FLORIDA ATLANTIC UNIVERSITY

Department of Electrical Engineering and Computer Science

College of Engineering & Computer Science

M.S. in Electrical Engineering (EG-MS-EEL)
Program Worksheet (30 credit hours total)

Name: _____   Z#: _____   Starting Term: _____

Phone #: _____   Overall GPA: _____   Date: _____

Degree Requirements

Students can choose between thesis and non-thesis options. Both options require a minimum of 30 credit hours (crs) Regardless of the option chosen, all students must complete the following requirements:

- Complete CGS 5937 Graduate Seminar course (zero crs).
- Complete a graduate math course (3 crs) from the Graduate Math section.
- Maintain a minimum 3.00 GPA to remain and graduate from the program.
- All courses within the degree program must be completed with a letter grade of "C" or higher.
- A minimum of 15 credit hours must be taken at the 6000 level.
- A maximum of 3 credit hours of Directed Independent Study (DIS) can be taken (faculty approval required).
- After completing 18 credit hours of coursework, students are <u>required</u> to submit their program worksheet and Plan of Study (POS) to the Electrical Engineering & Computer Science (EECS) Department.
- Students who wish to pursue a minor or certificate program must apply and be accepted by 18 earned credits. Otherwise, they are ineligible to apply.

Non-Thesis Option Requirement
- Students must complete 18 credit hours (six courses) from EEL Graduate Courses section.
- Students must complete 9 credit hours (three courses) from any graduate course taught by the EECS department.

Thesis Option Requirements
- Students must secure a Thesis Advisor.
- Complete **6 credit hours** of Master's Thesis over two semesters under the supervision of a faculty advisor.
- Complete 12 credit hours (four courses) from the EEL Graduate Course section.
- Complete 9 credit hours (three courses) from any graduate course offered by the EECS department.

See additional Thesis Requirements on page 4

The program worksheet undergoes periodic review and is subject to change.
This worksheet is intended to assist with tracking your coursework and completing the required POS.

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IF Prerequisite Courses were Required for Admissions (without a <u>Bachelor's degree in Electrical Engineering</u>). <u>Choose a total of four prerequisite courses (12 crs) from the list below</u>. EEL 3118L and EEL 3502 are required. Prerequisites must be completed <u>prior</u> to taking <u>any graduate program courses</u>.

Prerequisite Course Number & Title	Semester Taken	Grade
EEL 3118L Electronics Laboratory 1 **(REQUIRED)**		
EEL 3502 Signals & Digital Filter Design **(REQUIRED)**		
CDA 4630 Introduction to Embedded Systems		
EEL 3470 Electromagnetic Fields and Waves		
EEL 4361C Electronics 2 & Lab		
EEL 4512C Principle of Communication Systems		
EEL 4652C Control Systems 1		
EEE 4541 Stochastic Processes and Random Signals		
EEL 4216 Electric Power Systems		
EEL 4220 Electrical Machines		

Graduate Math section (REQUIRED)- Choose one graduate math course (3 crs) from the list below <u>or</u> complete a graduate level math course with prefixes: MAA, MAD, MAP, MAS, MAT, MHF, MTG, or STA.

Graduate Math Course Number & Title	Semester Taken	Grade
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		

CGS 5937 Graduate Seminar (zero crs), REQUIRED – Requires a minimum letter grade of "S," satisfactory. <u>Offered in only spring & fall semesters</u>.

Course Number & Title	Semester Taken	Grade
CGS 5937 Graduate Seminar		

Electrical Engineering (EEL) Graduate Courses section- Choose six courses (18crs) from the list below <u>if</u> Non-Thesis option. Choose four courses from the list below (12 crs) <u>if</u> Thesis option.

EEL Graduate Course Number & Title	Semester Taken	Grade
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		

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EEE 6374	RF Devices and Circuits		
EEE 6379	RF-Air Interface & Antennas in Wireless Comm		
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 Eng		

Electrical Engineering & Computer Science (EECS) Department Electives section- Choose three graduate courses (9 crs) offered by the department if you are Non-Thesis <u>or</u> Thesis option. List the three EECS courses below.

EECS Electives Course Number & Title	Semester Taken	Grade

Thesis Option section- Complete 6 credit hours of Thesis. Students are required to have a thesis form signed by a faculty advisor to register for thesis credits.

Course Number & Title	Semester Taken	Grade
EEL 6971 Master's Thesis Electrical Engineering		
EEL 6971 Master's Thesis Electrical Engineering		

IF Directed Independent Study (DIS) course (3 crs) was completed, list below. A DIS will substitute for one EEL Graduate Course. Students are required to have a DIS form signed by a faculty advisor to register for a DIS course.

DIS Course Number & Title	Semester Taken	Grade

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Course Substitution section. The EECS Department <u>may</u> approve course substitutions on a case-by-case basis. List approved course substitutions here. <u>Students are required to have advisor approval in writing.</u>

Substitution Course Number & Title	List EEL Graduate or EECS Elective	Semester Taken	Grade

Failed Courses section. List all failed courses here, with <u>letter grades lower than a "C".</u>

Failed Course Number & Title	Semester Taken	Grade

Eligibility Requirements for Thesis Candidacy:

Students may apply for candidacy upon completing 9 credit hours of coursework and maintaining a 3.00 overall/cumulative GPA. Students must prepare a POS in consultation with their graduate advisor, detailing the courses necessary for fulfilling their degree requirements. Approval from the student's advisor is required for all listed courses.

Students working toward the MS Thesis option degree may <u>not</u> register for thesis <u>credits</u> <u>until</u> their POS has been approved.

The Thesis Committee is composed of:
• At least three faculty members
• A minimum of two members are from the EECS Department
• The Committee Chair from the EECS Department

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How to Search for EECS Department Graduate Courses

When you perform a search on the Searchable Schedule, select the term. In the Department box, select Electrical Engin & Computer Sci. In the Level box, select Graduate. Then click on Search. This will display the entire course schedule of classes under the EECS department for that semester.

Enter Your Search Criteria

Term: Spring 2025

Field	Value
Subject (ex: ENC for ENC1101)	
Course # (ex:1101 for ENC1101)	
Departments	✕ Electric Engin & Computer Sci
Level	✕ Graduate
College	
Part Of Term	
Instructor	
Campus	
Keyword (With All Words)	
Attributes (ex: GenEd)	
Open Sections Only	☐

Search   Clear   ▸ Advanced Search

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