



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: \_\_\_\_\_

Are you pursuing a certificate \_\_\_\_\_ or minor \_\_\_\_\_ ? Certificate or Minor Program Name : \_\_\_\_\_

Did You submit your certificate or minor worksheet ? Yes \_\_\_\_\_ No \_\_\_\_\_

**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 required 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.

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

| Prerequisite Course Number & Title                         | Semester Taken | Grade |
|--|----------------|-------|
| EEL 3118L Electronics Laboratory 1 <b>(REQUIRED)</b>       |                |       |
| EEL 3502 Signals & Digital Filter Design <b>(REQUIRED)</b> |                |       |
| 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 **OR** 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. Offered in only spring & fall semesters.

| Course Number & Title     | Semester Taken | Grade |
|---------------------------|----------------|-------|
| CGS 5937 Graduate Seminar |                |       |

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

|          |   |  |  |
|----------|---|--|--|
| 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 or 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 may approve course substitutions on a case-by-case basis. List approved course substitutions here. Students are required to have advisor approval in writing.

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

**Failed Courses section.** List all failed courses here, with letter grades lower than a “C”.

| 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 not register for thesis credits until 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

## 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

Subject (ex: ENC for ENC1101)

Course # (ex: 1101 for ENC1101)

Departments

Level

College

Part Of Term

Instructor

Campus

Keyword (With All Words)

Attributes (ex: GenEd)

Open Sections Only

☐

Search

[Clear](#)

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