DSP SYSTEMS ENGINEERING
SPECIALIZED STUDIES PROGRAM • ONLINE

Digital Signal Processing (DSP), has emerged as an important technology for modern electronic systems. It is a form of embedded design that is one of the newest and hottest fields, and is considered to be the workhorse of choice for many computational-intensive applications. Modern applications include biomedical, communications, imaging, speech, video signal, and multimedia signal processing.

WHO SHOULD ENROLL
This program is designed for individuals involved in the evaluation, design or development of systems employing digital signal processing, or as an introduction to DSP technology.

PROGRAM BENEFITS
• Understand the essential mathematics & algorithms in DSP
• Gain hands-on experience in designing and implementing DSP algorithms
• Learn about DSP processors and architectures
• Discover how to program DSP code
• Create practical applications

SPECIALIZED STUDIES AWARD REQUIREMENTS
Candidates should have a bachelor’s degree in computer science or electrical engineering or equivalent knowledge acquired through training and experience in hardware design and development. A Specialized Studies certificate is awarded upon completion of 3 required courses (9 credit units total) with a grade of “C” or better in each course. Students not pursuing a specialized studies award are welcome to take as many individual courses as they wish.

PROGRAM FEES
The total cost of the program varies depending on the courses chosen. Actual fees may differ from the estimate below. Fees are subject to change without prior notice.

Course Fees
(4.5 prerequisite and 9 required units)  $3,350
Candidacy Fee  $35
Textbooks and Materials  $487
Total Estimated Cost  $3,872

FOR MORE INFORMATION:
Jennifer Mortensen • j.mortensen@uci.edu • (949) 824-9722

IEEE Members receive 15% off of one course per quarter.

DSP SYSTEMS ENGINEERING SPECIALIZED STUDIES PROGRAM

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<thead>
<tr>
<th>COURSE#</th>
<th>PREREQUISITE COURSES</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>EECS 805</td>
<td>C Programming for Embedded Systems</td>
<td>1.5 CEU</td>
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<tr>
<td>EECS X494.19</td>
<td>MATLAB for Engineers*</td>
<td>3</td>
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<tr>
<th>COURSE#</th>
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<tr>
<td>EECS X495</td>
<td>DSP Fundamentals, Modeling and Analysis**</td>
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<tr>
<td>EECS X495.1</td>
<td>C Programming for DSP**</td>
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<tr>
<td>EECS X495.2</td>
<td>DSP for Communications Systems#</td>
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<td>EECS X498.61</td>
<td>Real-Time Embedded Digital Signal Processing*</td>
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<td>EECS X498.6</td>
<td>Digital Signal Processing with FPGAs*#</td>
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<td>EECS X497.3</td>
<td>Motor Control Algorithms and Applications – Part 1*</td>
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<td>EECS X497.33</td>
<td>Motor Control Algorithms and Applications – Part 2*#</td>
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<td>EECS X498.11</td>
<td>High Efficiency Video Compression Techniques*</td>
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*Prerequisite: EECS 805, C Programming for Embedded Systems, or equivalent experience.
**Prerequisite: EECS X494.19, MATLAB for Engineers, or equivalent experience.

#Course requires hardware or software, please refer to online listing for details.

IEEE computer society