**PROGRAM DESCRIPTION**

The Master of Science in Electrical and Computer Engineering (MSECE) program at Fairfield University is an inter-disciplinary program that enables its graduates to study several fields including (but not limited to) engineering, mathematics, science and business. The interdisciplinary nature of the program affords the students a chance to establish an educational identity that is unique. Students can learn topics in subject areas that include computer hardware, power, VLSI, sensors, mixed signals, measurement, control, biomedical, computer and nanotechnology.

An MSECE graduate student can focus on topics that can result in a leadership position in a high-technology industry. In a time when the ability to innovate is the only sustainable competitive advantage, an ECE degree unlocks the door to an entrepreneurial career. Our graduates work to design and build state-of-the-art products and are highly sought after by employers.

The MSECE program takes advantage of elective courses offered by the School of Engineering master’s degree programs in mechanical engineering, mathematics, software engineering and management of technology. As a consequence, students gain technical skills and a sense of the economic and business values needed to employ technology to serve society’s needs. Some of our students have selected to participate in business plan competitions and engage in engineering entrepreneurship. We have strong ties to the Inventors Association of Connecticut, the Technology Venture community and local industry.

The thesis option enables students to do research. This is important for people who want to direct research and take the technical lead in projects. Thesis students work closely with a thesis advisor who will help them through the process. Many of our thesis students go on to publish papers and attend conferences. Our instructors have very strong ties to industry and are active in placement of our graduates.

**COURSE OF STUDY**

Students in the MSECE program complete either 33 credits, including a thesis, or a non-thesis option comprising 36 credits. Students work with a curricular adviser to select a plan of study customized to their needs. Students generally complete a minimum of 18 credit hours of courses with an ECE prefix.

**THESIS OPTION (6 CREDITS)**

Students may choose the thesis option provided they earn an A- or better in the Readings class, ECE 420, and secure the approval of the program director.

**REQUIRED COURSES**

- SW 407 Java for Programmers
- ECE 440 Computer Graphics
- ECE 420 Readings in Electrical and Computer Engineering
- Graduate Mathematics Elective

**GRADUATE MATHEMATICS ELECTIVES**

- ECE 410 Voice and Signal Processing
- ECE 415 Numerical Methods of Engineering
- ECE 431 Biomedical Signal Processing
- ECE 433 Biomedical Visualization
- Any approved MA 400-500 graduate level course

**GRADUATE PROGRAM DIRECTOR**

Dr. Adrian Rusu  
Phone: 203-254-4000, x2736  
rusu@fairfield.edu  

Dr. Rusu serves as the faculty advisor for students in the Electrical and Computer Engineering program and is the appropriate person to contact with questions, or to learn more.

For a complete faculty listing, see [www.fairfield.edu/soefaculty](http://www.fairfield.edu/soefaculty).

**ADMISSION REQUIREMENTS**

Applicants for a master’s degree must hold a bachelor’s degree from a regionally accredited college or university (or the international equivalent) in science or engineering or its equivalent. Those with work experience in a technology environment, whose academic and professional record suggest the likelihood of success in a demanding graduate program will also be considered. Applicants should demonstrate aptitude in some programming and some electric circuits and electronic circuits and devices or begin their studies by registering for one or more of these bridge courses as judged suitable by the program director.
FORMAL ADMISSION PROCESS
Applications to the graduate program are accepted on a rolling basis. Applications are reviewed by the Graduate Admission Committee. Students seeking admission must complete and submit the following online:

1. A completed application.
   (Apply online at www.fairfield.edu/soeapp.)
2. A non-refundable $60 application fee.
3. A professional résumé.
4. Personal statement describing intent for studying in the program.
5. Official transcripts from all universities/colleges attended.
   (All foreign transcripts must be evaluated by an approved evaluating service. A list of approved evaluators is available at www.fairfield.edu/eval.)
6. Two recommendation letters, one of which must be from a current supervisor or professor, completed online.
7. All international students whose native language is not English must demonstrate proficiency in the English language by taking either TOEFL or IELTS exams. For admission to the graduate school, a TOEFL composite score of 550 for the paper test, 213 for the computer-based, 80 on the internet based test or an IELTS score of 6.5 is strongly recommended. Scores must be sent directly from the Educational Testing Service (TOEFL) or IELTS.org. Fairfield’s ETS code is 3390.

Submit transcripts and any other documents that cannot be uploaded to:
Fairfield University
Office of Graduate Admission
Kelley Center
1073 North Benson Road
Fairfield, CT 06824

TRANSFER STUDENTS
Transfer credit will be considered for graduate coursework earned with a grade of B or better. No more than six credits may be transferred.

MANDATORY IMMUNIZATIONS
Connecticut State law requires each full-time or matriculated student to provide proof of immunity or screening against measles, mumps, rubella, varicella (chicken pox), meningitis and tuberculosis. Certain exemptions based on age and housing status apply. Matriculating students are defined as those enrolled in a degree seeking program. More detailed information and the required downloadable forms are available online at www.fairfield.edu/immunization. Completed forms should be submitted directly to the Student Health Center. Although this is not required to complete an application, you must provide proof of immunity/screening prior to course registration. Please consult your private health care provider to obtain the necessary immunizations. Questions may be directed to the Student Health Center: 203-254-4000 ext. 2241 or e-mail health@fairfield.edu.

