



DEPARTMENT OF  
ELECTRICAL ENGINEERING  
AND COMPUTER SCIENCE  
College of Engineering & Computer Science  
Florida Atlantic University

## M.S. IN ELECTRICAL ENGINEERING WORKSHEET

Name: \_\_\_\_\_ Z#: \_\_\_\_\_ Advisor: \_\_\_\_\_

Date of Admission: \_\_\_\_\_ GPA: \_\_\_\_\_

### Prerequisites

Laboratory 1 is mandatory. In addition need to satisfy at least four more courses from the menu below.

Course No.	Course Title	Actual Course Title if Not Taken at FAU	Where	Grade
CDA 3331C	Intro to Microprocessor Systems			
EEL 3470	Electromagnetic Fields and Waves			
EEE 4361	Electronics 2			
EEL 4512	Communications Systems <b>OR</b>			
EEL 4652	Control Systems 1			
EEL 4656	Analysis of Linear Systems			
EEL 3118L	Laboratory 1 ( <b>Mandatory</b> )			

### Graduate Math Requirement (3 credits):

Grade	Semester	Course Number/Name
		EEE 5502 Digital Processing of Signals
		EEL 5613 Modern Control
		EEL 5654 Controls II
		EEL 6482 Electromagnetic Theory 1
		EEL 6532 Information Theory
		EEL 6537 Detection Theory
		EEL 6935 Estimation Theory
		EOC 5172 Mathematical Methods in Ocean Engineering 1
		ISC 5451 Fractals and Chaos in the Life Sciences
		MAP 6264 Queueing Theory
		Any <b>GRADUATE LEVEL</b> course with a Math prefix (MAA, MAD, MAP, MAS, MAT, MHF, MTG, STA)

### Thesis Option:

Grade	Semester	Course Number/Name
		EEL 6971 Master's Thesis Electrical Engineering (6 credits)
		<b>CGS 5937 Graduate Seminar (Mandatory, 0 credits)</b>

### Non-Thesis Option:

		<b>CGS 5937 Graduate Seminar (Mandatory, 0 credits)</b>
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**ELECTRICAL ENGINEERING GRADUATE COURSES:**

Grade	Semester	Course Number/Name
		CDA 6214 Structured VLSI Design 1
		EEE 5321 CMOS Amplifiers
		EEE 5371 High Frequency Amplifiers
		EEE 5502 Digital Processing of Signals
		EEE 5557 Introduction to Radar Systems
		EEE 6323 RF CMOS VLSI Devices for Wireless Communications
		EEE 6374 RF Devices and Circuits
		EEE 6379 RF-Air Interface and Antennas in Wireless Communications
		EEE 6504 Adaptive Signal Processing
		EEE 6508 Advanced Signal Processing
		EEE 6585 Digital Processing Of Speech Signals
		EEL 5437 Microwave Engineering
		EEL 5500 Digital Communications Systems
		EEL 5613 Modern Control
		EEL 5654 Control Systems 2
		EEL 5661 Robotic Applications
		EEL 5934 Special Topics in Electrical Engineering
		EEL 6449 Fourier Optics and Holography
		EEL 6468 Smart Antennas
		EEL 6482 Electromagnetic Theory 1
		EEL 6504 Digital Communications 2
		EEL 6509 Digital Satellite Communication
		EEL 6532 Information Theory
		EEL 6537 Detection Theory
		EEL 6563 Fiber Optic Communication
		EEL 6593 Mobile Communication
		EEL 6597 Wireless Personal Communication Systems
		EEL 6621 Nonlinear Control Systems Engineering
		EEL 6682 Intelligent Control
		EEL 6819 Neural Complex and Artificial Neural Networks
		TCN 6120 Next Generation Telecommunications
		TCN 6122 Local Access & Internet Telecommunication Engineering

**ELECTIVES:** Any other graduate courses taught by EECS faculty (such as Bioengineering BME courses, or other graduate courses taught in the College of Engineering & Computer Science). Restrictions: 6 credits for non-thesis students, 3 credits for thesis students.

Grade	Semester	Course Number/Name

**THESIS OPTION (30 credits)**

EEL 6971 \_\_\_\_\_ (6 Thesis credit hours)

Total: 30 credit hours \_\_\_\_\_

**NON-THESIS OPTION (30 credits)**

Total: 30 credit hours \_\_\_\_\_

**Student Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## SUMMARY OF MS ELECTRICAL ENGINEERING DEGREE REQUIREMENTS

### Minimum Degree Requirements:

#### Master of Science Degree Thesis Option (30 credits)

- Requires 6 credits of orally defended thesis (EEL 6971)
- Requires 24 credits of approved course work (5000 and 6000 level) with the following constraints:
  - Minimum of 12 credits in EE courses
  - A 3-credit graduate math course
  - A maximum of 3 credits of Directed Independent Study (DIS) (EEL 6905) may be used to satisfy the minimum of 30 credits
- At least one-half of the credits must be at the 6000 level
- Must take one semester of CGS 5937 Graduate Seminar

#### Master of Science Degree Non-Thesis Option (30 credits)

- A 3-credit graduate math course.
- At least one-half of the credits must be at the 6000 level
- A minimum of 18 credits must be completed in EE
- A maximum of 3 credits of Directed Independent Study (DIS) (EEL 6905) may be used to satisfy the minimum of 30 credits
- Must take one semester of CGS 5937 Graduate Seminar

#### Admission to Candidacy/Online Plan of Study

Students must apply for candidacy as soon as they are eligible. Students should prepare, in consultation with a graduate advisor, the online PLAN OF STUDY, i.e. the list of courses, for completing their degree requirements. All courses must be approved by the student's advisor.

##### A student is eligible to apply for candidacy (online plan of study) when:

1. A minimum of 9 credit hours as a graduate student have been completed.
2. A minimum of 3.0 GPA in all courses attempted as a graduate student has been maintained.

Normally no more than 15 credit hours of work completed before submitting your Plan of Study will be accepted toward degree program.

Students working toward the MS (thesis option) degree may not register for thesis until their **Plan of Study** has been approved.