced Microprocessor Interfacing Advanced Topics in Electronics Numerical Linear Algebra Doctoral Seminar	Credits Total	3 3 3 0 6
Courses INEL 8295 INEL 8998  Qualifying Exam	Fourth Semester Advanced Topics in Electronics Elective Course Elective Course Doctoral Seminar	Credit:	3 3 3 0 9
Courses INEL 8999 INEL 8998	Fifth Semester Doctoral Dissertation Doctoral Seminar	Credit:	s 3 0 3
Courses INEL 8999 INEL 8998	Sixth Semester Doctoral Dissertation Doctoral Seminar	Credits Total	3 0 3
Courses INEL 8999 INEL 8998	Seventh Semester Doctoral Dissertation Doctoral Seminar	Credits Total	3 0 3
Courses INEL 8999 INEL 8998	Eight Semester Doctoral Dissertation Doctoral Seminar	Credits Total	s 3 1 4

### Sample study plan for a student entering with a BS to the Applied Electromagnetics Track

Courses INEL 6216 INEL 6078 INEL 6115 INEL 8998	First Semester Advanced Electromagnetics Estimation, Detection and Stochastic Systems Microwave Active Circuits Doctoral Seminar	Credit	3 3 3 0 9
Courses INEL 6068 INEL 6105 MATE 6677 INEL 8998	Second Semester Microwave Antenna Engineering Active Remote Sensing Techniques Elementary Partially Differential Equations Doctoral Seminar	Credit	s 3 3 0 9
Courses INEL 6106 INEL 8396 MATE 6025 INEL 8998	Third Semester Introduction to Radar Systems Advanced Topics in Applied Electromagnetics Numerical Linear Algebra Doctoral Seminar	Credit	s 3 3 0 6
Courses INEL 8495  INEL 8998	Fourth Semester Advanced Topics in Power Systems Elective Course Elective Course Doctoral Seminar	Credit	s 3 3 0 9
Qualifying Exam			
Courses INEL 8999 INEL 8998	Fifth Semester Doctoral Dissertation Doctoral Seminar	Credit	s 3 0 3
Courses INEL 8999 INEL 8998	Sixth Semester Doctoral Dissertation Doctoral Seminar	Credit:	s 3 0 3
Courses INEL 8999 INEL 8998	Seventh Semester Doctoral Dissertation Doctoral Seminar	Credits Total	s 3 0 3
Courses INEL 8999 INEL 8998	Eight Semester Doctoral Dissertation Doctoral Seminar	Credits Total	s 3 1 4

#### Sample study plan for a student entering with a BS to the Power Electronics Tracks

Courses INEL 6085 INEL 6025 INEL 6055 INEL 8998	First Semester Analysis and Design of Power Semiconductor Circu Advanced Energy Conversion Solid State Electronics Doctoral Seminar		3 3 0
		Total	9
Courses INEL 6058 INEL 6066 MATE 6026	Second Semester High Frequency Power Converters Control of Electric Drive Systems Numerical Optimization Doctoral Seminar	Credits	s 3 3 0
INEL 8998	Doctoral Seminal	Total	9
Courses INEL 6096 INEL 8496 MATE 6025 INEL 8998	Third Semester Electric Power Quality Advanced Topics in Power Electronics Numerical Linear Algebra Doctoral Seminar	Credits	3 3 3 0
		Total	6
Courses INEL 8496  INEL 8998	Fourth Semester Advanced Topics in Power Electronics Elective Course Elective Course Doctoral Seminar	Credits	3 3 0
Qualifying Exam		Total	9
Courses INEL 8999 INEL 8998	Fifth Semester Doctoral Dissertation Doctoral Seminar	Credits	s 3 0
		Total	3
Courses INEL 8999 INEL 8998	Sixth Semester Doctoral Dissertation Doctoral Seminar	Credits	s 3 0
1112 0000	Doctoral Commun	Total	3
Courses INEL 8999	Seventh Semester Doctoral Dissertation	Credits	s 3
INEL 8998	Doctoral Seminar	Total	0 3
Courses INEL 8999 INEL 8998	Eight Semester Doctoral Dissertation Doctoral Seminar	Credits	3
		Total	4

# Sample study plan for a student entering with a BS to the Power Systems Track

Courses INEL 6027 INEL 5505 INEL 6025 INEL 8998	First Semester  Dynamics and Control of Integrated Power Systems Linear Systems Analysis Advanced Energy Conversion Doctoral Seminar	Credits s Total	3 3 3 0 9
Courses INEL 6028 INEL 6077 ESMA 6600 INEL 8998	Second Semester Optimization and Economic Operation of Integrated Power Systems Surge Phenomena in Power Systems Probability Theory Doctoral Seminar	Credits Total	s 3 3 0 9
Courses INEL 6026 INEL 8495 MATE 6025 INEL 8998	Third Semester Computational Methods for Power Systems Analys Advanced Topics in Power Systems Numerical Optimization Doctoral Seminar	Credits is II Total	3 3 3 0 6
Courses INEL 8495 INEL 8998  Qualifying Exam	Fourth Semester Advanced Topics in Power Systems Elective Course Elective Course Doctoral Seminar	Credits Total	s 3 3 0 9
Courses INEL 8999 INEL 8998	Fifth Semester Doctoral Dissertation Doctoral Seminar	Credits Total	s 3 0 3
Courses INEL 8999 INEL 8998	Sixth Semester Doctoral Dissertation Doctoral Seminar	Credits Total	s 3 0 3
Courses INEL 8999 INEL 8998	Seventh Semester Doctoral Dissertation Doctoral Seminar	Credits Total	s 3 0 3
Courses INEL 8999 INEL 8998	Eight Semester Doctoral Dissertation Doctoral Seminar	Credits Total	s 3 1 4

### Sample study plan for a student entering with a BS to the Signal Processing Track

Courses INEL 6078 INEL 6049 INEL 5046 INEL 8998	First Semester Estimation, Detection, and Stochastic Processes Multidimensional Signal Processing Pattern Recognition Doctoral Seminar	Credit	s 3 3 0 9
Courses INEL 6076 INEL 6007 ESMA 6661 INEL 8998	Second Semester Adaptive and Optimal Signal Processing Introduction to Remote Sensing Theory of Statistics I Doctoral Seminar	Credit	s 3 3 0 9
Courses INEL 6050 INEL 8395 MATE 6025 INEL 8998	Third Semester Advanced Digital Signal Processing Algorithms Advanced Topics in Signal Processing Numerical Linear Algebra Doctoral Seminar	Credit:	s 3 3 0 6
Courses INEL 8395 INEL 8998  Qualifying Exam	Fourth Semester Advanced Topics in Signal Processing Elective Course Elective Course Doctoral Seminar	Credit	s 3 3 0 9
Courses INEL 8999 INEL 8998	Fifth Semester Doctoral Dissertation Doctoral Seminar	Credit	s 3 0 3
Courses INEL 8999 INEL 8998	Sixth Semester Doctoral Dissertation Doctoral Seminar	Credit	s 3 0 3
Courses INEL 8999 INEL 8998	Seventh Semester Doctoral Dissertation Doctoral Seminar	Credit	s 3 0 3
Courses INEL 8999 INEL 8998	Eight Semester Doctoral Dissertation Doctoral Seminar	Credit	s 3 1 4