NON-MATRICULATED STUDENT STATUS
Non-matriculated status may be granted to individuals who have not completed the admission process but wish to begin taking courses, or who are not seeking a degree or certification. Individuals wishing to enroll as non-matriculated students must submit:

1. A completed application.
   (Apply online at www.fairfield.edu/soeapp.)
2. A non-refundable $60 application fee.
3. A written request to the Graduate Program Director, specifying the semester for which this status is requested.
4. Official transcripts verifying that a baccalaureate (or higher) degree with a grade point average of 3.0 or higher has been earned.

Non-matriculated student status is granted for 9 credits only. Students seeking admission must complete the formal application process by the end of their 9 credit limit in order to continue with their studies. Individuals enrolled as non-matriculated students cannot enroll for more than six credits each term, cannot register on a full-time basis, and are not eligible for any tuition aid or financial support. Upon formal admission to the Graduate Program, credits earned while a non-matriculated student will be applied toward the master’s degree, provided the courses were approved by the faculty advisor and the grade received in each course was a B or better. Successful completion of coursework does not automatically guarantee formal admission.

NON-DEGREE STUDENTS
Students who hold master’s degrees and who are interested in taking courses for professional and/or personal continuing education may be admitted as non-degree students. Individuals wishing to enroll as non-degree students must submit:

1. A completed application.
   (Apply online at www.fairfield.edu/soeapp.)
2. A non-refundable $60 application fee.
3. A written request to the Graduate Program Director, specifying the semester for which this status is requested.
4. Official transcripts verifying that a master’s degree has been earned.

Courses taken under this status will not be considered toward fulfillment of degree requirements.

TUITION/FINANCIAL AID
Academic Year 2016/2017
Tuition: $800 per credit hour

A graduate education can provide countless professional and personal rewards in the future. However, the costs associated with earning a master’s degree may be challenging. Many students need to look beyond their own financial resources or the resources of their employer for assistance. There are many ways to finance a graduate education, including graduate assistantships, federal direct loan programs and our Veterans Pride Program, which are all discussed at www.fairfield.edu/gradfa.

SCHOLARSHIPS
The School of Engineering provides modest scholarships to select students on the basis of need and merit.

Submit transcripts and any other documents that cannot be uploaded to:
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Kelley Center
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Fairfield, CT 06824

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   (Apply online at www.fairfield.edu/soeapp.)
2. A non-refundable $60 application fee.
3. A written request to the Graduate Program Director, specifying the semester for which this status is requested.
4. Official transcripts verifying that a baccalaureate (or higher) degree with a grade point average of 3.0 or higher has been earned.

Non-matriculated student status is granted for 9 credits only. Students seeking admission must complete the formal application process by the end of their 9 credit limit in order to continue with their studies. Individuals enrolled as non-matriculated students cannot enroll for more than six credits each term, cannot register on a full-time basis, and are not eligible for any tuition aid or financial support. Upon formal admission to the Graduate Program, credits earned while a non-matriculated student will be applied toward the master’s degree, provided the courses were approved by the faculty advisor and the grade received in each course was a B or better. Successful completion of coursework does not automatically guarantee formal admission.

NON-DEGREE STUDENTS
Students who hold master’s degrees and who are interested in taking courses for professional and/or personal continuing education may be admitted as non-degree students. Individuals wishing to enroll as non-degree students must submit:

1. A completed application.
   (Apply online at www.fairfield.edu/soeapp.)
2. A non-refundable $60 application fee.
3. A written request to the Graduate Program Director, specifying the semester for which this status is requested.
4. Official transcripts verifying that a master’s degree has been earned.

Courses taken under this status will not be considered toward fulfillment of degree requirements.

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A graduate education can provide countless professional and personal rewards in the future. However, the costs associated with earning a master’s degree may be challenging. Many students need to look beyond their own financial resources or the resources of their employer for assistance. There are many ways to finance a graduate education, including graduate assistantships, federal direct loan programs and our Veterans Pride Program, which are all discussed at www.fairfield.edu/gradfa.

SCHOLARSHIPS
The School of Engineering provides modest scholarships to select students on the basis of need and merit.
OFFICE OF FINANCIAL AID

Advisors from the Office of Financial Aid are committed to helping students find the options that best suit each of their needs. We encourage all Fairfield University graduate students to contact the Financial Aid office with any questions or to make an appointment to speak with a counselor.

FINANCIAL AID CONTACT INFORMATION
Phone: 203-254-4125
Fax: 203-254-4008
E-mail: finaid@fairfield.edu

FINANCIAL AID OFFICE OPERATIONS
Days: Monday-Friday
Hours: 8:30 a.m.-4:30 p.m.
Location: Aloysius P. Kelley, S.J. Center

MORE INFORMATION

ADMISSION QUESTIONS
Questions about the application process should be directed to the Office of Graduate Admission.
Phone: 203-254-4184
Fax: 203-254-4073
E-mail: gradadmis@fairfield.edu

OFFICE OPERATIONS
Days: Monday-Friday
Hours: 8:30 a.m.-4:30 p.m.
Location: Aloysius P. Kelley, S.J. Center

SCHOOL OF ENGINEERING WEBSITE
www.fairfield.edu/engineering

ONLINE CATALOG
For detailed course descriptions and other University information, please refer to our online catalog www.fairfield.edu/catalogs.