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

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 **one** course (zero cr) CGS 5937 Graduate Seminar.
- 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 9 credit hours of coursework, students are required to submit a Plan of Study (POS) via MyPOS.

Non-Thesis Option Requirement

- Students must complete 18 credit hours (six courses) from EEL Graduate Course section.
- Students must complete 9 credit hours (three courses) from any course taught by the EECS department.

Thesis Option Requirements

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

See additional Thesis Requirements on the last page

Prerequisite Courses Required for Admissions- If student does not have a Bachelor's degree in Electrical Engineering (BSEE). Complete EEL 3118L and EEL 3502. In addition, complete two courses from the list below.

Course Number & Title	Semester Taken	Grade
EEL 3118L Electronics Laboratory 1 **(Mandatory)**		

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.

EEL 3502 Signals & Digital Filter Design **(Mandatory)**		
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)- Complete one graduate math course (3 crs) from the list below. Students also have the option to complete any graduate level math course with prefixes: MAA, MAD, MAP, MAS, MAT, MHF, MTG, or STA.

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 (REQUIRED) – One course (zero crs), requires a minimum letter grade of "S." Offered only spring & fall semesters.

Course Number & Title	Semester Taken	Grade

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

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		

Course Number & Title	Semester Taken	Grade
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- complete any graduate course offered by the department.
Complete <u>three courses</u> (9 crs) if you are Non-Thesis or Thesis option.

Course Number & Title	Semester Taken	Grade

Thesis Option- Complete 6 credit hours of Thesis. Student is 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		

List any Directed Independent Study (DIS) course here. Student is required to have a DIS form signed by a faculty advisor to register for a DIS course.

Course Number & Title	Semester Taken	Grade

The EECS Department may approve substitutions for core or elective courses. List any course substitutions here. Student is required to have advisor approval in writing.

Course Number & Title	Indicate "core" or "elective"	Semester Taken	Grade

List all failed courses here, with letter grades lower than a "C".

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 via MyPOS 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